



Engineering: people's work

Annual Report 2015



Breda The Netherlands



Lent The Netherlands

Engineering: people's work

Annual Report 2015

REPORT BY THE BOARD OF DIRECTORS

In 2015, Witteveen+Bos N.V. undertook numerous challenging projects in all parts of the world, thus helping to solve major social challenges. Most of the domestic markets in which Witteveen+Bos operates are stable, while the international markets offer opportunities for growth. The organisation has grown from 977 to 1,056 employees, revenue has increased from 119 million to 130 million euros, and in 2015 we realised a sound net profit of 14.3 million euros. Directors Karin Sluis and Henk Nieboer look back on a successful year.

Karin: 'In 2000, the United Nations adopted the UN Millennium Development Goals (MDGs). Among other things, these goals are aimed at eradicating poverty, improving public health, and ensuring environmental sustainability. In 2015 the UN observed that a lot of work remains to be done, although great strides have been made in the past fifteen years. Seventeen Sustainable Development Goals (SDGs) have therefore been defined that are aimed at ensuring a socially, ecologically and economically sustainable world by 2030.'

Henk: 'As an international engineering and consultancy firm, Witteveen+Bos wants to make an effective contribution to the attainment of these goals through our projects. For instance, we seek to make clean water and sanitary facilities available to all, design safe and sustainable cities, ensure sustainable production and consumption, and protect ecosystems and biodiversity. Furthermore, together with other companies we can play a key role in achieving the objective of economic growth and employment for all.'

The projects that Witteveen+Bos worked on in 2015 clearly demonstrate our contributions to the realisation of the SDGs. In Kazakhstan, for instance, we designed a treatment plant for the recycling of production water for oil and gas consortium NCOC. In Belgium we worked on the Oosterweel Link, a tunnel that will complete the ring road around Antwerp and thus improve accessibility and reduce air pollution and noise nuisance in the city. Towards the end of 2015, the Witteveen+Bos-designed 'Room for the River' project in Deventer was completed. Additional room was created for the IJssel River in order to decrease the risk of flooding in the city, while providing additional scope for nature development and recreation. The City of Amsterdam commissioned us to produce a design and supervise the performance of work for the renovation of a number of historic quay walls, to ensure that the city remains safe and attractive for local residents and tourists.

Henk: 'Our company continued to grow at a

steady pace in 2015, particularly internationally. The office we opened in Ghana in connection with the WASH project (Water, Sanitation & Hygiene) was given permanent status after completion of the project. We have noted many exciting challenges and opportunities for growth in this West African nation. We also opened a new office in London that will focus specifically on providing advice for cycling infrastructure projects. The city has major mobility and liveability issues which we can help to address. In 2015 the Belgian firm MAVA AES, with a staff of 50 professionals providing environmental and soil consultancy services, joined Witteveen+Bos. This merger will enable us to broaden and deepen our environmental expertise. We expect our international growth to continue in the coming period. Most growth opportunities for the engineering industry are currently found outside the Netherlands, for instance in emerging markets in Asia and Africa. But I would also like to emphasise once more that the Netherlands is and will remain our "home base", where we will continue to work on projects of all sizes to gain valuable experience and further develop our expertise.'

With the projects it worked on in 2015, Witteveen+Bos realised a total turnover of 130 million euros, representing an 8.8 % increase compared to 2014. Growth was mainly achieved through international projects. Our total revenue outside the Netherlands rose to 50 million euros in 2015, and is for the first time associated with substantial foreign currency risks. These risks are reduced by concluding contracts in euros or US dollars as far as possible, by entering into contracts with subcontractors in the same currency, and by agreeing arrangements about compensation with clients.

The growth of the organisation and the increasing number of large projects are resulting in increased pressure on our working capital. We therefore devoted extensive attention to project management in 2015. In 2015 we also decided to introduce a new accounting and project administration system, which will be implemented in 2016. All our staff worldwide will start working with this system in 2017. The system will enable project leaders to gain more insight into working capital, and provide them with additional tools to limit expenditure.

Our growth also means that Witteveen+Bos has qualified as a "large" company for several years now. We expect the organic growth of the company to continue in the coming years. In 2015 we therefore made preparations for the establishment of a Supervisory Board. The members will be appointed during the General Meeting of Shareholders to be held in April

2016. No major changes are expected in the financing of our company in 2016.

We performed a materiality analysis in 2015 in order to obtain a clear picture of the contribution that Witteveen+Bos can make to achievement of the SDGs. The results showed that Witteveen+Bos can achieve the greatest impact through its projects. Karin: 'One of the external stakeholders we interviewed remarked that Witteveen+Bos achieves far greater impact through its consultancy and design activities than through its operational processes. The analysis also showed that our professional competencies and knowledge position are essential to generate impact, and that we can contribute to employment and economic development through sustainable growth.'

The materiality analysis has prompted us to further develop our non-financial key performance indicators and expand their use. The application of our six sustainable design principles remains a key focus area. In 2015 we included in our Quality Manual a commitment to apply these principles in all our projects worldwide. 'Our concern for sustainable development is not confined to our projects', Henk continues. 'Staff regularly visit colleges and schools to talk about their work, while initiatives such as the Discovery Centre and Girls Day bring young people into contact with various aspects of technology. And every year we present the Witteveen+Bos Art+Technology Award to an innovative artist. This year's winner was Renzo Martens, who is collaborating with us to promote economic growth through art and technology in the Democratic Republic of the Congo, one of the world's poorest countries.'

Karin concludes: 'We are pleased to inform readers about our work and results in 2015. For the first time we have combined our Annual Report and Corporate Responsibility Report, providing an integrated overview of our financial and non-financial performance. For us, good financial results are not so much a goal in themselves as they are a necessary precondition to do our real job: contributing to the achievement of the SDGs through our projects. This report also includes interviews with the members of four project teams, who explain with enthusiasm how they have contributed to these goals. After all, an engineer's work is all about people.'

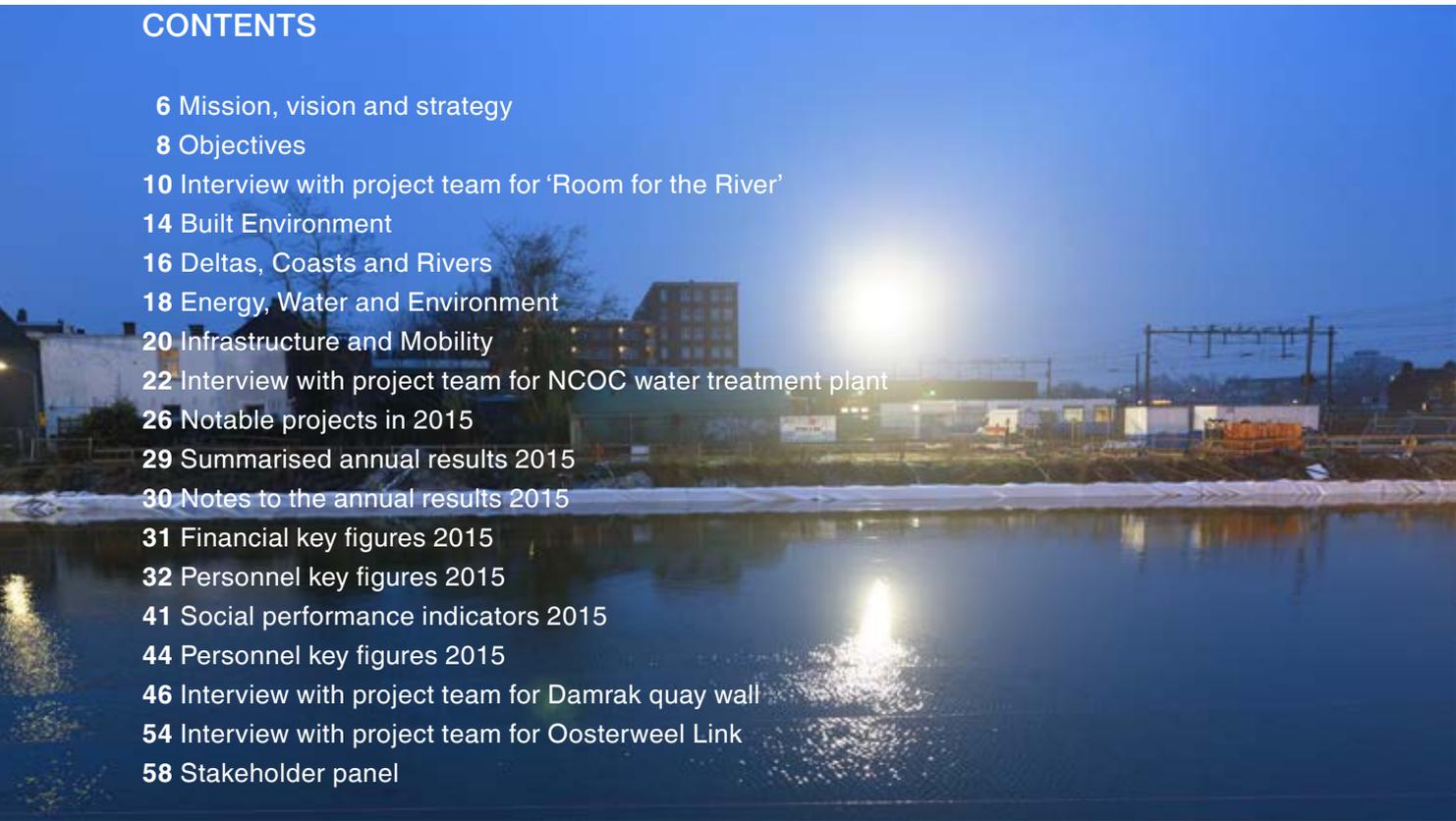
Deventer, the Netherlands, 8 March 2016
Board of Directors of Witteveen+Bos N.V.

Karin Sluis
Henk Nieboer



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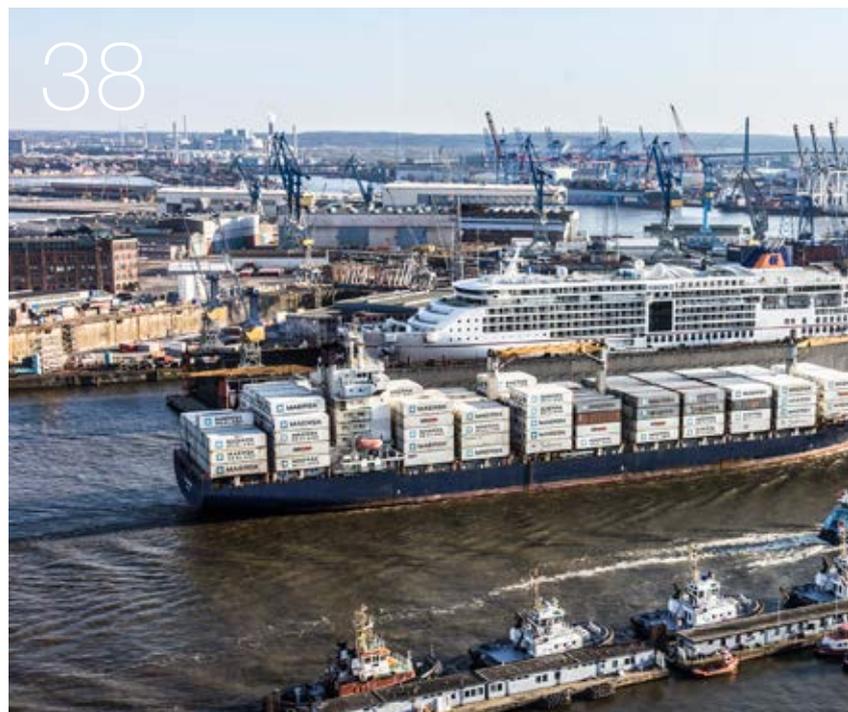
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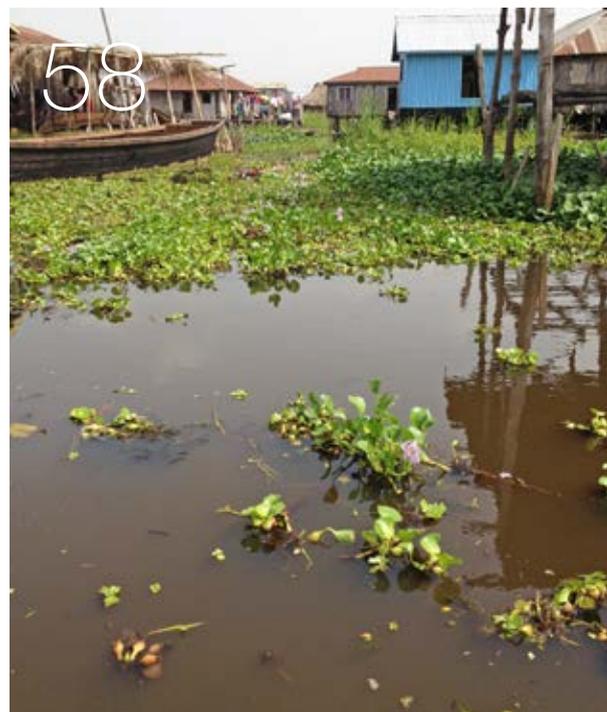
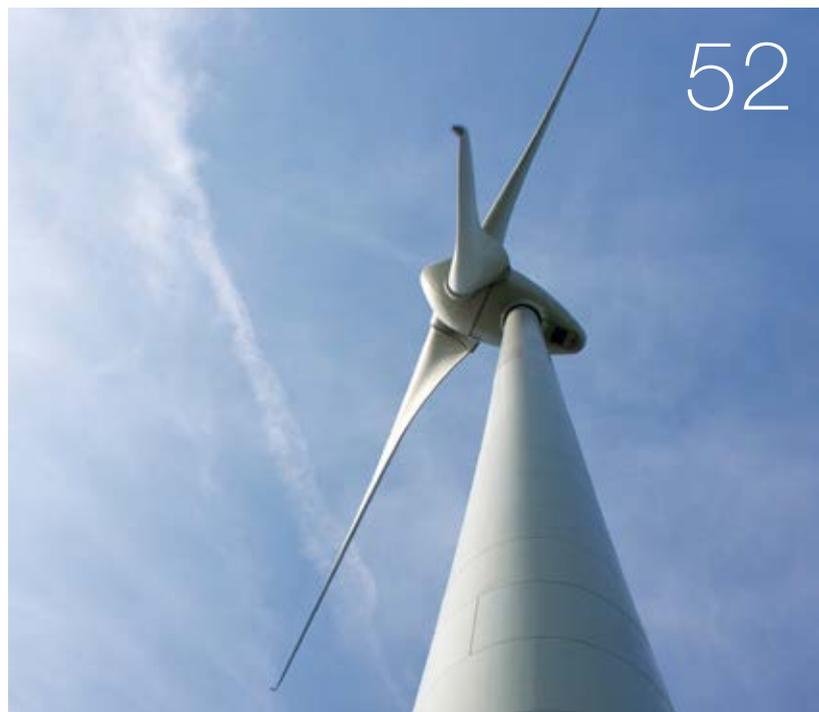
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MISSION, VISION EN STRATEGY

The world faces many challenges: flood risks, ongoing urbanisation and the depletion of natural resources, to name but three. As an international engineering and consultancy firm, we are keen to make a contribution to resolving these issues by placing our expertise at the service of society. In this way we can help to realise the UN's Sustainable Development Goals (SDGs).

Mission

We have a clear mission statement: 'Witteveen+Bos offers its clients value-added consultancy and top-quality designs for water, infrastructure, environment and construction projects. We use our high-end expertise to resolve complex issues and are a committed partner for our clients. We attach great importance to our independence and to our corporate culture, which allows all our employees to excel, utilise their talents to the full, and maximise value for clients.'

Vision

Witteveen+Bos is an engineering consultancy that seeks to offer the very highest level of quality, because we believe that a commitment to excellence is key to developing sustainable solutions for today's challenges. We aim to be very good at what we do. Our staff are experts in their respective disciplines and pursue ongoing innovation. We work with expert partners and maintain a culture of entrepreneurship and trust.

Clients

Both public- and private-sector clients call on us to help resolve the challenges they face. We provide advice to contractors, engineering and architectural firms, energy and water companies, railway and port authorities, and industry. In the public sector, we work for national governments, water boards, and provincial and local authorities. Our activities cover the entire chain, from policy-making and design to contracting and supervising the performance of work. We aim to establish long-term relationships with our clients that enable us to meet their needs and expectations as effectively as possible while delivering maximum added value.

Organisational structure

Witteveen+Bos has nearly 1,100 employees, based in six cities in the Netherlands and more than ten international offices in other countries. All are close to our clients, projects, partners and the employment market. Over 30 small organisational units - the Product-Market Combinations or PMCs - are responsible for contract management and acquisition. These PMCs are clustered into four business lines: Built Environment; Deltas, Coasts and Rivers; Energy, Water and Environment; and Infrastructure and Mobility. This organisational structure enables staff from various disciplines and different countries to work closely alongside each other, thus ensuring that our knowledge and experience are readily available worldwide.





Knowledge and innovation

Leading expertise is essential in order to devise sustainable solutions to complex challenges in the field of water, infrastructure, the environment and construction. Witteveen+Bos maintains excellent contacts with educational and knowledge institutions. We also organise various internal and external meetings, such as lab sessions and symposia, to encourage the development of new knowledge and to promote innovation. In our projects, we consciously address the impact of our decisions on people and society.

Sustainable design principles

In our projects we apply our six sustainable design principles, which are based on the UN's Sustainable Development Goals. They help us to promote sustainability in practice by:

- Aiming to develop nature-inclusive and climate-proof designs
- Applying the Trias principle to develop sustainable solutions
- Applying an approach that considers the entire supply chain
- Pursuing optimisation of functions
- Recognising the importance of participation by stakeholders and end-users
- Devoting attention to social sustainability as a guiding principle in the design process



Sustainable collaboration

The issues we tackle are becoming increasingly complex. To devise sustainable solutions to these challenges, our staff work in multidisciplinary project teams alongside colleagues from various backgrounds. Good cooperation is essential, both within the company and with external partners. In many cases, cooperation has been formalised in strategic alliances or joint ventures with other leading consultancies and complementary organisations. Examples include Tunnel Engineering Consultants (TEC), Railinfra Solutions (RIS), and the Strategic European Expertise Network (SEEN). Witteveen+Bos is also an active member of EcoShape and Duurzaam GWW, a consortium of government authorities, private-sector organisations and research institutes working on sustainable solutions in the fields of hydraulic engineering and road and railway construction.

Talent development and growth

By making the best possible use of everyone's talents, we can maximise our contribution to solving global challenges. Witteveen+Bos wishes to help all employees (and potential employees) achieve their full potential and realise their dreams and ambitions. Our human resources strategy is geared towards allowing all staff to gain experience in challenging projects and to take advantage of various training opportunities. New staff take part in an induction programme, while the majority of management positions are filled by means of internal promotion. For many years, Witteveen+Bos has applied a strategy of organic growth. This has enabled us to maintain our identity and independence, while bolstering employees' sense of involvement and engagement.

Human rights, employment conditions and business ethics

Witteveen+Bos endorses the ten principles of the United Nations Global Compact. Our Company Code states that 'assignments in contravention of national and international laws and regulations will not be accepted'. We support and respect the protection of internationally proclaimed human rights, and devote due attention to safe and healthy working conditions for employees. Our Company Code prohibits forced and compulsory labour in our operations. Witteveen+Bos endorses the ILO Declaration on Fundamental Principles and Rights at Work. We will not engage in bribery and we will not accept any assignment which has been assigned to us on dubious grounds. The Employee Regulations provide employees with clear guidance on our policy in this area. An Integrity Committee oversees compliance with our Company Code and employees can contact a confidential adviser (appointed by the Board of Directors) to report any issues or dilemmas. Witteveen+Bos has been making active efforts for years to help eliminate discrimination in respect of employment and occupation.

Ownership

Witteveen+Bos has a noteworthy ownership structure. An employee share ownership system was introduced in 1992 whereby the company is wholly owned by its staff. This arrangement provides a major incentive for staff engagement and entrepreneurship. We strive to maintain a sound financial basis and stable profit levels to safeguard long-term continuity. Each year, 100 % of the net profit is disbursed through a profit-sharing scheme for all employees and dividend distribution to all shareholders. This reflects a central tenet of the Witteveen+Bos philosophy: everyone within the company contributes to our success, and hence everyone should derive the benefits of that success.

OBJECTIVES

Witteveen+Bos wants to provide added value to society. Good financial results are a precondition enabling us to do our real job: devising solutions for challenges in the fields of water, infrastructure, the environment and construction. We therefore manage our activities based on financial as well as non-financial performance indicators.

Financial targets

A financially healthy company is essential to the long-term continuity of our operations. Our first financial Key Performance Indicator (KPI) is growth: we aim for our workforce and revenue to grow at an annual rate of 3 to 5 %, so that we can offer attractive career opportunities to more people and help more clients in addressing the issues they face. Our performance in 2015 was well above this KPI target, as the size of our workforce increased by 8.1 % while our revenue grew by 9.2 %. Our second financial KPI concerns our profit margin: to ensure sufficient scope for innovation and other new developments, we aim to realise a net profit margin of at least 8 %. As in previous years, we more than succeeded in achieving this target in 2015 with a net profit margin of 11.1 %.

Non-financial targets

Our non-financial targets are classified into three categories:

- Projects
- People
- Operations

In 2014 we defined a number of KPIs for these categories. We report on our performance in accordance with the G4 guidelines of the Global Reporting Initiative (GRI). Further information on our application of the GRI G4 guidelines may be found on page 43 of this report. A number of the relevant indicators are explicitly mentioned in this report (GRI G4-22). In 2015 we performed a materiality analysis to “flesh out” our KPIs. Suppliers, clients, business partners, civil-society organisations and other internal and external stakeholders jointly selected our KPIs in the categories Projects, People and Operations (GRI G4-18 and 19). The relevant targets have been adjusted and approved by the Board of Directors. The CSR team periodically produces management information in order to monitor whether the required performance levels are being achieved. As in previous years, we consulted a panel of stakeholders and asked them to review this combined Annual Report and Corporate Responsibility Report (GRI G4-24, 25 and 26). The panel’s feedback may be found on page 58.

Projects

The materiality analysis clearly showed that Witteveen+Bos provides the most added value

to society through its projects (GRI G4-20 and 21). In our projects we factor in aspects like climate change, future re-use (chain approach / circular economy) and the efficient and sustainable use of materials. We also contribute to the restoration of natural habitats, an affordable, reliable and sustainable energy supply, protection of the environment, and human well-being. We are supported in our efforts by the application of our six sustainable design principles in our projects. In 2015 we performed a baseline survey among project leaders to gain more insight into the extent to which these design principles are actively applied in our projects. In late 2015 we included a provision in our Quality Manual stating that the sustainable design principles are to be applied in all our projects.

We also provide added value to society in other ways. In 2015, for instance, Witteveen+Bos director Henk Nieboer in 2015 accepted a non-company position as director of EcoShape. In this role, he will focus on the practical application of the ‘Building with Nature’ approach and sharing of expertise. Together with a number of other parties, Witteveen+Bos is a participant in S-Sharing.com, a web-based platform devoted to ‘making sustainability measurable’. In addition, one of our employees serves on the board of the UN Global Compact Network for the Netherlands. Witteveen+Bos is also a participant in the Human Cities Coalition.

We have identified the following KPIs for 2016:

- A properly substantiated discussion of the six Witteveen+Bos sustainable design principles must be included in all project plans, in accordance with the Quality Manual.
- Fifty project leaders must participate in at least one internal ‘garage session’. These sessions are held at least five times per year and focus on fleshing out and applying the design principles in our projects.
- At least 50 external customer assessments of project results must be conducted, focusing on the extent to which application of the sustainable design principles has added value for society. We aim for an average score of at least ‘satisfactory’.
- At least one ‘garage session’ is to be organised where our main subcontractors are informed about and involved in the application of the six sustainable design principles by Witteveen+Bos.

People

Developing top talent is another key objective of Witteveen+Bos (GRI G4-20 and 21). We are committed to training and developing top talent, promoting diversity, and ensuring an adequate inflow of technical professionals. We pursue these aims by providing ‘learning and coaching on the job’, supporting career development op-





portunities for female employees, and involving young people in our work. In 2015 we increased the number of job performance interviews, with 522 Witteveen+Bos employees attending such interviews in the Netherlands. In 2015 we appointed a female staff member as location head of our office in The Hague. We also organised a wide range of activities for pupils and students, including a workshop on 'Girls Day' where a group of forty girls aged between 10 and 15 were given an opportunity to create their own design for the ZuidasDok project in Amsterdam.

The Works Council represents the interests of all employees of Witteveen+Bos Raadgevende Ingenieurs B.V. A number of new Works Council members were elected in mid-2015. The Council devoted attention to the theme of 'working in the future', and has requested input from employees who are closely involved in internationalisation through a posting abroad.

We have identified the following KPIs for 2016:

- Job performance interviews are to be held with at least 80 % of all employees who have been with the company for one to two years, and with at least 50 % of all employees who have worked at Witteveen+Bos for two to ten years.
- A 'Talent Development Score' will be included in all job performance reviews. Employees can use this metric to indicate whether they have been given every opportunity to utilise and develop their talents. We aim for an average score of at least 'satisfactory'.
- Every year, we will organise at least three events aimed at the general public.
- We aim for female staff members to account for 25 % of future partner appointments, a male-female ratio that corresponds to the ratio among new colleagues joining the company.
- The increase in the number of interns and final-year students must at least keep step with the growth of our company.
- We organise at least five business courses for students per year.

Operations

Our third social objective concerns reducing the environmental impact of our own operations (GRI G4-20 and 21). We seek to achieve this aim by promoting sustainable business travel and the reduction of CO₂ emissions throughout the supply chain. In 2015 our CO₂ Awareness Certificate was extended at Level 5 of the CO₂ Performance Ladder of the Foundation for Climate-Friendly Procurement and Business (SKAO).

We have identified the following KPIs for 2016:

- The reduction in CO₂ emissions from our own operations must be in line with our general target of 30 % emissions reduction by 2020 compared to the reference year 2007.
- We will engage in dialogue with our five main suppliers about achieving CO₂ emissions reduction throughout the supply chain.
- We will maintain our CO₂ Awareness Certificate at Level 5 of the SKAO CO₂ Performance Ladder, and obtain certification in accordance with our new Quality Manual 3.0.

INTERVIEW





'Room for the River' programme The Netherlands

Hydraulic engineers are working in Kampen on a shared goal: a fine and safe IJssel delta that provides space for recreation and where local residents are kept dry. To the team, it is less important who their formal employer is. Boundaries between client, contractor, cooperating partners and the general foreman have blurred in the old school that has been turned into the nerve centre of Room for the River Kampen.

'To be a team, you must see each other'



from left to right: Gert Jan Koppelman, Engbert van der Weide, Alice van de Werfhorst, Joost Lansink, Richard de Boer, Rob Lohrmann and Robin van Alphen

There were numerous highpoints in Room for the River projects in 2015. The secondary channels in Nijmegen-Lent were delivered, the floodplain digging near Meinerswijk/Arnhem and the spur lowering on the River Waal were finished and Room for the River Deventer was delivered. Witteveen+Bos had a hand in all of these projects. Work was also performed in 2015 on ensuring the safety of the river area in Veessen-Wapenveld and Kampen. Follow-on work will be carried out there at Kampen in the coming years. A variety of meas-

ures are being taken to improve water safety and spatial quality. The River IJssel is being deepened and the floodplains reconfigured. A bypass is being built south of Kampen to form a link between the River IJssel and Drontermeer Lake. It consists of new dikes separated by a channel and a nature spot. Various civil engineering works like locks, a bridge, a head gate and pumping stations are also being constructed, while the road network and water management in the area are undergoing thorough renovation. All of this

work obviously requires an integral approach to design and construction, with due attention to integral safety, archaeology and ecology. Stakeholders in the surroundings are being actively involved by local area management. The way of working in this project is special: the Room for the River Kampen team moved into a previously unoccupied school in 2015. Clients, contractors and foremen - totalling around 100 people - now work alongside each other. So the composition of the team and cooperation are important subjects. Rob

Lohrmann, project leader on behalf of Witteveen+Bos, says: 'My role is to make sure that the best Witteveen+Bos team works on the project. It's a question of continuously finding out internally who is best suited to doing what needs to be done and who is available for the job, continuously liaising with the contractor group about manpower requirements and, last but not least, making sure that everybody enjoys working on this terrific project.' Richard de Boer, design leader on behalf of Boskalis with in the Isala Delta project, adds:



‘You can’t fail when you have a team behind you’

‘We try to mould a team, to draw from the best colleagues of all the partners. In terms of knowledge and skill, Witteveen+Bos is a good agency, one in tune with the drive of Boskalis to deliver a solid piece of work. But I have to say that here in Kampen it makes absolutely no difference who works for whom, because together we are one team.’ Robin van Alphen, a Witteveen+Bos designer, continues: ‘We share with each other the progress throughout the project. Every Tuesday afternoon during lunch there is a

soapbox session where the project manager keeps everybody informed of the status of the project. Together we celebrate successes and milestones and there is also time to hear about personal news.’ According to Robin, one of the reasons for the sense of teamwork is that everybody is working in one and the same building. ‘I work on temporary structures, on such matters as temporary work floors and water management. It’s great to be able to consult directly with the work planners, foremen and surveyors

about what they need from me in a design. It works a lot better when you can drop in on each other instead of e-mailing and phoning back and forth or scheduling a formal appointment. We can immediately get down to business with each other.’ Working together in one building is a logical choice, says Richard. ‘To be a team, you must see each other. You discover sooner touchpoints between different tracks within the project and people are able to learn easier from the knowledge of their immediate

colleague.’ Rob adds: ‘It’s also a way of letting younger colleagues develop. Through this close collaboration, they experience the project from A to Z. They see that taking initiative has its rewards: you get opportunities but you are also allowed to make mistakes. Then you solve them a team, because you can’t fail when you have a team behind you!’

BUILT ENVIRONMENT

Resilient and sustainable cities

The Built Environment business line plans and designs resilient and sustainable urban areas. As the world's population and the proportion of people living in urban environments continues to grow, economic, cultural and recreational activities are increasingly clustered in and around cities. This process of urbanisation - whether planned or not - may greatly strain the quality of life in urban areas. Measures are therefore required, particularly to address challenges relating to water management, drinking water supplies, air quality, heat stress, accessibility, noise nuisance, and the conversion of areas and buildings for other uses.

We take a comprehensive view of design projects in urban environments. The challenges of the future require ongoing innovation and familiarity with new technologies. This applies to such developments as climate adaptation, the use of sustainable materials, energy efficiency, and 3D modelling. Projects aimed at creating healthy and resilient urban areas must consider a wide range of aspects, from complex area redevelopment to the conversion of individual buildings, and from master planning to site supervision of civil engineering projects.

+ Exporting knowledge of cycling

With its Dutch roots, Witteveen+Bos has ample knowledge of cycling and cycling infrastructure. Examples of exports of our cycling knowledge include a master class on cycling infrastructure in Latvia and speeches at conferences in Singapore and Kuala Lumpur. There is considerable interest in our cycling expertise in other countries as well and in our home country, for example in the Apeldoorn-Deventer express cycling route.

+ Replacing foil construction in Doornboslaan

Reconstruction of the railway underpass in Doornboslaan is progressing robustly. This is a highly challenging project because of the method of construction, right in the centre of the city nearby railway lines. The project includes replacing the oldest civil foil construction in the Netherlands. Construction is being undertaken according to the U-polder principle, whereby the new foil construction will be placed under water in an excavation with vertical sheet piling.

+ Helping frame the Environment and Planning Act

With the introduction of the new Environment and Planning Act, the Ministry of Infrastructure and the Environment is endeavouring to improve and simplify local planning laws in the Netherlands. The Ministry has engaged Witteveen+Bos and AT Osborne Consultants & Managers to indicate how subjects contained in ministerial regulations under local planning law can be re-divided into a smaller number of new regulations and which possibilities exist to accomplish the improvements being pursued through the overhaul of the system.



Several locations Worldwide



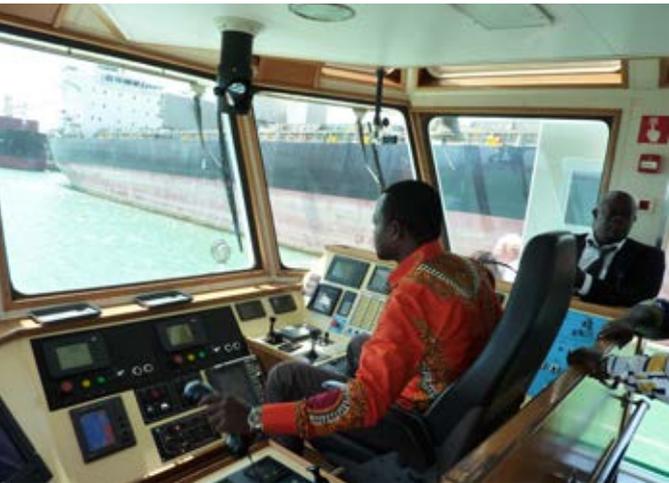


Breda The Netherlands



Various locations The Netherlands







Volkerak-Zoommeer The Netherlands

DELTA, COASTS AND RIVERS

Safety in delta regions

Our Deltas, Coast and Rivers business line focuses on the challenges encountered wherever land meets water. We adopt an integral approach that takes safety, nature, economic development, liveability and sustainability into account, with the overall aim of 'living with water'. To this end we design 'soft' solutions such as dunes and wave-absorbing embankments as well as 'hard' hydraulic engineering structures like dikes, pumping stations, locks and ports. Our work increasingly focuses on anticipating potentially hazardous situations, since prevention rather than cure (reconstruction after the event) allows resources to be used more efficiently.

The interplay between land and water plays a key role in delta regions. Safety is by no means guaranteed here. The natural characteristics of a delta, with its low-lying areas and significant natural values, can be difficult to reconcile with the interests of urbanisation and economic development. Witteveen+Bos works to find answers to the challenges of living and working in a delta region. We do so throughout the world, applying the latest insights in delta technology, flood safety, ecology, hydraulic engineering and water management. Our expertise is in demand in countries with major deltas, such as Bangladesh and Indonesia.

+ Port Master Plan

The existing port at Cotonou lacks efficiency, among other things because an outdated quayside, fragmentation of the port site and cumbersome procedures. Witteveen+Bos and Maritime & Transport Business Solutions B.V. are working on a master plan to configure and use the present port more efficiently, and its possible enlargement to facilitate the expected doubling of transshipment to approximately seventeen millions tons.

+ Putting up dikes

New dikes are being built around Reevediep for the Room for the River Kampen project. The dikes must assure the safety of local residents at high water. The dikes are being made of sand brought up for the lowering of the low water bed of the River IJssel. The sand will be sprayed on from spraying quays and then put in place by bulldozers.

+ Improving infrastructure

The infrastructure that connects the northern side of the Caspian Sea with the oil-rich inland regions is limited at present. Following the successful completion of the first phase consisting of designing an access canal, a transshipment port and a connecting dam to a central terminal site with associated facilities, a start was made in the second phase on the detailed engineering of the project.

ENERGY, WATER AND ENVIRONMENT

Health, economy and sustainability

The Energy, Water and Environment business line is dedicated to assuring safe and liveable areas with the sustainable use of water, energy and raw materials. Our projects help to ensure the availability of sufficient clean water, efficient and low-energy production processes, a healthy living environment and a robust ecosystem. This work facilitates economic development in tandem with good living conditions.

We deploy our knowledge worldwide from a strong home base in the Netherlands, where we hold a leading position in water and environmental projects. At various places in Africa and Asia, we are helping to create reliable, safe drinking water supplies and sanitation. Deployment of our expertise in water treatment, re-usage and asset management in the oil and gas industries is reducing the need for water and increasing production. Our leading position in environmental technology in the Netherlands enables us to put forward solid solutions worldwide for tackling the waste problem and remediating contaminated areas.

+ Improving bay water quality

Sentosa Development Corporation is considering turning Palawan Beach into a closed lagoon in order to improve water quality. After reviewing the design, Witteveen+Bos concluded that the proposed measures had been insufficiently validated to be able to guarantee water of good quality. In a follow-up project, we examined the ecological and hydro-morphological functioning of the bay in order to optimise the design.

+ Reducing ammonia emissions

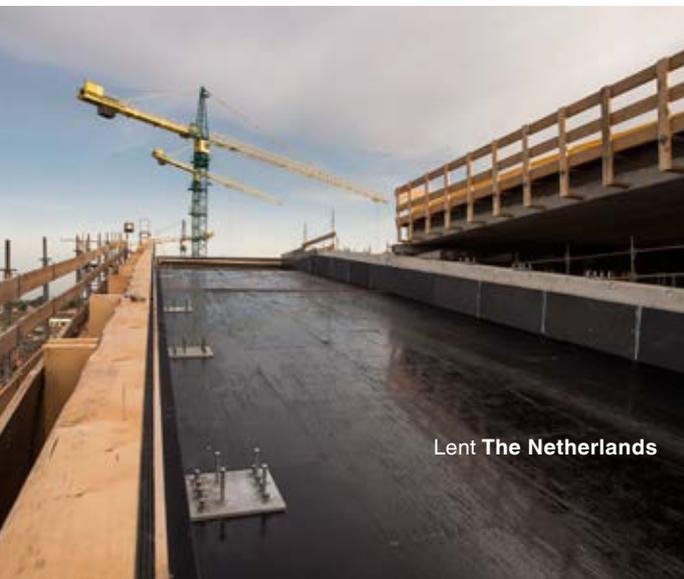
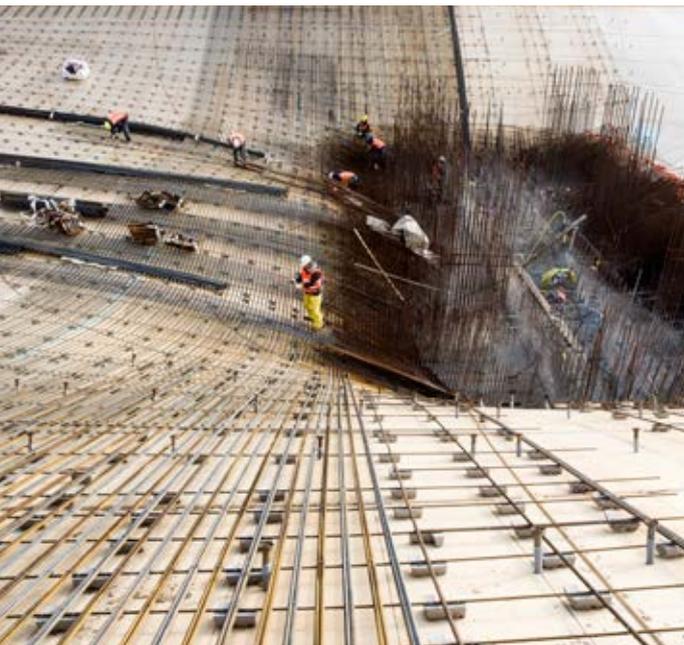
To protect nature the Ministry of Infrastructure and the Environment is stimulating the development of innovative cattle housing systems that reduce emissions of ammonia. Witteveen+Bos examined possibilities for optimising the method used to determine the emissions, with the aim of establishing a broadly supported protocol for follow-up measurements.

+ Managing water safety information

The Water Information House is a co-operative venture of Rijkswaterstaat, water authorities and provincial governments. Witteveen+Bos was involved in streamlining and standardising the information about water safety. Various programmes and projects are gathering and analysing information about this subject. The Water Information House and Witteveen+Bos structured all of the information flows to enable optimum sector-wide cooperation.









INFRASTRUCTURE AND MOBILITY

Growing demand for mobility

The Infrastructure and Mobility business line supports our clients in improving accessibility and mobility by devising sustainable, safe and economical solutions for all transport modalities. In all project phases, we provide advice on infrastructure, underground construction, tunnel safety, railway infrastructure, road construction, and traffic and transport. Our comprehensive approach and leading expertise enable us to offer the best advice and make us an effective collaboration partner.

Following major investments in the past few decades, a slight shift is visible in the Netherlands from building infrastructure to managing and maintaining assets. Witteveen+Bos also devotes extensive attention to developments such as 'time-table-free' train services and wireless inductive charging systems for electric vehicles. Elsewhere in the world, notably in South East Asia, South America and Central America, ongoing urbanisation is creating an increased demand for all types of infrastructure, including bridges, tunnels, and various underground facilities.

+ Extending the Waal Bridge

Traffic has been driving over the Extended Waal Bridge since June 2015. The bridge is part of the Room for the Waal project, for which Witteveen+Bos provided the engineering. The post-tensioned concrete bridge cast in situ is 280 metres long, with two lanes on each side of the road. The bridge is an extension of the historical Waal Bridge between Nijmegen and Lent that dates from 1936.

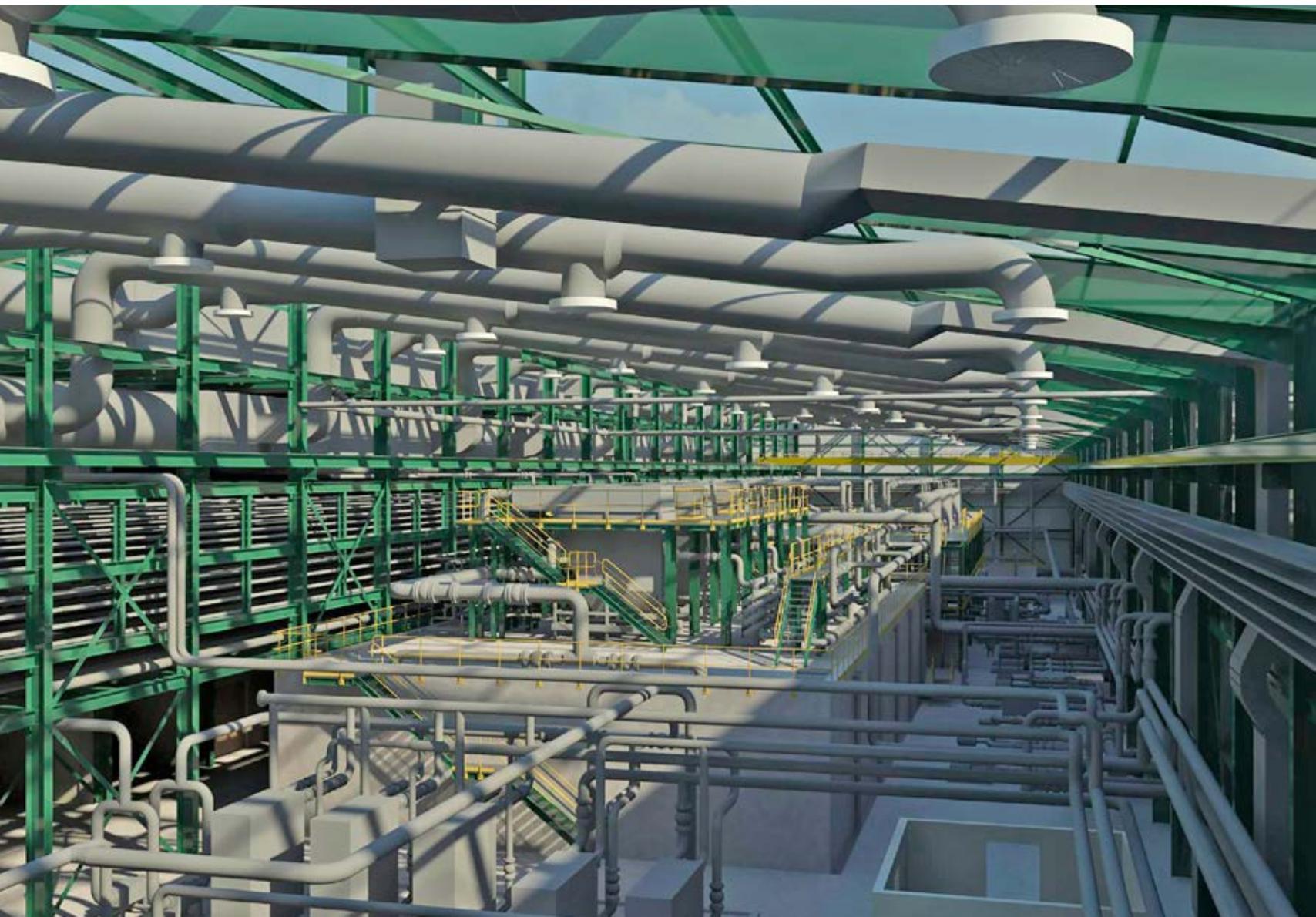
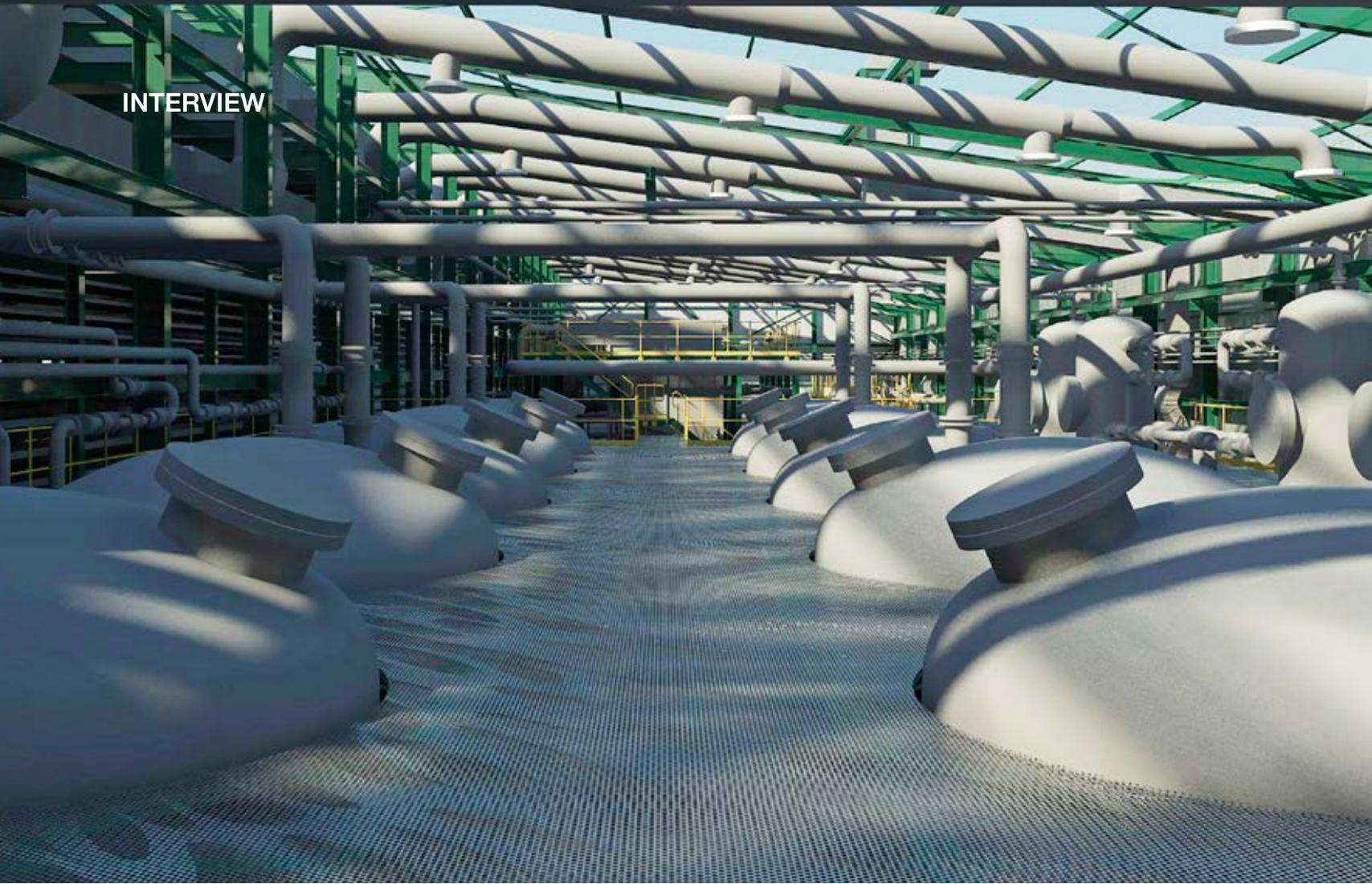
+ Creating Fehmarn Belt, the longest immersed tunnel

Through a collaborative venture called Tunnel Engineering Consultants (TEC), Witteveen+Bos is involved in designing and preparing the contract for an immersed tunnel 18.5 km long between Denmark and Germany. The new tunnel will reduce travel time by at least 30 minutes. The tunnel is a combined road and rail link and will be the world's longest immersed tunnel.

+ Ensuing safety and security of civil engineering works

For the IMPAKT project, Witteveen+Bos, RHDHV and Pilz are working on improving the functional safety and security of almost all critical civil engineering works in the infrastructure in the Netherlands, all of which are also being inspected. Some 1600 packages of measures have already been drawn up and work is in full swing. IMPAKT is a Dutch acronym for 'booster programme for tackling critical engineering infrastructure'.

INTERVIEW





NCOC waterplant Kazakhstan

Creating a Front-End Engineering Design (FEED) for an industrial wastewater treatment plant in a short period of time - that was the challenge posed by oil and gas company NCOC to Witteveen+Bos. The teams in Atyrau and Deventer were happy to tackle the project head-on. Together they developed a design for a treatment plant that maximises reuse of production water.

‘Everyone was given an opportunity to grow’



from left to right: Michel Bretveld, Azadeh Rahimpour, Hans Smit, Debbie Sprakel, Arjen van Nieuwenhuijzen and Chris Roose

North Caspian Operating Company (NCOC) treats wastewater produced by its oil and gas processing plant, which is located 40 km east of the city of Atyrau in Kazakhstan. The plant processes oil and gas supplied by pipelines from drilling platforms in the Caspian Sea. Every day, the new plant will treat over 7,000 m³ of stripped sour water and a brine flow using innovative treatment methods, including membrane technology. The resulting clean water can be used for the produc-

tion of demineralised water and steam. The installations will be located in a new facility that will be heated in a sustainable manner in winter, using the heat released by the power supply. Project manager Hans Smit was responsible for assembling the team. 'After the contract was awarded to us, we first examined which expertise was required and how many people we would need during the different stages. In putting together the extensive project team, we looked not only at people's

professional experience but also at their personalities. We knew the work would be challenging and would be carried out under considerable time pressure, so we took personal qualities and skills into account.' Because the project was carried out by a joint Kazakh-Dutch team, 'exchange' and communication were important themes. 'We devoted particular attention to ensuring that the team worked at the same physical location during key stages of the process: either in Deventer,

in Atyrau, or at the customer's office.' Hans' Kazakh colleague Daniyar Kaliyev worked on the project in Atyrau as a mechanical engineer. He draws attention to the exchange of knowledge involved in the project: 'The team members learned a great deal from each other. Everyone had their own role of course, but we also made every effort to share knowledge. In this way you can make it clear to the entire team which link you form in the chain, so to speak. I gained a great deal



‘Everyone is proud to be contributing to this project’

of professional knowledge and was also able to enhance my personal skills as the leader of the local engineering team and the link between the colleagues in Atyrau and Deventer.’ Knowledge development was a key element in the project. Hans: ‘We believe that experienced and seasoned colleagues should work together with young and more flexible employees. This allows us to make use of each other’s strong points. We challenge the younger colleagues to try out new

approaches, and we provide them with opportunities to contribute to the project under the guidance of an experienced engineer.’ Hans is backed up by his colleague Azadeh Rahimpour, who helped to perform the hydraulic calculations in the Netherlands: ‘Everyone was given an opportunity to grow, and to learn from the different steps in the process. We always resolved any difficulties as a team.’ ‘I’ve noticed there is a real sense of team spirit’, Azadeh continues. ‘For a start, everyone is proud to be

contributing to this project. That creates a bond, helped by the fact that we worked in the same location as much as possible. In this way, you can immediately see the impact that your work has on your colleagues, so you can help each other and resolve any issues together.’ Hans also noted the sense of team spirit: ‘We worked together very closely. It was great to see that colleagues stayed on to chat on Friday afternoon after a week of hard work, instead of going home. We definitely bond-

ed as a team and we also took some steps to encourage that by holding a joint kick-off, organising exchanges between the Netherlands and Kazakhstan, and celebrating project milestones together. There was a clear drive to complete this project according to schedule and to a high level of quality.’

PROJECTS IN 2015





■ Offices Witteveen+Bos

Markermeer The Netherlands



SUMMARISED ANNUAL RESULTS 2015

| Consolidated balance sheet (before profit appropriation) | 31 december 2015 | 31 december 2014 |
|---|------------------|------------------|
| ASSETS | | |
| Intangible fixed assets | 1,448 | 829 |
| Tangible fixed assets | 14,818 | 14,800 |
| Financial fixed assets | + 3,807 | 2,360 |
| Fixed assets | 20,073 | 17,989 |
| Work in progress | 8,762 | 9,266 |
| Accounts receivable | 26,972 | 28,047 |
| Cash and cash equivalents | + 6,429 | 11,748 |
| Current assets | + 42,163 | 49,061 |
| | 62,236 | 67,050 |
| LIABILITIES | | |
| Group equity | 29,002 | 31,828 |
| Provisions | 4,755 | 4,601 |
| Long-term liabilities | 5,844 | 6,219 |
| Current liabilities | + 22,635 | 24,402 |
| Total liabilities | + 28,479 | 30,621 |
| | 62,236 | 67,050 |
| Consolidated profit-and-loss account | | |
| | 2015 | 2014 |
| NET TURNOVER | | |
| Net turnover including changes in work in progress | 129,567 | 119,069 |
| Costs | | |
| Subcontracted work | 34,006 | 26,164 |
| Salaries and wages | 46,797 | 44,078 |
| Social security and pension premiums | 11,544 | 11,036 |
| Depreciation of (in)tangible fixed assets | 1,780 | 1,702 |
| Other operating costs | + 15,897 | 15,901 |
| | - 110,024 | 98,881 |
| OPERATING RESULT | 19,543 | 20,188 |
| Interest paid (on balance) | - 284 | 207 |
| Result before taxation | 19,259 | 19,981 |
| Results of other participations | - 7 | + 103 |
| Result before taxation (including other participations) | 19,252 | 20,084 |
| Taxation | - 4,904 | 4,810 |
| NET PROFIT | 14,348 | 15,274 |

(amounts in thousands of euros)

NOTES TO THE ANNUAL RESULTS 2015

Criteria for summarising the annual results

This Integrated Annual Report contains the balance sheet and the profit-and-loss account of Witteveen+Bos N.V., as well as the general principles for preparing the consolidated annual results. To obtain a complete insight into the assets and the results of Witteveen+Bos N.V., the reader is advised to inspect the consolidated annual results for 2015 filed at the Trade Register of the Enschede Chamber of Commerce.

Preparation of the consolidated annual results

The financial statements have been prepared in accordance with Part 9 of Book 2 of the Dutch Civil Code. They are based on historical costs, with the exception of buildings and land, which are valued at fair value (i.e. replacement value or, if lower, the value in use).

Consolidation

Insofar as actual policy-making influence exists, subsidiaries have been included in the consolidated annual accounts. Joint ventures have been consolidated proportionately according to the share held in the company.

Principles for the valuation of assets and liabilities

Land and buildings are valued at fair value (i.e. replacement value or, if lower, the value in use). Fair value is determined on the basis of price indices and periodic valuations. Depreciation of fixed assets is based on the estimated economic life. Financial fixed assets include unconsolidated interests in participations and partnership firms. Participating interests are valued according to the equity method. Projects in progress for third parties are valued based on incurred costs, plus the profit assignable to the performed projects, minus losses foreseeable at the balance sheet date. Profits for projects in progress are recognised based on the percentage of completion of the projects at the balance sheet date. Invoiced instalments for projects in progress are deducted from the projects in progress. Trade accounts receivable included in receivables are recognised less a provision for doubtful accounts. Provisions are created for deferred tax liabilities, tax risks, warranties and claims, deferred employee remuneration, and liabilities in respect of participating interests.

Principles for determination of the consolidated financial result

Net turnover and changes in work in progress include the services invoiced excluding value-added tax, and include the changes in work in progress. Revenues of projects are presented in proportion to the work completed. Salaries include remuneration paid to the Board of Directors. The pension obligations are valued according to the 'valuation to the pension fund' approach.

Independent auditor's report

To the Board of Directors of Witteveen+Bos N.V.

The annual results for 2015 presented on page 29, which comprise the consolidated balance sheet as at 31 December 2015, the consolidated profit-and-loss account and the accompanying notes, are derived from the audited financial statements of Witteveen+Bos N.V. for 2015. We expressed an unqualified audit opinion on those financial statements in our report dated 8 March 2016. Those financial statements, and the summarised annual results, do not reflect the effects of events that occurred subsequent to the date of our report on those financial statements (8 March 2016).

The summarised annual results do not contain all the disclosures required by Part 9 of Book 2 of the Dutch Civil Code. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of Witteveen+Bos N.V.

Responsibility of the Board of Directors

The Board of Directors is responsible for the preparation of a summary of the audited financial statements on the basis of the principles described in the notes to the consolidated annual results for 2015.

Auditor's responsibility

Our responsibility is to express an opinion on the summarised annual results based on our procedures, which were conducted in accordance with Dutch law, including the Dutch Standard on Auditing 810 'Engagements to report on summary financial statements'.

Opinion

In our opinion, the summarised annual results for 2015 derived from the audited financial statements of Witteveen+Bos N.V. for the year ended 31 December 2015 are consistent, in all material respects, with those financial statements, in accordance with the principles described in the notes to the consolidated annual results.

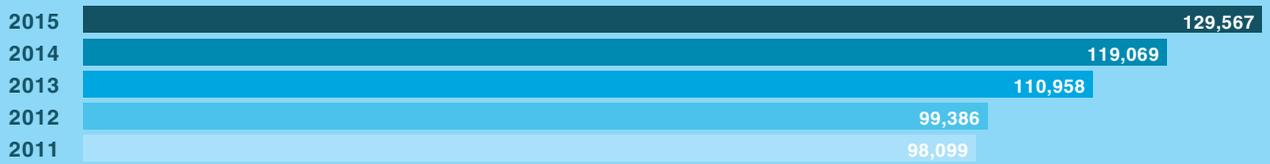
Zwolle, 8 March 2016

Deloitte Accountants B.V.

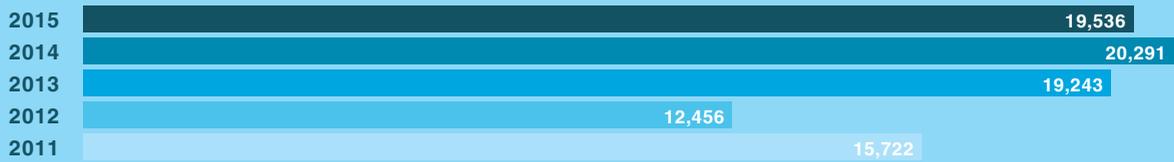
M.H.J. Klein Haarhuis RA

FINANCIAL KEY FIGURES

Turnover (in thousands of euros)



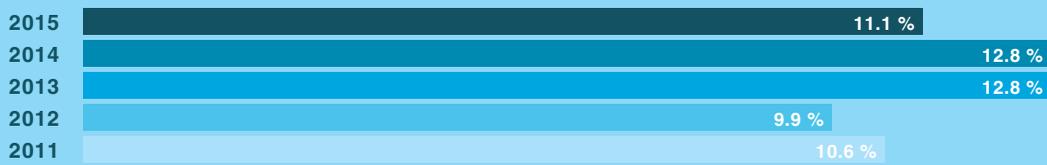
Operating result before interest and taxes (in thousands of euros)



Net profit (in thousands of euros)



Net profit margin (in %)



EBITDA (in thousands of euros)



PERSONNEL KEY FIGURES

Number of employees (as of 31 December 2015)

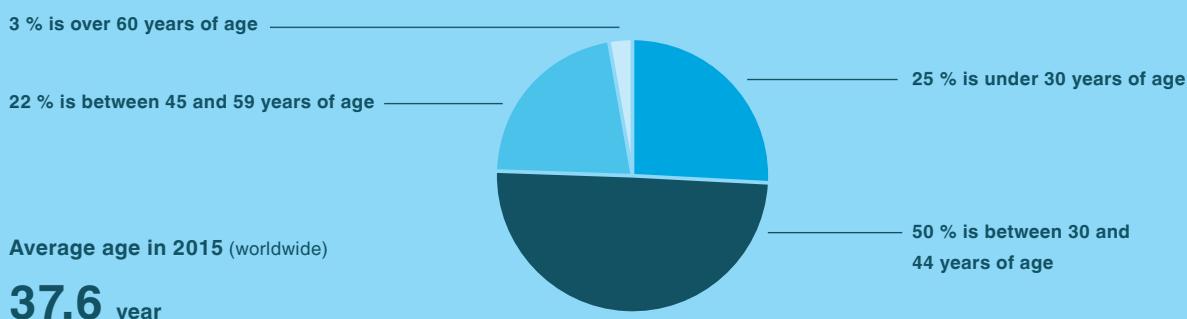


Average number of staff in Full-Time Equivalents (FTEs) and male/female ratio*

| | | | |
|------|-----|-----------|-------------|
| 2015 | 985 | 73 % male | 27 % female |
| 2014 | 899 | 71 % male | 29 % female |
| 2013 | 875 | 74 % male | 26 % female |
| 2012 | 860 | 75 % male | 25 % female |
| 2011 | 856 | 75 % male | 25 % female |

* This is the male/female ratio worldwide (2011-2013: male-female ratio in the Netherlands only).

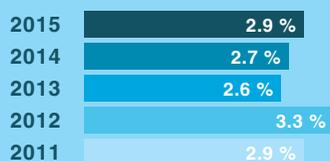
Staff age distribution in 2015 (worldwide)



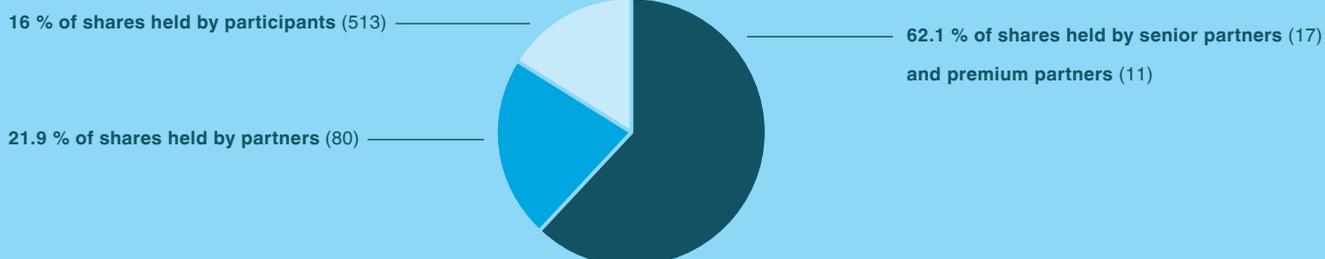
Average age in 2015 (worldwide)

37.6 year

Sick leave rate (The Netherlands)



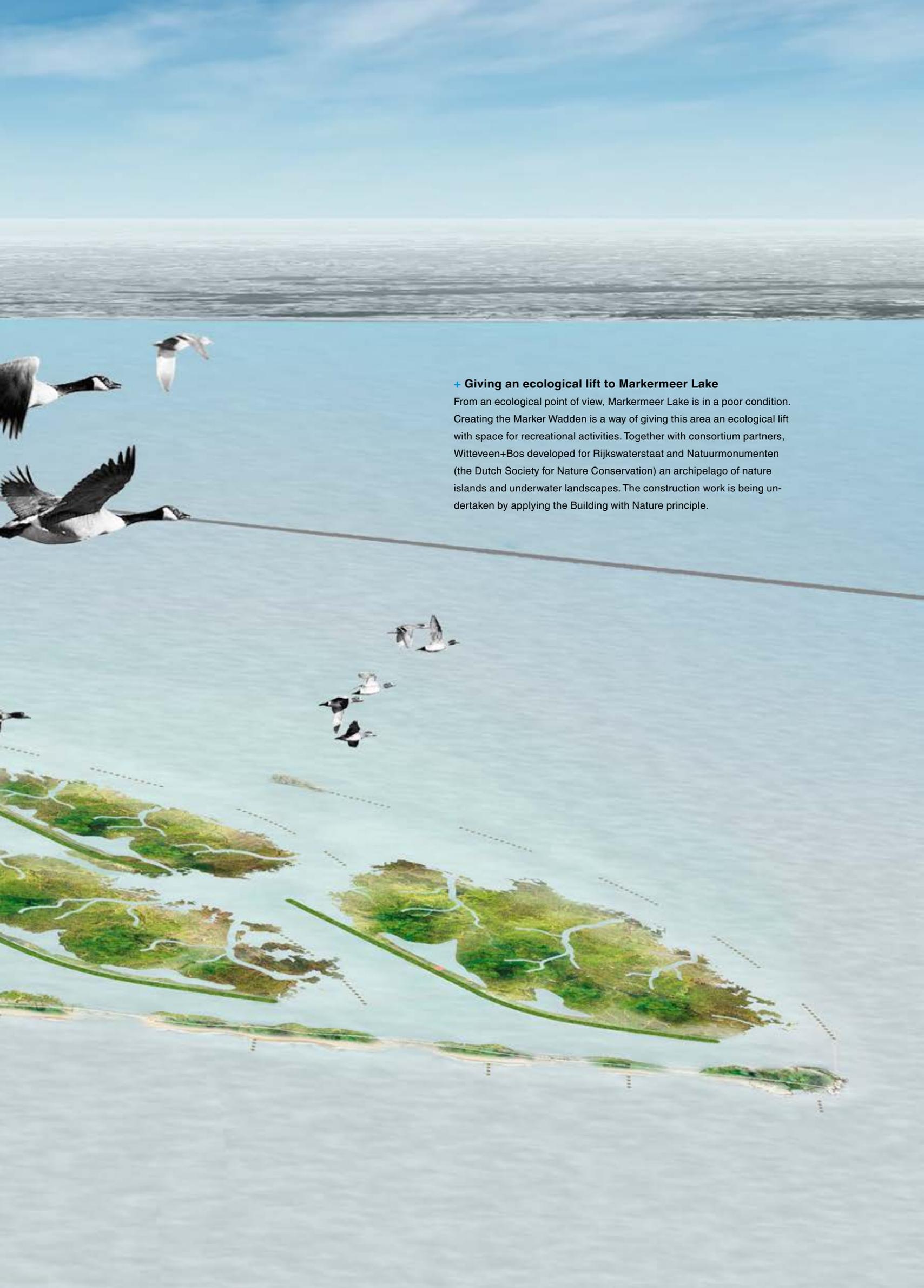
Participation in employee share ownership scheme at 1 July 2015



Internal price of Witteveen+Bos N.V. share at 1 July 2015

EUR 5.99

(EUR 5.59 at 1 July 2014)



+ Giving an ecological lift to Markermeer Lake

From an ecological point of view, Markermeer Lake is in a poor condition. Creating the Marker Wadden is a way of giving this area an ecological lift with space for recreational activities. Together with consortium partners, Witteveen+Bos developed for Rijkswaterstaat and Natuurmonumenten (the Dutch Society for Nature Conservation) an archipelago of nature islands and underwater landscapes. The construction work is being undertaken by applying the Building with Nature principle.



+ Restoring mangrove forests

Large parts of the mangrove forests on the north coast of Java have been cut down to make way for fish ponds. This has caused extensive erosion because the coast is no longer properly protected. Together with consortium partners, Witteveen+Bos developed a sustainable solution by applying the Building with Nature principle, i.e. semi-permeable dams and bamboo piles with brush works between them. This allows the mangrove forest to recover naturally and reassume the function of coastal defence.

Demak **Indonesia**



+ Assessing environmental impact in Eemshaven

The municipality of Eemshaven is working out a new zoning plan for Eemshaven especially for logistical and energy-related activities. Witteveen+Bos produced the Environmental Impact Report (EIR). The south-east side of the port is being enlarged by more than 180 hectares. An EIR will also be drawn up for this area, linked to a zoning plan.

Eemshaven **The Netherlands**



+ Planning the Blankenburg Link

Witteveen+Bos worked for Rijkswaterstaat on elaborating a plan for the Blankenburg Link, a new motorway between the A15 Maasvlakte/Mainport Rotterdam motorway and the A20 Westland/Haaglanden motorway. We cooperated in this project with wUrck and Rotterdam Engineering. A special feature of this project was the integral approach: the knowledge of Rijkswaterstaat and Witteveen+Bos was merged, especially in the fields of tunnel construction, road design, planning studies and local area management.

Rotterdam **The Netherlands**



+ Redevelopment of contaminated brownfield site

MAVA AES supervised the redevelopment of a brownfield site contaminated with chlorinated solvents, aromatics and minerals. The contamination source zones were identified during the demolition work using various methods including EnISSA (Enhanced In Situ Soil Analysis), and were immediately excavated. The post-remediation of the groundwater is carried out by means of biodegradation (injection of a carbon source and a graft).

Grobbendonk **Belgium**



+ Developing energy and raw materials factories

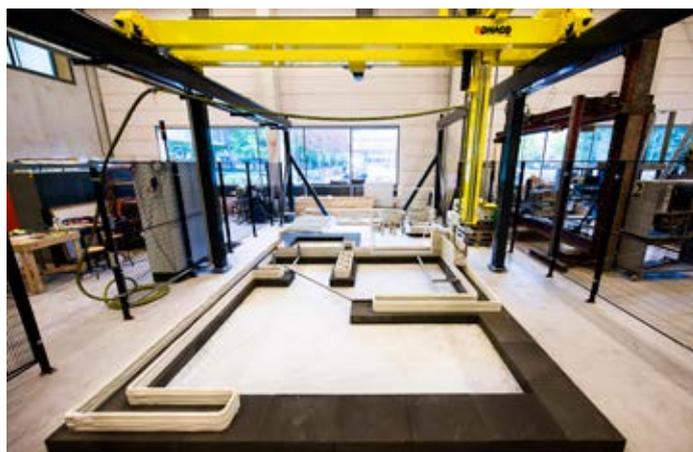
The development of energy and raw materials factories has been driven by the wish to be self-sufficient and to use raw materials as efficiently as possible. Energy factories fit in well with the principle of the circular economy, with biogas being produced at waste water treatment plants as a source of energy and residual substances like phosphorus being reused to the fullest extent possible. In 2015, Witteveen+Bos worked on energy factories in countries including the Netherlands, Ghana and the Philippines.

Hengelo **The Netherlands**

+ Setting up smart crossroads

For the North Holland provincial government, we set up and oversaw a successful pilot project for vehicle detection techniques, making it easier and cheaper to regulate traffic compared with conventional inductive vehicle detection loops. Work has been speeded up on introducing cooperative intelligent traffic systems (C-ITS) under the Better Usage project of the Ministry of Infrastructure and the Environment.

North Holland **The Netherlands**



+ Creating a private port

King Abdullah Port will be Saudi Arabia's first completely privately-owned port. The financiers engaged Witteveen+Bos in performance of the due diligence study into various contracts for what is planned to be the region's largest port. The intended annual container transshipment volume will be 20 million TEU and the port will also have Ro-Ro and bulk terminal facilities.

King Abdullah Economic City **Saudi Arabia**

+ Studying 3D concrete printer

3D printing technology is commonplace for many everyday goods and is likely also to play a significant role in the construction industry. The Eindhoven University of Technology is conducting research into possibilities for using a concrete printer to print sustainable concrete structures. Witteveen+Bos is the only engineering firm taking part in this project. The knowledge being acquired has attracted attention as far away as Singapore.

Eindhoven **The Netherlands**



+ Identifying ship emissions

Hamburg is Germany's largest port. Air quality in and around the city is greatly affected by emissions caused by ships. To obtain a more accurate picture of ship emissions, Witteveen+Bos is cooperating with the Helmholtz-Zentrum Geesthacht centre for materials and coastal research and the Port of Hamburg with a view to implementing an emission model similar to the one already developed for the Port of Antwerp.

Hamburg **Germany**



+ Designing the Stadsbaan Tunnel

The Stadsbaan Tunnel opened on 1 December 2015. It is the city of Utrecht's first tunnel and is intended to stimulate the growth of the central part of the Leidsche Rijn neighbourhood. Witteveen+Bos and Sweco produced the design for the 490-metre long tunnel, in accordance with the National Tunnel Standard. We also supervised work on the technical systems of the tunnel and commissioning.

Utrecht **The Netherlands**



+ Creating an overnight port for barges

The Ministry of Infrastructure and the Environment has decided that barges must be able to stop for the night every 30 kilometres. To meet this requirement, Witteveen+Bos is developing plans and preparing the contract for a new overnight port. The port must provide moorings for 17 inland vessels and the fleet of Giesbeek barges.

Giesbeek **The Netherlands**

+ Advising on sustainable buildings in Kazakhstan's service chain

Chagala Group has the ambition of becoming the most sustainable service chain in Kazakhstan. Witteveen+Bos is advising the company on the best way to achieve this goal. We are elaborating an energy strategy, including recommendations for the sustainability certification of buildings. The focus is on energy savings, using renewable energy sources (in accordance with the Trias Energetica principle) and reducing water consumption.

Atyrau **Kazakhstan**

Prorva region **Kazakhstan**



SOCIAL PERFORMANCE INDICATORS

Energy consumption (worldwide)***

| | 2015 | 2014 |
|--|-----------|-----------|
| District heating (hot water in GJ) | 143 | 355 |
| Gas consumption in office buildings (m ³) | 250,977 | 273,590 |
| Use of company cars for business purposes (litres of fuel) | 272,192 | 261,652 |
| Use of company cars for business purposes (km)* | 20,281 | 14,812 |
| Use of company cars for commuting purposes (km)* | 332,180 | 316,670 |
| Electricity consumption (kWh) | 1,591,193 | 1,732,911 |
| Air travel (km) | 8,705,177 | 7,941,327 |
| Use of private cars for business purposes (km)* | 3,240,101 | 3,408,089 |
| Paper use (kg)** | 33,081 | 45,784 |
| Use of private cars for commuting purposes (km)* | 2,633,642 | 2,434,895 |
| Use of public transport (km) | 7,125,765 | 6,762,392 |

* For our carbon emissions inventory, we use the following units: litres of fuel for the use of company cars for business purposes, kilometres for the use of hybrid cars for business purposes, and kilometres for the use of private cars for business and commuting purposes.

** This category only includes office paper; printed books and brochures are excluded.

*** This is the total energy consumption of all Witteveen+Bos offices worldwide. The figures were calculated based on data collected for our offices in the Netherlands and Jakarta, Indonesia. The figures for the other offices have been extrapolated based on the data for the offices in the Netherlands and Jakarta.

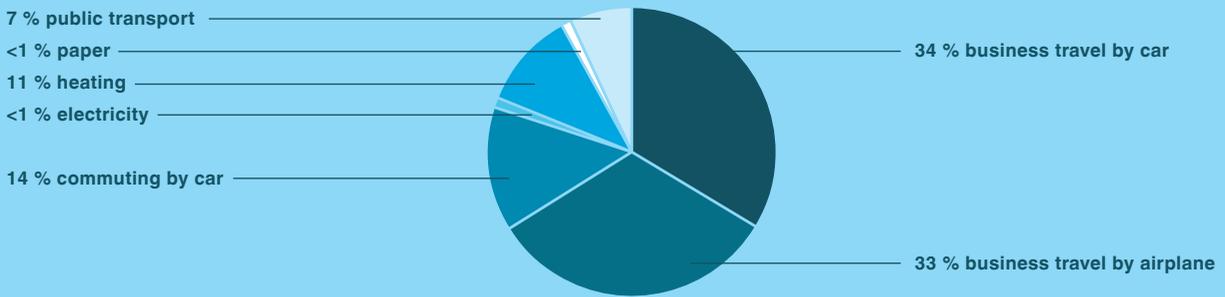
Emissions per scope in tonnes of CO₂ (worldwide)

| | 2015 | 2014 | 2007* |
|--|-------|-------|-------|
| Scope 1 | | | |
| Use of company cars for business purposes | 832 | 789 | 628 |
| Gas consumption | 473 | 515 | 266 |
| Subtotal for scope 1 | 1,305 | 1,304 | 894 |
| Scope 2 | | | |
| Electricity consumption | 10 | 10 | 981 |
| Air travel | 1,430 | 1,325 | 645 |
| District heating | 2 | 4 | - |
| Use of private cars for business purposes | 656 | 690 | 657 |
| Subtotal for scope 2 | 2,097 | 2,029 | 2,283 |
| Scope 3 | | | |
| Paper use | 3.1 | 4.3 | 4 |
| Use of private cars for commuting purposes | 532 | 493 | 392 |
| Use of public transport | 314 | 298 | 280 |
| Use of company cars for commuting purposes | 64 | 63 | 91 |
| Subtotal for scope 3 | 913 | 858 | 767 |
| Total for Scope 1, 2, 3 | 4,315 | 4,192 | 3,944 |

* This footprint was calculated based on data for the Netherlands.

SOCIAL PERFORMANCE INDICATORS

Emissions per activity in tonnes of CO₂ (worldwide)

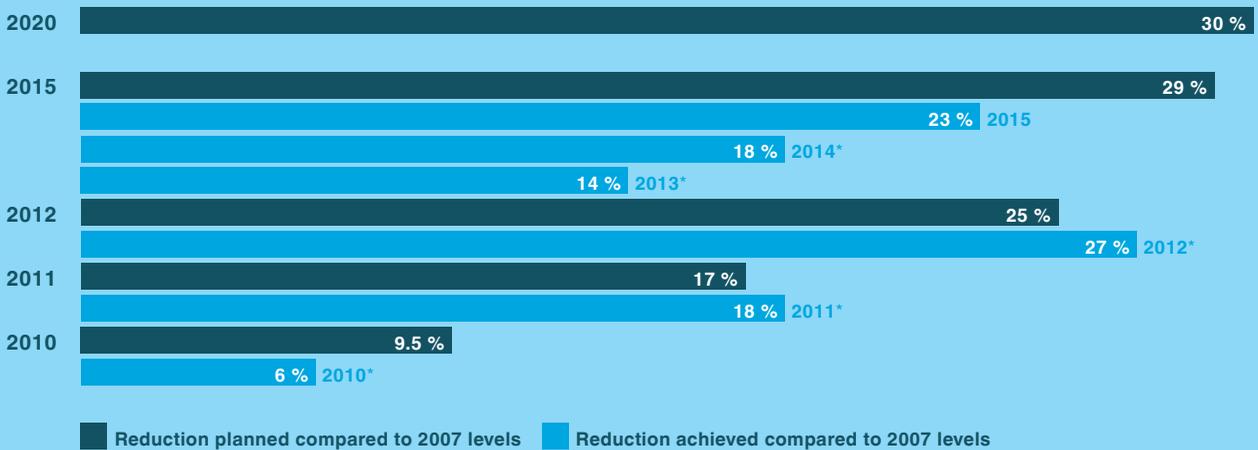


Emissions per FTE in tonnes of CO₂ (worldwide)



* This concern emissions per FTE in tonnes of CO₂ based on national FTE data.

CO₂-emissions reduction schedule up to 2020 (worldwide)



* This concerns the reduction in CO₂ emissions achieved based on national data.

REPORTING IN ACCORDANCE WITH GRI G4 GUIDELINES

Sustainability and Corporate Social Responsibility require accountability. Witteveen+Bos adheres to the guidelines of the Global Reporting Initiative (GRI) to ensure maximum transparency in our CSR reporting. Our Annual Report 2015 has been prepared in accordance with the GRI G4 guidelines. The GRI sustainability reporting guidelines were drawn up by the Global Reporting Initiative with the aim of making reporting on economic, environmental and social performance by all organisations as routine and comparable as financial reporting. The GRI has prescribed that all annual reports must meet the requirements of its G4 guidelines (previously G3) as of 1 January 2016. In this chapter we discuss the six main indicators defined in the GRI G4 guidelines, in order to provide an overview of our performance in 2015 and how this performance was achieved.

The full GRI index is available on our website at www.witteveenbos.com/CR. The table provides an overview of all the GRI indicators used.

Economic

Figures on our financial performance may be found in this Integrated Annual Report 2015. In 2015 Witteveen+Bos invested € 94,705 in various projects in the fields of sports, education, health, renewable energy and culture (including the Witteveen+Bos Art+Technology Award).

Environmental

Environmental protection entails more than just complying with legislation and official regulation. We carefully manage our environmental impact at all project stages, from business operations to the impact of our designs. To ensure a systematic approach in our business operations, we have implemented an environmental management system based on international guidelines and standards. We apply sustainable design principles to our products and services.

Materials

In 2015 Witteveen+Bos used 33,081 kg of photocopying paper. Although the paper does not contain any recycled materials, it is FSC-certified and produced in a carbon-neutral manner in an integrated pulp and paper mill, where no fossil fuels but only natural fuels are used to meet the remaining energy requirement. The paper is produced using wood that originates from sustainably managed forests, and has been awarded the EU Ecolabel and the Nordic Swan certificate. We encourage digital working methods in order to further reduce paper use.

Energy

We use natural gas to heat our offices in the Netherlands. The remaining direct energy consumption results from the use of fuel by our vehicle fleet. The chapter 'Objectives' describes a number of company initiatives aimed at developing energy-efficient or renewable-energy-based products and services.

Carbon footprint

The carbon footprint for 2015 has been calculated using conversion factors derived from the website www.co2emissiefactoren.nl. The emissions of our international offices have been included in the data for 2014 and 2015 (GRI G4-23). The figures for the office in Jakarta are based on collected data. The figures for the other offices have been extrapolated based on the data for the offices in the Netherlands and Jakarta. The carbon footprint per FTE relates to all Witteveen+Bos employees worldwide. A reduction of 23 % in emissions per capita has been achieved compared to the reference year 2007. On the whole, CO₂ emissions due to commuting and business travel (including air travel) continue to rise. Witteveen+Bos will take additional measures in 2016 in order to curb this increase.

Employment

Our workforce (2015 average: 985 FTEs worldwide) forms the basis for our sustained success. At 31 December 2015, Witteveen+Bos had 1,056 employees. In 2015 a total of nine persons were employed under an on-call contract. The workforce may be classified according to employment contract (temporary or permanent), employment type (full-time or part-time), or country. This breakdown shows that a large majority (89 %) of the Witteveen+Bos workforce in the Netherlands is employed under a permanent contract. The average length of service in the Netherlands was 7.6 years. We do not publish figures on our employee turnover by region. The approximate breakdown of the total worldwide workforce by gender was 73 % male and 27 % female. The composition of our workforce in the Netherlands in terms of educational levels is 48 % with university degrees, 33 % with higher vocational qualifications, and 19 % with intermediate vocational and accounting qualifications. Witteveen+Bos does not register composition of governance bodies according to gender or age group. Witteveen+Bos does not register minority group membership. In our company, employees with a temporary contract and regular part-time employees receive the same benefits as full-time employees. In the Netherlands, Witteveen+Bos has taken out an accident insurance policy that provides life and disability/invalidity coverage for all full-time and part-time employees. We also offer collective health insurance, pregnancy/paternity/parental leave and a company pension plan to all full-time or part-time employees. The share ownership scheme forms an exception: participation in this scheme is restricted to employees with a permanent contract.

Witteveen+Bos has a system of in-company training courses for its employees. Additionally, the company contributes financially to relevant external courses of study undertaken by employees and to external seminars, workshops and training sessions. As the different business segments have specific training needs and training programmes that are not centrally managed, Witteveen+Bos is not able to report company-wide statistics on the annual average number of training hours. In 2015 Witteveen+Bos spent € 485,869 on leadership and employee development.

PERSONNEL KEY FIGURES

Level of education (The Netherlands)

| | | | |
|------|-----------------|---------------------|---------------------------|
| 2015 | 48 % University | 33 % Higher Voc-ed* | 19 % Intermediate Voc-ed* |
| 2014 | 46 % University | 34 % Higher Voc-ed* | 20 % Intermediate Voc-ed* |
| 2013 | 45 % University | 33 % Higher Voc-ed* | 22 % Intermediate Voc-ed* |
| 2012 | 43 % University | 34 % Higher Voc-ed* | 23 % Intermediate Voc-ed* |
| 2011 | 43 % University | 34 % Higher Voc-ed* | 23 % Intermediate Voc-ed* |

* Voc-ed = vocational education

In-company training and education and number of interns / final-year students (The Netherlands)

| | 2015 | 2014 |
|---|------|------|
| Number of employees who received in-company training or education | 489 | 457 |
| Money spent on training and education per employee (in euros) | 559 | 544 |
| Number of interns and final-year students | 127 | 112 |

Employee turnover by age group and gender

| | 2015 (worldwide) | 2015 (NL) | 2014 (NL) |
|--|------------------|-----------|-----------|
| Employees leaving | 100 | 69 | 77 |
| Male employees leaving | 59 | 48 | 47 |
| Female employees leaving | 41 | 21 | 30 |
| Employees below the age of 30 leaving | 24 | 12 | 17 |
| Employees in the age of 30 to 45 leaving | 58 | 43 | 48 |
| Employees over the age of 45 leaving | 18 | 14 | 12 |
| Average number of years with the company | 5,7 | 7,6 | 8,7 |

Total workforce by employment contract (temporary and permanent), employment type (full-time and part-time), and country (31 December 2015)

| | 2015 | 2014 |
|---|-------|------|
| Full-time (The Netherlands) | 548 | 529 |
| Part-time (The Netherlands) | 321 | 325 |
| Fixed-term contract (The Netherlands) | 93 | 91 |
| Indefinite-term contract (The Netherlands) | 776 | 763 |
| The Netherlands | 869 | 854 |
| Belgium (including MAVA AES N.V. as of 2015) | 66 | 13 |
| Dubai | 7 | 1 |
| Indonesia | 37 | 28 |
| Kazakhstan | 71 | 67 |
| Latvia | 8 | 8 |
| Russia | 3 | 2 |
| Singapore | 6 | 2 |
| United Kingdom | 2 | - |
| Vietnam | 2 | 2 |
| Total number of employees worldwide | 1,056 | 977 |
| Total workforce in the The Netherlands (FTEs) | 809 | 780 |
| Total workforce worldwide (FTEs) | 985 | 899 |

+ Starting second phase of transport route

Following successful completion of the first phase with consultancy on earthwork and dredging for the new canal of the Cargo Transportation Route, phase 2 of the project got underway in 2015, namely the detailed engineering for the development of a new port and adjoining transport route, after which the work will be put out to tender and construction can begin.

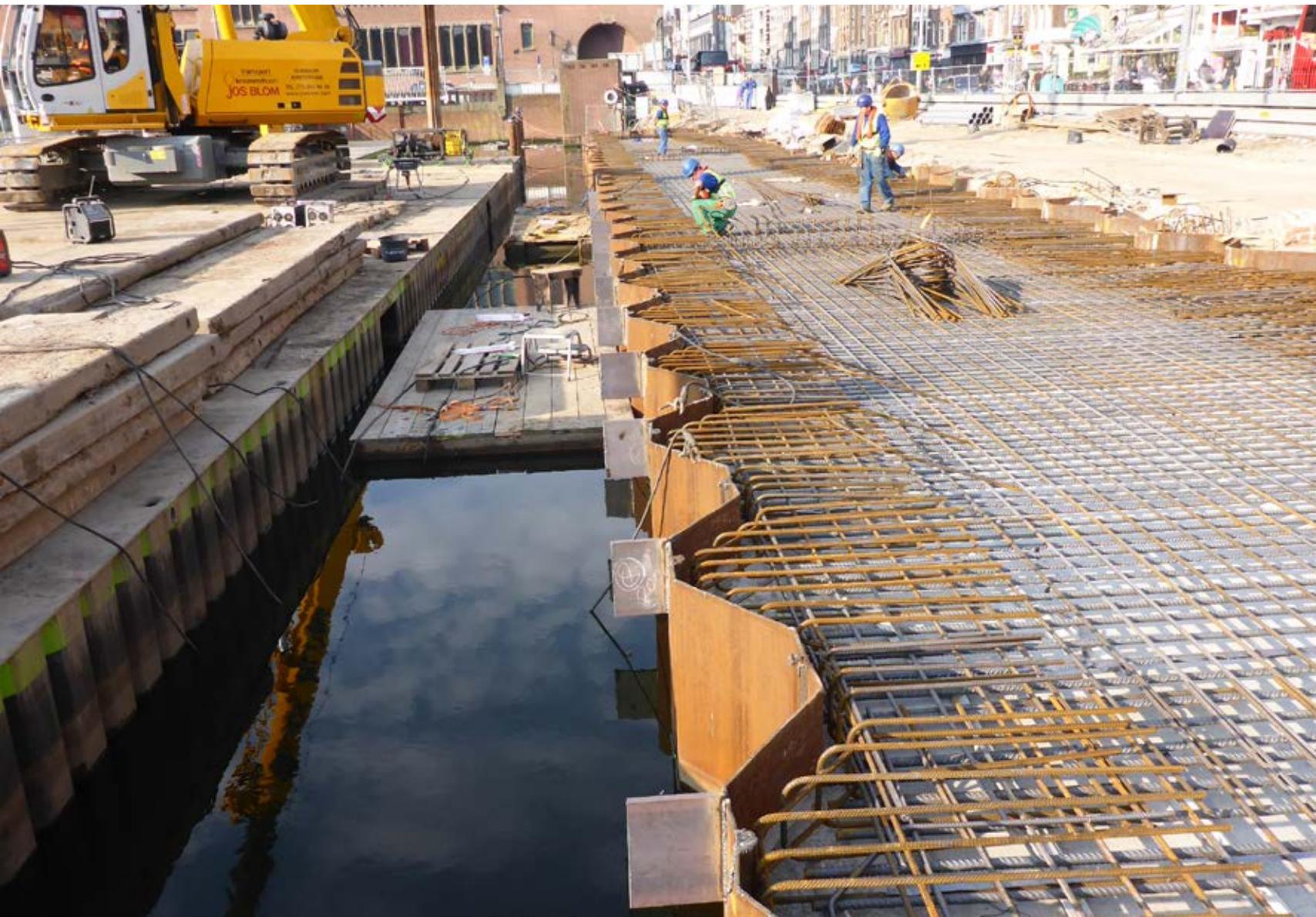


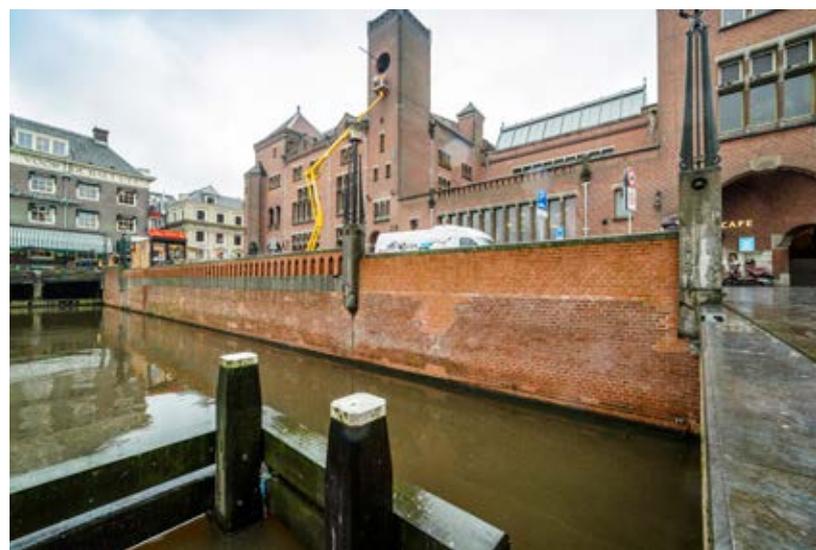
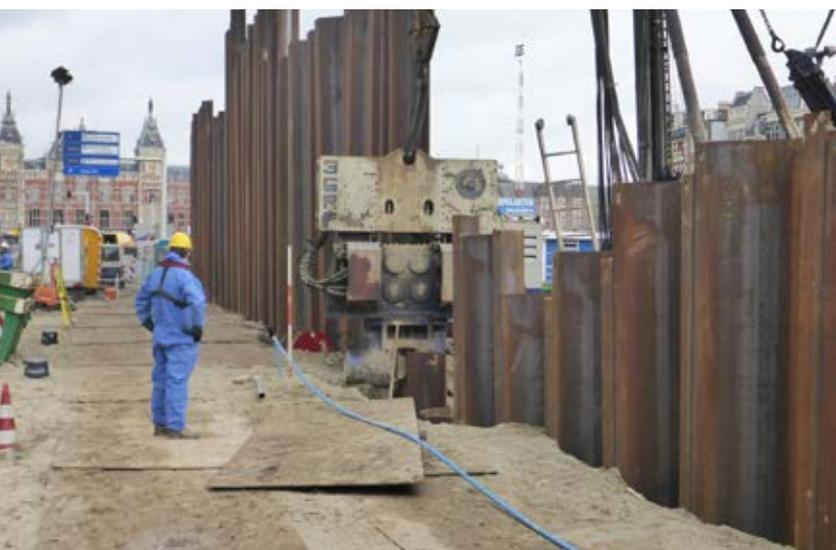


Damrak quay wall The Netherlands

Right in the heart of Amsterdam, opposite the central railway station, a new quay wall was constructed with a length of 160 metres. It was a challenging project, mainly because of the location and the numerous stakeholders. The 'Wet Damrak' project was completed early 2015, on time and within budget. Good cooperation within the team and with the client, partners and those in the immediate vicinity were key success factors in solving this above-ground and below-ground puzzle.

'We were willing to go the extra mile for each other'





'It's about open communication, particularly also when something doesn't go right'

The quay wall on Damrak was identified as the number-one risk for boring the tunnels of the new North/South metro line, because the quay wall would possibly slip into the water. It was the first civil engineering work built above the tunnels, posing all the accompanying engineering challenges. The Witteveen+Bos team was asked to work on the project because of experience gained with the North/South line, quay walls and collaboration with the City of Amsterdam. The location present-

ed engineering challenges, not to mention the numerous stakeholders. For one thing, 60,000 people walk down Damrak every day, mainly commuters and tourists, going to and from Central Station. The Red Carpet Project - reconfiguration of ground level above the North/South Line - was rolled out at the same time. The locals live in an area where intensive construction had been in progress for many years on the North/South Line and a few canal tour operators have jetties there

for their boats. Local area manager Barbara Dopper puts it like this: 'Ensuring that all parties, from contractor up and to including the Victoria Hotel, work well together on a 3D postage stamp.' It was the ultimate form of designing specifically for a particular place, with technology supporting the local area. Before work started on the design there was dialogue with the stakeholders. A thorough preparatory phase of one year proved worthwhile in the work performance phase. 'All directly

and indirectly involved stakeholders were aware of the plans', says project manager Laurens Kalwij. 'We had the feeling that we were doing and going for something together.' The decisive role of the local area was reflected in the choice of design, because several variants with a big impact on the local area proved unfeasible. Ultimately, five different forms of construction with a limited impact on the surroundings were worked out in 3D. 'The integral design was checked with a review com-



from left to right: Leonhard Schoot Uiterkamp, Laurens Kalwij, Tjeerd Kamerling, Barbara Dopper and Fabian Harbers

mittee, which does not usually happen, so it underlines the importance', explains Laurens. He was involved in the project right from the start as the 'engineering conscience' and describes Wet Damrak as being akin to 'his child'. Laurens and Barbara learned a lot from each other, from their team members and from the cooperating partners. More than forty Witteveen+Bos specialists played a role in preparing and carrying out the Wet Damrak project. The core team

consisted of five Witteveen+Bos staffers. Laurens: 'It's great to have a permanent group of people who are right there on top of the job. It allows you to get things done for each other if necessary.' Asked about the decisive factor within the team, he says: 'There was great awareness of the shared goal and we were able to communicate with each other openly. That's particularly useful when something doesn't go right.' While work was in progress, it was important to keep the stake-

holders involved. Barbara did this by 'being soft for the local area and hard for the engineering'. It boiled down to making allowance and showing understanding on the one hand and ensuring fulfillment of the hard engineering arrangements on the other. There was a lot of consultation with the client (City of Amsterdam), local residents, businesses and the cooperating partners. Looking back, Laurens says: 'It's fantastic that the puzzle fitted together and that by and large everything went

according to plan with limited inconvenience for all concerned.' Barbara still vividly remembers the moment she saw there was a sense of shared responsibility. 'We talked a lot to the canal cruise operators in order to mitigate the inconvenience caused by our work. We were willing to go the extra mile for each other. Among other things we took care of the furnishing of the temporary jetties and they helped us move the scaffolding - it was truly a terrific moment.'



+ Developing a driving simulator for interactive road design

Witteveen+Bos wants to be absolutely sure that its road designs are safe and understandable for road users. Drawings and visualisations are not enough to provide this guarantee. Witteveen+Bos developed a compact mobile driving simulator that even in the design phase makes it possible to drive across planned new sections of roads. What makes the driving simulator unique is the real-time connection to computing software for traffic simulations.

Various locations **The Netherlands**



+ Performing a landfill soil survey

The former Ald Dwinger landfill is situated in an ecologically valuable area called De Alde Feanen. It used to be a peat extraction area and a waste site. For the provincial government of Friesland, Witteveen+Bos performed an updated and risk-oriented soil survey. The results are being used as building blocks for the future remediation and the management of the nature area.

Earnewoude **The Netherlands**



+ Advising on artificial islands

To provide housing for the growing number of inhabitants, Witteveen+Bos is advising on land reclamation for artificial islands in Jakarta Bay. Seventeen islands have been planned and in 2015 we were involved in the construction of two islands of 300 hectares each. Following completion of the flood defences and configuration of the polders configured, these two islands provide housing for approximately 85,000 people.

Jakarta Indonesia

+ Redeveloping a railway station area

The City of Leeuwarden engaged Witteveen+Bos to prepare the contract for the modernisation of the railway station area. We also drew up plans for performance of the work for the public spaces and oversaw the call for tenders. The design must highlight the specific nature and unique identity of the station area for 2018, when Leeuwarden will be Europe's Capital of Culture.

Leeuwarden The Netherlands



+ Modernisation of IJsselmeerdijk wind farm

Utility company Nuon wants to modernise the existing IJsselmeerdijk wind farm. The company therefore commissioned Witteveen+Bos to identify the main water safety risks of the planned new wind turbines, as well as the associated failure frequencies. Witteveen+Bos and Nuon jointly presented the findings to the Zuiderzeeland Regional Water Authority. Nuon will use the information to further develop its strategy for the modernisation of the IJsselmeerdijk wind farm.

Swifterbant **The Netherlands**

+ Strengthening a dike

The Wadden Sea dike on the island of Texel does not satisfy safety standards and needs to be strengthened. Witteveen+Bos produced the environmental impact report, final design and the dike strengthening plan. This reinforcement is one of the larger projects in the Flood Protection Programme in which central government and flood defence managers are working together to protect the Netherlands against flooding.

Texel **The Netherlands**



+ Advising on museum climate control systems

The climate control systems at the Kröller-Müller Museum had reached the end of their economic and technical life. To properly preserve the museum's valuable works of art, Witteveen+Bos provided advice, in association with engineering and consultancy company Dijkoraad, on replacement of the systems. This was a complex project, because while the climate control systems were being replaced the museum had to remain open to the public.

Otterlo **The Netherlands**

+ Increasing water safety

The city of Barisal is prone to flooding due to high river discharges, cyclones and extremely heavy rainfall. The impact of flooding will increase enormously because of climate change and the growing population. In a consortium with Ecorys and Twijnstra Gudde, Witteveen+Bos advised on sustainable measures for increasing water safety in the city.

Barisal **Bangladesh**

INTERVIEW



Oosterweel link Belgium

Work is in progress at Antwerp in Belgium on the Oosterweel Link, one of Europe's largest infrastructure projects at present. The link will complete the Antwerp ring road and improve traffic flow and the embedding of the existing ring road. The Oosterweel Link is a key element in the City of Antwerp's 'Master Plan 2020'. The plan calls for additional road infrastructure, various public transport projects, additional cycle paths, and water-related infrastructure works.

'Working together on the best solution'





'Putting together a good team is crucially important'

Back in 2012, Witteveen+Bos teamed up with Sweco (formerly Grontmij) in a temporary trading enterprise called 'ROTS' to take on a contract from Beheersmaatschappij Antwerpen Mobiel (BAM N.V.) for studies into creating the Oosterweel Link on the right bank. A contract for the left bank followed in June 2015. For this purpose, Witteveen+Bos and Sweco established THV ATLAS. The combination of the two contracts made the two engineering firms responsible for the entire study for completion of Antwerp's ring road (the R1 motorway). The major project on the right bank poses various challeng-

es, including the Oosterweel junction, or the connection between the Scheldt tunnel and the stacked tunnel under the docks and the Albert Canal (the canal tunnel), with slip roads for the port and the north of Antwerp. The contract includes construction of the canal tunnel, which will be a stacked tunnel with two lanes on each side of the road from the Oosterweel junction to the R1. The final piece of work will be to reconstruct the R1, involving removal of the present viaduct at Merksem and partially placing the R1 below ground where it crosses the Albert Canal, with a second stacked tunnel in an

open trench. For the left bank, the project consists of an immersed tunnel under the River Scheldt and reconstruction of the two motorway intersections in the E34 and E17, including various smaller civil engineering works in the project area. As project manager, Joop van de Velde is responsible for the Left Bank and Scheldt Tunnel sub-project. 'As you can imagine, the total project will have a big impact. Everybody who has ever driven around the Antwerp ring road will know what problems there are. Our job is to solve the problems, enabling everybody to drive pleasantly along the city, while retaining

the support of all stakeholders and with careful embedding in the local area. An awful lot has to be done within a tight very tight schedule. Building up a good relationship with the client and putting together a good team are matters crucially important to the success of the project.' Awareness of the cultural differences that exist is very important. Dutch and Belgian colleagues of Witteveen+Bos are working on the project. Jantien Geerling, contract manager for the right bank, says: 'This made it likely that we would encounter some cultural differences. My task in the management team is to ensure fulfil-



from left to right: Frank Kaalberg, Bart Adriaens, Marc van Put, Christiaan Loeber, Anne-Caroline Kiekens, Jantien Geerling, Ad van der Velden, Sander ten Pas, Nikolaas van Empel, Aryan Snel and Joop van de Velde

ment of the contract with BAM, to provide a financial overview and to control the project budget. During meetings I notice that our Belgian colleagues interpret certain items in the contract far more precisely and act accordingly. They are also able to formulate more precisely. The Flemish language is rich and has greater depth. I keep a list of all the lovely Flemish sayings. Many Dutch colleagues are now using them as well, particularly when there is not an equally good Dutch equivalent. We the Dutch can be far more direct, and that sometimes comes in useful as well. As work has

progressed, we've learned to make good use of these differences. Everybody has his own particular strength!' Besides the combination of cultures, the combination of the different specialised disciplines is indispensable in both projects. The projects require expertise in multiple disciplines, including geo-engineering and geo-hydrology, immersed tunnels, landscape integration, ecology, tunnel safety, hydraulic engineering works, and traffic and tunnel installations. 'At an initial brainstorming session, where we looked for ways of optimising the

design, the idea came about of having a stacked cut-and-cover tunnel instead of the originally envisaged immersed tunnels,' says Jantien. 'By thinking out of the box and drawing on everybody's expertise, this solution enabled us to save hundreds of millions for the client and at the same time produce a sustainable design within the requirements imposed by the local area. It's terrific to see how experienced project managers with knowledge of other major projects like the North/South Line in Amsterdam are working alongside young colleagues who are thus able to

learn an awful lot and take on more and more responsibility within the project.' 'I also think it's very important that we are able to do fun things together after work,' adds Joop. 'We work very hard. Many colleagues are away from home the entire week and stay in a hotel. So after a long day at work there must occasionally be time to take part in some sport, go out for a meal with each other or get to know the city.'

STAKEHOLDERPANEL

For the fifth year, Witteveen+Bos has asked a panel of external stakeholders to provide balanced and impartial feedback on our sustainability performance and our CSR reporting practices, and to make appropriate recommendations for improvement (GRI G4-27).

Main points

The stakeholder panel appreciates the steps that Witteveen+Bos has taken to prepare this clear combined Annual Report and Corporate Responsibility Report for 2015, as well as the company's aim to produce a full Integrated Annual Report for 2016. We compliment the company on the materiality analysis it has performed, which looked at the main areas impacted by the company's activities. Witteveen+Bos has defined KPIs for three main categories: Projects, People and Operations. The panel is very interested in the results that Witteveen+Bos will achieve in 2016, and the extent to which the defined targets will be achieved.

Purpose, target group and main message

It remains important for Witteveen+Bos to carefully consider the purpose and target group of its Annual Report and the main message(s) to be conveyed. The panel recommends the company to avoid jargon as far as possible, and to explain why certain choices have been made. The report makes frequent mention of 'principles' and 'objectives'. Providing references to places where these principles and objectives are explained will make it even clearer to readers how Witteveen+Bos has arrived at certain decisions.

Clearer reporting on targets

Clearer information should be provided on Witteveen+Bos' efforts to achieve its financial and non-financial (CSR-related) objectives. Show the past, current and target situation, using appropriate visuals where possible. It may be useful to include a separate chapter on objectives following the chapter on the company's vision, mission and strategy. This will make Witteveen+Bos' contribution to society even clearer.

Structure of the report

The different chapters and sections of the report should be integrated more closely. The panel recommends creating clearer connections between the chapter on mission, vision and strategy and the descriptions of the various projects, for instance by linking these to Witteveen+Bos' sustainable design principles. We also recommend providing explanatory introductions to the various visuals and tables. The report includes a large number of 'good intentions', which will be conveyed with greater force if the different sections of the report are integrated even more closely.

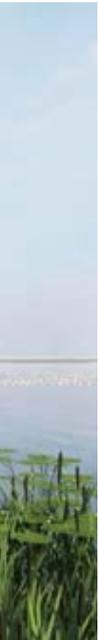
Deventer, the Netherlands, 9 February 2016

2016 stakeholder panel

Ruud Sprock (Senior Sustainability Consultant, C2N)

Harmen Kievit (coordinator of Arcadis-KNHM CSR programme)





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