

Water for today and the future



2022 Annual Report

Every drop sustainable



Contents

Foreword	5
Who we are and what we do	9
Profile	9
The world around us	10
Our strategy	13
Our value creation model	20
How we create value	21
Value for our customer	21
Objectives and results - customer	21
Availability of drinking water for all	25
Value for our natural environment	27
Objectives and results - natural environment	27
Living Lab: the quest for a flexible and future-proof infrastructure	35
Value for our employees	37
Objectives and results - employees	38
The workforce at Vitens	41
Health check encourages colleagues to be more mindful of their health	44
Value for our shareholders	45
Objectives and results - shareholders	45
Water-friendly construction: our guidelines for saving more drinking water	50
Guaranteeing our continuity	51
Continuity	51
Risk management in brief	52
Governance in brief	54

Governance	56
Code	56
Organisation and management	56
Laws and regulations	57
Societal duties	58
Risk management	59
Executive Board's statement of responsibilities	66
Statements and reports	68
Report of the Supervisory Board	68
Statement of the Executive Board	75
Report of the Works Council	76
Limited assurance report of the independent auditor	77
Other information	80
Connectivity matrix	81
Stakeholder management	85
Dialogue with our stakeholders	86
Materiality	91
About this report	95
Scope	95
Reporting criteria for non-financial information	96
Impact measurement method	97
Glossary and reporting definitions	106
GRI index	115

Financial results	123
Key metrics	123
Explanatory notes to the results	124
Consolidated results	127
Consolidated financial statements	129
Consolidated profit and loss statement and summary of the total result	131
Consolidated cash flow statement	133
Consolidated statement of changes in shareholders' equity	135
Explanatory notes to the consolidated financial statements	136
Explanatory notes to the consolidated balance sheet	147
Explanatory notes to the consolidated profit and loss statement	162
Explanatory notes to the consolidated cash flow statement	167
Other explanatory notes to the consolidated financial statements	168
Company financial statements	175
Explanatory notes to the company financial statements	177
Other information	183
Independent auditor's report	184
Summary of outstanding shares	194

Foreword

Urgent collaboration across a broad front to guarantee a sustainable supply of drinking water: now and in the future.

For Vitens and its customers, 2022 was marked by the devastating conflict in Ukraine. In addition to the horrific images and untold suffering of the inhabitants of Ukraine, we were confronted by rocketing energy prices and high inflation. For the 3rd time in just a few years (with the exception of 2021), we experienced a lengthy period of drought in 2022; from April to late September. But, despite this long dry spell, we delivered much less water than we had planned. That in itself is pleasing, because we are committed to conserving water. But it also had a serious impact on our water output, which was much lower than budgeted, leading in turn to a significantly lower result than the budget figure. Ironically, this came at a time when we badly needed that budgeted result to help finance our (future) investments. So, in 2022, we saw a collision between two strategic goals - 'water conservation' and 'financial health' and 2022 became the year of the paradox and the transition challenge.

This paradox is clearly apparent in the increasing uncertainties that we currently face, caused by changing weather conditions and more volatile revenue trends. On the one hand, we need to invest additionally in making the water system and drinking water supply climate-proof and future-proof. On the other hand, we need to strengthen the principles underpinning our financial policy in order to boost our capacity to withstand these uncertainties in the long run. A structural rate increase is unavoidable in this light.

Customer satisfaction and communication with customers

We are happy to report that our customers are very satisfied with Vitens. This is reflected in our service satisfaction index, for which our customers gave us a score of 8.4 in 2022. We owe this to our highly committed and professional staff. Thanks to their efforts in 2022, there were few major emergencies and drinking water outages, and we were able to deliver even better water quality.

As a drinking water utility, we do everything possible to deliver sufficient clean drinking water 24 hours a day and 7 days a week, and we performed well in that respect last year. Our operations remained stable and within our permit capacity in most places in our service area, even during the long dry and hot periods in 2022. It must be noted, however, that all our available permit capacity has now been used up.

We succeeded in achieving stable performance, thanks to timely anticipation of the water distribution profile and effective customer communication aimed at responsible drinking water use. Through close cooperation in the communication with our shareholders and other partners, we were able to get broad attention for our message calling on users to 'use drinking water wisely' in our service area.

Supply security and water resources under pressure

In 2022, we constantly faced challenges relating to the security of the drinking water supply, combined with the limited availability of (new) drinking water resources. Although unavoidable and necessary, expanding our production and transmission capacity remains difficult in the short term, mainly because of slow administrative procedures and the lack of technical capacity. The time required for issuing extraction and building permits is (excessively) lengthy and, as a result, the security of our drinking water supply is no longer something we can automatically assume. Securing today's drinking water supply requires action in the short term, mostly at existing extraction sites. In the longer term, we need other, sustainable, resources within a climate-proof water system, and we need a resilient infrastructure. In 2022, Vitens worked hard on this long-term task of sustainably extracting drinking water in a climate-proof water system, as well as on assuring security of supply in the short term. The solutions needed in the long term are not available today, and maintaining security of supply in the short term is extremely urgent. This conflict is one that we will also have to deal with in future years and it requires adequate and fast decision-making on the part of the administrative bodies and authorities involved.

Divergent, sometimes conflicting interests

In 2022, we experienced at first hand in our daily operations the effects of divergent and sometimes conflicting social tasks and interests. For example, nature development, economic growth, the major housing challenge and the impact of agriculture, which prevented us from using the full capacity of our permits at several locations. The important task of producing drinking water increasingly has to compete with other interests. Due to the limited availability of water, we were even unable to honour requests for drinking water connections received from businesses in certain regions.

We continue to appeal strongly to the relevant public authorities, urging them to act in accordance with their duty of care and provide the permit capacity that is needed. Drinking water is a basic necessity and of great importance to public health. In our view, giving drinking water an appropriate priority, which it has by law in fact, is both imperative and urgent. This additional permit and production capacity is necessary, also in the context of future housing construction - an area where we continue to stress the importance of water-friendly construction methods. Vitens, like the entire drinking water sector, has endorsed the ambition stated in the letter to the Dutch Lower House on Water and Soil Stewardship ('Water en Bodem Sturend'): i.e. water and soil must be leading when planning the spatial layout of our country.

In 2022, we saw that drinking water resources are coming under increasing pressure due to external influences. We are extremely concerned about the increasing level of pollution in Dutch water and the presence of undesirable substances in our water sources. As a result, we are having to treat the water extracted from drinking water sources more intensively. This underlines the necessity of achieving the goals of the Framework Directive on Water ('Kader Richtlijn Water') on time, i.e. in 2027. We find the rapid increase in emerging pollutants in the environment, such as PFAS, to be of great concern. Combating pollution requires tighter regulations that are designed to protect our drinking water sources. We also advocate a ban on PFAS and other substances that pose a high environmental risk.

Financial constraints and inflation

As mentioned above, we faced a number of financial challenges in 2022 and less water was used at the tap than projected, despite the long dry summer. Our operating expenses, energy costs and costs for chemicals and raw materials increased during this period due to inflation. Inflation had a further knock-on effect in the form of additional expense under the new collective labour agreement. The lower water output and higher costs resulted in a major variance from the budgeted result. Despite somewhat more moderate consumption of drinking water by customers in 2022 and despite our commitment to water conservation goals, the expectation is that housing needs, demographics, climate change and economic growth will lead to a rise in drinking water demand again in the longer term. That expectation, combined with the enormous replacement and renovation tasks associated with our infrastructure, mean that we must sharply ramp up our level of investment; a major change in scale relative to the past. To ensure that we have sufficient shareholders' equity available for making these key investments, further relaxation of the Weighted Average Cost of Capital regulation (WACC) is a hard requirement. Failure to do so would put the feasibility of these essential investments seriously at risk and endanger Vitens' financial health. We emphatically draw the attention of the Ministry of Infrastructure & Water Management and politicians in The Hague to the pressing need to increase the WACC in order to generate the funding capacity required for the short and long term.

Working together to create the future

Close cooperation with our partners is essential to successfully overcoming the major challenges we face, and we engage in continuous and constructive dialogue and collaboration with our shareholders. We are pleased to see that the water transition needed for a future-proof and sustainable water system is receiving acknowledgement and support at more and more governance tables. That fundamental choices are needed for the water transition is also stated in the letter to the Dutch Lower House on Water and Soil Stewardship ('Water en Bodem Sturend').

In a crowded country like the Netherlands, it makes sense to start from the natural water system and then look at what is possible: housing, business activities, agriculture, nature, or a combination. Together with our peers in the sector, we call on the government to make fundamental choices in which spatial zoning follows the water system and water is retained more effectively, and advocate speedy action to achieve this.

We have developed the Panorama Waterland concept and we have presented a detailed target structure for future drinking water extraction. We are ready to start working, in co-creation, on concrete projects to implement our vision for the near future and put it into operation.

We must accelerate towards 'Every Drop Sustainable'

Progressive climate change and the need to make our drinking water supply more sustainable continue to underscore the importance and urgency of our 'Every Drop Sustainable in 2030' strategy. Together with our partners, we are following a path to a future-proof drinking water supply, but the pace can and must be increased. We are also looking critically at ourselves, because we too must intensify our activities in view of the slower progress made on sustainability plans in 2022. These challenges require joint action, and we feel that 2023 should be the year when we all accelerate our sustainability programmes and turn words into deeds.

Finally, 2022 was also the year in which Marike Bonhof, a member of Vitens' Executive Board, informed us that she would be leaving Vitens. We would like to warmly thank Marike for the passion, commitment and effort she has put into serving Vitens' best interests during the past years. She has contributed greatly to shaping Vitens as it is today and built sturdy support to underpin Vitens' activities in the future.

Jelle Hannema



Who we are and what we do

Profile

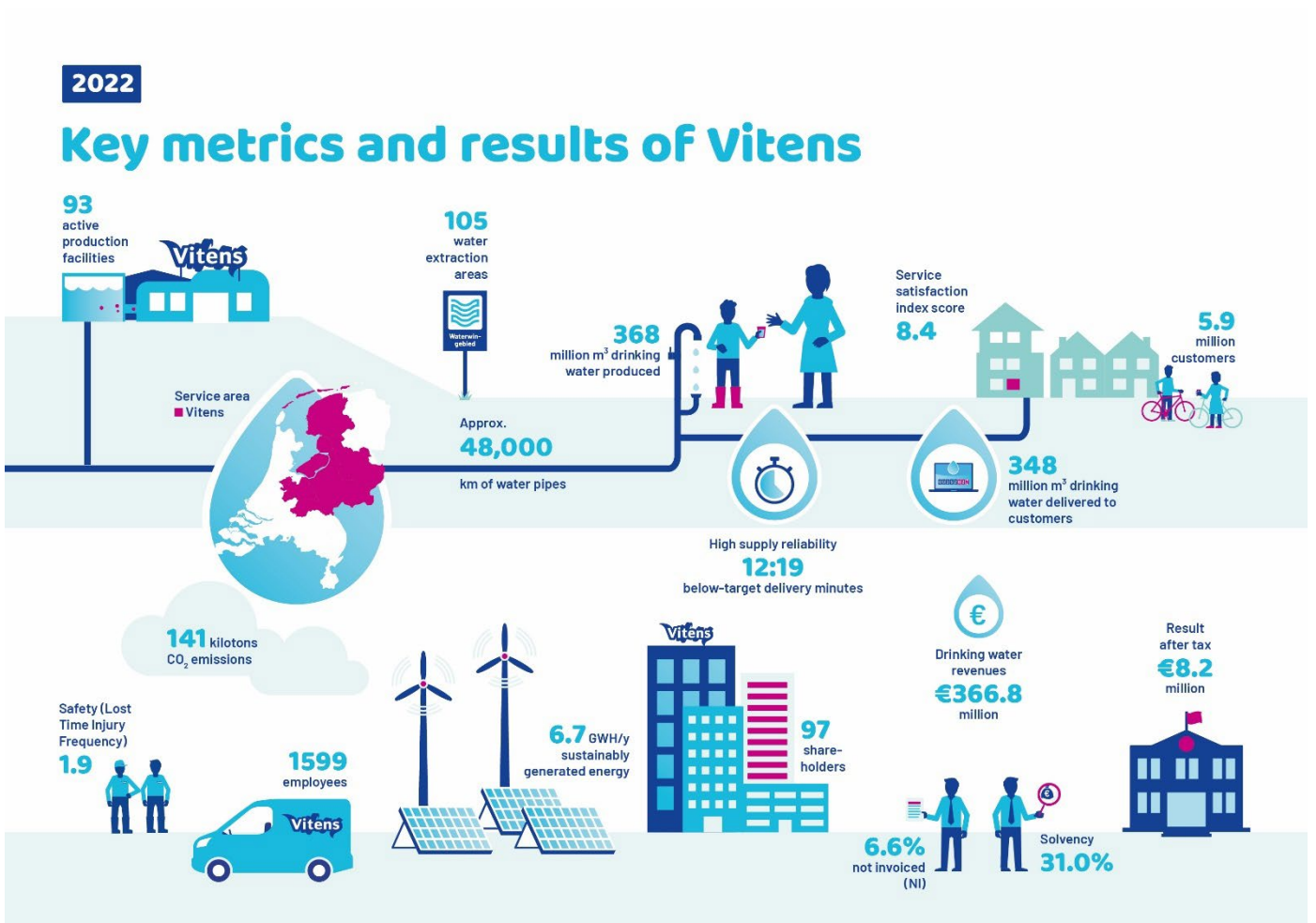
We supply drinking water to nearly 6 million customers in the provinces of Flevoland, Friesland, Gelderland, Utrecht and Overijssel and some municipalities in Drenthe and North Holland.

Drinking water that is reliable and available. Now and in the future. That is the essence of Vitens.

All shares in Vitens N.V. are owned by local and provincial authorities.

Our key task and mission

Provide reliable, affordable and available drinking water. That is our key task. Deliver high-quality drinking water to everyone in the service area twenty-four hours a day and seven days a week. Now and in the future. That is our reason for being, our raison d'être.



The world around us

2022: less water consumed, geopolitical developments and inflation

In many ways, 2022 was an eventful year. The summer was dry and hot, but Vitens performed well and supplied adequate drinking water. The cost of producing drinking water has increased over the past year due to very high inflation (caused by sharply increased energy prices and material and labour costs) and the extra effort required from Vitens in order to structurally cope with the effects of extreme weather conditions. This forced us to set higher drinking water rates for 2023 at the end of 2022. We also had to reject requests for water connections submitted by businesses for the first time. In addition, we saw that water consumption at the tap and, as a logical consequence, our revenue were lower than predicted, presumably due to the high energy costs that customers had to pay.

Think more broadly, look ahead on a longer timescale

Because of the context in which we are currently working, it is important for Vitens to think more broadly and extend the timescale for future plans. At Vitens, we look beyond simply meeting our statutory obligations. We also explicitly weigh up the societal impact of our activities in the choices we make. Vitens is continuously extending the timescale for future planning. This is reflected not only in the target structure, but also in our intention to expand the horizon of the next Investment Plan to 20 years and then to 30 years. To achieve our goal of a sustainable drinking water supply, we are strongly committed to intensive collaboration with the other parties in our field of operation.

Increased rates

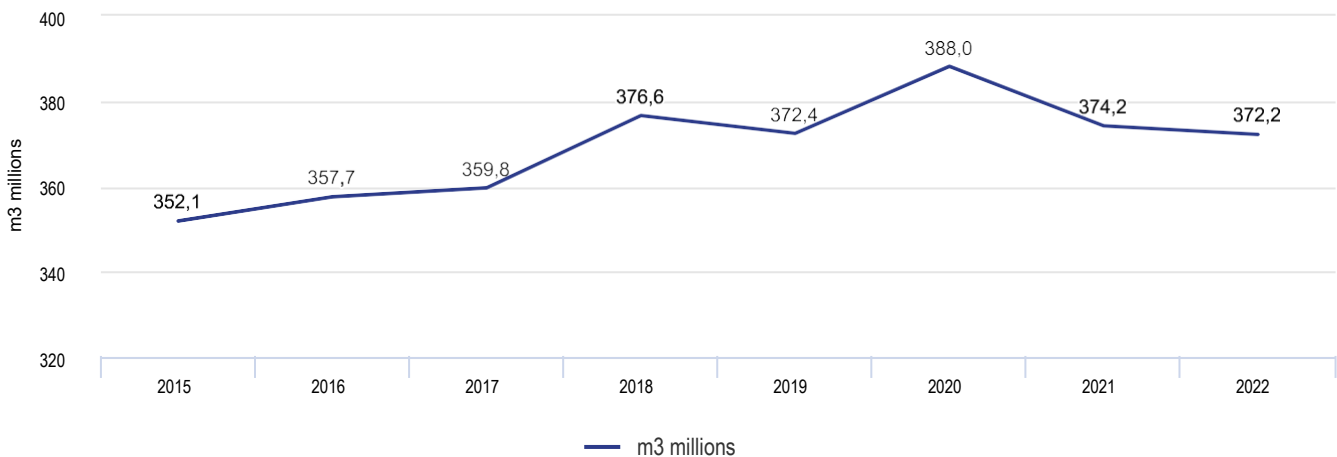
Vitens attaches great importance to keeping the price of drinking water affordable. Seen on balance, we have managed to implement small price increases during the past ten years. However, the costs Vitens incurs to produce and deliver drinking water have now risen significantly. The cost drivers include:

- The sharp rise in energy prices. A great deal of energy is needed to extract water, treat it and then pump it through the pipe network as drinking water.
- Rising investment costs that are reflected in the rate.
- Raw material scarcity and expensive products.
- Rising labour costs.
- Allowances for drought damage that Vitens has to pay to farmers as financial compensation in proven cases of reduced crop yields due to groundwater extraction activities.

Following a pressing request by central government in connection with the war in Ukraine and the sanctions imposed in that context, Vitens terminated its contract with Gazprom in 2022. Vitens is currently in contact with central government on this issue and discussing possible compensation.

To guarantee the availability of clean drinking water, we are forced to pass on the increased costs.

Trend in drinking water demand (water consumption)



The drinking water industry's cry for help

Climate change, economic growth, expansion in the housing market and continued pollution are increasing the pressure on the water sector's ability to supply drinking water. The situation is so urgent that Vewin, the association of water utilities in the Netherlands, sounded the alarm on behalf of all the Dutch drinking water utilities in September 2022. The message was loud and clear: all the drinking water utilities need more permit capacity, for use immediately or in the years up to 2030.

Increasing demand in the long term

Although drinking water used at the tap dipped under the forecast volume in 2022, demand is expected to increase in the longer term. Climate change is one of the factors driving this development. In 2022, as in 2018, there was a precipitation deficit. Furthermore, a major housing challenge lies ahead. About 300,000 new homes are to be built in Vitens' service area by 2030. Finally, both the economy and the population are continuing to grow.

High urgency: requests from businesses for drinking water connections denied for the first time

'Water from the tap is no longer something we can take for granted.' Jelle Hannema, Managing Director of Vitens, made this comment when asked to explain why Vitens could not honour several requests for drinking water connections submitted by businesses in Overijssel and Gelderland. 'We are moving to a situation where we can no longer meet all the requests we receive for drinking water connections. This is due to the fact that not all permits issued to us for drinking water extraction can be used to their full extent.'

About twenty percent of the total volume of drinking water supplied by Vitens goes to businesses. That equates to about 80 million cubic metres per year. The availability of drinking water is not only an issue for Vitens and business customers, but also for provincial authorities. Vitens advocates that the water system should be leading in (provincial) government decision-making with regard to housing and economic development.

Water transition: sustainable and circular use of fresh water

For a long time, the principal challenge in the Netherlands was to drain away excess water, however the Netherlands is now becoming drier due to climate change. To avoid water scarcity, we need to retain water better. The water system in the Netherlands is currently designed to drain water away as quickly as possible. In late April 2022, Jelle Hannema made an urgent appeal to central government, through the media and other channels, to speed up the water transition: i.e. the creation of a resilient system in which we keep water stockpiled for as long as possible.

A system that lets water slowly seep into the soil, giving the groundwater system a chance to recover, with the added advantage that all societal functions that depend on water - such as nature and agriculture - have sustainable access to that water. We are showing that it can be done in our Panorama Waterland project. In that project, we work closely with provincial authorities, municipalities, farmers and nature organisations to retain water more effectively on the 'Sallandse Heuvelrug'. The concept behind Panorama Waterland is also perfectly suitable for other locations.

Water as a guiding factor

In November 2022, the Dutch cabinet announced in a letter to the Lower House that water and soil will become guiding factors in spatial planning decision-making in our country. That letter describes the urgency of the water transition and outlines the approach. We support this intention wholeheartedly. But the time has come now for materialisation and purposeful action. The letter also stated that by 2035, the Netherlands must use 20 percent less drinking water than we did in 2022. This fits perfectly with our own water conservation goals.

Quality of drinking water resources under pressure

To continue to guarantee the quality of drinking water, all EU member states must comply with the Water Framework Directive (WFD) by 2027. In mid-April 2022, the Minister of Infrastructure and Water Management Mark Harbers reported in a letter to the Lower House that the Netherlands is unlikely to meet this target in 2027. Failure to meet these objectives increases the pressure on Vitens in continuing to deliver high-quality drinking water. After all, when the quality of the water sources is under pressure, it becomes more difficult to find and use good extraction locations. In addition, the effort that Vitens has to put into treating the water also increases. Increasing pollution is a societal issue that needs to be addressed with high urgency.

2022 RIVM National Institute for Public Health and the Environment report: PFAS concentration meets European requirements

Although, according to RIVM, our drinking water meets the requirements of the European Drinking Water Directive regarding the PFAS concentrations, it is clear that PFAS is pretty much omnipresent in the environment. As a result, the drinking water supply will be badly affected sooner or later. So Vitens, together with fellow drinking water utilities, emphasises that PFAS has no place in the environment and in our sources of drinking water. The drinking water utilities in the Netherlands strongly support a total ban on PFAS at national and European level, and - in anticipation of such legislation - a ban on discharges because PFAS degrades slowly and therefore remains in the environment as a pollutant for a long time.

Nitrogen ruling

The Council of State issued a ruling on the 'nitrogen emissions exemption for construction' in 2022. This ruling ended the exemption for excavation works and construction for drinking water infrastructure. For Vitens and Vewin, the temporary exemption for drinking water infrastructure must be reinstated if we are to realise our ambition for a sustainable drinking water supply.

The Alliance for Broad Prosperity

Vitens is part of the Alliance for Broad Prosperity ('Verbond Brede Welvaart'). The infrastructure companies participating in the Alliance for Broad Prosperity declare that they wish to contribute optimally to a future-proof, sustainable society and widespread social engagement. Infrastructure, with its networks of roads, railway lines, energy grids and drinking water distribution facilities is a key element underpinning our economy and society. The goals of the Alliance of Broad Prosperity fit seamlessly with our 'Every Drop Sustainable' strategy. In that strategy, we set ourselves the target of making the transition to a sustainable drinking water company, as part of a sustainable water system, by 2030.

Our strategy

Our 'Every Drop Sustainable' strategy focuses on transforming Vitens into a sustainable drinking water utility by 2030. In that year, we will be a drinking water utility that is inseparably rooted in society and that has a positive impact on people and nature. Vitens is a trusted partner in the Dutch water ecosystem. In that context, in addition to 'traditionally' supplying drinking water, we also focus on its 'usage'. In doing so, Vitens fulfils a social role and contributes to ensuring responsible use of water. Together with customers, stakeholders and partners, we seek solutions for a future-proof and resilient water system. To this end, we continuously deploy the right talent, knowledge and skills. We share our knowledge and expertise with our partners and we act to make our in-house operations sustainable, climate-neutral and circular. In 2030, Vitens as an organisation will have several roles that we are actively working on now:

- Provider of reliable drinking water in our area.
- Adviser on sustainable and safe drinking water use.
- Knowledge hub for the drinking water sector in the Netherlands.
- Proactive partner in the implementation programme for a sustainable Dutch water system.
- Incubator for knowledge and talent development in the drinking water field.

To make all this happen, we have the following long-term goals:

- 1 In 2030, Vitens is a financially healthy company. A company that invests as required and in a socially responsible manner and that aims to generate an appropriate return for shareholders.
- 2 In 2030, Vitens supplies reliable drinking water to its customers. 24 hours a day and 365 days a year. Vitens advises customers on sustainable and safe water use.
- 3 In 2030, Vitens works in a process-oriented, data-driven and short-cycle manner and as an intrinsically sustainable organisation, in order to fulfil our statutory duty and successfully address our societal task.
- 4 In 2030, Vitens is a driving force in the Dutch water ecosystem. Through broad collaboration and frequent knowledge sharing with parties in the Dutch (drinking) water sector.
- 5 In 2030, Vitens is a learning organisation that offers a challenging work environment for an ambitious and driven workforce. A workforce made up of people committed to Vitens who want to have a positive impact on society and nature.

Challenges and solutions

How can we secure the supply of drinking water in the years to come? This requires expansion of our production and transmission capacity and greater volumes in our extraction permits. And that in turn requires intensive collaboration with stakeholders, (market) parties and the authorities that issue the permits. To maintain our ability to guarantee good quality drinking water while making a positive impact on people and nature, our 'Every Drop Sustainable in 2030' strategy is more urgent than ever.

In 2022, Vitens worked on innovative solutions that will help us meet the future challenge of providing sufficient drinking water:

- **Intensified collaboration** with stakeholders, (market) parties, permit-issuing authorities and shareholders.
- Greater in-house **energy** generation.
- Increased use of alternative water sources for households, such as **rainwater**.
- Development of a **modernised drinking water concept** via the 'Living Lab'.
- **Awareness campaign** to encourage sparing use of water.
- Management action to ensure a positive **impact** on people and nature by measuring our impact.

Water for today and the future

To guarantee the security of supply of drinking water, Vitens must expand its production and transmission capacities. In the short term, however, administrative and technical obstacles are hampering that activity. For example, obtaining permits is a lengthy process. This applies to both construction permits and to the implementation of existing and new extraction permits.

Drinking water extraction and our environment: the target structure

Changes and challenges, such as climate change, the nitrogen problem, the difficulty in maintaining water quality, nature-related objectives and the housing challenge have a substantial impact on the future drinking water supply. So Vitens is committed to creating a resilient infrastructure for the drinking water supply that has a positive impact on people and nature. We will achieve this resilience through greater flexibility, for example, by pumping drinking water over greater distances through extended transmission pipes. This enables us to better respond to changes in the demand for drinking water. We are also looking specifically for new and larger extraction sites in areas where large volumes of surface water or groundwater are available and where we can add societal value.

Emission reduction

To reduce our own emissions and costs in 2022, Vitens generated its own energy. We do so with solar panels and by capturing methane released in our production process and using it to generate energy. The current energy crisis shows that eliminating our dependence on fossil fuels is more crucial than ever. In that context, water conservation also remains an important focus. The most sustainable drop is the drop we don't use. Vitens encouraged its customers to use water more sparingly in 2022. We set up awareness campaigns and used water scans to give consumers and business customers tips on how to save water.

Retaining water

To achieve a water transition, it is important that we retain water better in wet periods, rather than draining it away as quickly as possible. In addition, we need to match the functions we give to an area, such as agriculture or nature, to the water available there. We currently have two projects underway with our stakeholders:

- The Panorama Waterland project on the 'Sallandse Heuvelrug'. Here, together with provincial authorities, water boards and farmers, we are developing an area where water is leading and where, in addition to extracting water, we are expanding the spatial planning opportunities for agriculture, nature and recreation by retaining water more effectively and through other measures.
- The Blue Agenda on the 'Utrechtse Heuvelrug'. Together with the provincial authorities, water boards, landowners, farmers and other parties, we are looking for solutions to hold water for longer in this area. We are prioritising infiltration and water retention.

'Wise use of drinking water' awareness campaign

Raising awareness of the importance of drinking water can be effective in reducing drinking water consumption. Vitens is therefore committed to cooperating with stakeholders such as provincial authorities and municipalities, and interest groups such as Tuinbranche Nederland (the Dutch garden retail sector), to promote sustainable drinking water consumption. In 2020, a year of extreme drought, Vitens did so by issuing an 'urgent warning' to limit extreme peak consumption. In 2022, we adopted a milder approach to prevent consumption at peak times by launching our extensive 'Wise use of drinking water' summer campaign early in the year. The campaign achieved some impressive results: 93.4 percent of customers who saw the campaign messages reported using less drinking water and 64.5 percent of them said they would also consciously act to limit their water consumption in the future, by taking shorter showers for example. In the autumn, we ran a second campaign together with Tuinbranche Nederland to draw attention to sustainable water use in the garden.

Managing based on impact in 2022

In 2022, Vitens implemented further measures to become an impact-driven organisation. For example, we worked to develop a method to measure impact. 'Managing based on impact requires everyone who works for Vitens to commit to and support our objective of becoming an impact-driven organisation', says strategy specialist Tom Bijkerk. 'This can best be achieved by physically showing what that impact looks like. That's why we introduced 'value cases' this year, which involve working out one specific example in detail.

Lime pellets

This particular value case example focuses on lime pellets, a residual product made from material released during water treatment. You can sell this product to the construction industry, which incorporates it in building materials. But you can also look at more sustainable alternatives. For example:

- Using the lime pellets circularly, in our own production process.
- Using the lime pellets for nature restoration in the forests and woodlands in our area.
- Selling the lime pellets as a soil conditioner in agriculture.

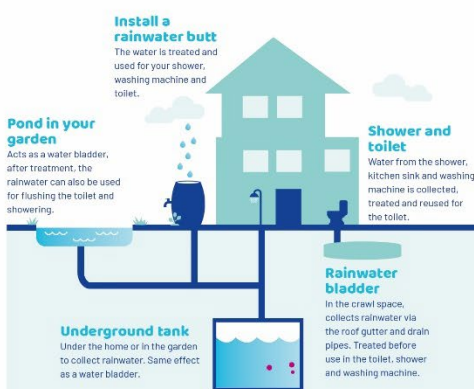
Bijkerk: 'To make a choice, you need to show which alternative creates the greatest value for society. And that is precisely what we are currently trying to quantify.'

Sustainable project execution and sustainable operations

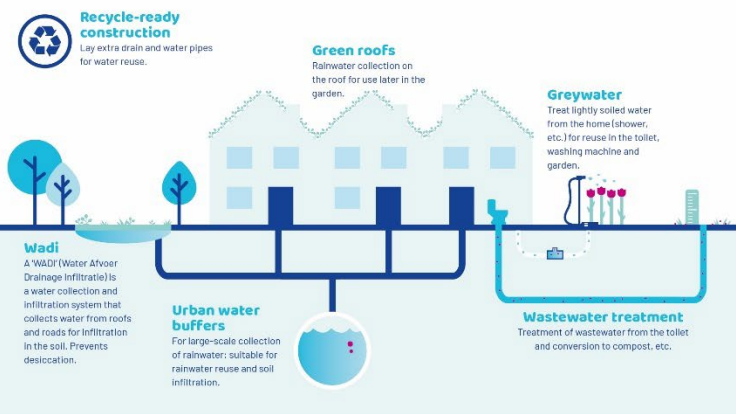
"We are introducing a range of measures to make construction more sustainable at our production sites and elsewhere. For example, we have changed our terms and conditions of purchase to ensure that suppliers work with more sustainable materials and equipment. The nitrogen ruling makes this even more necessary than before", says Anton Rottier, a team manager for Portfolio Management & Reporting.

Water-friendly construction

What you can do personally to make your home water-friendly



What municipalities and property developers do when building water-friendly homes and districts



In addition to more sustainable project execution, Vitens is also strongly committed to making its operations more sustainable. These include generating our own energy more often, reducing emissions and producing more energy efficiently, and reusing flushing water from our treatment process.

Sustainability and Corporate Responsibility report

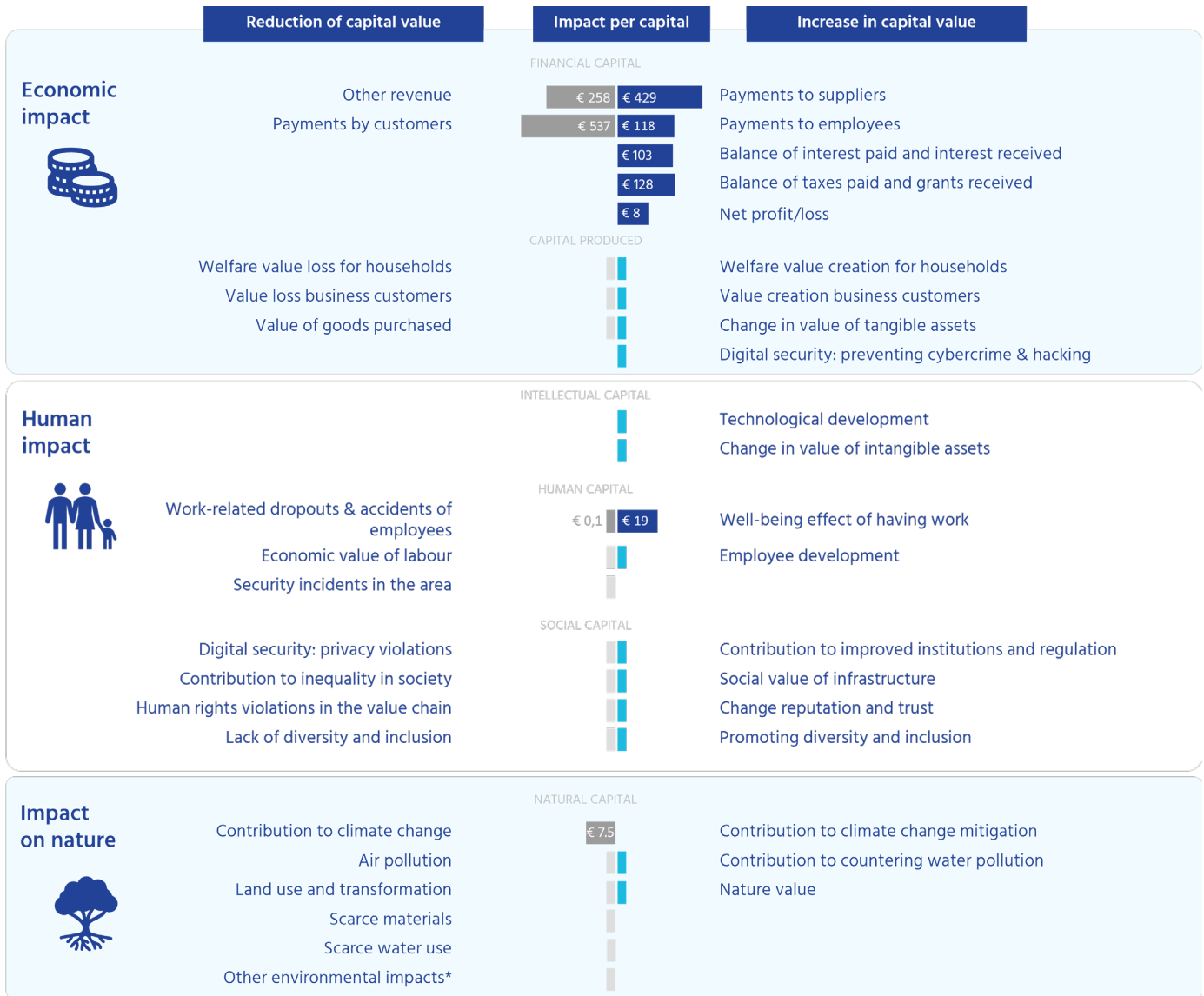
We have an impact on society through our activities. For example, we ensure that Dutch households always have access to safe and reliable drinking water at a fair price. We also ensure that our employees have a workplace where they can develop and feel fulfilled. For nature, we create positive value by supporting initiatives designed to combat water pollution, by managing our water extraction sites as nature areas, and by building in a nature-inclusive manner wherever possible. However, our services can no longer be taken for granted. For example, our key task and mission has been under pressure in recent years and we are no longer able to connect all business customers to the drinking water network. In addition to our positive impact, our work sometimes has a downside. Despite our high safety standards, accidents can occur during the work of our employees or service providers working for us. In addition, we emit CO₂ and methane when producing drinking water.

Vitens aims to increase its positive impact on people and nature. Through impact measurement, we are working to develop an integrated view of our impact that not only considers financial aspects, but also takes into account the impact on the five other capitals as defined in the International Integrated Reporting Council's framework (the IIRC's six capitals model):

- Economic impact: financial capital, manufactured capital and intellectual capital.
- Impact on people: social and human capital.
- Impact on nature: natural capital.

Our impact measurement is based on monetisation and quantification of a limited number of impacts over 2022. We express the impacts in euros. This allows comparison between the impacts and highlights where we add the most value to society. This analysis is based on the IMPACT MEASUREMENT MANUAL FOR INFRASTRUCTURE COMPANIES (version 2022). More detailed information about our impact measurement method can be found in the impact measurement report.

We present our achievements over the past year in a Sustainability and Corporate Responsibility report. This report lists an extensive set of impact measurement metrics, categorised based on the 6 capitals referred to previously. The result is a broader picture of where we create value or withdraw value from society. As our impact model is still evolving, the Sustainability and Corporate Responsibility report presents two types of impact: quantitative and qualitative. The quantitative impacts are calculated using the methodology in the manual. The qualitative impacts are estimates, so we only indicate whether we as Vitens have a positive or negative impact in each case. No attempt is made to quantify the size of these specific impacts. The estimates for our qualitative impacts are updates of the outcomes of a previously conducted Impact Journey in which the other infrastructure organisations also participated.



*Other environmental impacts: soil pollution, water pollution and fossil fuel depletion



Economic impact

Vitens is investing in infrastructure expansion in order to continue to meet the demand for drinking water. In 2022, these investments amounted to 172.9 million euros. To make this possible, Vitens pays suppliers for raw materials, tools and other resources. The investment in the infrastructure that Vitens maintains and expands through this activity directly generates tangible value for households and business customers (i.e. comfort for customers through having access to drinking water).

Impact on people

We do our best to make a positive impact on our customers, employees and society. As a first step to help us understand our impact on people, we have looked close to home: i.e. at our own employees. We strive to have a positive impact on people in terms of their well-being through having work. The value of having meaningful work is more than the salary we pay. Having a job where you feel at home increases your sense of self-worth and your autonomy, broadens your social relationships and consolidates social status. Research in this field and our employee satisfaction survey both indicate that the well-being resulting from having work is significant. In this context, we also see that having a job generates even greater value for workers with limited job prospects.

Another important theme for employees is safety & health. Although we are working hard to reduce this negative impact, there is still work-related sickness absence and accidents still occur, leading to a negative effect on employees. For example, (permanent) injury suffered by an employee as a result of a burnout, but also accidents, such as crushed limbs or heavy impacts that occur in a workplace setting.

Impact on nature

Our strategy - 'Every Drop Sustainable in 2030' - is built around a positive impact on people and nature. We are committed to enhancing the nature values in our water extraction areas and reducing our greenhouse gases. Vitens has an impact on the natural environment in several ways. The goal is to home in on these effects in an increasingly meaningful manner. As a first step to help us understand our impact on the natural environment, we are mapping and identifying our (negative) impact on the climate. Greenhouse gases and emissions are released during water treatment (CO₂ and methane). Three different types of emissions have been defined; scope 1, scope 2 and scope 3 emissions. The scope 1 and scope 2 emissions are associated with our operations and our own energy use. The scope 3 emissions, known as chain emissions, are more indirect in nature. These are the emissions released in the rest of the drinking water value chain. We cannot reduce the chain emissions in a direct approach, but we do have a responsibility to take action. So one of the impact measurement factors relates to chain emissions split across all the partners in the water sector value chain. Vitens is allocated a large portion of the emissions over which we have a great deal of influence and a smaller portion of the emissions over which we have less influence.

input

We trust in valuable resources...

financial

The shareholders of Vitens are 92 municipalities and five provincial authorities. Our equity position, revenues, investments, capital/loan liabilities are described in the financial statements. €172.9 million invested in subsurface and surface activi-ties.

manufactured

With our 93 production facilities, we produced 368 million m³ of drinking water in 2022. We also purchased 4.4 million m³ of drinking water. We have a distribution network of approx. 48,000 km of pipes.

intellectual

In 2021, Vitens invested in Innovation, circular business practices, and a robust link between data and digitisation of the service provision.

human

With 1599 employees, we have a diverse organisation in which flexible and safe working is a leading priority. Because we manage by results, employees have greater responsibility.

social and relations

We are socially engaged through our international activities and education programmes. We work together and seek dialogue with our stakeholders in order to jointly act to protect our groundwater resources.

natural

We need 168 GWh of energy to power our business operations. We manage roughly 2648 hectares of extraction areas in a sustainable manner.

business model

...in order, via our business model...



Deliver

sufficient

high-quality

drinking

water

primary task

Our primary task is to produce, distribute and deliver top-quality drinking water to our customers. We supply to **5.9** million customers and **2.7** million households. We offer perfect service when doing so. Safe and ethical working has our highest priority at all times.

output

...to manage by results.



water for today and the future

348 million m³ of tap water delivered

Service satisfaction index: **8.4**

2 clusters with a positive 'Operational margin'

2 clusters with adequate 'Operational reserves'

Water quality index: **0.015**

Below-target delivery minutes: **12:19**

SAP & Transition

0 ICT priority 1 cybersecurity incidents

5 ICT priority 1 emergencies



attractive and good employer

LTIF: **1.9**

Sickness absence: **5%**

Employee engagement: **7.4**

financial health & predictability

Solvency: **31.0%**

Drinking water revenues:

€ 366.8 million



intelligent water supply system

11 developments ensuing from the

Innovation process implemented within our operations



sustainable water system, drinking water utility and drinking water usage

Pollution index, short-term: **95**

Pollution index, long-term: **399**

6.7 GWh of sustainably generated energy

CO₂ emissions: **141** kilotons CO₂ e

CO₂ emissions per m³ of water produced (kg/ m³): **0.380**



impact

That is how we create value for our stakeholders and environment...

customers

By delivering affordable and reliable tap water to customers 24/7

- We contribute to their health
- We make their lives more comfortable

By providing good information and bespoke service

- We make arranging everything to do with water as easy as possible
- We help customers lead more sustainable lives

environment

Supplying water has a high societal value, but also has an adverse effect on people and nature. We are working to make the water cycle more sustainable and minimise the impact of our operations by:

- Generating sustainable energy
- Managing our sites sustainably
- Reducing the nuisance of our works

Applying sustainable procurement, reusing residual and byproduct flows and collaborating within the circular economy

employees

We contribute to employee wellbeing by:

- Offering selfdevelopment opportunities
- Paying a good income
- Ensuring a good work/life balance

shareholders

Shareholders can rely on us to:

- Act as a constructive partner in spatial planning matters
- Contribute to the wellbeing of their residents
- Help them with their groundwater protection tasks
- Pay dividend whenever possible

...and contribute to global objectives.

Sustainable development goals



Clean drinking water and good sanitation are our primary focus. (6.1, 6.3, 6.4, 6.5 and 6.6)



We contribute to decent work and economic growth. (8.8)



We invest in Innovation and a sustainable infrastructure. (9.1 and 9.4)



We ensure sustainable management and efficient use of natural resources. (12.2)



We take urgent action to combat climate change and its impact. (13.2)

Our value creation model

Comparative figures for the value creation model	2022	2021
Shareholders: municipalities and provincial authorities (number)	92 and 5	92 and 5
Number of clusters with a positive 'operational margin'	2	2
Number of clusters with sufficient 'total reserves'	2	2
Number of developments resulting from the innovation process	11	6
CO ₂ emissions in kilotons CO ₂ e	141	148
CO ₂ emissions per m ³ of water produced (kg/m ³)*	0.380	0.394
Distribution network (in kilometres)**	48,000	50,000
Treated groundwater (millions of m ³)	375.8	378.1
Drinking water production (millions of m ³)	367.8	369.0
Drinking water purchases (millions of m ³)	4.4	5.2
Tap water supplied to customers (millions of m ³)	347.6	349.9
Drinking water revenue (€ millions)	366.8	356.7
Sustainably generated energy (GWh)	6.7	5.4
Energy consumption (GWh)	168	171
Households (millions)	2.7	2.7
ICT prio 1 emergencies	5	6
ICT prio 1 cybersecurity emergencies	0	0
Investments above and below the surface (gross, € millions)	172.9	155.2
Customers in the supply area (millions)	5.9	5.8
Employees (number)	1,599	1,527
Below-target delivery minutes (BTDM)	12:19	18:22
Production facilities (number)	93	93
Engagement index (score)	7.4	7.7
Service Satisfaction Index (score)	8.4	8.3
Solvency (%)	31.0%	30.2%
Safety, Lost Time Injury Frequency (LTIF)	1.9	1.0
Pollution index sources - short-term, long-term	PI-ST 95, PI-LT 399	PI-ST 90, PI-LT 407
Water quality index (WQI)	0.015	0.017
Water extraction areas (hectares)	2,648	2,636
Sickness absence (%)	5.0%	4.2%

1 *The CO₂ emissions per m³ of water produced are based on total gross CO₂ equivalent emissions in scopes 1, 2 and 3.

2 ** Unlike previous years, the number of kilometres of distribution network in 2022 was determined based on the Vewin Benchmark definition. The Vewin Benchmark is based on the number of kilometres of pipe put into service.

How we create value

Value for our customer

Objectives and results - customer

Customers are unable to choose their drinking water supplier. That's why we feel an even greater responsibility for ensuring they can count on reliable and affordable drinking water of the highest quality 24/7. This is vital to the health of our nearly 6 million customers, who also need to be able to manage their water affairs as smoothly and simply as possible.

We have established two focus themes, i.e. material topics, in respect of customer value:

- Security of the drinking water supply
- Drinking water quality

Each material topic is associated with a goal (KPI, *key performance indicator*).

Contribution to SDGs

Our activities to create value for customers contribute to Sustainable Development Goal (SDG) 6: 'Clean drinking water and good sanitation facilities'.

Security of the drinking water supply

Everyone should be able to count on drinking water from the tap 24/7. After all, drinking water is a basic necessity of life. The number of below-target delivery minutes (BTDM) is a key KPI to determine the security of supply. This is the average number of minutes per year during which customers are unable to access drinking water. Our goal was a BTDM of under 14 minutes. This KPI includes both scheduled and unscheduled interruptions.

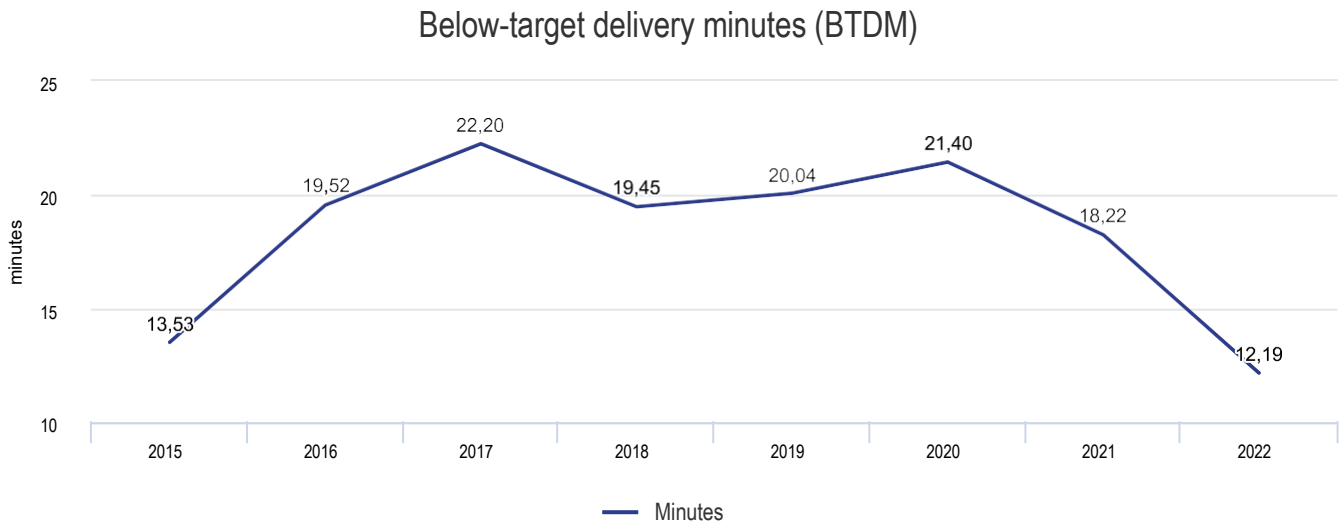
Target met in 2022: no major incidents or interruptions

In 2022, we achieved a BTDM of 12 minutes and 19 seconds (2021: 18 minutes and 22 seconds).

- In contrast to previous years, there were no major supply interruptions.
- The most significant incident was the failure of the booster station in Vinkeveen; as a result, approximately 5,100 customers had no water for 103 minutes.
- At the Spannenburg production facility, based on an analysis of earlier major incidents caused by voltage drops in the electricity grid, we took action to reduce the risk of a failure.

Security of supply challenge: meeting water demand at peak times

- The demand for drinking water at peak times is an ever greater challenge to the security of supply. During a hot summer, for example, meeting demand is always difficult. With this in mind:
- We will invest in the coming years in (new) production sites and the replacement and installation of (new) pipes.
- For example, we will create additional reservoirs to meet the demand on peak days in a specific area.
- Campaigns to reduce drinking water demand and making advice available to consumers and business customers are further areas of focus here.



Drinking water quality

We guarantee the quality of our drinking water through targeted treatment strategies and a quality policy that is more ambitious than the statutory requirements in some respects. After water treatment, the quality has to be monitored on a continuous basis.

Water Quality Index (WQI) Target:

< 0.019

Result: 0.015 (2021: 0.017)

We use a KPI based on the Water Quality Index (WQI) to measure drinking water quality. This index is part of a national system that applies to all drinking water utilities. The WQI is an aggregate figure based on several parameters, including water hardness. The lower the score, the higher the quality of the water.

Conclusion: we met the target. The quality of our drinking water could hardly be better. At the end of 2022, our WQI was 0.015 (2021: 0.017).

- To guarantee this outstanding drinking water quality, we perform over 170,000 quality checks every year in our laboratory.
- In the coming years, we will continue to innovate in terms of our treatment technologies and filtration optimisation in order to assure excellent drinking water quality.

Drinking water quality challenge: maintaining the current high standard

The challenge for the coming years is to maintain the high quality of our drinking water. We will conduct additional research in the coming years to assess the impact of PFAS and other emerging pollutants on our water resources.

Other related results

In addition to the material topics presented above, we consider a number of other results associated with value for customers.

Customer-focused service

In 2022, we improved a number of customer processes and experimented with new technologies to maintain customer satisfaction at a high level. Some examples:

- We opened a 'next of kin desk': a telephone number for people wishing to report a death, staffed by sympathetic agents who listen to people's personal stories and empathise with their emotions.
- Our water comparison tool provides even better information about water consumption and has been used more than one million times since its launch in July 2021.

Good score for service satisfaction

During the course of the year, we measure how satisfied our customers are with our service. For example, when they request a new connection or report the meter reading. These customer journey surveys are the basis of our Service Satisfaction Index (SSI). We add up the outcomes of the different customer journeys. A customer journey that is completed more often is assigned a higher weighting. The SSI is expressed as an overall score. In 2022, we achieved a score of 8.4 (2021: 8.3). We are proud to have maintained this high level of customer satisfaction for several years now.

Early detection of payment difficulties

Since 2016, we have applied a policy of setting up early-detection covenants with municipalities: when we see that a customer is in arrears, we immediately share this information with a municipality. The municipality can then contact the customer. The idea behind this: the earlier you help people, the greater the chance of keeping their financial problems at a manageable level.

At the end of 2022, we had 116 early-detection covenants in place with municipalities and other partners that help households with their fixed costs, or, put another way, an arrears information exchange activity with 127 localities in our service area.

In 2023, we aim to set up this type of covenant with the last three municipalities with which we have contact. We see that the covenants are having a positive effect. Municipalities are embracing their role by seeking contact with our customers on the early-detection list.

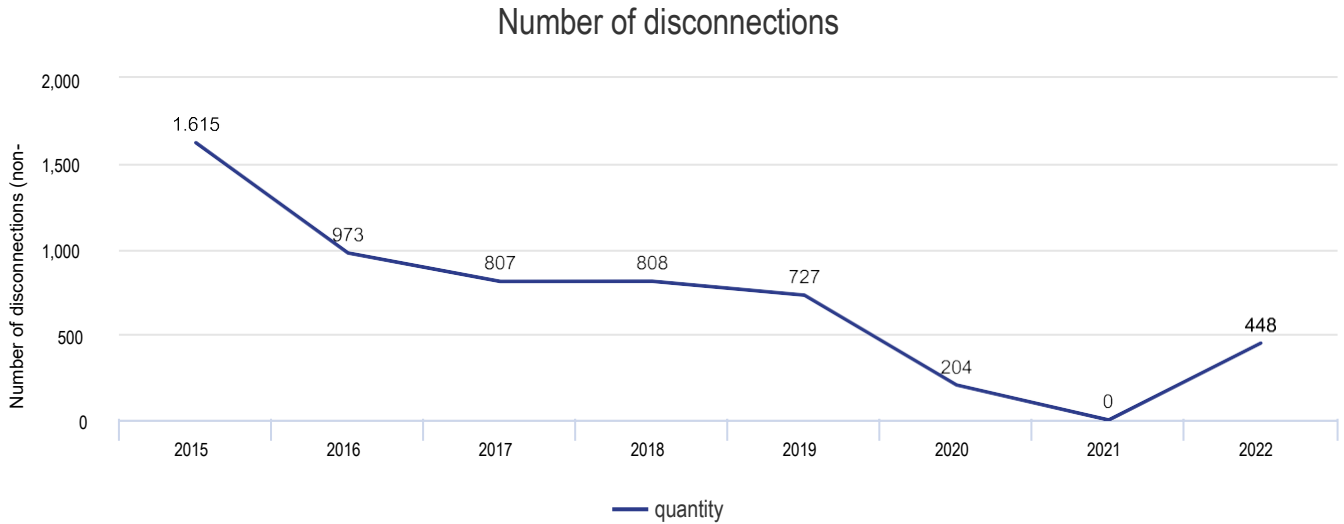
Keeping drinking water available to vulnerable customers

Vitens understands its social obligation and duty to include keeping water affordable and available for vulnerable customers as well. With this in mind:

- Vewin signed a declaration of intent, on behalf of the drinking water industry, to 'jointly support people in debt management schemes'; thereby showing that we are aware of the challenging nature of the present time and deal appropriately with customers in a municipal debt management scheme.
- In 2023, we will work to further operationalise our vision of debt prevention and socially sympathetic collection.

Trend in the number of disconnections

In previous years, we achieved a year-on-year decrease in the number of disconnections almost every year. In 2015, there were 1,615 disconnections. In 2019, the number had dropped to 727. From March 2020 to April 2022, during the coronavirus pandemic, we deliberately chose not to disconnect customers. This kept drinking water available to all customers. So, in 2022, we had to clear a two-year backlog, resulting in 448 disconnections during the year.



Clean drinking water in developing countries, thanks to Water For Life and VEI

As a drinking water utility, we feel responsibility not only for the supply of clean drinking water in the Netherlands, but also in the rest of the world. Through the Water For Life Foundation and our subsidiary VEI, we support over sixty fellow drinking water utilities. We make our knowledge and expertise available in more than 20 countries around the world where drinking water out of the tap cannot be taken for granted. Fellow water companies Evides, Waterbedrijf Groningen, Brabant Water, WLN and Waterleidingmaatschappij Limburg also participate in these initiatives.

Availability of drinking water for all

Vitens sees keeping water affordable and available for everyone as a social obligation. We take action to support vulnerable customers, through the early-detection covenants for people in arrears, a socially sympathetic collection process and other initiatives.

“People sometimes have trouble paying their drinking water bills”, says Ellen Magendans, a policy adviser for Customer Interaction & Service at Vitens. “Especially in these worrying times of high energy prices and rising inflation. Water is a basic necessity of life. That is why we are committed to keeping our drinking water available to these customers as well.”

What Vitens does:

- We enter into early-detection covenants with municipalities to signal debt problems at an early stage.
- We aim to apply a socially sympathetic collection process based on a new vision of debt prevention and social debt collection.
- Through VEWIN, we signed the letter of intent to ‘jointly keep debt management schemes intact’.

Early detection of payment difficulties

“In 2016, a number of municipalities in our service area wanted to set up a mechanism to detect payment difficulties at an early stage”, Ellen explains. “They saw this as a way to prevent an increase in the cases of problematic debt among private individuals. This led to the first early-detection covenants. When Vitens sees that a customer is in arrears, we report the matter to the appropriate municipality. The municipality then seeks contact with the customer. By reporting incipient debt early on, you stop the problem from getting worse.”

Early-detection covenants in place with nearly every municipality

Since 2021, early debt detection based on third-party alerts has been a legal obligation for municipalities. “We now have a covenant with almost every municipality in our service area,” Ellen says. “In 2023, we want to look closely at the process to identify possible improvements and seek more active collaboration with municipalities where we report large numbers of alerts. One of the really good outcomes, though, is that the municipalities and residents are in contact with each other. This makes customers aware of the help that is available locally and the route to it.”

Socially sympathetic collection process for vulnerable customers

“In addition to early detection, we strive to create a socially sympathetic collection process for our customers”, Ellen comments. In concrete terms, this means:

- Multiple payment reminders through different channels.
- Providing information about external support schemes, in our client contacts and through participation in the early-detection system.
- Personal contact in the form of home visits or phone calls with customers facing imminent disconnection.
- Offering payment arrangements and/or deferred payment in consultation with the customer (customised to the individual).
- Use of an outside collection agency and enforcement agent with a socially responsible approach.

Retaining customers who are already in a debt management scheme

At the end of October 2022, Vitens, through VEWIN, signed the letter of intent to ‘jointly support people in debt management schemes’. Ellen: “The intention is to retain customers who are already in a municipal debt management scheme. We continue to supply drinking water to them, even if they are temporarily unable to meet the agreed conditions or payment plan. Cutting off customers from their drinking water supply is a last resort. Especially now, when many people are struggling to make ends meet. The covenants on early detection, our socially sympathetic debt collection process and the letter of intent all demonstrate how seriously we take our social responsibility to prevent disconnection as much as possible.”



Value for our natural environment

Objectives and results - natural environment

Vitens is committed to extracting water sustainably, with respect for the water system and without disrupting the ecological balance. This has advantages not only for nature, but also for us: a cleaner environment means that the effort we have to put into treating the water reduces correspondingly, and that more water resources become available to us.

We create value for our natural environment by:

- Responding to challenges such as water scarcity caused by climate change.
- Protecting our groundwater resources to the best of our ability.
- Reducing our greenhouse gas emissions as much as possible.
- Actively managing nature and strengthening the ecological balance.

Water scarcity due to climate change makes it more challenging to meet the growing demand for drinking water with a minimal impact on nature. To achieve this, our management focus lies on expanding our production capacity where the impact on nature is smallest, optimising permit procedures and forecasting more accurately. We are implementing measures to minimise our greenhouse gas emissions, and generate our own sustainable energy whenever possible. And, perhaps most importantly, we contribute to a positive impact on nature by actively managing nature in our extraction areas (over 2,600 hectares) and preserving the ecological balance.

Contribution to SDGs

Our activities to create value for the natural environment contribute to *Sustainable Development Goal* (SDG) 6: clean water and sanitation, 9: industry, innovation and infrastructure, 12: responsible consumption and production and 13: climate action.

Material topics

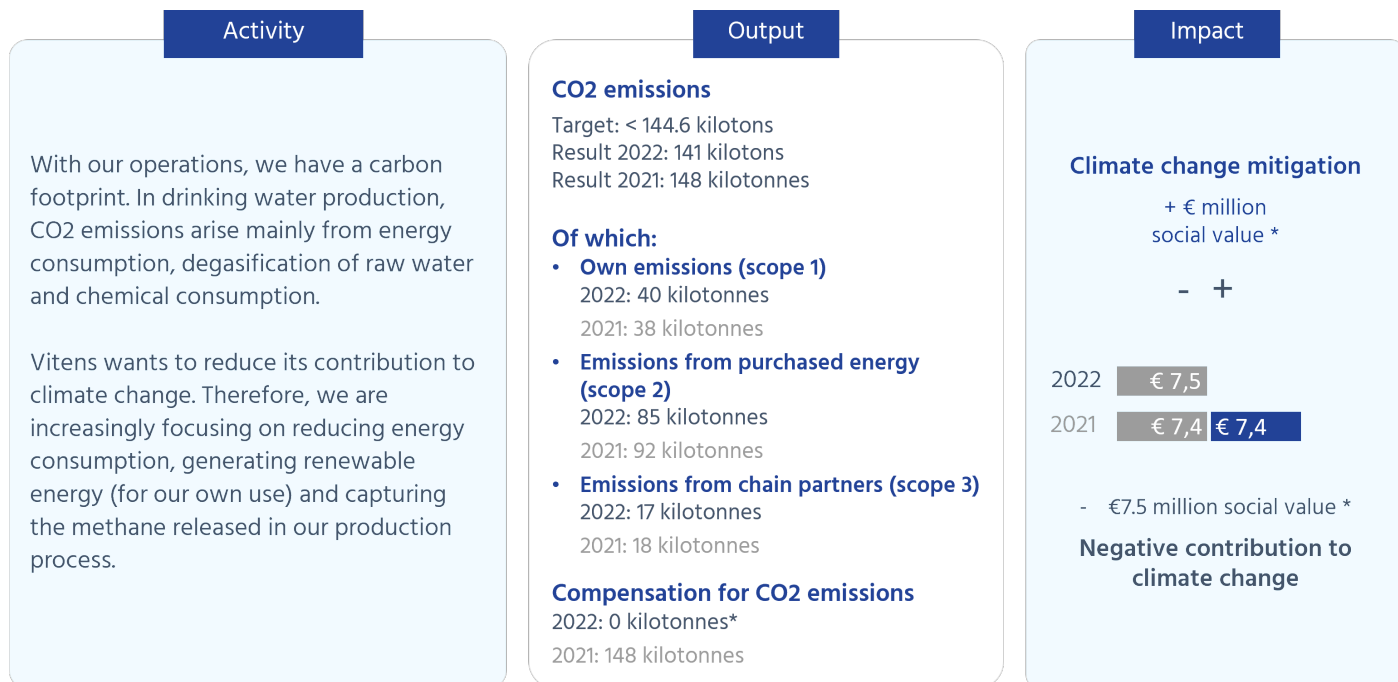
- Water scarcity
- Climate impact
- Protection of water resources

Impact on the natural environment

- Contribution to (combating) climate change
- Combating air, water and soil pollution
- Land use
- Depletion of fossil fuels
- Materials use
- Scarce water use
- Nature value

Stakeholders

- Customers
- (local) Government authorities
- Farming sector
- Other stakeholders in spatial planning and society



*1 *Vitens offset emissions in 2022 to a level that fully compensated the negative societal impact. A European tender procedure for obtaining the Guarantee of Origin certificates (GoO) is currently ongoing, but had not been completed at the time of writing. So the associated positive impact is missing from this calculation.*

Water scarcity due to climate change

We want our supply of drinking water to match demand as closely as possible. We also refer to this as 'demand coverage'. In addition, because of the impact we have on the environment, our groundwater extraction activities are restricted in some areas. As a result, we cannot use the full capacity of our permits, or expand them, at all our sites. We strive to minimise our impact on the surrounding area at our sites, to achieve fully sustainable water extraction.

2022 results

Our service area consists of ten clusters. A cluster is a set of production sites that supply drinking water to a clearly defined area. To determine whether a cluster meets the required demand coverage, we look at the operational margin and the total reserves.

1. A positive operational margin

We forecast water demand each year. Because the actual demand may be higher, due to a hot summer for example, we aim to have 10 percent additional production capacity available in each cluster. We call this extra capacity the operational margin.

2. Sufficient total reserves

The total reserve is the potentially available capacity for responding to an increase in water demand within five to ten years. To exploit that potential capacity, we need permits that we can operationalise as necessary. Our goal here is to have 10 percent additional permit capacity available, over and above the current permits.

Management focus on achieving objectives

To increase our reserves to the desired level, or maintain them, we initiate projects of the following types:

- Projects in which we unlock additional production capacity within existing permit agreements, e.g. construction of a new production site, or expansion of an existing site.
- Projects that focus on reducing our production or distribution losses.
- Projects for obtaining new permits or that focus on eliminating administrative restrictions that apply to a specific permit.

In 2022, two of the ten clusters met the targets for the operational margin and the total reserve. The same number of clusters met the targets in 2021.

The main reason for the lack of improvement in terms of the number of clusters is that water demand has gone up in some clusters. Projects that are now operational have contributed positively, but this improvement has not yet resulted in a higher number of clusters where we achieve the targets. In addition, various planned projects for unlocking unused permit capacity have been delayed.

Better management of projects

Automation of the demand coverage assessment process in SAP is an important development in the context of this topic. The assumptions and data we use are less prone to error as a result, and our forecasts are more accurate.

Furthermore, in SAP we can link our demand coverage to the project development and permit procedures. That correlation helps us to better manage our projects and better estimate which clusters will meet the target in the coming years.

Challenges and ambitions

We want to meet the targets for operating margin and the total reserve in all ten clusters as soon as possible. Because the projects that will help us realise these goals are on long time lines, we expect to achieve this objective between 2030 and 2035. There is increasing uncertainty in forecasts due to weather extremes on the one hand, and targets relating to conservation goals on the other. So we make forecasts in scenario settings and initiate timely action if necessary (adaptive strategy).

Even after this period, continued monitoring of these KPIs will provide important information, especially in the context of changing drinking water demand. But also because our strategic objectives call for us to replace unsustainable extraction sites with sustainable alternatives.

Factors influencing the achievement of the targets in the coming years are the effects of the nitrogen ruling, the success of our cooperation with parties in the area of our extraction sites and the sustainability challenge. The summary below reflects our expectations based on currently available information:

Number of clusters with a positive 'operational margin'

Target for 2022: 4

Result: 2 (2021: 2)

Conclusion: target not achieved

Number of clusters with sufficient 'total reserves'

Target for 2022: 4

Result: 2 (2021: 2)

Conclusion: target not achieved

Protection of water resources

The quality of our water resources is a clear indicator of general environmental quality. Thanks to our intensive monitoring and analysis methods, we have an accurate picture of the substances and micropollutants present in the soil and in groundwater. This knowledge is essential to taking effective action to improve water and soil quality. That is not only good for us as a drinking water utility; the entire natural environment benefits. We also engage in active nature management in these areas to develop nature and increase biodiversity, both in the soil and on the surface.

Pollution index

We use our pollution index (PI) to measure the quality of our water resources. The pollution index shows which substances are present in the extracted water and in what quantity. Those substances are split into four groups:

- General substances (nitrate, sulphate, calcium and magnesium)
- Pesticides
- Medicines
- Industrial chemicals

The measured value for each substance is compared to the short-term (2030, PI-ST) and long-term (2050, PI-LT) targets. For the short term, we follow the standards in the Drinking Water Decree, plus a more stringent value for the Substances of Very High Concern group. For the long term, we have chosen to weight the target value by a factor of ten. This approach is in line with our clean water sources ambition.

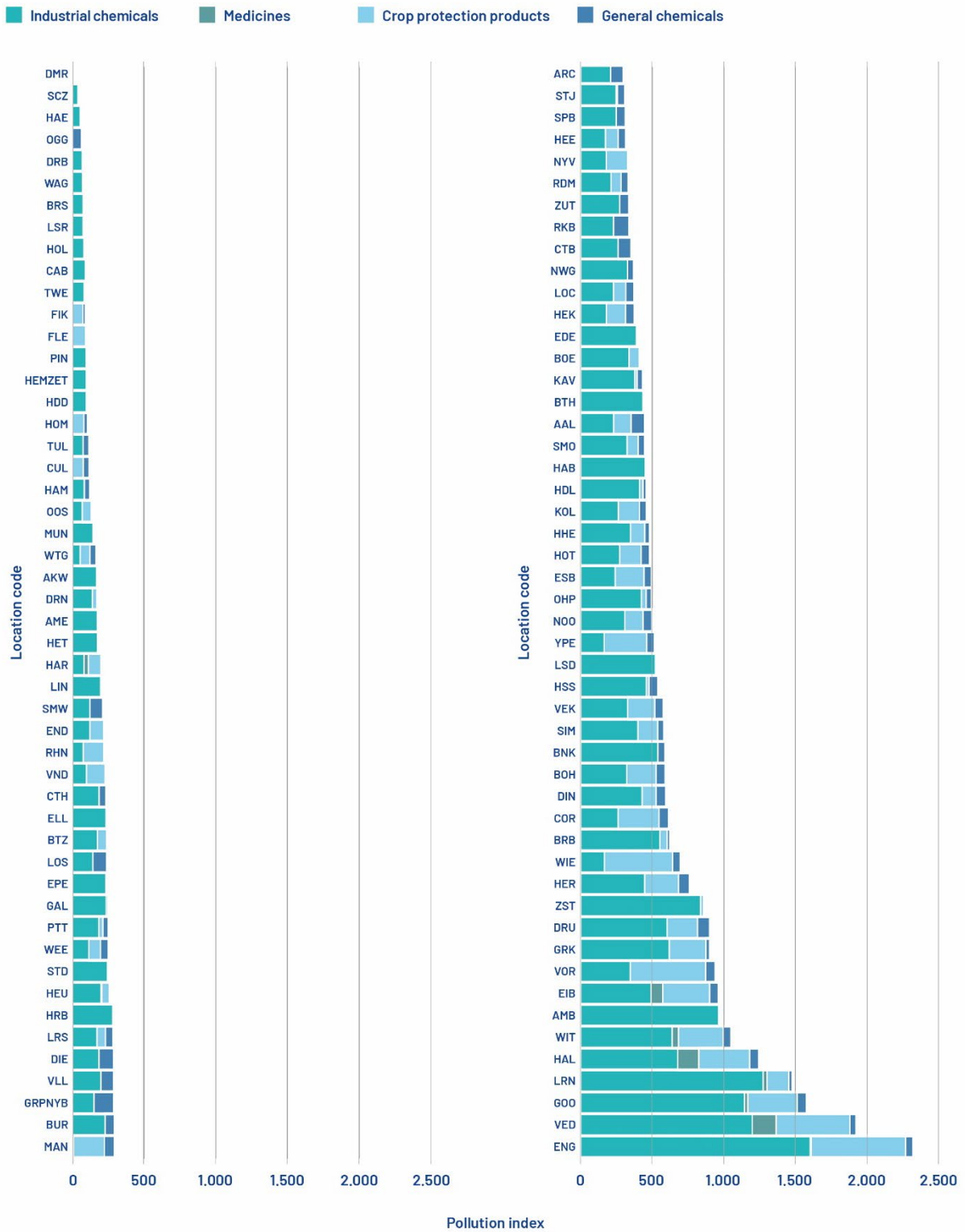
In 2022, the analytical package was expanded to include substances in the PFAS group. The results indicate that PFAS is present in very low concentrations at many extraction sites. At 10 sites, the measurements exceed the standards and thus contribute to the PI. The government is working to tighten drinking water standards, so the contribution of PFAS to the overall PI is likely to be much greater in the future.

The results in 2022 were as follows:

- PI-ST deteriorated slightly from 90 to 95.
- PI-LT improved slightly from 407 to 399.

Long-term

Pollution index per site



Demonstrating long-term trends

It is important to emphasise that we do not view the pollution index as a KPI with a hard target. Indeed, a rapid improvement in water quality cannot be expected given the extensive time needed for the effects of the measures to become apparent. The KPI is primarily intended to show long-term trends.

Communication with stakeholders

Among other things, we use the index as a tool for discussions with our stakeholders. The PI allows us to pinpoint where and in what concentration pollutants are present. Based on that information, government authorities or other stakeholders can take action as necessary, such as banning the use of certain pesticides in our groundwater protection areas. Bentazon, for example, may no longer be used in groundwater protection areas.

Pollutants by province

Over the past year, we produced charts based on the PI to show the provincial split of the pollutants present in our extraction areas. We intend to match this information with provincial environmental programmes.

Challenges and ambitions

In the coming years, we are committed to further understanding the quality of our groundwater resources. We will achieve this through:

- **Tighter management focus on water quality**

We want to manage water quality in our own operations based on tighter controls. This involves zooming in on relevant substance groups, such as pesticide residues, nitrate, volatile hydrocarbons (VOCL) and PFAS. We do this by preparing for the future based on new insights.

- **Early Warning monitoring network now operational**

The Early Warning monitoring network goes into operation in 2023. The system monitors shallow groundwater. This early warning notification helps us track which substances originate from current emissions.

- **Use of the PI to set up our target structure**

Finally, we want to use the pollution index to set up our target structure; our water extraction activities in the long term. For example, we can use the index in our search for new water resources or when considering disposing of existing resources.

Climate Impact

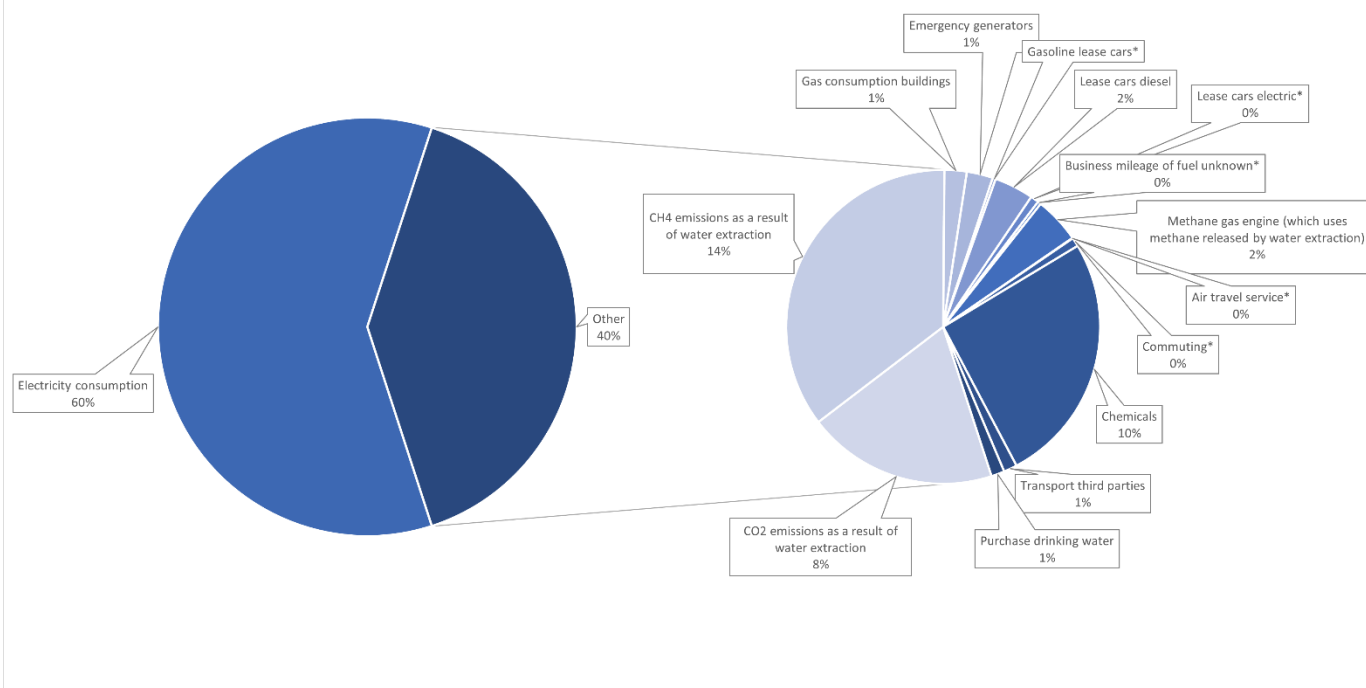
Importance of reducing CO₂ emissions

The emission of greenhouse gases such as CO₂ and methane is a major contributor to climate change. We unavoidably emit greenhouse gases during certain activities, such as treating and distributing drinking water. Given our duty of care for the environment and society, we try to reduce these emissions as much as possible.

Our ambitions here are linked to the objectives of the Dutch climate agreement: a 49 percent reduction by 2030 compared to 1990. In the case of Vitens, that equates to an emissions target of 100 kilotons CO₂ equivalent in 2030.

Vitens CO₂-eq emission 2022 (kt)

Gross: 141 kt



* Emissions are zero, based on rounded figures in kilotons CO₂ equivalent

A closer look at our emissions reveals that nearly 2/3 of our CO₂ emissions are related to the electricity we consume when extracting, treating and distributing water.

In addition, about 14 percent is related to the methane that is brought to the surface when pumping up groundwater. These are the areas where Vitens has the greatest potential for reducing the greenhouse gas emissions associated with our own operations. At our largest production site in Spannenburg, we already capture this methane, and use it to generate sustainable energy. In addition, we are conducting methane capture studies for a number of other sites.

CO₂ emissions in 2022

We plan to meet the 2030 emissions target in incremental steps. To check whether we are on track, we look at what emissions we need to achieve each year: the projected emissions for that year. In 2022, our emissions were roughly 141 kilotons CO₂ equivalent. This is lower than our emissions in 2021 (about 148 kilotons CO₂ equivalent), and also lower than the target we had set for 2022 (144.6 kilotons CO₂ equivalent). So we met the 2022 target.

Limited part of the result attributable to our own actions

A cautionary note applies here: a large part of the emissions reduction we achieved is directly related to actions to make the Dutch energy mix more sustainable (our energy consumption is virtually the same, but cleaner generation resulted in a reduction in our scope 2 emissions). Only a small part of the emissions reduction is directly attributable to our own actions; i.e. the net positive result of implementing emission-reducing/energy-saving measures on the one hand, versus the more intensive water treatment that was required and having to transmit more water due to drought on the other hand.

Causes of the delay in implementing measures

Our own sustainability measures are not being implemented as fast or smoothly as we would like for a number of reasons:

- Lengthy decision-making procedures due to potential conflicts of interest in spatial planning.
- A lack of manpower in terms of our professionals for implementing projects in the field, leading to strict prioritisation within the organisation and a strong emphasis on reliable production and delivering sufficient high-quality drinking water.

Past decisions directly reflected in the results

It is also important to note that the 2022 emissions are largely the result of decisions taken in earlier years. We cannot reduce our emissions overnight. The effects of the measures initiated this year will only become apparent in a few years' time.

Challenges and ambitions

To achieve the remaining reduction of 41 kilotons CO₂ equivalent over the next seven years, we need to achieve an average annual reduction of around 6 kilotons CO₂ equivalent. For 2023, we have set a target of 5 kilotons CO₂ equivalent.

Large-scale implementation of solar panels and methane reduction

We will achieve a further reduction in emissions in 2023 by fitting an expansive surface area of solar panels to the roofs of our buildings in 2023. In addition, the focus on methane capture and processing will make an important contribution to reducing our emissions in the medium term. Finally, we are conducting a study to assess the deployment of wind energy.

Feasibility under pressure

At the same time, the feasibility of our reduction task is under pressure. This is due to developments in the labour market, the limited availability of materials and challenges in spatial planning processes, among other things.

Target: 144.6 kilotons CO₂e

Result: 141 kilotons CO₂e (2021:148 kilotons CO₂e)

Conclusion: target achieved (limited contribution by in-house initiatives)

Circularity and By-Product Flows

We are committed to converting waste flows into by-products that have value by giving them a new function. The main by-product flows from our production process are humic acid, iron-rich groundwater and lime pellets. Reuse has already been set up for these flows, for example as a component in building materials (lime pellets in cement) or as an additive in biodigestion plants (iron sludge). However, our ambition extends beyond these forms of reuse: we seek applications for repurposing these flows in our own areas and enriching the soil. We would also like to reuse other waste flows (for example, those that originate from our production and transmission capacity projects). Our new Socially Responsible Contracting and Procurement (SRCP) policy plays a prominent role in this context (see below).

Socially Responsible Contracting and Purchasing (SRCP) policy

Last year, we drew up our SRCP policy. This policy contributes to this ambition by ensuring that we select the most sustainable market parties when awarding contracts, both in terms of their business operations, and during execution of the contract on behalf of Vitens. As a result, we make our chain collaboration more sustainable and the market parties contribute to achieving Vitens' 'Every Drop Sustainable' strategy.

Climate change adaptation

By focusing on a resilient infrastructure, based on the concepts of the target structure, we are better able to adapt to climate change. We see that the impact of some small existing extraction sites is increasing due to climate change. So we are now considering whether the current existing smaller extraction sites are future-proof in the long term.

Social impact on the natural environment

Vitens' strategy calls for a positive impact on people and nature and we calculate the impact Vitens has on society in a growing number of areas. This also applies to the natural environment:

Living Lab: the quest for a flexible and future-proof infrastructure

To better guard against water scarcity and climate change, Vitens is looking for ways to make its entire infrastructure more future-proof. In the Living Lab in the IJssel Valley, Vitens is concretely exploring approaches to achieving this aim. Vitens has set up a tender framework that challenges market partners to come up with creative and innovative ideas to make the infrastructure more flexible and sustainable.

"Previous projects to create a future-proof water system, such as 'Panorama Waterland', only looked at extraction", says drinking water infrastructure strategist Rian Kloosterman. "Now is the time to look at the overall infrastructure. We are asking the market to come up with concrete ideas that we can actually implement in the next couple of years."

Living Lab in the IJssel Valley

The intended location of the project, called 'Strategic Heart Living Lab', is the IJssel Valley. This is no accident, Kloosterman explains. "In Overijssel, we are increasingly hampered by the limitations of our infrastructure and water system. Our current infrastructure lacks the flexibility required to respond quickly to changes in drinking water demand, climate change or extraction availability."

Different type of water source or treatment site

According to Kloosterman, there are several approaches that parties can adopt to future-proof an innovative concept for the future infrastructure. "A greater surface water intake from the river IJssel for example, so we don't have to extract as much groundwater. Or a flexible design for a treatment site - the water production plant of the future - or for the distribution network."

Joining forces in a consortium

"The idea is to encourage market parties to join forces in a consortium," says Stefan Hemmer, Asset Strategy & Policy team manager. "Such a consortium would typically consist of a design and consulting firm, an infrastructure contractor and a construction company. After forming a consortium, the parties can then register with us as a single candidate."

Scalable and modular construction

"The process for physically creating an extraction site needs to be adapted", Kloosterman says. "We also want to set up the rest of the infrastructure in a different, faster manner. The new types of production site or pipe designs must be scalable, modular and site-independent so that we can build them relatively easily in other places. To put it another way: we are looking for a universal blueprint."

Collaboration with partners

Creating a future-proof drinking water infrastructure also requires a different approach for collaborating with partners, Kloosterman adds. "We want to be more explicitly present and interact with the parties involved from the very beginning. This is also the reason why the provincial authority of Overijssel is part of our tender assessment team."

Pilot site within five years

In July 2023, Vitens will analyse the submissions and choose the parties whose design will be taken to the next stage. Hemmer: "In collaboration with the market players and administrative partners, such as the provincial authority, we will then form the construction team responsible for building the Living Lab environment and testing its operation. If all goes well, a pilot site should be up and running within five years." If this succeeds, the time required to build a new extraction site could possibly be reduced from twenty years to just five, Hemmer believes. "Maybe the picture of the future I'm painting now is slightly too rosy, but we need ambitious forward-looking scenarios like this to achieve great things."



Value for our employees

Objectives and results - employees

In 2022, our 1,599 employees (2021: 1,527) worked every day to achieve our mission of 'water for today and the future'. Because we regard our employees as our most important capital, their well-being and welfare is one of Vitens' highest priorities.

Contribution to SDGs

Our activities to create value for the employees contribute to *Sustainable Development Goal (SDG) 8*: decent work and economic growth.

Material topics

- Attractive and good employer

Impact on our employees

- Well-being effects of having work
- Employee development
- Work-related sickness absence and accidents
- Environmental effects
- Value of work

Stakeholders

- Employees

Attractive and good employer

Objectives and results

Activiteit

For our employees, we strive for positive impact on people through well-being from having work. After all, the value of meaningful work is more than the salary that is paid. Having a job where you fit in increases your self-esteem, autonomy, social relationships and social status.

Another important issue for employees is safety and health. Although we are working hard to reduce this impact, there are still work-related absences and accidents, which lead to a negative impact on employees.

Output

Number of employees:

2022: 1.599
2021: 1.527

Number of employees with a distance to the labour market:

2022: 9
2021: 7

Employee satisfaction score:

2022: 74
2021: 73

Absenteeism rate

2022: 5%
2021: 4.2%

Number of non-fatal accidents

2022: 18
2021: 12

Impact

Well-being through having work

+ € 18.6 million social value

- +

2022 € 0,1  € 18,6

2021 € 0,1  € 17,1

- € 0.1 million social value

Work-related downtime and accidents

Objectives and results

An innovative, socially engaged employer, where you work healthily and safely. Work that gives you energy, makes you proud and that you experience as meaningful: all these aspects are important for our employees and important conditions for fulfilling Vitens' ambitions. As an innovative organisation, we offer employees the opportunity to develop their talents, grow personally and professionally and contribute to an (international) societal task. Attention for the person's unique character, individual qualities, career opportunities, a good work-life balance, flexible and safe and healthy work are essential ingredients in this regard.

Employee turnover

We welcomed 205 new employees, but also said goodbye to 127 employees. This high rate of turnover demands a great deal from our organisation.

In the light of all the developments we face, continued high employee turnover and the diverse needs and expectations of the different generations, maintaining our position as an attractive and good employer continues to be extremely important.

We identify any changes in this respect by tracking the following indicators:

- The composition of the workforce
- Diversity and inclusion
- Working safely and LTIF
- Recruitment and selection
- Engagement
- Sickness absence
- Development of talent

The composition of the workforce (excluding external staff)

Vitens employs 1,599 (2021: 1,527) people, of whom 73 percent are male (2021: 74 percent) and 27 percent female (2021: 26 percent). Of these employees, 90 percent have an open-ended employment contract with Vitens. Only 10 percent of the employees have temporary contracts (2021: 10 percent).

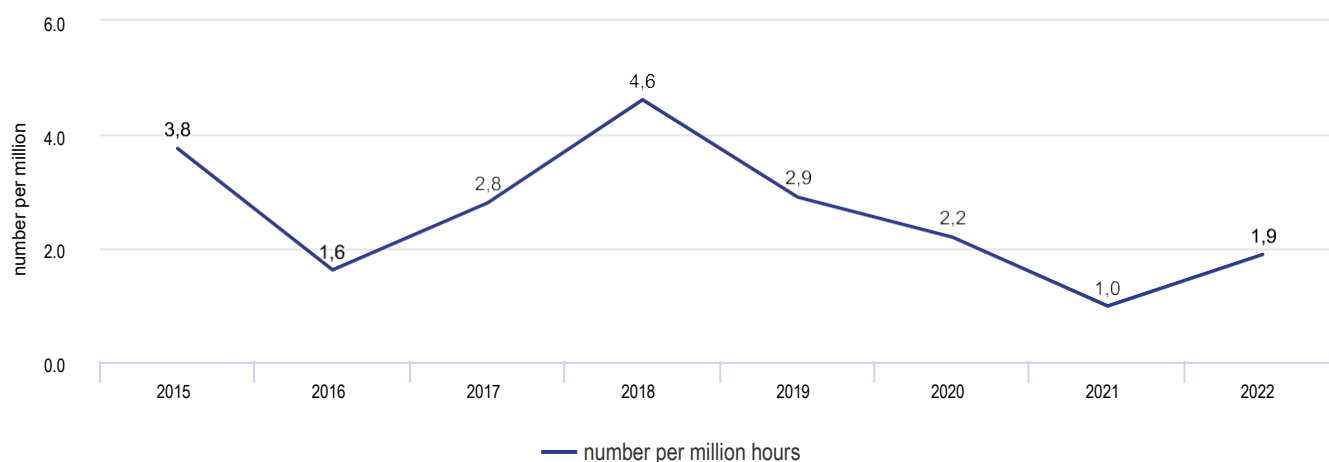
Diversity and inclusion

As part of our inclusive society, we believe it is important that everyone can participate and we are committed to offering equal opportunities in the workplace. This is why we offer work experience positions within Vitens for people who are disadvantaged in the labour market. Employees from a care farm assist us with this initiative. We are also putting in place further opportunities to offer work experience positions, such as the partnership with the Refugee Talent Hub. In early 2022, we signed the SER Charter, indicating our commitment to a joint campaign to achieve an inclusive work culture. This activity also includes attention for a socially safe working environment.

Working safely and LTIF

Working safely is an important theme for Vitens. Safety awareness and safe conduct on the part of employees play a crucial role in occupational safety. So we pay close attention to a safe working environment in terms of physical safety, working conditions and the environment. The Lost Time Injury Frequency (LTIF) increased from 1.0 in 2021 to 1.9 in 2022. In other words, there were 1.9 accidents resulting in absence from work per 1 million hours worked. Last year, we set up an in-depth study to identify the causes of the increased LTIF. A 'safe work' improvement plan has been drawn up based on the outcome. We expect to implement these actions in 2023.

Lost Time Injury Frequency (LTIF)



Despite this increase, safety rules are considered increasingly important. High attention for safety and high employee awareness are reflected in the number of reports of (potentially) unsafe situations. We welcome this development because the reported incidents and situations help us to make improvements. In 2022, more than 160 dangerous situations were made safer thanks to these reports.

Recruitment and selection

The tight labour market made recruiting new employees a challenging task again in 2022. Even so, we managed to reach a lot of people this year as well, and about 280 vacancies were filled with both new employees and through employee advancement. In the coming years, the recruitment challenge will remain substantial as nearly 400 employees are due to retire in the period up to 2030. As developments filter through in our (strategic) personnel planning and the campus recruitment initiative becomes established, we will be able to offer more starter positions, internships and traineeships. In this connection, it is pleasing to see that last year's intermediate vocational education (MBO) traineeship proved to be a success.

Employee engagement index

In recent years, the physical and mental well-being of our employees has become more important than ever. Employee engagement is a key factor here. Agile employees who enjoy their work are a baseline asset for Vitens. We measure this by conducting an employee engagement survey twice a year. In 2021, the engagement index was 7.7 and Vitens achieved a score of 7.4 in 2022.

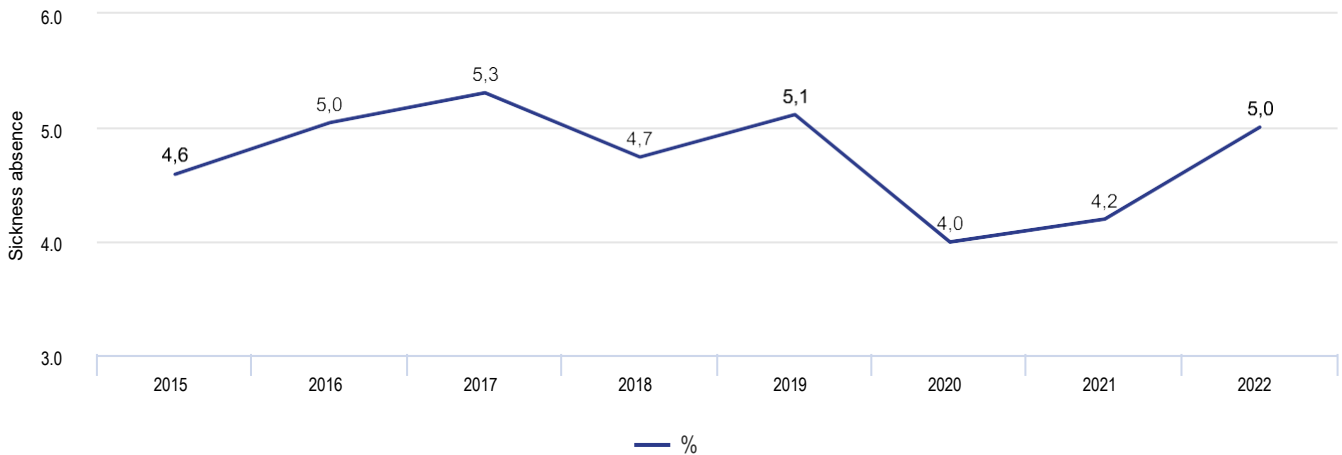
Despite the slight decrease, we are pleased with this good score. Obviously, we continue to work throughout the year to grow and improve in this area. We do so by prioritising the job satisfaction and well-being of our employees. For example, employees were given the opportunity of participating in a health check.

Sickness absence

Sickness absence increased last year from 4.2 percent in 2021 to 5.0 percent in 2022. That result means that we did not achieve the 4.5 percent target set for 2022. The coronavirus measures were lifted in the spring. In line with the national trend, this led to an increase in the number of people reporting sick within Vitens (the rate rose from 0.62 to 1.06).

Partly because a large group of employees is over 50 years old, managers have paid close attention to sustainable employability and health and this is now bearing fruit.

Sickness absence



Development of talent

Personal development, development of talent and advancement are important to Vitens and our employees. We analysed our employees' development potential, needs and performance in 2022, and now have a reliable initial picture of the development paths for our employees. This has a positive impact on both the organisation and the individual employee. Employees were encouraged last year to approach their managers and discuss their development needs in relation to their role in fulfilling Vitens' task. The number of internal transfers (154) is indicative of the effect of those discussions. Employees are also offered various tools, such as the Talent Motivation Analysis (TMA).

This tool highlights the employee's motivations and talents, which can then be discussed further. In addition, employees had access to a broad range of training courses. The Vitens Transfer Point is a further scheme that allows employees to temporarily try out a different role, and the VEI missions contribute to talent development.

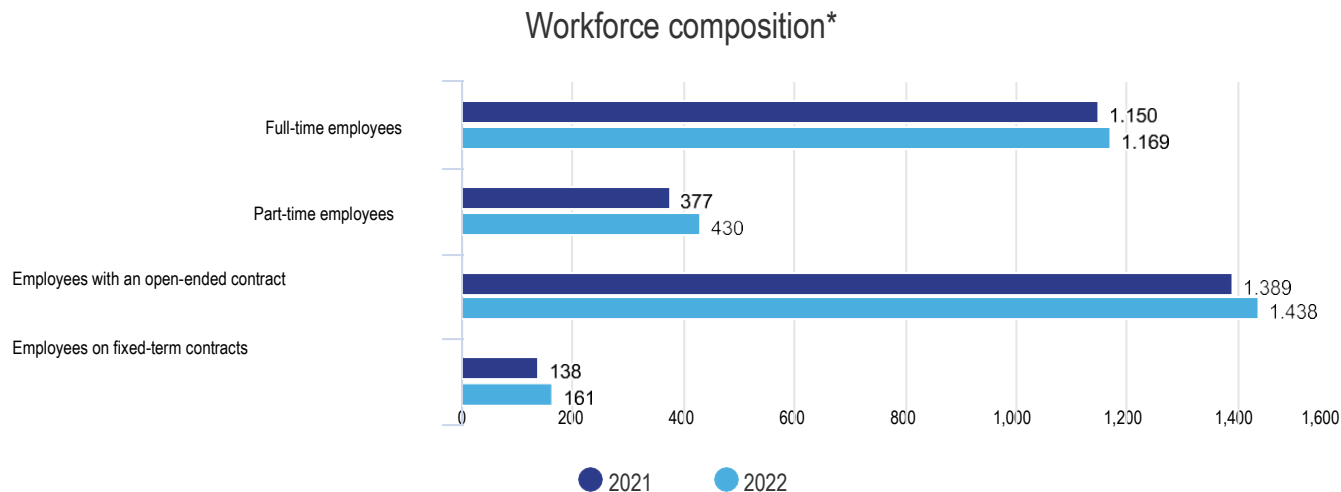
Working abroad through VEI

Vitens employees interested in international work can request a posting to countries such as Mozambique, Kenya, Indonesia and Bangladesh via VEI, a subsidiary of Vitens. In their new post, they gain international work experience and help local drinking water utilities improve their water supply network, invoicing system, technical systems, financial systems and customer systems.

The workforce at Vitens

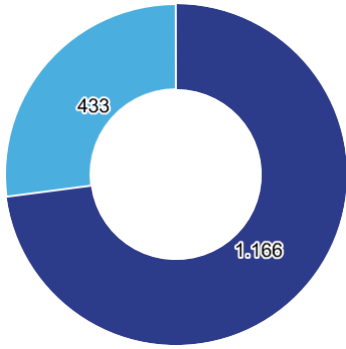
Vitens employs 1,599 people. A collective labour agreement applies to 1,597 employees (everyone except the Executive Board: 99.87 percent of the total). All our employees work in the Netherlands.

The charts below show the composition of our workforce. The [glossary](#) explains how this data is generated.



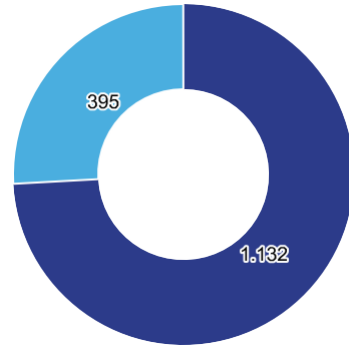
*1 * The gender split in the above categories is as follows (women/men): full-time: 152/1017, part-time: 281/149 employees with an open-ended employment contract: 390/1048, employees with a fixed-term contract: 43/118*

2022



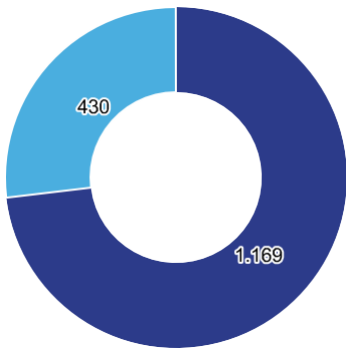
Men Women

2021



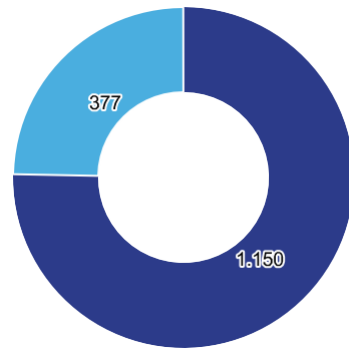
Men Women

2022



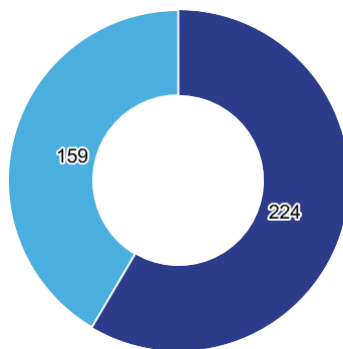
Full-time Part-time

2021



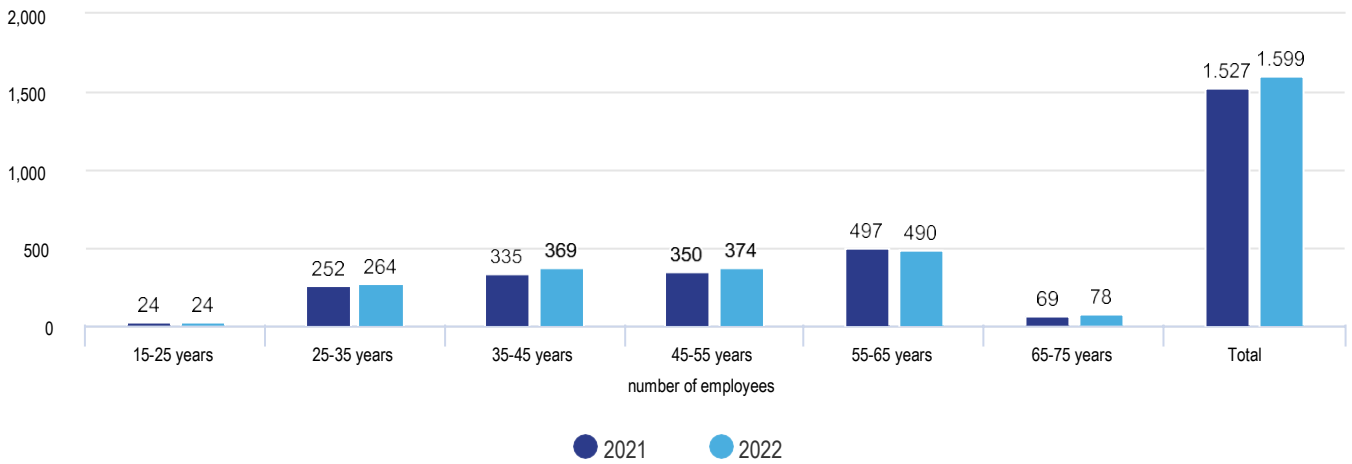
Full-time Part-time

Temporary staff hired in 2022



Women Men

Employee age split



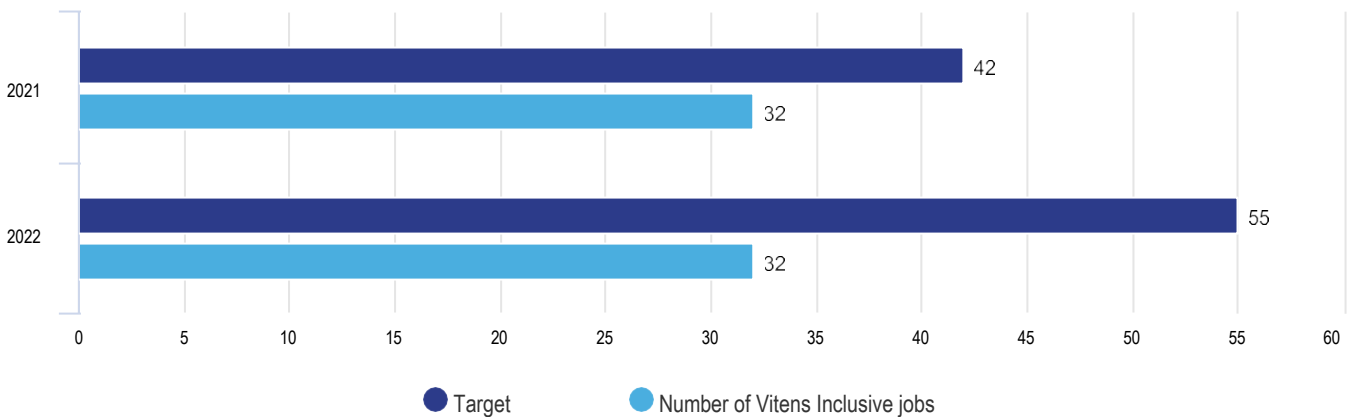
Vitens Inclusive

In our inclusive society, we believe it is important that everyone can participate. So we create job experience opportunities for people with limited employment prospects.

For example, we regularly receive help from residents of a special needs care farm. To establish this cooperation, Vitens works with a specialised agency.

This activity was hard to organise last year. This target group often needs intensive supervision, and the coronavirus pandemic made that difficult. Next year, we will set even more ambitious objectives for our programme with this target group.

Vitens Inclusive (number of positions for employees with poor job prospects in the labour market)



Health check motivates colleagues to be more mindful of their health

Vitens encourages employees to work on their mental and physical health. For example, all employees have the opportunity of participating in a health check that looks at everything from nutrition and exercise to relaxation and their job perception. The checks are a success: over a thousand employees have already signed up.

Checking where we are right now

“First and foremost, we want to find out how everyone is doing after the coronavirus period”, says Jelle Post, HR adviser at Vitens. “We previously conducted a survey on hybrid working, for example. We want to get more out of this approach because the information it generates helps us to improve working conditions and provide more effective support to keep employees healthy and employable. Second, working conditions legislation requires us to carry out a health examination once every four years.” To protect employee privacy, an outside research agency - *Bewegen Werkt* - carries out the health checks.

The health check consists of:

- A questionnaire for the Sustainable Employability Monitor.
- A *health check* that involves physical tests and measurements.
- A personal consultation (optional).

High enthusiasm

Jelle: “It’s pleasing to see that so many colleagues find this interesting. The questionnaire covers nutrition, exercise and relaxation, as well as topics such as job perception. The participant can see how he or she is doing in a personal report. If you score in the red, it’s time for action. In that case, you are invited to talk to the vitality coach.”

‘Free and fast information about my health’

To protect employee privacy, Vitens cannot itself contact the participants. Vitens does not know who decides to participate and who does not. However, Jelle is prepared to share his thoughts on his personal experience with the health check. “It’s an unexpected but thoughtful gift from my employer. I am not somebody who visits the doctor very often and now I have access to free and fast information about my health. The glucose measurement will be particularly interesting because I know that my blood sugar can be too high at times. The questionnaire didn’t reveal any surprises, instead it confirmed what I secretly already knew.”

What is the benefit?

- A better understanding of your health, lifestyle and employability.
- Awareness of how your choices affect your health and your job satisfaction.
- Advice and practical tips on changes you can make yourself.
- For Vitens: an anonymous collective report of the results.

Value for our shareholders

Objectives and results - shareholders

We have a unique relationship with our shareholders (92 municipalities, 5 provinces). They are indispensable because they issue the permits we need, and they have a financial interest in our activities. In addition, like us, our shareholders have a societal duty of care in which drinking water plays an important role.

We create value for our shareholders by:

- Focusing on digitisation and data security.
- Continually working on innovations.
- Managing our affairs well to keep the organisation financially sound.
- Collaborating smoothly with our partners in the water system.

Pollution index

Thanks to improvements in our analytical methods, we are now able to detect more pollutants. Our pollution index is a valuable tool in conversations about addressing pollutants. We also established or intensified several collaborations with partners. In 2022, we implemented some truly impressive innovations in our operations. Unfortunately, unforeseen high costs and lower revenue due to lower drinking water consumption did put further pressure on our financial health.

Contribution to SDGs

When it comes to creating value for shareholders, we contribute to *Development Goal (SDG) 9*: industry, innovation and sustainable infrastructure.

Digitisation and data security

Digitisation is a material topic for Vitens and an essential element of our 'Every Drop Sustainable' strategy.

During the past five years, our digitisation effort has focused on:

- Increasing reliability.
- Improving digital security.
- Deploying effective digital innovations.
- Adequate system replacements.

Much attention was also paid to bringing internal Vitens users up to speed with a rapidly growing range of digital assets, through useful and well-explained tools and resources.

Computer automation

As human resources are becoming scarce and specific knowledge is often stored in the heads of employees approaching retirement age, the logical strategic choice is to automate everything that can be automated. With this in mind, Vitens has launched two major automation programmes in the area of production control: WaterPAS (replacement of the production automation) and Infra 2025 (data-driven operational decisions digitisation). In addition, we are reviewing and transferring all of Vitens' processes for operations and customer handling to state-of-the-art SAP tooling within the scope of the SAP and transformation programme.

2022 results

These programmes increase dependence on digitisation, so addressing and reducing the risk exposure associated with digital operations is essential. In the context of increased reliability, the ICT department's multi-year professionalisation programme achieved a reduction in the number of major incidents, which dropped from 15 in 2017 to 5 in 2022. The indicators for assessing this internal control capability have also been expanded and assessed on a digital maturity scale of 1 to 5. Vitens' office and customer automation scores a high 3 and is well on the way to achieving a 4 in terms of digital maturity.

ICT Prio 1 emergencies

Target: 10

Result: 5 (2021: 6)

Conclusion: we met the target

Challenge and ambitions

Assisting and including Vitens employees in the digitisation task as effectively as possible is a key challenge. That task also involves facilitating employees so that they are better able to work digitally. To achieve this, our management focus lies on achieving a very high availability level, resulting in a service level of 8.9 this year. This score continues the upward trend of recent years.

Data security

Digital security also benefits from updating and consolidating current digital platforms to minimise the attack surface. For example, all the office data was removed from the old systems and cleaned up. The usable part was then transferred to the new Microsoft 365 environment where the data is stored safely and can be accessed by everyone anytime and anywhere to allow hybrid working. As a result, in the period since the COVID-19 lockdowns to the present, we have succeeded in limiting the CO₂ emissions associated with personal travel.

2022 results

We keep Vitens employees updated and raise their awareness of secure working practices as much as possible, with a specific focus on data security. In terms of cybersecurity, we measure performance and initiate management action based on the KPI for the number of Prio 1 cybersecurity emergencies.

ICT Prio 1 cybersecurity emergencies

Target: 0

Result: 0 (2021: 0)

Conclusion: we met the target

Financial health

The importance of financial health

A strong financial position is essential to maintaining our ability to fulfil our duties as a drinking water utility in the future. Without sufficient financial resources, we will not be able to invest as needed in replacing pipes, expanding our distribution network, building new production sites and making drinking water extraction more sustainable. The amount we need to invest annually will increase to over 400 million euros in the coming years. These investments are extremely important as they guarantee the delivery of our societal value in the long term.

2022 results

The yardstick by which we measure our financial health is solvency: the ratio of shareholders' equity to total assets (= equity + provisions + loan capital), expressed as a percentage. Solvency is important for obtaining loans through the banks or on the capital market. The lower the solvency, the less likely you are to get a loan and the higher the interest rate on a loan.

Solvency is too low

Solvency must be at least 30 percent, and according to the continuity goals in the financial policy, we aim for a minimum of 35 percent. In 2022, our solvency was 31 percent. At present, our investments are largely financed with loan capital. As a result, Vitens' financial health will come under pressure in the coming years. In the light of this, we will continue to add annual profits to shareholders' equity.

No dividend payment

Our financial policy states that if solvency is below 30 percent, Vitens will in principle not pay a dividend. In line with the agreements with shareholders, we are working to strengthen solvency to the point where we can pay dividend, but the current situation does not allow this. Even though shareholders' equity has risen above the critical threshold this year, the investment challenge still prevents payment of dividend.

Less revenue, higher costs

The increase in our debt relative to shareholders' equity at year end 2022 is mainly attributable to lower profit than budgeted (in our 2022-2024 Annual Financial Plan). The reasons are:

- **Less revenue:** our customers used less water than the forecast amount this year. One possible explanation is the high price of gas, causing people to take shorter showers.
- **Higher costs:** the rising prices for energy and raw materials - specifically chemicals – led to higher costs than budgeted this year.

Limitations imposed by the WACC

The WACC also contributed to low solvency. This system limits the amount of profit we are permitted to make. Because the current WACC (2.95 percent for the period 2022-2024) is too low compared to the amount we need to invest, we are forced to borrow substantially to make up the difference. Our loan capital increases as a result, leading to a further decrease in our solvency.

Challenges and ambitions

The main challenge for next year is to meet our (tight) budget in an environment full of uncertainties. To ensure this, we will take management action in a number of areas:

- **Lower sales forecast:** our 2023 sales forecast is based on a lower consumption of drinking water. The forecast is highly uncertain due to various developments, such as the war in Ukraine, climate change and rising energy prices.
- **Reduce cost variability and act to limit costs:** we have agreed fixed rates for the energy we require. This gives us certainty about prices. In addition, we have deferred activities to future years and run our operations more efficiently.
- **Increase the drinking water rate:** for 2023, we have had to increase the drinking water rate for our standard customer (household with 2.2 people) by 16.4 percent (excluding taxes). This was not done in previous years, but is needed now due to macro-economic developments.

Discuss the WACC

As in recent years, we are continuing to discuss the WACC regulation with the Committee of Shareholders and with the Ministry of Infrastructure and Water Management. The WACC regulation needs to be broadened to ensure adequate funds for investment in our pipe network. One of our wishes is to adjust the parameters that determine the WACC in order to align the regulation better with our risk exposure. We would also like to see some form of averaging, so that we can offset a year in which profitability is lower than the WACC against a year in which we achieve excess profit.

KPI for Financial Health

Solvency

Target: ≥ 30% (percentage specified in the financial policy ≥ 35%)

Result: 31% (2021: 30%)

Conclusion: target achieved, however the percentage specified in the financial policy was not achieved

Innovation

The importance of innovation

The world around us is changing at a rapid pace. We need to innovate to keep up with the speed of developments. Innovation allows us to expand our knowledge and embrace new insights faster and more efficiently. Only by continuing to innovate can we ensure the continuity of our organisation, the drinking water supply and the water system.

Accomplishments in 2022

Vitens works on innovations via the innovation and research agenda. To make innovation measurable, we report periodically on the progress of projects and the extent to which they have been implemented in business operations.

Successfully implemented innovations

We implemented 11 innovations in 2022. This more than meets our target (three). The following are a selection of the innovations implemented in 2022:

- **SLIMM3:** SLIMM3 is a digital application that uses data delivered by sensors to better regulate the production of water. This reduces emissions and the use of chemicals.
- **Forecasting Dashboard:** we have improved our forecasting models and are now better able to predict our drinking water delivery volume.

Challenges and ambitions

Our ambitions in the area of innovation are linked to the challenges we face. The major themes for the coming years are:

- Redesigning our water system based on circular principles.
- Conserving water by sensitising our customers.
- Taking further steps to digitise 24/7 water production.

More agile and less risk-averse

We live in a period of transition in which we also have a key role to play. If we are to keep up with these developments, we must become more agile and adaptive as an organisation, and reduce our risk aversion. At the same time, we operate within a complex administrative environment. Collaboration at national and international level remains essential for achieving the goals.

KPI for Innovation

The number of developments resulting from the innovation process implemented within our business operations

Target: 3

Result: 11 (2021: 6)

Conclusion: we met the target

Collaboration in the water supply chain

The importance of collaboration in the water supply chain

As a drinking water utility, we are dependent on, and part of, the water system. Because this system is under increasing pressure, we continually seek greater collaboration with our stakeholders.

Accomplishments in 2022

Our efforts to seek collaboration in 2022 resulted in the developments and milestones summarised below (among others).

Collaboration at senior administrative level

We regularly attend high-level meetings with our stakeholders:

- We collaborate with water boards on themes and projects for a future-proof water system (in the short and long term).
- After the municipal elections, we organised four sessions with senior officials in local and provincial government organisations to discuss the joint task of providing drinking water in the short and long term.

Collaboration by theme

With our partners, we work together on four central themes:

- **Water conservation:** this includes our awareness campaigns and pilot projects for water-friendly construction, such as in Silvolde. We collaborate with municipalities, contractors and housing associations for this theme.
- **Water source protection:** we work with farmers in various places to make agriculture more sustainable; through more nature-inclusive agriculture, for example, and through measures designed to reduce plant protection product leaching.
- **Climate change adaptation:** in a collaboration with partners in the 'Utrechtse Heuvelrug', we have set up a Blue Agenda initiative to explore options for climate-robust spatial planning in the area.
- **Circular economy:** we set up contractual arrangements with parties active in the agriculture and nature sectors to ensure appropriate use of our residual flows, such as lime, humic acids and iron. In a pilot project in Soesterduinen, we supply the residual heat from our production processes to local residents.

Challenges and ambitions

We have scheduled a stakeholder survey in early 2023 to explore how we can collaborate as effectively as possible with various partners.

National Rural Areas Programme

The National Rural Areas Programme ('Nationaal Programma Landelijk Gebied') is currently being distilled into provincial area plans. They are due to be completed by June 2023.

Provincial Council elections and Water Board elections

As we do after the municipal elections, we organise high-level administrative consultations after the Provincial Council and Water Board elections. Our agenda includes what we can do for each other and what we need from each other for drinking water today and in the future.

Water-friendly construction: our guidelines for saving more drinking water

The use of rainwater and treated domestic wastewater can significantly reduce the consumption of drinking water in homes. Vitens and partners have set up a range of pilot projects to explore innovative solutions for water-friendly homes and neighbourhoods. These pilot projects give us new information, reveal opportunities and highlight obstacles.

“If the current circumstances do not change, we will not be able to keep up with demand for drinking water for much longer”, says Mark de Vries, Vitens’ water conservation programme manager. “With the projected addition of 900,000 new homes that are due to be built in the period up to 2030, demand for drinking water will only increase in the coming years.”

The housing task opens up opportunities

At the same time, the housing task opens up many opportunities for slowing the rise in drinking water demand, says De Vries. Specifically, by making homes and neighbourhoods water-friendly. “Not just in new construction, home renovations also offer opportunities for implementing water-friendly measures.”

Water-friendly construction

Water-saving appliances, rainwater harvesting systems and reuse of domestic wastewater are among the measures for water-friendly construction. “You can use filtered and cleaned rainwater and wastewater for flushing the toilet, watering the garden and in the washing machine.” At present, drinking water is still often used for this purpose. De Vries: “Our goal is to achieve a 20 percent reduction in per capita drinking water consumption by 2035. We can meet that goal relatively easily, by eliminating the use of drinking water to flush the toilet.”

Pilot projects in several cities

In recent years, Vitens has partnered with municipalities, housing corporations, property developers and other parties in joint pilot projects to test water-friendly construction concepts. De Vries: “In Silvolde, 28 homes were modified to allow reuse of household wastewater. We are also looking at ways of using rainwater as drinking water in this project.”

According to De Vries, Vitens’ involvement in these pilot projects is important for several reasons. “For example, we have the water quality expertise needed for projects like this. You have to deal with different types of water quality when using rainwater and wastewater. We contribute ideas and expertise to produce clean drinking water without endangering public health.”

Bottlenecks

These pilot projects teach Vitens valuable lessons about bottlenecks such as the sustainability of the measures, the associated social costs and legal barriers. Currently, for example, the law does not allow treated wastewater to be pumped back to homes. De Vries: “Treating and reusing wastewater inside the home is permitted however. That falls under the resident’s responsibility.”

Amendment of the Buildings Decree

“The Buildings Decree also needs to be changed”, De Vries continues. “Municipalities do not yet have the power to impose water conservation and reuse measures on builders and property developers when building new homes. An amendment to the Buildings Decree would make that possible and ultimately result in water-friendly construction becoming the norm.”

Collaboration in water-friendly construction

Broad collaboration across the sector is a key success factor. De Vries: “You can only get things to move when you sit down with different parties and map out each other’s interests. Government bodies are in a position to amend legislation and permit issue procedures. Builders and developers, in turn, check to make sure that everything is technically and financially feasible.”

The customer literally holds the key

“One party whom we should never forget in that collaborative landscape is the customer”, says De Vries. “We can come up with all kinds of sustainable solutions, but, at the end of the day, it’s the customer who opens and closes the tap. We put effort into setting up awareness campaigns, provide better information about usage and offer behavioural incentives, but we can only make real progress together.”

Guaranteeing our continuity

Continuity

Indicators

Net result

Profit for 2022 was €8.2 million, which is much less than the profit realised in 2021 (€19.4 million). This is mainly attributable to high inflation and the lower volume of drinking water delivered, presumably as a result of the high energy prices.

Solvency

The solvency ratio is an important indicator of the organisation's continuity. Solvency is expressed as the ratio of shareholders' equity to total assets. According to the continuity objectives in the financial policy, solvency must be at least 30 percent, but Vitens aims for a solvency of at least 35 percent. In 2022, we achieved a solvency ratio of 31 percent (2021: 30.2 percent), meaning that we are at the lower end of the target range. Paying dividend over 2022 would be irresponsible in the light of the low solvency ratio, the uncertainties associated with the WACC and the huge investment task ahead of us.

Rate

Vitens strives to offer affordable drinking water rates without compromising the business continuity objective.

In 2022, the customer (consumer) paid €0.66 per m³ for drinking water and a standing charge of €44 (2021 €0.64 per m³ and a standing charge of €42). The price of drinking water for business customers in 2022 was €0.64 per m³ (2021: €0.66 per m³).

Investments

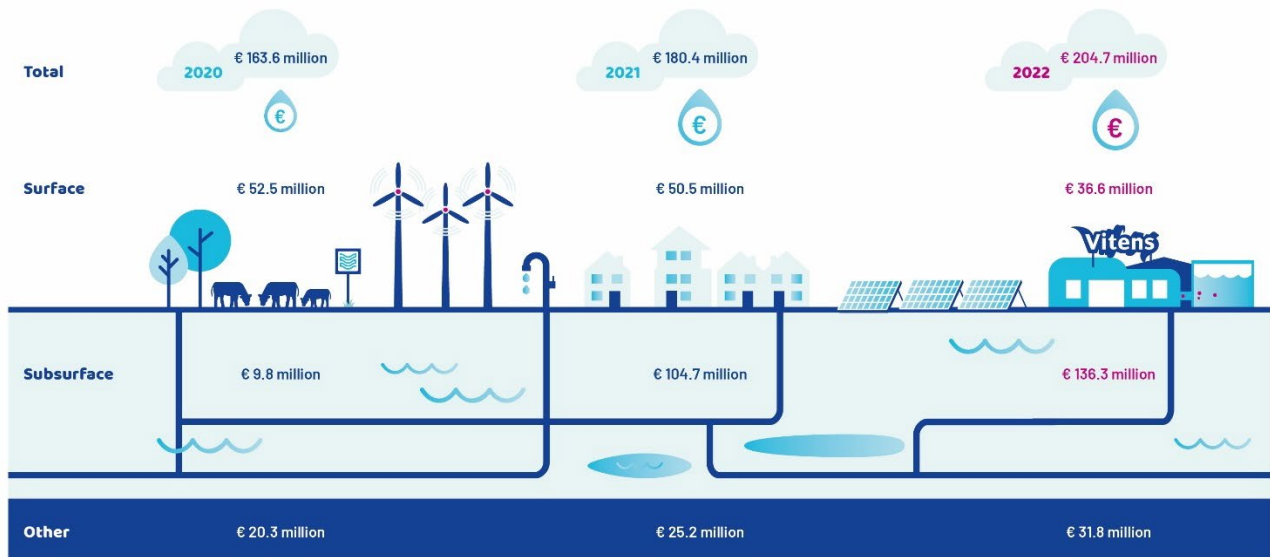
Vitens faces an enormous investment task in the coming years. Climate change, growing water usage, investment in replacements and themes such as digitisation and data security have a specific impact on the infrastructure. In 2022, our direct investment expenditure amounted to roughly €205 million gross. That amount is higher than in previous years (2021: €180 million, 2020: €163.6 million). Our investments focus primarily on supply security to safeguard our ability to provide an adequate supply of clean drinking water, now and in the future.

In 2022, we invested mainly in expanding and replacing our infrastructure. We are expanding the capacity of our water system, old pipes have been replaced and pipe reconstruction projects have been completed. We also invested in safety, cybersecurity and the SAP transformation.

Financing strategy

Given the increased size of its financing needs, Vitens needs to be able to access the capital market. The financial policy was adjusted accordingly at the end of 2022. The ratios were expanded and tightened, based on the principles in the WACC regulation. A long-term financing strategy has been developed to implement the tightened financial policy.

Surface, subsurface and other investments - gross



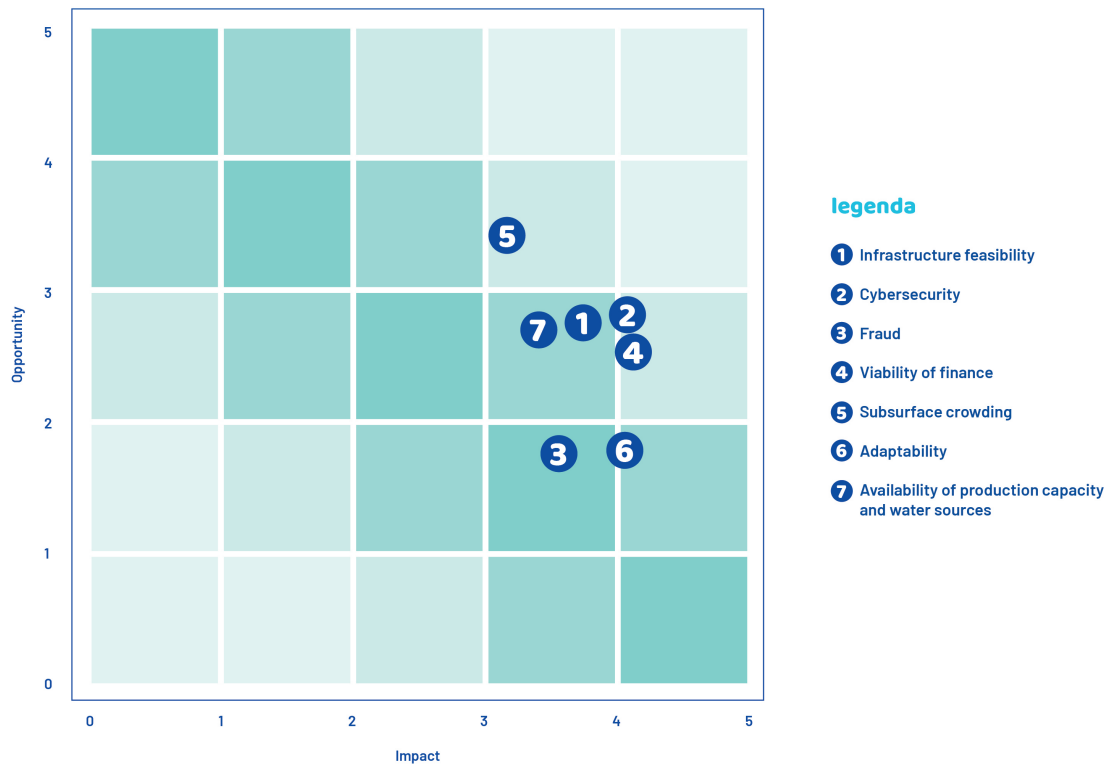
Risk management in brief

Top business risks integrated in the planning and control cycle

The strategic goals for 2030 are set out in the 'Every drop sustainable' strategy. Each year we look at the risks that potentially have the greatest effect on achievement of our strategic goals. We call them the top business risks.

Management based on these control measures, and monitoring the risks and how they develop, are fully integrated in our planning and control cycle. Each risk is identified in concrete terms and linked to a targeted management approach and appropriate measures. During the year, the measures are implemented and we monitor progress and their impact.

Risk matrix top business risks



1. Feasibility of the future infrastructure

If demand continues to rise more sharply than in recent years and the construction works lag behind, we may not be able to future-proof our infrastructure fast enough to avoid jeopardising 24/7 delivery and prevent extraction overruns relative to permit capacity. The feasibility risks are administrative in nature on the one hand; i.e. linked to the governmental processes for obtaining (sufficient) extraction capacity.

On the other hand, there are technical feasibility risks; i.e. the availability of sufficient (staff) capacity, both internally and externally.

2. Cybersecurity

The cybersecurity threat is likely to intensify, but even if it remains at the same level, our increased 'digital attack surface' makes us vulnerable to a successful cyber attack, which could disrupt the drinking water supply, result in our operations being held to ransom, or lead to customer data leaks.

3. Fraud

Access to cash and financial assets, close contacts with contractors and insufficient integrity awareness can tempt employees to commit fraud, resulting in financial damage and harm to Vitens' reputation.

4. Capacity to cover financing needs

If the WACC regulation, combined with the restriction on dividend payments to shareholders, limits our ability to generate adequate profit to the point where we can no longer attract (affordable) loan finance, we will not be able to achieve our strategic goals.

5. Crowding in the subsurface domain

Vitens is not the only party that uses the subsurface domain. The area below the surface is increasingly used for other purposes, such as energy and heat storage. This may have an adverse effect on the groundwater quality at our extraction sites and also impair the quality of our drinking water due to unwanted exposure to heat when pumped through the pipes.

6. Adaptive capability

Scarcity in the labour market clashes with the scope of our recruitment task, leading to the risk that we will not be able to fill positions with the talented people we need in a timely manner, thereby impairing our ability to perform as an organisation.

7. Availability of production capacity and sources

The availability of sufficient (clean) water resources and production capacity is crucial to guaranteeing our ability to deliver sufficient drinking water of the desired quality, both now and in the future. The demand for drinking water is expected to increase in the years to come, so we must adjust our extraction and production capacity in good time. Availability is a potential bottleneck however, because we are dependent on how the provincial authorities process our applications for extraction permits.

Governance in brief

Laws and regulations

To ensure compliance with the legislative framework, Vitens has appointed a compliance officer who focuses on two key issues: 'does Vitens comply with laws and regulations'? And: 'how can we structure our organisation to ensure that we continue to comply with those laws and regulations'. The compliance officer is the point of contact for and liaison between the organisation, external parties, the Executive Board and the Supervisory Board with regard to the application of laws and regulations. The Drinking Water Act is particularly relevant to Vitens. The Inspectorate for Habitat and Transport (Inspectie Leefomgeving en Transport/ILT), acting on the authority of the Ministry of Infrastructure & Water Management, monitors whether we comply with that legislation. In 2022, a start was made on implementing an integrated system of risk management and compliance, which links compliance with laws and regulations to risk management.

In line with the legal obligations of the Drinking Water Decree, Vitens' quality management system is certified in accordance with NEN-EN-ISO 9001. Vitens' quality management system has been certified since 1 January 2017 as compliant with the latest ISO standard relating to quality management: NEN-EN-ISO 9001:2015. The environmental and occupational health & safety management system also achieved certification in accordance with the most recent standards. We strive to enforce and improve human rights through dialogue with suppliers and appropriate terms and conditions in our procurement policy.

In addition to the above, Vitens has also drawn up a code of conduct that establishes guiding principles on ethical business practices, safety and how we interact with our customers, with each other and with our environment.



Governance

Code

Transparency is one of Vitens' guiding principles, so we apply the Dutch Corporate Governance Code (the Code), which sets out guidelines for good and properly accountable management and administration. In addition, the Code provides a framework for the relationship with a company's stakeholders, such as the shareholders, employees, customers and society as a whole.

Vitens has implemented the best practices recommended in the Code in its operational management procedures, insofar as they are applicable to a drinking water utility with public shareholders. One best practice that has not been adopted relates to the appointment of a director for a maximum period of four years, subject to reappointment for a period of no more than four years on each future occasion (2.2.1 of the Code). The current directors have been appointed for an indefinite term. The annual performance review procedure, which may result in dismissal in the event of an unfavourable assessment, is considered to be adequate. The different regulations and other relevant documents relating to corporate governance at Vitens can be referenced via Vitens.nl. The Code was amended in December. The regulations will be updated to reflect the new changes in 2023.

Organisation and management

Executive Board

Vitens N.V. (referred to in this report as Vitens) is a public limited company that is managed by the Executive Board. In 2022, the Executive Board consisted of two directors. In November 2022, one of the Executive Board directors informed the organisation of her intended departure. The composition of the Executive Board is presented in the Report of the Supervisory Board. The remuneration policy of the Executive Board is proposed by the Supervisory Board and then adopted by the General Meeting of Shareholders. Following adoption, the Supervisory Board sets the remuneration. The remuneration consists of a basic salary, pension, social contributions and other expense allowances and complies with the requirements of the Executives' Pay (Standards) Act (Wet Normering Topinkomens).

To advance their collective knowledge, skills and experience in relation to sustainable development, the Executive Board members participate in a permanent education programme that focuses on sustainability, renewable resources and developments relating to sustainability in the water ecosystem. Their knowledge is kept up-to-date through presentations, knowledge networks such as 'Springtij' and 'Waarde van Water', and through NG Infra. The Board members are also building knowledge in relation to a Green Financial Framework.

Governance in relation to potential and actual current impacts on stakeholders is addressed and discussed in the weekly Executive Board meeting. We follow the job descriptions of first-line management that set out frameworks and directives for governance and for economic impact (financial, manufactured and intellectual capital), human impact (social and human capital) and the impact on nature (natural capital). We also apply the power of attorney and authorisation regulation, which determines formal powers relating to power of attorney and authorisation. Vitens was not yet in a position to report on numbers of critical problems in 2022.

Supervisory Board

The Supervisory Board is responsible for supervision of the Executive Board and the general course of affairs at Vitens. The members are appointed by the General Meeting of Shareholders. The Supervisory Board By-Laws include a provision governing the maximum period of office of Supervisory Board directors in accordance with best practice 2.2.2 of the Code. The composition of the Supervisory Board is presented in the Report of the Supervisory Board.

The Supervisory Board participates collectively in education initiatives relating to general sustainability and developments in sustainability in the context of the water system. Several presentations are arranged each year, on themes such as 'transitioning the water (eco)system' and 'water quality and sustainable water resources'.

The Supervisory Board receives information about potential and actual impacts from stakeholders in the form of progress reports.

Committee of Shareholders

A Committee of Shareholders has been appointed by the General Meeting of Shareholders. This committee convenes at least twice a year and has an advisory function for the General Meeting of Shareholders, the Executive Board and the Supervisory Board. The issues discussed include the appointment and dismissal of Vitens' Executive Directors and Supervisory Directors. In addition, policy matters such as issues relating to the financial policy, rate-setting policy and dividend policy are also considered.

Laws and regulations

In 2019, Vitens appointed a Compliance & Privacy Officer who is responsible for coordinating compliance issues and establishing and embedding a compliance framework within the organisation. In the past year, this approach was further professionalised by having the Compliance & Privacy Officer team up structurally with the risk manager. This coordinated approach has resulted in the first measures for implementing an integrated system of risk management and compliance.

In 2022, we completed an internal audit of the Drinking Water Act and Drinking Water Regulations and the follow-up actions recommended in the audit report have been implemented in all departments. A fine was imposed in 2022 for failure to provide data to Statistics Netherlands. This administrative fine involved a penalty amount of €1,600.00

Privacy

The General Data Protection Regulation (Algemene Verordening Gegevensbescherming) came into force in May 2018. Vitens has drawn up and implemented an overarching policy on this subject and all customer processes have been modified to ensure that they are GDPR-compliant. Departmental data protection assistants have been appointed to ensure compliance with privacy laws and regulations within Vitens, specifically the GDPR. These employees answer privacy-related questions in addition to their regular duties. Due to the nature of their work and position, they are ideally placed to address privacy issues within their own departments. The departmental data protection assistants work closely with the Compliance & Privacy Officers. This approach keeps the lines of communication short, ensures optimal knowledge deployment and there is a structural focus on awareness.

Data Protection Authority

The likelihood that Vitens and its suppliers will become a target of cybercrime has increased due to the increasing digitisation of operational and other processes. In 2022, a cyber attack successfully targeted one of Vitens' suppliers, resulting in the unwanted disclosure of the personal data (name and position) of several Vitens employees (250). In its role as Controller, Vitens informed both the supervisory body and employees, and the supplier has responded to the cyber attack by taking appropriate action to prevent a recurrence. There were no further reports to the Data Protection Authority in 2022, and no fines or other measures were imposed.

Inspectorate for Habitat and Transport

The Inspectorate for Habitat and Transport (Inspectie Leefomgeving en Transport/ILT), acting on the authority of the Ministry of Infrastructure & Water Management, monitors whether Vitens complies with the Drinking Water Act. Accordingly, as a drinking water utility, Vitens has an obligation to report any violations of the standards applying to drinking water quality. In 2021, due to a changed sampling method (as a result of COVID-19), a substantial number of nonconformities were reported to the Inspectorate: 85 reports for the full year. After reinstatement of the normal sampling method in July 2021, the number of reports reduced. In 2022, 38 reports were submitted to the Inspectorate.

Societal duties

Code of Conduct, corruption and bribery

Our policy on corruption and bribery is set out in our Code of Conduct. At Vitens, we work in accordance with '*Zó doen we dat bij Vitens!*', which is the name of our code of conduct. This Code of Conduct lays down the basic principles for integrity, safety, interacting with customers, with each other and with our environment. We want the relationships we build with employees, suppliers, business partners and customers to be based on trust and fairness. So we expect our suppliers to act in line with our policy. Our Code of Conduct describes the minimum standards and requirements that our suppliers must meet. Vitens recognises that situations arising from corruption and bribery can be damaging to our reputation, and they are also not in keeping with our societal task and duties. If a Vitens employee or a supplier infringes the Code of Conduct, we follow a documented procedure in order to resolve the situation. No forms of corruption or bribery were identified at Vitens in 2022.

Human rights

Respect for human rights is important because human rights are the fundamental social building blocks that we rely on in daily life. We feel that Vitens has a duty to uphold and strengthen human rights. Vitens collaborates with many partners all over the world. This automatically exposes us (indirectly) to risks associated with the violation of human rights. At a day-to-day business level, for example, if we discover that one of our suppliers acts in contravention of our purchasing standards (which include provisions on human rights), we will terminate the relationship with this supplier. Additionally, violations of human rights by our suppliers may also damage Vitens' reputation. We try to manage the risks to which we are exposed in the area of human rights by maintaining a constant dialogue with suppliers and monitoring whether they comply with our terms and conditions of purchase.

Environment

Care for the environment is the basis of our strategy and our task of protecting groundwater reserves. We comply with laws and regulations, but also look at ways in which we can use our activities to strengthen our position relative to the environment and our habitat. Our responsibilities are documented in our environmental policy and we use an ISO 14001 certified environmental management system. The environmental aspects are investigated each year and we assess how they are weighed in the environmental aspects register. Based on specific criteria, we have identified a number of environmental aspects as significant (energy consumption, (direct) emissions to the air, emissions to the soil and water, waste generation). These criteria have been defined in accordance with the SCCM foundation's certification scheme. The significant environmental aspects have been reported to the Executive Board and specifically mentioned as areas requiring attention in the guidelines for the annual plans. They are also prioritised in the environmental management system. Obviously, this does not mean that the other aspects are ignored. The management system applies to these aspects and appropriate action is initiated whenever necessary.

System to promote social safety and reporting arrangements

The vision on social safety has been reformulated: 'Vitens aims to be and remain a socially safe organisation. An organisation in which you can call each other to account, can be honest without fear of reprisals and where people treat each other with respect. Social safety has a strong connection to who we are, our corporate culture and how we work within Vitens.'

Due to organisation-wide attention for and discussion of social safety as a topic, the number of reports increased significantly in the second half of the year. Both anonymous and identified reports were received.

Some of the reports have been investigated and closed, others however are still ongoing. The risk manager reports to the Executive Board and the Supervisory Board on the nature and number of reports/complaints received twice a year.

Last year a number of changes were made in relation to social safety. At the recommendation of the remuneration committee, the concept of integrity was replaced by the concept of social safety in communication. The option of calling attention to a socially unsafe situation through an outside agency is still available.

The social safety hotline has been moved to a lower level in the organisation to eliminate possible barriers and make reporting more accessible. To ensure barrier-free accessibility, reports/external complaints are no longer reported to the Executive Board unless the report is extremely serious, relates to the Executive Board or has a major impact on the organisation.

The social safety regulations are currently being updated and will replace the 2018 reporting and response procedure and the 2013 regulation on misconduct. In late 2022, the Dutch Lower House approved the Whistleblowing (Schemes) Act. We are now incorporating the effects of this legislation in our Vitens whistleblower policy.

Vitens has appointed (5) internal confidential advisers, in addition to the external confidential adviser. Their role is to listen sympathetically and they can also advise the person concerned about possible follow-up actions. In addition, Vitens regularly updates a 'social safety' page on Intranet where employees can find the regulations, the hotline details and the contact details for the confidential advisers.

Risk Management

2022 Strategic Risk Profile

The top business risks identified by Vitens (see Risk management in brief) are explained in more detail below. This explanation includes a description of the risk and indicates what management measures are in place to control the risk. It then goes on to describe the (expected) impact on risk development and achieving our strategic goals.

Top business risks

Feasibility of the future infrastructure

Risk description:

If demand continues to rise more sharply than in recent years and we are unable to increase the speed at which works are carried out, we may not be able to future-proof our infrastructure fast enough to avoid jeopardising 24/7 delivery and prevent extraction overruns relative to permit capacity. The feasibility risks are administrative in nature on the one hand; i.e. linked to the governmental processes for obtaining (sufficient) extraction capacity. On the other hand, there are technical feasibility risks; i.e. the availability of (staffing) capacity, both internally and externally.

Risk management:

- To tackle the administrative feasibility aspects, Vitens has launched a more intensive dialogue with administrators and lobbyists of the Dutch Association of Water Boards, Vewin, members of the Dutch Lower House and with the Ministry of Infrastructure & Water Management. We have also discussed spatial development with regional administrators in discovery and action dialogue table settings.
- In the IJssel Valley concept and project, we encourage alternative approaches and thinking outside the box to minimise administrative and technical constraints and explore the options.
- In terms of (human) capacity, Vitens works with second opinions and reviews for major projects, to ensure reliability and predictability in both the scope and the project estimates. We have also improved resource planning by setting up a quarterly planning cycle for our asset management teams and in the asset management portfolio.
- Vitens has launched the tender process for the 'Strategic Heart Living Lab' project. This project actively involves the market and administrative partners in testing long-term (innovative) options identified in Overijssel's drinking water strategy in a practical living lab setting. The intention is to get these long-term options on the agenda in the other provinces as well, as a solution path for the water transition. Vitens also launched an extensive tender for transmission pipes last year.
- Vitens started to develop multifunctional standards in 2022, however, due to capacity constraints, this project suffered a delay and will continue in 2023.
- The 'Scale Up' programme ('schaalsprong', as it is known internally) focuses on the huge increase in the investments that we need to make.

Change in the level of risk

The risk exposure level remains the same, although we are concerned that central, regional and local government authorities may not be as convinced as we are of the self-evidential nature of the duty of care and the specific (legal) priority associated with drinking water. Measures have been developed and set in motion, and we expect them to start having a positive effect on administrative and technical feasibility. Vitens has chosen a result-oriented approach and is actively looking for coordination opportunities and solutions to address permit capacity and staff capacity issues, together with partners. These initiatives have been positively received so far, but processes like this require time and perseverance. The measures relating to improved (resource) planning have sharpened the focus on predictability, and will ultimately improve predictability.

Cybersecurity

Risk description:

The cybersecurity threat is likely to intensify, but even if it remains at the same level, our increased 'digital attack surface' makes us vulnerable to a successful cyber attack, which could disrupt the drinking water supply, result in our operations being held to ransom, or lead to widespread customer data leaks.

So the cybersecurity risk has become a permanent concern for Vitens. Our systems and data must be effectively protected against internal and external attacks. Our dependence on ICT and data continues to grow, so security in these areas is becoming increasingly important. This is particularly true of the units within Vitens that are responsible for our socially vital task of producing and delivering drinking water. And the large amounts of customer and employee data that Vitens processes also invite attacks.

Risk management:

- We have created the Vitens Security Board (VSB) - a team of top managers and specialists with relevant expertise - to integrally manage how we control physical security and cybersecurity. The Security Board periodically identifies how the threat level is evolving, pinpoints areas where there are vulnerabilities and assesses the associated risk. The cybersecurity programme and the underlying cybersecurity projects are also managed by the Board to ensure effective risk mitigation.
- The human factor received the attention it deserves: people's actions and conduct are key to increased security resilience. Substantial effort was once again put into awareness activities, training courses and response simulations. Besides the mandatory, annual security game for the entire workforce, we also introduced challenges for specific target groups among our technicians. We again organised a Security Week, based on a carefully considered event and seminar programme. Furthermore, the ongoing anti-phishing campaign has been expanded to include a focus on malicious attempts to extract confidential data by telephone, in addition to email and SMS. The overall aim is to target learning and measure how effectively Vitens defends against such attacks.
- Processes: in the practice drill and training programme, we have steadily escalated up to the level of a full Business Continuity emergency. A detailed situational script was created for a total loss of all systems, and then simulated in real life by the Security Incident Response Team. All managers in the emergency response organisation also participated in a serious game as training for their coordinating role in the event of an attack. In 2021, Vitens set up an internal IT General Controls (ITGC) system. Thanks to this system, we are able to independently carry out periodic checks of our security measures, without an external auditor. In 2022, we further automated the periodic security checks.
- Technology: vulnerabilities detected in the periodic in-depth penetration tests and audits mentioned above led to further scaling up of the mobilised improvement teams. We have now formed a permanent multidisciplinary taskforce to ensure adequate time and focus for all the often highly detailed technical modifications that need to be made based on the results of the tests.

Change in the level of risk:

The risk exposure level increased slightly in 2022 and is therefore still (very) high. The number of serious vulnerabilities is increasing, as is the pace at which they are identified and exploited by malicious parties. In addition, our drinking water production and delivery activities are dependent to some extent on outdated technology, which has yet to be replaced. While Vitens' resilience has increased in terms of detection and response, ongoing digitisation is increasing both the 'attack surface' and the associated impact of a cyber incident. This increases the risk. So increased capacity for the task force and for programmes to replace aging vital technology are our priorities for the coming period.

No significant cyber incidents occurred in 2022. However, since the outbreak of the war in Ukraine, the organisation is in a state of permanent high preparedness.

Fraud

Risk description:

Access to cash and financial assets, close contacts with contractors and insufficient integrity awareness can tempt employees to commit fraud, resulting in financial damage and harm to Vitens' reputation. In order to increase fraud awareness, Vitens puts effort into creating a socially safe environment in which employees display desirable behaviour of their own accord and act in the best interests of the organisation. Vitens also uses 'hard controls', i.e. management measures that directly or indirectly enforce desirable behaviour and prevent misconduct.

Risk management:

- To make fraud awareness more self-evident, Vitens is paying greater attention to social safety. This creates a work environment in which employees demonstrate desirable behaviour of their own accord and act in the best interests of the organisation.
- In addition, from a risk management perspective, management measures have been implemented that reduce the probability of fraud and encourage desirable behaviour, either procedurally or through the automated system.
- Social safety was again brought to the attention of employees and management. A live event on social safety was arranged as a kick-off to educate the organisation on the topic of social safety. This event, like the ongoing discussion on social safety, brought the topic firmly back into focus in the organisation and within the teams.
- The fraud risks for Vitens are reassessed annually. This year we adopted a renewed, organisation-wide approach. To ensure that Vitens remains up-to-date, about twenty interviews were held with employees in various positions from all departments and at director level to identify possible new fraud risks. A large group of selected employees were asked to assign scores to the fraud risks. In addition, for the first time, key control measures were reviewed by the departments themselves to assess whether they are adequately understood, properly used and effective.

Change in the level of risk:

The risk exposure level decreased slightly as social safety received more attention within the organisation. We see that the number of reports increased significantly this year. In addition, risk awareness was raised by embedding integrated risk management in the work processes. The fraud risk reassessment did not reveal excessively high fraud risks (in 2021, two fraud risks were above the accepted risk level). Although high attention for the topic within the organisation had a strong mitigating effect, the trend in disposable income in 2022 acted in the opposite direction, resulting in a 'slight' net decrease. This is because one of the main causes of fraud, individual financial distress, is more widespread, leading to a higher probability of fraudulent activity.

Capacity to cover financing needs

Risk description:

If the Weighted Average Cost of Capital (WACC) constrains our profitability to an excessive extent, our funding capacity comes under pressure, leaving us insufficiently able to achieve our strategic goals.

Risk management:

- In early 2022, Vitens' Executive Board and Supervisory Board adopted the revised financing strategy, and we formulated our 2023-2025 financial policy on that basis. This policy was subsequently adopted at the last Shareholders' Meeting in November.
- The Treasury Committee analysed the short-term and long-term financing needs, and, at the end of October, started contacting potential lenders to arrange a €100 million Revolving Credit Facility (RCF) for use as a back-up line of credit. This facility will be available at the beginning of 2023.
- In view of the expected result in 2022, Vitens had to apply for waivers (exemptions) relating to the agreed debt ratio standard. These waivers were received during the fourth quarter. In 2023, we will continue to monitor the ratios and expect to meet the standards again. Achieving the budgeted profit is the key factor here.
- The WACC for the period 2022-2024 was set at 2.95 percent in November 2021. In 2022, an external study was set up to assess the need for regulatory adjustments from 2025, and also review the financial health of the drinking water utilities. A draft report was prepared in December. The final report and an action plan will follow in early 2023.

Change in the level of risk:

The risk exposure level remains the same. The WACC revision last year, valid to 2024, has relieved the pressure somewhat and allows Vitens to meet its short-term financing needs effectively. Vitens is also preparing for the longer term with the new financial strategy and policy. To this end, Vitens, together with the sector, continues to lobby for changes to the regulation regime under the WACC. This is essential in the light of the need for structural solutions to the funding challenge.

Crowding in the subsurface domain

Risk description:

Vitens is not the only party that uses the subsurface domain. The area below the surface is increasingly used for other purposes, such as energy and heat storage. This may have an adverse effect on the groundwater quality at our extraction sites and also impair the quality of our drinking water due to unwanted exposure to heat when pumped through the pipes.

Because some risks are not yet known and others are difficult to manage, Vitens advocates functional separation. This means: no activities involving geothermal and soil energy in areas intended for drinking water extraction. In order to manage this risk, government authorities must assign primary importance to safeguarding drinking water interests in their policies and laws and regulations.

The risks vary in nature and urgency: ranging from administrative pressure to acute quality problems. Inadequate outcomes may lead to a lower level of protection, forced acceptance of lower-quality water sources, and unavoidable abandonment of existing sites or an inability to develop Additional Strategic Reserves.

Risk management:

- To better protect our infrastructure from the risks of ATEs-based, soil energy systems and geothermal energy systems, we highlighted the importance of proper registration and of permits, supervision and enforcement (PSE) in our discussions with the provincial authorities. We also advocated mirroring in municipal environmental plans through implementation of registration and PSE at that level as well.
- We have partially modified our own position on this topic; we are adopting a more adaptive approach, which does not abandon the principle of separation of functions, but does (attempt to) offer greater freedom of action without making concessions that would be detrimental to the drinking water task.
- In order to encourage the adoption of uniform groundwater protection policies by provincial authorities in respect of activities in the subsurface domain, we have repeatedly requested a clear and consistent approach (through national government and through our strategic consultations with the provincial authorities). A number of provincial authorities are now amending their environmental regulations and also involving Vitens in that process. In addition, the 'review of groundwater protection policy' is included in the statutory implementation programme under the National Drinking Water Policy Document (Beleidsnota Drinkwater). And the Ministry of Economic Affairs is adopting provincial policies in this area.
- To secure national drinking water interests in the Heating Visions and Regional Energy Strategies (2.0), we are taking explicit action to make sure that municipalities understand the importance of maintaining the functional separation between geothermal heat and drinking water in drinking water protection areas (including the Additional Strategic Reserve areas).
- In order to track developments relating to geothermal energy and innovations in this area, we have formed a theme group (Deep Underground) and set up internal (process) agreements for periodic monitoring of new initiatives. This group coordinates Vitens' response to these initiatives where appropriate. We also actively participate in the external 'Vulnerable Areas' working party. This consultation between provinces, the geothermal industry, EBN and Vewin/the drinking water utilities focuses on defining vulnerable areas and protecting groundwater quality.

- To encourage coordination of spatial developments, energy and drinking water, we advocate the establishment of drinking water strategies in the provincial environmental plans. Utrecht, Flevoland, Overijssel and Friesland have already done this. This does not yet apply to the reviewed protection policy. Drenthe and Gelderland are expected to officially establish Additional Strategic Reserve areas within one year.
- Vewin, on behalf of the water utilities in the Netherlands, has published a position paper for government authorities and network operators that recommends measures for preventing warming of the drinking water in the pipe network when rolling out district heating networks.

Change in the level of risk:

The risk exposure level has increased slightly. Several provinces are updating their drinking water strategies and environmental regulations, and are involving us in this process. We are making our position and the supporting arguments clear to the municipalities. Furthermore, as a member of several national working parties and research groups, we remain well-informed about what is going on in respect of this risk. Even though the drinking water task is ultimately better protected as a result, and agencies will be able to enforce effectively in the future, these developments do not immediately reduce the likelihood of this risk materialising. Our assessment is that, despite the urgency and positive developments, the level of risk exposure of both our water resources and pipe infrastructure has again increased.

Attractive employer

Risk description:

Scarcity in the labour market clashes with the scope of our recruitment task, leading to the risk that we will not be able to fill positions with the talented people we need in a timely manner, and thereby impairing our ability to perform as an organisation. In this context, motivating and retaining existing staff is also a major challenge.

Risk management:

- Vitens actively deployed the newly developed campus recruitment concept last year and started an intermediate vocational education (MBO) traineeship, in addition to the already existing traineeship at university (of applied sciences) level (HBO/WO). Work also started on setting up an internship office to centralise coordination of the internships within Vitens. Furthermore, talks have begun with vocational education institutions at intermediate (MBO) and university of applied sciences (HBO) level to position Vitens more prominently as an employer in respect of these target groups.
- In early 2022, Vitens conducted a target group study to determine its image as an employer and design strategies to attract candidates based on that outcome. We also developed data-driven recruitment by measuring Vitens' visibility to job seekers and then taking appropriate (extra) action where necessary.
- The onboarding process for new employees has been improved further, by paying attention to and optimising the other parts of the '*candidate journey*', in addition to the recruiting phase.
- Employees were offered a Talent Motivation Analysis (TMA). The outcome of this personal analysis is a detailed description of drives and talents that employees can use when discussing their current position, personal ambitions and possible new opportunities within Vitens with their manager.

Change in the level of risk:

The risk exposure level has increased, mainly due to labour market trends. This issue is becoming increasingly critical for Vitens, especially in the technical and IT fields. Vacancies are difficult to fill in general, and the process to do so requires greater effort and more time. Furthermore, employee turnover due to advancing age is also increasing. Among other steps, the organisation must focus (even) more on creating and filling entry-level positions to compensate for this development. Measures to achieve this have been developed and are currently being deployed.

Availability of production capacity and sources

Risk description:

The availability of sufficient (clean) water resources and production capacity is crucial to guaranteeing our ability to deliver sufficient drinking water of the desired quality, both now and in the future. The demand for drinking water is expected to increase in the years to come; so we must adjust our extraction and production capacity in good time. Availability is a potential bottleneck because we are dependent on provincial authorities, water boards and other parties for our extraction permits.

Moreover, if our water sources are inadequately protected (from a spatial development perspective), the quality of our water sources may deteriorate, requiring additional treatment effort or even requiring an extraction site to be abandoned.

Risk management:

- The target structure determining the long-term development of our infrastructure has been delivered and is being incorporated in our infrastructure plans;
- In the four strategic heartlands identified in this structure, studies to determine the feasibility of a large extraction site (25-50 million m³/year) have been initiated and largely completed. This size of extraction site seems possible on the Veluwe ridge, in Noord-Flevoland and Oost-Flevoland, in the river-rich area in the central part of the Netherlands, and along the River IJssel (IJssel Valley). In the case of the latter, we have started to set up a pilot project and launched a tender for (development of) the treatment technology and the area process;
- In discussions with the provincial authorities, we have agreed to more closely align the working method adopted for the target structure with the working method chosen for the provincial plans.
- In practical terms, we succeeded in handling the peak load smoothly last summer through effective daily operational management. The drought team set up specifically for this purpose did an excellent job and also communicated well with the outside world. The 'Wise Use of Drinking Water' campaign helped to reduce drinking water consumption. The high gas prices probably also helped, as people showered less, or took shorter showers.
- We are also better able to better utilise permit capacity over time to avoid overruns in peak periods. In addition, demand in the last months of 2022 was lower than expected (2015 level).
- With our 'Water-Friendly Construction' position paper, we are pushing regionally and nationally for water-saving measures in new construction projects and building refurbishments. New connection policies are being developed for large business customers, including a framework for assessing new applications for water connections. In addition, we have started discussions with (large) business customers about water-saving measures.

Change in the level of risk:

The risk exposure level remains the same. The impact of climate change due to continued drought is growing, leading to higher peaks in demand and increased pressure on extraction sites. Extraction permits need to be adjusted accordingly, and these processes are still proving to be time-consuming in practice. The urgency associated with extraction and environmental permits is now also understood by provincial authorities, water boards and other key parties, as is the need for collaboration in finding long-term solutions. We are also finding that our target structure is increasingly taken as a guideline in discussions on future drinking water infrastructure with stakeholders.

Executive Board's statement of responsibilities

The Executive Board is responsible for the design and effectiveness of the internal risk management and control systems. These systems aim to identify and mitigate the most relevant risks for our organisation. The Executive Board is aware that risk management and control systems neither offer absolute assurance that Vitens' business objectives will be realised, nor can they fully prevent misstatements of material importance, financial loss, fraud and violations of laws and regulations. In consideration of the above, the Executive Board is of the opinion that, in 2022:

- The system for risk management and the internal controls for financial and non-financial reporting provide a reasonable degree of assurance that the statements published by Vitens do not contain material misstatements. This opinion is partly based on the results of the risk inventories that were updated in 2022 and the Finance & Control Department's periodic regular audits.
- The annual report provides adequate information about the existing deficiencies in terms of the design, existence and operation of the internal risk management and control systems and adequately describes the improvements that are planned for the next financial year.
- The annual report identifies the material risks and uncertainties that are relevant in the context of the company's continuity for a period of 12 months after preparation of the report, and adequately demonstrates that it has been drawn up on a *going-concern* basis.



Statements and reports

Report of the Supervisory Board

As the Supervisory Board, we are responsible for integral supervision of the strategic policy (*Every Drop Sustainable* strategy), long-term value creation, the policy of the Executive Board, internal control and risk management, and the general course of business at Vitens. In addition, we assist the Executive Board by providing solicited and unsolicited advice. We also act as the employer of the Executive Board and maintain contacts with internal and external stakeholders. This report describes how we fulfilled our supervisory mandate during the past year and highlights the main issues in which the Supervisory Board was involved.

Strategy and realisation of the business plan

The Supervisory Board monitors the way in which the Executive Board gives substance to value creation in the long term. In the light of this, we regularly discuss the company's strategy in our meetings, initiatives designed to implement that strategy and the progress made in that respect, and the main risks associated with those activities. Value creation is particularly evident in the strategic staff planning process, the investment plan, and the long-term vision for infrastructure (the LTV). During the year under review, we held regular meetings with the Executive Board to discuss the strategic cornerstones and are pleased to note that significant progress has been made. And in 2022, we had several discussions with the Executive Board about the revised strategic roadmap: '*Every Drop Sustainable*'. This strategy reflects the Sustainable Development Goals, which emphasise the sustainable nature of Vitens without losing sight of customer focus. Furthermore, the Supervisory Board examined and analysed the availability of finance in the medium term for all these developments and the increasing investment challenge in the future, particularly in discussions with shareholders.

Each year, Vitens prepares an integral business plan. This plan translates the strategic goals and the continuity objective, i.e. the primary mandate, into concrete and measurable operational objectives. The specific business objectives which Vitens sets itself in the financial year are defined to the greatest possible extent as easily measurable, financial and non-financial performance indicators (KPIs), and course corrections are made as and when required. At the October 2021 meeting, the Integral Business Plan 2022 was presented by the Executive Board and subsequently approved by the Supervisory Board. This plan presents the first outlines of the revised strategy and highlights the upward trend in investments. It is also a business plan that makes it clear that the conversion of all processes, as a result of the SAP transformation, will require enormous effort and high resilience on the part of all employees.

Financial reporting

In the presence of the independent auditor, PricewaterhouseCoopers Accountants N.V., the Supervisory Board discussed in detail the annual report and the 2021 financial statements, including the accompanying audit report. During 2022, the Executive Board submitted quarterly reports to the Supervisory Board, which compared actual financial performance to the budget for 2022, the annual forecast for 2022 and the results achieved in 2021. The topics discussed based on these reports included expenditure trends, trends in water deliveries, the increasing level of investment, financing needs and the financial ratios. The Supervisory Board's Audit Committee (AC) engaged in intensive preparatory work on all these subjects. The Supervisory Board has concluded that the quarterly reports contain adequate information for monitoring the progress made in achieving the business objectives.

Financial statements and dividend proposal

In addition to the Executive Board's report, this annual report also includes the financial statements of Vitens, which have been approved by the Supervisory Board following the unqualified audit report issued by PricewaterhouseCoopers Accountants N.V. The Supervisory Board proposes that the General Meeting of Shareholders adopt the 2022 financial statements as presented and grant discharge to the members of the Executive Board for their implementation of management policy, and to the members of the Supervisory Board for their supervisory activities, as evidenced by the financial statements and the annual report.

The net result for the 2022 financial year is €8.2 million (2021: €19 million). In view of our task, the solvency target and the requirements of the banks, the Supervisory Board and Executive Board propose adding the full amount to the reserves.

Members of the Executive Board

The composition of the Executive Board did not change in 2022. Jelle Hannema and Marike Bonnhof are the two members of the Executive Board. Marike Bonnhof informed the Supervisory Board of her departure from Vitens, made the necessary preparations and transferred her tasks and duties on 16 December.

Supervisory Board: composition, independence and diversity

Composition and independence

The composition of the Supervisory Board remained unchanged in 2022. At the end of 2022, the composition of the Supervisory Board was as follows:

Name	Position	First appointed	Reappointed	Resignation date
Kees Jan Rameau	Deputy Chair	2014	2018	2022 (not eligible for reappointment*)
Henriëtte Setz	Member	2018	2022	November 2026 (not eligible for reappointment*)
Gerda van Dijk	Member	2018	2022	November 2026 (not eligible for reappointment*)
Mark van Lieshout	Member	2019	2023	April 2027 (not eligible for reappointment*)
Han Noten	Chair	2020	n/a	2024 (eligible for reappointment)
Paul ten Kroode	Member	2022	n/a	April 2026 (eligible for reappointment)

* = In principle, members are appointed for two terms of four years each. Members can be reappointed for a further two terms of two years each, subject to confirmation of the need to do so in the Supervisory Board's report.

All members of the Supervisory Board are independent within the meaning of *best practice* provisions 2.1.7, 2.1.8 and 2.1.9 of the Dutch Corporate Governance Code.

Vitens has set up an induction programme for new members of the Supervisory Board. The Board Members in question receive extensive information about the governance structure, the operational processes and business-specific financial topics such as the WACC, the drinking water rates, treasury considerations and supervision.

Other positions held by the members of the Supervisory Board are reported to the Board beforehand and stated in the annual report. None of the members of the Supervisory Board holds a different position that conflicts with his/her duties as a member of the Supervisory Board of Vitens. In addition, none of the members of the Supervisory Board holds more than five supervisory directorships (a chairmanship counts double) with Dutch listed companies or other large joint-stock companies, private limited companies and non-profit organisations. The number and nature of the additional positions held by each Supervisory Board member do not interfere with proper performance of that person's duties.

Diversity

We see diversity as one of the preconditions for proper performance of the duties of the Executive Board and the Supervisory Board. Diversity not only relates to expertise and background, it also includes aspects such as gender, culture and age. Vitens has also signed the Diversity Charter. When making appointments, the Supervisory Board aims to achieve a balanced male/female ratio in both the Executive Board and the Supervisory Board: a target of at least 30 percent women and at least 30 percent men. At the end of 2022, the male/female ratio for the Executive Board was 50/50 and 66.6/33.3 for the Supervisory Board. The target percentage was therefore achieved.

No conflicts of interest

No transactions involving potential conflicts of interest of material significance to the company and/or the relevant executive directors, supervisory board members, shareholders and/or the external independent auditor took place in 2022.

Permanent education and self-evaluation

In the context of permanent education, the Supervisory Board organised information sessions on the WACC, Administrative Feasibility & Dynamics and Water Quality & Resources.

In October 2022, in connection with the reappointment of three Supervisory Board members, the Board considered its own performance, the performance of the individual Supervisory Board committees and that of the individual Supervisory Directors. The broader (externally supervised) evaluation will be prepared on 2 February 2023 and working with the new template format will also be assessed at that time.

Meetings in 2022

In addition to bilateral meetings, the Supervisory Board came together for plenary meetings on seven occasions during the year under review. The Supervisory Board meets in private for the first half hour of each scheduled meeting. The participants attending the Supervisory Board meetings are the members of the Executive Board and, by invitation, the external auditor and members of the management team. The Supervisory Board has two committees: an Audit Committee and the Remuneration and Appointments Committee. The Audit Committee met on five occasions in 2022 and the Remuneration and Appointments Committee held five meetings. The chart below indicates the attendance record of each individual Supervisory Board Director.

	Supervisory Board	Audit Committee	Remuneration and Appointments Committee
1-2	ALL	n/a	ALL
15-3	ALL	ALL	n/a
29-6	Setz ABS	Setz ABS	ALL
5-9	ALL	ALL	n/a
16-9	n/a	n/a	ALL
30-9	n/a	n/a	Noten ABS replaced by Van Lieshout
24-10	Van Dijk ABS	ALL	n/a
15-11	ALL	n/a	n/a
2-12	n/a	ALL	n/a
6-12	n/a	n/a	ALL
21-12	ALL	n/a	n/a

¹ ALL=all present ABS=absent

Supervisory Board meetings

The quarterly meetings focused on the developments within Vitens. Among other topics, these meetings were used to review the year-to-date and quarterly figures, the investment plan, the budget and the drinking water rates for 2022. The external auditor also attended the meeting in which the annual report was reviewed.

Besides the meetings, the Board made a working visit to the Groenekan production facility in Groenekan. The visit ended with an informal get-together with Vitens' senior management.

In the annual Meeting of the Councils (Works Council, Executive Board and Supervisory Board), 'Social Safety' was the keynote topic. We wish to compliment the Works Council on a well-organised and productive afternoon. The following topics were also reviewed in great detail by the Supervisory Board:

- Cybersecurity
- Governance model
- 2023-2032 Infrastructure plans
- Financial policy including dividend policy
- Upward trend in drinking water demand
- SAP & Transformation (the transformation of our company based on the SAP 4 HANA Enterprise Resource Planning system)

Committee meetings

The Supervisory Board has the following two permanent committees: the Remuneration and Appointments Committee and the Audit Committee. These committees prepare decisions within their individual fields of action for adoption by the Supervisory Board and advise the Supervisory Board accordingly. The topics are discussed in detail during the committee meetings. The most important deliberations and findings of both committees are then presented during the Supervisory Board meeting for further considered decision-making. Decisions are only taken by the complete Supervisory Board.

Remuneration and Appointments Committee meetings

The Remuneration and Appointments Committee has two members: Gerda van Dijk (Chair) and Han Noten. This committee met five times in 2022. This meeting focused on the HR agenda, strategic HR topics such as SPP, talent and development, the desirable governance model and social safety. At the end of 2022, Executive Board member Marike Bonhof announced her departure and the committee launched a recruitment and selection process to find a successor. Finally, informal consultation took place with the Works Council on a regular basis.

Audit Committee meetings

The Audit Committee consists of Mark van Lieshout (Chair), Kees-Jan Rameau to April, Paul ten Kroode from April and Henriëtte Setz. The Committee members came together on five occasions during the financial year. In addition, outside and during the meetings, the Chair of the Audit Committee maintained contact with the external auditor and the internal audit team. In preparation for the meeting of the plenary Supervisory Board, the Audit Committee studied the financial statements for the year and discussed the audit report and the management letter. Furthermore, the Audit Committee meeting dealt with the 2023 integrated business plan, the 2023-2032 investment plan, the 2023-2027 financial projection, the 2022 audit plan, the top business risks and internal controls, and the 2023 drinking water rates. Increasing investment needs and the long-term feasibility of arranging financing for those needs have been regular topics of discussion. Attention was also given to the progress made in ongoing major projects, including the SAP transformation and the 2023-2032 infrastructure plans.

Shareholders and General Meeting of Shareholders

In addition to the General Meeting of Shareholders as a decision-making body, a Committee of Shareholders has been appointed by and at the instigation of the Meeting of Shareholders. The Committee of Shareholders has an advisory function in respect of the General Meeting of Shareholders, the Executive Board and the Supervisory Board. The Committee of Shareholders met twice during the year under review. Immediately following on from these meetings, discussion took place between the Committee of Shareholders, the Chair of the Supervisory Board and all members of the Executive Board. The 2021 annual report, dividend developments, the annual plans for 2023, the WACC, the revised financial policy and shareholder value were discussed in the meeting. The Committee of Shareholders reported on its activities during the meetings of the shareholders of April and November 2022. A complete list of the members of the Committee of Shareholders has been included on page 78.

In the General Meeting of Shareholders of 22 April 2022, the discussions focused on the 2021 annual report, the 2021 financial statements were approved and adopted and discharge was granted to the Executive Board and the Supervisory Board. Mr Ten Kroode was also appointed to the Supervisory Board. In the November meeting, the General Meeting of Shareholders discussed the 2023 annual plan and renewal of the contract with the auditor, reappointed three Supervisory Directors, and approved the reviewed financial policy and rates for 2023.

Our appreciation and thanks

We wish to express our appreciation for the effort and dedication of the Executive Board, the company's management and all employees in respect of the business operations and the results achieved during 2022. And also for the manner in which Vitens explicitly seeks to connect with its customers and stakeholders. The Supervisory Board is also satisfied with the way in which Vitens' Executive Board and the shareholders, represented by the Committee of Shareholders, have joined forces to jointly focus attention on the WACC issue in political circles in The Hague and investigate effects on shareholder value.

We look forward to the results for 2023 with great interest and with the utmost confidence.

Zwolle, 15 March 2023

Composition of the Supervisory Board

Mr Han Noten (1958)

Dutch nationality

- Appointed as per November 2020, term ends in November 2024
- Other positions:
 - Chair of Ambulancezorg Nederland (AZN)
 - Chair of RvT Pensioenfonds PGB

Ms Henriette Setz (1968)

Dutch nationality

- Appointed as per Augustus 2018, term ends in November 2026
- Director of Operations Essent
- No other positions

Ms Gerda van Dijk (1960)

Dutch nationality

- Appointed as per November 2018, term ends in November 2026
- Director of Zijlstra Center for Public Control, Governance & Leadership, VU University Amsterdam
- Professor of “Public Leadership”, VU University Amsterdam
- Independent consultant for NOSCERE
- Other positions:
 - Member of the Pension Funds Code Monitoring Committee
 - Member of the Raad voor Dieraangelegenheden
 - Chair of the Scientific Advisory Committee of NVTZ (Nederlandse Vereniging voor Toezichthouders in de Zorg) to 1 January 2023
 - Independent Chair of the Review Board for the 'Learning Evaluation Pilot scheme', Ministry of Health, Welfare and Sport to 1 January 2023
 - Since 12-10-2022 Chair of the Integrity Commission of Waterschap Limburg and Waterschapsbedrijf Limburg

Mr Mark van Lieshout 1963

Dutch nationality

- Appointed as per June 2020, term ends in April 2027
- CFO of HES International B.V.
- No other positions

Mr P.A.N. ten Kroode (1961)

Dutch nationality

- Appointed as per April 2022, term ends in April 2026
- Independent consultant and interim manager
- Other positions:
 - Chair of the Executive Board of Nationale Milieu Database
 - Chair of the Supervisory Board of CROWD BV
 - Member of the Supervisory Board of Zonneveld Ingenieurs BV

Mr C.J. (Kees Jan) Rameau MBA, Vice Chair (1962) to April 2022

Dutch nationality

- Appointed as per April 2014 to 2018, reappointed to April 2022
- Member of the Executive Board of (CSGO) of N.V. Eneco
- Other positions:
 - Member of the Board of Trustees of Stichting de Noordzee
 - Member of the Board of Governors of Stichting Toekomstbeeld der Techniek
 - Member of the Supervisory Board of Lichtblik (Holding company AG)
 - Member of the Board of Energie-Nederland
 - Member of the Board of Groen Gas Nederland (to April 2022)

Composition of the Committee of Shareholders

Mr **F. Douwstra**, Chair (representing the Provincial Authority of Friesland)

Mr **E. van Hijum**, Deputy Chair (representing the Provincial Authority of Overijssel)

Mr **A. Spaans** (representing the other shareholders in Overijssel)

Mr **J. Markink** (representing the Provincial Authority of Gelderland)

Mr **H. Hieltjes** (representing the other shareholders in Gelderland)

Mr **R. Strijk** (representing the Provincial Authority of Utrecht)

Ms **S. Schilderman** (representing the municipality of Utrecht)

Mr **W.J. Stegeman** (representing the other shareholders in Utrecht)

Mr **K. Ahles** (representing the municipality of Almere)

Members of the Executive Board

Mr J.J. Hannema – Managing Director and Chair of the Executive Board

Other positions:

- Member of the Board of Trustees of Wetsus
- Member of the Board of Netherlands Water Partnership (NWP)
- Member of the Board of Vewin
- Member of the Board of Water for Life
- Member of the Board of Werkgeversvereniging Waterbedrijven (WWB) (as per 1 July 2022)
- Member of the Board of Stichting Open Bodemindex (OBI)

Ms M. Bonhof– Member

Other positions:

- Member of the Supervisory Board of Waarborgfonds Eigen Woningen (Nationale Hypotheekgarantie)
- Member of the Board of NG Infra
- Member of the Supervisory Board of Water- en Energiebedrijf Bonaire

Ms S.Y.A. (Sharmila) Raghoobar – Company Secretary (as per 21 March 2022)

Other positions:

- Chair of Stichting Sociaal Fonds Vitens
- Member of the Board of Trustees of Veluwe Onderwijsgroep
- Chair of the Remuneration Committee of Veluwe Onderwijsgroep

Ms E.N.M. (Eugenie) Westhuis-Brouwer – acting Company Secretary to March 2022

Other positions:

- Chair of Stichting Sociaal Fonds Vitens

Composition of the Works Council of Vitens

- Hans Teunisse – Chair
- Stef van Beusekom – Deputy Chair
- Louis Brussee – executive team member
- Charissa Abrahams-Hendriks (from October 2022)
- Dennis Buijer
- Heleen Ens
- Bas van Harten (to June 2022)
- Ronald Haverkamp
- Marlies Hillebrand
- Amanda Hovenga
- Massius Linnebank
- Reinier Nogarede
- Devi Slotboom (from October 2022)
- Jurjen van Tellingen
- Carlie Verhoef
- René Veenendaal
- Jurgen van der Wal
- Secretary: Sitara Spaans

Statement of the Executive Board

The Executive Board of Vitens declares to the best of its knowledge and belief:

- That the 2022 financial statements provide an accurate picture of the assets, capital and liabilities, the financial position as at 31 December 2022 and the 2022 result of Vitens and the businesses included jointly in the consolidated accounts.
- That the annual report provides an accurate picture of the situation at the balance sheet date of 31 December 2022 and the course of affairs at Vitens during the financial year.
- That the materially important risks to which Vitens is exposed have been identified in the annual report.

Zwolle, 15 March 2023

Jelle Hannema, Chair

Report of the Works Council

The Works Council of Vitens pursues connected employee participation: liaising between employees in their daily work routine and the decision-makers who determine that daily work routine. Through its composition, the Works Council is a good representation of all employees and capable of acting effectively to resolve possible conflicts between company interests and employee interests. Due to the departure of two council members, interim elections were necessary. The Works Council returned to full strength in September.

The Executive Board keeps us informed of developments within the organisation, such as the huge strategic, infrastructural and financial tasks we face as a company. In return, the Works Council discusses important signals that come to its attention on the shop floor. Together with the rest of the organisation, we also keep close track of issues such as work pressure, (social) safety, the overstretched labour market and the worry caused by high energy costs and inflation that our colleagues experienced in 2022. This happens in formal consultation, but also in informal 'feet-on-the-table' chats. Following the departure of Executive Board member Marike Bonhof, the Works Council is now closely involved in the process for selecting a new Executive Board member.

Organisational changes

In 2022, the Works Council regularly advised the Executive Board on organisational changes, also in instances outside the scope of the Works Councils Act. These included advice on the formation of a new Continuous Improvement Support Centre team in the Finance & Control Department and advice on the redistribution of the tasks of the Design & Construction Manager, including the recruitment of a second manager. The Works Council also advised on the process for arranging a Revolving Credit Facility.

A number of issues that required the approval of the Works Council were addressed in 2022. Among other things, consent was given in respect of the list of 'on-call' positions and the screening matrix. The Works Council was heavily involved in the selection of a new health and safety service provider and ratified the contract award. Consent was also given regarding changes to the reintegration and absenteeism protocol, the policy for working with Chromium-6, the policy for international travel and the on-call deployment rosters for 2023.

In each (monthly) consultation meeting, the Executive Board informed the Works Council about the progress made in the SAP & Transformation programme.

Constructive discussions on social safety in the 'golden triangle' setting

Once a year, at the initiative of the Works Council, a Council Meeting is held in which the Works Council, Supervisory Board and Executive Board discuss current topics. The discussions in this so-called 'golden triangle' setting are enormously valuable for the Works Council. This year, discussion focused on the theme of 'Social Safety from the Perspective of Vitens as an Employer'. After a brief introduction by Annemieke Traag, Director of Administrative Affairs and holder of the Social Safety portfolio within Vitens, in which she presented the vision, the current state of affairs and the agenda for the coming period, the meeting participants enjoyed several fascinating informal discussions based on thought-provoking statements.

There was also regular consultation between the Works Council's day-to-day executive team and Gerda van Dijk, the Supervisory Board member responsible for employee participation. At the November 2022 shareholders' meeting, Gerda van Dijk was reappointed - with the support of the Works Council - for another four-year term. We expect to continue the excellent cooperation of the past with her in 2023.

Limited assurance report of the independent auditor

To: the General Meeting of Shareholders and the Supervisory Board of Vitens N.V.

Assurance report relating to the sustainability information in the 2022 Annual Report

Our conclusion

Based on our review activities, we have no reason to believe that the sustainability information included in the 2022 Annual Report of Vitens N.V. does not, in all material respects, accurately and sufficiently reflect:

- the policy and operational management aspects relating to sustainability; and
- the events and the performance in that area during the year ending on 31 December 2022,

in compliance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the applicable additional reporting criteria used, as explained in the 'Reporting Criteria' section.

The scope of our review

We have reviewed the sustainability information included in the following sections of the 2022 Annual Report (hereinafter: the sustainability information):

- Foreword;
- Who we are and what we do;
- How we create value; and
- Other information

This review focused on obtaining a limited degree of assurance.

The basis for our conclusion

We conducted our review in accordance with Dutch law, including Dutch Standard 3810N 'Assurance Engagements relating to Sustainability Reports'. Our responsibilities pursuant to the above are described in the paragraph entitled 'Our responsibilities in respect of the sustainability information audit'.

We feel that the assurance information we have gathered is sufficient and suitable as the basis for our conclusion.

Independence and quality control

We are impartial and not dependent on Vitens N.V., in accordance with the 'Regulation on the independence of auditors in respect of assurance engagements' (Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten/ViO). In addition, we have satisfied the Regulation on conduct and professional rules for auditors (Verordening gedrags- en beroepsregels accountants/VGBA).

PwC works in accordance with the Detailed requirements for quality systems (Nadere voorschriften kwaliteitssystemen/NVKS). Based on the above, PwC has at its disposal a cohesive quality control system, which includes established guidelines and procedures relating to compliance with ethical requirements, professional standards and other relevant laws and regulations.

Reporting criteria

The reporting criteria used to prepare the sustainability information are the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the additional reporting criteria used by Vitens, as explained in 'About this report' in the 'Other information' section of the annual report.

The lack of established practices for reviewing and measuring sustainability information allows the use of various, acceptable measurement techniques. This may have an effect on comparability between the entities and over time.

In this light, the sustainability information must be read and understood in conjunction with the reporting criteria used.

Limitations on the scope of our review

The sustainability information in the annual report includes forward-looking information in the form of expectations relating to objectives, strategy, plans and estimates and risk assessments. The actual outcomes in the future are uncertain so the possibility that they may differ from these expectations is inherent to this forward-looking information. The resulting differences may be of material importance. We do not give any assurance relative to the suppositions and feasibility of forward-looking information.

The calculations to determine economic impact, the impact on people and the environment and the impact on nature (hereinafter, the impact data) in the sustainability information are mostly based on sources made available by external parties and assumptions. The assumptions and sources used are explained in 'Impact measurement method' in the 'Other information' section of the annual report and further elaborated in the impact measurement manual for infrastructure organisations (Handboek Impactmeten Infrabedrijven), which can be downloaded from the Impact Institute's website. We have not performed any work in respect of the content of these assumptions and external sources other than assessing their appropriateness and plausibility.

The sustainability information includes references to external sources or websites. The information contained in these external sources or websites is not part of the sustainability information that we have reviewed. We therefore do not provide assurance in relation to that information.

We have not changed our conclusion as a result of these factors.

Responsibilities in relation to the sustainability information and the review of that information

Responsibilities of the Executive Board and the Supervisory Board in respect of the sustainability information

The Executive Board of Vitens N.V. is responsible for preparing reliable and adequate sustainability information in accordance with the reporting criteria as explained in the 'Reporting Criteria' section. This scope includes selecting the reporting criteria, identifying stakeholders and determining the material topics. The Executive Board is also responsible for selecting and applying these reporting criteria and for determining that these reporting criteria are adequate for the legitimate information needs of stakeholders, taking into account the applicable laws and regulations related to reporting. The choices made by the Executive Board regarding the scope of the sustainability information and the reporting policy are set out in 'About this report' in the 'Other information' section of the annual report.

The Executive Board is also responsible for exercising internal controls to the extent considered necessary by the Executive Board in order to draw up the sustainability information in a form free of material misstatements resulting from fraud or errors.

The Supervisory Board is responsible for monitoring the entity's reporting process in respect of the sustainability information.

Our responsibilities in relation to the review of the sustainability information

Our responsibility is to plan and perform the review engagement in a way that generates adequate and suitable assurance information for the opinion we have been asked to provide. In line with our engagement brief, we have focused on obtaining limited assurance in respect of the plausibility of the sustainability information. The work performed for that purpose varies in nature and timing, and is also less extensive in scope than the work that would be performed for an assurance engagement designed to deliver reasonable assurance. Therefore, the level of assurance obtained via an assurance engagement designed to deliver limited assurance is also significantly lower than the assurance obtained from an assurance engagement that has been designed to deliver reasonable assurance.

Our activities

We have performed this review in a professional and critical manner and, where relevant, have exercised professional judgement in accordance with the Dutch 3810N standard, ethical requirements and the independence requirements. Our activities included the following:

- Conducting an analysis of the external environment and gaining an understanding of the relevant social themes and issues, and the characteristics of the entity.
- Evaluating the suitability of the reporting criteria that have been used, consistent use thereof and the explanatory notes in that respect included in the sustainability information. This includes evaluating the outcomes of the dialogue with stakeholders and evaluating the reasonableness of estimates made by the Executive Board.
- Requesting and gathering information in order to obtain a global understanding of the internal control measures, the reporting processes and information systems relevant to preparation of the sustainability information, but explicitly not for the purpose of acquiring assurance information about the existence of or for testing the operational effectiveness of the internal control measures.
- Identifying areas in the sustainability information where there is a greater risk of misleading or unbalanced information, or misstatements that are of material importance and result from fraud or errors. Deciding what further work, if any, needs to be carried out to determine the plausibility of the sustainability information in the light of our risk assessment. That further work included:
 - Conducting interviews with the managers responsible for the (sustainability) strategy, sustainability policy and sustainability performance (and/or relevant employees) at group level (and corporate/divisional/cluster/local level);
 - Conducting interviews with relevant employees responsible for delivering information, performing internal data checks and consolidating data in relation to the sustainability information;
 - Obtaining assurance information indicating that the sustainability information correlates correctly to the entity's underlying administrative records;
 - Assessing relevant internal and external documentation based on limited observations;
 - Analytically evaluating data and trends.
 - Evaluating the reasonableness of the assumptions in the calculation accompanying the impact data, as included in 'Impact Measurement Method' in the "Other Information" section of the annual report and further elaborated in the impact measurement manual for infrastructure organisations (Handboek Impactmeten Infrabedrijven), which can be downloaded from the Impact Institute's website and which are explained in the impact model methodology.
 - Assessing the appropriateness and plausibility of the assumptions and external sources used for the calculations underlying the impact data, as explained in the methodology of the impact model.
- Reconciling the relevant financial information with the financial statements.
- The scope of our review does not include an evaluation of the consistency of the sustainability information in relation to the other information in the annual report.
- Evaluating the overall presentation and content of the sustainability information.
- Considering whether the sustainability information as a whole, including the relevant explanatory notes, paints a picture appropriate to the purpose of the reporting criteria used.

Obviously, we consult with the Supervisory Board about the planned review scope and timing, and the significant findings revealed by our review.

Zwolle, 15 March 2023

PricewaterhouseCoopers Accountants N.V.

F.S. van der Ploeg RA



CO₂ houdend proceswater

CO₂ houdend proceswater

Other information

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Connectivity matrix

Reasons for our strategic choice			How do we implement the strategy?				For whom/how is this ultimately important?			
No.	Material topics	Strategic agenda	Risk identified in the risk assessment	Value drivers	Operational KPIs	Target	Intended impact	SDG	Stakeholder groups	Result
1	Water scarcity	Water for today and the future, Sustainable water system - drinking water utility and - drinking water usage	Feasibility of future-proof infrastructure, subsurface crowding	We anticipate climate change and current and future drinking water demand and adjust our operations, strategy and our (strategic) reserves accordingly.	Number of clusters with a positive 'Operational margin' Number of clusters with sufficient 'Operational reserves'	≥ 4 ≥ 4	The Netherlands can trust Vitens to anticipate climate change and to work towards a good balance between increasing water demand on the one hand and, on the other hand, the availability of sufficient sources and the impact of water extraction (e.g. spatial planning requirement, groundwater depletion).	SDG 6 6.4 Significantly increase the efficiency of water use in all sectors and guarantee sustainable extraction and an adequate supply of fresh water to respond effectively to water scarcity and significantly reduce the number of people adversely affected by water scarcity. SDG 12 12.2 Achieve sustainable management and efficient use of natural resources. SDG 13 13.2 Integrate climate-change measures into national policies, strategies and planning.	Society, customers	2 2

Reasons for our strategic choice			How do we implement the strategy?			For whom/how is this ultimately important?				
No. Material topics	Strategic agenda	Risk identified in the risk assessment	Value drivers	Operational KPIs	Target	Intended impact	SDG	Stakeholder groups	Result	
2	Climate Impact	Water for today and the future, Sustainable water system - drinking water utility and - drinking water usage	Feasibility of future-proof infrastructure, availability of production capacity and water sources	We strive to reduce our climate impact by reducing greenhouse gas emissions, including sustainability criteria in tenders (such as pipe materials) and focusing on circular waste flows.	CO2 emissions	≤ 144.6	The Netherlands can trust Vitens to anticipate climate change and to work towards a good balance between increasing water demand on the one hand and, on the other hand, the availability of sufficient sources and the impact of water extraction (e.g. spatial planning requirement, groundwater depletion).	SDG 12 12.2 Achieve sustainable management and efficient use of natural resources. SDG 13 13.2 Integrate climate-change measures into national policies, strategies and planning.	Society, customers	141
3	Security of the drinking water supply	Water for today and the future	Feasibility of the future infrastructure	We invest in maintenance, replacement and protection with regard to our production facilities and pipe network.	Below-target delivery minutes (BTDM)	≤ 14 minutes	Customers can depend on a continuous supply of drinking water.	SDG 6 6.1 Universal and equal access to safe and affordable drinking water for all.	Customers	12:19
4	Drinking water quality	Water for today and the future	Availability of production capacity and water sources, subsurface crowding	We use the right water treatment and research methods.	Water quality index (WQI)	≤ 0.019	Vitens' customers can blindly trust in the availability of high-quality drinking water.	SDG 6 6.1 Universal and equal access to safe and affordable drinking water for all. 6.3 Improve water quality by reducing pollution, halting discharges of hazardous chemicals and materials and minimising their emissions, while also halving the amount of untreated wastewater and significantly increasing recycling and safe water reuse worldwide.	Customers	0.015

Reasons for our strategic choice			How do we implement the strategy?			For whom/how is this ultimately important?				
No.	Material topics	Strategic agenda	Risk identified in the risk assessment	Value drivers	Operational KPIs	Target	Intended impact	SDG	Stakeholder groups	Result
5	Attractive and good employer	Attractive employer, Water for today and the future	Attractive employer	Vitens acts to ensure that employees are healthy and engaged, feel fulfilled at work and are productive. Vitens also wants to attract and retain the right people due to scarcity in the labour market.	Engagement Index	≥ 7	Employees can work in a safe work environment where vitality, job satisfaction and development are central, both now and in the future	SDG 8 8.8 Protect the labour rights and promote safe and healthy working environments for all employees, including migrant workers, especially women migrants, and people trapped in precarious working conditions	Employees, shareholders	7.4
6	Financial health	Financial health & predictability	Capacity to cover financing needs	Our financial policy is based on continuity.	Solvency	≥ 30%	Vitens is a financially healthy company with a good balance between the price of drinking water, solvency and the return for shareholders.	SDG 9 9.1 Develop high-quality, reliable, sustainable and resilient infrastructure, including regional and transboundary infrastructure, in support of economic development and human well-being, with an emphasis on affordable and equitable access for all.	Shareholders, customers	31.0%
7	Digitisation and data security	Water for today and the future	Cybersecurity	Vitens is committed to digitising its business operations and services further and increasing the security of its ICT platform.	ICT Prio 1 emergencies ICT Prio 1 Cybersecurity emergencies	≤ 10 0	Customers can count on us to keep their data confidential and rely on a continuous supply of drinking water.	SDG 9 9.1 Develop high-quality, reliable, sustainable and resilient infrastructure, including regional and transboundary infrastructure, in support of economic development and human well-being, with an emphasis on affordable and equitable access for all.	Society, shareholders, customers	5 0

Reasons for our strategic choice			How do we implement the strategy?			For whom/how is this ultimately important?				
No.	Material topics	Strategic agenda	Risk identified in the risk assessment	Value drivers	Operational KPIs	Target	Intended impact	SDG	Stakeholder groups	Result
8	Protection of groundwater resources	Water for today and the future	Availability of production capacity and water sources, subsurface crowding	We protect our water sources and increase our understanding of quality changes in our groundwater.	Source pollution index, short-term, long-term (PI)	n/a	Dutch water consumers can rely on reliable and affordable drinking water, both now and in the future.	<p>SDG 6 6.3 Improve water quality by limiting pollution, halve the amount of untreated wastewater and increase recycling. 6.5 Implement integrated management of water resources at all levels, including targeted collaboration across boundaries. 6.6 Protect and restore water-based ecosystems to health.</p> <p>SDG 12 12.2 Achieve sustainable management and efficient use of natural resources.</p>	Society, shareholders	95 (ST) 399 (LT)

Stakeholder management

More urgent dialogue and sharper tone

Vitens has strong social ties. As a supplier of drinking water, we are central to society. We are also seeing a shift of roles in that we are increasingly solicited as a full-fledged collaborative partner or consultant.

Our primary mission is and will continue to be contributing to public health and prosperity by providing reliable and affordable drinking water 24/7. Even so, it is clear to us that drinking water is increasingly under pressure and that developments on the global stage, such as climate change, the impact of armed conflict and the broad societal transition also directly affect Vitens.

Transitions place Vitens at the centre of the debate

The past year was characterised primarily by urgency, driven by both internal factors and external developments. Internally, we face the challenge of making sufficient high-quality drinking water available. Sometimes we are unable to do so, as we saw last year.

Externally, we are having to cope with developments that have a major impact on the drinking water supply. For example, the water transition, the climate transition, the energy transition, the transition in rural areas, demographic developments and the related housing task. These developments not only affect the drinking water supply, they also place us at the centre of the public and political debate about the future spatial design of the Netherlands.

So we are committed to anticipatory collaboration and are a proactive voice in the political and social debate on topics that are directly related to water quality and water availability.

While we remain committed to defending drinking water interests now and in the future, we believe in co-creation as the only viable solution when it comes to realisation. This is based on the conviction that co-creation is the best path to a socially anchored drinking water supply in the future, with a positive impact on people and the environment.

Politics and society

We closely follow social trends and developments and take them into consideration when making decisions. We also keep track of national and European legislation. After all, that legislation directly and indirectly shapes the markets in which we are active and influences the strategy and expectations of our stakeholders. We highlight the importance of some trends or developments because they are directly associated with our area of knowledge and expertise; for example, groundwater quality and water availability. However we also face and have to anticipate and act to mitigate broader and more general trends, such as digitisation, climate change and terrorist threats (at a cybersecurity level).

New and existing networks

The pressure on the physical environment and the subsurface places high demands on Vitens' stakeholder management across the board. The key factors here are: a good network, knowing the interests at stake, having an accurate picture of opportunities and risks, developing effective collaborative relationships and refining an adaptive planning process. All with the ultimate goal of making drinking water tasks part of the transitions in the living environment and water-rich areas. Last year, we found that the changing playing field made turning to other stakeholders outside the drinking water industry worth our while.

Vitens has adopted the principles of strategic Environmental Management and Mutual Gains to smooth the way by structurally maintaining a network of relevant stakeholders, knowing the interests at stake, continuously monitoring issues, and developing targeted stakeholder strategies on that basis. Given the importance of stakeholder management, an independent stakeholder survey is conducted periodically among our stakeholders. The next survey will take place in 2023.

Regional tasks

With the National Rural Areas Programme, central government has committed to an approach that deals with major tasks, such as housing construction, in an integrated manner. But the tasks also often need to be given a place regionally so that they can be implemented there. Including drinking water is not a request to be looked at, it is a necessity. We increasingly see that stakeholders are considering the drinking water task in regional and local plans. But real action that secures drinking water interests in a way consistent with meeting short-term and long-term challenges remains absent. Furthermore, the challenges in the regions are also different and require different forms of and approaches to cooperation and dialogue.

Dialogue with our stakeholders

The broader scope of our tasks and overall broadening of the task packages automatically leads to broadening of the relevant stakeholder group. Vitens is actively anticipating this. The overview below summarises the main developments in this respect in the past period.

- 1 More active commitment to shareholder engagement. Through shareholder sessions, strengthened governance elements in the Committee of Shareholders, and bilateral contacts.
- 2 In relation to contacts with the financial sector, initiatives to broaden the set of lenders and stakeholders, e.g. Gasunie and network operators, banks and other lenders.
- 3 Given the issue of security of supply: action to intensify dialogue with both central government as the party with system responsibility and the Inspectorate for Habitat and Transport (ILT) as the supervisory authority. The relationship with ILT has been intensified to encourage risk-oriented supervision and an active role on the part of the supervisory body.
- 4 As part of the programme to diversify water sources, development of strategic hearts with consideration of surface waters as an additional resource. As a result, the Department of Public Works and Water Management and the users of the rivers are now in the picture.
- 5 The housing challenge and the importance of water-friendly construction. This is where the housing sector comes into the picture: the Ministry of the Interior and Kingdom Relations, the government departments responsible for housing and spatial planning, the construction supervision departments of regional authorities, property developers, builders and housing cooperatives.
- 6 Europe is increasingly important - intensified dialogue with the Unie van Waterschappen and Vewin lobbyists.
- 7 Regional discovery and action dialogue tables on spatial development.
- 8 Commitment to water source protection.
- 9 No longer being able to connect some large business customers led to urgency and dialogue.
- 10 Collaboration with large business customers and the business community to conceive and develop new innovations.

Stakeholder	Goals	Engagement/Dialogue	Plans for the 2023 Dialogue and future years
Employees:			
	Safe working environment.	Consultation between management and employees and annual performance and appraisal interviews, Safety Week/Safe Vitens activities	Continued focus on reducing sickness absence and on safety
	Attractive terms and conditions of employment	Meetings and internal communications (intranet, <i>Every drop sustainable</i> live events, BRON staff magazine, team meetings)	Improve the employee journey and implement hybrid working
	Open communication	Long-term employability through Strategic Staff Planning programmes	Continuation of the current dialogue based on the positioning compass
	Development possibilities	Training courses and schooling	Activation strategy
	Pleasant working atmosphere	Safety and personal development	
	Ethical behaviour	Employee participation and Central Works Council	Activities related to social safety
		Sparing use of water	
		Strategy communication and activation: <i>Every drop sustainable</i>	
		Coronavirus-related information	
Customers:			
	Low cost to society (rates)	Communication about drinking water rates, surcharge tax charges and the VAT increase	Continuation of the current dialogue
Households.	Supply security	Communication on social media, customer newsletter and website	Communication on sparing use of water and water-friendly living
Corporate customers	High-quality drinking water	Improved communication in relation to supply interruptions via waterstoring.nl (including WhatsApp).	Address areas for improvement in relation to customer journeys
Laboratory customers	Services and knowledge-sharing	Digital newsletter	
Vulnerable parties, such as hospitals	Communication about maintenance and faults	Customer panel for assessing problems and solutions	Continuation of the current dialogue
		Relationship meetings with business customers.	Continuation of the current dialogue
	Customer friendly and service-oriented support.	More understandable communication with customers.	Continuation of the current dialogue
	Fast and adequate complaint handling	Customer service via social media and telephone	Continuation of the current dialogue
	Tips on water conservation and a water-friendly lifestyle	Communication on responsible use of water and water-friendly living	Conduct discussion based on the water comparison tool

Stakeholder	Goals	Engagement/Dialogue	Plans for the 2023 Dialogue and future years
Regional and local government:			
	Performance of the statutory task - Continuity and security of supply	Meetings with shareholders and the Supervisory Board	Continuation of the current dialogue
Shareholders (provincial authorities and municipalities)	Continuity of the business - financial policy	Annual report	Continued discussion of social developments such as climate extremes, the economic recovery, tightness in the contractor market, the expected increase in drinking water demand and the energy transition
	Long-term and short-term <i>Return on Investment</i> (ROI)	WACC limitation in relation to investments and dividend payment	In discussion about a climate-proof extraction concept
	Sustainable regional area development	New strategy, discovery and action dialogue tables in the regions	Engage with new civil servants
	Transparent reporting	Low costs for the public	
	Effort to economise on water	Compliance with laws and regulations, collaboration to raise awareness	Continue collaboration to raise awareness
	Promote healthy soil and ecosystem	Consultation on and/or implementation of financial structures such as sufferance tax and other taxes	
		Regional development	
	Financial health	Rate setting	
		Committee of Shareholders	
	Water transition	Social developments such as climate extremes, the economic recovery, tightness in the contractor market, the expected increase in drinking water demand and the energy transition	
	Target structure	Dialogue on a climate-proof extraction concept	
Public authorities and companies with which we cooperate:			
	Continuity and supply security.	Regular contact with civil servants and elected officials at European, national, provincial and local level	Continuation of the current dialogue
Regulatory government bodies (ministries)	Spatial planning	Company visits, presentations, local communication, joint national media coverage	In collaboration with partners, work on more sparing use of water
Other government authorities and safety regions	Compliance with legislation and regulations	Contact via industry associations such as VEWIN	Making Vitens' impact measurable
Regulatory public authorities	Soil protection	Meetings for provincial authorities and municipalities on relevant themes such as implementation of the new Environment and Planning Act	Collaborate with partners to organise the social functions in spatial planning

Stakeholder	Goals	Engagement/Dialogue	Plans for the 2023 Dialogue and future years
Partners in the water ecosystem (provincial authorities, water boards, municipalities)	Safety (fire service)	Consultation with municipalities and the competent authorities about water depletion, biodiversity, sustainable area development, water quality, protection of water resources and legislation	National frameworks: Drinking Water policy document, Delta Programme, water conservation, WACC regulation, Subsurface, Environment and Planning Act, etc.
Partners in the physical living environment (provincial authorities, municipalities, agricultural and horticultural organisations)	Collaboration in creating the infrastructure of the future	Contribution to formulating the sixth Nitrate Directive Action Programme.	
Partners in the subsurface water value chain (network operators, water boards, infrastructure partners)	Knowledge exchange and active shaping and implementation of sustainability initiatives	Participation in activities organised by municipalities	
Interest groups (VNO-NCW, ..)		Coalition building to defend common interests such as the Soil Coalition with a.s.r. and Rabobank	
		Geothermal initiatives	
		Participation in national accelerator programmes	
Dutch Green Building Council	Put drinking water interests on the construction agenda	Collaboration in the housing task	Continued collaboration with parties active in construction
Nature-inclusive construction	Put drinking water interests on the construction agenda	Collaboration in the housing task	Continued collaboration with parties active in construction
Springtij	Knowledge exchange, put drinking water and sparing use of water on the agenda	Exchange of knowledge, experience and inspiration	Continued collaboration
VEMW	Raise awareness of drinking water interests for businesses	Participate in VEWIN's discovery and action dialogue table	Continued collaboration
Housing associations	Drinking water interests for housing associations	Participate in VEWIN's discovery and action dialogue table	Continued collaboration
Collaboration in various covenants: sustainable building and future-proof construction	Secure drinking water interests in covenants	Work with other drinking water utilities to secure drinking water in construction projects	Continued collaboration
Waarde van Water	Network collaboration in relation to sustainability as a theme	Collaboration in respect of sustainability topics at various companies and organisations.	Continue
NG Infra	Collaboration within the infrastructure network and reporting	Exchange knowledge on various topics	Continue collaboration
Public Works and Water Management ('Rijkswaterstaat')	Secure drinking water interests	Participate in developments relating to drinking water availability through the target structure	Continue collaboration

Stakeholder	Goals	Engagement/Dialogue	Plans for the 2023 Dialogue and future years
Suppliers:			
	Collaboration possibilities	Consultation between procurement managers and suppliers	Continuation of the current dialogue
	Business development and product development.	Discussions on circularity in tenders (e.g. procurement policy for sustainable materials and raw materials passport)	
Lobby groups:			
	Compliance with legislation and environmental regulations	Consultation and exchange of ideas for our projects and services	Continuation of the current dialogue
	Cooperation opportunities and joint initiatives to protect nature, flora and fauna and a clean habitat	Contribute positively to achieving biodiversity	
	Exchange knowledge	Set up clean environment and clean soil collaborations with the agricultural sector	
	Collaboration in the area of infrastructure	Tenders/value chain collaboration	
Schools and knowledge institutes:			
	Collaboration	Work experience and graduation projects	Continuation of the current dialogue
Secondary vocational education, universities of applied sciences and research universities	Knowledge transfer	Trainee programme	
Pupils in primary and secondary schools	Research within the water sector	Collaboration and research with other water utilities	
Kiwa Water Research	Internships and research opportunities.	Discussion on renewed participation in the Drinking Water Sector research group	
Wetsus.	Training courses and schooling	Participation in seminars	
	Research and development	Guided tours	
	Awaken pupils' interest	'Kraanwaterdag' event	
		Educational programmes and guest lectures via waterkennis.nl and introduction of the 'Kraanwaterdag' event	
		Knowledge, Research and Innovation calendar	
		Sector collaboration to promote water education	
Media:			
	Up-to-date information on the company's activities, views and ambitions	National, regional and local media	Continuation of the current dialogue

Stakeholder	Goals	Engagement/Dialogue	Plans for the 2023 Dialogue and future years
	Give interviews and provide reports	Articles in trade magazines	
		Meetings and guided tours at company locations	
		Stronger position in the debate on a sustainable water system	Strengthen current dialogue
		Using water sparingly and a water-friendly lifestyle	Strengthen current dialogue
		Drought and peak load during heat waves	
		Water availability	Strengthen current dialogue

Materiality

Vitens reports in accordance with the Global Reporting Initiative (GRI) standards, 2021 version. Materiality is an important principle: the standards require a description of materiality determination and the materially important aspects.

Vitens uses its materiality determination for both its reporting and in its annual planning cycle. Material topics directly influence the focus of the annual plans. We close the circle by using the same materiality analysis to look back on the year in question; we assess how we have performed and account for our actions. This way of working makes us transparent.

One drawback of this approach is the topicality of the materiality analysis used for our report. Until now, we have always used the second-to-last materiality analysis for our annual report. We changed this practice this year, following adoption of the updated GRI guidelines (2021 version). So, in respect of this report, the materiality analysis was carried out in 2022 and is applied here.

To give our stakeholders meaningful information on the most current materiality analysis, we have listed the key actions and outcomes below.

The analysis for this report

The review to determine which material topics should be included in the annual report is done in a structured manner and largely determines the content of the integrated annual report.

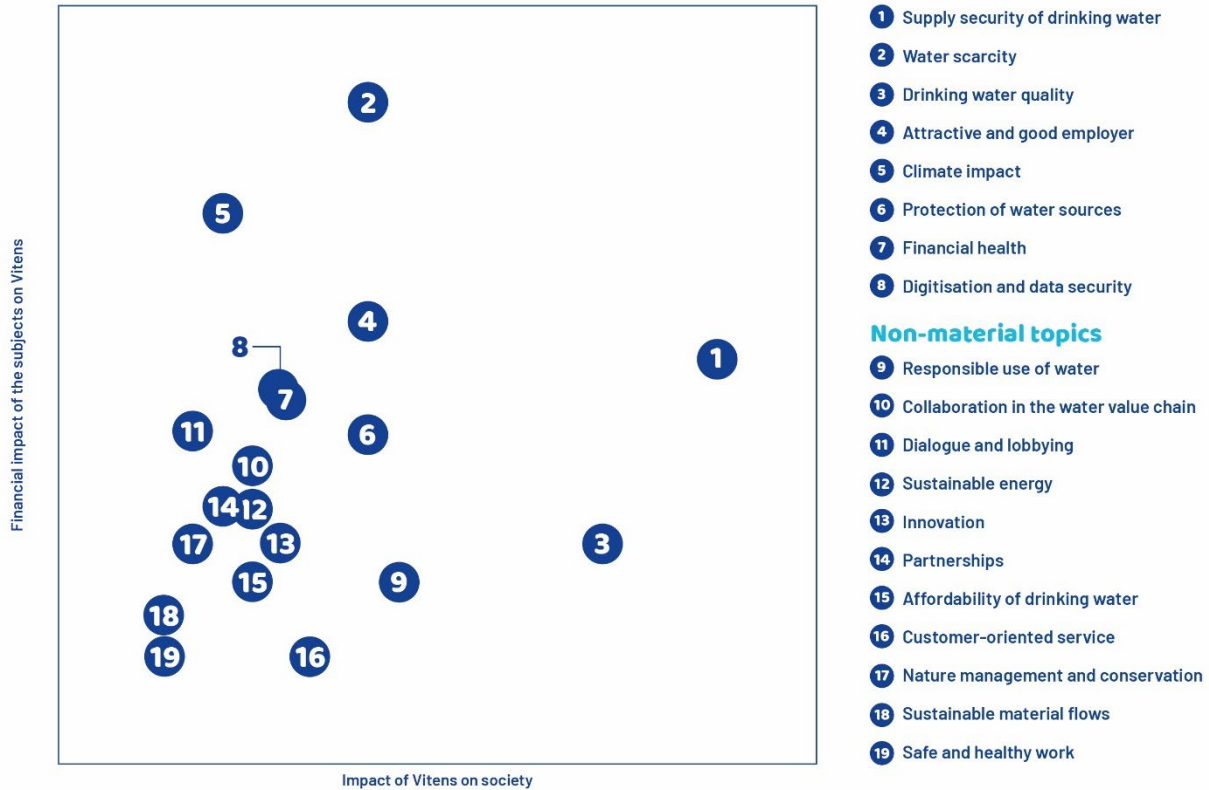
A partial update that focused on determining whether the topics were still relevant took place in 2021, and the material topics were re-prioritised. The analysis performed in 2022 is based on the GRI and the CSRD. The CSRD incorporates the concept of 'double materiality' and identifies both the financial impact and the social impact of the material topics. The GRI standards that apply primarily to this annual report call for a focus on impact materiality. Vitens identified the 8 topics below as the most significant material topics.

The changes to the material topics in comparison to 2021 are as follows:

- The 'engaged employees' topic has been combined with the topic of being an attractive employer and is now presented as the 'Attractive and Good Employer' topic.
- Innovation has been dropped based on the new prioritisation.
- The '(Cyber)security' topic has been combined with the topic of digitisation to become the 'Digitisation and data security' topic.
- The 'Water Scarcity and Climate Adaptation' topic has been split into the component parts. Water scarcity, as an independent topic, is also materially important in 2022. Climate adaptation is covered in the scope of the 2022 'Climate Impact' topic.

2022

Vitens' materiality matrix



Material topics

- 1 Supply security of drinking water
- 2 Water scarcity
- 3 Drinking water quality
- 4 Attractive and good employer
- 5 Climate impact
- 6 Protection of water sources
- 7 Financial health
- 8 Digitisation and data security

Non-material topics

- 9 Responsible use of water
- 10 Collaboration in the water value chain
- 11 Dialogue and lobbying
- 12 Sustainable energy
- 13 Innovation
- 14 Partnerships
- 15 Affordability of drinking water
- 16 Customer-oriented service
- 17 Nature management and conservation
- 18 Sustainable material flows
- 19 Safe and healthy work

Figure: 2022 materiality matrix

Definitions of 2022 material topics

Drinking water supply security:

Vitens wants to deliver water reliably to its customers and meet increasing demand. This is why Vitens is committed to keeping the time that customers are without water due to maintenance or faults as low as possible, acts to minimise inconvenience, invests in sufficient capacity and reliable infrastructure, and works creatively with its customers to ensure security of supply.

Water scarcity:

Vitens realises that water scarcity is becoming more common, partly due to climate change. Vitens thinks proactively about how areas can be spatially set up and designed to prevent water scarcity. By doing so, Vitens anticipates the consequences of water scarcity and brings together different policy areas to mitigate the increasing level of risk.

Drinking water quality:

Vitens ensures that customers can always rely on safe and clean water of outstanding quality.

Attractive and good employer:

Vitens acts to ensure that employees are healthy and engaged, feel fulfilled at work and are productive. Vitens also wants to attract and retain the right people due to scarcity in the labour market. Strategic staff planning, digitisation, automation, apprenticeship programmes and campaigns that highlight working in the water industry and the uniqueness of the company all illustrate Vitens' commitment to being an attractive and good employer. Vitens also has strong programmes for training, personal and professional development, psychosocial well-being and job satisfaction.

Climate impact:

Vitens wants to reduce its impact on the climate by reducing greenhouse gas emissions, including sustainability criteria in tenders (such as pipe materials) and setting up circular waste and by-product flows. In addition, Vitens will adapt as necessary to absorb the impact that climate change has on its operations.

Protection of water resources:

Vitens is committed to protecting its water resources against spatial crowding and pollution caused by agriculture, natural resource extraction and other activities.

Financial health:

Vitens remains financially healthy through good solvency, a healthy loan portfolio and strategic investments. An appropriate dividend policy gives shareholders a fair return on their investment and ensures that Vitens retains sufficient reserves.

Digitisation and data security:

Vitens manages vital infrastructure for the drinking water supply in the Netherlands. So Vitens is fully focused on protecting and securing its systems, data, production facilities and (customer) information. Vitens also intends to further digitise its services.



About this report

Scope

We report on our financial, strategic and sustainability performance in our annual report. These performance-related areas are subject to significant development. Each year, we attempt to improve on the previous year's performance and further optimise our data and systems. Vitens exclusively publishes the annual report online. The most recent previous annual report, relating to financial year 2021, was published on 22 April 2022.

The reporting period for the 2022 annual report runs from 1 January 2022 to 31 December 2022. After approval by the external auditor, the report was sent to the shareholders and published on 21 April 2023.

In the year under review, there were no significant changes in the size, structure, ownership or supply chain of the organisation.

Last year, we used the second-to-last materiality analysis for our annual report. We have changed this approach this year and used the materiality analysis conducted in 2022.

Please refer to the explanatory notes to the consolidated financial statements for details of our financial performance (see Consolidated financial statements). In respect of our non-financial performance, Vitens reports on the entities in which it has a controlling interest. These are Vitens N.V., Watermanagement B.V. and Industriewater B.V. The report also touches on a number of initiatives that are related to Vitens' involvement and additional explanations are provided as an explanatory note when required. Vitens Evides International (VEI) produces its own annual report, which is therefore not consolidated in these financial statements. No significant acquisitions or divestments were made in 2022.

The definitions and reporting principles remain unchanged relative to the previous year, unless stated otherwise in the explanatory notes. Wherever possible, we compare quantitative information with comparative figures from previous years. Most Key Performance Indicators (KPIs) are discussed every quarter with the departments involved and subsequently reported to the Executive Board. The data relates to Vitens' own performance and not to that of our customers and partners in the value chain. Wherever possible, we have expressed information in terms of financial and non-financial data in this integrated report.

Each year, we have a greater level of confidence in the accuracy of the reported data. Even so, although we apply external assurance, we acknowledge that we cannot guarantee one hundred percent accuracy. We have tried as far as possible to eliminate the uncertainties associated with qualitative research or with quantitative calculations. The feedback provided by our independent auditor helps us to become more proficient at reporting non-financial information each year.

Contact details for questions about the report or its contents: communicatie@vitens.nl

Reporting criteria for non-financial information

Vitens has reported in accordance with the GRI Sustainability Reporting Standards, also known as GRI standards, since 2017. The GRI standards are the most widely accepted guidelines worldwide for preparing non-financial annual reports. The sustainability information reported in the 2022 annual report is based on the GRI standards and internal reporting criteria. In accordance with the requirements of the GRI standards, a materiality analysis has been used to determine the content of the report. Materiality is an important element of GRI and application of the GRI standards requires a detailed description of how materiality is determined and the materially important aspects. Unlike last year, we used the most current analysis, the 2022 materiality analysis, for this report.

A new strategy has been formulated for the period 2021-2030 in which our ambition is to be fully climate-neutral and the most sustainable drinking water utility in the Netherlands by 2030. The Finance & Control department is responsible for collecting and validating this non-financial data. The qualitative information is gathered selectively based on the main themes identified in Vitens' strategy. The information on these subjects is provided and substantiated by the responsible managers within the organisation.

Impact measurement method

Impact analysis for Vitens

To get a better idea of the ways in which Vitens makes a positive or negative contribution to society, Vitens started measuring and reporting impacts in 2021. We have included an impact analysis for the second time in this annual report. We have also included a Sustainability and Corporate Social Responsibility report for the first time this year. In addition to impacts that have been quantified, the latter report includes a number of impacts where a qualitative assessment has been made (Vitens had a negative or positive impact). This impact analysis (both qualitative and quantitative) builds on an Impact Journey that we previously conducted with other infra organisations to familiarise ourselves with impact measurement.

By quantifying and assigning a value to four impacts and transparently clarifying where our impacts are positive and negative, this report represents a subsequent step, albeit small, in developing a comprehensive analysis. Based on these experiences, and further themes, we will continue to extend the scope of our impact analysis in the coming years.

Building on existing methods and data

Vitens adheres to the principles of an integrated annual report. The impact analysis is an extension of this. The impact measurement manual for infrastructure organisations (Handboek Impactmeten Infrabedrijven), hereinafter referred to simply as the Manual, acts as our guideline for elaborating the impact analysis. This Manual, which was first published in September 2020 and updated in 2022, provides detailed guidelines and examples contributed by network organisations for use by peers in the sector. The Manual builds on the Impact Institute's [Framework for Impact Statements \(2019\)](#) and [IP&L Assessment Methodology Core \(2020\)](#).

Scope

Value chain scope

The calculations are based on Vitens' value chain. Within that value chain, we distinguish between 'downstream', 'internal operations' and 'upstream'.

- 'Downstream' is the term used for business customers and households.
- 'Internal operations' is the term used for Vitens' business operations.
- 'Upstream' is the term used for suppliers of materials and services, among others, and organisations in the water cycle such as government authorities.

Impact scope

The figure below shows impacts broken down into the six capitals (forms of value): Financial, Manufactured, Intellectual, Natural, Social and Human. The starting point for the definition and elaboration of impacts is the standard list of impacts for infrastructure companies in the Manual. A number of these impacts were quantified in 2022 as a follow-on from the earlier work done in 2021. The scope has been expanded relative to 2021, and now includes financial capital. This addition improves our understanding of Vitens' impact on human capital, natural capital and financial capital. In respect of the impact on Human capital, we looked in detail at two impacts on employees. For the third impact, our impact on Natural capital, we worked out our contribution to climate change.

Capital	Impact	2022
Financial capital	Various impacts such as payments to suppliers, employees, taxes and financial costs relating to customers	In scope
Manufactured capital	Change in value of tangible assets	
	Value creation in terms of consumer well-being	
	Loss of value in terms of consumer well-being	
	Value creation for business customers	
	Loss of value for business customers	
	Digital security: cybercrime and hacking prevention	
	Value of goods purchased	
Intellectual capital	Change in the value of intangible assets	
	Technological development	
Natural capital	Scarce materials use	
	Scarce water use	
	Soil contamination	
	Air pollution	
	Water pollution	
	Depletion of fossil fuels	
	Contribution to climate change	In scope
	Land use and land transformation	
	Nature value	
Social capital	Digital security: privacy violations	
	Contribution to or reduction of inequality in society	
	Social impact of diversity and inclusion	
	Human rights violations in the value chain	
	Change in reputation and trust	
	Social value of infrastructure	
	Contribution to improved institutions and regulations	
Human capital	Employee development	
	Positive impact of having work on well-being	In scope
	Safety incidents and loss of well-being in the human environment	
	Work-related sickness among employees and accidents at work	In scope
	Economic value of labour	

The selected impacts (contribution to climate change, well-being effect of having work, work-related sickness absence, accidents at work and financial capital) have been incorporated in a number of impact indicators based on materiality and feasibility.

Impact manual	Impact indicators
Contribution to climate change	Contribution to climate change (direct - Vitens' own organisation) Contribution to climate change (indirect - upstream)
	Mitigation of climate change (direct - Vitens' own organisation) Mitigation of climate change (indirect - upstream)
Positive impact of having work on well-being	Well-being effects of having work (direct - Vitens' operations)
Work-related sickness absence and accidents	Non-fatal accidents (direct - Vitens' operations) Fatal accidents (direct - Vitens' operations) Other work-related sickness absence (direct - Vitens' operations)
Financial capital	Payments to suppliers Balance of interest paid and interest received Payments to employees Balance of taxes paid and grants received Net profit/loss Other payments by external stakeholders to the organisation Payments by customers Other payments by the organisation to external stakeholders

Method

We quantified the impacts for the selected indicators first. We then determined how much of the quantified impact can be attributed to Vitens. The term we use for this approach to assigning impact is 'attribution'.

The data used to measure impact is primary data on CO2 emissions and employees, supplemented by secondary data for impact measurement and valuation.

Quantifying impact

The following paragraphs present the impact calculations, which are structured as follows:

- Indicator – Definition of the impact indicator.
- Limit of scope - Explanation of the assumptions used for the calculations.
- Calculation - The calculation of the financial impact, expressed in social costs and benefits.
- Valuation – A summary of the monetisation coefficients used in the calculations.
- Sources - The sources of the inputs for the calculations and an explanation of why these were chosen, if relevant.
- Attribution – The degree of responsibility assigned to Vitens.

The following basic principles apply to this report:

- Impact. The positive and negative impacts are analysed and quantified separately for each theme since they cannot be directly offset against each other.
- Limitations. Various criteria, points of departure and assumptions are used when calculating impacts. They are explained separately where applicable.
- Calculation. The explanation of the calculation and the sources used is as transparent as possible. Regular discussion takes place with experts (Impact Institute) and other network organisations to select the most appropriate valuation technique, associated indicators and review the information available.
- Sources. Recent information is used.
- Attribution. We have chosen to split the impact among the stakeholders in the value chain.

Impact attribution

Attributing impact is an important part of measuring impact. In the context of water utilities, significant impact is created in the interplay with other organisations, outside one's own organisation. If part of this impact is not assigned to a water utility, the impact may be disproportionately large.

The impact is split across various parties via attribution. There is not yet a widely used or accepted method for attributing impact. The network organisations in the Manual use the methodology described in the IAM Supplement Impact Contribution document. Impact in the value chain is split based on (i) responsibility and (ii) economic value added.

Impact calculations

The following sections further explain the impact calculations of the three selected impacts.

Contribution to climate change

Indicator

The contribution to climate change impact is calculated based on the greenhouse gases emitted by Vitens' organisation and in the value chain. The in-scope gases are the six greenhouse gases as defined in the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). A further explanation of this impact can be found in the Manual.

Limitations

- The effect of greenhouse gas emissions is considered separately from other causes of climate change.
- The social cost of a ton of CO₂ equivalent (CO₂e) is estimated based on a study by Kuik et al. (2009). This value reflects marginal *abatement costs* (abatement costs – the macroeconomic costs of achieving the Paris Agreement targets) in line with the mean values of the environmental prices published by CE Delft.

Calculation

Contribution to climate change	Contribution to climate change resulting from the network operator's greenhouse gas emissions (direct - Vitens' own organisation)	Scope 1 Emissions * Monetisation coefficient (EUR/kg CO ₂ e)
	Contribution to climate change resulting from the network operator's greenhouse gas emissions (indirect - upstream)	(Scope 2 Emissions + Scope 3 Emissions) * Monetisation coefficient (EUR/kg CO ₂ e)
Limitation of climate change		

Valuation

Monetisation coefficient	Unit
0.157	EUR/kg CO ₂ e, see Impact Measurement Manual for Infrastructure Companies (Handboek Impactmeten Infrabedrijven)

Sources

Indicator	Source
Scope 1, 2 and 3 CO ₂ e emissions,	Vitens Annual Report

Attribution

In terms of the direct contribution to climate change, the primary responsibility lies with Vitens, assessed at an attribution factor of 69 percent. However, Vitens is not primarily responsible for the indirect contribution to climate change, assessed at an attribution factor of 19 percent. The method for calculating the attribution factors is explained in the Attribution section.

Well-being through having work

Indicator

The well-being effect of having work strengthens the self-confidence, autonomy, social relationships and status of employees. Having work increases personal well-being through increased social contacts and a sense of trust in society. It also contributes to greater self-esteem. The well-being impact of having work is calculated by comparing the *Life Satisfaction* (LS) of people in work with that of unemployed people and then correcting for income. The impact of income is part of the financial capital category and not included in this calculation. A further explanation of these impacts and the applicable well-being factors can be found in the Manual.

Limitations

- It is assumed that Vitens employees are not structurally different from the average Dutch worker in paid employment. Structural differences are unlikely since Vitens does not apply specific selection to its employees and has a large group of employees in diverse positions.
- The well-being factors have been adjusted to exclude the effect of salary. This effect is quantified in the impact that payments to employees have on financial capital.
- The calculation provides an estimate of well-being for all workers. In reality, of course, well-being varies from employee to employee. In the interests of privacy and feasibility, no distinction will be made based on income, education level or other background information.

Calculations

Positive impact of having work on well-being	Employees in Vitens' own organisation (excluding employees with limited job prospects) * ((Average employee satisfaction NL - average employee satisfaction Vitens) * Average increase in life satisfaction from having work) * Monetisation coefficient
	Employees in Vitens' own organisation with limited job prospects * ((Average employee satisfaction NL - average employee satisfaction Vitens) * Average increase in life satisfaction from having work per person with limited job prospects) * Monetisation coefficient

Valuation

Monetisation coefficient	Unit
2,298	EUR/life satisfaction score (scale 0-100), see the impact measurement manual for infrastructure companies

Sources

Headcount	Vitens Annual Report
Well-being factors	European Social Survey, see Manual
Average employee satisfaction Netherlands	Statistics Netherlands National Survey of Working Conditions

Attribution

Vitens is primarily responsible for the well-being effects of work. The attribution factor used is 69 percent.

Work-related sickness absence and accidents

Indicator

The impact of work-related sickness absence and accidents on Vitens employees is defined as the reduction in years of healthy life, expressed in terms of social costs. Work-related incidents include fatal and non-fatal accidents in the working environment and the occurrence of chronic stress. This was calculated over 2022 only for incidents within the organisation (direct). Incidents in the value chain (indirect) are not yet included in the scope here.

Limitations

- It is assumed that sickness absence that is not determined to be 'work-related' is in no way associated with the work at Vitens.
- The calculation provides an estimate of the average damage per accident and sickness absence day in the different categories. In reality, the damage varies from case to case and person to person. For privacy and feasibility reasons, it is assumed that the average damage figure is a good approximation.

Calculations

The loss of employee well-being is measured by the Disability-Adjusted Life Year (DALY) indicator. A DALY is a measure of the total burden arising from disease: the decrease in both life expectancy and quality of life. Work-related sickness absence and accidents are divided into three components: (i) non-fatal accidents, (ii) fatal accidents, and (iii) other work-related sickness absence. The three components are subdivided further as shown below:

- Non-fatal accidents: the incidents within Vitens are assigned to the following categories: pinch/bump/cut, fall/stumble, traffic, toxic substances etc., animals, mental/physical aggression (people), fire, and other. They are combined with the DALY data associated with these types of health effects.
- Fatal accidents: are determined based on the number of deaths resulting from work-related incidents within Vitens. The number of deaths are multiplied by the fatal incident valuation coefficient.
- Other work-related sickness absence: health impairment that is not caused by an accident is assigned to this category. The cases are split out based on their character: mental, physical & ergonomic and other. Sickness absence in these subcategories is determined based on the number of days of absence and a weighting factor for disability. In the case of physical health problems, a weighted average is taken as the weighting factor for upper limb disorders and back and lower limb disorders. The number of days of absence are multiplied for each category (mental, physical and other) by a corresponding factor for the reduced value of a life year (disability weighting factor) as defined in the Global Burden of Disease study (2017). The total number of Disability-Adjusted Life Years (DALYs) attributable to other work-related sickness absence is calculated as the sum of the categories. Finally, this total value is multiplied by a valuation coefficient of one DALY.

Accidents and employee sickness absence	Loss of well-being due to non-fatal accidents in Vitens' organisation (EUR/year) + Loss of well-being due to fatal accidents in Vitens' organisation (EUR/year) + Loss of well-being due to work-related sickness absence in Vitens' organisation (EUR/year)
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Valuation

Monetisation coefficient	Unit
103,048	EUR/Disability-Adjusted Life Years (scale 0-1), see the impact measurement manual for infrastructure companies

Sources

Work-related sickness absence	Internal Vitens data; TNO Arbobalans 2018
Number of accidents	Accident Report LTIF
Disability Weighting Factors	Global Health Data Exchange (2017); GBD 2017 Disability Weights; Netherlands Centre for Occupational Disease (2016); Haagsma et al. (2016)

Attribution

Vitens is primarily responsible for work-related sickness absence and accidents. The attribution factor used is 69 percent.

Impacts on financial capital

Indicator

The impacts on financial capital include the value of financial flows to and from Vitens for stakeholders. Outgoing flows, such as a payment from Vitens to a stakeholder is a positive impact for the stakeholder. Incoming flows, such as a payment from a stakeholder to Vitens is a negative impact for the stakeholder. The impacts are based on Vitens' consolidated cash flow statement.

Limitations

- The purpose of measuring impacts on financial capital is to provide an overview of the cash flows going to the organisation and how they are then distributed to the stakeholders. For traceability and recognition of the results, we selected a combination of items from the cash flow statement that best represented each impact. In reality, the flow to various stakeholders is not fully captured in these overviews; employee expenses, for example, do not reach employees in their entirety.

Calculations

In the case of the impacts on financial capital, the impacts are broken down according to the relevant financial flows detailed in the cash flow statement. They are presented under a brief description and summary of the items included for each indicator.

Variable	Explanation	Items recognised in Vitens' cash flow statement
Payments to suppliers	Outgoing cash flows related to procurement costs, other operating expenses and investments (less capitalised production)	Drought claims, operations-related debtors, investment-related debtors, payment transactions
Balance of interest paid and received	Cash flows from financing activities and investments/divestments in financial assets and working capital	Redemptions/interest, payment account interest
Payments to employees	This includes employee expenses (the costs the organisation pays to/on behalf of its employees).	Payroll tax, salaries, ABP pension/social security contributions
Balance of taxes paid and government grants received	Taxes paid (such as profit tax or water taxes) less any government grants received	Tap water levy, VAT, municipal charges, groundwater tax,
Net profit/loss	If the organisation makes a net profit, there is a positive impact for the organisation and its shareholders. In the case of a net loss, the impact is negative.	Final total cash flows
Payments by customers	Revenue of the organisation, possibly split out by small and large consumers	OLA water debtors
Other payments by external stakeholders to the organisation	Other revenue (i.e. other income) such as external revenue and other income excluding sales, including capital raised	Non-water debtors, UG-HL, Sale of MVA, Facturatie BV, Cash loan, New loan, Balance regulation
Other payments by the organisation to external stakeholders	Other disbursements	n/a

Valuation

For recognition and repeatability, one euro is valued equally for each stakeholder. Each euro paid to employees is valued equally for each employee, and this euro is valued equally to a euro paid in dividends.

Sources

2022 Cash transactions	Vitens 2022 cash flow statement
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Attribution

Vitens is fully responsible for the impacts on financial capital. The attribution factor used is 100 percent.

Attribution

Impacts are attributed in several ways, as described above. This split among stakeholders is based on (i) responsibility and (ii) the share in the chain. The attribution calculation is determined in three steps, based on the IAM Supplement Impact Contribution method, see Manual.

Step 1: classification based on responsibility

Attribution type	Description	Impact indicator
1	Predominantly internal effects	<i>All indicators relating to financial capital</i>
2a	Attribution factor for external impacts (directly) related to the entire chain, where the network organisation has primary responsibility	Contribution to climate change through greenhouse gas emissions (direct - Vitens' own organisation)
		Climate change mitigation (direct - Vitens' own operations)
		Climate change mitigation (indirect - upstream)
		Non-fatal accidents
		Fatal accidents
		Other work-related sickness absence
2b	Attribution factor for external impacts (indirectly) related to the entire chain, where the network organisation does not have primary responsibility.	Well-being effects of having work
		Contribution to climate change through greenhouse gas emissions (indirect - upstream)
3	Attribution factor for external impacts for which there is no primary responsible party in the entire chain	<i>No indicators in this impact analysis</i>

Step 2: calculation of economic value added

In the second step, we estimate the economic value added for Vitens' value chain. This is an analysis of how much of the drinking water price goes to Vitens and how much goes to suppliers via other chain partners. Vitens' share here is estimated at 39 percent.

Step 3: calculation of attribution factors

The attribution factors are determined as a combination of attribution type and, for types 2 and 3, the economic value added. The combination of steps 1 and 2 in accordance with the methodology described in the IAM Supplement Impact Contribution document leads to the attribution factors per impact indicator that are stated in the explanatory notes to each impact.

Reporting

In Vitens' 2022 annual report, we report on the impacts below.

Natural capital	Contribution to climate change
	Climate change mitigation
Human capital	Accidents and employee sickness absence
	Well-being effects of having work
Financial capital	Payments to suppliers
	Payments to employees
	Interest paid
	Taxes
	Other revenues
	Financial costs related to customers
	Net profit/loss

Glossary and reporting definitions

This overview explains the (industry-specific) terms that are used in this annual report.

Number of clusters with a positive 'operational margin':

Definition:

The operational margin is defined as the difference on an annual basis between the firm total production requirement and the available treatment capacity expressed as a percentage of the firm total production requirement.

The number of clusters is the unit used for reporting. The calculation of the production requirement and treatment capacity is based on millions of m³.

Measurement method:

The indicator is calculated as follows:

1. The total production requirement is calculated by adding the distribution loss to the projected drinking water delivery output. This result is increased by 10 percent to allow for unexpected developments in demand*. The projected drinking water output is calculated per delivery group, namely large businesses, small businesses (including agricultural businesses) and households.

After adjusting for wholesale supplies (delivery between water utilities), this gives the total firm production requirement.

2. The available treatment capacity is determined by correcting the gross permit capacity for the non-usable element (due to qualitative and quantitative limitations), and by taking into account limitations relating to what can be made usable and factoring in the production losses. The available treatment capacity minus maximum production capacity gives the operational margin.

Responsibilities and reporting:

The Asset Management manager is responsible for reporting on progress and the KPI results, and ongoing performance is regularly discussed with the Executive Board. The number of clusters with a positive 'operational margin' reported in the annual report refers to the situation as at 1 January 2022 and is therefore based on projects realised in calendar year 2021. Or, in other words, if a project is realised in a cluster in 2021, that project aims to bring the cluster up to a satisfactory operational margin in 2022.

Number of clusters with sufficient 'total reserves':

Definition:

The total reserve is defined as the difference on an annual basis between the maximum production capacity and the firm production requirement and is equal to the sum of the operational margin and the non-operational reserve, expressed as a percentage relative to the firm total production requirement.

The non-operational reserve is defined as the annualised difference between the nominal permit capacity and the firm total production requirement, expressed as a percentage of the firm total production requirement.

The number of clusters is the unit used for reporting. The calculation of the production capacity and production requirement is based on millions of m³.

Measurement method:

The indicator is calculated as follows:

1. The total production requirement is calculated by adding the distribution loss to the projected drinking water delivery output. This result is increased by 10 percent to allow for unexpected developments in demand*. The projected drinking water output is calculated per delivery group; e.g. large businesses, agricultural users and households.

After adjusting for wholesale supplies (delivery between water utilities), this gives the total firm production requirement.

2. The maximum production capacity is determined by subtracting non-deployable capacity (due to qualitative and quantitative constraints), and the production losses.

The maximum production capacity minus the firm total production requirement gives the total reserve.

Responsibilities and reporting:

The Asset Management manager is responsible for reporting on progress and the results, and ongoing performance is regularly discussed with the Executive Board. The number of clusters with a positive 'operational margin' reported in the annual report refers to the situation as at 1 January 2022 and is therefore based on projects realised in calendar year 2021. Or, in other words, if a project is realised in a cluster in 2021, that project aims to bring the cluster up to a satisfactory operational margin in 2022.

** The allowance for unexpected developments in demand is intended to ensure that the system can cope with an expected demand peak. A peak of this type may be caused by (A) prolonged higher delivery output due to extreme weather conditions, (B) deviations relative to forecast and (C) non-availability of (part of) the available treatment capacity due to emergencies. This 10 percent increase reflects our reserve policy and is in line with national guidelines (Vewin).*

In the case of large business customers, the forecast is based on previous actual figures including relevant individual developments reported by the Relationship Management team.

In the case of agricultural customers, the forecast is based on previous actual figures and indexed expectations resulting from research that focuses on developments in the dairy farming sector.

In the case of households, the forecast is based on previous actual figures for household consumption, including changes in population statistics.

Number of dangerous situations reported

The number of reported dangerous incidents includes unforeseen, unintended and sudden events or series of events that have, or might have, resulted in injury or illness and/or damage to (or loss of) materials/equipment or harm to the company's reputation.

Number of ILT reports

The annual number of potentially avoidable incidents reported to the Inspectorate for Habitat and Transport (Inspectie Leefomgeving en Transport/ILT) involving water quality limit infringements.

Number of developments resulting from the innovation process implemented within our business operations:

Definition:

The number of developments resulting from the company-wide innovation process that are ready for implementation within Vitens' business operations in order to realise a demonstrable impact. Innovation within Vitens focuses in the present on the issues of tomorrow. With our powers of innovation, we investigate the potential of new (measuring) technologies and other ways of obtaining raw water, promote development of the (digital) water system and make improvements to our operations and customer contacts, thereby creating positive impact and increasing our visibility. The objective is to implement at least three developments resulting from the innovation process within the business operations.

Measurement method:

The KPI for the 'Number of developments resulting from the innovation process implemented within the business' reports the number of projects that were ultimately approved by the innovation committee for further use in the business.

Responsibilities and reporting:

The Business Development manager reports on the number of innovation developments each quarter in the departmental reporting cycle.

Valve: point in the main pipe or transmission pipe that is used to release pressure in sections of the pipe for monitoring activities or for repair work. Monitoring involves inspecting the inside of the pipe for iron and manganese deposits. Small sections of the pipe are flushed through for this purpose and the flushing water checked. If significant deposits are detected, the pipe is fully flushed.

Valve policy: policy based on weighing up performance, costs and risks to determine the most optimal maintenance plan for each valve (frequency and year of maintenance per valve).

CO₂: carbon dioxide. This gas is largely generated by the combustion of fossil fuels such as natural gas and coal and is one of the factors that magnify the greenhouse effect. We report in accordance with KWR's Drinking Water Industry Code of Practice (PDC-11) 'Calculation of the CO₂ footprint of drinking water utilities', which has been prepared based on the Greenhouse Gas Protocol (GHG Protocol) for reporting emissions and other guidelines.

CO₂ emissions:

Definition: the amount of greenhouse gas emissions caused by Vitens' operations.

Measurement method:

CO₂ emissions from Vitens' operations (in kilotons of CO₂e) = the sum of greenhouse gases emitted by Vitens in the year under review. Vitens has drawn up and updates a process description for determining the KPI for CO₂ emissions from Vitens' operations, which includes specific details of the PDC-11 method used by Vitens.

Greenhouse gas emissions are determined for the year under review based on Vitens' activities associated with scope 1, 2 and 3 emissions in that year. The activity data (e.g. kWh of electricity consumed) is multiplied by emission factors (e.g. kg CO₂e/kWh). The emissions resulting from the activities in scope 1, 2 and 3 are expressed as the mass allocation of CO₂ equivalents (CO₂e) and added together to give a total for Vitens. This method is described generically for Dutch drinking water utilities in the Drinking Water Industry Code of Practice (PDC-11) 'Calculation of the CO₂ footprint of drinking water utilities' published by KWR. The emission factors can be found at co2emissiefactoren.nl.

Vitens chooses to report the gross CO₂e emissions: offsetting measures for emissions reduction (such as any Guarantee of Origin Certificates purchased) are not included.

Furthermore, in addition to the PDC-11 method, Vitens uses the high emission factor for methane^[1] (34 kg CO₂e/kg CH₄ instead of 28 kg CO₂e/kg CH₄), for the sake of continuity in the methodology and in line with the importance of methane in achieving short-term climate goals.

Over the year 2022, the intention is to valorise the impact of greenhouse gases emitted according to the Impact Measurement method and reduce it to "net zero". This will be achieved by purchasing the quantity of Guarantee of Origin certificates ("green electricity" certificates) that correspond to the total impact of greenhouse gases emitted. A European tender procedure for obtaining the Guarantee of Origin certificates (GoO) is currently ongoing, but had not been completed at the time of writing. Note: this approach does not result in climate neutrality (i.e. full offsetting based on mass emissions; 1 ton of emissions compensated by 1 ton of VER), but quantifies the emissions produced against offsetting measures such that the impact is net zero.

[1] This relates to the global warming potential of methane (Global Warming Potential, GWP₁₀₀) which indicates how much greater the effect of methane is as a greenhouse gas (relative to CO₂). The choice for 34 instead of 28 kg CO₂e/kgCH₄ is permitted within PCD-11 (2022) as an add-on.

Responsibilities and reporting:

The manager responsible for Asset Management reports annually on the CO₂ emissions in the departmental report.

Committee of Shareholders: this committee has an advisory function in respect of the General Meeting of Shareholders, the Executive Board and the Supervisory Board.

Corporate governance: the relationships between the Executive Board, the Supervisory Board and the General Meeting of Shareholders. The basic principles of Corporate Governance are good entrepreneurial practice (the ethical nature and transparency of the Executive Board's actions) and good supervision (including accountability for supervision).

Digitisation and data security: cybersecurity includes the security of Vitens' electronic data, systems, networks, computers, mobile devices and servers. Vitens has created two KPIs to report on and initiate management action in respect of malicious attacks, specifically ICT Prio 1 emergencies and Prio1 Cybersecurity emergencies.

Definition of Prio1 emergencies: a disruption that affects a mission-critical application or the underlying generic infrastructure (office automation, network, database cluster, storage). This priority is given if the fault blocks the execution of the primary business process (production & distribution, invoicing, customers and laboratory), in principle for more than 50 users.

Measurement method:

The number of prio 1 emergencies recorded in JIRA (our work management tool).

Responsibilities and reporting:

The ICT manager reports on the number of Prio 1 emergencies every quarter in the departmental reporting cycle.

Definition of Prio 1 Cybersecurity emergencies: A (cybersecurity) data breach is a single or series of unwanted intentional, unlawful and/or malicious events that has/have a (potentially) negative impact on the organisation, its business processes, objects, resources or employees and that pose(s) a threat to the availability, integrity or confidentiality of information or systems or services provided by others and the drinking water supply. The target for the number of Priority 1 incidents related to cybersecurity per calendar year is zero.

Measurement method:

The number of Priority 1 Cybersecurity incidents registered in JIRA (our work management tool).

Responsibilities and reporting:

The ICT manager reports on the number of prio 1 Cybersecurity incidents every quarter in the departmental reporting cycle.

Data-driven organisation: organisation that is controlled using business-critical data, to support fast and smart decision-making.

(Drinking water/groundwater) sources: groundwater sources which are used for drinking water extraction.

Sustainably generated energy: sustainably generated energy in GWh/y (wind power, solar power, biomass, hydro power, methane capture). The term 'sustainable' refers to: renewable energy as defined in GRI-302 and energy generated by processing residual products to achieve lower CO₂e emissions (particularly in relation to methane).

Filtration: water treatment method. Sand filtration is an example: the water is cleaned as it passes through the 'porous' sand layer that traps particles present in water.

Global Reporting Initiative (GRI): global organisation that produces guidelines for sustainability reporting.

Innovation: Vitens sees innovation as a key factor in achieving our objectives and reducing risks. To this end, Vitens has established a process where new innovative projects are conceived, analysed, trialled in a pilot scheme and approved for business implementation by an innovation committee.

Intelligent water supply: equipping a water distribution network with sensors to allow online gathering of qualitative and quantitative data in relation to the water supply.

Leakage losses: loss of drinking water through functional impairment of the pipes and production facilities (technical), or through errors in water consumption registration (administrative).

Lost Time Injury Frequency (LTIF): the number of accidents involving Vitens' employees that result in more than one day of absence from work multiplied by one million and divided by the number of hours worked.

m³: one cubic metre (thousand litres) of water. The average water consumption for the model customer (based on the number of people in an average household) is 110 cubic meters per year.

Material flows: materials that we require for our processes and the resulting residual material flows.

Materiality: the degree to which stakeholders consider an issue or topic relevant.

Workforce: data set relating to employees with an employment contract with Vitens and temporary workers via an employment agency or under a secondment contract (hired in), or for subcontract work.

The data is recorded in SAP. Each new employee, internal or hired in, is registered by a (team) manager. The data is recorded in SAP and reviewed by an HR department employee. Various items of data are entered in SAP, such as personal data and employment contract data: gender, date of birth, type of contract (fixed-term/open-ended), external organisation data, etc.

The collective labour agreement applies to all internal employees, excluding the Executive Board. The terms and conditions of employment of the Executive Board are set by the Remuneration and Appointments Committee in line with the remuneration policy.

Various departments have signed framework agreements for hiring temporary staff.

Methane combustion: energy released by burning methane, a colourless, flammable gas.

Not invoiced (NI): water that has been delivered but not invoiced to an end-user, due to a pipe breakage for example. We also call this an economic leakage loss.

Below-target delivery minutes (BTDM):

Definition:

The average number of minutes for which a resident in our supply area has been cut off from the water supply during the past year.

Measurement method:

The BTDM indicator is calculated as follows:

- Each interruption is quantified by multiplying the number of minutes without water by the number of consumer addresses affected by the fault.

- The BTDM is the sum of the total number of minutes without water calculated in this way, divided by the total number of consumer addresses in the supply area.

- In the monthly reports, this number is extrapolated to a whole year by dividing it by the number of days in the reporting period and then multiplying the result by 365.25.

Responsibilities and reporting:

The Asset Management manager issues monthly BTDM reports within the (group-wide) management reporting pack. The results are discussed in the quarterly meetings with the Executive Board. These results are considered when formulating the investment plan, with the aim of reducing the number of faults and interruptions.

Softening: partial removal of the lime naturally present in water during the treatment and purification process.

Raw water quality: the quality of the water before it is used or treated.

SAP transformation: new SAP systems (SAP S/4HANA) that help implement Vitens' strategy by directly contributing to achievement of the strategic goals relating to reliable and affordable drinking water 24/7, Vitality at Work (Sterk in je werk) and Greater convenience for customers (Meer gemak voor de klant). The programme has a positive effect on most of the strategic business risks. The objectives include supporting efficient business processes, providing integrated information about assets and our customers, providing real-time information to allow immediate response and creating a modern user experience.

Service Satisfaction Index (SSI): the weighted average of customer satisfaction with Vitens' services, measured among Vitens' customers who have completed a customer journey. There are nine customer journeys in total.

Solvency:

Definition:

The solvency ratio indicates the extent to which Vitens is able to meet its obligations (debts).

Measurement method:

The solvency ratio is calculated by dividing shareholders' equity excluding subordinated loans by the balance sheet total and expressing the outcome as a percentage. The percentage is recorded cumulatively at the end of each month during the financial year. The solvency ratio is the most important indicator of an organisation's continuity. Solvency is expressed as the ratio of shareholders' equity to total assets, as shown on the balance sheet. The target is at least 30 percent, and according to the continuity goals in the financial policy, Vitens aims for a minimum solvency of 35 percent.

Responsibilities and reporting:

The solvency ratio is reported on a monthly basis by the Finance & Control department in the management reporting pack and is discussed with the Executive Board on a quarterly basis. The Executive Board reports on this matter to the Supervisory Board and the Audit Committee, which are responsible for deciding if and when action is required.

Stakeholders: individuals and groups that have a stake in Vitens in one way or another. For example, employees, shareholders, customers, providers of finance, suppliers and (local) government authorities.

Fault: temporary interruption in the drinking water supply due to a fault in the pipe network or at a production facility, or due to a process automation problem.

Source pollution index:

Definition:

Index that measures the quality of our sources to provide information on how Vitens can better protect its sources. The Source Pollution Index KPI is used to communicate with stakeholders about pollutants that threaten the quality of our water sources, and to determine Vitens' action guidelines.

In order to generate information about the quality of our water sources, interpret that information and assess the range for adjustment, we compare actual raw water quality with our target for raw water quality (source values). This highlights areas where there are concerns (overruns relative to source values).

We have decided to use a single indicator (one index) to cover all the areas of concern, to allow comparison from year to year while still offering the possibility of in-depth analysis. This approach was inspired by RIWA's removal requirement index for water treatment activities. The removal requirement index is based on the principle that the water at an intake point must be cleansed to such an extent that all substances meet the appropriate target values set in the Dutch Drinking Water Decree. The greater the number of substances that exceed that standard, the greater the water treatment challenge, and the higher the removal requirement value according to RIWA's index.

Measurement method:

The source pollution index is calculated based on the following three inputs:

Input 1) The first input is a list of defined 'source values'. Explanation: we have set source values for each substance that can pollute a water source (e.g. pesticides or medicine residues) and for which (treatment) measures can be implemented at the source to counteract that pollution. A source value is an objective/target value set by Vitens in relation to the quantity of the specific substance that may be present. Two source values have been set for each substance: one for the relatively short term (2030) and one for the long term (2050). See the list of source values.

Input 2) The second input is a documented list of extraction sites and raw water sampling points on which the KPI is based. Explanation: this determines which raw water sampling points per extraction site provide the data for input 3 and for calculating the pollution index for each source (which are then averaged for the Vitens-wide pollution index).

Input 3) The final input is the raw water quality data from the past three years, measured via the raw water sampling points as described in input 2 and recorded in Lims. Explanation: raw water quality data is obtained by sampling and analysis at a minimum frequency of once annually. The sampling activity is managed via the annual Water Quality Measurement Programme.

The calculation is similar to that used for RIWA's removal requirement index. The measured raw water quality data per extraction site is compared to the source values. The measured value (based on the maximum value over three years) for each substance is compared to the source value to determine whether it meets or exceeds the target. These results for each substance are expressed on a scale from 0 to 100, where 0 means no overrun (meets source value) and 100 is the highest degree of overrun. The scores for all the substances are added together, resulting in pollution indices for all the extraction sites.

Vitens' source pollution index is then calculated as the average of the pollution indices of all the extraction sites: with one index value for the short term and one for the long term.

To allow future comparison, subsequent laboratory corrections relating to false positives are not taken into account when adjusting the pollution index.

Responsibilities and reporting:

The Asset Management manager has final responsibility for the KPI and the availability of the figures. Vitens' hydrology specialist has delegated responsibility for the generating the KPI.

Water quality index (WQI):*Definition:*

This index shows the extent to which the drinking water complies with statutory standards as determined in the Dutch Drinking Water Decree.

Measurement method:

The WQI considers health parameters (acute and non-acute), operating parameters and customer-oriented parameters. The WQI is calculated based on the 2019 performance protocol. The benchmark file in Excel (water utilities performance comparison) is used for the calculation. The aggregated WQI results from a calculation based on weighting factors relating to the norm definition and actual values. The weighting factors are determined as follows: acute health parameters - multiply by four, non-acute health parameters - multiply by two, operating parameters - multiply by one, and customer-oriented parameters - multiply by three.

The index is expressed per m³ of drinking water delivered and is a dimensionless number.

Responsibilities and reporting:

The WQI is reported on a quarterly basis by the Extraction & Purification department in the 'Water Quality' management report and in the group-wide management reporting pack, and discussed with the Executive Board.

Water extraction areas: areas where groundwater is actively extracted (from river banks) in order to produce drinking water. All the extraction areas are registered in a geo-database (areas in current use in each province) that is managed by the Asset Management department. These areas are characterised as follows:

- Vitens holds the rights;
- The area is named in the extraction permit;
- Extraction resources (extraction wells) are physically present in the water extraction area;
- The status of the water extraction area is 'not expired'.

(Water) extraction well: a well where groundwater is extracted from below the surface (of river banks) using a pump.

Water transition: the transition to a situation in which we manage the water system in a way that structurally differs from today's approach. So the water transition is a radical change, and focuses on sustainable and circular use of fresh water.

Extraction sites: areas where groundwater is extracted in order to produce drinking water. See also the definition of water extraction areas.

Attractive and good employer:*Definition:*

An attractive and good employer offers employees a safe work environment in which vitality, job satisfaction and development are central, both now and in the future

Measurement method:

Vitens' performance as a good and attractive employer is measured twice a year in an engagement monitor. The assessment lies between 1 and 10. This is calculated by averaging the responses to questions related to employee engagement.

Responsibilities and reporting:

The HR manager reports (at least) once a year on employee engagement.

Sickness absence:*Definition:*

The sickness absence figure indicates how much working time has been lost in a specific continuous period of time due to incapacity for work as a result of illness. It gives an indication of the extent of sickness absence in relation to work capacity.

Measurement method:

The absence expressed as a percentage is calculated by dividing the product of the days of illness in the period and the percentage of incapacity for work by the number of days in the period (on a 12-monthly basis including long-term disability/excluding pregnancy). This method is built into the SAP system in accordance with the standard calculation used by the Dutch institute for working conditions (NIA TNO).

Responsibilities and reporting:

The sickness absence percentage is reported monthly by the HR department in the management reporting pack and is discussed quarterly with the Executive Board.

GRI index

GRI Code	Indicator	Explanation	Relevant section of the annual report
GRI 1	Statement of use	Vitens N.V. reports in accordance with GRI standards for the 1 January 2022 to 31 December 2022 review period.	
GRI 1	GRI 1 applies	The GRI standards are in line with GR 1: Foundation 2021	
GRI 2: general disclosures			
GRI 2: Organisation and reporting practices			
2-1	Organisational information		Who we are, Governance, Notes to the consolidated financial statements
2-2	Entities included in the organisation's sustainability reporting.		Scope
2-3	Reporting period, frequency and contact point.	This report relates to the period from 1 January 2022 to 31 December 2022.	Scope, About this report
2-4	Restatements of information.		Scope
2-5	External assurance		Scope; Limited assurance report of the independent auditor
GRI 2: Activities and workers			
2-6	Activities, value chain and other business relationships		Who we are; Governance, Vitens' profile, table of key metrics, value creation model, Scope
2-7	Employees (composition and number)	Vitens is not structured regionally, so the report does not present the number of employees by region.	Value for our employees
2-8	Workers who are not employees (external hires).		Value for our employees
GRI 2: Governance			
2-9	The organisation's governance structure and composition.		Governance
2-10	Nomination and selection of the highest governance body		Governance, Code, reference to the following regulations/by-laws: Nomination and selection process: 1.1 By-laws of the Executive Board and Nomination and Selection Process: 1.1. and 27(1)(e) By-laws of the Supervisory Board
2-11	Chair of the highest governance body		Governance, Organisation and management
2-12	Role of the highest governance body in overseeing the management of impacts.		Governance, reference to By-laws: Sub a. Article 14.1 By-laws of the Executive Board, long-term value creation with strategy, etc. sub b and c: risk management Article 14.3 of the By-laws of the Executive Board

GRI Code	Indicator	Explanation	Relevant section of the annual report
2-13	Delegation of responsibility for managing impacts.		Governance, Organisation and management
2-14	The role of the highest governance body in sustainability reporting		Governance, reference to By-laws: Article 14.7 By-laws of the Executive Board, executive board responsibility for organisational embedding
2-15	Conflicts of interest		Governance, reference to Conflicting interests, Article 5 By-laws of the Executive Board and Conflicting Interests, Article 8 By-laws of the Supervisory Board
2-16	Communication of critical concerns	Omission: in 2022, the number of potential and actual negative impacts on stakeholders was not registered in numbers. To this end, Vitens will define and list the number of potential and actual negative impacts on stakeholders in 2023. Then, in line with the existing registration method (via the Executive Board reports and an announcement letter to the Supervisory Board), the number of critical problems will be reported each quarter in the quarterly reports and presented to the Supervisory Board.	
2-17	Collective knowledge of the highest governance body		Governance
2-18	Evaluation of the performance of the highest governance body		Governance, reference to the article on performance in general, Article 14.5 By-laws of the Executive Board and the article on performance in general, Article 15.4 By-laws of the Supervisory Board
2-19	Remuneration policy		Governance, Notes to the company financial statements, note 39
2-20	Process to determine remuneration		Governance, Notes to the company financial statements, note 39
2-21	Annual total compensation ratio	Omission: data for calculating the ratios is not available. For the next review year, we will consider whether the reporting tool can be adapted accordingly.	
GRI 2: Strategy and policies			
2-22	Statement on sustainable development strategy by the highest decision-making person/body in the organisation.	Foreword	Foreword
2-23	Policy commitments in terms of the values, principles, policies and standards of conduct adopted by the organisation	Vitens applies the precautionary principle in relation to its non-financial risks. These risks and their management are described in the paragraph on risk management	Governance and Risk management
2-24	Embedding policy commitments in the organisation		Governance

GRI Code	Indicator	Explanation	Relevant section of the annual report
2-25	Processes to remediate negative impacts		Governance
2-26	Mechanisms for seeking advice and raising concerns related to the Code of Conduct.		Governance
2-27	Compliance with laws and regulations		Governance
2-28	Membership of associations (such as sector associations) and national and international lobby groups.	Sector association: Vewin, WWb Knowledge institutions/associations: Kiwa Water Research, Wetsus, MVO Nederland, NextGenerationInfra	Dialogue with our stakeholders
GRI 2: Stakeholder engagement			
2-29	Principles for identifying and selecting stakeholders and ensuring their engagement.	The stakeholders are selected based on an assessment of mutual interest between the stakeholders and Vitens	Stakeholder management
2-30	Employees subject to a collective labour agreement.		Value for our employees
GRI 3: Material topics			
3-1	Process to determine the content and the specific boundaries of the report and the principles that apply in this area.	Materiality matrix	Materiality (stakeholder management)
3-2	Material topics identified during the process for determining the content of the report.	In the case of material topics for which the available GRI KPIs are considered insufficient, we have referred to our own KPI. These KPIs are generally reported each quarter and used for management purposes.	Stakeholder management
3-3	Management of material topics	The material topics are explained in Stakeholder management.	Value creation model, the connectivity matrix and the glossary of terms and reporting definitions
Material indicators reported by Vitens in accordance with GRI			
Financial health			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - shareholders	Glossary of terms and reporting definitions, Objectives and results - shareholders
201-1	Direct economic value generated and distributed	Vitens is a financially healthy company with a good balance between the price of drinking water, solvency and the return for shareholders. Vitens reports monthly on the solvency KPI.	H3 Financial health, consolidated profit and loss statement

GRI Code	Indicator	Explanation	Relevant section of the annual report
201-2	Financial implications and other risks and opportunities due to climate change.	Omission: information on the opportunities due to climate change, the financial implications of the impacts and the cost of measures to manage opportunities and risks is not available. For 2023 and subsequent years, climate change opportunities will be identified, the financial implications assessed further based on impact measurement and costs and income will be recorded.	
201-3	Obligations under defined benefit plans and other pension plans		Notes to the consolidated financial statements; collective plans.
201-4	Financial contributions and grants received from the government		Notes to the consolidated financial statements
Climate Impact			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - natural environment	Glossary of terms and reporting definitions, Objectives and results - natural environment
305-1 and 305-2	Direct greenhouse gas emissions (scope 1 and 2), by weight	Vitens strives to keep its carbon footprint as low as possible. The 2022 annual report provides details on the CO2 emissions KPI (resulting from water extraction), broken down into different categories. CH4 emissions are also reported (methane emissions resulting from water extraction). The base year and source year are indicated.	Climate impact
305-3	Indirect greenhouse gas emissions (scope 3)	The annual report details the scope 3 CO2 emissions, broken down into different categories. The base year and source year are indicated.	Climate impact
305-4	Direct greenhouse emissions intensity	In the 2022 annual report, CO2 emissions (scope 1 and 2) are related to the number of litres of drinking water produced (millions of m3/year).	Our value creation model
305-5	Reduction of greenhouse gas emissions	In the 2022 annual report, CO2 emissions are expressed as an overall figure, in relation to the 2021 target and result. The report information indicates what portion of the emissions reduction is directly relatable to Vitens' own actions (as it is also subject to other factors). Results are expressed in kilotons of CO ₂ equivalent.	Climate impact
305-6	Emissions of ozone-depleting substances	Not applicable to Vitens	
305-7	Nitrogen oxides, sulphur oxides and other significant air emissions	Not applicable to Vitens	
Material indicators to which no GRI standard applies and for which Vitens has defined its own indicator			
Attractive and good employer			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - employees	Glossary of terms and reporting definitions, Objectives and results - employees

GRI Code	Indicator	Explanation	Relevant section of the annual report
In-house KPI	Employee engagement index	The GRI indicators do not include an indicator for engaged and healthy employees who feel completely at ease and who are comfortable and productive. Employee engagement is a key factor here. The KPI for this theme is the employee engagement index. We measure the extent to which Vitens is an attractive and healthy employer with the employee engagement index KPI.	Our employees
Protection of groundwater resources			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - natural environment	Glossary of terms and reporting definitions, Objectives and results - natural environment
In-house KPI	Source pollution index, short-term, long-term (PI)	The GRI indicators do not include an indicator for protection measures. The indicator we have chosen is additional to GRI indicator 303-2. The source pollution index KPI will allow Vitens to focus management attention and action more acutely on the quality of the water sources and work towards a clean water source as the ideal situation.	
Digitisation and data security			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - shareholders	Glossary of terms and reporting definitions, Objectives and results - shareholders
In-house KPI	ICT prio 1 emergencies	The GRI indicators do not include an indicator which reflects the targeted level of digitisation in an effective manner. Vitens used the internally defined "ICT Prio1 emergencies" KPI to measure this in 2022 (and earlier years).	Value for our stakeholders
In-house KPI	ICT prio 1 cybersecurity emergencies	The GRI indicators do not include an indicator which reflects the targeted level of security in an effective manner. The "ICT Prio 1 Cybersecurity emergencies" is an internally defined method that expresses how many undesirable wilful, unlawful and/or malicious events occur (either as a single incident or a series of incidents) that have a (potentially) negative impact on Vitens.	Value for our stakeholders
Drinking water quality			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - customer	Glossary of terms and reporting definitions, Objectives and results - customer
In-house KPI	Water quality index (WQI)	The GRI indicators do not include an indicator which reflects the quality target in an effective manner. GRI indicators 417-1 and 417-2 focus on the provision of information relating to products and therefore do not allow us to describe the aspect in terms of content or quality. The WQI is an externally defined monitoring method which can be used appropriately under the Drinking Water Act and is therefore an excellent indicator for this goal.	
Security of the drinking water supply			

GRI Code	Indicator	Explanation	Relevant section of the annual report
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - customer	Glossary of terms and reporting definitions, Objectives and results - customer
In-house KPI	Below-target delivery minutes (BTDM)	The GRI indicators do not include an indicator which reflects the quality target in an effective manner. GRI indicators 417-1 and 417-2 focus on the provision of information relating to products and therefore do not allow us to describe the aspect in terms of content or quality. BTDM is an externally defined monitoring method which can be used appropriately under the Drinking Water Act and therefore an excellent indicator for this goal. In order to provide adequate transparency in respect of this indicator, we have also chosen a KPI which allows us to state the most negative/undesirable situation for the organisation.	
Water scarcity			
DMA		Management approach in the glossary of terms and reporting definitions, Objectives and results - natural environment	Glossary of terms and reporting definitions, Objectives and results - natural environment
In-house KPI	Number of clusters with a positive 'operational margin' and Number of clusters with sufficient 'total reserves'	GRI 303 applies to this in-house KPI. However, there is no GRI indicator for the availability of groundwater in water sources. We compensate for this by reporting the number of clusters, which shows that Vitens is committed to a good balance between water demand and the availability of sufficient clean water sources.	
Non-material indicators reported by Vitens in accordance with GRI			
Water and wastewater			
303-3	Water withdrawal		Other notes to the consolidated financial statements; water balance sheet
303-5	Water consumption		Other notes to the consolidated financial statements; water balance sheet
Sustainable energy			
302-1	Energy consumption within the organisation	Vitens monitors its energy consumption and looks for opportunities to generate sustainable energy and thereby reduce greenhouse gases. In the annual report, total energy consumption is reported in gigawatt hours, together with the number of gigawatt hours of self-generated, renewable energy	Our value creation model, climate impact
Our employees			

GRI Code	Indicator	Explanation	Relevant section of the annual report
403-9	Work-related injuries, expressed as the Lost Time Injury Frequency (LTIF)	<p>The annual report exclusively states the LTIF, sickness absence and, in the event of their occurrence, work-related fatalities in relation to Vitens' employees in the Netherlands. We measure the ODR, LDR and AR indicators, but do not report them. You can request this information from us. Because our work is carried out in the Netherlands, reporting statistics in relation to accidents which take place in other countries is not relevant. We do not state the LTIF for subcontractors in the annual report. This issue is however discussed with management. Gender is not taken into account when reporting the LTIF in order to avoid discrimination.</p>	Our employees



Financial results

Key metrics

		2022	2021	2020	2019	2018
Customers						
Number of connections as at 31 December (x 1000)	quantity	2,737	2,707	2,644	2,622	2,596
Average drinking water price per m3 for small consumers	€	1.10	1.06	1.04	1.00	1.00
Consumption per small consumer connection	m3	103	105	111	107	112
Staff						
Number of permanent employees as at 31 December	quantity	1,599	1,527	1,443	1,394	1,392
Company results						
Revenue	€ millions	406.9	396.1	390.4	364.9	361.0
Drinking water revenue	€ millions	366.8	356.7	353.7	328.8	322.9
Operating result before depreciation and amortisation (Ebitda)	€ millions	143.0	144.9	153.5	137.5	135.9
Operating result (Ebit)	€ millions	33.9	44.6	52.1	41.4	45.3
Result to be distributed to shareholders of Vitens N.V.	€ millions	8.2	19.4	23.9	11.1	13.0
Profit margin	%	2.0	4.9	6.1	3.0	3.6
Interest coverage	ratio	5.0	5.7	5.4	4.5	4.2
Shareholders' equity						
Shareholders' equity	€ millions	649.5	600.3	559.2	533.3	533.0
Total capital	€ millions	2,096.1	1,988.1	1,899.3	1,826.3	1,766.5
Total interest-bearing liabilities	€ millions	1,112.4	1,036.7	996.3	953.7	935.7
Investments	€ millions	204.7	177.1	157.6	143.4	122.0
Solvency	%	31.0	30.2	29.4	29.2	30.2
Weighted Average Cost of Capital (WACC)	%	1.8	2.4	2.9	3.3	3.3
Intangible and tangible fixed assets per connection						
Intangible and tangible fixed assets per connection	€	734	705	690	673	658
Costs per connection 1						
Operational costs	€	89	86	78	76	80
Taxation	€	2	3	3	3	4
Depreciation	€	37	36	37	36	35
Borrowing costs	€	9	9	10	11	13
Result	€	4	9	10	5	5
Cost of capital	€	13	18	20	16	18
Total costs	€	141	143	139	131	137

Non-financial						
Production and purchase, exclusive of bulk	millions m3	372.2	374.2	388.0	372.4	376.6
Deliveries to customers	millions m3	347.6	351.3	362.4	349.4	352.3
Not Invoiced (NI)	%	6.6	6.5	6.6	6.2	6.5
Number of active production facilities	quantity	93	93	93	93	93

¹ Calculated in accordance with VEWIN benchmark definitions. The benchmark figures for 2022 are provisional, the final figures will be available in September 2023.

Explanatory notes to the results

Financial policy

Our financial policy, which was adopted by the Meeting of Shareholders in November 2022, does justice to laws and regulations (*compliance*), serves the best interests of our customers and shareholders and aims to set challenging but realistic targets for Vitens. Continuity is a primary focus in our financial policy.

Continuity

The continuity objective is formulated as follows: solvency must be at least 30%, but Vitens aims for a solvency of at least 35%. In addition, Vitens aims to achieve permanent compliance with the financial ratios set by lenders.

Rates

Vitens strives to offer affordable drinking water rates without compromising the business continuity objective. The guiding principle here is an operating result (ebit) that is budgeted annually based on the maximum permitted WACC (*Weighted Average Cost of Capital*) minus the defined margin at between 0 and 0.5%. The maximum WACC was used in 2022.

Dividend

Vitens wishes to give its shareholders a reasonable return on their invested capital, subject to the following preconditions:

- the dividend is related to the net result;
- the amount of dividend paid out amounts to a maximum of 50% of the net result. Payment of dividend is conditional to achievement of the continuity objective. In principle, no dividend will be paid at a solvency ratio of less than 30%;
- each year, a dividend proposal that complies with the above rules is submitted to the Supervisory Board for approval and to the General Meeting of Shareholders for final adoption. This dividend proposal is structured in line with the company's specific financial situation.

Compliance

In recent years, increasing regulation has been introduced in the drinking water sector in line with public demand for transparency. Transparency relates to openness, accountability and accessibility.

The Drinking Water Act defines important financial frameworks for controlling rates and solvency. For example, a maximum limit applies to the cost of capital that can be charged to customers by the drinking water utilities (rate control) and a maximum has been set for the permissible percentage of shareholders' equity in the total capital (solvency). Every two years, before 1 November, the government sets the levels that will apply for both financial frameworks for the following two calendar years. The Drinking Water Act was amended accordingly in 2022 with both financial frameworks being fixed for a three-year period. For 2022, the weighted average cost of capital has been set at 2.95% (2021: 2.75% and 2020: 2.75%) and the maximum permissible solvency at 70%. Over 2022, the weighted average cost of capital achieved by Vitens was 1.83%, which is below the set norm. At the end of 2022, solvency was 31.0% (2021: 30.2%).

Rate transparency is a further aspect of rate control. Vitens submitted the 2021 Operating Report in 2022. In December 2022, the Minister informed the Lower House of his positive assessment of the 2021 Operating Report.

In addition, at the end of 2022, Vitens submitted the justification for the 2023 rates to the relevant supervisory authorities: the Inspectorate for Habitat and Transport (ILT) and the Authority for Consumers and Markets (ACM). ILT assesses how the drinking water rates are set.

The drinking water utilities created a voluntary benchmark in 1997 at the instigation of the water sector association, VEWIN. This benchmark compares the performance of the drinking water utilities in terms of the environment, water quality, service provision and finance. The new Drinking Water Act calls for mandatory implementation of this type of performance comparison every three years. In 2022, the benchmark comparison was updated based on the figures for 2021.

Rates

We are working hard to keep the price of drinking water for our customers at the lowest possible level. Based on our societal mission, we look critically at our operating expenses in relation to performance as a matter of course, and will continue to do so. The increase in our investments (to ensure long-term security of supply) is reflected in an increase in the expected depreciation costs and in the operating expenses. In the light of the 2023 to 2027 multi-year plan, Vitens has increased its 2023 rates for drinking water and the standing charges for consumers. In that respect, we have assumed the maximum WACC of 2.95% for 2023.

Investments

In 2022, Vitens invested roughly €204.7 million, excluding third-party contributions (2021: €179.0 million). As in previous years, Vitens invested heavily in replacements and expansions of the water supply network and renovation and replacement of production sites in 2022.

Our investments in pipes for reconstruction works (work initiated by municipalities or other third parties) increased again in the past year compared to previous years. In addition, the combined renovation projects, in which Vitens and other network companies simultaneously replace gas and drinking water pipes, will be continued.

We see an increase in the length of transmission pipes. These pipes are needed to ensure security of supply, or to distribute water optimally. Several transmission pipe projects were launched in 2022 and are expected to reach completion in 2023.

Multiple projects in the extraction areas and treatment plants were also completed during the past year. Such as the new construction works at the Sijmons production facility. In 2022, we continued to accelerate projects in order to replenish and add to the reserves. In these projects, the preparations for new construction, or for the expansion of a production facility, and the permit application and award process are carried out in parallel. This is a deliberate choice, which reflects our desire to shorten the turnaround time in order to bring achievement of our reserves policy forward and thereby ensure security of supply. The effect will be seen in the coming years.

For 2023, Vitens expects further growth in both subsurface and surface investments. For example, several new transmission pipes will be put into operation and the Weerseloseweg, Ceintuurbaan and Culemborg production facilities and others are expected to be completed. Work also continues at the major Noardburgum, Hammerflïer and Fikkersdries projects. In 2023, the implementation of SAP will continue to be the most important programme within the ICT portfolio.

Treasury

At the end of 2022, Vitens had a loan portfolio (excluding subordinated loans) worth €984.7 million (2021: €995.4 million). Interest rate swaps (financial instruments) were used for normal trading operations in order to avoid interest rate exposure risks resulting from (major) fluctuations in the interest rate on the variable loan portfolio. These instruments are not used for speculative or trading purposes.

In 2022, Vitens repaid an amount of €56.3 million against existing loans and arranged new loans for an amount of €125 million. The negative current account balance reduced by €18.0 million to €23.3 million (2021: €41.3 million). The total interest-bearing liabilities (liquid assets, subordinated loans, outstanding loans and current interest-bearing liabilities) increased by €75.7 million in 2022 to €1,112.4 million (2021: €1,036.7 million).

Consolidated results

Vitens implemented a slight rate increase in 2022, leading to a higher water revenue (despite a decline in the output volume). Operating costs increased, along with the financial expenses. The maximum WACC for 2022 was taken as the basis for setting the rates. The result after tax was lower than in 2021 at €8.2 million (2021: €19.4 million).

The price paid by customers (consumers) for drinking water in 2022 (€0.66 per m³ and a standing charge of €44) increased slightly relative to 2021 (€0.64 per m³ and a standing charge of €42). The taxation rates for tap water also increased slightly in 2022. Sufferance tax is no longer charged, effective from 1 January 2022.

Revenue

The amount of water consumed in 2022 (347.6 million m³) reduced by 0.6% relative to 2021 (349.9 million m³). The average consumption per small-consumer connection reduced to 103 m³ in 2022 (2021: 105 m³). The drinking water revenues, despite lower water consumption, were €10.1 million higher (about 3%) at €366.8 million (2020: €356.7 million) mainly due to rate increases.

The volume pumped into the drinking water network in 2022 came in at 372.2 million m³ (2021: 374.2 million m³). The 'Not Invoiced' percentage (NI) was 6.6%, which is higher than the finalised NI percentage for 2021 (6.5%).

The other revenue in 2022 increased by 1.8% to €40.1 million (2021: €39.4 million).

Operating expenses

The operating expenses balance for 2022 increased by 6.1% compared to 2021, rising to €373.0 million (2021: €351.5 million).

The increase in operating expenses is mainly explained by an increase of €10.9 million in other expenses and an €8.8 million increase in depreciation. The increase in other expenses is mainly explained by higher energy costs and higher costs related to drought damage.

Depreciation

Depreciation in 2022 increased to €109.1 million (2021: €100.3 million). The variances relative to the previous financial year mainly result from normal depreciation of the tangible and intangible assets. Due to a higher level of investment, depreciation rose by €3.8 million, see note [22]. In addition to normal depreciation, there was a book loss of €2.9 million (2021: book profit of €1.8 million).

Operating result

The operating result for 2022 amounts to €33.9 million (2021: €44.6 million).

Financial income and expenses

On balance, the financial income and expenses came in at an expense of €26.1 million in 2022 (2021: expense of €25.4 million). This was caused by rising market interest rates in 2022 and a rising loan portfolio. Vitens arranged new loans for an amount of €125 million in 2022. The interest rates for 76% (2021: 78%) of the loan capital are fixed for several years. This stabilises the borrowing costs over time and reduces the effect of fluctuations in the market interest rate.

Result to be distributed to shareholders

The net result for distribution to the shareholders of Vitens in 2022 amounted to €8.2 million (2021: €19.4 million).

Shareholders' equity

The shareholders' equity increased in 2022 by €49.2 million to €649.5 million. This was mainly caused by the addition of the result for 2022 (€8.2 million) and by an increase in the hedging reserve due to a positive derivative value change (€40.4 million) and other changes (€0.6 million).

The hedging reserve for unrealised adjustments to the fair value of financial instruments as a result of applying *cash flow hedge accounting* increased in 2022, due to a higher market interest rate, by €40.4 million positive (including the effect of other changes amounting to €0.6 million) to a negative value of €19.5 million (2021: €60.4 million).

The solvency (shareholders' equity) as at 31 December 2022 was 31.0% (2021: 30.2%) and therefore lower than the target of 35% as formulated in the financial policy.

After adoption of the proposed profit appropriation for 2022 at the General Meeting of Shareholders, €8.2 million will be added to the reserves and no dividend will be paid.

Cash flow and financing

The cash flow from operations of €130.2 million (2021: €143.8 million) was not adequate for financing the investment activities (including third-party contributions), which amounted to €192.1 million (2021: €167.0 million). In 2022, an amount of €56.3 million was repaid against existing loans (2021: €68.8 million) and new loans amounting to €125 million were arranged (2021: €100 million). The current account balance fell by €18.0 million to €23.3 million negative at the end of 2022. On balance, the interest-bearing debt (including liquid assets) increased by €75.7 million in 2022 to €1,112.4 million as at 31 December 2022.

Consolidated financial statements

Consolidated balance sheet as at 31 December

Assets

	In millions of euros		31/12/2022		31/12/2021
	Fixed assets				
[1]	Intangible fixed assets	40.7		40.5	
[2]	Tangible fixed assets	1,968.2		1,866.7	
[3]	Assets with right of use	21.6		23.5	
[4]	Associate companies and joint ventures	6.3		5.9	
[5]	Other financial assets	8.5		0.2	
			2,045.3		1,936.8
	Current assets				
[6]	Trade debtors and other receivables	50.8		51.3	
			50.8		51.3
	Total assets		2,096.1		1,988.1

Equity and liabilities

In millions of euros		31-12-2022	31-12-2021
[7]	Shareholders' equity		
	Share capital	5.8	5.8
	Share premium reserve	147.2	147.2
	Hedging reserve	-19.5	-60.4
	Other reserves	507.8	488.3
	Result for the financial year	8.2	19.4
		649.5	600.3
	Liabilities		
	Long-term liabilities		
[8]	Equalisation account - contributions received from third parties	137.2	124.4
[9]	Subordinated loans	-	-
[10]	Long-term loans	984.7	939.1
[11]	Derivatives	7.2	48.5
[12]	Provisions for employee benefits	0.7	1.0
[13]	Other provisions	1.3	0.5
[14]	Lease liabilities	12.7	15.1
		1,143.8	1,128.6
[15]	Current liabilities		
	Trade creditors and other payables	196.3	158.1
	Tax liabilities	15.3	15.2
	Interest-bearing liabilities	23.3	41.3
	Short-term loans	25.0	-
	Short-term employee benefits	33.1	35.2
	Accrued expenses and deferred income	9.8	9.4
		302.8	259.2
	Total liabilities	2,096.1	1,988.1

Notes in the left-hand margin of tables relate to the explanatory note to the consolidated balance sheet and following.

Consolidated profit and loss statement and summary of the total result

Consolidated profit and loss statement

	In millions of euros		2022		2021
[17]	Drinking water revenue	366.8		356.7	
[18]	Other revenue	40.1		39.4	
	Total operating income from ongoing operating activities		406.9		396.1
	Operating expenses				
[19]	Cost of work contracted out and temporary staff	-56.9		-56.8	
	Groundwater taxes and levies	-5.4		-5.2	
[20]	Other expenses	-104.6		-93.7	
[21]	Employee expenses	-97.0		-95.5	
[22]	Depreciation, fair value changes and impairment of tangible and intangible fixed assets	-109.1		-100.3	
	Total operating costs		-373.0		-351.5
	Operating result		33.9		44.6
[23]	Financial income and expenses	-26.1		-25.4	
[24]	Share in the result of associate companies and joint ventures	0.4		0.2	
			-25.7		-25.2
	Result before tax		8.2		19.4
[25]	Taxation		-		-
	Result after tax		8.2		19.4
	Of which:				
	Result to be distributed to shareholders of Vitens		8.2		19.4

Consolidated summary of the total result

In millions of euros	2022	2021
Result after tax	8.2	19.4
Change in interest-rate derivatives offering effective coverage	41.0	21.9
Total result	49.2	41.3
Of which:		
Result to be distributed to shareholders of Vitens	49.2	41.3

We do not expect future changes in interest-rate derivatives offering effective coverage to be reclassified and reported in the profit and loss statement. Notes in the left-hand margin of tables relate to the explanatory note to the consolidated profit and loss statement and following.

Consolidated cash flow statement

	In millions of euros		2022	2021
	Result after tax		8.2	19.4
	Adjustments for:			
[23]	Financial income and expenses	26.1	25.4	
[22]	Depreciation, fair value changes and impairment of tangible fixed assets	95.8	91.1	
[22]	Depreciation, fair value changes and impairment of intangible fixed assets	6.3	5.7	
[8]	Equalisation account amortisation - contributions received from third parties	-4.8	-4.3	
[8]	Receipts, equalisation account - contributions received from third parties	17.9	17.9	
[3]	Depreciation on lease assets	6.3	5.9	
[12.13]	Addition to/release from provisions	3.3	0.4	
[4]	Other changes in financial fixed assets	-0.4	-0.2	
			150.5	141.9
	Changes in working capital:			
[6]	Trade debtors and other receivables	0.6	-1.0	
	Trade creditors, accrued expenses and deferred income	2.3	13.8	
			2.9	12.8
[12.13]	Withdrawals from provisions		-4.2	-2.7
[26]	Cash flow from operating activities		157.4	171.4
	Interest paid	-27.2		-27.6
	Cash flow from operating activities		130.2	143.8
[1,2,3.22]	Investments in tangible and intangible fixed assets	-193.8		-170.1
[2.22]	Divestments	1.7		3.1
[26]	Cash flow from investment activities		-192.1	-167.0
[10]	Long-term loans drawn down	125.0		100.0
[10]	Repayment against long-term loans	-56.3		-56.3
[9]	Repayment against subordinated loans	-		-12.6
[3]	Repayment against lease liabilities	-5.5		-5.2
[5]	Change in loans for FFA	-8.3		-
[7]	Repayments relating to derivatives	-		-12.0
[5]	Change in short-term loans	25.0		-
[26]	Cash flow from financing activities		79.9	13.9

	Net cash flow		18.0	-9.3
	Liquid assets and current interest-bearing liabilities as at 1 January		-41.3	-32.0
	Liquid assets and current interest-bearing liabilities as at 31 December		-23.3	-41.3
	Change in liquid assets and current interest-bearing liabilities		18.0	-9.3

Consolidated statement of changes in shareholders' equity

In millions of euros	Share capital	Share premium reserve, ordinary capital	Hedging reserve 1	Other reserves 1	Result for the financial year	Equity capital allocatable to shareholders of Vitens
As at 1 January 2021	5.8	147.2	-82.3	464.6	23.9	559.2
Result for financial year 2021	-	-	-	-	19.4	19.4
Other comprehensive income in 2021	-	-	21.9	-	-	21.9
Total result in 2021	-	-	21.9	-	19.4	41.3
Appropriation of 2020 result	-	-	-	23.9	-23.9	-
Dividend payment on ordinary shares	-	-	-	-	-	-
As at 31 December 2021	5.8	147.2	-60.4	488.5	19.4	600.5
Change in other reserves	-	-	-	-0.1	-	-0.1
As at 31 December 2021	5.8	147.2	-60.4	488.3	19.4	600.3
Result for financial year 2022	-	-	-	-	8.2	8.2
Other comprehensive income in 2022	-	-	40.4	-	-	40.4
Other changes	-	-	0.5	0.1	-	0.6
Total result in 2022	-	-	40.9	0.1	8.2	49.2
Appropriation of 2021 result	-	-	-	19.4	-19.4	-
Release from other reserves	-	-	-	-	-	-
Dividend payment on ordinary shares	-	-	-	-	-	-
As at 31 December 2022	5.8	147.2	-19.5	507.8	8.2	649.5

1 The balance of the hedging reserve and the other reserves is freely distributable. The other reserves relate to a reserve resulting from cumulative retained profit.

Explanatory notes to the consolidated financial statements

General

Vitens is a public limited company. The company is domiciled and registered in Zwolle, the Netherlands (Chamber of Commerce 050.69.581), with its office at the following address: Oude Veerweg 1, 8019 BE Zwolle. The shares in the company are owned by municipalities and provincial authorities in its service area. The main activities of Vitens are pumping up and purifying (treating) groundwater and subsequent distribution of service water as drinking water. These financial statements relate to financial year 2022 which ended on the balance sheet date of 31 December 2022. These 2022 financial statements were prepared on 15 March 2023 by the Executive Board and the Supervisory Board. The Supervisory Board will present the financial statements for the purpose of adoption to the General Meeting of Shareholders on 21 April 2023.

IFRS

The financial statements of Vitens have been drawn up based on the International Financial Reporting Standards (IFRS), as adopted by the European Union (EU). IFRS includes both the IFRS standards and the International Accounting Standards (IAS), which are issued by the International Accounting Standards Board (IASB) and the interpretations of IFRS and IAS standards as issued by the International Financial Reporting Interpretations Committee (IFRIC), or the Standing Interpretations Committee (SIC).

The main principles for valuation and result determination used when drawing up the consolidated financial statements are described in the sections below. The historical cost convention applies. Notwithstanding this, certain assets and liabilities, in particular company-owned housing and derivatives, are recognised at fair value. Unless stated otherwise, these valuation principles have been consistently used for all financial years that are included in these financial statements. The financial statements are presented in millions of euros (functional currency that is also used for reporting purposes) and rounded to the nearest whole number.

Continuity

Vitens failed to achieve one of the ratios in the bank covenants: the 'debt ratio'. This means that Vitens applied for and received a waiver from two lenders for 2022. The other ratios were met by Vitens. Accordingly, the accounting principles used for valuation and result determination in these financial statements are based on the assumption that the company is a going concern.

New and amended IFRS standards

Our analysis shows that both the adopted standards and the standards yet to be implemented do not have a material impact on the company's equity, cash flows and result and that there are no significant additional disclosures. For this reason, the effects of these changes on the company have not been disclosed in detail in these financial statements.

Principles used for consolidation

The consolidated financial statements present the financial information for Vitens and the group companies in which Vitens has direct or indirect influence on the business and financial policies. The assets, liabilities and results of these group companies are fully recognised in the consolidated accounts. In cases where the holding in the consolidated company amounts to less than 100%, a third-party share is included in the shareholders' equity and in the result. The results of the group companies that were acquired or sold during the financial year are included in the consolidated profit and loss statement from the date of joining the group, respectively up to the date of sale. The same principles as those that apply to Vitens are used to determine the balance sheet and result of the group companies. The same financial year is also used. Interests in associate companies and joint ventures are not included in the consolidation.

Intercompany transactions, balance sheet entries and unrealised profits on transactions between group companies have been eliminated.

Accounting principles for valuation and result determination

The accounting principles and method for determining the result are unchanged compared to the previous financial year, but do take into account amendments to standards and interpretations with effect from 1 January 2022.

Intangible fixed assets

The intangible fixed assets are categorised as follows:

- software, development costs and licenses;
- work in progress.

Investments in software, development costs and licenses during the financial year are valued at the acquisition price less cumulative depreciation and cumulative impairment losses. The acquisition price is understood to be the procurement price, which is either the manufacturing price, or valuation at fair value in the case of companies that have been acquired. The cost price of intangible assets made by the company consists of the direct costs of manufacture and supplements for indirect production costs. The costs of intangible assets made by the company, which are in the development phase, are recognised on the balance sheet as assets and the costs relating to the research phase are recognised in the profit and loss statement.

Intangible fixed assets are depreciated based on the straight-line method, taking into account the expected service life, if the service life can be determined. An intangible asset is not depreciated if a service life cannot be determined for it. An impairment assessment will be made each year for intangible fixed assets without a specified service life and which have not yet been put into operation. Depreciation starts from the time when the asset in question is put into operation.

The service lives of intangible assets are as follows:

- software, development costs and licenses 3-7 years;
- work in progress is not depreciated.

Tangible fixed assets

The tangible fixed assets (property, plant and equipment) are categorised as follows:

- production buildings, outbuildings and equipment on sites and land;
- office buildings;
- company-owned housing;
- plant and machinery;
- pipes;
- other fixtures, fittings, tools and equipment;
- work in progress;
- raw materials and process additives (stocks).

Land and operational buildings, offices, machinery and equipment, pipes and other fixed operating assets are valued at the acquisition or manufacturing price less cumulative depreciation and the cumulative impairment losses. When first-time adoption of IFRS was implemented, the assets were valued based on fair value. This fair value was assumed at *deemed cost*, subject to further annual depreciation.

Company-owned housing comprises residential properties situated in the water extraction areas of Vitens and let at market rental rates to (former) Vitens employees. Vitens categorises these properties as tangible fixed assets (property, plant and equipment) in accordance with IAS 16, values them at their fair value and recognises any changes in shareholders' equity (revaluation reserve). The fair value is based on the last assessment under the Valuation of Immovable Property Act (WOZ) and other factors. A revaluation reserve is accrued for unrealised changes in value.

Investments made during the financial year are valued at the acquisition price less any grants and other contributions that have been obtained. The acquisition price is understood to be the procurement price, which is either the manufacturing price, or valuation at fair value in the case of companies that have been acquired. The cost price of assets made by the company consists of the direct costs of manufacture and supplements for indirect production costs.

The costs incurred for at least one reporting period, for the manufacture or acquisition of an item of property, plant and equipment, or from the time when it is put into use, are only capitalised if it is plausible that these costs will generate future economic benefits, if the item is retained under the company's economic ownership, and if these costs can be reliably determined. Depending on the situation, these investments are included in the carrying value of the relevant assets or are capitalised separately. The carrying value of the original asset is treated as a divestment upon replacement.

Tangible fixed assets are depreciated based on the straight-line method, taking into account the expected service life of the different components that make up the asset in question. Depreciation starts from the time when the asset in question is put into operation.

The other plant and machinery item also includes membranes and water meters.

The useful lives of the items in the different asset categories are as follows:

- operational buildings 40 years, outbuildings and equipment in the grounds 15 years; the grounds themselves (land) are not depreciated;
- office buildings and company-owned housing 40 years;
- production facilities, civil engineering 40 years, electrical engineering and mechanical engineering 15 years;
- other plant and machinery 5-15 years;
- pipes: main pipes 50 years, connection pipes 33¹/₃ years and water meters 10-15 years;
- other fixtures, fittings, tools and equipment 3-5 years;
- work in progress is not depreciated;
- raw materials and process additives (stocks) are not depreciated.

The expected useful life, residual value and depreciation methods are assessed each year and amended if necessary. Profit or loss at the time of sale or disposal is determined based on the proceeds and the carrying value on that date.

Borrowing costs are allocated to projects under construction in accordance with IAS 23. Borrowing costs are allocated to projects with an expected turnaround time exceeding 12 months and an expected investment amount greater than €1 million. The borrowing costs are allocated based on the weighted average interest rate that applies to the interest-bearing loans (2022: 2.6%; 2021: 2.6%).

The stocks of raw materials and consumables are geared to the other tangible fixed assets. Stocks are valued at historic cost (or the realisable value if lower), subject to deduction of a provision for obsolescence.

Impairment of fixed assets

If circumstances require, analysis takes place to determine whether impairment of tangible fixed assets (plant, property and equipment) is required. If there are indications for this, an estimate is made of the realisable value of these assets. In the case of assets, the realisable value is the higher of two valuations: the fair value minus sales costs, or the value-in-use. The value-in-use is determined based on the present discounted value of the estimated future cash flows.

The impairment loss is recognised as an expense in the profit and loss statement and specified in note [22] relating to depreciation. After processing an impairment loss, the annual amount of depreciation is amended in line with the revised carrying amount minus the residual value.

If the impairment amount exceeds the carrying amount for the asset, consideration must be given to creating a liabilities-based provision.

Assets with right of use

Assets with a right of use are valued at cost. This cost comprises the amount of the initial valuation of the discounted lease liability and the initial direct costs incurred, less depreciation during the financial year.

After initial recognition, the asset with a right of use must be depreciated over the useful life of the underlying asset. The depreciation schedule that applies to assets with a right of use is determined based on the term of the contract.

When determining the lease liabilities and rights of use as at 1 January 2022, the WACC percentage for 2022 (2.95%) was taken as the discount rate for calculating the present value of the lease liabilities, with the exception of the lease liabilities with defined interest rates.

Associate companies and joint ventures

Associate companies are entities where Vitens, either directly or indirectly, exercises influence on the financial and operational policies but does not have a final say when taking decisions. In general, this applies in cases where Vitens can exercise voting rights of between 20% and 50%.

Associate companies are valued at cost price at the time of acquisition (which is the fair value) and, from that time on, changes in the value of the associate companies are recognised directly in the profit and loss statement (equity method).

In the case of a negative equity value, losses on investments are recognised up to the amount of the net investment in the associate company. This net investment also includes loans granted to associate companies to the extent that they actually form part of the net investment. A provision is recognised for the share in further losses only if and to the extent that, based on legal obligations, the debts of the associate company are guaranteed, or if there is a firm obligation to enable the associate company to pay the debts (for the percentage share).

In the event of possible impairment of associate companies, processing takes place in accordance with 'Impairment of financial fixed assets' in the 'Accounting principles for valuation and result determination' section.

Joint ventures are contracts where Vitens, together with one or more parties, performs activities subject to joint control of all the parties. Investments in associate companies over which Vitens exercises significant influence, and interests in joint ventures, are valued according to the equity method. The carrying value of the associate company or of the joint venture includes the goodwill that was paid at the time of acquisition and the share of Vitens in the changes in the shareholders' equity of the associate companies, or joint venture, after the date of acquisition.

Other financial assets

The other financial assets relate to loans that have been issued and receivables that have been valued at the amortised cost price minus any impairment losses.

Derivatives

Derivatives (financial instruments) are used during normal trading operations to limit interest rate exposure risks. The objective of this form of control is to limit the effect that changes in interest rates have on the results. Interest-rate derivatives are used to manage the loan portfolio based on the desired risk profile and are not used for speculative or trading purposes. These interest rate derivatives are valued at fair value from the time when the contract is entered into (*trade date*). The fair value is determined based on developments in the market interest rate and the defined interest rate for the underlying derivative. Changes in the fair value of derivatives are recognised directly in shareholders' equity. The interest-rate derivatives that have been contractually agreed are referred to as hedge instruments.

Vitens applies the following valuation hierarchy:

- level 1: quoted (unadjusted) prices on active markets for identical assets or liabilities;
- level 2: other methods where all variables have a significant effect on the recognised fair value, and are directly or indirectly observable;
- level 3: methods where variables are used that have a significant effect on the fair value measurement, but which are not based on observable market information.

The derivatives are valued according to the level-2 method in the valuation hierarchy: i.e. variables that have a significant effect on the fair value measurement are directly or indirectly observable. Vitens applies a net present discounted value calculation that takes credit risk into account. The following are relevant variables that apply to the valuation of derivatives: (i) present discounted values of interest payments; and (ii) forecast yield curves.

The use of interest-rate derivatives results in a fixed *cash outflow*. Vitens pays a fixed interest rate on the derivative, whereas the short-term interest paid on rollover loans is paid from the short-term interest receipts on the derivative. A hedge is considered to be effective from the start and during the term of the hedge relationship. Changes in the cash flows for the hedged item are expected to be almost completely covered by changes in the cash flows from the hedge instrument. If this is the case, the fluctuations in the fair value of the derivatives are recognised as debit/credit transactions against the coverage reserve (shareholders' equity). This is known as hedge accounting. If the derivative no longer qualifies as a hedge instrument, the fluctuations in the fair value are recognised as debit/credit entries in the profit and loss statement.

Impairment of financial fixed assets

In the case of financial instruments, the company determines whether there are objective indications for impairment of a financial asset or group of financial assets as at the date of each balance sheet. If objective reasons for impairment exist, the company determines the degree of impairment loss and accounts for this loss directly in the profit and loss statement.

In the case of financial assets that are valued at amortised cost price, the degree of impairment is calculated as the difference between the carrying amount of the assets and the best possible estimate of the future cash flows, expressed as the discounted value using the effective interest rate for the financial assets as determined when the instrument was first recognised. The impairment loss that was recorded for this must be corrected if the reduction in impairment is associated with an objective event after writing-down. The recovery is limited to no more than the amount that would be required to value the asset at the amortised cost price at the time of recovery, if no value impairment had been involved. The correction made to the loss is recognised in the profit and loss statement.

Valuations at fair value

Vitens applies the following valuation hierarchy for determining the fair value:

- level 1: quoted (unadjusted) prices on active markets for identical assets or liabilities;
- level 2: other methods where all variables have a significant effect on the recognised fair value, and are directly or indirectly observable;
- level 3: methods where variables are used that have a significant effect on the fair value measurement, but which are not based on observable market information.

The table below details the financial assets and liabilities that are valued at fair value. For details of how the fair value is determined, see the explanatory note to the accounting principle for 'Property, plant and equipment' (Tangible assets). For an explanation relating to derivatives that are valued at fair value, please refer to the explanatory note on the accounting principle for 'Derivatives'.

Valuations at fair value as at 31/12/2022	Level 1	Level 2	Level 3	Total
In millions of euros				
Assets				
Company-owned housing	-	-	4.0	4.0
Total assets	-	-	4.0	4.0
Equity and liabilities				
Derivatives	-	8.1	-	8.1
Total liabilities	-	8.1	-	8.1

Valuations at fair value as at 31/12/2021	Level 1	Level 2	Level 3	Total
In millions of euros				
Assets				
Company-owned housing	-	-	4.4	4.4
Total assets	-	-	4.4	4.4
Equity and liabilities				
Derivatives	-	48.5	-	48.5
Total liabilities	-	48.5	-	48.5

Trade debtors and other receivables

Trade debtors and other receivables are valued at amortised cost price subject to deduction of a value correction for possible bad debts. Netting and presentation of trade debtors and other receivables, and advances from water consumers are based on billing groups: a customer grouping based on time-staggered submission of meter readings for determining the billable water consumption. Trade debtors and other receivables are no longer included when payment has been received, or bad debt has been established.

Liquid assets

The liquid assets item relates to bank credit balances and cash in hand and is valued at amortised cost, which is equivalent to the nominal value. Debts owed to banks are recognised under interest-bearing liabilities.

Equalisation account - contributions received from third parties

The equalisation account for contributions received from third parties is valued in accordance with IFRS 15 as the amount received from third parties when laying connection pipes minus amortisation. Equalisation account amortisation takes place over a period of 33 1/3 years and is seen as equivalent to the depreciation period for investments in connection pipes. The annual amortisation is recognised under other revenue. The current component of the equalisation account contributions received from third parties is recognised under the current liabilities.

Interest-bearing liabilities

The interest-bearing liabilities are valued at fair value after deduction of transaction costs at the time of drawing down. They are valued subsequently at the amortised cost price using the effective interest method. Repayment obligations relating to long-term liabilities that fall due within a period of one year are presented under the current liabilities.

Provisions for employee benefits

The reorganisation provision was created to cover liabilities resulting from the social plan. The costs ensuing from the social plan are largely attributable to the expenses associated with finding new positions for employees who are surplus to requirements. The calculation is based on the number of employees surplus to requirements, the total wage costs, a realistic estimate of the (average) age and the expected period required for guidance and coordination.

The anniversary provision has been created for future anniversaries and calculated in accordance with actuarial principles. The 2016-2021 period life table for men and women, future staff turnover and salary increases have been taken into account in this respect.

The provisions for employee benefits have been converted to discounted value at a nominal interest rate of 2.6% (2021: 2.6%). The current component of the employee benefits provision is recognised under the current liabilities.

Other provisions

The stated provisions are created if:

- a legally enforceable and/or actual liability exists as at the balance sheet date, which ensues from events before the balance sheet date;
- it is reasonable to expect that settling the liability will require an outflow of financial resources;
- the size of the liability can be estimated reliably;
- the provisions are valued at the nominal value of the projected expenditure that will be required, unless the time value of money has a significant effect. In the latter case, the provision is valued at the discounted value;
- the current component of the other provisions is recognised under the current liabilities.

Lease liabilities

When determining the lease liabilities and rights of use as at 1 January 2022, the WACC percentage for 2022 (2.95%) was taken as the discount rate for calculating the present value of the lease liabilities, with the exception of the lease liabilities with defined interest rates.

Subsequent to initial recognition, the lease liabilities are measured by increasing the carrying amount to reflect interest on the lease liability and by decreasing the carrying amount to reflect lease payments made.

Collective plans

Vitens operates a Pension and Flexible Early Retirement plan (Pensioen- en Flexibele Uittredingsregeling) for existing and former employees. The pensions are administered by Stichting Pensioenfonds ABP and the Flexible Early Retirement plan by Stichting Flexibel Uittreden Nutsbedrijven, which is indirectly administered by Pensioenfonds ABP. These are collective plans in which multiple employers participate and are essentially defined-benefit pension plans where the amount of pension is based on the length of service and average salary enjoyed by the employee during the period of employment.

The pension plans comply with the definition of *'multi-employer funds'*. IAS 19 requires certain information relating to defined-benefit plans to be explained in the financial statements. In particular, the balance of the assets and liabilities associated with the plan must be shown in the balance sheet as a receivable or payable. Both pension funds have indicated that they are unable to provide the information that is required in relation to defined-benefit pension plans to the participating businesses. Therefore, both plans are handled as defined-contribution plans and the pension premiums owed for the financial year are recognised as pension expenses in the profit and loss statement. Pension expense for 2022 is €13.8 million (2021: €13.1 million).

ABP's 12-month average funding ratio as at 31 December 2022 was 118.6% (31 December 2021: 102.8%). The pensions were not increased as of 1 January 2022. ABP's financial situation, within the rules governing the current pension system, did not permit indexation of the pensions. The total premium for the retirement and surviving dependants pension via ABP will amount to 25.9% as at 1 January 2022 (2021: 25.9%).

Current liabilities

The current liabilities are valued at the amortised cost price. A current liability is included in the balance sheet as soon as Vitens becomes a contract partner and/or a concrete service has been provided, or goods have been delivered.

Lease and rental contracts

Vitens has entered into lease and rental contracts for the vehicle fleet and the rental of various premises and company buildings. The lease and rental agreements have been recognised in accordance with IFRS 16.

Drinking water revenue

The drinking water revenue consists of the standing charge (fixed fee) and the charge for delivering drinking water. The revenue from drinking water is recognised based on the total amount of water delivered to third parties. The revenue data is obtained via meter readings at customers' premises and, in respect of the amount that has not yet been finally invoiced, via estimates based on historical statistics. The turnover tax and levy on tap water charged based on the drinking water revenue are not included in the revenue figure. The drinking water revenue is recognised at the time when the benefits of ownership have transferred to the buyer.

Other revenue

The other revenue section is used to recognise revenues that are not directly related to the core activities. The other revenue includes the following items (among others):

- Revenues from home relocations/new connections and debt collection. In the case of home relocations/new connections, Vitens charges an amount to cover the associated administrative activities;
- The revenues from fire hydrants relate to a one-off contribution and an annual payment for maintenance;
- The revenues from work for third parties relates to various activities that Vitens performs for third parties;
- The revenues from rental and leasehold contracts relate to leases and rent income from office buildings and company-owned housing (present on land where production facilities are sited or where extraction takes place). This entry also includes revenues from land leasehold contracts;
- 'Hitch-hiking' payments are made primarily by municipalities for the inclusion of their water pollution levies/home occupant-based cost allocation and sewerage levies on the invoice sent by Vitens;
- The revenues from analyses and consultancy relate to analyses performed in Vitens' laboratory on behalf of third parties;
- The revenues from services provided to third parties relate to front-office and back-office work carried out for a different drinking water utility and service provision to VEI B.V.;
- The amortisation on contributions from third parties relates to customer contributions for laying connection pipes. The equalisation account is amortised over 33 1/3 years;
- The revenues from standpipe rental relate to renting standpipes to third parties.
- The revenues from by-products and residual materials relate to sales of the residual materials that are generated during the water treatment process;
- The activities associated with other revenues are recognised as revenue insofar as delivery of goods and services has taken place and insofar as the contractual obligations have been fulfilled.

Cost of work contracted out and temporary staff

These are the costs incurred by Vitens for its operations and relate to work that is contracted out and the costs of hiring temporary staff from third parties. These costs are allocated to the period to which they relate.

Groundwater taxes and levies

These are the costs incurred by Vitens for its operations and relate to taxes and levies associated with extracting groundwater. These costs are allocated to the period to which they relate.

Other expenses

These are costs incurred by Vitens for its operations and consist (among other things) of raw materials and process additives, electricity, vehicle costs, IT costs, facility costs and other costs. These costs are allocated to the period to which they relate.

Capitalised own-account production

Direct employee expenses and indirect other costs are incurred for manufacturing/creating tangible and intangible fixed assets which relate to the infrastructure activities of the business within the framework of Vitens' capitalised own-account production. This capitalised production is deducted from the employee expenses, outsourced work, agency and seconded staff and the other costs.

Financial income

The financial income consists of interest income, i.e. loans, calculated based on the effective interest method. This income is allocated to the period to which it relates. In addition, the financial income consists of the allocation of borrowing costs to projects under construction in accordance with IAS 23.

Financial expenses

The borrowing costs relate to interest-bearing liabilities, calculated based on the effective interest method and are allocated to the period to which they relate. The interest-bearing liabilities include fixed-interest loans, subordinated loans, rollover loans, interest-rate derivatives and current-account overdraft facilities. In addition, they include a release of the difference between the fair value and nominal value of the loan portfolio of parties that have been acquired, costs associated with unwinding provisions and other financing costs such as commitment fees, guarantees and bank charges.

Share in the result of associate companies and joint ventures

This relates to the result of associate companies and joint ventures.

Taxation

From 1 January 2016, publicly owned Dutch legal persons are liable to pay corporation tax. Based on this legislation, public limited companies such as Vitens are considered to use their entire capital in order to run a business. Activities performed by Vitens under the Drinking Water Act, such as supplying drinking water, are exempted from corporation tax.

Suppositions, estimates and assumptions in the financial statements

When drawing up a set of annual financial statements, use is made of assumptions, suppositions and estimates based on historical data and factors that are considered acceptable by management in view of the specific circumstances. These assumptions, suppositions and estimates affect the valuation and presentation of the reported assets and liabilities, and the result achieved during the financial year. The actual figures may differ from the estimates and suppositions that have been used. These items are examined in detail below.

Provisions for employee benefits

The stated provisions have been determined based on suppositions relating to future trends in the area of salaries, social legislation, staff turnover and statistically substantiated assumptions relating to life expectancy. This set of assumptions, together with the discount rates that have been used, has a major effect on the valuation of the provisions and the results.

Other provisions

The other provisions relate to possible compensation for drought damage in extraction areas around a number of production facilities, provision for possible incorrect calculation of the standing charges invoiced to some of our customers, a number of legal disputes and the current lease/rental commitments. The provisions have been determined based on management's best estimate of the amounts at which these liabilities can be settled.

Valuation of intangible fixed assets and property, plant and equipment

When determining the carrying value for intangible fixed assets and property, plant and equipment (tangible fixed assets), use has been made of estimated depreciation periods: these are based on expectations relating to the technical and economic useful life of the underlying assets. The useful life of the assets may change due to future changes in the area of technological development, or in the use of the assets, which may then result in impairment losses. An increase/decrease of 10% relative to the amount of depreciation (depreciation percentages) results in higher/lower depreciation of approximately €10 million.

If circumstances require, analysis takes place to determine whether impairment of intangible fixed assets and property, plant and equipment is required. If there are indications for this, an estimate is made of the realisable value of these assets. In the case of assets, the realisable value is the higher of two valuations: the fair value minus sales costs, or the value-in-use. The value-in-use is determined based on the present discounted value of the estimated future cash flows.

Debtors

Vitens periodically assesses the recoverability of receivables based on historical data relating to past payment behaviour. Possible devaluations are deducted from the debtor balance. Vitens applies the following bad debt provision percentages in relation to its internal and external outstanding accounts receivable for water (which have been transferred to a collection agency):

Age category	% debtors being processed internally at Vitens	% debtors transferred to collection agency
- outstanding trade debtors 0-30 days	1%	30%
- outstanding trade debtors 31-60 days	1%	31%
- outstanding trade debtors 61-90 days	3%	31%
- outstanding trade debtors 91-180 days	9%	36%
- outstanding trade debtors 181-365 days	43%	49%
- outstanding trade debtors > 365 days	100%	65%

The provision for non-water-related amounts is statically determined. At the end of each year, Vitens assesses the recoverability/non-recoverability of the outstanding debtor balance based on the individual cases.

Fair value measurement in relation to financial instruments

Derivative financial instruments are recognised at fair value in the balance sheet. In the case of other financial instruments, including drawn-down and issued loans, the fair value is indicated in the explanatory notes to the financial statements.

Revenue recognition

Recognition of the drinking water revenues is based on the total amount of water delivered to third parties (taxation on tap water is not counted as revenue). Vitens applies a system for determining revenue where the actual recorded consumption is allocated to months/years in the following three-step process:

- 1 The actual invoiced quantities, expressed as m³/revenue. The actual invoiced m³/revenue is allocated to the calendar years for each customer. In 2022, 45% of the deliveries to customers were invoiced.
- 2 The quantities still to be invoiced, expressed as m³/revenue up to and including the end of the calendar year (annual forecast). In relation to the period during the financial year for which customers have not yet received a final bill, an estimate is made based on historical meter readings in relation to current drinking water output. A higher/lower estimate of the revenue still to be invoiced of 1% results in a higher/lower net revenue of approximately €1.2 million. Note [29] includes a detailed explanation with regard to recognition of accrued balance sheet revenue items from previous years and the actual 'Not Invoiced' (NI) amount as a percentage.

- 3 Total reconciliation check between customer information in SAP IS-U and drinking water output figures. The customer data is compared to the water balance sheets (production facility output figures) as a reconciliation check. Movements are analysed, as is the trend in NI.

Accounting principles for the cash flow statement

The cash flow statement has been drawn up according to the indirect method where the result after tax according to the profit and loss statement is used to infer the movement in cash. When used in the cash flow statement, the term 'cash and cash equivalents' refers to the interest-bearing liabilities shown on the balance sheet.

Explanatory notes to the consolidated balance sheet

[1] Intangible fixed assets

In millions of euros	Software, development costs and licenses	Work in progress	Total
Balance as at 1 January 2021			
Acquisition value	61.2	20.3	81.5
Cumulative depreciation, impairment and fair value changes	-50.4	-	-50.4
Carrying value as at 1 January 2021	10.8	20.3	31.1
Changes during 2021			
Investments	-	11.0	11.0
Transfer to property, plant and equipment	-	4.1	4.1
Work in progress put into service	20.1	-20.1	-
Divestments	-	-	-
Depreciation	-5.7	-	-5.7
Transfer of cumulative acquisition value	-2.5	-	-2.5
Transfer of depreciation, impairment and fair value changes	2.5	-	2.5
Total	14.4	-5.0	9.4
Balance as at 31 December 2021			
Acquisition value	78.9	15.2	94.0
Cumulative depreciation, impairment and fair value changes	-53.6	-	-53.6
Carrying value as at 31 December 2021	25.3	15.2	40.5
Changes during 2022			
Investments	-	5.5	5.5
Transfer to property, plant and equipment	-	1.0	1.0
Work in progress put into service	4.9	-4.9	-
Divestments	-	-	-
Depreciation	-6.3	-	-6.3
Transfer of cumulative acquisition value	-0.2	-	-0.2
Transfer of depreciation, impairment and fair value changes	0.2	-	0.2
Total	-1.4	1.6	0.2
Balance as at 31 December 2022			
Acquisition value	83.4	16.8	100.2
Cumulative depreciation, impairment and fair value changes	-59.5	-	-59.5
Carrying value as at 31 December 2022	23.9	16.8	40.7

The 2022 investments in intangible assets relate to software purchases, development costs and licenses. In 2022, an amount of €1.0 million was transferred from work in progress recognised in tangible fixed assets (property, plant and equipment) to work in progress recognised in intangible fixed assets.

[2] Tangible fixed assets

In millions of euros	Production buildings and land	Office buildings	Company-owned housing	Plant and equipment	Pipes	Other fixtures, fittings, tools and equipment	Work in progress	Total
Balance as at 1 January 2021								
Acquisition value	596.8	26.4	7.3	652.0	2,585.5	25.6	55.4	3,948.9
Cumulative depreciation, impairment and fair value changes	-295.2	-9.4	-2.0	-500.8	-1,332.0	-21.0	-	-2,160.4
Carrying value as at 1 January 2021	301.6	17.0	5.3	151.2	1,253.5	4.6	55.4	1,788.5
Revaluation of office buildings	-	2.1	-	-	-	-	-	2.1
Carrying value as at 1 January 2021	301.6	19.1	5.3	151.2	1,253.5	4.6	55.4	1,790.6
Changes during 2021								
Fair value changes	-	-	-0.3	-	-	-	-	-0.3
Investments	0.5	-	-	-0.1	82.9	-	82.8	166.1
Work in progress put into service	11.3	2.9	-	19.3	5.5	5.9	-44.9	-
Transfer to/from a different asset class	8.9	0.4	-	-19.2	8.7	1.2	-4.1	-4.1
Transfer of cumulative acquisition value	-61.5	-0.4	-	65.2	-9.7	5.8	-	-0.6
Transfer of depreciation, impairment and fair value changes	61.5	0.4	-	-65.2	9.7	-5.8	-	0.6
Divestments	-0.3	-	-0.6	-	-	-	-0.4	-1.3
Depreciation	-13.7	-0.9	-	-19.8	-52.9	-2.5	-	-89.8
Total	6.7	2.4	-0.9	-19.8	44.2	4.6	33.4	70.6
Balance as at 31 December 2021								
Acquisition value	678.8	32.1	7.3	586.6	2,692.3	26.9	88.8	4,112.8
Cumulative depreciation, impairment and fair value changes	-370.4	-10.7	-2.9	-455.3	-1,394.6	-17.8	-	-2,251.7
Carrying value as at 31 December 2021	308.4	21.4	4.4	131.3	1,297.7	9.1	88.8	1,861.1
Changes during 2022								
Fair value changes	-	-	0.1	-	-	-	-	0.1
Investments	4.4	-	-	-	95.5	-	99.3	199.2
Work in progress put into service	11.7	-	-	31.3	21.0	4.7	-68.7	-
Transfer to/from a different asset class	0.7	-	-	-1.6	0.9	-	-1.0	-1.0
Transfer of cumulative acquisition value	-8.3	-	-	-12.3	-5.6	-1.4	-	-27.6
Transfer of depreciation, impairment and fair value changes	8.3	-	-	12.3	5.6	1.4	-	27.6
Divestments	-1.1	-	-0.5	-0.1	-2.8	-	-	-4.5
Depreciation	-13.8	-1.1	-	-20.5	-54.3	-3.3	-	-93.0

Total	1.9	-1.1	-0.4	9.1	60.2	1.4	29.6	100.7
Balance as at 31 December 2022								
Acquisition value	686.2	32.1	6.8	603.8	2,801.2	30.2	118.5	4,278.8
Cumulative depreciation, impairment and fair value changes	-375.9	-11.8	-2.8	-463.4	-1,443.3	-19.7	-	-2,316.9
Carrying value as at 31 December 2022	310.3	20.3	4.0	140.4	1,357.9	10.5	118.5	1,961.9

In millions of euros	31/12/2022	31/12/2021
Production buildings and land	310.3	308.4
Office buildings	20.3	21.4
Company-owned housing	4.0	4.4
Plant and equipment	140.4	131.3
Pipes	1,357.9	1,297.7
Other fixtures, fittings, tools and equipment	10.5	9.1
Work in progress	118.5	88.8
Subtotal for tangible fixed assets	1,961.9	1,861.1
Raw materials and process additives (stocks)	6.3	5.6
Total for tangible fixed assets	1,968.2	1,866.7

The borrowing costs (IAS 23) are allocated based on the weighted average interest rate that applies to the interest-bearing loans (2022: 2.6%; 2021: 2.6%) for projects which started after 1 January 2009 involving a minimum investment of €1 million and a completion time exceeding 12 months. In 2022, €1.8 million (2021: €1.2 million) in borrowing costs were allocated to projects in progress.

The revaluation of company-owned housing led to a fair value change of €0.1 million in 2022 (2021: €0.3 revaluation of office buildings).

[3] Assets with right of use

In millions of euros	31/12/2022	31/12/2021
Buildings	5.2	5.5
Vehicle fleet	7.3	9.6
Data lines	8.0	7.2
Other	1.1	1.2
Total assets with right of use	21.6	23.5

Vitens has entered into lease and rental contracts for the vehicle fleet and the rental of various premises and company buildings. The lease and rental contracts have been recognised in accordance with IFRS 16. The short-term lease and rental contracts (< 1 year)/low-value lease and rental contracts (< €5,000) are included under the Off Balance Sheet rent and lease liabilities, see note [16].

The table below shows the changes in the lease and rental agreements in 2022 in relation to both the right of use and the lease liability.

In millions of euros	Right of Use	Lease liability
Balance as at 1 January 2022	23.5	20.2
New and/or amended lease contracts	2.9	2.9
Additional costs	1.5	-
Depreciation	-6.3	-
Repayment against lease liability	-	-5.5
Interest	-	0.4
Balance as at 31 December 2022	21.6	18.0

[4] Associate companies and joint ventures

The group companies, associate companies and joint ventures are shown below.

As at 31 December 2022	Town/city	Participating interest (%)
Group companies (consolidated)		
Vitens Watermanagement B.V.	Zwolle	99.9
Vitens Industriewater B.V.	Leeuwarden	100
Associate companies (not consolidated)		
AquaMinerals B.V.	Rijswijk	22.8
KWH Water B.V.	Nieuwegein	26.4
SubMerge B.V.	Rotterdam	33.3
Joint ventures (not consolidated)		
VEI B.V.	Utrecht	50.0
Facturatie B.V.	Utrecht	50.0

In millions of euros	Associate companies		Joint ventures		Total	
	2022	2021	2022	2021	2022	2021
Carrying value as at 1 January	3.2	3.0	2.7	2.7	5.9	5.7
Changes						
Share in the result	0.5	0.2	-0.1	-	0.4	0.2
Received from associate companies	-	-	-	-	-	-
Total changes	0.5	0.2	-0.1	-	0.4	0.2
Carrying amount as at 31 December	3.7	3.2	2.6	2.7	6.3	5.9

Financial information for associate companies and joint ventures

In millions of euros	Assets	Liabilities	Revenue	Profit/Loss	% Holding	Share in net assets
2022						
VEI B.V. (2022)	16.0	14.4	20.3	-	50.0%	0.8
AquaMinerals B.V. (2022)	3.5	2.1	17.5	-	22.8%	0.3
KWH Water B.V. (2022)	28.0	15.0	26.0	-0.2	26.4%	3.3
SubMerge B.V. (2022)	-	0.2	-	-0.1	33.3%	-0.1
Facturatie B.V. (2022)	20.4	16.8	1.0	-0.1	50.0%	1.8

The finalised 2022 financial statements for the associate companies and joint ventures listed above will not be available before publication of the 2022 Vitens Annual Report. The expected 2022 result for the associate companies and joint ventures has however been included. The amounts stated in the table above relate to the entities in their entirety.

[5] Other financial assets

In millions of euros	31/12/2022	31/12/2021
Carrying value as at 1 January	0.2	0.2
Changes		
New loans issued	8.4	-
Repayments received against loans	-0.1	-
Other changes	-	-
Total changes	8.3	-
Carrying amount as at 31 December	8.5	0.2

At the end of the financial year, the other financial assets amounted to €8.5 million (2021: €0.2 million); these relate to loans that have been issued.

Loan to related party

The loan issued to Facturatie B.V., amounting to €8.4 million, is intended to fund investments needed for the implementation of SAP HANA. The loan is made available for the period from 14 October 2022 to 13 October 2029.

The interest charged equals the sum of the applicable 4-year Interest Rate Swap (IRS) at the time of the drawdown request and the Margin. In this case, the 4-year IRS is applied based on the average term of the loan. The Margin is based on a current estimate of the typical margin charged in the market for a comparable loan to a drinking water utility and is 0.38% per annum.

General terms and conditions for transactions with related parties

Sales to and purchases from related parties are made subject to terms and conditions equivalent to those prevailing in arm's length transactions. Outstanding year-end balances are unsecured and interest-free and settlement is made in cash. No guarantees have been given or received for receivables or receivables from related parties.

[6] Trade debtors and other receivables

In millions of euros		31/12/2022	31/12/2021
Trade debtors	36.9	39.0	
Impairment loss on debtors	-1.6	-2.2	
Hitch-hikers	0.2	0.2	
Net trade receivables		35.5	37.0
Taxes and social security premiums		0.8	1.8
Accrued income and prepaid expenses		14.4	12.5
Total		50.7	51.3

The trade debtors balance comprises water debtors in the business and consumer markets at €16.5 million (2021: €17.7 million) and other non-water debtors at €20.4 million (2021: €21.3 million). The fair value for the debtors is identical to the carrying amount. The accrued income and prepaid expenses at year-end 2022 amounted to €14.4 million and consisted mainly of prepaid amounts and sales yet to be invoiced.

At the end of the financial year, the bad debt write-down on debtors amounted to €1.6 million (2021: €2.2 million). The release in the profit and loss statement for 2022 amounted to €0.6 million (2021: -/€0.2 million).

The movement in the debtor provisions is shown below.

In millions of euros	2022	2021
Balance as at 1 January	2.2	2.3
Changes		
Additions	-	0.2
Withdrawals	-	-0.3
Amount released	-0.6	-
Total changes	0.6	-0.1
Balance as at 31 December	1.6	2.2

The overview below shows the outstanding trade debtors, split by age. This does not include payables owed by hitch-hikers, which amount to €0.2 million (2021: €0.2 million), in view of the fact that Vitens has no bad-debt exposure in this respect.

The trade debtors balance as at 31 December 2022 does not include individual receivables for which no provision has been formed as yet and which would have a material impact on the result of Vitens in the event of non-recovery. Future economic developments, which may have an impact on Vitens' trade debtors and other receivables, have also been taken into account in the provision. The debtors do not include receivables that cannot be classified as outstanding under the *expected credit loss model* (IFRS 9).

Water debtors

In millions of euros	0-90 days	91-80 days	181-365 days	> 365 days	Total
2022	14.1	0.7	0.6	1.1	16.5
2022 (including bad debt)	14.0	0.6	0.3	0.2	15.1
2021	14.7	0.7	0.8	1.5	17.7
2021 (including bad debt)	14.5	0.6	0.4	0.4	15.9

Non-water debtors

In millions of euros	0-90 days	91-180 days	181-365 days	> 365 days	Total
2022	19.6	0.1	0.2	0.4	20.4
2022 (including bad debt)	19.6	0.1	0.2	0.3	20.2
2021	20.2	0.3	0.2	0.6	21.3
2021 (including bad debt)	20.2	0.3	0.1	0.3	20.9

[7] Shareholders' equity

Authorised capital	Ordinary shares			Total
Number of shares	Number of issued shares	Shares in Vitens' portfolio		
Balance as at 31 December 2021	5,777,247	-		5,777,247
Balance as at 31 December 2022	5,777,247	-		5,777,247

Authorised capital

The authorised capital of the company amounts to €18,000,000 divided up into 18,000,000 ordinary shares of a nominal value of €1 per share.

Consolidated statement of changes in shareholders' equity

The authorised capital of the company amounts to €18,000,000 divided up into 18,000,000 ordinary shares of a nominal value of €1 per share. At the end of 2022, 5,777,247 of these shares were issued and paid up.

The share premium reserve is a reserve resulting from the establishment of Vitens in 2001. This amounted to €9 per share for each issued share (4,475,439), equating to a total of €40.3 million. In 2006, 1,887,685 shares were issued as a result of the merger and an amount of €52.80 per share was added to the share premium reserve (total of €99.7 million). In 2006 and 2007, the shares in Nuon N.V. were purchased in three transactions (1,615,655 shares in total). Of these shares, 619,223 were withdrawn in 2006 and a further 175,000 in 2007. The share premium reserve was reduced by €9 per share (total of €7.1 million). In 2007, part of the shareholding in Nuon N.V. was sold to municipalities and provincial authorities (274,935 shares in total). In 2011, Vitens issued 208,346 shares as a result of the merger and an amount of €69 per share was added to the share premium reserve (total of €14.4 million).

The hedging reserve is for unrealised adjustments to the fair value of financial instruments resulting from the application of cash flow hedge accounting. This reserve is for the effective portion of a hedge only. A break occurred in 2021. The contract relating to one derivative with a break clause was terminated as of 1 November 2021. The total amount paid for the surrender of the contract (due to negative market value) was €12.0 million. The derivative's maturity date was 30 June 2043. As long as the underlying interest rate risk continues to exist, the balance will be recognised over the remaining term to 30 June 2043. In 2022, €0.6 million from the hedging reserve was recognised in the financial expenses.

The other reserves relate to a reserve resulting from cumulative retained profit.

Profit appropriation

The Executive Board proposes the following appropriation of the result after tax for adoption by the shareholders (approved by the Supervisory Board on 15 March 2023): no payment of dividend and addition of the result of €8.2 million to the other reserves. This is in line with Vitens' financial policy.

[8] Equalisation account - contributions received from third parties

In millions of euros	2022	2021
Balance as at 1 January	129.0	115.4
Amounts received during installation phase	17.9	17.9
Amortisation released to the profit and loss statement	-4.8	-4.3
Balance as at 31 December	142.0	129.0
Current component of the equalisation account	4.8	4.6
Long-term component of the equalisation account	137.2	124.4
Total	142.0	129.0

Vitens applies IFRS 15 (*Revenue from Contracts with Customers*) in respect of the contributions that Vitens receives from third parties for laying connection pipes. Amortisation takes place over a period of 33 ¹/₃ years and is seen as equivalent to the depreciation period for investments in connection pipes.

The current component of the equalisation account contributions received from third parties is recognised under the current liabilities, see note [15].

[9] Subordinated loans

In millions of euros		2022		2021
Balance as at 1 January		-		-
Repayment obligation during the financial year	-		12.6	
		-		12.6
Changes				
Loan repayments	-		-12.6	
		-		-
Repayment obligation during next financial year	-		-	
		-		-
Balance as at 31 December		-		-

Repayment of the subordinated loans takes place in fifteen annual instalments subject to an option to suspend payment if solvency falls below 25% in the financial year. Interest is paid over the part of the principal sum that has not been repaid. In 2021, the subordinated loan was fully repaid.

[10] Long-term loans

In millions of euros		2022		2021
Balance as at 1 January		939.1		895.4
Repayment obligation during the financial year	56.3		56.3	
		995.4		951.7
Changes				
New loans	125.0		100.0	
Loan repayments	-56.3		-56.3	
		1,064.1		995.4
Repayment obligation during next financial year	-79.4		-56.3	
		984.7		939.1
Balance as at 31 December		984.7		939.1

The long-term liabilities relate to private loans and rollover loans. The fair values of the long-term liabilities are included in note [30].

In 2022, new loan capital was arranged for an amount of €125.0 million (2021: €100.0 million).

Type of long-term loan	Long-term component		Current component	
	31/12/2022	31/12/2021	31/12/2022	31/12/2021
Rollover loans	277.2	329.5	77.3	27.3
Private loans	707.5	609.6	2.1	29.0
Total	984.7	939.1	79.4	56.3

The interest on the rollover loans is fixed on each occasion between the 1-month and 12-month Euribor rate and therefore fluctuates depending on trends in the capital market.

Other information relating to long-term and subordinated loans

In millions of euros	2022	2021
Average interest rate %	2.60%	2.60%
Total as at 31 December	1,064.1	995.4
Repayments < 1 year old	79.4	56.3
Repayments > 1 year and < five years old	296.8	311.5
Repayments > 5 years old	687.9	627.6

No collateral (pledge, mortgage, ownership of securities, etc.) has been provided for the loan portfolio referred to above.

[11] Derivatives

As at 31 December 2022, Vitens held the following financial instruments, recognised at fair value.

In millions of euros	2022	2021
Financial instruments as at 1 January	48.5	82.3
Change in value due to realised and unrealised results	-40.4	-33.8
Financial instruments as at 31 December	8.1	48.5
Current financial instruments (< 1 year)	0.9	-
Long-term financial instruments (> 1 year)	7.2	48.5

The market value of the derivatives depends on unrealised changes to the fair value resulting from changes in the yield curves. In concrete terms this means that the interest payable on the derivatives exceeds the current market interest rate, which results in a negative value. In 2022 this was €8.1 million (2021: €48.5 million negative). These derivatives have been taken out in order to compensate for interest rate risk exposure caused by major fluctuations in the market interest rate. The negative value in question will not be recognised directly by Vitens in the profit and loss statement because the hedge is considered effective. The use of alternative benchmark rates as part of the IBOR reform has no impact on Vitens' hedging provisions and other financial instruments, as the Euribor rates have not yet been adjusted.

At the end of 2022, Vitens had six ongoing interest-rate derivative contracts for a principal sum of €245 million (2021: six interest-rate derivatives for €245 million) where the variable interest on the rollover loans is fixed for between one and nineteen years. The fair value of these interest-rate derivatives amounted to a negative amount of €8.1 million at the end of 2022 (2021: €48.5 million negative). Of the derivatives referred to above, Vitens has one interest-rate derivative (2022: €1.6 million; 2021: €14.1 million) with a remaining term of nineteen years (with a principal sum of €25 million), with a break clause (for both parties) after every ten years (in 2031). In the case of this derivative, the credit risk (CVA/DVA), which is included in the valuation, is determined up to the break clause and not for the entire term.

[12] Provisions for employee benefits

Movement summary for employee benefits	Reorganisation provision	Anniversary provision	Total
In millions of euros			
Balance as at 1 January 2021	0.9	1.1	2.0
Addition	-	-	-
Interest added	-	0.1	0.1
Amount released	-0.2	-	-0.2
Withdrawals	-0.4	-0.3	-0.6
Balance as at 31 December 2021	0.4	0.9	1.3
Addition	-	0.1	0.1
Interest added	-	0.1	0.1
Amount released	-0.3	-	-0.3
Withdrawals	-0.1	-0.2	-0.3
Balance as at 31 December 2022	-	0.9	0.9
Current liabilities for employee benefits	-	0.2	0.2
Long-term liabilities for employee benefits	-	0.7	0.7

Long-term component in the employee benefits provisions		
In millions of euros	31/12/2022	31/12/2021
Reorganisation provisions	-	0.2
Anniversary provision	0.7	0.8
Total long-term component in the employee benefits provisions	0.7	1.0

In respect of the long-term component in the employee benefits provisions, €0.7 million (2021: €1.0 million) relates to expected expenditure during a period of one to five years and €0.3 million (2021: €0.3 million) relates to expected expenditure after five years. The current component of the employee benefit provisions is recognised under current liabilities, see note [15].

Current component of the employee benefit provisions		
In millions of euros	31/12/2022	31/12/2021
Reorganisation provisions	-	0.2
Anniversary provision	0.2	0.1
Leave not taken	12.9	13.7
Pension premiums to be paid	1.6	1.5
Other current employee benefits	18.4	19.7
Total current component in the employee benefits provisions	33.1	35.2

Reorganisation provisions

In 2022, Vitens paid financial settlements in respect of the individuals included in the reorganisation provision. This no longer applies from 31/12/2022.

Anniversary provision

The main factors used to determine the anniversary provision are detailed below:

Suppositions	2022	2021
Period life table/mortality table	period life table 2016-2021	period life table 2015
Discount rate	2.60%	2.60%
Expected salary increases	2.50%	2.00%

[13] Other provisions

In millions of euros	2022	2021
Balance as at 1 January	2.4	3.9
Changes		
Addition	3.4	0.8
Interest added	-	-
Amount released	-	-0.2
Withdrawals	-3.9	-2.1
Reclassification	-	-
Total changes	-0.5	-1.5
Balance as at 31 December	1.9	2.4
Current component of other provisions	0.6	1.9
Long-term component of other provisions	1.3	0.5
Total	1.9	2.4

The other provisions relate to possible compensation for drought damage in extraction areas around a number of production facilities, amounts not remitted to third parties for the period 2015-2019, reserves for long-term illness and a provision for net liability of associates.

Insofar as considered necessary, provisions have been made as detailed in the above summary of changes.

[14] Lease liabilities

In millions of euros	31/12/2022	31/12/2021
Buildings	5.6	5.8
Vehicle fleet	7.3	9.6
Data lines	3.9	3.6
Other	1.2	1.2
Total lease liabilities	18.0	20.2
Current component of the lease liabilities	5.3	5.1
Long-term component of the lease liabilities	12.7	15.1
Total	18.0	20.2

Vitens has entered into lease and rental contracts for the vehicle fleet and the rental of various premises and company buildings. The lease and rental agreements have been recognised in accordance with IFRS 16.

The movement summary relating to the lease and rental agreements for both right-of-use and lease liability is included under assets with right of use, see note [3].

[15] Current liabilities

In millions of euros	31/12/2022	31/12/2021
Trade creditors and other payables	79.6	67.4
Advance relating to water debtors	18.3	18.1
Current component of derivatives	0.9	-
Repayment obligations in relation to long-term liabilities	79.4	56.3
Repayment obligations in respect of lease liabilities	5.3	5.1
Tax liabilities	15.3	15.2
Interest-bearing liabilities	23.3	41.3
Short-term loans	25.0	-
Current employee benefits	33.1	35.2
Invoices still to be received	12.8	11.2
Accrued expenses and deferred income	9.8	9.4
Total	302.8	259.2

Given the short time lines, the fair value of trade and other payables, tax liabilities, current employee benefits, invoices to be received and accrued liabilities is recognised at nominal value. In principle, trade creditors and tax liabilities are paid within 30 days. The tax liabilities consist of payable groundwater and tap water levies amounting to €10.9 million (2021: €11.7 million) and payable wage tax and social premiums amounting to €4.4 million (2021: €3.5 million). The advance relating to water debtors represents a netted balance of €18.3 million.

The current interest-bearing liabilities, amounting to €128,6 million as at year-end 2022 (2021: €97.6 million), consist, in addition to the repayment obligations relating to long-term liabilities of €79.4 million (2021: €56.3 million), the current component of the derivatives at €0.9 million (2021: nil) and a short-term loan amounting to €25.0 million (2021: nil), of interest-bearing liabilities with banking institutions at €23.3 million (2021: €41.3 million). The interest-bearing liabilities relate to a current-account overdraft facility. Interest is paid on this amount at a variable rate. This is based on the 1-month Euribor rate, including an agreed mark-up percentage.

The current employee benefits item amounted to €33.1 million at the end of 2021 (2021: €35.2 million) and relates to all commitments to employees such as the current component of the reorganisation provisions and the anniversary provision, pension premiums that are payable, reserves for outstanding unemployment contributions, reserves for long-term sickness, and outstanding days of holiday and holiday pay.

[16] Commitments that do not appear on the balance sheet

Lease liabilities

Commitments pursuant to operational lease		
In millions of euros	31/12/2022	31/12/2021
Within one year	3.5	2.8
Between 1 and 5 years	6.6	6.0
More than 5 years	-	-
Total	10.1	8.8

These commitments relate to non-lease components (service and maintenance) of company cars. The commitments relating to the right of use for company cars are included in the financial statements of Vitens in accordance with IFRS 16.

Rent commitments

Commitments pursuant to rent		
In millions of euros	31/12/2022	31/12/2021
Within one year	0.5	0.8
Between 1 and 5 years	2.7	3.0
More than 5 years	2.2	0.4
Total	5.4	4.2

These liabilities ensue from rental contracts for office buildings, building contents, parking spaces and support facilities. In the case of the leases to which IFRS 16 applies, the lease liability only includes the service charges.

Energy supply liabilities

Liabilities pursuant to energy supply contracts		
In millions of euros	31/12/2022	31/12/2021
Within one year	33.7	10.5
Between 1 and 5 years	12.6	6.4
More than 5 years	-	-
Total	46.3	16.9

These liabilities ensue from energy supply contracts for the production facilities and office buildings.

Water purchase liabilities

Liabilities pursuant to water purchase		
In millions of euros	31/12/2022	31/12/2021
Within one year	4.1	3.0
Between 1 and 5 years	16.7	17.7
More than 5 years	128.4	74.2
Total	149.2	94.9

These liabilities ensue from water purchase contracts for a period of up to 40 years.

Liabilities pursuant to the Drinking Water Act (WACC)

The Drinking Water Act defines important financial frameworks for controlling rates and solvency. For example, it sets a maximum for the cost of capital that can be charged to customers by the drinking water utilities (WACC). In 2022, based on preliminary figures, Vitens achieved a WACC that is lower than the permitted WACC (2021: shortfall). The definitive WACC will be presented in the Operating Report that will be submitted to the Ministry of Infrastructure & Water Management before or on 1 October 2023. As at 31 December 2022, Vitens had a liability of nil (2021: €3.8 million).

Liabilities pursuant to the Drinking Water Act		
In millions of euros	31/12/2022	31/12/2021
2020	-	3.8
2021	-	-
2022	-	-
Total	-	3.8

Contingent liabilities

Vitens and Vitens Watermanagement B.V. together are classed as a tax group in relation to levying turnover tax; each of the companies is severally liable to pay the tax owed by all of the companies included in the tax group.

Explanatory notes to the consolidated profit and loss statement

[17] Drinking water revenue

In millions of euros	2022	2021
Supply of drinking water	226.3	223.8
Standing charge	140.5	132.9
Total	366.8	356.7

The drinking water revenue reported above comes from a single segment; the entire supply area of Vitens. The average customer's annual bill (small consumer) increased in 2022 to €110 (excluding taxes) relative to 2021 (€106 excluding taxes). The amounts are based on a model customer, who consumes 100 m³.

[18] Other revenue

In millions of euros	2022	2021
Revenues from home relocations and collections	1.5	1.4
Revenues from fire hydrants and sprinklers	7.3	7.5
Revenues from work for third parties	0.7	0.8
Revenues from rental and leasehold contracts	0.9	0.8
'Hitch-hiking' payments	0.2	0.2
Revenues from analyses and consultancy	3.7	3.8
Revenues from services provided to third parties	9.6	9.1
Equalisation account amortisation	4.8	4.3
Revenues from connections	6.2	6.4
Revenues from standpipe rental	0.9	0.7
Revenues from by-products	1.7	1.4
Other revenues	2.6	3.0
Total	40.1	39.4

The other revenues section is used to recognise revenues that are not directly related to the core activities. The other revenues include the following items (among others):

- Revenues from home relocations and debt collection. In the case of home relocations, Vitens charges an amount to cover the associated administrative activities;
- The revenues from fire hydrants relate to a one-off contribution and an annual payment for maintenance.
- The revenues from work for third parties relate to various activities that Vitens performs for third parties;
- The revenues from rental and leasehold contracts relate to leases and rent income from office buildings and company-owned housing (present on land where production facilities are sited or where extraction takes place). This entry also includes revenues from land leasehold contracts;

- 'Hitch-hiking' payments are made primarily by municipalities for the inclusion of their water pollution levies/home occupant-based cost allocation and sewerage levies on the invoice sent by Vitens;
- The revenues from analyses and consultancy relate to analyses performed in Vitens' laboratory on behalf of third parties.
- The revenues from services provided to third parties relate to front-office and back-office work carried out for a different drinking water utility and service provision to VEI B.V.;
- The amortisation on contributions from third parties relates to customer contributions for laying connection pipes. The equalisation account is amortised over 33 1/3 years;
- The revenues from standpipe rental relate to renting standpipes to third parties.
- The revenues from by-products and residual materials relate to sales of the residual materials that are generated during the water treatment process;
- The activities associated with other revenues are recognised as revenue insofar as delivery of goods and services has taken place and insofar as the contractual obligations have been fulfilled. Of the other revenues, €0.2 million relates to grants.

Operating expenses

[19] Cost of work contracted out and temporary staff

In millions of euros	2022	2021
Work contracted out	42.7	29.8
Temporary staff provided by third parties	26.4	42.3
Minus: indirect costs related to capitalised own-account production	-12.2	-15.3
Total	56.9	56.8

The costs included for capitalised own-account production are own-account costs incurred for manufacturing tangible fixed assets that relate to the company's infrastructure activities (production facilities and pipes). This amounted to €12.2 million in 2022 (2021: €15.3 million).

The total net cost of work contracted out and temporary staff remains in line with the previous year. This is caused, on the one hand, by a reduction in the number of temporary staff and the work contracted out. For example, there was a reduction in the number of SAP consultants and the labour market remained tight. On the other hand, we see a sharp increase in the price component, keeping costs in line with the previous financial year.

[20] Other expenses

In millions of euros	2022	2021
Raw materials and process additives	14.5	12.6
Other employee expenses	6.4	5.4
Water purchases	2.7	3.3
Electricity	18.7	13.9
Vehicle expenses	4.5	4.0
IT costs	20.4	19.0
Telecommunication costs	1.7	1.3
Facility costs	17.4	21.5
Taxation, benefits and insurance	12.0	7.4
Demolition costs	3.0	2.0
Other expenses	9.1	8.3
Minus: indirect costs related to capitalised own-account production	-5.8	-5.0
Total	104.6	93.7

Raw materials and consumables rose to €14.5 million (2021: €12.6 million) due to significantly higher prices for chemicals, caused by inflation and commodity shortages.

The other employee expenses largely relate to travel and accommodation costs and costs incurred for training.

The electricity costs represent costs for electricity, gas and other fuels. The costs were €4.8 million higher than in 2021, mainly due to the rising energy prices.

The vehicle costs relate to servicing costs for the vehicle fleet, fuel and other vehicle expenses. The servicing costs in 2022 amounted to €2.3 million (2021: €2.0 million).

The facility costs largely relate to the rent paid for office buildings and maintenance costs associated with plant, office buildings and grounds. The costs for maintaining and the upkeep of plant, buildings and grounds during 2022 amounted to €14.0 million (2021: €17.3 million). The rent paid for office buildings and machines in 2022 amounted to €1.1 million (2021: €1.1 million).

Taxes, payouts and insurance consist mainly of costs incurred for drought damage and taxes and fees. The increase is mainly attributable to the costs of drought damage resulting from a dry summer. These costs increased by more than €4 million to €6.9 million (2021: €2.7 million).

The other expenses consist mainly of costs related to dues, contributions and leasehold. Furthermore, a grant of €0.3 million is also recognised under other expenses.

The costs included for capitalised own-account production are own-account costs incurred for manufacturing/creating tangible and intangible fixed assets that relate to the company's infrastructure activities (production facilities and pipes). In addition to employee expenses and hiring temporary staff from third parties, various other costs are included, which amounted to €5.8 million over 2022 (2021: €5.0 million).

[21] Employee expenses

In millions of euros	2022	2021
Salaries	90.9	87.3
Social security premiums	12.0	10.7
Premiums paid into collective plans that are handled as a defined-contribution plan	13.8	13.1
Minus: employee expenses associated with capitalised own-account production	-19.5	-15.3
Subtotal	97.2	95.8
Reorganisation provisions	0.1	-0.3
Anniversary provision	-0.3	-
Total	97.0	95.5

The costs of capitalised own-account production include own-account staff costs incurred for manufacturing intangible and tangible fixed assets that relate to the company's infrastructure activities (production facilities and pipes). These consist mainly of direct employee expenses and in 2021 amounted to €19.5 million (2021: €15.3 million). The employee expenses for reorganisations and anniversaries are shown below:

In millions of euros	Restructuring provision	Anniversary provision	Total 2022	Total 2021
Addition to provisions	-	0.1	0.1	-
Release from provisions	-0.3	-	-0.3	-0.3
Total	-0.3	0.1	-0.2	-0.3

Headcount	2022	2021
Number of permanent employees as at 31 December	1,599	1,527
Number of FTEs in permanent employment as at 31 December	1,504	1,437

[22] Depreciation, fair value changes and impairment of tangible and intangible fixed assets

In millions of euros	2022	2021
Depreciation of property, plant and equipment	93.0	89.8
Depreciation of intangible assets	6.3	5.7
Depreciation costs associated with Facturatie B.V.	0.7	0.5
Gain on sale associated with divestments	2.9	-1.8
Depreciation associated with IFRS 16	6.3	5.9
Fair value changes	-0.1	0.3
Total	109.1	100.3

[23] Financial income and expenses

In millions of euros	2022	2021
Interest paid on bullet and linear loans	15.0	14.2
Interest paid on derivatives	11.0	12.5
Interest paid on rollover loans	1.2	-0.8
Interest paid on subordinated loans	-	0.1
Interest paid on current account overdraft	0.2	-
Interest paid on short-term loans	0.1	-
Addition to provisions for interest	-	0.1
Borrowing costs for lease contracts	0.4	0.3
Borrowing costs charged to investment projects (IAS 23)	-1.8	-1.2
Other borrowing costs	0.1	0.2
Total	26.2	25.4
Interest income	-0.1	-
Total interest income and interest paid	26.1	25.4

[24] Share in the result of associate companies and joint ventures

In millions of euros	2022	2021
Result of associate companies and joint ventures	0.4	0.2

[25] Taxation

Vitens is liable to pay corporation tax. Activities performed by Vitens under the Drinking Water Act, such as supplying drinking water, are exempted from corporation tax.

Taxation on the result from ordinary operations amounted to €0 (2021: €0). Reconciliation with the effective tax rate is as follows:

In millions of euros	2022	2021
Result before tax	8.2	19.4
Non-taxable activities	9.7	20.8
Taxable result	-1.5	-1.6
Corporation tax	-	-

Corporation tax is calculated based on the current tax rate in the Netherlands (2022: 25.8%; 2021: 25.0%). The effective tax burden on the result to which corporation tax applies amounted to 0%.

Dividend tax

Vitens withholds and pays dividend tax over the dividend payment.

Explanatory notes to the consolidated cash flow statement

[26] Cash flow from operations, investment activities and financing activities

The cash flow from operations amounted to €130.2 million (2021: €143.8 million) and was not sufficient for financing the investment activities, amounting to €192.1 million (2021: €167.0 million). The cash flow from operating activities is €13.6 million lower than in 2021, which is mainly caused by a lower result. The cash flow from investment activities increased by €25.1 million due to an increase in the investment volume.

The net cash flow for financial year 2022 was €18.0 million positive, meaning that the interest-bearing loans decreased by the same amount.

Other explanatory notes to the consolidated financial statements

[27] Dividend

In 2022, the General Meeting of Shareholders adopted the proposed profit appropriation for the 2021 result. In accordance with this decision, the result was added to other reserves and no dividend was paid.

In millions of euros	2022	2021
Dividend over financial year 2020	-	-
Dividend over financial year 2021	-	-
Number of ordinary shares with dividend entitlement	5,777,247	5,777,247
Dividend per share (in euros)	-	-

The Executive Board's proposal to the shareholders regarding appropriation of the profit realised in 2022 recommends paying no 2023 dividend on ordinary shares (approved by the Supervisory Board on 15 March 2023).

[28] Related parties

The shares in Vitens are held by shareholders in the public sector (provincial authorities and municipalities). Vitens has holdings in associate companies and joint ventures, where it either has significant influence but not a majority holding, or has joint control of operations and financial policy. Transactions with these parties are performed on an *arm's length* basis.

VEI B.V.

In 2022, the two shareholders, i.e. Vitens (50%) and Evides N.V. (50%), jointly paid in an amount of €4.4 million (2021: €4.4 million) as a contribution to VEI B.V.'s activities in developing countries. In addition, Vitens invoiced an amount of €2.3 million in 2022 (2021: €1.6 million). This relates to the hours worked by the Vitens employees who participated in the projects set up by VEI B.V. and costs ensuing from *service level agreements*.

Facturatie B.V.

Each year, Facturatie B.V. charges the depreciation costs to the shareholders, which are Vitens (50%) and Evides N.V. (50%). The depreciation costs for Vitens in 2022 amounted to €0.7 million (2021: €0.5 million). At the end of 2022, an amount of €0.1 million (2021: €0.1 million) was still recognised on Vitens' balance sheet as chargeable depreciation costs. In addition, a loan for €8.4 million was issued to Facturatie B.V. in 2022.

A list of the other related parties has been included below.

Related party	Registered office	Participating interest (%)
AquaMinerals B.V.	Rijswijk	22.8
KWH Water B.V.	Nieuwegein	26.4
SubMerge B.V.	Rotterdam	33.3

At the end of the financial year, the receivables and payables in respect of related parties amounted to:

In millions of euros	2022	2021
Receivables due from related parties	14.4	13.3
Payables owed to related parties	2.5	0.3

A total of €23.4 million of receivables from related parties were invoiced over the 2022 financial year (2021: €23.7 million), of which €14.4 million remained outstanding at the end of the financial year (2021: €13.3 million). With respect to payables to related parties, invoices for a total of €29.0 million were received during the financial year, of which €2.5 million was still outstanding at year-end 2022 (2021: €0.3 million).

[29] Water balance sheet

In millions of m3	2022	2021
Total water requiring processing	375.8	378.1
Production losses	-8.0	-9.1
Total service water production	367.8	369.0
Service water purchases	4.4	5.2
Production and purchase,	372.2	374.2
Sales of service water outside supply area	-	-
Delivered in supply area	372.2	374.2
Distribution losses and measurement variances	-24.6	-24.3
Deliveries to customers	347.6	349.9
Not invoiced (NI) %	6.6%	6.5%

Vitens' reported drinking water revenue at the end of the financial year is largely made up of estimates of water consumption. The drinking water output of all the production facilities is recorded monthly and is therefore known with certainty at the end of the financial year. In relation to the period during the financial year for which customers have not yet received a final account, an estimate is made based on historical meter readings in relation to the current drinking water output. We use a revenue simulation for this, based on the customer data in SAP IS-U. At the end of the financial year, 55 to 60% of the water consumption is estimated. The NI is an important component of the revenue forecasting model. The NI is the difference between the drinking water output and the water consumption that has been settled with our customers. As a result, the actual NI is not known until the end of the next financial year, when more than 99.5% of the water consumed has been invoiced and settled.

The actual NI at the end of the next financial year always differs slightly from the NI reported at the end of the year under review. This is an inevitable effect of the high level of estimated water consumption, 55% to 60%. The difference is relatively small however. The average difference in recent financial years was only +0.25%. Revising the NI upward results in a downward revision of revenue. The actual NI for 2021 was 6.5% (after invoicing 100% of the deliveries to customers). The total estimated water consumption and standing charge at the end of 2021 that would be invoiced in 2022 exceeded the actual invoiced amount by 0.4%. The projected NI percentage for 2022 is 6.6%.

Result after processing balance sheet items in respect of consumption and the effect of NI	2022	2021	2020	2019	2018
Result after processing balance sheet items in respect of the previous year's consumption (in millions of euros)	-1.3	-1.6	-0.3	-0.5	-1.1
Actual NI in financial statements (after > 99.5% invoicing)	-	6.5%	6.6%	6.2%	6.5%
Expected/Reported NI in the financial statements (after approx. > 45% invoicing)	6.6%	6.1%	6.4%	5.9%	6.3%

[30] Financial risk management

Management of capital

The financial policy, which was adopted by the Meeting of Shareholders in November 2022, does justice to laws and regulations (compliance), serves the best interests of our customers and shareholders and aims to set challenging but realistic targets for Vitens. Continuity is a primary focus in our financial policy. The continuity objective is formulated as follows: the solvency ratio is defined as a shareholders' equity of at least 35% of the balance sheet total. This primary objective is focal to managing the financial risks. At the end of 2022, the solvency was 31.0% (2021: 30.2%).

Vitens states in its Treasury Statute that the interest rate exposure risk may not exceed 25% of the total loan capital. The interest rate exposure is the sum of the interest rate resets (including interest rate derivatives) and the requirement for new loans (loan renewal) in any year.

Vitens has agreed credit arrangements with various lenders. These credit arrangements describe the conditions (financial ratios) set by the lenders, which Vitens must satisfy.

In October 2021, the WACC for 2022, 2023 and 2024 was set at 2.95%. The maximum permissible solvency for these years remains at 70%. The WACC was set at 2.75% for 2020 and 2021.

Vitens failed to achieve one of the ratios in the bank covenants: the 'debt ratio'. This means that Vitens applied for and received a waiver from two lenders for 2022. The other ratios were met by Vitens. Therefore, the impact of the foregoing on Vitens is nil.

The WACC achieved by Vitens in 2022 has provisionally been assessed at 1.83%. The definitive WACC will be presented in the Operating Report that will be submitted to the Ministry of Infrastructure & Water Management before or on 1 October 2023. The WACC achieved is lower than the standard value set at 2.95%.

Financial ratios	Streefwaarden ¹	2022	2021	2020	2019	2018
Solvency (shareholders' equity/total capital)	> 35%	31.0	30.2	29.4	29.2	30.2
Solvency (guaranteed capital/total capital)	> 35%	31.0	30.2	30.0	30.6	32.3
Leverage ratio (OCF/Interest-bearing debt)	> 7%	11.7	12.2	11.9	13.9	13.1
Interest Coverage ratio (Ebit/(interest charges and interest income + dividend paid out in current financial year))	> 1.3	1.30	1.76	1.84	1.17	0.87
Debt ratio (interest-bearing liabilities (excluding subordinated loans)/Ebitda)	< 7.5	7.8	7.1	6.4	6.8	6.6
Weighted Average Cost of Capital (WACC) 2	< 2.95%	1.83%	2.41%	2.93%	3.3%	3.3%

1. The target values reflect conditions set in Vitens' financial policy.

2. The WACC is set at 2.95% for the years 2022 to 2024 inclusive (for 2021 and 2020: 2.75%).

Calculation method for financial ratios and explanation of abbreviations

- **Solvency (shareholders' equity):** shareholders' equity x 100% divided by the balance sheet total;
- **Solvency (guaranteed capital):** (shareholders' equity + subordinated loans) x 100% divided by the balance sheet total;
- **Leverage:** net cash flow from operations divided by interest-bearing loans (including the subordinated loans);
- **Ebit:** operating result plus result from joint ventures and associate companies;
- **Ebitda:** ebit plus depreciation and impairment;
- **WACC:** operating result from drinking water activities plus any rate compensation divided by the average balance sheet total for drinking water activities.

Financial risks are controlled within Vitens by the Treasury Committee, which reports to the Executive Board. The primary objectives of the Treasury policy include guaranteeing permanent access to the capital market, controlling financial risks, achieving the lowest possible level of cost and guaranteeing adequate liquidity.

Vitens is exposed to the following financial risks: market risk (including price risk, currency risk and interest rate risk), credit risk and liquidity risk.

Market risk

(i) Price risk

Price risk is understood to be the risk of changes in value as a result of changes in market prices.

Fair value of financial assets and liabilities In millions of euros	Carrying value		Fair value	
	2022	2021	2022	2021
Assets				
Trade debtors and other receivables	50.8	51.3	50.8	51.3
Long-term financial assets	8.5	0.2	8.5	0.2
Liabilities				
Subordinated loans	-	-	-	-
Long-term loans	1,064.1	995.4	931.0	1,090.3
Trade creditors and other payables	97.9	85.5	97.4	85.5
Invoices still to be received	12.8	11.2	12.8	11.2
Interest-bearing liabilities	23.3	41.3	23.3	41.3
Short-term loans	25.0	-	25.0	-
Other current financial liabilities	58.2	59.8	58.2	59.8

The above table shows the fair values of the financial assets and liabilities. The fair value figures for the loans are level-2 valuations. The derivatives are not reported here as these are recognised at fair value in the balance sheet.

The fair value of the financial assets and liabilities has been determined as follows:

1. Trade debtors, other receivables and amounts invoiced in advance: in view of the short duration of these receivables, the fair value is the same as the carrying amount;
2. Long term financial assets: this item relates to a loan issued for the purpose of funding the vehicle fleet and mortgage loans to (former) employees. The fair values have been determined by converting the future cash flows to the discounted value;
3. Subordinated and long-term loans: the fair values for these loans have been determined by converting the future cash flows to the discounted value using the yield curve that applies in the case of Vitens as at 31 December.
4. Trade creditors and other payables, invoices still to be received, interest-bearing liabilities and other current financial liabilities: the fair value of these items is taken as the carrying amount in view of the short duration.
5. Interest-bearing liabilities: the fair value of the interest-bearing liabilities is identical to the carrying amount.

(ii) Exchange rate risk

This is the risk that the value of a financial instrument will change as a result of exchange rate fluctuations. VEI B.V. is a joint venture of Vitens and Evides N.V. and implements projects that aim to improve the water supply in developing countries. VEI B.V. uses the euro as its functional currency. Possible exchange rate fluctuations are calculated for each transaction and credited/debited to the profit and loss statement. Vitens itself has no exposure to currency risk in its activities because all trading activities take place in the Netherlands.

(iii) Interest rate risk

During the course of its normal trading operations, Vitens uses derivatives (*interest rate swaps*) to limit interest-rate risk exposure. The objective of this form of control is to limit the effect that changes in interest rates have on the results. Derivatives are used to manage the loan portfolio based on the desired risk profile. These instruments are not used for speculative or trading purposes. Vitens has stated in its Treasury Statute that no more than 25% of the total loan capital (excluding subordinated loans) may be subject to interest rate risk. At the end of 2022, the interest rate risk calculated in this manner amounted to 23.9% (2021: 21.7%). The interest rate risk is only subject to interest rate fluctuations in relation to a small part of the loan portfolio and the impact on interest charges is limited.

A possible increase/decrease in the short-term interest rate (3-month Euribor) of one hundred basis points (1%) means an increase/decrease in borrowing costs for Vitens of €1.6 million per annum (2021: €1.5 million). The increase/decrease relates to the rollover loans, which are not covered by the derivatives, and the current account balance.

A possible decrease of one hundred basis points (1%) in the yield curve relative to 31 December 2022 has a negative effect of €8.8 million on the value of the derivatives. A possible increase of one hundred basis points (1%) in the yield curve relative to 31 December 2022 has a positive effect of €7.9 million on the value of the derivatives. A negative or positive effect on the value of the derivatives results in changes to the shareholders' equity.

The interest rate derivatives are equal to the term of the linked rollover loans. In respect of a principal sum of €245 million, the term (to 2027) of the interest-rate derivatives is the same as the term of the rollover loans.

The table below shows the expiry date or, if earlier, the contractual review date for the loan portfolio as at 31 December 2022. This shows the extent to which Vitens is exposed to changes in the interest rate percentages for financial liabilities.

Interest-rate risk	Effective interest rate percentage	< 6 months	> 6 < 12 months	1-5 years	> 5 years	Total
In millions of euros						
As at 31 December 2021						
Subordinated loans	1.15%	-	-	-	-	-
Bullet and linear loans	2.41%	0.3	28.7	27.0	582.6	638.6
Rollover loans (linked to interest rate swaps, resulting in fixed-interest loans)	4.31%	-	25.0	200.0	20.0	245.0
Rollover loans	-0.19%	-	2.3	84.5	25.0	111.8
Banks (current account)	one-month Euribor	41.3	-	-	-	41.3
Lease liabilities	0.0-3.0%	2.7	2.4	12.2	0.9	18.2
Total financial liabilities		44.3	58.4	348.7	603.5	1,054.9
As at 31 December 2022						
Subordinated loans	0.00%	-	-	-	-	-
Bullet and linear loans	2.16%	0.3	1.7	69.8	637.7	709.5
Rollover loans (linked to interest rate swaps, resulting in fixed-interest loans)	4.46%	-	50.0	170.0	25.0	245.0
Rollover loans	0.53%	25.0	2.3	57.3	25.0	109.6
Banks (current account)	one-month Euribor	23.3	-	-	-	23.3
Cash loans	0.52%	25.0	-	-	-	25.0
Lease liabilities	0.0-4.4%	2.9	2.5	11.2	2.7	19.3
Total financial liabilities		76.5	56.5	308.3	690.4	1,131.7

Credit risk

Vitens is exposed to risk in that customers may be unable to pay their bills. At the end of 2021, the debtor balance to which this risk applies amounted to €36.9 million (2021: €39.0 million), see note [6]. In addition, risk is incurred on the balance of financial fixed assets at €8.5 million (2021: €0.2 million).

The remaining current receivables of €15.2 million (2021: €14.3 million) consist of receivables owed by 'hitch-hikers' at €0.2 million (2021: €0.2 million), tax and social insurance contributions at €0.8 million (2021: €1.8 million), expenses paid in advance at €6.8 million (2021: €5.4 million) and revenues still to be received at €8.8 million (2021: €7.1 million). Vitens is not exposed to credit risk in respect of the payables owed by 'hitch-hikers' and tax and social insurance contributions. Vitens has no significant credit risk concentrations.

Liquidity risk

The liquidity risk consists of the risk that Vitens may (temporarily) not have access to financial resources in order to fulfil its obligations. In order to minimise this risk, Vitens regularly assesses the expected and potential cash flows over a time horizon of several years. In addition, a detailed liquidity forecast is drawn up every year in order to identify possible fluctuations in the need for liquid funds in good time and take appropriate action as necessary.

As at 31 December 2022, Vitens has a current account facility of up to €65 million, a cash facility of up to €55 million (concerns two uncommitted facilities) and a long-term credit arrangement for €150 million of which €75 million in loans can still be drawn down. In addition, Vitens has a variable rollover loan of €50 million (committed) of which €20 million can still be drawn down.

The contractually agreed (non-discounted) payments against financial liabilities are shown in the table below:

Liquidity risk	< 1 year	> 1 < 5 years	> 5 years
In millions of euros			
Calculation of long-term financial liabilities including interest			
Subordinated loans	-	-	-
Bullet and linear loans	18.4	134.1	728.6
Rollover loans	85.4	243.4	64.0
Derivatives	4.5	9.1	12.5
Lease liabilities	5.1	10.6	2.7
Other long-term financial liabilities	41.8	38.6	130.6
Total long-term financial liabilities	155.2	435.8	938.4
Current financial liabilities			
Trade creditors and other payables	97.9	-	-
Invoices still to be received	12.8	-	-
Interest-bearing liabilities	23.3	-	-
Short-term loans	25.0	-	-
Other current financial liabilities	58.2	-	-
Total current financial liabilities	217.2	-	-
Total long-term and current financial liabilities	372.4	435.8	938.4

[31] Netting financial assets and financial liabilities

At the end of 2022 and 2021, Vitens did not include any netted financial assets and financial liabilities on the balance sheet. Furthermore, no contingent set-off rights apply that might lead to recognition of financial assets and financial liabilities in netted form.

[32] Events after balance sheet date

After the balance sheet date, no significant events occurred that would affect the 2022 financial statements.

Company financial statements

Company balance sheet as at 31 December

Assets

	In millions of euros		31/12/2022		31/12/2021
	Fixed assets				
	Intangible fixed assets	40.7		40.5	
	Tangible fixed assets	1,968.2		1,866.7	
	Assets with right of use	21.6		23.5	
[33]	Investments in subsidiaries	-		-	
[33]	Investments in associate companies and joint ventures	6.3		5.9	
	Other financial fixed assets	8.5		0.2	
			2,045.3		1,936.8
	Current assets				
[34]	Trade debtors and other receivables		50.8		51.3
	Total assets		2,096.1		1,988.1

Equity and liabilities

	In millions of euros		31/12/2022		31/12/2021
[35]	Shareholders' equity				
	Share capital	5.8		5.8	
	Share premium reserve	147.2		147.2	
	Revaluation reserve for derivatives	-19.5		-60.4	
	Revaluation reserve for IFRS transition	12.5		15.1	
	Other reserves	495.3		473.2	
	Result for the financial year	8.2		19.4	
			649.5		600.3
	Liabilities				
	Provisions				
[36]	Provisions for employee benefits	0.7		1.0	
[37]	Other provisions	1.3		0.5	
			2.0		1.5
	Long-term liabilities				
	Equalisation account - contributions received from third parties	137.2		124.4	
	Interest-bearing liabilities	984.7		939.1	
	Lease liabilities	12.7		15.1	
	Derivatives	7.2		48.5	
			1,141.8		1,127.1
[38]	Current liabilities		302.8		259.2
	Total equity and liabilities		2,096.1		1,988.1

Company profit and loss statement

In millions of euros		2022		2021
Own result (excluding associate companies) after tax	7.8		19.2	
Result from associate companies after tax	0.4		0.2	
Net result		8.2		19.4

Explanatory notes to the company financial statements

Valuation principles for the company financial statements

The company financial statements of Vitens have been drawn up in accordance with the relevant provisions of Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek) with the exception of the accounting principles used for valuation and determining the result as explained below.

The valuation principles that have been applied are largely the same as those used for the consolidated financial statements in accordance with the provisions of Section 362, paragraph 8, Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek), where investments in subsidiaries are recognised at the net capital value of the assets in accordance with the equity method. The company profit and loss statement of Vitens has been drawn up in a simplified form pursuant to Section 402, Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek). Vitens applies the International Financial Reporting Standards (IFRS) as adopted within the European Union as the accounting principles for valuation and result determination. For details of these principles, please refer to the 'Accounting principles and method for determining the result' section for the consolidated financial statements.

The balance sheet items 'company-owned housing' and 'derivatives' are valued at fair value. Pursuant to application of Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek), a revaluation reserve has been formed to allow for the effect on capital of fair value changes. For other explanatory notes, please refer to the consolidated financial statements.

[33] Investments in associate companies

In millions of euros	Investments in subsidiaries	Investments in associate companies and joint ventures	Total
Carrying value as at 1 January 2021	-	5.7	5.7
Changes during 2021			
Share in the result	-	0.2	0.2
Result for the financial year	-	-	0.0
Total changes	-	0.2	0.2
Carrying value as at 31 December 2021	-	5.9	5.9
Changes during 2022			
Share in the result	-	0.4	0.4
Other changes	-	-	-
Total changes	-	0.4	0.4
Carrying value as at 31 December 2022	-	6.3	6.3

Holdings in subsidiaries are valued at net capital value, which is determined based on IFRS principles as used in the consolidated financial statements.

[34] Trade debtors and other receivables

In millions of euros		31/12/2022	31/12/2021
Trade debtors	36.9	39.0	
Impairment loss on debtors	-1.6	-2.2	
Hitch-hikers	0.2	0.2	
Net trade receivables		35.5	37.0
Taxes and social security premiums		0.8	1.8
Amounts receivable from group companies		-	-
Accrued income and prepaid expenses		14.4	12.5
Total		50.7	51.3

[35] Shareholders' equity

In millions of euros	2022	2021
Balance as at 1 January	600.3	559.2
Changes		
Result for the financial year	8.2	19.4
Change in revaluation reserve for derivatives	41.0	21.9
Change in revaluation reserve for the IFRS transition	-2.6	-2.5
Change in general reserve	2.5	2.4
Dividend payment on ordinary shares	-	-
Total changes	49.2	41.2
Balance as at 31 December	649.5	600.3

The revaluation reserve for derivatives relates to the negative derivative market value of €7.2 million (2021: €48.5 million), see note [11].

The revaluation reserve for the IFRS transition was created for the value increase in 2006 in relation to the transmission pipes and main pipes, and raw water and site-based pipe systems at production locations. In the case of the transmission pipes and main pipes, a weighted average age (or investment year) of 1977 applies, meaning that this revaluation will reduce to zero during the coming eight years. In the case of the raw water and site-based pipe systems at production locations, a weighted average age (or investment year) of 1996 applies, meaning that this revaluation will reduce to 0 during the coming 15 years.

For further explanatory notes on shareholders' equity, please refer to the consolidated financial statements, see note [7].

[36] Provisions for employee benefits

For a summary of the changes in the employee benefits provisions, please refer to the consolidated financial statements. See note [12].

[37] Other provisions

For a summary of the changes in the other provisions, please refer to the consolidated financial statements. See note [13].

[38] Current liabilities

In millions of euros	31/12/2022	31/12/2021
Trade creditors and other payables	79.6	67.4
Advance relating to water debtors	18.3	18.1
Current component of derivatives	0.9	-
Repayment obligations in relation to long-term liabilities	79.4	56.3
Repayment obligations in respect of lease liabilities	5.3	5.1
Tax liabilities	15.3	15.2
Interest-bearing liabilities	23.3	41.3
Short-term loans	25.0	-
Current employee benefits	33.1	35.2
Invoices still to be received	12.8	11.2
Accrued expenses and deferred income	9.8	9.3
Total	302.8	259.2

[39] Remuneration of the Executive Board and Supervisory Board

Pursuant to article 1.3, first paragraph, part d of the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet normering bezoldiging topfunctionarissen publieke en semipublieke sector/WNT) of 15 November 2012, Vitens has a duty to comply with the provisions of the Act when drawing up the report included below.

Correction of previous reporting errors

In the WNT compliance report as included in the 2021 annual report of Vitens N.V., a number of mandatory WNT compliance components are not presented sufficiently clearly. Section 5d. of the WNT Implementation Regulations, i.e. 'correction of errors found after adoption of the financial reporting document', is applicable here.

The 2021 annual report fails to provide sufficient clarity regarding the following aspects relating to senior officials (the Executive Board):

- Whether 'employed by the company' is answered with "yes";
- Whether the standard used is the institutional standard or the individual standard;
- Any amounts unduly paid;
- The amount of any excess relative to the standard;
- The reason why an excess is or is not allowed.

The 2021 annual report fails to provide sufficient clarity regarding the following aspects relating to senior officials in a supervisory role (the Supervisory Board):

- Whether an individual maximum remuneration applies or the maximum remuneration for the institution;
- Any amounts unduly paid;
- The amount of any excess relative to the standard;
- The reason why an excess is or is not allowed.

We emphasise that the correction of errors presented here does not affect any undue payments and that the remuneration amounts stated in the 2021 annual report were not incorrect in terms of their absolute value.

Remuneration of the Executive Board

In this Annual Report 2022, we have used the WNT compliance reporting format drawn up by the Ministry of the Interior and Kingdom Relations. Application of this reporting format ensures that disclosures not clearly presented in the 2021 compliance report are now included in the comparative figures in the 2022 WNT report.

2022 details		
amounts x € 1	drs. J.J. Hannema	drs. M. Bonhof
Position	Managing Director and Chair of the Executive Board	Executive Director
Commencement and end of tenure in 2022	01/01 – 31/12	01/01 – 31/12
Employment scope (part-time factor relative to FTE)	1	0.895
Employed by the company?	yes	yes
Remuneration		
Remuneration plus taxable expense allowances	191,524	168,926
Deferred remuneration	24,476	24,483
Subtotal	216,000	193,409
Individually applicable remuneration cap	216,000	193,414
-/- Amount unduly paid and not yet recovered	N/A	N/A
Remuneration	€216,000	€193,414
The amount of the excess, and the reason why an excess is or is not allowed	N/A	N/A
Explanation of the claim relating to any unduly paid amounts	N/A	N/A
2021 details		
amounts x € 1	drs. J.J. Hannema	drs. M. Bonhof
Position	Managing Director and Chair of the Executive Board	Executive Director
Commencement and end of tenure in 2021	01/01–31/12	01/01–31/12
Employment scope (part-time factor relative to FTE)	1	1
Employed by the company?	Yes	Yes
Remuneration		
Remuneration plus taxable expense allowances	184,855	184,847
Deferred remuneration	24,145	24,153
Subtotal	209,000	209,000
Individually applicable remuneration cap	209,000	209,000
Remuneration	209,000	209,000

1. *Managing Director and Chair of the Executive Board: 365 days in 2022, full-time employment contract (2021: 365 days; full-time employment contract).*
2. *Executive Director 326 days in 2022, part-time employment contract (2021: 365 days; full-time employment contract).*

Remuneration of the Supervisory Board

The remuneration of the Supervisory Board Members consists of attendance fees. The table below shows the remuneration of senior officials and former senior officials – without a contract of employment (in euros).

2022 details amounts x € 1	H.C.P. Nuts	M.R. van Lieshout	K.J. Rameau	H. Setz	G.M. van Dijk	P.A.N. ten Kroode
Position	Chair	Member	Member	Member	Member	Member
Commencement and end of tenure in 2022	01/01– 31/12	01/01– 31/12	01/01- 22/04	01/01– 31/12	01/01– 31/12	23/04-31/12
Remuneration						
Remuneration	32,400	21,600	6,628	21,600	21,600	14,972
Individually applicable remuneration cap	32,400	21,600	6,628	21,600	21,600	14,972
-/- Amount unduly paid and not yet recovered	N/A	N/A	N/A	N/A	N/A	N/A
Remuneration	32,400	21,600	6,628	21,600	21,600	14,972
The amount of the excess, and the reason why an excess is or is not allowed	N/A	N/A	N/A	N/A	N/A	N/A
Explanation of the claim relating to any unduly paid amounts	N/A	N/A	N/A	N/A	N/A	N/A
2021 details amounts x € 1	H.C.P. Nuts	M.R. van Lieshout	K.J. Rameau	H. Setz	G.M. van Dijk	P.A.N. ten Kroode
Position	Member/Chair	Member	Member	Member	Member	Chair
Commencement and end of tenure in 2021	01/01– 31/12	01/01–31/12	01/01– 31/12	01/01– 31/12	01/01– 31/12	01/01–25/5
Remuneration						
Remuneration	27,199	20,900	20,900	20,900	20,900	12,454
Individually applicable remuneration cap	27,199	20,900	20,900	20,900	20,900	12,454

In the table above, the maximum individual remuneration cap takes into account the number of days in office as Chair and/or as a Supervisory Board member.

[40] Audit fees

In accordance with Section 382(a) of Book 2 of the Dutch Civil Code (Burgerlijk Wetboek), this note explains the auditor's fees in relation to the services provided by the external accountancy organisation in 2022. These comprise audit fees for the financial statements amounting to €320 thousand (2021: €291 thousand) and for other review services at €8 thousand (2021: €8 thousand).

Zwolle, 15 March 2023

Supervisory Board

drs. H.C.P. Noten (Chair)

ir. K.J. Rameau MBA (Supervisory Director)

drs. M.R. van Lieshout (Supervisory Director)

drs. H. Setz MBA (Supervisory Director)

prof. dr. ir. G.M. van Dijk (Supervisory Director)

ir. drs. P.A.N. ten Kroode (Supervisory Director)

Executive Board

drs. J.J. Hannema

Other information

Profit appropriation

The articles of incorporation state the following with regard to profit appropriation:

34.1

The dividend policy is adopted, and may be changed, by a resolution of the Executive Board that has been approved by the Supervisory Board and adopted by the General Meeting of Shareholders. In compliance with the duly adopted dividend policy, the Executive Board determines each year how much profit will be allocated to reserves and how much profit will be paid out as dividend, subject to approval of the Supervisory Board.

34.2

Payment of distributable profit occurs after the adoption of the financial statements in which it is determined that this payment is admissible.

34.3

The General Meeting of Shareholders may, in response to a proposal of the Executive Board that has been approved by the Supervisory Board, decide to pay out interim dividend and make payments from the company's reserves.

34.4

Payments on shares may only be made up to the amount of distributable equity capital as a maximum and, if an interim payment is involved, subject to demonstration that this requirement has been satisfied in the form of an interim statement of assets and liabilities, as referred to in Section 105, paragraph 4, of Book 2 of the Dutch Civil Code (Burgerlijk Wetboek). The company shall file the statement of assets and liabilities at the office of the Commercial Register within a period of eight days from the date on which the decision to make payment is announced.

34.5

A shareholder's entitlement to a payment on shares lapses after a period of five years. The Executive Board proposes the following appropriation of the result after tax for adoption by the shareholders (approved by the Supervisory Board on 15 March): no payment of dividend on ordinary shares and addition of the result of €8.2 million to the other reserves. This complies with the dividend policy.

Independent auditor's report

Statement relating to the 2022 financial statements

Our opinion

In our opinion, the annual financial statements of Vitens N.V. ('the company') present a true and accurate picture of the size and composition of the assets and liabilities of the company and the group (the company together with its subsidiaries) as at 31 December 2022 and of the result and the cash flows during 2022, in accordance with the International Financial Reporting Standards, as adopted within the European Union (EU-IFRS), and Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek) and the provisions of and pursuant to the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens/WNT).

The scope of our audit

We have audited the 2022 financial statements of Vitens N.V. in Zwolle as presented in this annual report. The financial statements include the consolidated financial statements of the group and the company financial statements.

The financial statements comprise:

- the consolidated and company balance sheet as at 31 December 2022;
- the following statements relating to 2022: the consolidated and company profit and loss statement, the consolidated summary of the total result, the consolidated statement of changes to shareholders' equity and the consolidated cash flow statement; plus
- the explanatory notes and a summary of the main principles used for financial reporting and other explanations.

The financial reporting system used to draw up the financial statements is EU-IFRS and the relevant provisions of Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek) and the provisions of and pursuant to the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens/WNT).

The basis for our opinion

We have performed our audit in accordance with Dutch legislation, which includes the Dutch audit standards and the 2022 WNT audit protocol in relation to standardisation of the remuneration of senior officials in the public and semi-public sector. Our responsibilities pursuant to the above are described in the paragraph entitled 'Our responsibilities in respect of the audit of the financial statements'.

We feel that the assurance engagement information we have gathered is sufficient and suitable as the basis for our conclusion.

Independence

We are impartial and not dependent on Vitens N.V., in accordance with the Accounting Organisations (Supervision) Act (Wet toezicht accountantsorganisaties/Wta), the Regulation on the independence of auditors in respect of assurance engagements (Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten/ViO) and other relevant requirements regarding independence in the Netherlands. In addition, we have satisfied the Regulation on conduct and professional rules for auditors (Verordening gedrags- en beroepsregels accountants/VGBA).

Our audit approach

We have determined our audit procedures in respect of the key points, fraud and going-concern status, and the ensuing aspects, in the context of the audit of the financial statements in their entirety and in the context of forming our opinion on those financial statements. The information supporting our opinion, such as our findings and observations on individual key points, the audit approach to fraud risks and the audit approach to going-concern status, should be viewed in that context and not as separate assessments or conclusions.

Summary and context

Vitens N.V. is a drinking water utility whose main activities comprise: pumping up, purifying and treating groundwater and subsequent distribution of drinking water. The group consists of different entities and we have therefore given appropriate consideration to the scope of and approach to the group audit, as explained in the section entitled 'The scope of our group audit'. We have paid particular attention to the areas that are related to the group's specific operating activities.

As part of designing our audit approach, we determined materiality and identified and estimated the risk of material misstatement in the financial statements. We paid particular attention to areas where the Executive Board has made important subjective assessments, for example significant estimates that are linked to assumptions about future events which are inherently uncertain, such as the estimates relating to the value of the tangible fixed assets, derivatives, debtors, provisions and recognition of the net revenue based on the meter readings and annual settlements, which are respectively made and drawn up at various times during the year. We specifically considered the assumptions associated with the physical and transition risks due to climate change. Vitens N.V. provides details of the estimated amounts and main areas associated with estimation uncertainty in 'Suppositions, estimates and assumptions in the financial statements', starting on page 153 of the annual report. Due to the significant estimation uncertainty associated with recognition of the drinking water revenues, we have highlighted this as a key point as explained in greater detail in the section entitled 'The key points of our audit'.

Vitens N.V. has assessed the potential impact that climate change and its 'net zero commitment' plans are expected to have on its financial position. The risks arising from climate change are part of Vitens N.V.'s risk management process and they have been concretised by Vitens N.V. into specific risks, in the light of Vitens N.V.'s business activities. Further explanations are provided in various sections in the management report: 'Who we are and what we do', 'Governance', 'Statements and reports' and 'Other information'. We discussed the climate-related risks with the Executive Board and evaluated the potential impact on the financial position, including the underlying assumptions and estimates. The expected effects of climate change have no impact on the key points in our audit.

Vitens N.V.'s ability to ensure continuity of its business activities is largely dependent on the IT infrastructure. We have assessed the reliability and continuity of the automated data processing procedures insofar as these have an impact on our audit activities for the 2022 financial statements. We involved internal IT specialists in this task and used tools such as data analyses in relation to transactions.

In addition to the key point referred to previously, our audit activities also included close scrutiny of the operating result in relation to the maximum WACC of 2.95% specified in the Drinking Water Act (the maximum weighted average cost of capital for drinking water utilities) in financial year 2022. In the event that the maximum WACC is exceeded, Vitens N.V. is required under the Drinking Water Act to ensure that the excess is paid back to consumers in the rates set for the calendar year following determination of the definitive WACC. Based on the provisional calculation, the WACC for 2022 is 1.83%. The amount of the definitive WACC and any future contingent liability will be determined based on the 2022 Operating Report which will be submitted to the Ministry of Infrastructure & Water Management on or before 1 October 2023. The explanation relating to the WACC is presented in notes 16 and 30 to the financial statements.

We have ensured that the audit team possessed adequate specialised knowledge and expertise for auditing a drinking water utility. We also included specialists in the fields of IT and financial instruments in our team. All the work carried out in the group entities was performed by the same audit team.

Our approach mainly concentrated on the following areas:

Materiality

Materiality: €5,595,000.

Scope of the audit

The audit was set up from a consolidated perspective and performed partly virtually and partly on site at Vitens N.V.

Key points

Recognition of drinking water revenues.

Materiality

The scope of our audit is influenced by the application of materiality. The concept of 'materiality' is explained in the section entitled 'Our responsibilities in respect of the audit of the financial statements'.

Based on our professional expertise, we determine quantitative limits for materiality, including the materiality in relation to the financial statements as a whole, as detailed in the table below. These limits, in combination with the qualitative considerations, help us to determine the nature, timing and scope of our audit activities for the individual items and explanations in the financial statements and evaluate the effect of any identified misstatements, both individually and collectively, on the financial statements as a whole, and on our opinion.

Materiality for the group	€5,595,000 (2021: €5,100,000).
How materiality is determined	We determine the materiality based on our professional judgement. We consider 1.5% of the total costs to be a realistic basis for our assessment.
The considerations relating to the chosen benchmark	We used the total costs as the primary, generally accepted, benchmark, in line with our analysis of the information needs shared by all financial statement users. On this basis, we are of the opinion that the total costs are an important indicator of the company's financial performance.

We also take into account misstatements and/or possible misstatements, which are, in our opinion, materially important based on qualitative reasons.

In accordance with our agreement with the Supervisory Board, we report any misstatements detected by our audit that amount to more than €279,750 (2021: €259,000), and smaller misstatements that we feel to be relevant for qualitative reasons.

The scope of our group audit

Vitens N.V. is the parent company of a group of entities. The financial information for this group is included in the consolidated financial statements of Vitens N.V.

It is important to note here that the group carries out its activities exclusively in the Netherlands and that the operating processes and internal controls within the group are set up and applied centrally.

We determined the scope of our audit to ensure the performance of sufficient audit procedures to enable us to express an opinion on the financial statements as a whole. In doing so, we considered, among other things, the management structure of the group, the nature of the activities of the group entities, the business processes and internal controls and the industry in which the company operates. Based on this, we determined the nature and extent of the work at the group entity level that needed to be performed by the group team and by the group entity auditors.

Our audit is performed by one central team and is set up based on a consolidated perspective, meaning that we see the group as a single entity in administrative terms. In that light, we have included all the transaction flows and financial positions that are materially important for the consolidated annual accounts in the scope of our audit. We have audited the consolidation of the group and the explanatory notes in the financial statements.

By performing the above-mentioned activities, we have generated enough suitable audit information relating to the financial information for the group in order to express an opinion about the consolidated financial statements.

Audit approach to fraud risks

We identified the risks and estimated the likelihood of materially important misstatements in the financial statements as a result of fraud. During our audit, we obtained an understanding of Vitens N.V. and the environment in which it operates, the components of the internal control system, including the risk assessment process and the manner in which the Executive Board responds to fraud risks and monitors the internal control system, as well as the manner in which the Supervisory Board exercises supervision and the results thereof. We refer specifically to pages 58 and 67 of the annual report in this respect: the Executive Board presents its fraud risk assessment here, including risk management, in the 'Risk Management' section under 'Governance'.

With respect to the risk of material misstatement due to fraud, we evaluated the design and implementation of internal controls, including the Executive Board's fraud risk assessment, the code of conduct, the whistleblower policy and incident registration, and, to the extent we considered necessary for our audit, the operation of these internal controls.

We requested information from the members of the Executive Board, management (including the audit & advisory and legal department, the compliance department, human resources and the first-line managers) and the Supervisory Board regarding instances of actual, alleged or suspected fraud of which they were aware. This did not result in any reports of actual, alleged or suspected fraud that could lead to a material misstatement.

As part of our process for identifying risks of material misstatement in the financial statements resulting from fraud, we considered fraud risk factors related to fraudulent financial reporting, misappropriation of assets and bribery and corruption. We evaluated whether these factors were indicative of the existence of the risk of material misstatement due to fraud. The fraud risks we identified and the tasks performed specifically in this respect are as follows:

Identified fraud risks	Our audit activities and observations
<p>The risk of the Executive Board breaching internal controls</p> <p><i>In all our audits, we assess the risk of breaches of the internal controls by the Executive Board, including risks of possible misstatement due to fraud based on an analysis of possible vested interests of the Executive Board. In that context, we paid particular attention to whether, from the perspective of the regulations to which the water utility is subject, there are any specific trends with respect to the recognition of revenue, expenses and/or investments.</i></p>	<p><i>We evaluated, to the extent relevant to our audit, the design of internal control measures to mitigate the risk of a breach of the internal controls, the existence and, if necessary, the operation of the measures in the processes for generating and processing journal entries and making estimates. In this context, we paid specific attention to access security in the IT systems and the possibility that this could break functional boundaries.</i></p> <p><i>We selected journal entries based on risk criteria and performed specific audit procedures on them.</i></p> <p><i>In determining the risk criteria, we took into account the specific trends related to the WACC.</i></p> <p><i>We also performed specific audit procedures on significant estimates made by the Executive Board, particularly the estimates for determining the drinking water revenues. We paid particular attention to the inherent risk of Executive Board bias in estimates.</i></p> <p><i>Our work did not reveal any material misstatements in the information provided by the Executive Board in the financial statements and the management report compared to the financial statements.</i></p> <p><i>Our work did not result in any specific indications of fraud or suspicions of fraud with respect to breaches of the internal controls by the Executive Board.</i></p>

The risk of fraudulent financial reporting due to overstatement of the revenue

As part of our risk assessment and based on the potential for fraud risks in revenue recognition, we evaluated which types of revenue or assertions give rise to a risk of a material misstatement resulting from fraud.

For Vitens N.V., the WACC is an important baseline each year. Due to the lower WACC achievement over 2022, the Executive Board could potentially benefit from deliberate recognition of a higher revenue to meet its targets.

We evaluated, to the extent relevant to our audit, the design and operation of the internal controls for revenue recognition and in the processes for generating and processing journal entries related to revenue.

We conclude that, in the context of our audit, we were able to rely on the internal control measures relevant to this risk.

For a detailed description of the work we performed on revenue recognition, we would also refer readers to the section entitled 'The key points of our audit'.

We performed specific tasks including:

- *data-oriented work to establish the existence of revenue transactions and the application of appropriate pricing;*
- *determining the existence of debtors at year-end, including tracking payments in 2023 based on partial sampling;*
- *testing specific journal entries related to revenue processing.*

Our work did not result in any specific indications of fraud or suspicions of fraud with respect to breaches of the internal controls by the Executive Board.

The risk associated with improper appropriation of funds from the organisation due to deficiencies in the outgoing payments process

The migration from SAP R/3 to SAP S/4 has not yet been fully completed, meaning that Vitens N.V. used both applications for processing purchases and payments during the financial year.

We conclude that, in the context of our audit, we cannot rely on the controls that Vitens N.V. has established for SAP R/3, in particular due to IT deficiencies in this application.

As a result of the deficiencies found in the setup of SAP R/3, we identified this as a risk in our audit.

We have evaluated, to the extent relevant to our audit, the design, existence and, where applicable, the operation of the internal control measures associated with managing payments in the various systems of Vitens N.V. In the case of SAP S/4, we conclude that we can rely on the internal control measures relevant to this risk.

As we cannot rely on this in respect of SAP R/3, we performed specific work on procurement transactions and payments recorded and processed through SAP R/3.

Our work included:

- *data-oriented work to establish the existence of the payment transactions processed via this application;*
- *data-oriented work to validate that outgoing payments were made to the bank account number stated on underlying records (such as purchase invoices).*

Our work did not result in any specific indications of fraud or suspicions of fraud.

We built an element of unpredictability into our audit. We took note of lawyers' letters and relevant correspondence with supervisory authorities and remained alert to indications of possible fraud during the audit. We also reviewed the results of other audit procedures and considered whether any findings were indicative of fraud or non-compliance with laws and regulations. In such cases, we re-evaluated our assessment of the risk of fraud and its impact on our audit procedures.

Audit approach to assess going-concern status

The Executive Board has prepared the financial statements based on the assumption that operations will continue for at least 12 months from the date on which the financial statements were prepared. Our work to evaluate the board's going-concern assessment includes:

- Considering whether the Executive Boards' going-concern assessment contains all relevant information known to us as a result of our audit and questioning the Executive Board with regard to the main assumptions and points of departure.
- Investigating whether the Executive Board has identified events or circumstances that may cast reasonable doubt on the company's ability to continue as a going concern (hereinafter referred to as going-concern risks).
- Analysing whether the current funding and required funding to keep the business operating as a going concern have been secured, including compliance with relevant covenants, with particular attention for the *waivers* obtained in the financial year following the failure to meet the set ratio standards. The Executive Board has specifically explained this on page 68 of the annual report.
- Evaluating the budgeted operating results and related cash flows for the period of at least 12 months from the date of preparation of the financial statements, taking into account sector developments such as the WACC regulation and our knowledge gained from the audit.
- Quizzing the Executive Board on the existence of possible known going-concern risks beyond the period for which the Executive Board carried out its going-concern assessment.

Our audit procedures did not reveal any information that conflicts with the Executive Board's suppositions and assumptions about the going-concern expectation it presents in the annual report.

The key points of our audit

In the key points of our audit, we describe the items which, in our professional opinion, were the most important during the audit of the financial statements. We have informed the Supervisory Board of the key points, however they do not constitute a full report of all risks and points which we identified and discussed during our audit. We have described the key points in this paragraph and included a summary of the activities we performed in relation to these points.

Key points	Our audit activities and observations
<p>Recognition of drinking water revenues. <i>The explanations relating to revenue recognition are included in the section entitled 'Suppositions, estimates and assumptions in the financial statements' on page 153, note 16, 17 and 29 in the financial statements.</i></p>	<p><i>We have performed audit procedures in respect of the reported drinking water revenues, with specific attention to the total service water output, the accuracy and completeness of the active connections, the accuracy of the rates applied, the NI (Not Invoiced %), the quality of the revenue estimate and the invoicing process.</i></p>

The net revenue from drinking water deliveries amounted to €366.8 million as at 31 December 2022, and therefore constitutes a significant item in the consolidated profit and loss statement (90% of total operating income).

The revenues from drinking water are recognised based on the total amount of water delivered to third parties (in m³). Due to the large number of customers (5.9 million), the meters are read (particularly in the case of consumers and small business customers) at various times spread over the year and (final) settlement therefore also takes place at various times spread over the year.

The actual invoiced amount of water in m³ for all active connections is allocated to the calendar years. In 2022, 44.4% of the deliveries to customers was invoiced in the form of a final settlement. In relation to the period during the financial year for which customers have not yet received a final settlement, an estimate (revenue simulation) is made for the period from the last final settlement to the date of the balance sheet, based on historical meter readings in relation to current service water output. This means that, as at 31 December 2022, €205.0 million (55.6%) of the deliveries to customers is based on simulated turnover.

In view of this estimate and the inherent degree of estimation uncertainty associated with it, combined with the significance of the amount of the estimated drinking water revenues relative to the total drinking water revenues for 2022, we see this as a key point in our audit.

We have assessed Vitens N.V.'s internal controls for revenue simulation and invoicing. We checked the completeness of the service water output (number of m3 of water used for the revenue simulation) by reviewing the primary registrations at each production facility in Vitens N.V.'s service area. We assessed reliable registration of the service water output based on inspection reports relating to flow meters and detailed reconciliation with the registration data at the source. This included cross-checking the number of flow meters referenced when specifying the total service water output against the actual number of flow meters on the outfeed pipes at each production facility.

We performed audit activities in relation to the correctness and completeness of the number of active connections in the customer administration and have determined that all active connections have been included in the revenue simulation via a link between the customer administration and the customer data used in the revenue estimate.

We checked the correctness of the rates by comparing them to the rates approved by the shareholders. In addition, we carried out an analysis that involved a cross-check of the total number of connections, the standing charge and water consumption per connection, the rate charged and the revenue recognised.

We benchmarked the NI, as specified in note 29, Water Balance sheet, against the NI information for previous years and the NI information that is available for the entire drinking water sector in the Netherlands. In addition, we assessed Vitens N.V.'s analysis of the impact of NI fluctuations.

Based on the procedures performed by us and the audit evidence obtained, we did not identify any materially important findings.

Finally, we assessed the accuracy and adequacy of the explanatory notes and did not identify any materially important findings in this regard.

No audit activities performed regarding compliance with the anti-overlapping provision of the WNT

In accordance with the 2022 Audit Protocol for the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet normering bezoldiging toefunctionarissen publieke en semipublieke sector/WNT), we did not perform any audit activities with regard to the anti-overlapping provision, as specified in Section 1.6a of the WNT and Section 5, paragraph 1, sub paragraphs 'n' and 'o' of the WNT Implementing Regulation. This means that we neither investigated a possible breach of standards by a senior managing official due to employment as a senior managing official at other institutions subject to the WNT, nor whether the explanation required in this context was correct and complete.

Statement in relation to the other information included in the annual report

The annual report also includes other information. This covers all information in the annual report other than the financial statements and our audit opinion relative to those statements.

Based on the activities detailed below, we are of the opinion that the other information:

- is consistent with the financial statements and does not contain any material misstatements;
- contains all the information required for the Executive Board report and the other details, as stipulated in Title 9, Book 2 of the Dutch Civil Code.

We have read the other information and, based on our knowledge and understanding gained from the audit of the financial statements or otherwise, assessed whether the other information contains any material misstatements.

Through our work in this respect, we have complied with the requirements of Title 9 of Book 2 of the Dutch Civil Code and with Dutch Accounting Standard 720. These activities are not performed to the same level of detail as our audit activities for the financial statements.

The Executive Board is responsible for preparing the other information, including the Executive Board report and the other data in accordance with Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek/BW).

Responsibilities in relation to the financial statements and the audit

Responsibilities of the Executive Board and the Supervisory Board in respect of the financial statements

The Executive Board is responsible for:

- drawing up and accurately presenting the financial statements in accordance with EU-IFRS and Title 9, Book 2 of the Dutch Civil Code (Burgerlijk Wetboek/BW) and the provisions of and pursuant to the WNT; and for
- exercising internal controls to the extent considered necessary by the Executive Board in order to draw up the financial statements in a form free of material misstatements resulting from fraud or errors.

When preparing the annual accounts, the Executive Board must consider whether the company is capable of continuing its activities in the long term. The Executive Board must prepare the financial statements pursuant to the stated reporting systems based on a going-concern assumption, unless the Executive Board intends to liquidate the Company or terminate the operating activities, or if termination is the only realistic alternative.

The Executive Board must include explanatory notes in the financial statements relating to events and circumstances that give rise to reasonable doubt about the company's ability to continue its operating activities in the long term.

The Supervisory Board is responsible for monitoring the company's financial reporting process.

Our responsibilities in relation to the audit of the financial statements

Our responsibility is to plan and perform an audit assignment in a way that generates adequate and suitable audit information for the opinion we have been asked to provide.

Our objectives are to obtain a reasonable degree of assurance that the financial statements as a whole are free from misstatements of material importance, whether due to fraud or error, and to issue an audit opinion that reflects our findings. A reasonable degree of assurance is a high level of certainty, but not an absolute degree of certainty, meaning that we may not discover all material misstatements during our audit.

Misstatements can arise as a result of fraud or errors and are materially important if it is reasonable to expect that these misstatements, either individually or collectively, may affect the economic decisions taken by users of these financial statements. The materiality influences the nature, timing and extent of our auditing work and the evaluation of the effect of identified anomalies on our opinion.

A more detailed description of our responsibilities is included in the appendix to our audit report.

Zwolle, 15 March 2023

PricewaterhouseCoopers Accountants N.V.

F.S. van der Ploeg RA

Appendix to our audit opinion on the 2022 financial statements of Vitens N.V.

This appendix contains information complementary to our audit report in the form of a more detailed explanation of our responsibilities relating to the audit of the financial statements and the activities comprising an audit of this nature.

The auditor's responsibilities in relation to the audit of the financial statements

We have performed this audit in a professional and critical manner and, where relevant, have exercised professional judgement in accordance with the Dutch audit standards, the 2022 WNT audit protocol (Controleprotocol WNT 2021), ethical requirements and the independence requirements. Our audit included the following:

- Identifying and estimating the risk of misstatements of material importance in the financial statements as a result of errors or fraud, determining and performing audit activities based on these risks and obtaining audit information that is adequate and suitable for forming our opinion. In the case of fraud, there is a greater risk of material misstatements going undetected than in the case of errors. Fraud may involve collusion, falsification of documents, purposely neglecting to record transactions, purposely misrepresenting facts or breaching internal controls.
- Obtaining an understanding of the internal controls that are relevant for the audit in order to select the audit activities that are most suitable under the circumstances.
These activities are not intended to reflect an opinion about the effectiveness of the company's internal controls.
- Evaluating the suitability of the principles that are used for financial reporting and the reasonableness of the estimates made by the Executive Board and the associated explanatory notes in the annual accounts;

- Determining that the going-concern assumption applied by the Executive Board is acceptable. In addition, based on the audit information that has been obtained, determining whether events and circumstances exist that give rise to reasonable doubt about the company's ability to continue its operating activities in the long term. If we conclude that a materially important degree of uncertainty exists, we have an obligation to focus on the relevant related explanatory notes to the financial statements in our audit report. If the explanatory notes are inadequate, we have a duty to amend our report. Our conclusions are based on the audit information that was obtained up to the date of our audit report. Future events or circumstances may however mean that a company can no longer continue to operate.
- Evaluating the presentation, structure and content of the financial statements and the explanatory notes to the financial statements and evaluating whether the financial statements provide an accurate picture of the underlying transactions and events.

In view of the fact that we have final responsibility for the opinion, we are responsible for managing, supervising and performing the group audit. In this respect, we have determined the nature and scope of the activities that are to be performed for the group entities in order to guarantee that our audit activities are far-reaching enough for coming to an opinion about the financial statements as a whole.

The determining factors here are the geographical structure of the group, the scope and/or risk profile of the group entities or the activities, the operating processes and internal control measures and the sector in which the company operates. Based on this, we have selected group entities where there was a need for an audit or assessment of the financial information, or of specific accounting entries.

We consult with the Supervisory Board about the planned scope and timing of the audit and the significant findings revealed by our audit, including possible significant deficiencies in the internal controls.

We determine the key points of our audit of the annual accounts based on all the issues that we have discussed with the Supervisory Board. We describe these issues in our audit report, unless this is prohibited by law or regulations or, in extremely rare cases, if not disclosing this information is in the best interests of society.

Summary of outstanding shares

No.	Shareholder	Ordinary shares	Percentage
1	Provincial authority of Overijssel	774,096	13.399%
2	Provincial authority of Friesland	755,043	13.069%
3	Provincial authority of Gelderland	387,231	6.703%
4	Municipality of Almere	366,175	6.338%
5	Provincial authority of Utrecht	285,896	4.949%
6	Municipality of Utrecht	285,896	4.949%
7	Municipality of Amersfoort	131,691	2.279%
8	Municipality of Dronten	98,457	1.704%
9	Municipality of Lelystad	98,457	1.704%
10	Municipality of Zeewolde	98,457	1.704%
11	Municipality of Hilversum	89,569	1.550%
12	Municipality of Hof van Twente	66,713	1.155%
13	Municipality of Hardenberg	63,007	1.091%
14	Municipality of Nieuwegein	61,246	1.060%
15	Municipality of Steenwijkerland	60,227	1.042%
16	Municipality of Zeist	60,035	1.039%
17	Municipality of Doetinchem	58,752	1.017%
18	Municipality of Stichtse Vecht	58,097	1.006%
19	Municipality of Veenendaal	56,404	0.976%
20	Municipality of Kampen	50,961	0.882%
21	Municipality of Zutphen	50,739	0.878%
22	Municipality of Zwolle	46,329	0.802%
23	Municipality of Woerden	45,042	0.780%
24	Municipality of Soest	44,542	0.771%
25	Municipality of Tiel	42,728	0.740%
26	Municipality of De Bilt	41,879	0.725%
27	Municipality of Raalte	41,696	0.722%
28	Municipality of Rijssen-Holten	41,696	0.722%
29	Municipality of De Ronde Venen	40,426	0.700%
30	Municipality of Wijchen	40,058	0.693%
31	Municipality of Oude IJsselstreek	40,057	0.693%
32	Municipality of Houten	38,490	0.666%
33	Municipality of Zwartewaterland	38,453	0.666%
34	Municipality of Meppel	37,526	0.650%
35	Municipality of Lingewaard	37,387	0.647%
36	Municipality of Utrechtse Heuvelrug	36,554	0.633%
37	Municipality of Dalfsen	34,746	0.601%
38	Municipality of Epe	34,717	0.601%
39	Municipality of Nijkerk	34,717	0.601%
40	Municipality of Overbetuwe	34,717	0.601%
41	Municipality of West Betuwe	34,717	0.601%
42	Municipality of Zevenaar	34,717	0.601%
43	Municipality of Montferland	34,716	0.601%
44	Municipality of Noordoostpolder	32,430	0.561%
45	Municipality of Winterswijk	32,046	0.555%
46	Municipality of Lochem	32,045	0.555%
47	Municipality of IJsselstein	31,228	0.541%
48	Municipality of Culemborg	26,705	0.462%
49	Municipality of Duiven	26,705	0.462%
50	Municipality of Westerveld	25,944	0.449%

No.	Shareholder	Ordinary shares	Percentage
51	Municipality of Leusden	25,902	0.448%
52	Municipality of Borne	25,480	0.441%
53	Municipality of Baarn	24,207	0.419%
54	Municipality of Beuningen	24,035	0.416%
55	Municipality of Buren	24,035	0.416%
56	Municipality of Ermelo	24,035	0.416%
57	Municipality of Nunspeet	24,035	0.416%
58	Municipality of Zaltbommel	24,035	0.416%
59	Municipality of Berkelland	24,034	0.416%
60	Municipality of Ommen	23,164	0.401%
61	Municipality of Wierden	23,164	0.401%
62	Municipality of Brummen	21,364	0.370%
63	Municipality of Maasdriel	21,364	0.370%
64	Municipality of Voorst	21,364	0.370%
65	Municipality of Bronckhorst	21,362	0.370%
66	Municipality of Wijk bij Duurstede	20,818	0.360%
67	Municipality of Aalten	18,693	0.324%
68	Municipality of Elburg	18,693	0.324%
69	Municipality of Oost Gelre	18,693	0.324%
70	Municipality of Oldebroek	18,693	0.324%
71	Municipality of Putten	18,693	0.324%
72	Municipality of West Maas en Waal	18,693	0.324%
73	Municipality of Staphorst	18,531	0.321%
74	Municipality of Rheden	16,461	0.285%
75	Municipality of Bunschoten	16,219	0.281%
76	Municipality of Urk	16,215	0.281%
77	Municipality of Druten	16,023	0.277%
78	Municipality of Heerde	16,023	0.277%
79	Municipality of Heumen	16,023	0.277%
80	Municipality of Neder-Betuwe	16,023	0.277%
81	Municipality of Westervoort	16,023	0.277%
82	Municipality of Berg en Dal	13,352	0.231%
83	Municipality of Bunnik	13,314	0.230%
84	Municipality of Montfoort	11,861	0.205%
85	Municipality of Lopik	11,619	0.201%
86	Municipality of Doesburg	10,682	0.185%
87	Municipality of Hattem	10,682	0.185%
88	Municipality of Woudenberg	9,683	0.168%
89	Municipality of Oudewater	9,199	0.159%
90	Municipality of Wijdmeren	8,956	0.155%
91	Municipality of Eemnes	7,988	0.138%
92	Municipality of Scherpenzeel	7,746	0.134%
93	Municipality of Renswoude	4,389	0.076%
94	Provincial authority of Flevoland	4,316	0.075%
95	Municipality of Súdwest Fryslân	1,000	0.017%
96	Municipality of Tytsjerksteradiel	200	0.003%
97	Municipality of Apeldoorn	1	0.000%
	Total	5,777,247	100.00%