



VolkerWessels



# Sustainability Report 2018

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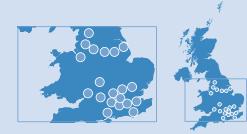
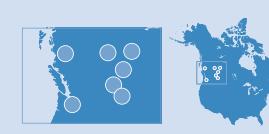
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Royal VolkerWessels is a leading integrated and diversified listed construction group with a “think global, act local” mindset. VolkerWessels’ operating model combines a local sales and client focus with a centralised control and support structure at divisional level that optimises scale and expertise across its operating companies. VolkerWessels operates primarily in the Netherlands, the United Kingdom, North America and Germany. Operationally, its business is organised in six segments. In the countries in which VolkerWessels operates it has over 120 local operating companies, which have national and regional offices and management.

This report focuses on our activities in the Netherlands, although we also report on a small number of indicators for the United Kingdom. In 2018 we started additional reporting on these indicators for our activities in North America and Germany for the first time. For further information please refer to the ‘About this report’ section.

The Netherlands	United Kingdom	North America	Germany
 <b>Construction &amp; Real Estate Development</b> <ul style="list-style-type: none"> <li>■ Construction and renovation of residential and non-residential real estate including industrial and logistic facilities</li> <li>■ Real estate development</li> <li>■ In-house technical installation services capabilities</li> <li>■ Industrial production and supply of construction materials, including pre-fabricated building supplies</li> </ul>	 <b>Infrastructure</b> <ul style="list-style-type: none"> <li>■ Road construction, service and maintenance and asphalt production</li> <li>■ Railway construction, services and maintenance</li> <li>■ Civil engineering activities for roads, waterways and rail</li> <li>■ Multi-disciplinary project management capabilities for complex projects</li> <li>■ Traffic management systems for roads and railways</li> </ul>	 <b>Energy &amp; Telecoms Infrastructure*</b> <ul style="list-style-type: none"> <li>■ Construction and maintenance of energy infrastructure (oil, gas and electricity)</li> <li>■ Construction and maintenance of telecoms infrastructure including fibre-optic and wireless networks</li> </ul> <p>* Segment includes Belgium.</p>	 
			 <ul style="list-style-type: none"> <li>■ Construction for residential housing</li> <li>■ Real estate development</li> <li>■ Focus on selected major urban areas in Germany, in particular around Berlin, North Rhine-Westphalia and Frankfurt</li> </ul>

2018 was an important year for the VolkerWessels sustainability policy, a year in which our vision ‘building a better quality of life’ was made a priority, right up to the highest level. There has always been room for sustainability, but we are increasingly setting more ambitious and visible targets for this at a central level.

This is a necessity, given that the construction sector has a significant impact on the quality of life of society, as is reflected in the grand ambitions of our national, regional and local governments. We are clear on what the end goal should be: a climate-neutral, circular and healthy living environment. We consider this to be a clear common objective and share this great ambition. The discussion should no longer be about what is the ultimate goal, but about how we want to realise it, and how quickly. VolkerWessels wants to provide sustainable alternatives that have a positive impact in the transition to a climate-neutral, circular construction sector, and is keen to do so. Within a few years, emission-free cities will be a reality, homes will no longer be connected to the gas grid and we will be producing increasing numbers of modular and reusable structures.

## What to do or not to do?

Within a wide variety of possible sustainable actions we are looking to strike the right balance. We want to act quickly but at the same time make carefully considered choices. What do we really need to do and how far do we take it?

Our vision ‘building a better quality of life’ acts as a guideline when considering such questions. As a construction group, we have the ability to make a major contribution to people’s health, natural environment, and work and social activities. Ultimately it is not about

physical buildings or infrastructure, but about the people who live and work in that built environment.

Accelerating the pace and scope of our sustainable action is a major challenge for an organisation which operates in a sector that is naturally reactive and is characterised by small margins. How are we going to achieve it? Since 1854, before the modern day VolkerWessels was established, the company’s ability to adapt has been put to the test many times, and we have shown ourselves equal to the challenge. We need to tap into this ability once again, so we can move with the times as far as sustainability is concerned, whilst preserving continuity. We are certain that we will succeed, by becoming increasingly proactive in order to keep pace with the change.

## Six focal points

Over the past year we have spoken extensively at the highest management level about our desire to bring about change more quickly. These talks resulted in us selecting six initiatives on which we will focus additional effort in the coming year. It is by focusing on these areas that we will be able to make a real change.

These ‘six focal point’ are an integral part of our overall sustainability policy. We are not yet satisfied with our performance and the pace of our development in those areas. In order to stay well on track, we need to invest in knowledge and technical solutions, and address these

six topics even more actively than we have done so far. The first three focal points are focused on those areas where VolkerWessels can make the greatest impact and has the most influence, along with its clients and other partners:

1. **Circular design strategies** that enable us to embed circularity in our designs - for example with the circular viaduct - and the standardisation of material passports.
2. **Sustainable equipment services** that contribute to our building sites and transport becoming more sustainable, with solutions such as using BouwHubs - logistical and circular collection points on the outskirts of cities. These are proved to have a major positive effect, as a study we conducted in association with Dutch research institute TNO reaffirmed once again this year.
3. **Sustainable concrete and asphalt.** The production process is very energy-intensive, involving a large quantity of raw materials - hence providing plenty of scope for improvement, increasing our sustainable impact.

Besides wanting to influence quality of life in these ways, we also need to continue to make our own organisation more sustainable. To that end we have also formulated three focal points aimed at our own sustainability:

4. **Making our fleet of vehicles more sustainable**, as our large fleet of leased and commercial vehicles contribute significant levels of carbon emissions.
5. **Improving our waste separation rate**, as there is room for our companies to improve in this area.
6. **Embedding social return at our companies**. We are a large employer, so we wish to take responsibility and offer opportunities to people who are at a disadvantage in the labour market.

## Good examples in 2018

The circular viaduct is a good example of a circular design process. During the year, we delivered the first circular viaduct in the Netherlands in Kampen through a unique partnership. The project taught us in which ways we need to change the way we think and collaborate with our partners, in order to achieve circular infrastructure. For example, intensive collaboration with the supplier was required to develop with the right modular construction. The viaduct consists of 40 concrete elements and is designed to allow for complete and safe disassembly, removal and reassembly at a new location.

Another prominent innovation is the Low-Temperature Geothermal Heat project in Zevenbergen, which provides a good alternative to traditional heating methods. It involves using innovative drilling technology to tap into geothermal heat to heat greenhouses. In the future we hope to be able to extend the technique to residential properties.

We also developed and built the first Biomakerij in the Netherlands, providing fully circular water treatment at the Trappist Abbey in Berkel-Enschot. Wastewater from the Abbey is purified by organic ornamental plants in a greenhouse, resulting in huge energy and water savings.

## An industry first: sustainable revolving credit facility

Quality of life is taking an increasingly prominent position in our organisation. In the past year we took the initiative to link our sustainability performance to our Revolving Credit Facility (rcf) which is provided by a consortium of banks. We were the first company in the Dutch construction sector to do so, thus demonstrating our ambitions with regard to sustainability.

VolkerWessels will be granted a lower rate of interest or be subject to a higher rate of interest depending on how many sustainability goals we achieve. These sustainability goals will be measured annually and

verified by an external auditor. The three focal points for our own organisation mentioned previously are included in these goals. Our performance on these 'RCF-KPI's' will mainly be used as an internal management tool to ensure that quality of life is a standard item on our organisation's agenda.

We have included the CSR performance of our companies in Germany and North America in our sustainability reporting for the first time in 2018. Quantitative data for our companies in the UK was already part of our CSR reporting in previous years. We are expanding our reporting scope because we consider it important that we match our scope for both our financial and our sustainability reporting. This is an initial step towards introducing greater policy cohesion between the various Dutch and international business areas.

## Culture survey

We conducted a culture survey in 2018 to learn more about how our employees view us as an employer. All employees were asked questions on topics such as social safety and long-term employability. Where are we performing well and what do we need to improve? The survey produced some very valuable insights. Quality of life and sustainability are still not considered to be an intrinsic part of daily work for the organisation. Our employees need greater visibility for these topics, as well as better cooperation between our companies. This is also a task for us as the Management Board. It is essential that we keep repeating our message. The six focal point we have identified will help us, as they translate quality of life to tangible, specific actions for the organisation.

## Working safely

The culture survey showed that our 'safety' core value is highly valued by our employees. However, the number of accidents in our sector is still too high and our performance could and should be better. That is one of



From left to right: Jan de Ruiter, Alan Robertson, Dick Boers, Jan van Rooijen, Alfred Vos.

the reasons why the injury frequency rate has been included in the targets for the revolving credit facility (rcf). Working safely is our top priority. Where safety is concerned, the culture of discipline and accountability must be a constant area of focus. In the past year, we have strengthened our policy considerably: we are increasing the involvement of management, and investing in certifying our companies on the Safety Ladder – a national tool used to measure safety culture.

## Looking ahead to 2019

As we move towards 2020, the target year for our current sustainability goals, we have made a start with the development of new quality of life targets for 2025. These will be strongly linked to the aforementioned focal points and the three pillars of our quality of life vision: health, natural environment, and work and social activities. We will finalise these targets in 2019 and present them in detail in our next sustainability report.

## Management Board of VolkerWessels

Jan de Ruiter

Dick Boers

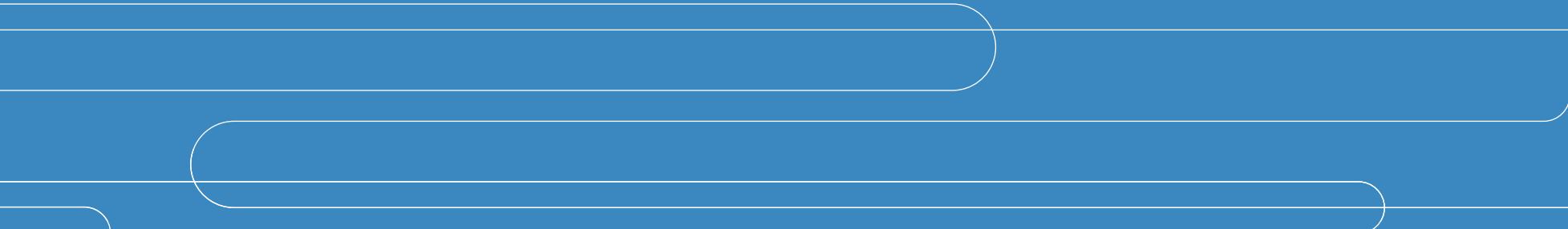
Jan van Rooijen

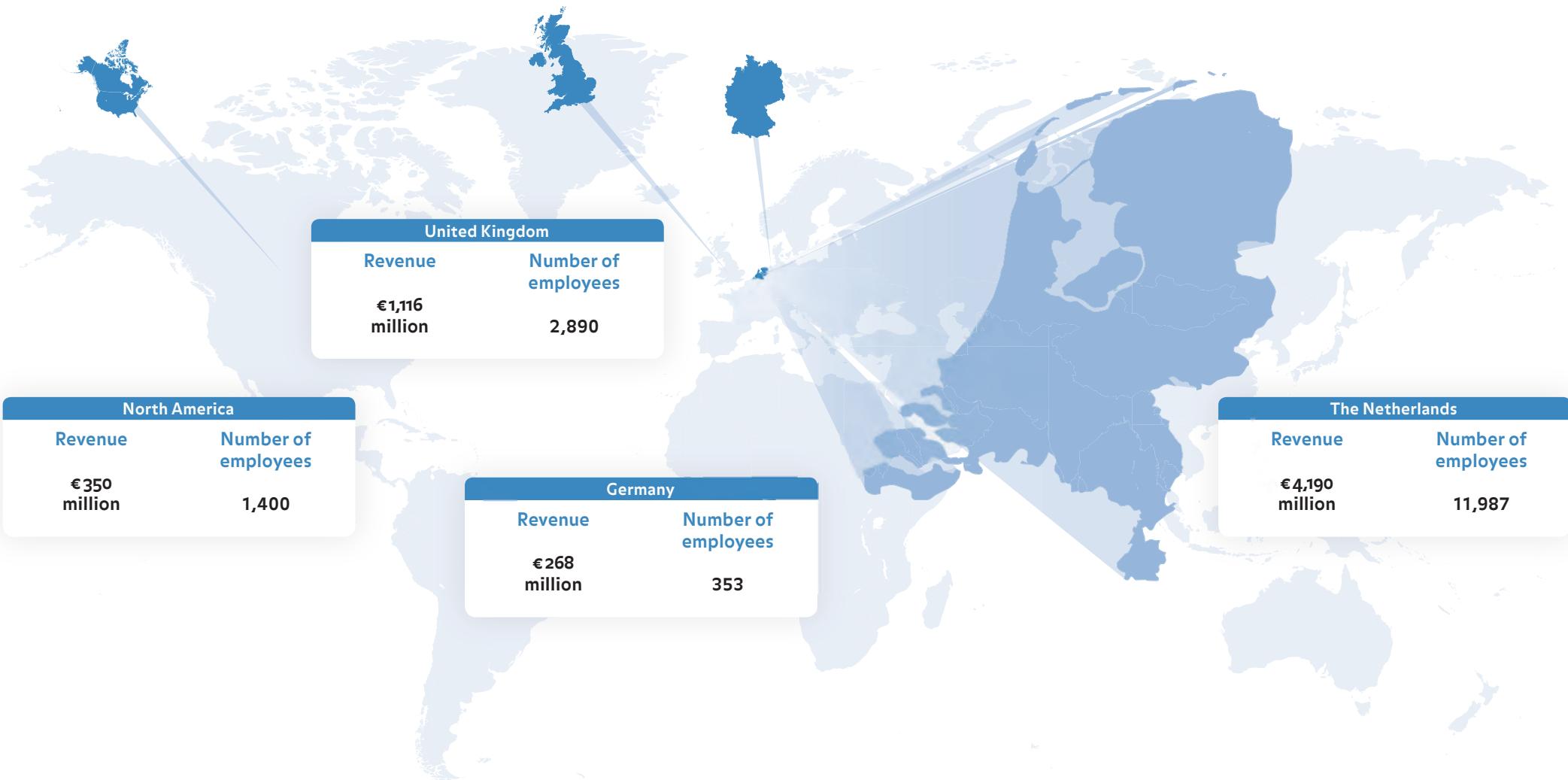
Alfred Vos

Alan Robertson

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# Summary

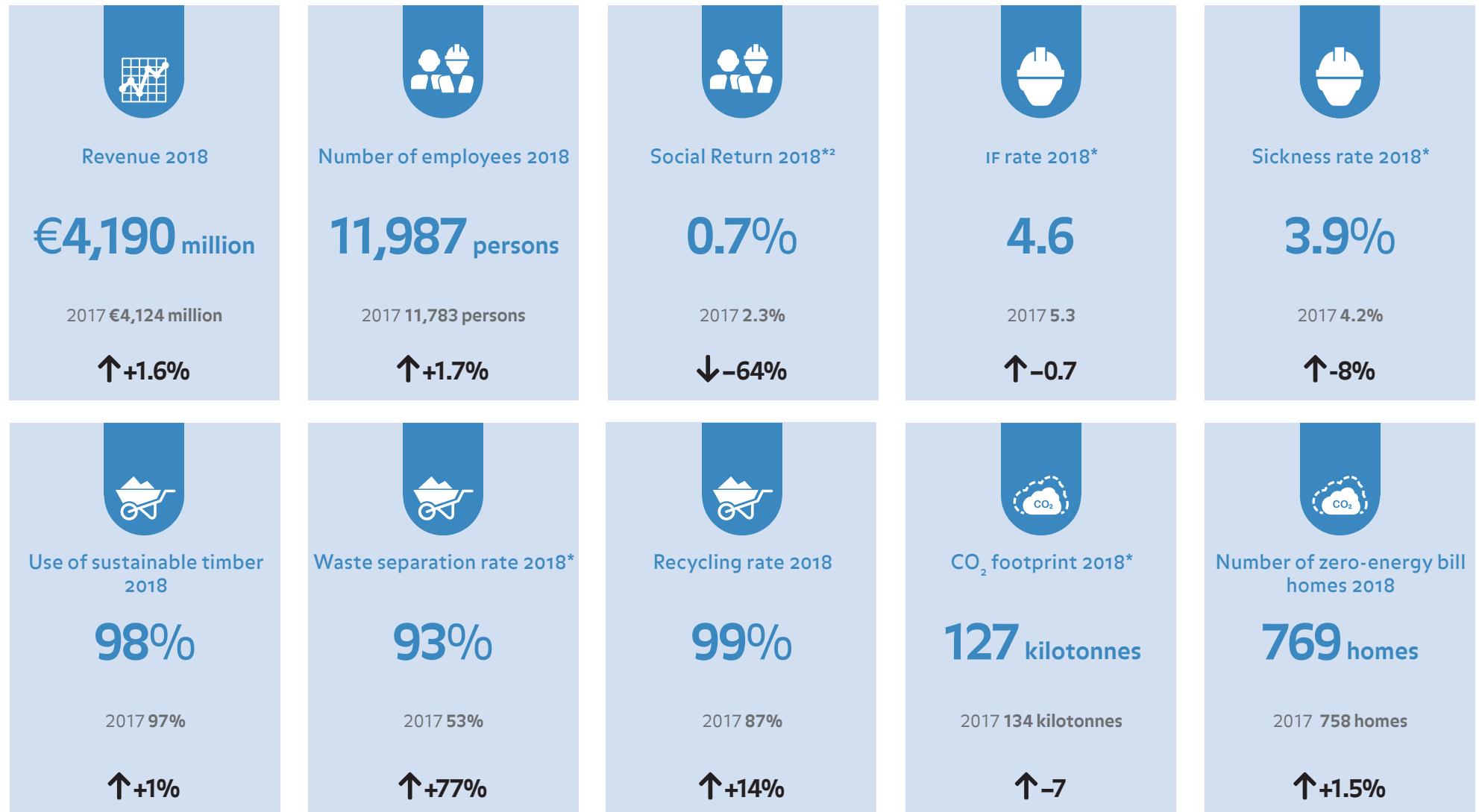




<sup>1</sup> VolkerWessels Netherlands includes the foreign branches of our Dutch companies and therefore differs from the legal structure of VolkerWessels Nederland B.V.

# Summary – VolkerWessels Netherlands<sup>1</sup>

SUMMARY



\* KPMG provided limited assurance on this indicator, refer to page 77.

<sup>1</sup> VolkerWessels Netherlands includes the foreign branches of our Dutch companies and therefore differs from the legal structure of VolkerWessels Nederland B.V.

<sup>2</sup> The decline in the figure for 2018 was mainly due to a stricter application of our methodology and data quality requirements, not to a change in the actual performance (see page 58 for a more detailed explanation).

## Health

SAFETY	2016	2017	2018	INITIATIVES IN 2019	TARGET FOR 2020	PROGRESS	Achieved	⌚ On track	✗ Not on track
							✓ Achieved	⌚ On track	✗ Not on track
IF rate	5.5*	5.3*	4.6*	<ul style="list-style-type: none"> <li>■ Major modifications to the WAVE app</li> <li>■ Improved monthly management reporting</li> <li>■ Safety Ladder certification</li> </ul>	IF-rate 3.5			⌚ On track	
Accidents resulting in absence from work	129*	129*	116*						
Sickness rate	3.9%*	4.2%*	3.9%*						

## Natural environment

RAW MATERIALS	2016	2017	2018	INITIATIVES IN 2019	TARGET FOR 2020	PROGRESS
Use of sustainable timber	96%	97%	98%	<ul style="list-style-type: none"> <li>■ Development of circular Bouwhub in Amsterdam</li> <li>■ Monnickendam project featuring all-timber structure</li> </ul>	100% of timber use is sustainable	⌚ On track
Volume of waste (in kilotonnes)	66*	72*	680* 101 <sup>1</sup>	<ul style="list-style-type: none"> <li>■ Generate additional material passports</li> </ul>	25% reduction in waste for disposal for each euro of revenue compared to 2014	✗ Not on track
Waste separation rate	62%*	53%*	93%* 53% <sup>1</sup>		100%	⌚ On track
Recycling rate	89%	87%	99%		97%	✓ Achieved
Secondary materials in concrete products (% recycled)	5%	10%*	4%* 6% <sup>2</sup>		25% reduction in primary concrete procured compared to 2014	✗ Not on track
Secondary materials in asphalt products (% recycled)	41%	41%	41%*		10% reduction in asphalt raw materials procured compared to 2014	✓ Achieved

\* KPMG provided limited assurance on this indicator, refer to page 77.

<sup>1</sup> Due to a definition change (see page 45) we include two figures for 2018. The bottom figure shows the result according to the old definition.

<sup>2</sup> Due to an expansion of the scope (see page 41) we include two figures for 2018. The bottom figure shows the result according to the old definition.

# Summary – VolkerWessels Nederland

SUMMARY

## Natural environment

Achieved

On track

Not on track

CO <sub>2</sub> AND ENERGY	2016	2017	2018	INITIATIVES IN 2019	TARGET FOR 2020	PROGRESS
CO <sub>2</sub> footprint (scope 1 and 2 in kilotonnes)	123*	134*	127*	<ul style="list-style-type: none"> <li>■ Action plan for focal point sustainable fleet</li> <li>■ Circular BouwHub in Amsterdam</li> </ul>	10% reduction in CO <sub>2</sub> per € of revenue compared to 2014	
CO <sub>2</sub> emissions of concrete products (scope 3) in kg of CO <sub>2</sub> per m <sup>3</sup>	149	154*	161*		5% reduction in CO <sub>2</sub> per m <sup>3</sup> of revenue compared to 2014	
Zero-energy bill homes	270	758	769*		2000 per annum	

<sup>1</sup> Due to an expansion of the scope (see page 75) we include two figures for 2018. The bottom figure shows the result according to the old definition.

## Work and social enterprise activities

EMPLOYMENT	2016	2017	2018	INITIATIVES IN 2019	TARGET FOR 2020	PROGRESS
Total average number of employees	11,638	11,783	11,987	<ul style="list-style-type: none"> <li>■ Launch central learning management system</li> <li>■ Launch werkenbijvolkerwessels.nl recruitment website</li> </ul>	<ul style="list-style-type: none"> <li>■ Focus on internal succession planning</li> <li>■ Invest in long-term employability</li> </ul>	
Construction & Real Estate Development	3,627	3,716	3,768	<ul style="list-style-type: none"> <li>■ Launch 'Maak Morgen Mogelijk' campaign</li> <li>■ Involve supply chain partners in social enterprise activities</li> <li>■ Masterclass 'Dealing with social enterprise in the workplace' masterclass for instructors</li> </ul>		
	4,900	4,983	4,903			
	2,819	2,789	2,950			
	292	295	366			
Percentage of people at a disadvantage on the labour market (PSO-score)	1.7%	2.3%	0.7%* <sup>2</sup>		3.7%	

\* KPMG provided limited assurance on this indicator, refer to page 77.

<sup>2</sup> The decline in the figure for 2018 was mainly due to a stricter application of our methodology and data quality requirements, not to a change in the actual performance (see page 58 for a more detailed explanation).

## Health

 SAFETY	2018
IF rate	
United Kingdom*	<b>1.1</b>
North America	<b>7.5</b>
Germany	<b>14.7</b>
Accidents resulting in absence from work	
United Kingdom*	<b>7</b>
North America	<b>21</b>
Germany	<b>8</b>
Sickness rate	
United Kingdom*	<b>1.1%</b>
North America	<b>0.1%</b>
Germany	<b>4.3%</b>

## Natural environment

 RAW MATERIALS	2018
Volume of waste (in kilotonnes)	
United Kingdom*	<b>321</b>
North America	<b>86</b>
Germany	<b>0.14</b>
Afvalscheidingspercentage	
United Kingdom*	<b>93%</b>
North America	<b>99%</b>
Germany	<b>78%</b>
 CO <sub>2</sub> AND ENERGY	2018
co <sub>2</sub> -footprint (scope 1 and 2 in kilotonnes)	
United Kingdom*	<b>32</b>
North America	<b>71</b>
Germany	<b>2</b>

## Work and social activities

 EMPLOYMENT	2018
Total average number of employees	
United Kingdom	<b>2,890</b>
North America	<b>1,400</b>
Germany	<b>353</b>

### INITIATIVES IN 2019

- Set up quarterly reporting process
- Further implement quality control system
- Follow up on recommendations for improvement from external assessment

\* KPMG provided limited assurance on this indicator, refer to page 77.



## Key financial figures

FINANCIAL	2016	2017	2018
Revenue (in mln euro)			
Netherlands – Construction & Real Estate Development	1,946	2,043	<b>2,105</b>
Netherlands – Infrastructure	1,371	1,474	<b>1,414</b>
Netherlands – Energy & Telecom	649	674	<b>751</b>
United Kingdom	1,071	995	<b>1,116</b>
North America	317	351	<b>350</b>
Germany	207	244	<b>268</b>
Order book (in mln euro)	<b>8,157</b>	<b>8,091</b>	<b>8,924</b>
EBITDA (in mln euro)	254	265*	<b>251**</b>
Operating expenses (in mln euro)	<b>5,335</b>	<b>5,563</b>	<b>5,796</b>

\* Excluding €13 million third party result and €5 million staff-related charge in connection with the share incentive plan.

\*\* Excluding €6 million staff-related expense in connection with the share incentive plan.

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# VolkerWessels

# Our living environment

How can we continue to lead comfortable and healthy lives in our urbanised, densely populated built environment and still meet our climate targets?

Cities present both a challenge and an opportunity in this respect, accounting for around 60 to 80 per cent of total energy consumption and around 75 per cent of carbon emissions. The pressure on the urban housing market and infrastructure is growing all the time, and residents are increasingly demanding in terms of quality of life. However, it is precisely this intensive pressure that provides opportunities for sustainable solutions. For example, the scale of cities means it is easier to make efficient use of energy and resources and to implement technological innovations on a large scale.

The issues of sustainability and quality of life are so closely intertwined, that there is no added value in approaching them separately. We combine these challenges and see them as an opportunity for innovations which are valuable to society.

If we want to put successful sustainable alternatives on the market it is essential that we get the various disciplines working together. We come up with solutions by actively engaging with our stakeholders, knowledge partners and with society in general. This requires the expertise, experience and ideas of all of our stakeholders.

## What do developments in society mean for us?

Below we highlight a few of the main developments in society that impact our business operations.

### Growing importance of wellbeing and health

People are increasingly health conscious. New definitions of health focus on people's ability to adapt and take control when faced with the physical, emotional and social challenges of life. We are also finding that end users are placing new demands on buildings. This is reflected in procurement criteria - for example, design requirements for offices tend to pay increasing attention to employees' health. New housing concepts in which sustainability, health and circularity are the norm are consistent with this trend.

### Climate change

Rising temperatures have many negative consequences: extreme weather, a growing contrast between wet and dry regions, and a decline in biodiversity. All these factors also have an impact on human health, such as a decline in the quality of drinking water and food. This also poses major challenges to our clients (particularly those in the public sector), for example in relation to flooding and heat stress. As we are active in the market through both design and execution, we must be able to offer smart and sustainable solutions in tenders and projects. Climate-mitigating and climate-adaptive measures can be used to make ecosystems more resilient.

### Tight labour market

With an ageing population, there is insufficient young talent is coming through to meet demand, and there is a growing shortage of specialist technicians. It is important to VolkerWessels that all employees remain employable on a long-term basis and that as an employer we respond to the personal needs of both existing and potential employees.

### Digital transformation

We are living in an age when information is always at our fingertips. Unlimited connectivity makes a major social contribution to quality of life. More and more machines, sensors and people are connected to everything and everybody. While this poses risks in terms of data security, privacy and improper use of technology, it also presents opportunities for making networks even faster, smarter and safer. Digitisation offers scope for even smarter design, construction and maintenance. For example, open data can be used for location scans and smart logistics, and BIM models can be used to create resource banks and materials passports.

# Business model

VOLKERWESSELS



This visual depiction of the living environment shows a simplified version of our business model: the activities we perform, what we use in the process and the result we ultimately achieve for the living environment. We are not just interested in the physical buildings and networks that we create than in how they contribute to quality of life. We achieve this by using comprehensive collaboration to combine the local knowledge and expertise of our companies.

#### **What input do we require for this?**

In order to realise our projects we need economic, social and environmental input, for example:

- **Economic** financing and capital goods such as equipment.
- **Social** knowledge and experience of employees and subcontractors.
- **Environmental** resources, building materials and energy.

To support our building sites we aim to make our supply and logistics as safe, economical and efficient as possible, for example by means of the BouwHub or by using sustainable materials.

#### **Our activities**

We operate in three sectors in the Netherlands with a very diverse range of activities. From development and design to construction, management and operation:

- **Construction & Real Estate Development** from property development to residential, industrial and non-residential construction.
- **Infrastructure** civil engineering, road and railway construction, traffic systems.
- **Energy & Telecom Infrastructure** infrastructure for energy networks and telecommunications.

In the United Kingdom, North America and Germany, VolkerWessels has leading positions in selected markets.

Our company is an ecosystem of entrepreneurs and more than 120 local operating companies, with approximately 16,600 employees. The majority of our 25,000 projects a year are locally sourced, small scale, with low complexity and high repetition. This solid backbone enables us to take a selective approach towards additional large-scale, complex projects. VolkerWessels acts primarily as the lead contractor, specifically focusing on activities such as project, contract and risk management. Whilst subcontracting the majority of the actual construction work, it maintains strategic and tactical positions across the entire value chain.

Our core values of safety, sustainability and integrity are key in performing our work. This means we pay attention to such things as a tidy, safe and sustainable construction site, economical use of our equipment and thorough separation of waste to optimise recycling.

#### **What output do we realise with this?**

In collaboration with our employees, chain partners and other stakeholders we are able to realise not just individual structures such as homes, roundabouts or masts but even design and build an entire area. Working together with companies from all sectors we have the ability to design a complete living environment, for example a whole residential area complete with roads, green areas, sewage system and internet connection. Or a modern business area such as Strijp-S in Eindhoven, comprising a mix of offices, homes, cafes, pubs and restaurants, and cultural venues.

#### **What result do we aim for?**

We expressly focus not just on the physical living environment but on the impact of the living environment on people's quality of life. It is about the living enjoyment, happiness, health, accessibility and greenery. We put this into practice in three key areas in which VolkerWessels has a great deal of influence and therefore the ability to contribute to quality of life:

1. Health and wellbeing
2. Natural environment
3. Work and social activities

### **What does this mean for our sector?**

Given the improved market conditions and general outlook for the construction sector, our expectations for the medium term are positive.

The drive towards greater sustainability in the sector will pick up pace in the coming years. Governments have ambitious targets and high expectations in their capacity as major clients, while our clients and society in general also expect a great deal from the construction sector. Our clear direction, together with the rapid pace of development in the market, means we can predict accurately what the sector can expect in the medium term.

We are clear about the ultimate goal we are working towards: a climate-neutral, circular construction sector. This will require sustainable solutions to complex issues. The challenge is not to achieve just one objective ( $\text{CO}_2$  reduction, climate adaptation, circularity, health and wellbeing) but to tackle them all. By devising effective sustainable alternatives and working with supply chain partners and clients to develop them, we can play a key role, both now and in the future.

We are seeing a rise in demand for sustainable solutions in the markets where we are active. The transition to sustainable energy sources such as wind, solar and hydrogen is fuelling demand in the market for energy infrastructure. The development towards gas-free neighbourhoods is having a major impact on our construction and real estate segment. This also poses challenges, with the sector still needing a great deal of innovation in order to transform existing buildings and adapt infrastructure to this development. At the same time telecom solutions such as smart meters and high-speed fibre-optic networks can support this transition.

The procurement process is increasingly defined by sustainable quality and long-term management. We use our expert knowledge and innovative concepts to better meet the needs of society. The emphasis of our work is on the crucial issue: contributing to the quality of life of residents and end users.

### **What does this mean for our projects?**

Our diverse range of businesses within our company is what continues to set VolkerWessels apart. This diversity means that we have many different disciplines and areas of expertise within our group, while the decentralised structure of our organisation keeps us close to the changes taking place in the market and allows us to keep responding to those changes. At the same time we are faced with the challenge of combining this decentralised expertise and market knowledge into centralised solutions. Exchanging knowledge internally and scaling up pilots for broader application are crucial in this respect.

Our companies' core activity is the successful completion of a large volume of local projects in local markets. In doing so we focus on small and medium-sized projects, supplemented by large and small multidisciplinary projects that allow us to make the best possible use of the combined knowledge within our group. Our reputation for quality, sustainability and innovation, our sound financial position and our focus on margin over volume support this strategy.

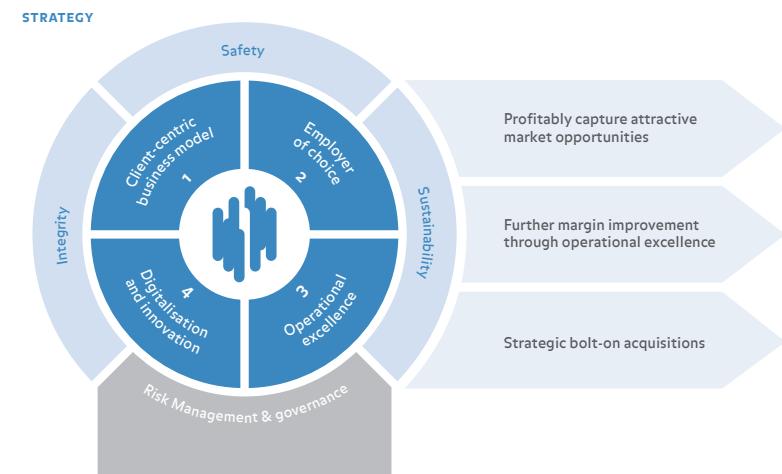
In addition our companies will continue to operate locally and independently, and there will continue to be room for entrepreneurship and innovation. The scope for personal initiative makes our employees feel responsible for their organisation and the living environment.

### **Strategic pillars**

Our strategy is based on four pillars:

1. Client-centric business model
2. Employer of choice
3. Operational excellence
4. Digitisation and innovation

Our core values of safety, integrity and sustainability are crucial elements within this strategy. These four pillars translate into three tactical priorities: (1) to profitably capture attractive market opportunities, (2) to improve margins through operational excellence and (3) to pursue strategic bolt-on acquisitions.



### Risk management

Good risk management and taking advantage of opportunities is necessary for the successful achievement of our strategic objectives. The Management Board has overall responsibility for identifying, prioritising, managing and monitoring risks. Holding quarterly meetings with the boards of our operating companies, and using specific indicators are among the tools used to monitor risks over time. These include our safety indicators relating to risks surrounding health and safety, and indicators for co<sub>2</sub> and consumption of primary resources to measure our dependence on raw materials and fossil fuels. These indicators can be found throughout the various thematic section of this report. You can read more about risk management in our organisation in the Risk section of our Annual Report.

### What do these developments mean for our value chain?

If we are to establish a climate-neutral, circular sector, our entire value chain will have to adapt accordingly. We can no longer persist in thinking of this value chain as being composed of single isolated links. Rather, collaboration with all the partners throughout the value chain is crucial to devising innovative solutions. The challenge for VolkerWessels in this regard is: at what points in the value chain can we play that connecting role, and where do we need other parties to do so? Another challenge is that all supply chain partners will need to think about how costs that are currently still external can be changed to internal in our business operations, products and services.

This will result in a shift in focus to the front end of the chain. Which is precisely where the biggest challenges lie: how to make it easier to reuse items, to extend their lifespan and reduce or avoid consumption of primary resources and energy. VolkerWessels will give top priority to innovations that can accelerate this transition in the chain. Examples include the Plastic

Road (developed in co-creation with supply chain partners) and the materials passport.

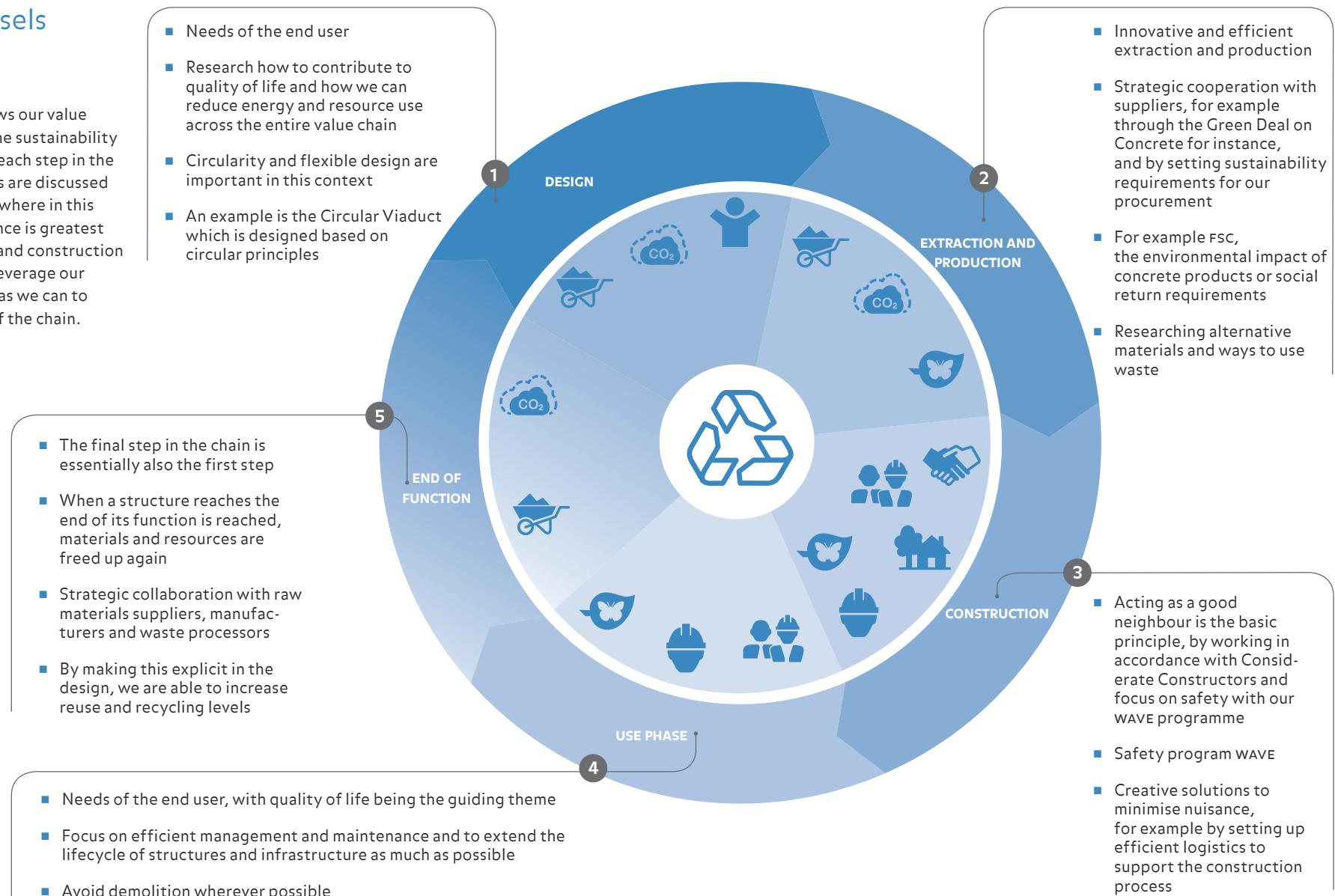
This will lead to more intensive cooperation with our suppliers and partners. Increasingly VolkerWessels is becoming a knowledge partner as well as a contractor. This is the role we aspire to have; it increases our involvement at every stage of the lifecycle and gives us greater influence, from the first design stages all the way to the use phase.



Left: Simon Jorritsma, Right: Anne Koudstaal.  
Joint inventors of the PlasticRoad concept.

## VolkerWessels value chain

This overview shows our value chain along with the sustainability topics relevant to each step in the chain. These topics are discussed in more detail elsewhere in this report. Our influence is greatest during the design and construction phases, when we leverage our influence as much as we can to activate the rest of the chain.



The VolkerWessels vision is a built environment where people experience a better quality of life. In short, our ambition is to contribute to people's health and happiness. We look at the added value for the end user. Do we really build our homes so well that people live longer and happier lives in them?

As an international construction group with many different areas of expertise, we are in a position to organise a large part of the living environment. That means that contributing to quality of life is not just an empty phrase. We have influence over how people live, the ease of their commute to work, and the quality of the hospital in which they are being treated.

## Three quality of life pillars

We know that we are not able to influence all aspects of quality of life directly. We have consciously selected three pillars that we are able to influence to a great extent; this enables us to focus our approach. The three topics we chose, together with our companies, our stakeholders and independent experts are:

1. Health
2. Natural environment
3. Work and social activities

## Why these pillars?

We know where our influence lies for each of these pillars.

- **Health:** we focus on research into healthy design and on developing new building concepts aimed at health. In addition, healthy employees are by far the most important consideration in our own organisation: working safely is our number one priority.

■ **Natural environment:** our role here is an important one. Our use of raw materials – extraction as well as production – has a considerable impact on the natural environment. By coming up with effective sustainable alternatives we can contribute in a positive way to the transition to a climate-neutral, circular construction sector.

■ **Work and social activities:** as we are involved in building people's living environment on an everyday basis, we have influence over mobility, recreation and social aspects in these areas. In addition, work has a major bearing on people's levels of happiness and well-being people experience. We therefore strive to be an excellent employer for our employees.

At both higher management level and at project level we have discussed how our potential influence can be translated into policy. We also involve our External Review Committee in this discussion, which is composed of external experts in various disciplines. Our ambitions need to be consistent with the great diversity of our organisation and at the same time be focused on the long term.

## Strategy

We want to be a valuable knowledge partner. This means that we need strong foundations in order to do our work well.

## Being a knowledge partner

We want to be a valuable knowledge partner for our clients in the area of quality of life. We provide input on how society can be organised in a way in which high quality of life will be future-proofed. We help clients to make their objectives more tangible, and experiment and innovate together. In addition, we see ourselves as an important partner for discussion with our sector peers and with politicians, and aspire to be a research partner for research institutions.

## The challenges of being a knowledge partner

We believe that acting as a knowledge partner is essential if we want to improve people's quality of life. We are convinced that we have what it takes, but we still have a way to go. It also poses challenges.

## Reliable claims

For us, something is sustainable once we have proven that this is actually the case. We want to avoid claiming that a concept or product is sustainable unless we are able to actually substantiate this. That means more research, consideration, development and testing. Whilst this is not our core task, we are making progress. A good example is our cooperation on the new NEN regulations on circularity, which focus on new working practices, harmonisation and circular construction standards.

Making reliable claims also means being open about weaknesses and matters we are still unsure about. If we are not yet sufficiently sure about what the long-term impact of a particular application, we have to be honest and transparent about these uncertainties. This is a challenge on which we are focusing extra attention.

### A proactive role takes some getting used to

We can use our influence to contribute to smart solutions for developments in society, such as sudden growth or contraction in regions or neighbourhoods. By engaging in discussion with the Government and politicians we can develop sustainable, prefabricated, circular concepts, tailor-made for the area and issues concerned.

While it is up to us to overcome the technical hurdles to realising a healthy and sustainable built environment, the greatest challenges are actually social and organisational rather than technical. Natural gas-free construction is a good example. It presents a major challenge in terms of keeping track of agreements between partners and creating awareness and trust among all parties in the market with regard to the construction of gas-free neighbourhoods.

In working towards our goal of being a valuable knowledge partner, we are required to take a proactive approach in order to accelerate these social and organisational processes. This is no easy matter in a sector that is traditionally quite reactive and is used to focussing on the technical issues.

We cannot do it alone, however. We also need to see our clients take a more proactive stance. As well as working with them on development, we also see a role for them in terms of financing sustainable alternatives. Together, we need to come up with solutions on how to distribute the necessary investment burden required to make the construction sector more sustainable.

### Putting our house in order

The second part of our strategy is about doing our work well. This relates to things such as building high quality homes, safe and tidy building sites and an entrepreneurial business culture that enables a

multidisciplinary way of working. It also means having a good insight into our sustainability performance. A certain basic occupational hygiene, to ensure sustainability in every project that we deliver, is an important element of this strategy. This needs to be made visible in a dashboard that provides insight into a number of chosen KPIs, with targets and results providing a constant basis for a substantive discussion about quality of life. This dashboard is currently under development.

### Sustainability means making choices

Our vision 'building a better quality of life' is becoming more concrete all the time. We are making a focused choice to pursue a number of initiatives to which we are fully committed. In selecting these initiatives we keep a close eye on our core business: constructing buildings and delivering infrastructure. This pragmatic approach will ensure that we make the biggest possible difference in the shortest amount of time.

VolkerWessels is investing in these initiatives because it will help us create a good foundation for a strong proactive stance and good positioning in the market. However, it is also because we are not yet satisfied with our performance and the pace of development of sustainable alternatives.

We expect our first three focal points to enable us to make a major sustainable impact:

- **Circular design strategies** that enable us work with clients and project owners to embed circularity in our designs, as is the case for example with the circular viaduct and the standardisation of material passports.
- **Sustainable equipment services** that make our building sites and transport more sustainable, for example by using BouwHubs, logistical and circular collection centres.



### "When you build, you are building the future.

So always make sure to give the future a voice when making policy decisions.  
Think about the rights of those who have yet to be born."

Jan Terlouw  
Writer, former politician and  
co-initiator of 'Toekomststoel'



## ANOTHER PERSPECTIVE

- Sustainable concrete and asphalt.** The production process for these materials is very energy-intensive and requires a lot of raw materials, providing plenty of scope for increased sustainable performance.

We also need to further increase the sustainability of our own working processes. We are working on good basic occupational hygiene within our own organisation by:

- Making our fleet of vehicles more sustainable,** in view of our large fleet of leased and commercial vehicles (5,000 in total) which are responsible for significant carbon emissions.
- Improving our waste separation rate,** as there is room for further improvement by the companies in this area.
- Embedding social return at our companies.** As we are a large employer, we want to take responsibility and give a chance to people who are at a disadvantage on the labour market.

#### Better communication of the quality of life message

In addition to the six focal points, our directors are also tasked with getting the quality of life message across. We can see that our narrative and our ambitions are paying off. In order to raise our profile as a knowledge partner we need to get our vision across better, both internally and externally.

Over the past year all the statutory directors have come together to discuss our three core values of safety, sustainability and integrity. In relation to safety, we spoke about tighter objectives and reducing the number of accidents. In relation to integrity we considered the decentralised structure, and our positions on issues such as accepting gifts and managing bullying. In relation to sustainability, the focus was on the medium term: 2023. What can we expect to come our way in the next five years? How do we make sure we are ready for the changes in society,

the market and customer demand? And, more importantly, what is our own vision of the future? We have challenged our board members to take quality of life into account in strategic decisions.

At the end of last year we appointed a number of ambassadors to really bring the quality of life topic to life in the organisation. These are enthusiastic people with a passion for sustainability, who have a drive to get the VolkerWessels vision across. Each ambassador works on behalf of our organisation in their own area of expertise.

#### Engaging in dialogue

To continue developing our quality of life approach, and communicate it even more clearly and effectively, we engage in regular dialogue with our various stakeholders. This helps us to shape our shared ambitions and goals, and to achieve them.

Many of our projects are commissioned by governments. It is essential that we have a joint dialogue about how all parties can achieve their sustainability ambitions. This type of conversation, that VolkerWessels has been conducting for a long time, can be tricky. It requires both the client and the contractor to work more as partners and to acknowledge that this can be new and uncomfortable for both. It calls for an attitude to procurement and contracts that is different from the usual customer-supplier or client-contractor relationships.

We help clients make their sustainability goals tangible. Last year for example, we contributed our knowledge of systems and contracts. Together with our clients we brainstormed about the road of the future, energy-neutral tunnels, measures in maintenance contracts and new circular business cases. We do this by organising design sprints and brainstorming sessions.

#### Revolving Credit Facility: breaking new ground in the construction sector

In 2018 we took the initiative to link our sustainability performance to the Revolving Credit Facility (RCF), reaching agreements on this initiative with seven major banks. Under the RCF agreement the level of interest we pay on the loan will be partially determined by how many sustainability goals we achieve.

**"It is interesting to note that many the sustainability criteria are at the same time requirements in procurement for our clients."**

This step is heavily consistent with our vision. It demonstrates our ambition to constantly improve ourselves. We are proud to be a pioneer in the field of sustainable financing. The lower or higher level of the interest rate will be determined by the number of sustainability goals, focussed on five performance indicators. In defining the indicators we looked at our influence on the three quality of life pillars and how they contribute to the Sustainable Development Goals (SDGs). The indicators are related to safety, CO<sub>2</sub>, energy, social return and raw materials. Our sustainability goals will be measured annually and verified by an external auditor. We will mainly use this RCF performance as an internal management tool to ensure that quality of life is a standard item on our organisation's agenda. The RCF KPIs are included in the Management Board's balanced scorecard.

## Our research partners

Knowledge institutes are key partners for realising projects and developing concepts. We have a lot to learn from researchers and students, and we collaborate with them in all kinds of ways – within our projects, within our companies and at a group level.

In order to take advantage of the opportunities provided by new technologies we have intensified our collaboration with Delft University of Technology through our partnership with X!Delft. X!Delft gathers technological know-how and business expertise, enabling the rapid translation of innovations and ideas into tangible applications and business models.

We have developed a great partnership with KWR Watercycle Research Institute over the past year.

## OVERVIEW OF KEY STAKEHOLDERS



	WHO	WHAT	WHY	KEY FINDINGS
Strategic dialogue (annual)	Board members and external stakeholders	Social trends, topics and expectations	Input for vision and strategy	<ul style="list-style-type: none"> <li>VolkerWessels needs to increase its promotion of quality of life</li> <li>We need more frequent dialogue with the end-users</li> <li>Act more as a knowledge partner in dealing with clients</li> </ul>
Operational dialogue (semi-annual)	Representatives of companies and external stakeholders	Concrete implementation of strategy	Input for actions and programmes	<ul style="list-style-type: none"> <li>Make measures to green our vehicles more tangible, distinguishing between greater/lesser impact and easy/difficult to implement</li> <li>Top 3: Awareness programmes on safe and sustainable driving, electric car with holiday alternative and speed control</li> </ul>
End-user dialogues (annual)	Survey of wellbeing and productivity among end users of office buildings in the Netherlands	Contribute to quality of life	Input for further development of quality of life	<ul style="list-style-type: none"> <li>Respond effectively to wishes and needs</li> <li>Build a long-term relationship with the project's local community</li> </ul>
External Review Committee (annual)	Three independent experts at the interface of science and business: Karen Maas Wim Pullen Ruben Vrijhoef	Contribute to quality of life	Input for further development of quality of life, vision and strategy	<ul style="list-style-type: none"> <li>Make sure your story is rock solid</li> <li>Support employees on projects with clear tools</li> <li>Gather insights into what people value about 'a pleasant living environment' and what a construction company is and is not able to influence in this regard</li> </ul>

Together we are developing the Nexus knowledge campus for research, development and design for the water sector. The idea is to pool ideas about circularity, energy and water, thus working towards our ambition to bring knowledge to the market more quickly. This will be made possible by working in the same building with various knowledge partners.

This year we joined Platform CB'23, in which we are working with various parties to reach agreements on circular construction across the construction sector. One clear objective is to develop new NEN regulations. The working groups are looking at topics including new working practices, harmonisation and standardisation.

## 66 To be able to keep on innovating we need to tap into the brainpower of our professionals 99

### What our employees think

The commitment of our employees is crucial in realising our ambitions, which based on our core values: safety, sustainability and integrity. In 2018 we invited all our employees to take part in a culture survey. We asked them how we are doing, what we are doing well and where we need to improve.

One of the things where our employees feel there is room for improvement is our positioning in terms of quality of life. In 2019 we will launch the first part of our communication programme, an employee challenge to

come up with the best idea for recycling waste and materials.

We are sure that employees can contribute good ideas. To be able to keep on innovating we need to tap into the brainpower of our professionals. Last year saw the official launch of the HeliX innovation programme.

HeliX is a key part of our innovation strategy, promoting mutual cooperation between our companies. The programme offers a way of working that is different from our standard operational processes, facilitating problem-oriented innovation through a process based on Design Thinking, Lean Startup and Agile methodologies.

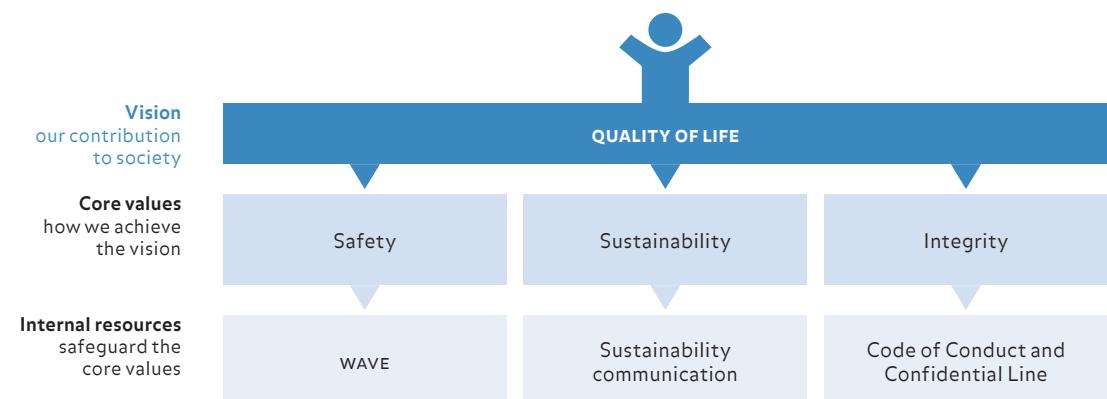
A digital environment – to which all VolkerWessels employees will have access – will be used to gather ideas for various innovation campaigns during a short period of time. The campaigns may also be opened up to external parties so that we can work with partners, start-ups or clients to come up with solutions.

In 2018 the campaign was about lorry parks. The transport sector is experiencing a growing number of problems with regard to safety and comfort. We asked employees for their ideas on safety, user-friendliness, comfort, sustainability and good traffic flow. This resulted in activity from around 1,000 employees and 140 ideas, of which 16 were selected. The concept will be fleshed out with the initiators of the campaign in 2019.

### **Setting a more active course towards sustainability**

How do you help the organisation to move in a sustainable direction? How do we raise the subject of sustainability with all our companies in such a way that we really get through to every layer of the organisation? Our management objective is to make sure that sustainability is translated into every single project. This is a process that will take several years.

Our principal objective is to do our work well. That means a working process based on safety, sustainability and integrity. In terms of policy our



organisation is set up in such a way that we set performance targets for our companies based on the command and control principle. This means that the targets and frameworks are imposed by the Management Board (command) and that KPIs are set to achieve them (control).

The results are expressed in terms of KPIs like waste separation rate, incident frequency (IF) rate, CO<sub>2</sub> emissions of our vehicles, percentage of zero-energy bill homes and PSO score for social return. The balanced scorecard for the Management Board includes the aforementioned KPIs for the RCF.

The CSR (Corporate Social Responsibility) Platform is the central decision-making body in the area of sustainability. The platform is comprised of the chair of the Management Board and Board members from all our divisions. The Management Board bears ultimate

responsibility for the policy and for achieving the targets. The CSR department supports, coordinates and facilitates the implementation of the sustainability policy by the companies and reports to the platform and the Management Board.

Starting this year our companies in Germany and North America will also be included in our sustainability reporting. Before the IPO these activities were separate. During the past year we have done a great deal of work to analyse existing processes, to catalogue data and set up a new reporting process. This is part of getting our house in order. In previous reports we already reported on the performances of our companies in the United Kingdom. In the International section of this report we give a description of sustainability for our international operations and explain the performance for the past year.

### **Looking ahead: 2020 is around the corner...**

The target year for our sustainability targets is 2020, which is just around the corner. During the past year, preparatory work has taken place on new targets for 2025. The targets will be linked to the six focal points and three pillars of quality of life. These targets will be finalised during the coming year, with the support of our companies.

### **External Review Committee**

How do you get the organisation moving in a sustainable direction? Our External Review Committee was established to help with this, this time for the fifth year in a row. We conducted a critical dialogue over a period of a month, with three independent experts attached to Het Groene Brein, a foundation that brings together science and business in the interests of sustainable enterprise. The composition of the Committee changes each year.

The contributions made by the members of the council are hugely valuable. They examine our policy based on their own areas of expertise. We have given thought to some of these topics, but less thought to others.

The External Review Committee helps us to focus and provides us with guidance for improving our policy.

This year the key question focussed on making our approach to quality of life more tangible: how do you introduce sustainability at every level of the organisation (Management Board, boards of the companies, projects and employees) and what is needed to achieve that? The key findings were:

- More targeted choices: what should be done, and what not?
- Assess projects in terms of the quality of life benchmark
- Activate management to tell the story

**"Sustainability is a must for any company wanting to position itself for the future. Society and company stakeholders are calling for solutions that take into account the scarcity of resources and the environmental impact, and VolkerWessels is well placed to respond to this."**

Sietze Hepkema  
Member of the VolkerWessels Supervisory Board



## **ANOTHER PERSPECTIVE**

## KAREN MAAS

Make sure your story is rock solid

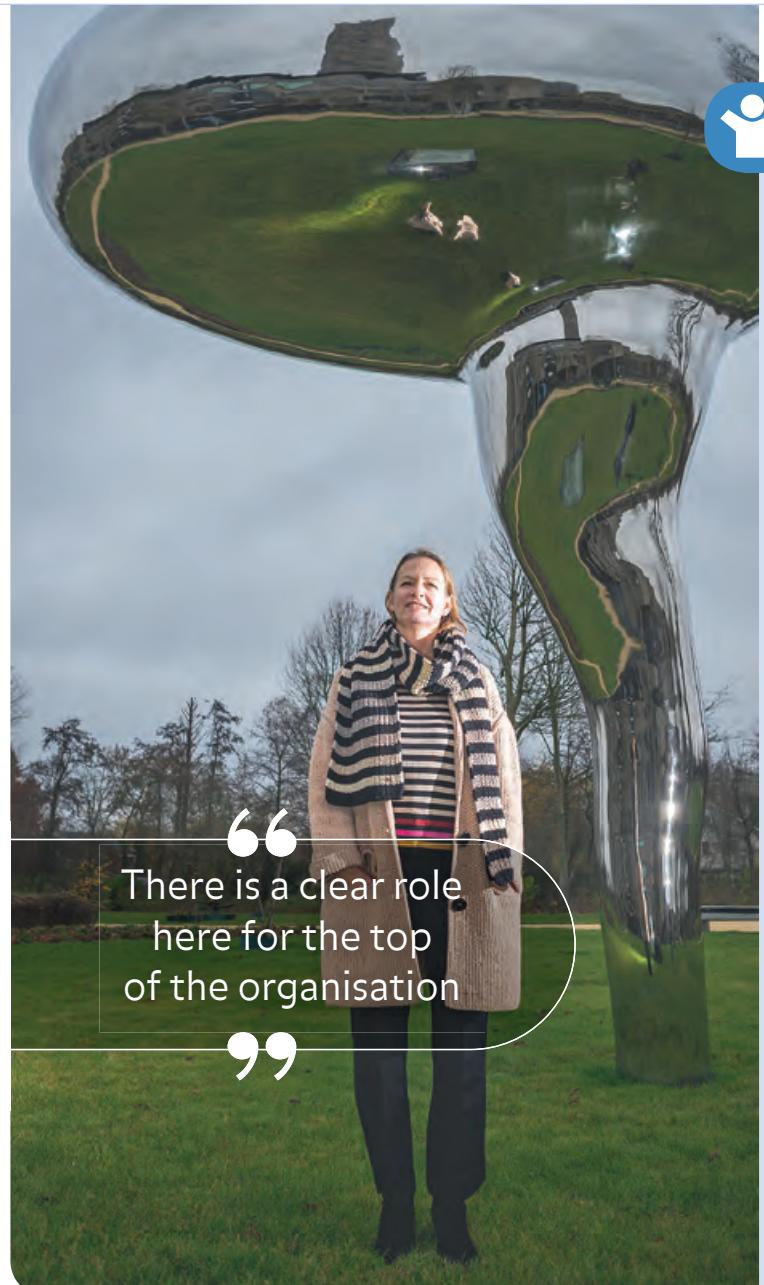
**Karen Maas, Academic director of the Erasmus Impact Centre, Erasmus University Rotterdam**

VolkerWessels has a really great ambition: to deliver a positive impact on quality of life. It is clear that there is plenty of energy to make this happen and also that many initiatives and activities are already in place that will help achieve this. Contributing to quality of life is an important topic and an attractive one. Broad enough to encompass many different things, specific enough to appeal. This is the strength of VolkerWessels, but at the same time also its great challenge.

Because what exactly does VolkerWessels understand under quality of life? How can they contribute to quality of life? Why would VolkerWessels make private investments in order to create social value? In what way does this strengthen the business model and the organisation? In short, why does VolkerWessels want to contribute to quality of life? This story needs to be crystal clear and rock solid.

There is a clear role here for the top of the organisation. Members of the Management Board, the company directors and the managers all need to be able to get this story across effectively. This does not mean that a standard story should be developed for everyone to learn by heart. No, quite the opposite. Top managers need to be able to explain the story in their own words, based on their own context and using their own examples. This will bring the story to life and make it understandable and engaging for employees and stakeholders. Create knowledge and competence, involve employees and encourage healthy internal competition. Only then will it be possible to make the change from reactive to proactive and from ambition to impact.

“  
There is a clear role here for the top of the organisation  
”



## WIM PULLEN

### Gather insights into what people value about 'pleasant living'

**Wim Pullen, Director of the Center for People and Buildings, Delft University of Technology**

Quality of life is a complex term, as readers of successive VolkerWessels sustainability reports will know. There are three pillars: health, natural environment, and work and enterprise activities.

Quality of life affects anyone who buys a VolkerWessels home, people who use an office or hospital, but also anyone who drives on roads or roundabouts – or any other part of the infrastructure – built by VolkerWessels. Health affects all of us, including those who are not clients of VolkerWessels.

This makes it all the more surprising that VolkerWessels only engages in dialogue with end users on this topic once a year. Health needs to be taken seriously. You would expect a large company to want to know every last detail about the effects of its construction activities. After all, quality of life for the person living in a VolkerWessels home only starts when they are handed the key to their new home. Just one user dialogue a year is in stark contrast with the wealth of knowledge and experience that VolkerWessels can glean if users and residents are willing to share these. VolkerWessels does not need to hold more frequent dialogue if it instead carries out a systematic evaluation of user experiences: detailed experiences of both the product and how it

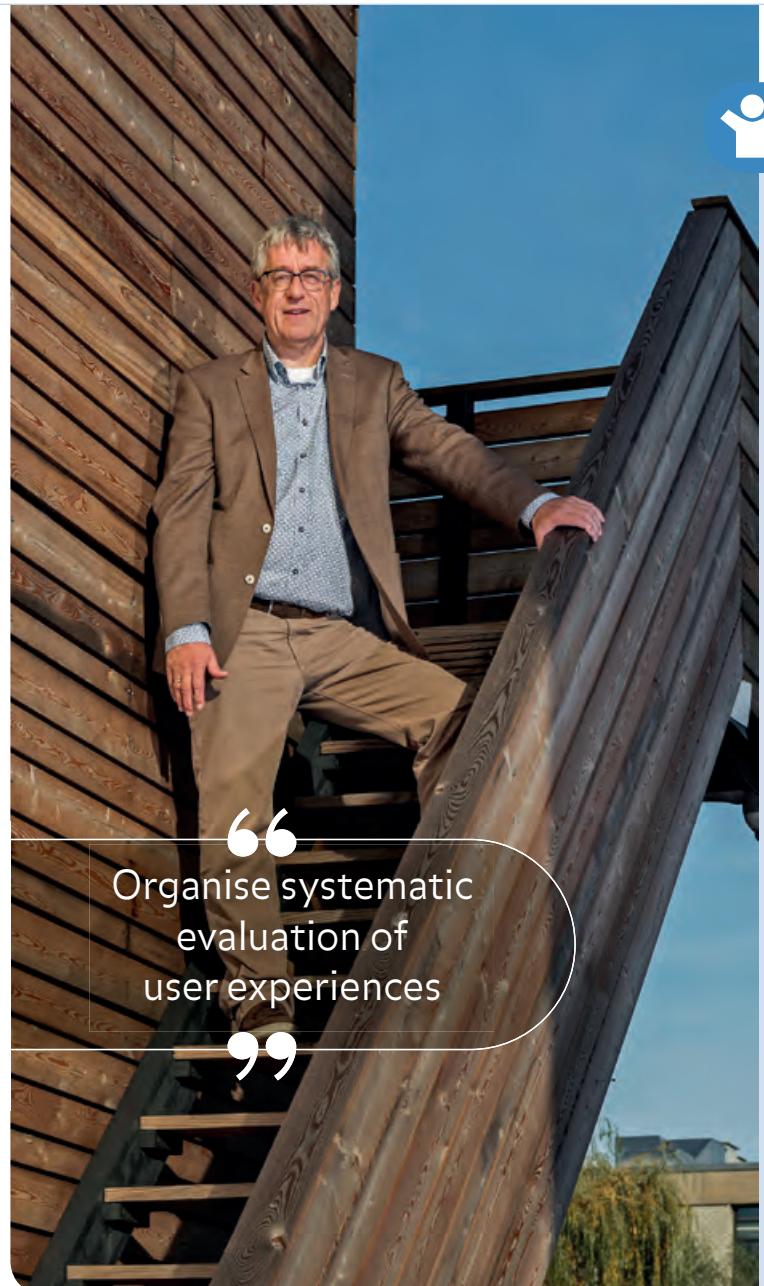
was created are important, and experiences after three months are different from after two or five years.

Obviously there are costs involved in setting up such an evaluation system, but there is plenty of young talent in the VolkerWessels group to make a start. This talent is the management of the future. If the Management Board and their directors give them the chance now, then we needn't have any worries about learning potential in the construction sector.

If a home has defects it would be nice if VolkerWessels could put these right from a goodwill perspective, without the consumer succumbing to the preconception about the construction sector ("they make money by charging everything as extra work").

Organised aftercare of this type is dependent on a relationship being built with buyers/end users: the customary guidance for the buyer can easily be extended in the form of attentive care for residents.

The management of VolkerWessels can only take itself seriously if it is listening to the end user.



## RUBEN VRIJHOEF

### Support employees with clear tools for quality of life

**Ruben Vrijhoef, Lecturer at the HU University of Applied Sciences Utrecht, Researcher at the Knowledge Centre for Process Innovation (cpi) in Building and Construction, Delft University of Technology**

There is no better way for a construction company to show it is building a better quality of life, than in building projects on which so many employees work every day to contribute to the built environment. More than ever before society is making high demands in terms of a healthy environment, social responsibility and care for the planet and nature.

This is urgent and requires immediate action, in projects with employees. Strategy needs to be translated into action with an impact and a demonstrable result. How can the company see to it that every project and every employee is focused on quality of life?

It starts with a statement: We only do projects that contribute to quality of life. Take a strict line on this and dare to be as strict on quality of life as on financial returns. Educate clients and engage with them about the opportunities that projects offer to contribute to quality of life. Set tangible demonstrable targets for

how each project will make a measurable and workable contribution to quality of life.

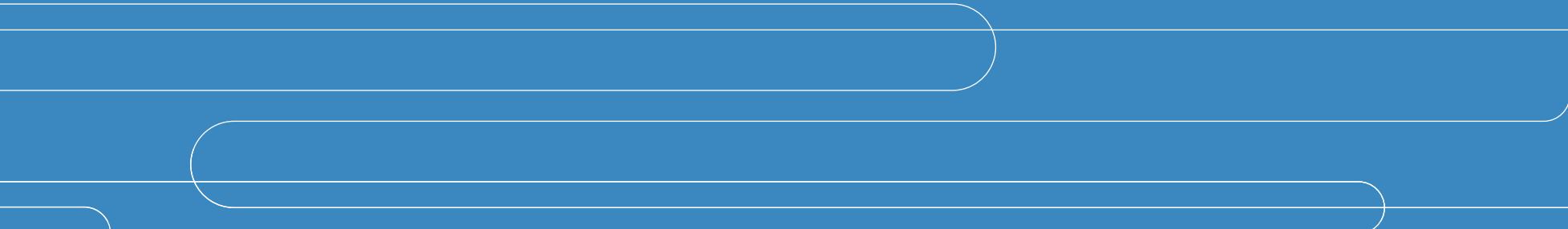
Social demonstrability and visibility are even more important than measurability. Interact and engage with a project's local community. How? Give projects, teams and employees the tools and budget they need to take action. Get them together and allow them to inspire each other by sharing successes and experiences. Provide a platform and give them positive attention and appreciation. Broadcast the results and initiate the learning curve from project to project. Be open to acknowledgement but also to criticism from the community, experts and social organisations.

Bring it all together in an iconic project for the company that encompasses every aspect of quality of life. Make that your main priority and hold it up as an example to others. Make it the focus of your investments in knowledge and people, and get partners and knowledge institutes involved. This will allow quality of life to become part of the DNA of employees and projects.



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# Sustainability topics



## Health



The WonderWoods project in Utrecht's central station area comprises a pair of tower blocks with a height of 70 and 90 metres providing space for living, working, relaxation and recreation.

"Every day we are involved in building the **living environment**. In developing new concepts we also focus on the topic of **health**."

## VolkerWessels wants to contribute to a healthy built environment.

Every day we are involved in building the living environment. We are therefore committed to research into healthy design and developing new building concepts aimed at health.

We believe that a sustainable building should always also be a healthy building, and that health should become an obvious quality aspect in realising our projects. We know that the indoor environment of a building impacts on our health, with factors such as light, air, space, comfort and materials all playing a part. By taking these factors into account when designing a building, we can achieve a higher standard for health in buildings.

### Healthy building materials

How do we build with health in mind? At VolkerWessels we first of all look at the core of our activities: the materials we build with. We are continuing to broaden our knowledge about healthy building materials.

For some existing materials there are healthier alternatives. Wood, for example, regulates damp, provides insulation and has a proven positive effect on people's mental health. Furthermore it is a renewable resource which can be used as a sustainable alternative

for materials such as concrete. We are using increasing amounts of wood, for example in the standard housing modules of Finch Buildings.

There are various studies that show that nature also has a positive effect on people's health. Being able to look out on natural features is generally felt to be positive. Nature has a soothing effect on people. We are getting better all the time at translating this into our designs.

A school building under construction in Amsterdam-Noord consisting of 34 wooden modules. A unique project since one of the requirements is that the building must be movable (see also page 42).



## Safety is not optional at VolkerWessels

Obviously, we need to talk about working safely, but above all we need to do it. We make no concessions when it comes to safety. Working safely should be the norm: second nature, automatic.

Our safety policy is aimed at the working culture. In practice this means that we make sure that we have enough trained people with an excellent understanding of safety management. We apply clear rules on the building site and make efforts to ensure that they are enforced. We raise awareness of the topic with our WAVE (Wees Alert! Veiligheid Eerst! – Be Alert! Safety First!) safety programme and the annual Safety Day.

### Tightening our policy

During the recent period we have done a lot of thinking about our safety policy, because we believe our safety performance needs to improve, both as a company and as a sector. Over the past year we have therefore taken steps to make our safety policy more tangible. The main action points are:

1. More site visits by the management
2. Enforcement: safety is not optional
3. Better insight into the causes of accidents and near misses
4. The Safety Ladder as a tool for culture change

### Site visits by management

Visible leadership and dialogue with construction site workers about safety can and must improve. A new element in our policy is that statutory directors must perform at least 8 site visits a year, putting the total number of visits at over 500. This will make the core value of safety more visible for the construction site

workers. A special questionnaire has been developed for these inspections and has been included in the WAVE app, so that the findings of the visits can be recorded.

### Safety is not optional

Accountability and agreements are the two key topics that need to become an integral part of our safety culture.

We have various ways of rewarding our employees for excellent behaviour, including the (metaphorical) pat on the back but also for example by nominating them as safety employee of the week.

But more important is that safety can never be 'optional'. And so we always confront our employees if they consciously or unconsciously break a clear guideline or rule. The sanctions policy is crucial in this respect: if the confrontation does not produce the desired result, the responsible safety official is obliged to resort to sanctions.

### Targets for 2020

- IF-rate of 3.5
- All companies at level 3 on the Safety Ladder
- Reinforce the safety culture
- Further rollout of central registration of accidents
- Involve subcontractors in WAVE
- WAVE and Samen Slimmer Bouwen ('Building Smarter Together') as mutually reinforcing programmes
- Active cooperation to develop products arising from the Safety in Construction Governance Code



### Culture in the very fibres

Working on safety requires constant attention. At the drawing board, at the building site, during transport and at the office. We launch initiatives throughout the year to raise safety awareness among our employees. We have clear WAVE values and rules. It would be good if we could actively remind each other of them more frequently, so as to make sure we all stick to them.

Focus and alertness are needed when changes are made to the order of work or to working methods. Prevention is key, and so a Health & Safety Plan is drawn up prior to a project. Two important elements in such a plan are the risk inventory and evaluation. These are different for each project. If the work changes or is very different from the norm a Task Risk Assessment (TRA) will be made.

<b>Safety values</b>	
<b>Core value</b>	
<b>Safety</b>	I work safely or not at all
<b>Values</b>	
<b>Consistency</b>	Safety is part of everything we do
<b>Responsibility</b>	I am responsible for my own safety and that of others
<b>Willingness to learn</b>	I want to learn from accidents and near misses
<b>Openness</b>	I alert others to unsafe behaviour and safety issues

### Training

In 2018 the decision was made to train 15 colleagues to perform audits. Monitoring our performance is at least as important as having clear rules, because we can use the resulting insights to steer a tighter course. In addition to this central training programme, which will be launched in 2019, the initiatives for many programmes come from our own companies.

The Safety in Construction Governance Code is aimed at implementing legislation relating to construction. The recommendations of the Dutch Safety Board report 'Bouwen aan constructieve veiligheid' ('building constructive safety') will be implemented within the organisation wherever possible, for example through

<b>Safety rules</b>	
	Use the right personal protection equipment (PPE)
	Make sure the building site is safely cordoned off
	Use the correct (approved) equipment and tools
	Keep the workplace tidy
	Perform an LMRA (Last-Minute Risk Analysis)
	Do not work or drive under the influence of alcohol and/or drugs
	Do not smoke outside the designated areas

the major training programme launched for the Health & Safety Coordinators at the Construction and Real Estate Development segment. The course focusses on safety on and around the construction site, and was developed as a result of accident analysis showing the need for improvement in Health & Safety coordination. The course was launched in the autumn of 2018 and is being given with around 300 employees participating. In addition, we collaborate with the Safety in Construction Governance Code to formulate principles to promote constructive safety.

In 2018 we also launched the Conscious Safe Leadership course aimed at project leaders, foremen and work

planners. We want to provide this course to no fewer than 1,300 employees in 2019.

VolkerWessels employs several WAVE coaches who engage with employees to find out why someone is working unsafely. The coach then works with employees to find a solution to the situation. It is the task of the WAVE coach to make employees aware of their responsibilities and the consequences of their actions. Finally the WAVE coach helps the board gain an insight into the employee mindset when it comes to safety.

Not all construction work is the same. Sometimes a project calls for project-specific training, for instance if the work is highly specialised. Take for example our rail company. During the work to repair and reinforce the Haringvliet bridge workers were working around 15 metres up in the air and in a very small space. In such situations, it is important to know the procedure if a worker becomes unwell. We have trained our people so that they know what to do in the event of this happening.

66

We want more insight  
into why accidents  
happen

99

### 360-degree visibility policy

In 2018 we implemented new 360-degree visibility policy and rolled it out across all our companies and suppliers. This was done in accordance with the occupational hygiene strategy: where moving vehicles are involved, we try to keep people and machinery separate wherever we can when arranging the building

 "We cannot allow ourselves to wait any longer to clean up God's creation and make it more beautiful. **It is the responsibility of all of us.** Sitting back and waiting passively for new innovations is not an option. Taking positive action paves the way for new technologies, which we thus help to set in motion."

Brother Isaac  
Prior of the Onze Lieve Vrouw van Koningshoeve abbey



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site. We also apply the 'If you can see me, I can see you' principle, which means that colleagues let each other know where they are in relation to one another while carrying out the work.

When operating machinery, people often have limited visibility, for example because they are positioned high up. The new 360-degree visibility policy along with vehicle reversing alarms and cameras will improve the situation. The policy and associated rules came into force on 1 January 2019.

Finally, high-visibility clothing must be worn on all building sites. Radio ear protectors have been banned. These measures drastically reduce the risk of collision and are enforced by including these items in the audits and workplace inspections. Suppliers listed in the procurement contracts must also comply with this requirement. Our own equipment supply company has

fitted nearly all its wheeled vehicles, including the buses, with cameras and high-visibility marking.

### Better insight into the causes of accidents

It is helpful for everyone to be aware of when accidents are most likely to happen. That way we can limit the risks. We want to have a better understanding of why accidents happen.

### Accident investigation

Since 2016 any serious accident is subject to an in-depth investigation by investigation teams from the companies, as well as investigation specialists from VolkerWessels. A total of 10 such investigations were performed in 2018. Fatal accidents and serious accidents resulting in sick leave must be reported to the Inspectorate of the ministry of Social Affairs and Employment (szw). Such investigations are carried out by our central accident investigation team based on the Tripod method (see inset). The investigation team

provides support to the company where the accident happened. The findings of these investigations are leading for our policy (see 'Culture in the very fibres', pp. 32 and 33). Less serious accidents are always investigated by the company's quality, health & safety and environment department using the 5 Why method.

- An investigation starts with a 24-hour report in which we record what happened.
- Step two is to prepare an investigation plan, setting out the members of the investigation team, the investigation questions, a schedule and interviews to be held.
- Once this is clear, the plan is carried out: we conduct interviews and analyse all the information.
- We write a brief report on the results of the investigation, with an analysis and conclusions.
- We provide feedback in person on the outcome of the investigation to those involved and to the board. During the feedback session we work together to formulate recommendations.
- The recommendations are submitted to the Safety Platform.

### Reporting and monitoring

It is important that we are kept well-informed about unsafe situations and accidents and near misses. The WAVE app gives us more insight into accidents and areas for improvement in terms of working safely. We expect to be able to carry out more analyses based on the data gathered. The application has been significantly upgraded over the past few years, for example to make it more user-friendly.

In order to improve reporting we decided to make some major modifications to the WAVE app. The most

important change concerns better classification of accidents. Previously, accidents were often wrongly identified as lost-time injuries despite alternative work being available. A second, much larger change is that accidents are analysed based on the 11 basic risk factors. Examples include unsuitable physical circumstances and other influences (stress, tiredness), and poor-quality tools or materials. The same applies to the reporting of unsafe actions or situations. Finally, in 2019 a dashboard will be developed for monitoring the main KPIs. This will provide additional information as input for the existing reporting and management cycle at VolkerWessels.

#### Safety Ladder

For VolkerWessels the Safety Ladder is the perfect tool to ensure a strong safety culture. The tool is based on the hearts & minds principle, meaning that safety should be an integral part of everything you do.

The Safety Ladder has five levels. Our objective is for all VolkerWessels companies to have reached level 3 by 2020. Level 3 represents 'calculating: we have the system in place.' Some companies have already reached level 3 or 4. Meeting this objective will help us achieve our most important target: an IF rate of 3.5 in 2020.

#### Injury Frequency (IF) rate in 2018

Our performance in the area of safety is expressed by our KPI for injury frequency or IF rate. This is the number of occupational accidents resulting in sick leave multiplied by one million (hours) divided by the number of hours worked. In 2018 there were a total of 116 accidents resulting in sick leave, leading to an IF rate of 4.6. This means that our target of an IF rate of 4.7 in 2018 was met. It was also lower than the 5.3 recorded in 2017 and we are pleased to report that this represents a historical low. Analysis of the accidents resulting in sick leave shows that tripping, slipping and stumbling are the most common types of accident in all segments. In 2019 all these accidents will be analysed in more

detail and addressed in initiatives across the VolkerWessels group.

There is still too much difference in the level of safety awareness between various companies, with some differences being quite sizeable. In view of this we are switching from quarterly to monthly reporting in 2019. This will give a monthly impetus to boost safety awareness.

#### Safety in the chain

Our own group-wide Safety Day is a perfect opportunity to engage with partners in the supply chain on the subject of safety. The third edition was held last year. The group behind the Safety in Construction Governance Code took the initiative to organise an annual day centred on the theme of safety. Every year on the third Friday in March we discuss safety with all partners in the value chain at our building sites.

For one day we made sure that the whole of VolkerWessels Netherlands was focused on safety. And not by reciting new rules but by discussing safety together and playing a game. The theme of last year's



Staff play our very own board game during the Safety Day: The Road to Safety.



Safety Day was Be aware while you play, safety is a must! Will you stand for safety?

The generic site safety instructions (GPI) are an important outcome of the collaboration with supply chain partners. This involves safety checks at the entrance to building sites. By April 2019 all site workers must be aware of this set of instructions, ensuring uniform levels of knowledge across the construction sector. VolkerWessels is one of the initiators.

The Safety Ladder helps us to implement our policy towards our subcontractors consistently. Our objective is for the whole of VolkerWessels to have reached level 3 by 2020. From this level upwards a company must treat subcontractors and hired employees in the same way as its own employees. This means that they are included in inspections and attend toolbox courses. Subcontractors are regularly audited under this certification.

When selecting a new supplier or subcontractor we ask them a number of health and safety-related questions, for example about their IF rate.

Another way in which we communicate our policy to subcontractors is by means of supplier days, which most of our companies already organise on an annual basis.

#### Responsibilities

The VolkerWessels Safety Platform is responsible for developing the safety policy and monitoring our companies' safety performance. The Safety Platform is being chaired by the chairman of the Management Board and reports to and advises the Management Board.

The Safety Platform orders accident investigations, decides whether to send out a WAVE alert and determines which improvement measures need to be

implemented based on the findings of the accident investigations. In addition the Platform is responsible for the everyday implementation of the WAVE safety programme. Safety is a factor in the remuneration of the management and members of the boards.

#### Highlights of 2018

- Safety policy made more specific
- VolkerWessels Safety Day
- 15 prevention employees trained to perform audits
- Start of training programme for Health & Safety coordinators for Construction and Real Estate Development

#### Challenges in 2018

- Behaviour change: accountability and agreements
- Large differences in safety awareness at companies

#### Action items for 2019

- Major overhaul of the WAVE app
- Improved monthly management reporting
- Safety Ladder certification

## Natural environment



**"By developing effective sustainable alternatives we can make a positive contribution to the transition to a climate-neutral, circular construction sector."**

High water levels in the River IJssel pose a flood threat to the cities of Zwolle and Kampen and their hinterland. In order to be able to continue to guarantee flood protection in this area we are lowering the summer bed of the IJssel and realising a new side branch, the Reevediep.

## Natural environment

### Steadily gaining experience in circular construction

We must learn to make more use of biobased and secondary materials in construction. This means making changes to processes and business cases.

In a circular system, materials never degenerate into waste, but instead circulate in a never-ending cycle. This means that (parts of) our products are designed so as to allow for high-level recycling or re-use. In the ideal circular world the technical cycle is smaller than the biological cycle; this is a crucial notion in our view.

#### Try it out

We are already moving in the right direction – as a co-initiator and developer of the Madaster material passport, with our experience in circular design, and by applying our ever-expanding knowledge of health-promoting and natural materials.

A wonderful project we developed in collaboration with the De Dommel water board and Hungarian firm Biopolus is the Biomakerij at the Trappist abbey Koningshoeven in Berkel-Enschot. Building work started in January and the first circular water purification plant of the Netherlands opened in

October. It uses a greenhouse of tropical plants to purify the wastewater from the abbey's brewery, which amounts to around one million cubic metres a year. The water is reused to irrigate the abbey's land, to water plants in the nursery and to rinse beer bottles. The Biomakerij was delivered with a material passport. The project won the Water Innovation Award 2018 from leading Dutch construction magazine Cobouw.

*Interior view of the Biomakerij greenhouse. Tropical plants and microorganisms are used to purify the wastewater.*



## Building a circular construction sector

Things need to change in the construction sector. The market appears to be preparing itself for a circular building sector. We are increasingly being asked about circular solutions and note an increasing willingness on the part of our clients to invest in circularity.

Our resource policy is focused on the following areas:

1. **Circular design strategies:** we view our projects as resources banks and have considerable influence in the design phase
2. **Material passport:** giving building materials an identity to ensure information remains available
3. **Good waste management:** increasing the waste separation rate

### Experience in circular construction

By now we have gained considerable experience in the development of sustainable housing and infrastructure concepts and the sustainable use of materials. Examples of circular construction projects include Fokker Logistics Park, the Alliander office in Duiven, the MorgenWonen and ZuiverWonen housing concepts and the Circular Viaduct developed in collaboration with the Dutch department of public works. In 2018 we brought together our real estate developers, contractors, experts and architects to start developing a new circular and healthy housing concept.

### Targets for 2020

- Raise percentage of waste separated to 100% high-grade use
- Complete reuse in high-grade applications: 97% recycling
- 25% reduction in waste for disposal for each euro of revenue
- Reduction in procurement of resources:
  - 25% reduction in primary timber procured
  - 25% reduction in steel procured
  - 25% reduction in concrete procured
  - 10% reduction in asphalt raw materials procured
  - 100% sustainable timber procurement



6  
CLEAN WATER  
AND SANITATION



9  
INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



12  
RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION

### Circular bike path

A great example of a circular solution is the circular bike path we built in the Dutch city of Zwolle last year. After years of development the inauguration of the world's first PlasticRoad was a real highlight. The concept uses recycled material and consists of prefabricated elements.

The 30-metre pilot stretch of bike path is made of recycled plastic and consists of separate, hollow elements that not only allow room for cables and pipes, but also have a function in collecting and disposing of rainwater. At the end of their function, the elements can be taken apart and used to produce new elements. The PlasticRoad project involves innovative supply chain cooperation between Wavin, Total and VolkerWessels. In the autumn we also installed a second stretch of PlasticRoad bike path in the town of Giethoorn.

### Circular construction means experimenting

In collaboration with prefab builder Consolis Spanbeton and the Dutch department of public works we built the first Circular Viaduct in the Netherlands. The viaduct was built near Kampen, where it will be used and tested by construction transport vehicles involved in the construction of the Reeuwsluis lock. In this project we are experimenting with new techniques, as well as putting a new form of collaboration into practice, for example working together closely with the supplier in order to create the right modular construction. We are also sharing the knowledge gleaned from the project with other parties that want to contribute to the development of circular construction. Following an initial test phase, the minister of Infrastructure and Water Management will inaugurate the viaduct in the first half of 2019.



**"Circularity at VolkerWessels will only work if there is bottom-up and top-down enthusiasm at the same time. I am confident that this will be achieved!"**

Elphi Nelissen  
Professor and Chair of Building Sustainability at Eindhoven University of Technology

The viaduct is circular because the concrete elements used to build it can be fully dismantled and reused at a new location. This means no waste, no new materials and top-level recycling of used materials.

#### Reducing the use of primary resources

If we want to achieve closed cycles of resources we need to be aware that resources are more than just the building materials we end up using. Water is a resource, energy can only be generated from resources and we also rely on resources to transport materials. We focus on the whole lifecycle of the materials we use in order to reduce the use of new primary resources by promoting reuse and recycling. Where we do use new primary resources, our aim is to reuse or recycle them at the end of their function.

#### VolkerWessels signs national concrete agreement

The concrete supply chain is a decisive factor in increasing sustainability, given that it is one of the



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largest sectors involved in creating the built environment.

On 10 July 2018 we joined some 50 other major players to sign the national concrete agreement. The main aim of the agreement is to achieve a substantial reduction of carbon emissions, along with joint efforts to make the concrete supply chain circular. At present concrete recycling is still often low-quality, with concrete being broken up and used as foundation material. Full concrete recycling will require the recovery of cement, and all the materials to be reused for the production of concrete. This is the technical challenge we are facing. It is also worth noting that a number of important partners in the supply chain did not sign the agreement. Successful greening of the concrete supply chain depends on the whole supply chain making the change.



## HIGHLIGHTED

### A MILLION PLASTIC CAPS

We are proud that VolkerWessels, Wavin, Total, the province of Overijssel and the city of Zwolle joined forces this year to install the first two PlasticRoad pilots in the world. This is our way of trying to make cities and villages climate-proof, circular and settlement-proof while causing the minimum of nuisance to the surrounding environment. We do so by making use of the plastic waste we already produce. These two pilots alone have enabled us give a second life to 2 tonnes of plastic waste (equivalent to a million plastic caps)!

A result we can all be really proud of.

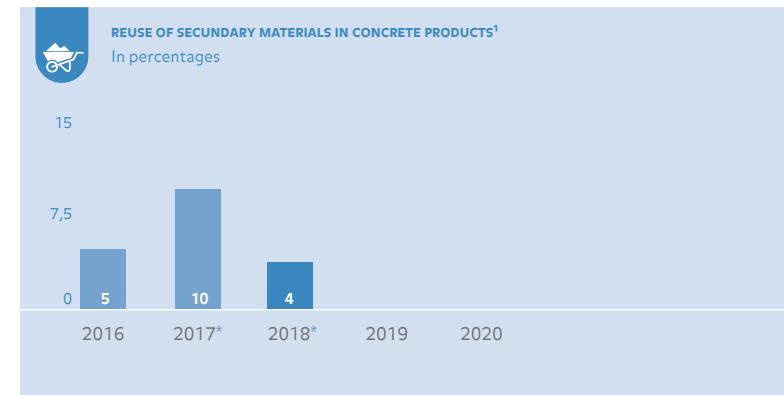
Examples of projects in which we used less (primary) concrete include Paleis Het Loo, the Reevesluis lock and the recycling of concrete during maintenance work on tram rails in Amsterdam.

In the ongoing project to renovate Paleis Het Loo we are responsible for the underground expansion of the museum. The underwater concrete floor we have laid there is twice as thin as usual, saving a considerable amount of concrete.

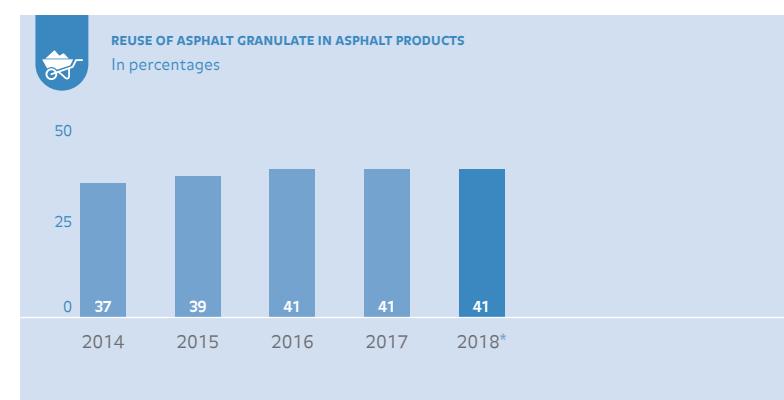
In 2018 work started on building the new Reevesluis lock in the Drontermeer lake. The chosen building method needs substantially less concrete because the lock is not underpinned by piles. The walls of the lock will be made of steel and recycled concrete will also be used. The control building will be fully circular.

Recycled concrete can be used in maintenance and renovation as well as in new construction. For example in Amsterdam we applied concrete recycling during maintenance work on the tram rails. As of this year the top layer of the concrete for the tram rails contains 30% recycled concrete. That represents a 30% reduction in the use of primary resources.

There was a 6% decline in the amount of secondary materials used in concrete products. This was due to a second VolkerWessels concrete processor being added to the scope for this figure. This company performs more specialist activities (concrete road construction), which require specific concrete characteristics necessary to extend the overall technical lifespan. This limits recycling options. Looking at just the activities of Van Hattum en Blankevoort, which was the basis for this figure in previous years, there was a decline of 4% compared to 2017.



\* KPMG provided limited assurance on this indicator, refer to page 77.



\* KPMG provided limited assurance on this indicator, refer to page 77.

<sup>1</sup> Concerns part of the activities of Van Hattum en Blankevoort and BKB Infra, for further details refer to the section 'About this report'



**"Working with VolkerWessels to create a greener world.** Increasing the use of FSC timber in a building considerably reduces its carbon footprint and enhances quality of life. The use of sustainable timber contributes to the protection of the world's forests."

Liesbeth Gort  
Director of FSC Nederland



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### Asphalt with a smaller negative impact

Producing and laying new asphalt causes pollution. The production of asphalt involves high energy consumption as well as substantial amounts of primary resources. Which is why we want to keep working to make asphalt more sustainable in the coming years. We are already taking steps in the right direction, particularly in terms of investing in sustainable asphalt mixes which contain a higher proportion of secondary asphalt.

An example of a more sustainable asphalt mix is one that contains cellulose, an essential ingredient for producing asphalt. This cellulose is derived from toilet paper that ends up in treatment plants. Normally the cellulose is incinerated. We were the first to use a special technique to enable this cellulose to be recycled and processed into noise-reducing asphalt.

In Steenbergen we were contracted to renovate a ring road. Instead of the usual procedure of applying a

surface layer of asphalt on top of an asphalt reinforcement grid we used an interlayer of flexible asphalt. This Konwéflex asphalt bends with the forces in the underlying layer of concrete and avoids – as is the case with regular asphalt reinforcement – the risk of cracking. This is a much more sustainable solution for the future because this type of asphalt is much easier to recycle. To test the difference between asphalt reinforcement and Konwéflex in practice both materials were used in different sections of the road. Konwéflex was applied to the busiest section: a challenge we were confident to take.

The percentage of asphalt granulate in asphalt has remained stable in recent years. The measures we have taken to increase this percentage – for example modifying various asphalt plants to enable them to produce more sustainable asphalt mixtures – are not yet reflected in the figures. In addition it is not yet always possible to use our more sustainable asphalt mixtures on the projects. This is due to some clients setting a

maximum recycling percentage for asphalt mixtures which we cannot exceed, and is also influenced by the type of projects we are involved in currently.

### Building with timber

Timber is an important resource in the drive towards a more sustainable construction sector. Timber is the sustainable alternative to concrete in building construction. Large projects featuring hybrid buildings consisting of a wooden structure with a concrete core are increasingly common. It goes without saying that the timber must be certified as sustainable and thus come from managed forests.

We are a partner of FSC Nederland and aim to exclusively use sustainable timber. In 2018 we achieved second place in the Dutch Forest 50 ranking of companies that purchase and use sustainable timber. We have been in the top three for several years now.

In 2018 we developed the biggest solid wood building in the Netherlands to date: a residential block comprising 62 apartments. Construction work on the building in Monnickendam, just north of Amsterdam, will commence in 2019. The project is unique in that the entire structure is made of wood.

During the year under review we also built a school building consisting of 34 wooden modules. A unique project, because the building needed to be movable whilst providing multi-functional accommodation of lasting quality. This is because the school building will need to be moved at least once before the final plot becomes available. A circular design is crucial to the movability of the building. And so the steel foundation piles are leased, the modules are demountable and less material has been used compared to solid structures. The modules are easy to assemble and allow for modules to be added on, making it easy for primary school Klein



Thomas Rau addresses the audience at the 'Because Material Matters' event held in October.



Amsterdam, which opens its doors in January 2019, to respond to future growth and contraction.

#### Giving materials an identity

For some years now we have been involved in the development of a new independent method of providing insight into the circularity of building projects. This method is the Madaster material passport. A building's material passport records which materials were used in its construction and how they have been applied. This makes it much easier to reuse and recover materials when the building is demolished or dismantled. Because the materials remain traceable it is easier to determine the residual value of the property beforehand.

In the past year we worked hard to make the added value of material passports and circular design principles clearly visible and to make a direct link to business. In February we organised a large gathering at

which clients and relations learned about the usefulness and necessity of using the Madaster material passport in the construction and infrastructure sector. In October we organised the 'Because Material Matters' event, which attracted a large number of young professionals and entrepreneurs.

A number of VolkerWessels projects are already on the Madaster register. A project added to the register this year was the distribution centre for Eosta, a distributor of organic fruit and vegetables. A material passport was issued with the materials used for the base building and the fit-out. We also did a trial run on registering an asphalt road in Madaster.

Up to the spring of 2018 we completed 1,000 MorgenWoning homes, which are almost completely industrially manufactured. That means we stored around 189,000 tonnes of registered building materials



in a 'materials bank' of 1,000 homes. These materials can be released in the future and used again.

#### **Development of uniform methods for measuring circularity**

If we want to achieve closed cycles of resources we will need to change not only the materials and the products but also the construction processes. This calls for a sector-wide framework, standardisation of the data in material passports and a transparent and defined way of measuring circularity.

To this end we have joined the Platform CB'23 initiative of the Dutch department of public works and the Central Government Real Estate Agency together with De Bouwcampus and NEN. We provide input for all three action teams with the aim of developing transparent regulations that will provide the construction sector with advanced and measurable means of implementing circularity and sustainability in future projects.

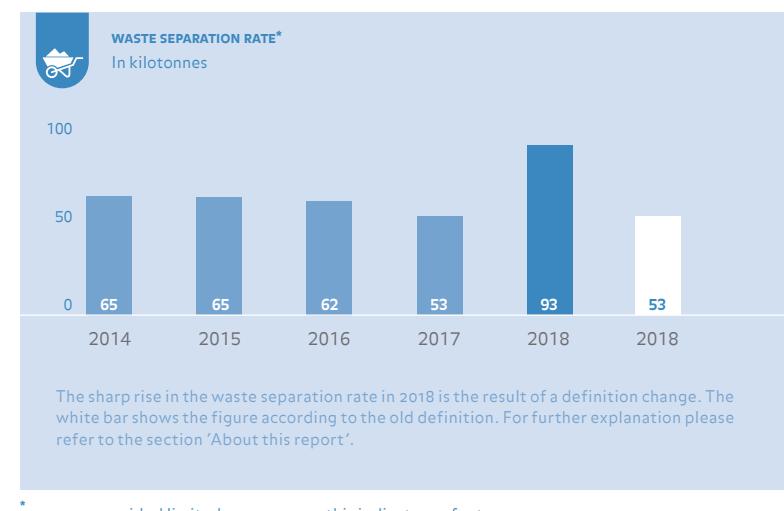
#### **Waste management**

It is not easy to obtain second-hand building materials at an economically viable price. In many cases it is cheaper to buy new materials, because the second-hand production process remains expensive. The BouwHubs present good opportunities in this respect, allowing us to store large volumes of materials and process them on the spot. During the past year we worked hard on plans for a second BouwHub in Amsterdam.

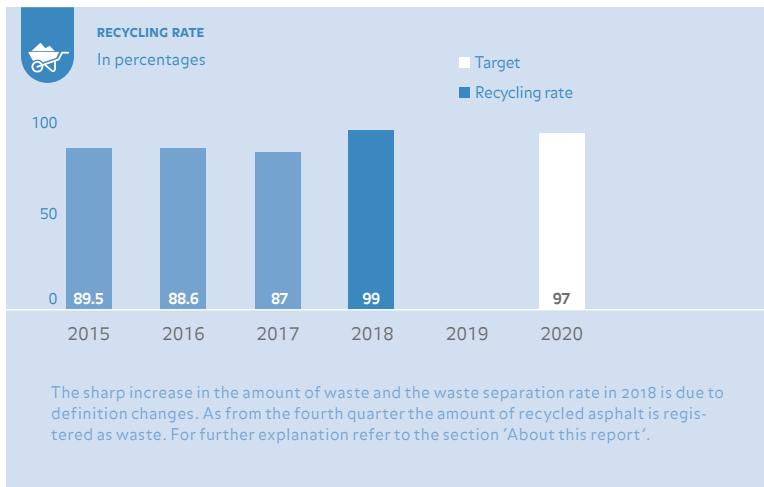
This logistical innovation (see the section on CO<sub>2</sub> and energy) also places a lot of focus on recycling building waste. Building waste returned from the building sites is collected at the BouwHub, separated and where possible used directly to make new products. The great thing is that the BouwHub is not only open to our own companies but also to fellow contractors working on projects in the Amsterdam area.



\* KPMG provided limited assurance on this indicator, refer to page 77.



\* KPMG provided limited assurance on this indicator, refer to page 77.



Waste separation is the first step towards a fully circular organisation. We want to work towards a situation in which we can build without being left with residual flows. High-grade waste management is therefore a focal point of our policy. We want as much of our building site waste as possible to be disposed of separately.

There was a sharp increase in the amount of waste in 2018, primarily due to the fact that as from the fourth quarter of 2018 recycled asphalt is registered as waste. This is the result of a change in our definition of waste. We made this change because the original definition was open to different interpretations. This also explains the sharp rise in the waste separation rate: 93% compared to 53% in 2017. The waste separation rate excluding recycled asphalt was 53%. For further explanation please refer to the section 'About this report'.

## Responsibilities

Given the great diversity of both materials used and residual streams the knowledge about optimum use and reuse of resources resides with our companies. At group level we have set central targets for our four main resources (timber, concrete, asphalt and steel). Companies that use significant quantities of these resources must comply with these targets. They are also responsible for developing the necessary measures, entering into partnerships and developing innovations that contribute to the realisation of our targets. They do so in regular consultation with the CSR department and the various suppliers.

In addition we have a target for waste separation, which as of this year has also become one of the KPIs for the RCF agreement. We have central framework contracts with waste processors which set out agreements on monitoring and processing of waste streams, for example providing for the high-grade reuse of materials from the construction process wherever possible. Progress with regard to the targets for resources and waste is monitored centrally.

Our role in the FSC Covenant is implemented centrally. The contracts with our timber suppliers contain agreements concerning the use of sustainable timber and the monitoring of our timber procurement. All our wood-processing companies are FSC/PEFC certified and monitor their own certification.

## Highlights of 2018

- Plastic Road bike path completed in Zwolle
- Circular viaduct near Kampen completed
- Biomakerij in Berkell-Eschot completed
- Signing of national concrete agreement

## Challenges in 2018

- Improving waste separation
- Making circularity measurable
- Scaling up innovations

## Action items for 2019

- Development of circular Bouwhub in Amsterdam
- Monnickendam project featuring all-timber structure
- Deliver more material passports

## High time to speed things up

Technically, we are well on the way to making the energy transition happen. However, this will also require more intensive cooperation between parties such as municipalities, real estate owners, grid operators and of course end users. With the Paris climate agreement and the forthcoming national climate agreement, it is now high time to join forces and really get to work on the energy transition.

The opportunities for saving energy and improving energy systems are greatest in the built environment. VolkerWessels is working with supply chain partners to achieve the maximum reduction in emissions.

These emissions are generated both by the extraction and production of raw materials and in the use phase of buildings and infrastructure. Both of these domains require a structural approach to saving energy and increasing sustainability. This also creates scope for new innovative solutions.

### Targets for 2020

- 10% CO<sub>2</sub> reduction per euro of revenue compared to 2014
- 5% CO<sub>2</sub> reduction in Scope 3 emissions per m<sup>3</sup> of concrete products compared to 2014
- 5% CO<sub>2</sub> reduction in Scope 3 emissions from asphalt products per tonne of asphalt compared to 2014
- 2,000 zero-energy bill homes per year



### Saving energy in the use phase

We work constantly to find ways of making energy consumption in the use phase more sustainable, for example by developing sustainable energy systems and new building standards.

For example, zero-energy bill homes generate electricity as well as consuming less energy. In 2018 we built a total of 769 zero-energy bill homes: a slight increase compared to 2017 (758) but still below our target of 2,000 for 2020. Together these 769 homes will save an average of 2,000 tonnes of CO<sub>2</sub> per year compared to the same number of standard homes.

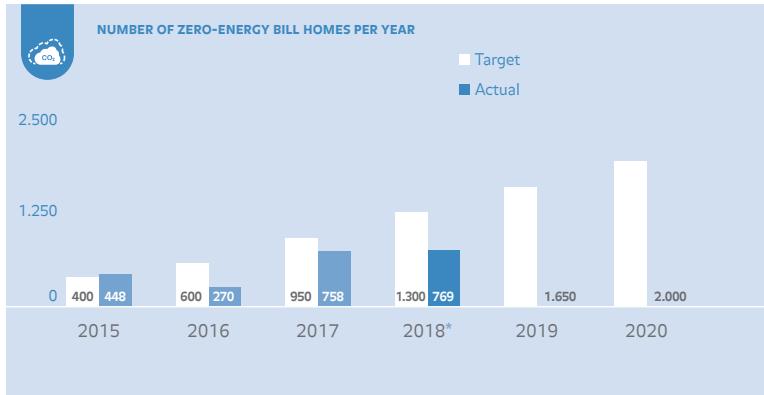
In addition to low-energy building standards we also focus on alternative energy sources for our building site, in our production facilities and during the construction process.

### Opportunities for Bouwhubs

Construction and logistical efficiency do not always go hand in hand, and there is still room for improvement here. However, in recent years we have built up ample experience in efficient organisation of the construction process in city centres, with the VolkerWessels BouwHub playing a key role in this respect. In Utrecht we have been working with a BouwHub on the outskirts of the city for some time now. The hub operates as a base for monitoring and coordinating the entire logistical process in the building supply chain (from supplier to construction site).

In collaboration with Dutch research institute TNO a great deal of research has been conducted into the positive effects of the BouwHub. The findings are very positive: significant savings in terms of energy, higher productivity levels, 50 to 80 per cent fewer trips and less heavy traffic in the city centres.

Our ambition is to engage with more municipalities about the implementation of BouwHubs. During the past year we finalised the plans for an initial circular BouwHub in Amsterdam. This will be realised in 2019, in collaboration with demolition and waste management and recycling company Beelen. The favourable location of the BouwHub will make it possible to transport



\* KPMG provided limited assurance on this indicator, refer to page 77.

materials, people and machinery by water. The facilities will be made available to all parties, builders and suppliers, so that we can make a real difference throughout the chain. The number of transport movements by suppliers can be reduced significantly, and there is scope for further expansion of transport by water. This represents a good step in the transition towards smarter and cleaner city logistics.

#### Gas-free

During the past year we developed an extensive area in the Nieuw Kijkduin neighbourhood of The Hague, which will be completely gas-free. Planned construction in the coming years includes a new shopping centre with apartments for rent and purchase, 17,000 m<sup>2</sup> of commercial space and a new promenade. We will install the plug & play thermal storage system ONE, developed by our own installation company.

We see opportunities for making the housing market more sustainable. Natural gas-free construction is rapidly becoming the norm. In addition, from 2020 all new properties must be nearly zero-energy buildings

(nZEB, or BENG in Dutch). At various locations VolkerWessels is building BENG and zero-energy bill homes. In 2018 we completed the one thousandth MorgenWoning home: proof to us that developing and building without a connection to the natural gas grid is easily possible.

A great example in the area of housing construction is the completion of Clarissenhof, in the heart of the Spoorzone 013 district in Tilburg. Here we delivered a wide variety of 339 completely gas-free homes for rent and purchase. The buildings are able to exchange residual heat and residual cold for immediate reuse. This concept enables a collective thermal storage plant to work even more efficiently and sustainably.

#### Factories: Brainport Industries Campus

In addition to homes and offices we also develop and build factories. In 2017 we started work on the construction of Brainport Industries Campus (BIC) near Eindhoven. This development and production site for business and knowledge institutions in the high-tech sector occupies a total area of 200 hectares.

BIC is proof that it is also already possible to work gas-free on a large scale, thanks to thermal storage, heat pumps and 8,800 solar panels. This 'Factory of the Future' will be the home front for far-reaching partnerships between industry suppliers, specialist businesses and innovative educational and knowledge institutions.

Various VolkerWessels parties are involved in the construction of BIC. This collaboration is a great example of our multidisciplinary way of working. Six parties are handling the various aspects of the building process, from the construction of the building to the design of the public space and the laying of pipes and cables.





### Expansion of activities

In 2018 we acquired Joulz Energy Solutions (JES). There is growing demand for solutions to support the energy transition and the trend towards electrification. JES adds substantial engineering and construction experience in the high-voltage field to our existing experience at VolkerWessels. By combining our activities we will be better able to cater to increasing client needs in terms of energy transition solutions.

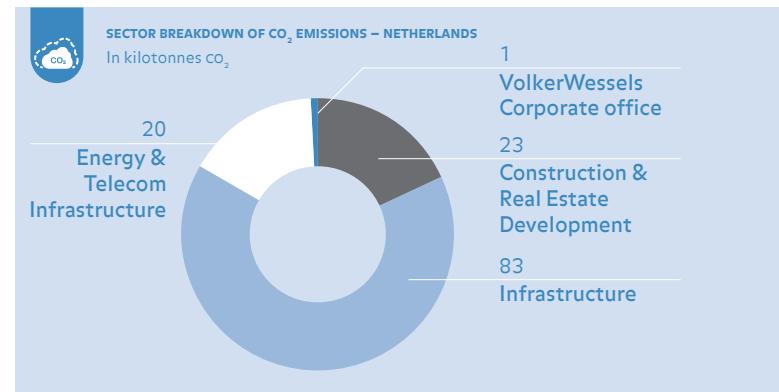
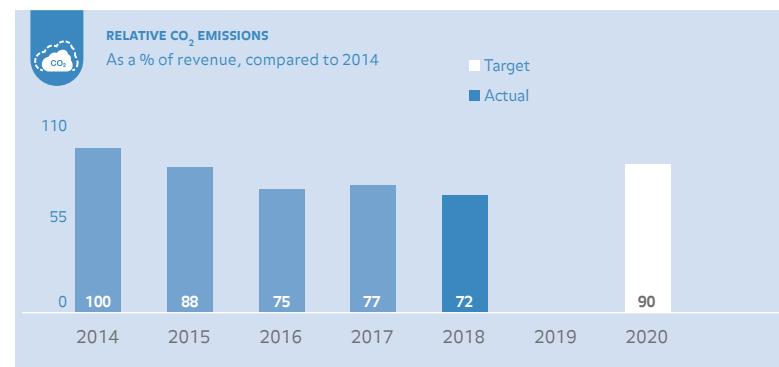
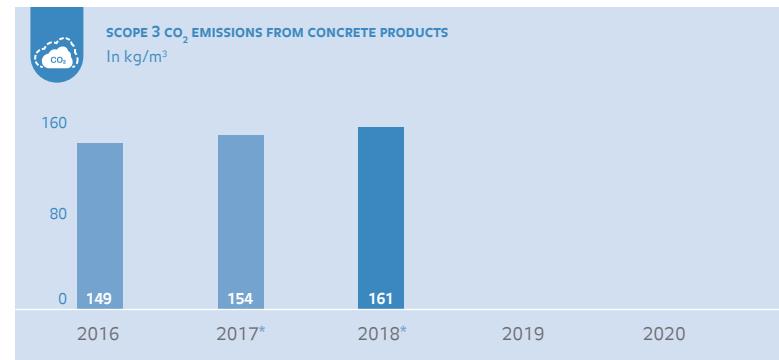
Together with JES we are working on two high-voltage offshore platforms for the huge wind farms being built in the North Sea. We are responsible for the complete engineering and installation of the high-voltage equipment on both platforms.

### Extraction and production of materials

Extraction and production of our main resources steel, concrete and asphalt is by far the greatest cause of carbon emissions in our value chain. We also want to take our responsibility in the value chain and work with producers and suppliers to make the chain more sustainable. We do so by encouraging our suppliers to use energy-efficient production methods, use alternative or recycled raw materials and optimise the composition of concrete and asphalt mixes.

Increasing sustainability in the concrete and asphalt chain is our key priority here. These are two of our biggest material flows with production processes that are energy and carbon-intensive. Having our own production sites gives us considerable influence on the asphalt production process, while our design choices enable us to influence the composition and application of concrete.

For asphalt we seek to do this by reducing the amount of energy used during the production process, for example by producing asphalt at lower temperatures. We regularly develop, test and manufacture types of low-temperature asphalt. The latest sustainable asphalt



\* KPMG provided limited assurance on this indicator, refer to page 77.



Construction, reconstruction and maintenance of asphalt roads are the core of our infrastructure work.

 "The energy transition is proceeding apace. Via **sustainable solar and wind energy** to the green hydrogen economy for mobility, the built environment, chemical sector and industry. We are up for it!"

Tonnie van Peperstraten  
Director of Van Peperstraten Group



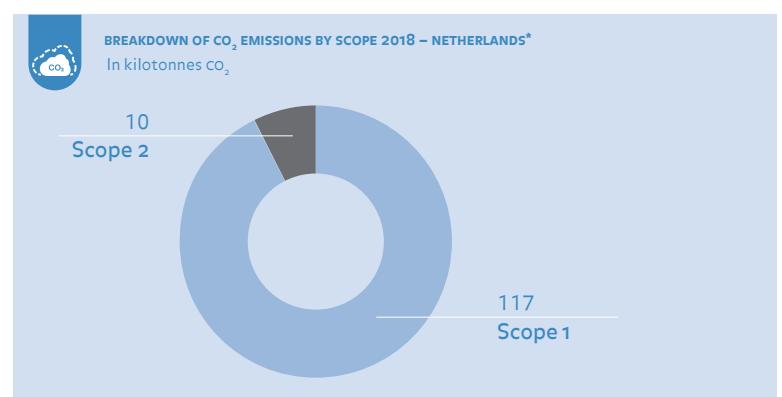
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mixture is manufactured at a low temperature of around 90°C and has a very high recycling rate of 85%. These green credentials make the mix unique in the asphalt market. In partnership with the municipality of Schiedam the mix was applied in practice for the first time this year.

Another example is the building of canopies at our production sites over the area where the asphalt granulate is stored. This keeps the raw materials drier, thus reducing the amount of energy needed to heat them. In 2018 canopies like this were built at our asphalt plants in Doetinchem and Roosendaal, in addition to which PV panels were installed. In Doetinchem this measure alone cut gas consumption by 12.5%.

### At the building site

We also make frequent efforts to implement measures to reduce CO<sub>2</sub> emissions from our building sites. The construction of the Rotterdamsebaan road project in The Hague is a case in point. It is the first drilled tunnel project in the world to use an electric segment





truck, known as the 'Tunnel Tesla'. Its use of electricity means there are no exhaust fumes in the tunnel tube. In addition, less ventilation is required for the drill, resulting in substantial energy savings.

#### Our own CO<sub>2</sub> emissions

Reducing CO<sub>2</sub> emissions is an important part of our business operations. We focus on measures that reduce the emissions caused by our buildings, vehicle fleet and the use of machinery. For example, one of our companies is installing 14,000 solar panels, which will generate around 4 megawatts of electricity a year. The first phase will be finished in 2019.

The relative CO<sub>2</sub> emissions of our group have declined in recent years. Following a slight increase in 2017 the amount of CO<sub>2</sub> emitted per euro of revenue fell once again in 2018, by 3% compared to 2016 (down 5% compared to 2017). This was mainly due to a reduction in the emissions caused by our asphalt plants and equipment. The reduction at the asphalt plants was attributable to two factors. Firstly asphalt production was lower. Secondly we have made our production process more energy-efficient, as described elsewhere in this report. With regard to fuel consumption of our equipment, while emissions are largely determined by the nature of our major projects, use of energy-efficient equipment is increasing.

One of the focus areas for the coming years will be a low-energy policy for the vehicle fleet. After all, the emissions caused by our cars and vans are responsible for a major part of VolkerWessels' total carbon footprint. In 2018 we started looking with our companies at the various practical solutions that are also viable for the long term.

#### Monitoring and managing

The companies report on their CO<sub>2</sub> emissions on a quarterly basis. The primary responsibility for implementing reduction measures and gathering and processing data lies with our companies themselves. This year we added benchmarks for our vehicle fleet for the first time. The benchmarks show how the segments and companies are performing compared to one another and in relation to the objectives. High as well as low scores provide motivation to take measures or tighten existing ones.

#### Highlights of 2018

- Completion of the 1,000<sup>th</sup> MorgenWoning home
- Acquisition of Joulz Energy Solutions
- Industry first: 'Tunnel Tesla' on Rotterdamsebaan project

#### Challenges in 2018

- Making existing residential properties gas-free
- Fleet policy

#### Action items for 2019

- Translate the spearhead to increase the sustainability of the vehicle fleet into action points and approach
- Realise a circular Bouwhub in Amsterdam

## Making an active contribution to nature

Clients are increasingly asking for nature-inclusive building methods in the development of neighbourhoods, urban districts and infrastructure. Think for example of making use of the roofs of buildings or of buildings with nesting spaces for birds.

### Designing with biodiversity

A great deal can be achieved by looking at biodiversity in the planning phase, so that the opportunities can be incorporated in the design. We create space for all aspects of the project whilst preserving and reinforcing an area's biodiversity. Adopting ecological measures contributes to climate adaptation and improves the ecosystem. In addition, it can help enhance the appearance of the surroundings.

#### Targets for 2020

- Rollout of internal campaign to promote biodiversity
- 20 projects a year in which we take at least two biodiversity measures
- Two inspiring projects a year



### Sustainable residential neighbourhood

In Groningen we designed the sustainable residential neighbourhood Engelse Park. We gave a lot of consideration to nature, both in relation to the public space and to the homes themselves.

- Rainwater does not drain away into underground sewers but is fed back to the plants and flowers around the neighbourhood. This will help create a flourishing environment that will attract butterflies and bees.
- A special bat tunnel will be built, to allow bats to fly safely to and from the nearby woods.
- Nesting boxes for bats and birds will be incorporated in various places in the outsides of buildings and in garden walls.

In 2018 we also completed the courthouse in Breda, which will house the district court, the public prosecutor's office and the child care and protection board. On top of the car park we laid out a 6,000-square metre roof garden which is open to the public, complete with plants and irrigation system.

### Wooden frames for our standard homes

98% of the timber procured by VolkerWessels is certified timber<sup>1</sup>, and therefore demonstrably sourced from managed forests. We set ourselves apart from most of the other major construction companies by

exclusively using wooden window and door frames for our standard Pluswonen homes.

VolkerWessels is a signatory to the FSC Nederland Covenant for the construction sector. The FSC system guarantees responsible forestry to ensure the survival of the world's forests. Protecting the plant and animal habitats is one of its prime objectives.

### Vertical greenery in the city

Nature and ecosystems often have to take a back seat in large urban planning projects. Our two prominent designs in Utrecht's Beurskwartier district, in the Amsterdam Zuidas business district and at Amsterdam Sloterdijk station show that this does not have to be the case.

The WonderWoods project in Utrecht involves the construction of a pair of iconic tower blocks with a height of 70 and 90 metres respectively. The blocks will provide space for living, working and recreation and will feature a lot of greenery – trees, bushes and shrubs – to provide residents, birds and insects with a healthy, climate-proof habitat.

In Amsterdam's Zuidas district we are building Valley, an innovative and sustainable mixed-function building with an area of around 75,000 m<sup>2</sup>. In this project

<sup>1</sup> Certification means that only FSC-certified companies are allowed to sell FSC products. The contracts with our timber suppliers contain agreements with regard to the use of sustainable timber and the monitoring of our timber procurement. All VolkerWessels wood-processing companies are FSC/PEFC-certified and monitor their own certification.

greenery is fully interwoven with the public space: the green structure at street level seamlessly extends to the building's various terraces. There is a diverse selection of plants with a wide range of leaf colours, flowering styles and shapes. A number of flowering lower trees and shrubs break up the otherwise open and spatial design.

Another pair of residential blocks will be built at Amsterdam's Sloterdijk station encircled by a ring of greenery at second street level. This 'Green Hug' will act as climate control, collect surplus water, reduce noise and improve air quality. Rainwater will be led down via the outside walls and the terraces and collected in a pond.

#### Water safety and ecology

Water safety and ecology are perfect partners, which are suited to an integrated approach. This is for example the case with the IJsseldelta Room for the River project,

in which six of our infrastructure companies are involved. The project comprises two measures that will provide guaranteed water safety in the medium term. Room for nature is a key aspect of this project. The natural flood protection of three floodplains will be reinforced with the creation of around 350 hectares of new delta nature area. In addition two fish ladders will be installed in the Reovediep, a side branch of the river IJssel, to make it easier for the fish to pass from one side to the other. Our ecologists will monitor the work. Together we will ensure that the existing natural floodplains are respected during the execution of the project, to ensure that the species present retain a suitable habitat at all times.

#### Natural water purification in Utrecht

Green water purification is an option even in urban areas without much greenery. The transformation of the Jaarbeursplein square in Utrecht was completed in the past year with the installation of a water feature with

LED lighting. The water is purified by means of a helophyte filter and a combination of 1,500 plants and bacteria. In the spring of 2019 this water feature will be transformed into an oasis of greenery as the plants grow.

#### Monitoring and managing

Biodiversity is a topic that does not occupy a central position in our organisation. This is mainly because it requires specific professional know-how. We are working on sharing and disseminating knowledge within our organisation. This year for example we developed the biodiversity toolbox, which is freely available to colleagues and helps integrate biodiversity in projects.

#### Highlights of 2018

- Prominent use of nature and water safety in development of IJsseldelta area
- Development of biodiversity toolbox

#### Challenges in 2018

- Awareness of opportunities offered by biodiversity and nature for contributing to quality of life
- Leave building sites with greater biodiversity than before the project

#### Action items for 2019

- Construction work starts on WonderWoods project

**"Storage of energy is crucial in realising a sustainable energy system. Together with VolkerWessels, we are working to convert solar energy into heat in raw materials and hydrogen."**

ir. Jos Boere  
Director of Allied Waters B.V.



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## Work and social activities



"The opinion and input of **our people are very valuable** for enabling our organisation to make the most of its potential."

The OpenIJ consortium, comprising BAM- PGGM and VolkerWessels-DIF, works on realising the new sea lock at IJmuiden, which will improve access to the port of Amsterdam.

## Work and social activities

### We want to be a good employer

A good employer both for our own people, and for subcontractors and suppliers. But also for those for whom work is not something they can take for granted. Our organisation features a wide range of activities, which means that there are plenty of opportunities to provide such people with a job.

We want all our employees to work in accordance with our core values: integrity, safety and sustainability. In order to achieve this we invest time and effort in a wide variety of campaigns and workshops to create ongoing awareness amongst our employees about what we consider important about these core values.

We consider acting with integrity to be a prerequisite for doing our work properly. This is only possible in a culture where we are open and honest towards each other, in which we have the courage to call other people out on undesirable behaviour in a respectful way and where there is room to make mistakes and learn from them.

#### **Focus on culture**

In order to work on this open and transparent culture every year we ask all our employees how they experience our culture and leadership. The first of these surveys took place last year. We asked for feedback on topics such as social and physical safety, working

together, career opportunities and sustainability. The employees' opinions and input are very valuable so that we can constantly improve and enable our organisation to make the most of its potential.

Our people are positive about the following points: the constant drive to improve, delivering quality and safety. What we need to focus more attention on is mutual collaboration between companies, inspiring leadership and openness and honesty.

The instructor/apprentice method is a good way of training up new qualified staff. Students on BBL vocational courses spend four days a week learning the trade from a VolkerWessels professional and go to school on the fifth day. Featured is Remco van Engelen.



## A conversation about culture and leadership

Our sector is doing well. There is plenty of work. At the same time this presents a challenge, because the Netherlands has a serious shortage of technically trained professionals, causing a risk of project delays. In order to be and remain successful we must respond to this development.

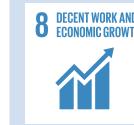
We make every effort to achieve constant improvement and to be a good employer for every generation of workers. We aspire to being an organisation where we can make mistakes and learn from them. To be a knowledge partner for our clients, suppliers and partners, and work together with them to develop sustainable alternatives and focus on new ways of contracting.

In order to be a valuable knowledge partner we need to keep attracting highly qualified people, and so we need to stand out in a tight and strongly competitive labour market. Our people need to feel that they are really being seen and heard. Our policy therefore focuses on four aspects:

1. Leadership
2. A transparent culture
3. Training and development of our employees
4. Labour market communication

### Targets for 2020

- Invest in internal succession planning
- Invest in long-term employability
- PSO score of 3.7%
- Education to boost equal opportunities



### Leadership

Our aim at VolkerWessels is to turn our management teams into high-performing teams that meet our standards for leadership. We have chosen four words to capture the essence of leadership: authentic, inspiring, transparent and professional.

### Our leadership profile

#### Authentic

Has self-knowledge, reflects and wants to learn something new every day. Takes a genuine interest in the people they work with. Acts in accordance with words and values. Not afraid to make choices and decisions.

#### Inspiring

Motivates people through enthusiasm and vision. Cooperates and has the ability to connect people and get the best out of them. Takes and gives responsibility.

#### Transparent

Walks the talk and talks the walk, is open, honest, clear and acts with integrity. Is approachable about behaviour and addresses others with respect.

#### Professional

Knows their profession, the market and the client. Inspires and encourages new ideas. Surrounds themselves with colleagues who complement them. Is enterprising, result-oriented and promotes safety, integrity and sustainability in work.

Good leaders understand when to manage and when to lead. Our own leadership programme focuses on raising awareness of one's dominant management style, the other leadership styles and which style is most effective in which situation. These are people who are learning how to provide effective coaching and training to the new generation of employees.

The new leadership programme has been developed so as to focus on a transparent way of working. We expect the programme to have a positive effect on our corporate results and that will help us maintain our status as a good employer. Last year the programme was launched within the Energy & Telecom Infrastructure and Construction & Real Estate Development segments, to be followed by the Infrastructure segment in 2019. At the same time our international departments are rolling out similar programmes tailored to the local labour markets.

## 66 Good leaders know the difference between managing and leading

### Transparent culture

VolkerWessels consists of many different companies, each catering to its own market. This means we have to deal with many different (working) cultures. In addition we have our deep-rooted history, stretching back to 1854. These two characteristics make it a challenge to effect the desired changes in the organisation's culture. Which is why we have been focusing explicitly on this in our employee training programmes since 2017, teaching them about the differences that exist and the pros and cons of this. We consider shared awareness of this to be an important factor in interdisciplinary collaboration.

We want all our employees to work in accordance with our core values: integrity, safety and sustainability. In the culture survey we carried out last year all VolkerWessels employees were asked about their experiences of the culture and leadership. We asked for

feedback on topics such as social and physical safety, working together, career opportunities and sustainability. The employees' opinions and input are very valuable for constant improvement to enable our organisation to make the most of its potential.

### Training and development

VolkerWessels has its own training institute, the VolkerWessels Academy, which offers modular training programmes that range from learning about VolkerWessels to project management and leadership. Our employees are given the latest insights into market development, innovative ways of working and skills development. This keeps them sharp and makes them aware of changes.

In 2018 we looked at a further professionalisation of the VolkerWessels Academy to make the programmes more accessible to all. In 2019 we will be launching a central learning management system for all our companies, an online learning platform with individual logins for all employees. It will contain all our e-learnings, for example on integrity. New employees will be able to find all the information here and the platform will offer general courses, such as VCA health & safety training. In addition each company will be able to develop its own training courses and make them available via the platform.

### Learning in practice

In addition to the VolkerWessels Academy our companies also develop their own training programmes to teach students the job. Learning in practice is still the most important way of doing this. For example at our telecom business, where apprentices are paired with an instructor to learn the job of telecom engineer. We have our own technical industry college for our company that installs pipes and cables. The training college provides a pleasant, safe and inspiring environment aimed at the work-oriented development of young talent, workers

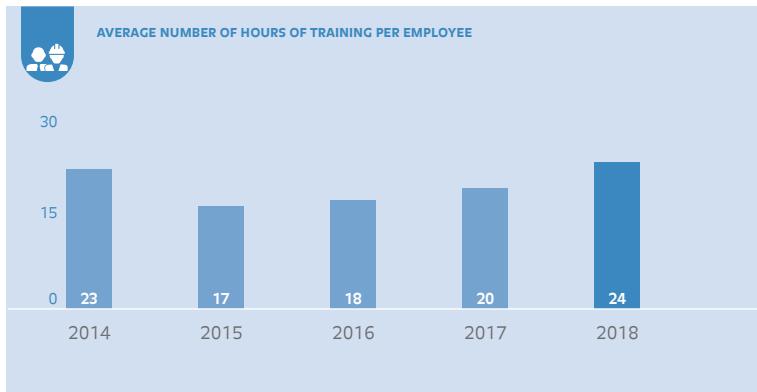


WAVE (Wees Alert! Veiligheid Eerst! – Be Alert! Safety First!) is a way of working.

from outside the sector and more experienced candidates who already work for us. The instructor/apprentice principle is also used in the Construction and Real Estate Development segment, for example for installation technology and bricklaying.

#### **Labour market communication**

An attractive employer is also visible to and accessible for the outside world. In 2018 we developed a vision and strategy for labour market communication. A target group analysis was drawn up at group level in order to create an effective strategy, which included looking at



what activities companies can undertake themselves to increase their visibility. In 2019 we are launching the recruitment website werkenbijvolkerwessels.nl ('working at VolkerWessels') as well as the central campaign 'Maak morgen mogelijk' ('Make tomorrow possible').

#### **Responsibilities**

Given the major differences between companies, markets and employees we leave the organisation of the HR policy up to our companies. One topic that is organised centrally is the policy for long-term employability of our employees. At group level the HR department combines the needs in terms of certain HR topics that need to be managed centrally and coordinates the central HR policy. It does so in close cooperation with the HR directors.

#### **VolkerWessels as a social entrepreneur**

At VolkerWessels we are good at managing our business. But we also want to be good at social enterprise. That means combining social objectives with our business operations.

Our basic principle for social enterprise is that people who deserve a chance on the labour market should be given room to develop. Because finding suitable work is not always easy for people who are on benefits or who have a physical or mental handicap. VolkerWessels makes measurable efforts in this area, in terms of time and money invested. Social return is one of the six focal points for 2019.

Our objective is to train people up so that instead of going back on benefits they can come and work for us. At the same time it helps us find workers for our companies facing staff shortages. An example is the Rotterdamsebaan project in The Hague, where we periodically offer apprenticeship training for asylum seekers holding a residence permit and for benefit

claimants. A number of asylum seekers with residence permits are now fully employed on the project.

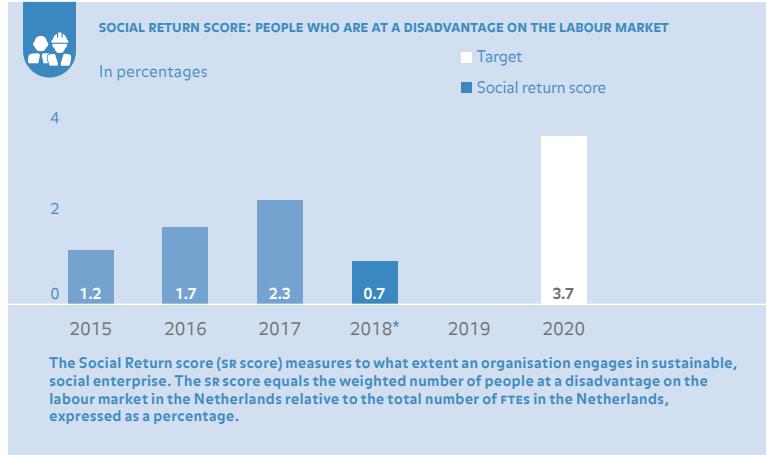
But it is not just on building sites where we can find room for people who are at a disadvantage on the labour market. For example, one of our road construction companies has for some time now employed a Wajonger in an administrative position (a Wajonger is someone who has had an occupational disability from a young age and therefore receives benefits). With tailored

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**We combine  
social objectives with  
our business operations**

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supervision he now feels completely at home. We also find solutions for people with physical limitations. In the past year our engineering firm took on an adviser after making just a few minor modifications to the office.

Research shows that if young people obtain a basic qualification (at least MBO level 2) they are much less likely to end up on benefits later in life. Good training is therefore important, as well as being a good way of tackling the shortage of trained staff. The instructor/apprentice method works well here; students on a BBL vocational course spend four days a week learning the trade from a VolkerWessels professional and go to school on the fifth day. VolkerWessels provides time and space for these young students to master the job at their own speed.



\* KPMG provided limited assurance on this indicator, refer to page 77.

### Making the most of our potential

We understand that we need to make the potential of social enterprise clear to our companies. They also need help with the extra work involved in implementing social return. Some clients – government projects in particular – set specific conditions in this area. It goes without saying that we meet these, although we also seek to add something extra by combining the know-how from the various disciplines. An example is how the experiences gained during the work training programme in The Hague are being shared on other projects in the construction and infrastructure sector. A social return policy calls for specialist know-how and the right network. Who are the local partners we can work with? Where in our company or which of our projects is right for someone who is at a disadvantage on the labour market? How do we share our knowledge with our supply chain partners?

In 2016 we set up the Social Return Counter, which organises social return within VolkerWessels and

enables the specialist knowledge to be applied at our companies. The Counter is also responsible for measuring our performance, analysing the extent to which the companies provide opportunities to people who are at a disadvantage on the labour market. It does so using the Social Enterprise Performance Ladder (pso), a nationwide benchmark for social enterprise.

### Two aspects of social enterprise

Our efforts are focused in two areas. On the one hand we analyse the direct employment relationships and how these relate to our total workforce. This is called the direct contribution. On the other hand there is also great potential for the indirect contribution: how much we procure from social enterprise businesses, how many people who are at a disadvantage on the labour market are working on our projects through supply chain partners and suppliers. These two contributions together provide a Social Return score, for which we have set an ambitious 2020 target: a weighted Social Return score of 3.7%.

This year we commissioned KPMG to provide assurance on the Social Return score. As a result, there was closer monitoring to ensure that the right people at a disadvantage on the labour market were included and that the right methodology was applied. It emerged from this that we are gaining more insight into the indirect contribution all the time but still do not have a clear picture of the total number of FTEs employed through supply chain partners and suppliers. Monitoring the burden of proof of the indirect contribution (people working on our projects via subcontractors) is complex. We are engaged in a large number of projects in which a large number of supply chain partners and suppliers are involved. We have therefore chosen to exclude the indirect contribution for now. This means that the figures for 2017 and earlier are not fully comparable with the figures for 2018. Measuring the indirect contribution is one of our focus



areas for 2019. For further explanation please refer to 'About this report'.

In 2018 the Social Return score was 0.7%, based on our direct contribution. This was considerably lower than in 2017 (2.3%). The decline was mainly due to the measuring method and not to a change in actual performance. There was closer monitoring to ensure that the right people at a disadvantage on the labour market were included and that the right methodology was applied. In addition we used an improved tool in 2018, which made it easier to perform checks; we can now record accurately the exact number of days people at a disadvantage on the labour market were actively employed by our companies. The response rate from the companies rose sharply in the past year.

The audits showed that around a third of the people concerned work for our companies, but that they have completed their internship or that the indicative period has expired. This indicates that we are contributing to social enterprise because we have been able to offer them a permanent job. This means they are no longer at a disadvantage on the labour market, resulting in a lower Social Return score.

In 2018 we made the Social Return score part of the KPIs for the RCF. We have noticed that not all clients employ the same methodology, making it difficult to give Social Return a fixed place in the business processes and project management. By taking the initiative we want to help our clients to implement social return more successfully.

### Dilemma

By more actively recruiting and deploying people who are at a disadvantage on the labour market and procuring more from social enterprises VolkerWessels creates a significant number of jobs in the Netherlands. That is what we aspire to but we also see priority being given to our core task: realising high-quality projects fast. This comes at the expense of the extra attention needed for social enterprise.

Which is why social return is one of the initiatives we are going to focus on more. One of the ways we are doing so is by including the PSO score in our agreement for the RCF with the banks. In addition the KPI has been added to the balanced scorecard for the members of the Management Board.

### Highlights of 2018

- Culture survey
- Launch of new leadership survey
- Development of labour market communication campaign

### Challenges in 2018

- Awareness of differences in culture
- Attracting and retaining highly qualified staff
- Uniform social return approach in the market

### Action items for 2019

- Launch central learning management system
- Launch werkenbijvolkerwessels.nl [website]
- Launch 'Maak Morgen Mogelijk' campaign
- Involve supply chain partners in social return
- 'Dealing with social enterprise in the workplace' masterclass for instructors



## Work and social activities – Community engagement

### Building community engagement

Spatial projects have a major impact on the local community and vice versa. We can put our quality of life vision into practice during both the preparation and execution of construction projects. Are local residents and other stakeholders given a say before the work starts and are they given the opportunity to suggest solutions? If so, this contributes to their quality of living, working and life. Which means there is an important role for community engagement in the execution of our projects.

#### Getting the community involved

In renovating community centre 't Eikske in Landgraaf we involved the Harlekijn primary school next door in the plans from the very start. After all, carrying out renovation work right next door to a primary school meant focusing on safety and creating awareness on this subject. And so we started by making warning signs that would appeal to children. In addition as many as 300 children from the school decorated the safety fences with their own artwork. The initiative aimed not only to give the neighbourhood something nice to look at but also and specifically to raise awareness of 'working together to create a safe building site'.

#### Targets for 2020

- 100% of projects must comply with Considerate Constructors guidelines
- At least 150 projects a year must be registered with Considerate Constructors
- 15 projects in which we take two measures under the Sustainable Construction Site guidelines
- 15 projects in which we take two measures from the Construction Logistics Menu



On one of our projects the children at the primary school next door were taught in a fun way about what goes on at a building site.



**"Schiphol is intense, dynamic and changing rapidly. Strong growth in passenger numbers, limited capacity and new parking products. In a robust partnership with VolkerWessels we are turning into a **data-driven, flexible and proactive organisation.**"**

Corné de Jong  
Manager Product & Contract management Parking, Schiphol Group



## ANOTHER PERSPECTIVE

### **Rolling out the BouwApp ("Building App")**

Last year we started rolling out the BouwApp ("Building App"), which we use to inform local communities about works in connection with building and infrastructure projects. The style and set-up of the app is adjusted to suit the company and the project. The BouwApp provides information on the timeline, progress and possible nuisance. As well as providing information the app is a tool for dealing with complaints and measuring customer satisfaction.

The BouwApp is now successfully being used on all projects undertaken by our largest road construction company. Examples of such projects include the major maintenance of the Berg en Bos nature park in Apeldoorn and the rail underpass in Goes. These are long-running projects whereby it is essential that those in the vicinity are involved at each stage.

We actively draw attention to the BouwApp, for example by means of banners on fences and building signs and in letters to local residents and reports in the local media.

We can tell that this is effective, for example in connection with the work on the N204 road – the project has more than 1,000 followers. The community engagement manager posts regular updates on what is being done with residents' feedback.

The BouwApp was also on the agenda at our nationwide community engagement day, which was attended by around 400 community engagement managers, project managers, area managers and communication advisers from the government and market parties. A workshop challenged professionals to come up with new ideas for the app. This input allows us to keep on improving the BouwApp.

### **Considerate Constructors**

VolkerWessels is a proud initiator of Considerate Constructors in the Netherlands. The foundation works to ensure that the community, safety and sustainability are taken into account during building projects.

Last year one of our construction companies became the 2,000th Considerate Constructor. Two of our construction companies working on a joint project received the Considerate Constructors Zuidas Award. The Valley Amsterdam project was chosen by residents and auditors as the project that made the best contribution to a safe and community-friendly building site during the year. Valley won the prize for the quality of the construction fences: attractive banners with clear impressions of what Valley will look like. In addition the contractor took steps to limit nuisance when it turned out that a number of sheet piles had to be vibro-driven into place instead of using silent pressing. This was done between the hours of 8.00 am and 10.00 am to minimise nuisance. Measures such as these were highly appreciated by the juries. In 2018, 343 construction sites were registered.



#### Five pillars of Considerate Constructors code of conduct

1. Local community Considerate Constructors limit the disruption and inconvenience to the local community
2. Safety Considerate Constructors work in a way that is safe for local residents, passers-by and visitors
3. Professionals Considerate Constructors pay consideration to the development, health, well-being and safety of their professional staff
4. Environment Considerate Constructors are environmentally conscious in their work
5. Tidiness Considerate Constructors are tidy in their work

#### Building on a postage stamp

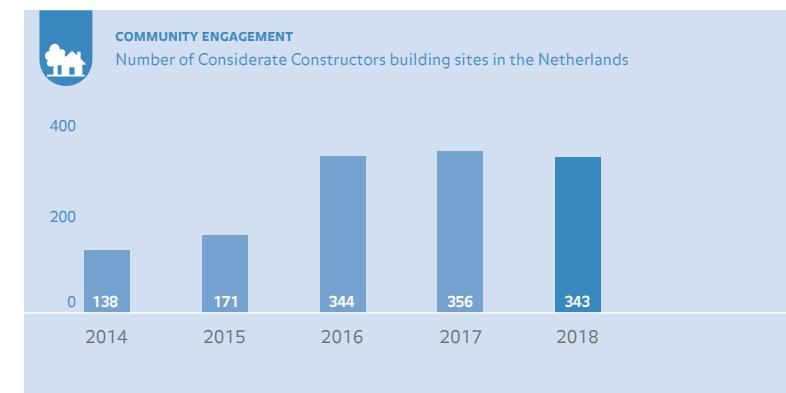
Construction projects in city centres often see us having to work within a limited space and amid busy conditions. This can require creative solutions to keep nuisance to a minimum.

One of the most hectic inner-city project sites is Jaarbeursplein by Utrecht Central Station. Building a multi-storey car park on a site that sees 186,000 people coming and going every day is a huge challenge. We made sure the site was clean and tidy to limit the nuisance for the many pedestrians and cyclists in the area. For example all lorries left the construction site via a special rinsing area to ensure they were as clean as possible. In addition the limited space required close coordination with other contractors.

#### Impact of measures immediately clear to residents

We understand that residents like to get a clear (visual) picture of the impact of climate change on their own neighbourhood. And so we use a 3D tool to provide them with an insight into the impact of various measures, for example to limit heat stress and flooding in the street. We consult with specialists and/or residents to explore and select possible solutions on the spot.

This happened for example in the case of the centres of four villages in the catchment of the Schipbeek, a tributary of the river IJssel in the east of the Netherlands: Bathmen, Holten, Markelo and Neede. It transpired that heavy showers would result in the serious flooding of around 40 per cent of the paved surfaces. By implementing measures this can be limited to around 10 per cent.





**MILESTONE IN GROUND RADAR TECHNOLOGY**

The Netherlands has over 1.7 million kilometres of underground cables and pipes. With the increase in the number of underground networks in the country (for example fibre optic, sewerage and electricity networks) the risk of damage during construction and excavation work is growing all the time. We teamed up with the University of Twente and Gasunie to develop a solution in the form of a ground scanner.

By combining various innovations such as machine learning and augmented reality the 3D ground scanning technology provides an image of what is in the ground and where. Underground cables and pipes are automatically recognised and shown on a tablet or computer screen. Up until now only specialists were able to interpret the results of a scan, and it took several days for results to come through. Now we are able to drastically reduce the number of damage incidents and carry out our work within a shorter timeframe, minimising the nuisance to the surrounding area. The ground scanner also received international recognition during the year at the World Gas Conference in Washington, where it won the Industry Choice Award.

### Monitoring and steering

Since 2016 we require the companies to report based on qualitative descriptions of the policy pursued. The divergent nature of the activities within our organisation makes it difficult to express this in KPIs. This way of reporting provides more information about the actual effects and satisfaction levels of clients and the local community.

#### Highlights in 2018

- 343 building sites registered with Considerate Constructors
- Improved usability of BouwApp

#### Challenges in 2018

- Adequate communication on long-running projects
- Minimising the impact on the local community on city-centre building projects

#### Action items for 2019

- Continue research into impact on the community of Bouwhub smart logistics
- Expand use of BouwApp

## Work and social activities – Integrity

# VolkerWessels does not compromise on integrity

Integrity is one of our three core values. VolkerWessels does business with integrity, or not at all. We focus on two main areas: raising awareness of integrity among our employees and ensuring people act with integrity within our organisation.

### Raising awareness on integrity among employees

Our in-house awareness campaign VolkerWessels Veilig ('VolkerWessels Safe') covers integrity, privacy and information security and how they interconnect given the multiple intersections between the topics.

We take a look at desirable and undesirable conduct as well as rules and guidelines. Last year for example we focused on using business assets. It is important that everyone is absolutely clear about this. In the spring of 2018 a video animation about using business assets was rolled out across the group.

### E-learning and workshops

Our compliance policy reinforces integrity awareness. The Compliance Annual Plan sets out the action items for the year ahead. E-learning are a good way of promoting integrity awareness; they have a wide reach and employees can follow them when it is most convenient to them.

In 2018 we developed an e-learning on integrity focusing on:

1. Taking personal responsibility
2. Pointing out unethical behaviour to each other
3. Where to report suspicions of misconduct

The e-learning was rolled out in December 2018 and ran until mid-February 2019 and was aimed at all VolkerWessels employees who have a device for work such as a phone or laptop. The e-learning is also mandatory for hired employees.

Next year we will roll out an e-learning about the General Data Protection Regulation (GDPR) and the restrictions on sharing information with fellow competitors under the Dutch Competition Act.

In 2018 a total of 689 employees took part in a course or workshop on integrity. In these workshops groups of up to 20 employees use specific examples to discuss integrity dilemmas and the rules set out in the 2016 Code of Conduct.

At the end of 2018 the topic of Integrity was discussed at the mandatory return days for all the group's statutory directors. Topics discussed included examples of potential or actual unethical or less ethical conduct by directors of VolkerWessels in the last few years. It was concluded that most of the directors have a good knowledge of where the boundaries of ethical and unethical behaviour lie in this day and age. They are also aware of the exemplary role they have in this respect.

### Targets for 2020

All employees must know:

1. How to deal with integrity dilemmas in their field of work
2. Who to turn to if they wish to consult with someone about this
3. Who to report any breaches of the code of conduct to



### Avoiding insider trading

Since the listing of our shares on the stock market, insider trading is a new topic to which we have devoted attention. Providing employees with good information on this topic is essential because the consequences of insider trading can be serious.

To reach out effectively to employees it has been decided not to provide the information in the form of an e-learning; with this topic it would seem that this is not the most effective way of getting the message and rules across clearly. In 2017 the boards of all the companies followed a 'train the trainer' workshop on this topic. Responsibility for making employees aware of the risks of insider trading lies mainly with them. To maintain ongoing attention on the topic, an animation film has been made, that will be rolled out in March 2019.

### Compliance Officer training

The VolkerWessels Compliance Officers have an important task and responsibility in monitoring that our standards and the rules are upheld. They provide a corporate culture in which everyone can do their work safely. At the beginning of 2019 our Compliance

Officers will receive extra training, to ensure that they know what their role is and are able to perform it effectively. Examining dilemmas is an effective work approach in such training courses. We teach the Compliance Officers how best to deal with dilemmas and how best to advise colleagues in this area.

In 2018 49 suspected integrity violations and suspected misconduct were reported. The reports resulted in 11 dismissals. The number of reported incidents was higher than in 2017 (32). The figure is in line with the results of previous years.

#### **Openness and trust**

A good integrity policy focuses on both the structure and the culture of the organisation. In order to gain an insight into the level of openness and trust at VolkerWessels we included these topics in the group-wide culture survey conducted last year. A key finding was that there is a difference between how managers and their employees experience integrity. Attention was also devoted to this during the return days for statutory directors at the end of 2018.

In response to the findings of the culture survey we have started developing a toolbox to encourage employees and managers to engage about integrity issues. The toolbox will be made available to every layer of the organisation, starting with the Management Board and proceeding layer by layer to the employee.

#### **Integrity in cooperation**

The clear rules that we have set for our employees also apply to our clients, suppliers, subcontractors and other stakeholders. Our conditions for working together are set out in our Code of Conduct, which states for example that forced labour is not permitted and is subject to severe penalties. It provides a clear basis for acting and doing business with integrity. We refer to the Code in our General Terms and Conditions.

VolkerWessels also subscribes to the Guiding Principles for Commissioning Construction Companies, as do our partners in the supply chain.

In 2016 we signed the United Nations Global Compact, thus committing to the 10 universal principles on human rights, labour, the environment and anti-corruption.



#### **SUSTAINABLE DEVELOPMENT GOALS AT VOLKERWESSELS**

Our vision of sustainability is aimed at 'building a better quality of life'. We look at questions such as: 'How do you introduce sustainability at every level of the organisation and what tools do you need to do that?' The SDGs help us introduce focus. They provide a guideline and a reference framework: What contribution can we make to the big social questions of today? They also provide a common language for explaining to others what we do.

We put sustainability into practice by means of our objectives. A special set of objectives has been defined in the Revolving Credit Facility (RCF) agreements with a number of major banks. We took the initiative to link our sustainability performance to the credit facility from the banks. Depending on how many sustainability goals we achieve we will be granted a lower rate of interest or be

subject to a higher rate of interest. In determining the indicators we looked at the influence we have on the three quality of life pillars and how these contribute to the SDGs:

#### **HEALTH**

We invest in research into healthy design and the development of new building concepts promoting health. Moreover we work safely or not at all. By taking this stance we safeguard the good health and well-being of our stakeholders (SDG 3). In addition our policy on environmental impact and waste management also has a major influence on the safety and sustainability of cities and communities (SDG 11).

#### **NATURAL ENVIRONMENT**

We keep our CO<sub>2</sub> emissions and our use of primary resources to a minimum. We develop sustainable alternatives to speed up the transition to a construction sector that is climate-neutral and circular. In addition we seek to have a positive impact on nature and biodiversity. In this way we contribute to the use of clean energy (SDG 7), industrial innovation and infrastructure (SDG 9), responsible consumption and production (SDG 12) and climate action (SDG 13).

#### **WORK AND SOCIAL ENTERPRISE ACTIVITIES**

VolkerWessels wants to be an honest business partner and an attractive employer. We consider it our duty to remain a healthy company that creates economic, social, ecological and societal added value. In so doing we contribute to decent work and economic growth (SDG 8).

We are members of the UN Global Compact Network Netherlands and report annually on how we put these principles into practice.

#### **Responsibilities**

The Integrity Platform initiates measures to promote awareness about doing business with integrity within VolkerWessels. It also monitors the implementation and follow-up of these measures. Its core tasks are to promote awareness and compliance with the rules, the code of conduct and the guidelines. The Platform consists of board members of various large VolkerWessels companies, an HR representative, the Central Compliance Officer and the director of the group communications department. The Platform is being chaired by the chairman of the Management Board. At group level we have a Central Compliance Officer (cco) who is responsible for implementing the initiatives and action items set out in the Compliance Annual Plan. The Management Board is responsible for the integrity policy.

#### **Highlights of 2018**

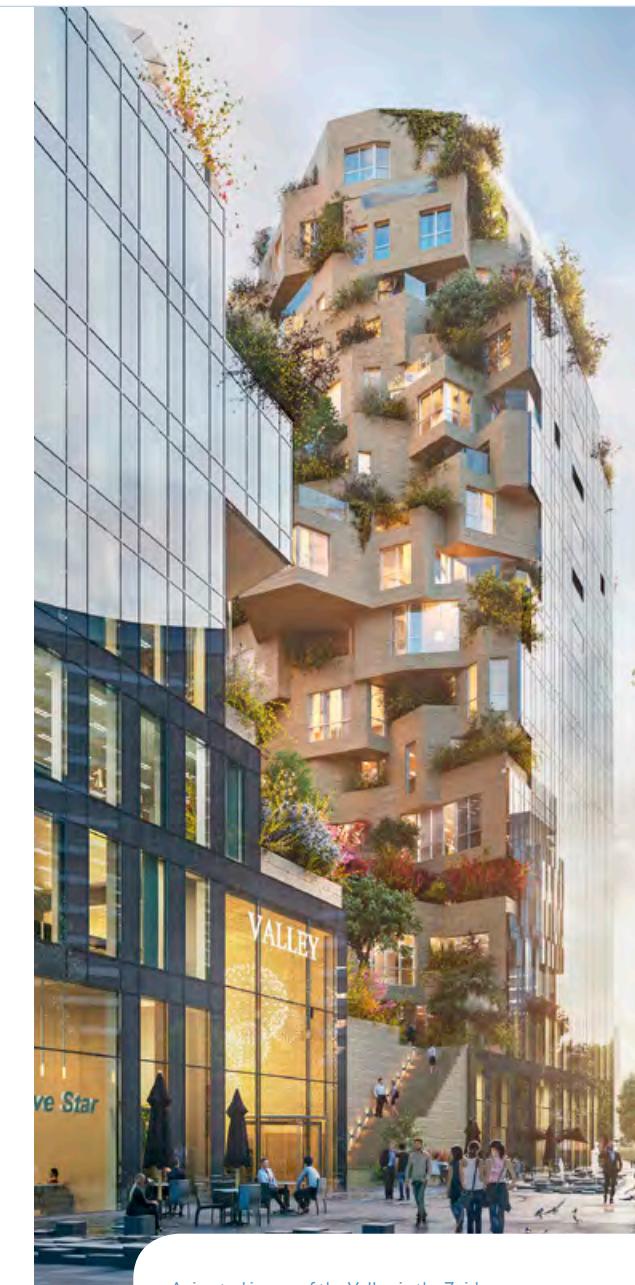
- Rollout of e-learning on integrity and participation in integrity workshops
- Workshops for statutory directors on acting with integrity
- Training of Compliance Officers
- Focus in culture survey on structure and culture of organisation

#### **Challenges in 2018**

- Experience of integrity by managers and their employees
- Animation / video on insider trading

#### **Action items for 2019**

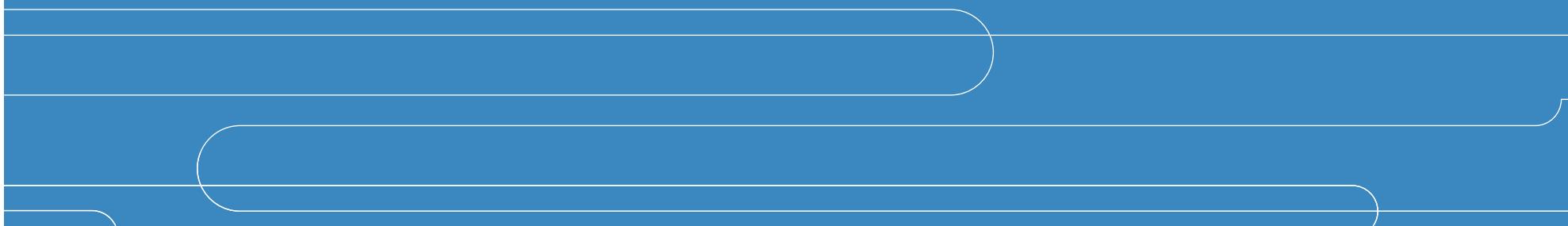
- Rollout of e-learning on GDPR and the Dutch Competition Act
- Animation video on avoiding insider trading
- Training Compliance Officers on dealing with dilemmas

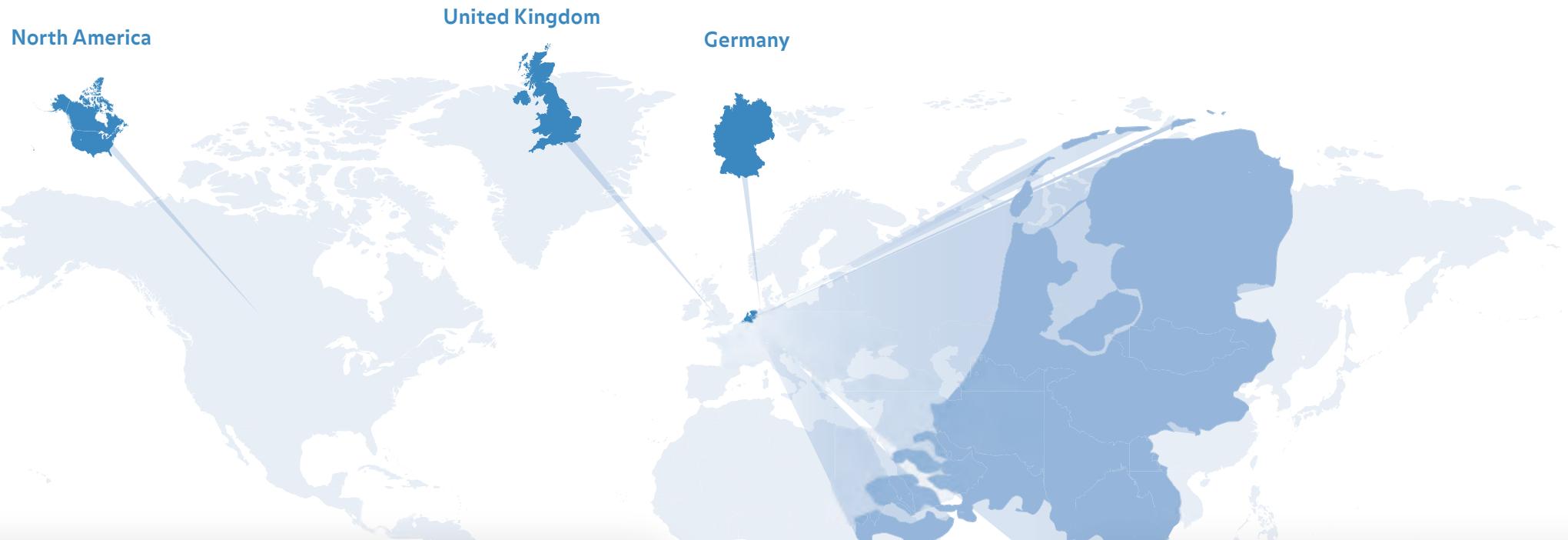


Animated image of the Valley in the Zuidas business district in Amsterdam, which is scheduled for completion in 2021.

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71 North America  
71 Germany

# VolkerWessels International





**"In addition to our activities  
in the Netherlands  
we are also active in the  
United Kingdom, North America  
and Germany."**

This year we have included our international activities in our CSR reporting scope. We were already reporting quantitative information for a number of KPIs for the United Kingdom, but not yet for Germany and North America. In 2018 we started gathering sustainability data for our most important KPIs at a central level. We are doing so because we believe it is important for our financial and sustainability reporting to have the same scope.

Our companies in Germany and North America are new to the reporting process. In order to focus our efforts and identify effective measures for improvement, we asked KPMG to perform a readiness assessment. Readiness assessments are aimed at evaluating how robust the information on our performance is, with the ultimate aim of obtaining assurance. The readiness assessment showed that the figures are not yet robust enough for assurance. As a result we know which areas we still need to improve. The companies concerned will need time to improve their reporting processes and perform internal audits. We will focus on this in 2019.

## United Kingdom

Our activities in the United Kingdom are focused on multidisciplinary technical solutions in the civil engineering and construction sectors. We mainly execute infrastructure projects here. We also have expertise in the field of commercial and industrial buildings and are active in the offshore wind market.

### Key figures for the United Kingdom

	2018*	2017*	2016*
IF-rate	1.1	3.4	1.8
Total weight of waste in kilotonnes	321	500	1,055
Separation rate	93%	89%	71%
CO <sub>2</sub> emissions in tonnes	32.0	25.8	29.6

\* KPMG provided limited assurance on this indicator, refer to page 77.

### Health

In the United Kingdom we promote a positive safety culture by means of several engaging behaviour campaigns. These campaigns are developed in-house and rolled out across the country. The safety campaigns include PALS (Plan, Attitude, Leadership, Share) and AIM (Attitude, Influence, Management).

Despite a sharp increase in the total number of hours worked our safety performance improved in 2018. The IF rate was 1.1. During the year there were seven accidents resulting in sick leave, considerably fewer than in 2017. This was mainly thanks to the excellent performances of VolkerHighways and VolkerLaser, both of which reported zero accidents resulting in sick leave following awareness campaigns.

We are aware of the importance of protecting the well-being of our people, of understanding the relationship between work and health and committing ourselves to reducing stress in the workplace. Therefore, in 2018 we launched a Mental Health Awareness programme for our employees.

The programme consists of:

- Facilitating 'Keeping the pieces together' sessions at all branches, at which employees are encouraged to support and assist colleagues.
- Providing mental health awareness courses to line managers and supervisors.
- Appointing Mental Health Champions within the organisation who will act as confidential counsellors and points of contact for colleagues coping with problems. To become a champion, employees must follow a First Aid for Mental Health course.
- Communicating regularly on the range of support services available to employees and subcontractors.

### Natural environment

We are trying to reduce the amount of waste we produce as much as possible, focusing specifically on avoiding construction, demolition and excavation waste ending up in landfill.

We have improved our waste separation performance: the waste separation rate in 2018 was 93%. The total weight of waste was 321 tonnes in 2018, down from 500 tonnes reported in 2017. Discarded soil makes up a large proportion of the waste in the UK. The fluctuations in the amount of waste are therefore mainly attributable to this residual waste flow. This is different from the situation in the Netherlands. In addition we carried out less demolition work in 2018, as a result of which there was also less construction and demolition waste.

For some years now, the focus on waste processing in the United Kingdom has been on the recycling percentage, with close monitoring of the amounts which are reused, recycled, incinerated or sent to landfill.

CO<sub>2</sub> emissions per euro of revenue rose by 10% in the United Kingdom compared to 2017. The increase was due to high fuel consumption on a number of large projects. This means there was a strong increase in equipment-related fuel consumption.

Absolute CO<sub>2</sub> emissions rose compared to 2017 to 237,000 tonnes in 2018. The rise is attributable to an increase in work. In addition the method for collecting data has improved, resulting in more accurate information.

As is the case with our Dutch activities the execution of our projects is a major source of CO<sub>2</sub> emissions. We apply carbon-reduction measures wherever possible. Our rail company won prizes for two projects at the Green Apple Environment Awards. Firstly Network Rail's West Anglia Main Line (WAML) project achieved transport savings of around 56,300 kilometres by recycling residual flows at the building site; this reduced the number of transport movements by around 2,500.

Secondly, 80 tonnes of CO<sub>2</sub> was saved on the Felixstowe Branch Capacity Enhancement project to renovate a railway bridge by reducing the number of transport movements. Here, too, the company managed to significantly reduce the amount of materials used for the bridge, resulting in CO<sub>2</sub> savings of 660 tonnes.

### **Work and social activities**

We invest heavily in the recruitment, selection, training and development of people who share our core values and contribute to our culture, philosophy and ambitions. We want to be an employer of choice and recognise that to achieve this status will require constant effort on our part. We consider it crucial that our organisation invests in equity, diversity and inclusion (EDI) in order to remain an attractive employer.

The sector we work in is traditionally characterised by low diversity. In addition, we are also faced with a shortage of skilled workers in the United Kingdom. This presents us with a major challenge. In view of this in 2017 the board appointed a head of EDI along with a steering group composed of volunteer employees. In 2018 this resulted in:

- the implementation of the 'Building Inclusion Together' strategy
- the signing of an EDI commitment by the board
- an EDI training course that has already been followed by the management and will be rolled out to all colleagues
- a dedicated section on the corporate website and the intranet aimed at raising awareness of these topics

### **Considerate Constructors**

In the United Kingdom we belong to the Considerate Constructors Scheme (CCS), the sister organisation of the Dutch scheme Stichting Bewuste Bouwers in Nederland. In the same way as the Dutch organisation, CCS looks at the effort made by projects in terms of environmental considerations, such as local residents, employees and the environment they are working in. In 2018 our average score was 40.5, above the sector average. Three of our projects were recognised with a National Site Award.



Construction of a greener railway track between Preston and Blackpool in the northwest of England, for the first time in history connecting to the main West Coast line.

## North America

VolkerWessels North America is active in the infrastructure sector, in the Canadian provinces of Alberta and British Columbia and in the Seattle region of the United States. Our activities are focused on the construction and maintenance of roads and underground infrastructure.

### Key figures for North America

	2018
IF-rate	7.5
Total weight of waste in kilotonnes	86
Separation rate	99%
CO <sub>2</sub> emissions in tonnes	70.8

### Health

The IF rate in 2018 was 7.5. There were 21 accidents resulting in sick leave, more than in 2017. We note that in Canada these accidents mainly occurred at the newly added business units where the safety management programme has yet to be implemented. The United States also reported an increase in the number of accidents.

### Natural environment

In North America we also made a major effort to obtain a complete set of data on waste and CO<sub>2</sub>. We did not manage to do so everywhere. Electricity and fuel consumption data are only available for the largest suppliers. With regard to transport we do have data available for our own vehicle fleet but not for the rental cars and the fuel consumption related to mileage done in private cars.

For Canada we have figures available for the amount of waste produced by the offices but not for residual waste streams at the building sites. These figures are available for the United States and currently still mainly concern concrete and sand.

### Work and social activities

In North America we employ a lot of seasonal workers. These workers are included in our safety figures and participate fully in our safety programmes. We do not yet have figures for absenteeism due to illness for this group. Given that this is a large group we are still looking at how best to compile absenteeism figures for this group.

## Germany

Our activities in Germany are mainly focused on the development and construction of residential real estate and affordable homes for the rental market. We are primarily active in three urban areas: Berlin, Frankfurt and the state of North Rhine-Westphalia.

### Key figures for Germany

	2018
IF-rate	14.7
Total weight of waste in kilotonnes	0.14
Separation rate	78%
CO <sub>2</sub> emissions in tonnes	2.0

### Health

The IF rate for 2018 was 14.7. Eight accidents took place, each of which resulted in sick leave. All concerned relatively minor accidents at our building sites. Compared to 2017 the total number of accidents was down by nine (2017: 17 accidents, of which seven resulted in sick leave).

Because every accident is one too many, in the coming year we will be increasing the pressure on our subcontractors to comply with our safety requirements. Unfortunately this is necessary. We still see people at building sites who are not wearing helmets or safety shoes. In 2018 we appointed an employee who is severally responsible for the safety culture in Germany.

**Natural environment**

In the larger cities in Germany in particular we are seeing growing demand for circular construction methods. In 2018 construction work started on the PULSE building in Berlin, which was designed according to circular principles. The PULSE building was awarded a DGNB Gold Certificate by the German Sustainable Building Council (DGNB). The DGNB system is widely used in Germany to measure and assess the sustainability performance of buildings. Buildings that meet the relevant performance requirements are awarded a bronze, silver, gold or platinum certificate.

For almost all of our projects, building waste is processed by subcontractors. This means we do not have full insight into these figures. We are making efforts to obtain data in order to be able to provide a representative overview of our waste streams. We have taken the first steps in this direction by gathering data from one of our subcontractors, and have also determined follow-up steps to order to make the data complete and of the desired quality.

We are currently working on implementing the MorgenWonen concept in Germany, which requires adapting the originally Dutch concept for the German market. We expect investor demand for this type of home to be high.

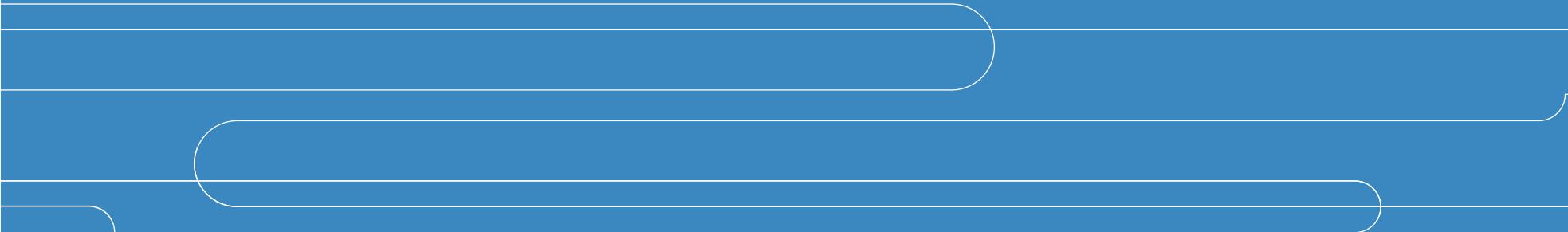
Registration of our data has improved considerably. At the beginning of the year we only had data available for the vehicle fleet; we have since added data for electricity and heating of offices and for air travel. The data is not fully complete yet. We will continue to work on this in 2019.

**Work and social activities**

Experienced, highly trained workers are scarce. VolkerWessels Germany therefore invests in its existing employees and has expanded the range of coaching and training available internally. We have also developed a programme aimed at attracting more young people. This is needed, given that more than half of our employees are aged over 46, and 4.5% are older than 60.

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# About this report



# About this report

The original Sustainability Report was drafted in Dutch. This document is an English translation of the original. In the case of any discrepancies between the English and the Dutch text, the latter will prevail.

## Scope

The primary target group of this report is our stakeholders who are interested in the activities of VolkerWessels – primarily in the Netherlands, where we are active across a broad range in various sectors. Since 2013 we have also reported on the performance of all our operating companies in the United Kingdom.

As of 2018 we have expanded the scope of the Sustainability Report with data for our companies in Germany and North America. In order to focus our efforts and identify effective measures for improvement, we asked KPMG to perform a readiness assessment. Readiness assessments are aimed at evaluating how robust the information on our performance is, with the ultimate aim of obtaining assurance. The readiness assessment showed that the figures are not yet robust enough for assurance. The results of the international activities for 2018 can be found in the section VolkerWessels International.

Foreign branches of our Dutch companies are included in this report. Figures for our companies in Belgium and Germany (VolkerWessels Deutschland GmbH) which are controlled by Dutch companies have been included in the total figure for VolkerWessels Netherlands, but are not reported separately.

## Consortiums, companies and new entities

In this report we consolidated consortiums or companies in which we have a controlling interest. Interests in entities in which VolkerWessels shares control with third parties and whereby VolkerWessels and other parties have a right to the assets and are liable for the debts, are proportionally consolidated as joint

operations in the financial reporting. This approach is in accordance with IFRS accounting principles for financial reporting. The material topics for VolkerWessels have been determined based on various rounds of stakeholder dialogue and an employee survey. More information on this can be found in the Materiality Analysis appendix to the online report on our website (Dutch only).

Acquired companies or consortiums in which our interest increased to more than 50% in 2018 will be involved in the reporting process in 2019 and included in the 2019 accounts. This will for example be the case for Joulz Energy Solutions (JES), a company we acquired in 2018.

In the course of the year under review our company Volker Staal en Funderingen divested its steel activities. This was reflected in energy consumption but not in CO<sub>2</sub> emissions. This is because the activities use mainly green electricity.

## CSR strategy

Our CSR strategy is based on market research, best practices and VolkerWessels' strategy. We comply with the internationally recognised guidelines of the Global Reporting Initiative (the GRI Standards version). The GRI table can be found on the website.

## Data collection

We have created a reporting manual for our companies to collect data in a uniform manner. We adopt the guidelines and emission factors applied by the Dutch Foundation for Climate Friendly Procurement and Business (SKAO) to calculate the carbon footprint of our operations. The CO<sub>2</sub> emission factors stated in the SKAO Handbook 3.0 have been applied in our calculations.

Any recalculations and changes in definitions are explained in the text and the footnotes. Since 2015 all

data is internally validated on a quarterly basis to increase the reliability of the figures and raise awareness throughout the organisation. VolkerWessels uses this data to carry out comprehensive internal audits on the sustainability figures. These enable us to constantly improve the reliability of our sustainability figures. Furthermore, we use the Group's consolidation system in SAP to register our financial data, employee data and safety data.

## Social Return

The Social Return score (SR score) is a benchmark for sustainable and social enterprise for which the indicator is the number of persons employed from the social return target group. The score equals the weighted number of people at a disadvantage on the labour market in the Netherlands relative to the total number of FTEs in the Netherlands, expressed as a percentage. With a few exceptions, the SR score is calculated according to the methodology of the Stichting PSO Nederland foundation, created in collaboration with Dutch research institute TNO, which is used to measure the direct and indirect contributions:

1. Direct contribution: the number of persons employed who are at a disadvantage on the labour market relative to the total workforce. Reporting of this information is mandatory for the companies.
2. Indirect contribution: the extent to which companies source from supply chain partners and suppliers who engage in sustainable and social enterprise. Reporting will be developed further in 2019.

The direct and indirect contributions are added together to provide an overall percentage: the SR score. Following a change we made in 2018 the SR score differs in parts from PSO Nederland, namely the calculation of the direct contribution. The Social Return target group measured differs from the PSO methodology on certain points in terms of the education levels of students, asylum seekers holding a residence permit and

unemployed workers who are not on benefits. There are also a number of minor differences regarding length of service. These changes mean that the SR target groups applied by VolkerWessels relate directly to the wishes of our clients whilst still being consistent with the criteria, i.e. to what extent people are able to earn their own living later on in their career.

The addenda/modifications are as follows:

- BBL/BOL (training on the job pathway/school-based pathway) levels 3 and 4 (weight = 0.25): PSO Nederland only includes students at BBL/BOL levels 1 and 2 (weight = 0.5). We have extended this to levels 3 and 4 because on the one hand it allows us to meet the requirements of certain government clients, and on the other because it is consistent with our desire to contribute to a good basic qualification to limit drop-out later on.
- Persons who commence a BBL/BOL course while they are working for VolkerWessels are included in our calculations during their training period, in line with the parameters for regular BBL/BOL students.
- More highly-qualified interns (weight = 0.25): this is consistent with our desire to contribute to good basic qualifications to limit drop-out later on.
- For persons covered by the Dutch Participation Act we apply a period of five years rather than three because we have found that this group benefits from a longer period of supervision to avoid relapse.
- Unemployed workers who are not on benefits (weight = 1): this is consistent both with the requirement of certain government clients and with our own practical experiences.
- Asylum seekers holding a residence permit (weight = 1): this group tends to fall within the basic criteria of the Dutch Participation Act, but given the great potential we see for this target group we believe it is interesting to monitor them separately.

- Persons who are homeless and unemployed (weight = 1): persons in this group are sometimes not covered by the Participation Act, and can be included under this header.

#### **Waste**

In 2018 we changed our definition of waste. We did so because the previous definition was open to different interpretations by the companies. The definition used in 2017 was 'a combination of residual waste flows which are reused, recycled, processed, incinerated with energy being recovered, or sent to landfill. In other words, the flows that go to the waste processor.' The 2018 definition is 'residual waste flows which are reused, recycled, processed, sent to landfill or incinerated with energy being recovered. In other words, the residual flows that go to the waste processor or which are processed by one of our own companies so that they can be reused as raw materials (for example asphalt and concrete).'

The consequence of this change is that some of our companies have included a large amount of extra residual flows as waste compared to previous years. We have seen a sharp increase for our road construction company and for asphalt manufacturer KWS Infra in particular, due to the fact that recycled asphalt and asphalt millings now qualify as waste. The change has also led to a considerable increase in the waste separation rate: under the old definition the separation rate for 2018 is 53% compared to 93% under the new definition.

#### **Concrete and asphalt**

In 2018 we expanded the reporting scope with regard to the concrete KPIs (Scope 3 CO<sub>2</sub> emissions and percentage of secondary material in concrete products). This means that in addition to the figures for Van Hattum & Blankevoort, those of BKB Infra have also been included in the totals. This has added an important second concrete processor to the reporting scope, meaning that the results provide a better reflection of our performance.

Finally, for the first time we have requested assurance on the percentage of asphalt granulate reused in asphalt products.

#### **Hours worked in the United Kingdom**

In 2018 for the first time the number of hours worked in the United Kingdom was estimated based on contractually agreed hours, adjusted for absenteeism. This has proved to be a better way of estimating the number of hours worked in the United Kingdom than the previously reported estimates based on the definitions used in the Dutch health, safety and environmental checklist VCA. The improved estimate has been applied to historical data and the IF rate for the United Kingdom has been restated for the years up to and including 2014.

#### **Monitoring**

In the past few years we have focused on making our monitoring system more robust. More and better data results in more reliable figures. This is evident for example in our waste, CO<sub>2</sub> and safety figures. We are increasingly working with accurate figures instead of conservative estimates. That means that the improving figures are partly performance-related and partly the result of the improved monitoring system. Furthermore, with effect from 2015 the key indicators are monitored and evaluated every quarter instead of annually. The figures are discussed by the Management Board.

**Future of reporting policy**

In 2017 we gave more prominence to the three quality of life topics in this report and this focus has been maintained in 2018. In 2019 we will continue to work on new quality of life targets for 2025, which we expect to be able to present in the 2019 report. This sustainability report has been expanded with information relating to our business activities in North America and Germany. In the coming years we will focus on setting up a robust reporting process, thereby aiming to achieve assurance at the same level as in the Netherlands.

**External Assurance**

To safeguard the reliability of our figures we engaged KPMG to verify our reporting on the Netherlands and the United Kingdom and to issue an assurance report for our Sustainability Report. KPMG has done so for specific data on the topics of safety, co<sub>2</sub>, resource management and integrity for The Netherlands and the United Kingdom. For more information, see the Assurance Report on page 77.

**Feedback**

If you have any feedback or questions about our sustainability report, please contact  
[csr@volkerwessels.com](mailto:csr@volkerwessels.com).

# Assurance

## Assurance report of the independent auditor

To: the readers of the Sustainability Report 2018 of Koninklijke VolkerWessels N.V.

### Our conclusion

We have reviewed the information for selected indicators and related disclosures for the topics CO<sub>2</sub> and energy, resources, safety, employment and integrity that are indicated with an (\*) in the Sustainability Report 2018 (hereafter: the Selected indicators) of Koninklijke VolkerWessels N.V. (hereafter 'VolkerWessels') based in Amersfoort. A review is aimed at obtaining a limited level of assurance.

Based on our procedures performed, nothing has come to our attention that causes us to believe that the information for the Selected indicators is not prepared, in all material respects, in accordance with the reporting criteria as included in the section 'Reporting criteria'.

The Selected indicators regard the Dutch activities as well as the activities in the United Kingdom.

### Basis for our conclusion

We have performed our review on the Selected indicators in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)' (Assurance engagements other than audits or reviews of historical financial information (attestation engagements)).

Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Selected indicators' of our report. We are independent of Koninklijke VolkerWessels N.V. in accordance with the 'Verordening inzake de

onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### Reporting criteria

The information for the Selected indicators needs to be read and understood together with the reporting criteria. VolkerWessels is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of the Selected indicators are the applied internal reporting criteria as disclosed in the chapters 'About this report' and 'Definitions' of the report.

### Scope of the review of the group

Koninklijke VolkerWessels N.V. is the parent company of a group of entities. The Selected indicators incorporate the consolidated information of the group entities in the Netherlands and the United Kingdom, as explained in the chapter 'About this report'.

Our group review procedures consisted of both review procedures at corporate (consolidated) level as well as at local level. Our selection of local entities in scope of our review procedures is primarily based on the individual contribution of a local entity to the consolidated information. Furthermore our selection of

local entities considered relevant reporting risks and geographical spread.

By performing our review procedures at local level, together with additional review procedures at corporate level, we have been able to obtain sufficient and appropriate assurance evidence about the group's reported information to provide a conclusion about the Selected indicators.

### Unreviewed corresponding information

No review has been performed on the information for the indicators 'Secondary materials in asphalt products (% recycled)', 'Zero-energy bill homes' and 'Percentage of people at a disadvantage on the labour market (PSO-score)' for previous years. Consequently, the corresponding data and the related disclosures for the previous years have not been reviewed.

### Responsibilities of the Management Board and the Supervisory Board for the Selected indicators

The Management Board of VolkerWessels is responsible for the preparation of the information for the Selected indicators in accordance with the reporting criteria as included in the chapters 'About this report' and 'Definitions', including the identification of stakeholders and the definition of material matters.

The Management Board is also responsible for such internal controls as Management Board determines is necessary to enable the preparation of the information for the Selected indicators that is free from material misstatement, whether due to fraud or error.

The Supervisory Board is responsible for overseeing the reporting process of VolkerWessels.

### Our responsibilities for the review of the Selected indicators

Our objective is to plan and perform the review in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion. Procedures performed to obtain a limited level of assurance are aimed to determining the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in review engagements with a limited level of assurance is therefore substantially less than the assurance obtained in audit engagements.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the information for the Selected indicators. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS, Regulations on quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have exercised professional judgement and have maintained professional scepticism throughout the review, in accordance with the Dutch Standard 3000A, ethical requirements and independence requirements.

Our review included amongst others, the following procedures:

- Identifying areas in the information for the Selected indicators with a higher risk of misleading or unbalanced information or material misstatements due to fraud or error. Designing and performing further assurance procedures aimed at determining the plausibility of the information for the Selected indicators;
- Considering the internal control relevant to the assurance engagement with the aim of selecting assurance activities that are appropriate in the circumstances. This consideration does not aim to express a conclusion about the effectiveness of the internal control of the entity;
- Evaluating the appropriateness of the reporting criteria used, including evaluating the results of the dialogue with stakeholders and the reasonableness of estimates by the Management Board and the disclosures provided for the Selected indicators;
- Evaluating the presentation, structure and content of the information for the Selected indicators and related disclosures and evaluating whether the information for the Selected indicators presents the underlying transactions and occurrences free from material misstatement;
- Interviewing relevant staff responsible for providing the information for the Selected indicators, carrying out internal controls on the data and consolidating the data for the Selected indicators;
- Performing three site visits within the segments Energy & Telecom Infrastructure, Construction & Real Estate Development and VolkerWessels United Kingdom, with the aim to validate source data at local level and to evaluate the design and implementation of internal controls and validation procedures;
- Performing an analytical review of the data and trends in the information submitted for consolidation at corporate level;

- Reviewing, on a limited test basis, relevant internal and external documentation, to determine the reliability of the information for the Selected indicators.

We communicate with the Management Board regarding, among other matters, the planned scope and timing of the review and significant findings that we identify during our review.

Amstelveen, 4 March 2019

KPMG Sustainability,  
Part of KPMG Advisory N.V.

W.J. Bartels RA, Partner

# Appendix sustainability figures – The Netherlands

## Health

	2018	2017	2016	2015	2014
<b>SAFETY</b>					
<b>Sickness absence percentage*</b>					
Netherlands	3.9%	4.2%	3.9%	3.9%	4.8%
– Construction & Real Estate Development	3.6%	4.1%	3.7%	3.7%	5.8%
– Infrastructure	3.9%	4.3%	4.2%	3.8%	4.1%
– Energy & Telecom Infrastructure	4.2%	4.0%	3.9%	4.3%	4.9%
– VolkerWessels group head office	2.6%	4.6%	2.8%	2.6%	1.6%
<b>Accidents resulting in absenteeism*</b>					
Netherlands	116	129	129	113	115
– Construction & Real Estate Development	48	39	53	46	30
– Infrastructure	40	49	55	47	57
– Energy & Telecom Infrastructure	26	37	20	20	28
– VolkerWessels group head office	2	4	1	0	0
<b>Number of fatal industrial accidents*</b>					
	0	0	1	0	1
<b>IF rate Netherlands*</b>					
	4.6	5.3	5.5	5.1	5.2

\* KPMG provided limited assurance on this indicator, refer to page 77.

## Natural environment

	2018	2017	2016	2015	2014
<b>RAW MATERIALS</b>					
Percentage of sustainable timber used	98%	97%	96%	97%	92%
Separation rate for building and demolition waste*	93.1%	52.6%	61.9%	64.8%	65.0%
Total weight of waste (in tonnes)*	680,083	71,673	65,742	60,450	61,410
Hazardous materials collected and processed (in kg)	229,047	282,144	289,860	375,610	550,780
<b>Use of secondary material</b>					
Concrete (% reused)	*4%	*10%	5%	–	–
Asphalt (% asphalt granulate)	*41%	41%	41%	39%	37%
<b>CO<sub>2</sub> AND ENERGY</b>					
<b>CO<sub>2</sub> emissions per scope (in kilotonnes)*</b>					
Netherlands	127.0	133.6	122.7	134.6	150.4
– Scope 1	117.2	125.1	114.5	124.7	140.4
– Scope 2	9.9	8.5	8.2	9.8	10.0
<b>CO<sub>2</sub> emissions per sector (in kilotonnes)</b>					
Construction & Real Estate Development	23.2	18.9	18.8	19.2	18.4
Infrastructure	83.1	92.6	84.3	91.1	99.3
Energy & Telecom Infrastructure	19.9	21.4	19.0	24.3	32.7
VolkerWessels group head office	0.9	0.7	0.6	0	0
<b>CO<sub>2</sub> emissions in the value chain (scope 3)</b>					
Concrete (kg CO <sub>2</sub> / m <sup>3</sup> )	*161	*154	149	–	–
<b>Number of zero energy bill homes</b>					
	*769	758	270	448	–

\* KPMG provided limited assurance on this indicator, refer to page 77.

## Work and social activities

	2018	2017	2016	2015	2014
<b>EMPLOYMENT</b>					
<b>Breakdown of staffing levels by age and gender (male/female)</b>					
<21	107/17	79/12	68/12	55/14	62/13
22-25	396/79	350/76	344/68	368/70	409/77
26-30	941/199	887/192	915/160	926/144	889/150
31-35	1,118/168	1,064/157	1,082/154	1,022/161	1,111/205
36-40	1,154/198	1,198/191	1,233/172	1,164/173	1,215/199
41-45	1,281/210	1,318/196	1,364/192	1,421/222	1,520/266
46-50	1,507/267	1,545/243	1,600/225	1,590/197	1,554/187
51-55	1,618/179	1,671/164	1,662/150	1,645/138	1,504/119
56-60	1,389/101	1,398/91	1,411/82	1,441/75	1,291/87
61-65	951/57	865/49	814/52	735/52	623/50
65<	43/7	34/4	16/5	16/4	12/5
<b>Total number of employees by gender (male/female)</b>	<b>10,506/1,481</b>	<b>10,407/1,376</b>	<b>10,510/1,273</b>	<b>10,381/1,251</b>	<b>10,291/1,341</b>
<b>Percentage of fulltime / part-time by gender</b>					
Male fulltime / part-time	92.4% / 7.6%	92.5% / 7.5%	91.7% / 8.3%	93.7% / 6.3%	93.1% / 6.9%
Female fulltime / part-time	40.0% / 60.0%	40.5% / 59.5%	42.5% / 57.5%	41.6% / 58.4%	33.8% / 66.2%
<b>Inflow and outflow of males and females</b>					
Male inflow	80.9%	79.1%	83.0%	82.4%	81.3%
Female inflow	19.1%	20.9%	17.0%	17.6%	18.7%
Male outflow	82.0%	82.8%	83.7%	81.0%	82.9%
Female outflow	18.0%	17.2%	16.3%	19.0%	17.1%
<b>Breakdown of years of service and gender (male / female)</b>					
<2	2,053/508	1,659/33	1,601/320	1,532/310	2,573/278
2-5	1,914/310	1,791/302	1,659/277	1,655/265	1,861/299
6-10	1,454/197	1,812/245	2,044/234	2,214/242	1,832/226
11-20	2,229/295	2,221/277	2,116/266	2,143/289	1,904/282
21-30	1,414/102	1,469/101	1,609/116	1,670/112	2,152/102
31<	1,438/71	1,450/63	1,422/59	1,137/1,281	2/55
<b>Input Social Return target group</b>					
People employed who are at a disadvantage on the labour market (PSO score in the Netherlands)	*0.7%	2.3%	1.7%	1.2%	-

\* KPMG provided limited assurance on this indicator, refer to page 77.

	2018	2017	2016	2015	2014
<b>Training</b>					
Average number of hours of training per employee	24	20	18	17	23
Amount spent per employee (in euros)	918	931	848	720	693
Percentage of women who participated in the Management Development course (MOL)	9.4%	9.4%	6.3%	6.3%	–
Number of participants in VolkerWessels Academy	790	1,180	739	278	199
<b>COMMUNITY ENGAGEMENT</b>					
Number of building sites registered with 'Considerate Constructors'	343	356	344	171	138
<b>INTEGRITY</b>					
Total number of reported suspicions of a breach of integrity and suspicions of wrongdoing*	49	32	39	33	49
Number of reported cases resulting in dismissal*	11	12 reported cases resulting in 13 dismissals	8 reported cases resulting in 11 dismissals	13	16
Number of reported suspicions of a breach of competition law*	1	0	0	0	1
Use of the whistleblower's scheme*	0	8	0	3	3
Number of employees enrolled in integrity workshops, such as the induction programme and other gatherings*	689	529	481	1,188	1,798

\* KPMG provided limited assurance on this indicator, refer to page 77.

# International

	2018	2017	2016	2015	2014
<b>SAFETY</b>					
<b>Sickness absence percentage</b>					
United Kingdom*	1.1%	1.1%	1.1%	1.4%	1.0%
North America	0.1%	–	–	–	–
Germany	4.3%	–	–	–	–
<b>Accidents resulting in absenteeism</b>					
United Kingdom*	7	20	10	16	15
North America	21	18	11	12	15
Germany	8	7	0	0	0
<b>Number of fatal industrial accidents</b>					
United Kingdom*	0	0	0	0	0
North America	0	0	0	0	0
Germany	0	0	0	0	0
<b>IF rate</b>					
United Kingdom*	1.1	3.4	1.8	3.0	3.0
North America	7.5	8.8	5.6	6.9	8.3
Germany	14.7	13.1	–	–	–
<b>RAW MATERIALS</b>					
<b>Separation rate for building and demolition waste</b>					
United Kingdom*	92.8%	88.6%	71.4%	–	–
North America	98.6%	–	–	–	–
Germany	78.4%	–	–	–	–
<b>Total weight of waste (in tonnes)</b>					
United Kingdom*	321	500	1,055	345	377
North America	86	–	–	–	–
Germany	0.14	–	–	–	–

\* KPMG provided limited assurance on this indicator, refer to page 77.

	2018	2017	2016	2015	2014
<b>Hazardous materials collected and processed (in kg)</b>					
United Kingdom	11,745,919	15,154,949	15,350,600	1,285,223	9,410,000
North America	3,312,195	–	–	–	–
Germany	0	–	–	–	–
<b>CO<sub>2</sub> AND ENERGY</b>					
<b>CO<sub>2</sub> emissions per scope (in kilotonnes)</b>					
United Kingdom*	32.0	25.8	29.6	31.9	25.3
– Scope 1*	21.7	17.1	20.8	23.3	19.1
– Scope 2*	10.3	8.7	8.9	8.6	6.2
North America	70.8	–	–	–	–
– Scope 1	65.9	–	–	–	–
– Scope 2	4.9	–	–	–	–
Germany	2.0	–	–	–	–
– Scope 1	1.1	–	–	–	–
– Scope 2	0.9	–	–	–	–
<b>EMPLOYMENT</b>					
<b>Breakdown of staffing levels by age and gender (male/female)</b>					
<21	108/37	150/42	149/45	122/37	119/31
22-25	258/77	283/71	253/122	266/74	267/71
26-30	401/128	425/131	434/190	392/116	372/107
31-35	461/103	415/103	388/158	382/102	403/107
36-40	478/104	431/94	393/131	356/85	352/75
41-45	449/82	471/71	375/131	491/76	452/83
46-50	509/113	543/98	438/136	421/68	367/75
51-55	496/81	440/69	280/113	368/71	342/65
56-60	401/62	329/37	199/63	231/36	201/41
61-65	190/34	125/29	72/36	125/23	97/20
65<	65/7	34/5	32/9	9/3	22/9
<b>Total number of employees by gender (male/female)</b>	<b>3,816/827</b>	<b>3,646/750</b>	<b>3,013/1,134</b>	<b>3,163/692</b>	<b>2,994/684</b>
<b>Percentage of fulltime / part-time by gender Netherlands</b>					
Male fulltime / part-time	98.9% / 1.1%	98.9% / 1.1%	99.2%/0.8%	99.5%/0.5%	99.7%/0.3%
Female fulltime / part-time	87.9% / 12.1%	84.8% / 15.2%	82.9%/17.1%	82.7%/17.3%	82.3%/17.7%

\* KPMG provided limited assurance on this indicator, refer to page 77.

	2018	2017	2016	2015	2014
<b>Inflow and outflow of males and females</b>					
Male inflow	80.2%	78.7%	82.0%	80.4%	78.9%
Female inflow	19.8%	21.3%	18.0%	19.6%	21.1%
Male outflow	62.2%	65.4%	84.2%	58.0%	66.1%
Female outflow	37.8%	34.6%	15.8%	42.0%	33.9%
<b>Breakdown of years of service and gender (male / female)</b>					
<2	1,135/285	1,138/277	1,016/379	1,195/271	1,079/244
2-5	1,111/259	1,109/258	899/402	799/190	694/214
6-10	521/148	531/151	556/248	576/128	648/109
11-20	767/93	647/76	470/90	480/60	494/55
21-30	208/30	127/21	50/14	106/13	122/18
31<	79/7	53/7	23/0	32/5	0/2
<b>Average number of hours of training per employee</b>					
United Kingdom	28	7	9	16	-
North America	4	-	-	-	-
Germany	0	-	-	-	-
<b>Amount spent per employee (in euros)</b>					
United Kingdom	447	414	192	394	-
North America	583	-	-	-	-
Germany	0	-	-	-	-
<b>INTEGRITY</b>					
<b>Total number of reported suspicions of a breach of integrity and suspicions of wrongdoing</b>					
United Kingdom*	5	43	20	11	8
North America	1	-	-	-	-
Germany	0	-	-	-	-
<b>Use of the whistleblower's scheme</b>					
United Kingdom*	0	1	2	1	3
Noord Amerika	0	-	-	-	-
Germany	0	-	-	-	-

\* KPMG provided limited assurance on this indicator, refer to page 77.

# Definitions

## A

### Asphalt granulate

Secondary material derived from the destruction or routing of hard asphalt surfaces. Asphalt granulate can be reused in various products, such as in the production of new asphalt.

### Average number of employees

The average number of employees at the end of a certain period, in this case a year.

## B

### BIM

Building Information Modelling. BIM is a digital representation of all physical and functional aspects of a building. A BIM model is a shared source of knowledge or file containing information about a building that serves as a reliable basis for making decisions during the entire life cycle of the building.

### Biodiversity

Biodiversity is defined as the variety of life forms within an ecosystem or even on the entire planet.

### BREEAM (Building Research Establishment Environmental Assessment Method)

Assessment method to establish the sustainability performance of buildings. BREEAM sets a standard for a sustainable building and then determines the performance level of the building. The objective is to analyse buildings and issue a sustainability label (pass, good, very good, excellent and outstanding).

### Building

A property used permanently (and not for a specific project) by a company as an office, storage unit, production site, etc.

### Building and demolition waste

Consists of the unsorted fraction of resources released during activities on a construction or a demolition project. This fraction of resources still needs to be sorted to create pure materials which can be immediately used by the final processor. Building and demolition waste does not include materials containing asbestos and asbestos-like materials, eternit materials, waste from rooftop renovations, sand, soil and rubble.

## C

### CO<sub>2</sub>

A gas emitted for example by burning fossil fuels (i.e. fuels including coal and products made of crude oil). CO<sub>2</sub> is the type of gas that makes a substantial contribution to the greenhouse effect.

### CO<sub>2</sub> footprint

The total amount of CO<sub>2</sub> emitted in a certain period, in this case by VolkerWessels.

### Community engagement

Actions aimed at the local community in which external parties are involved and consulted, such as residents, road users, companies, the media, environmental movements, etc.

### Completed homes

A unit for completed housing units, i.e. including apartments. Includes housing units completed on behalf of third parties.

### Considerate Constructors

A quality label promoting the relationship between building sites and the local community. The quality label encourages communication with the community near the building site and makes the professionalism at building sites transparent. The Dutch initiators of Considerate Constructors are VolkerWessels, BAM, Ballast Nedam and Strukton.

### Conversion factor

The factor for converting energy to CO<sub>2</sub> is different for each energy flow and each type of fuel. The factor is used to calculate the carbon emissions. The conversion factors used by VolkerWessels are based on the CO<sub>2</sub> performance ladder in version 3.0 of the SKAO Handbook.

### CSR

Corporate Social Responsibility

### CSR platform

Internal advisory body at VolkerWessels in the field of our policy on Corporate Social Responsibility.

## E

### Employee

A person employed by a VolkerWessels operating company, including people seconded to another VolkerWessels operating company.

### External Review Committee

External advisory body of VolkerWessels. The External Review Committee reflects and advises on our CSR policy. The composition of the committee changes annually. The External Review Committee has no legal liability or responsibility.

**F****Flow of resources**

The flow of raw materials from project to project (i.e. trade flows between own work projects). For example: rubble, asphalt (with the exception of tar asphalt), concrete.

**FSC wood**

Wood/paper that carries the FSC quality label of the Forest Stewardship Council (FSC). This proves that the timber comes from a forest that has been assessed independently by the FSC and is found to be a well-managed forest according to standards relating to the environment, social conditions and the economy.

**G****General procurement terms**

The general terms that stipulate the conditions under which VolkerWessels procures products and/or services from its suppliers. These terms apply as much as possible from the moment that agreements are concluded with other parties.

**GRI (Global Reporting Initiative)**

Internationally recognised standard for sustainability reporting.

**H****Hours of training**

Total number of hours of training that an employee has had, both in-house and externally.

**HR/HRM**

Human Resources/Human Resources Management.

**I****Industrial accident**

An accident that occurs during the performance of paid labour, with the exception of accidents that occur while commuting. That means that industrial accidents happen during working hours, but not all accidents that occur during working hours are considered to be industrial occupational accidents. We only speak of an industrial occupational accident if the accident was caused by work. Industrial accidents include both fatal accidents and accidents resulting in sick leave. Note: accidents that occur during business trips are considered to be industrial accidents.

**Industrial accident resulting in death**

An industrial accident resulting in death is an industrial accident that results in the death of the person concerned immediately after or within calendar 30 days of the accident. An industrial accident resulting in death only concerns VolkerWessels employees or temporary employees.

**Industrial accident resulting in sick leave**

This refers to an industrial accident resulting in sick leave longer than one day, not including the day that the person concerned (being either a VolkerWessels employee or a temporary employee) suffered the accident. Note: Saturdays and Sundays are not included. If an industrial accident occurs on a Friday and the employee reports back to work the following Monday, it is known as an industrial accident not resulting in sick leave.

**Injury frequency (IF rate)**

Injury frequency (IF rate) is the number of industrial occupational accidents resulting in sick leave (or death) multiplied by one million (hours) divided by the number of hours worked.

**Innovation**

The development of a new or improved product, concept or service. The innovation is pioneering for both the company and the market for which it is intended. A sustainable innovation also adds value to the environment.

**N****NGO (non-governmental organisation)**

An organisation that is independent of governments and focused in some way on an assumed public interest.

**Number of hours worked**

The number of hours worked is the total number of hours worked by VolkerWessels employees including hired personnel. The number that is registered consists of (1) the number of hours worked by own employees and (2) the number of hours worked by temporarily hired employees. If companies that do not register the actual number of hours worked (by their own employees and temporary employees), then the number of own employees must be multiplied by a standard number of 1,600 hours per year.

**P****PlusWonen home**

Sustainable home built as part of the 'PlusWonen' home construction concept and label developed by VolkerWessels.

**Project**

A temporary location where a job is carried out.

**PSO**

The Dutch Social Enterprise Performance ladder

**PSO score**

Measure of sustainable and social enterprise in which people employed in the social return target group act as the indicator. The score is the average weighted number of people who are at a disadvantage on the labour market in relation to the total number of FTEs, expressed as a percentage.

**R****Recycling rate**

Indicates which percentage of the total amount of waste (excluding hazardous waste) is separated when gathering waste and subsequently recycled when processing it.

**Residual flow**

That part of the waste flow from private individuals, institutions and companies that remains after all usable and recyclable waste flows have been removed from the main flow. The residual flow at VolkerWessels is the flow that remains after the customary resources (e.g. concrete granulate, metal, paper, cardboard, sand and timber) are removed from the main flow.

**Resource management**

The manner in which we as a company deal with our resources. Reducing and separating our waste flows so that they can be reused by ourselves or another party is given priority.

**S****Scope 1, 2, 3 (SKAO)**

**Scope 1** – Direct emissions by the own organisation, such as emissions from own gas consumption and emissions caused by the own fleet of vehicles.

**Scope 2** – Indirect emissions caused by the generation of electricity consumed by the organisation, such as emissions from the plants that supply this electricity.

**Scope 3** – Relates to other indirect emissions. These are a result of the activities of the organisation but arise from sources that are not owned or managed by the organisation. Examples include emissions generated by the production of procured materials, waste processing, and the use phase of workproducts or, services or supplies provided by the company.

**Secondary material**

Material emitted after the end of the life cycle which is reused after being processed by including it in a product instead of primary materials.

**Sickness absence rate**

Indicates which part of working capacity was not utilised in a certain period due to sick leave. This is the most common measure of sick leave within an organisation. The rate is based on calendar days. The sickness absence rate is calculated based on the average number of VolkerWessels employees/ FTEs excluding temporary employees.

**SKAO**

Stands for the Dutch Foundation for Climate-Friendly Procurement and Business. This foundation is responsible for all aspects of the co<sub>2</sub> performance ladder (its usage and further development, managing the certification schedule and expanding the number of participating sectors).

**Social Return**

For VolkerWessels, social return is defined as every effort taken in its operations and in the execution of projects that enables people with an occupational disability or who are at a disadvantage on the labour market to participate in the labour market.

**Supply chain**

This is defined as the chain of all business activity needed to meet demand for products and services, from the extraction of raw materials to ultimate delivery to the end user.

**T****Temporary employee**

Examples include temps and seconded employees working under the direction of VolkerWessels but who do not have an employment contract with VolkerWessels or a subcontracting agreement.

**Training amount**

Total amount spent on internal and external training, excluding VAT and travel expenses, including material costs, hours and other out-of-pocket expenses.

**V****vca certificate**

A Dutch health, safety and environmental (HSE) checklist for contractors. A company that is VCA certified has an internal plan for HSE aspects.

# W

## Waste

A combination of residual waste flows which are reused, recycled, processed, sent to landfill or incinerated with energy being recovered. In other words, the residual flows that go through the waste processor or which are processed by one of our own companies so that they can be reused as raw materials (for example asphalt and concrete).

### Waste separation rate

Indicates which percentage of overall building and demolition waste is separated in the process of gathering and processing waste (on site). This does not include hazardous waste. The waste separation rate is determined as follows:

$$\frac{\text{total waste (tonnes)} - (\text{commercial waste (tonnes)} + \text{building and demolition waste (tonnes)})}{\text{total waste (tonnes)}} \times 100\%$$

# Z

## Zero-energy bill home

'Zero-energy bill' is defined as: 'Housing units which are not connected to the gas grid, with an energy bill totalling €0 (after applied tax credit)'. These include Morgenwoning homes as well as a large number of Pluswoning homes.

### Legend

-  Quality of life
-  Health and wellbeing
-  Natural environment
-  Work and social activities
-  Safety
-  Raw materials
-  Employment
-  CO<sub>2</sub> and energy
-  Community engagement
-  Biodiversity
-  Integrity

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We look forward to receiving your reactions to our  
Sustainability Report at [csr@volkerwessels.com](mailto:csr@volkerwessels.com)

The Dutch version of the Sustainability Report is the  
audited, leading version. In case of textual  
contradictions, the Dutch version shall prevail.

Composition  
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