

# TARBOUND TO THE TARBOUND TO TH



### CSR REPORT 2016

This report was drafted in accordance with the international guidelines of the Global Reporting Initiative (version G4).

Printed copies of this CSR Report can be requested via csr@boskalis.com.

The CSR Report can be found on www.boskalis.com/ csrreport.

# TABLE OF CONTENTS



4	CHAIRMAN'S STATEMENT
6	CREATING LONG-TERM VALUE
16	IMPACT ON LOCAL COMMUNITIES
26	ENVIRONMENTAL IMPACT
42	CARE FOR HUMAN CAPITAL
54	RESPONSIBLE BUSINESS CONDUCT
62	APPENDIX

#### 

### CHAIRMAN'S STATEMENT

2016 marked the transition from a period of growth and prosperity to one of stagnation and rationalization. Early 2016 we saw dark clouds gather on the horizon, but looking back at the year we are amazed at the pace at which the storm arrived and how severe it is. Right now it is fair to say that we are in the midst of it.



With regard to CSR, we have once again made important progress in numerous areas. Last year we introduced four material topics and related sub-topics resulting from a materiality assessment. These topics form the backbone for our CSR strategy and reporting. This was an important step for us to report over 2016 according the GRI G4 guidelines. One of the material themes both Boskalis and its stakeholders view as important is our impact on local communities.

#### IMPACT ON LOCAL COMMUNITIES

Many of our projects intervene in an existing environment. Our presence when constructing infrastructure or reclaiming land is relatively brief but many of our projects have a lasting impact. As a company we take a responsible approach towards the potential consequences of our activities. We seek to avoid adverse impact arising from our activities and services, and otherwise to mitigate or remedy this impact. We exercise our leverage if we are in a position to influence the entity responsible for the impact to bring about change in the situation. Our social impact program launched in 2016 focuses on employee awareness and training and offers practical tools. As a company with a strong technical background with leading environmental engineering capabilities, this additional focus on our social engineering skills is a natural next step.

#### **BUILDING WITH NATURE**

Care for the environment is an aspect that is deeply embedded in our organization, and something that we take into account right from the initial design of a project.

An increasingly important part of our projects incorporate innovative solutions for protecting biodiversity and preserving natural environments. One of the results of our focus on the environment is our successful Building with Nature program, which adopts the natural system as a basic design principle. Partly on the strength of the knowledge gained from this, we were commissioned by the Dutch Society for the Preservation of Nature (Stichting Natuurmonumenten) to execute one of the largest nature restoration projects in Western Europe: the Marker Wadden. The Marker Wadden is a group of artificial islands that will ensure the ecological restoration and transformation of the Markermeer lake into a dynamic area with a rich animal and plant life.

#### IMPACT OF CLIMATE CHANGE

Climate change and the consequences thereof, such as rising sea levels, are increasingly important topics for our sector and for society. With much of the country below sea level, the Netherlands has had to battle to fend off the ravages of the sea for centuries. The Dutch expertise and skills in the field of delta technology and hydraulic engineering are highly rated throughout the world. Boskalis' core business enables it to provide innovative adaptive and mitigating solutions to combat the impact of climate change. In the past year we started work on reinforcing the Wadden Sea dike on the island of Texel as well as the dike between Eemshaven and Delfzijl in order to protect the Dutch coast against flooding. The reinforcement of the 33-kilometer long Markermeer dike and the 25-kilometer Houtrib dike and our projects in the context of the Room for the River program will also contribute to flood prevention in the Netherlands.

Boskalis had a very busy year in offshore wind with the installation of foundations for the Wikinger and Veja Mate projects. We furthermore strengthened our market position through the acquisition of the offshore wind activities of VolkerWessels. As a group, we continue to seek opportunities and innovative ways to reduce our emissions. Together with our joint venture partner Keppel we announced the investment in two innovative LNG dual-fuel harbor tugs in Singapore. Last year we also took our biofuel program one step further. This pilot project is aimed at developing a drop-in biofuel that meets the most stringent sustainability standards and can result in a sharp reduction in emissions. Last summer our cutter suction dredger Edax achieved good results with this type of fuel on the Marker Wadden project.

#### ADAPTING TO THE NEW REALITY

All the hard work and many new projects acquired during the year could, however, not prevent more and more gaps from appearing in our fleet schedules. Considering the prospects going forward, we came to the inevitable conclusion that we have to align the size of the fleet with the market. After a comprehensive study we decided to take 24 vessels out of service: ten at Dredging and fourteen at Offshore Energy. This was a difficult decision, particularly for the 650 colleagues affected. In close consultation with the Works Council we carefully completed the advisory process and agreed on a fair social plan.

#### **SAFETY AND QUALITY**

Since the launch of our No Injuries No Accidents (NINA) safety program in 2010, our Lost Time Injury Frequency (LTIF) has fallen significantly from 0.67 in 2010 to 0.08 in 2016. In our sixth NINA year we once again made important progress expanding the rollout of this global safety program. In addition, we introduced the Mooring and Safe Mind workboxes containing practical training methods and tools.

Great strides were also made with the development of our new quality system, the Boskalis Way of Working. Aimed at harmonizing various business processes and support systems, the Boskalis Way of Working quality system will be introduced in the course of 2017.

#### PREPARING FOR THE FUTURE

We expect the current market environment to persist in the coming years. In order to respond to this outlook and to prepare ourselves for the period that follows we have been working hard on our 2017-2019 Corporate Business Plan, the main points of which can be found in our annual report.

With the right focus and optimization of our existing business portfolio we can successfully steer the company through this difficult period. Results will be lower than in extremely profitable previous years but our financial position is very strong and healthy with nearly EUR 1 billion in cash at the end of 2016. We will continue to generate a strong cash flow in the coming years which, in turn, will provide opportunities. The CSR business case will remain a key part of our operations in this respect.

On behalf of the Board of Management I want to thank all our colleagues for their commitment and great efforts in 2016, as well as our clients, partners and shareholders for the trust and confidence they place in us.



Peter Berdowski

# CREATING LONG-TERM VALUE

Creation of the first phase of the Marker Wadden nature creation project in the Netherlands.



## 8 VALUE CHAIN 12 STRATEGY

#### 14 MANAGING OUR MATERIAL THEMES

### VALUE CHAIN

#### PROFILE

Royal Boskalis Westminster N.V. (Boskalis) is a leading dredging and marine expert creating new horizons for all its stakeholders.

In addition to our traditional dredging activities we offer a broad range of maritime services for the offshore energy sector. Furthermore, we provide towage services as well as emergency response and salvage-related services.

As a partner we are able to realize complex infrastructural works for our clients within the chain of design, project management and execution, on time, safely and within budget, even at vulnerable or remote locations around the world. We strive for a sustainable design and realization of our solutions.

Demand for our services is driven by growth in global trade, growing energy consumption, growth in world population and climate change. Boskalis operates worldwide but concentrates on those regions that have the highest growth prospects. This spread gives us both a solid foundation and the flexibility to be able to secure a wide range of projects, as well as providing good prospects for balanced and sustained growth. Our main clients are oil, gas and wind energy companies, mining companies and related EPC contractors and subcontractors, governments, port and terminal operators, shipping companies, insurance companies and international project developers.

Boskalis has 11,700 employees including associated companies. The safety of our own employees and those of our subcontractors is paramount. Boskalis operates its progressive global safety program No Injuries No Accidents (NINA), which is held in high regard in the industry and by our clients. We operate on behalf of our clients in over 90 countries across six continents. Our versatile fleet consists of more than 900 vessels and floating equipment. Our head office is based in the Dutch city of Papendrecht. Royal Boskalis Westminster N.V. shares have been listed on Euronext Amsterdam since 1971 and are included in the AEX-Index.

#### ACTIVITIES

Boskalis is renowned for its innovative approach and specialist knowledge of environmentally-friendly techniques. With our great expertise, multidisciplinary approach, versatile state-of-the-art fleet and extensive experience in engineering and project management we have proven time and again that we are able to realize complex projects on time, safely and within budget, anywhere in the world.

#### **DREDGING & INLAND INFRA**

Traditionally, the core activity of Boskalis is dredging. This involves all activities required to remove silt, sand, clay and other layers from the sea- or riverbed and reusing it elsewhere where possible, for example for coastal protection or land reclamation. The services we provide also include the construction and maintenance of ports and waterways, and coastal defense and riverbank protection. In addition, Boskalis is active in the extraction of raw materials using dredging techniques and dry earthmoving. In the Netherlands, Boskalis also operates as a contractor of dry infrastructure projects. This involves the design, preparation and execution of large-scale civil infra works, such as the construction of roads and railroads, bridges, aqueducts, viaducts and tunnels in addition to dike and riverbank related projects. In doing so, we also perform specialist works such as soil improvement and remediation.

#### **OFFSHORE ENERGY**

With its offshore contracting capabilities and services Boskalis supports the activities of the international energy sector, including oil and gas companies and providers of renewable energy such as wind power. We are involved in the engineering, construction, maintenance and decommissioning of oil and LNG import/export facilities, offshore platforms, pipelines and cables and offshore wind farms. In performing these activities Boskalis applies its expertise in the areas of heavy transport, lift and installation work, as well as diving and ROV services complemented with dredging, offshore pipeline, cable and rock installation. Our subsidiary VBMS is a leading player in the European market for offshore cable installation.

#### TOWAGE

We provide assistance to incoming and outgoing oceangoing vessels in ports around the world through joint ventures with regional partners: Keppel Smit Towage in Asia, Saam Smit Towage in the Americas and KOTUG SMIT Towage in Northwest Europe. In addition we offer a full range of services for the operation and management of onshore and offshore terminals through Smit Lamnalco. These services include assistance with the berthing and unberthing of tankers at oil and LNG terminals as well as additional support services such as pilotage, subsea inspection and maintenance, firefighting, and the coupling and uncoupling of terminal connections.

With our versatile fleet of over 400 vessels we assist vessels in over 90 ports in 36 countries, including oil and chemical tankers, container ships, reefers, ro-ro vessels and mixed cargo ships.

#### SALVAGE

Through SMIT Salvage we provide services relating to marine salvage and wreck removal. SMIT Salvage provides assistance to vessels in distress and is able to spring into action at any time and anywhere in the world. We are able to do so by operating out of four locations which are strategically situated along the main international shipping routes: Houston, Cape Town, Rotterdam and Singapore. The removal of shipwrecks or damaged offshore platforms almost always takes place at locations where the wreck forms an obstruction to traffic or presents an environmental hazard. We have the advanced technology and expertise needed to remove hazardous substances such as heavy fuel oil from wrecks and boast a successful track record in salvaging vessels and platforms under challenging circumstances.



#### VALUE CREATION

We are guided in our value chain by our General Code of Business Conduct, which is based on international guidelines such as the Universal Declaration of Human Rights. We endorse the principles of the International Labour Organization, the UN Global Compact and the OECD Guidelines for Multinational Enterprises.

Our core activities are focused on markets and market segments where we have the greatest opportunities. Our key market segments are Ports, Offshore Energy, Infra and Climate-change related. In our value chain the material CSR themes are impact on local communities, environmental impact, care for human capital and responsible business conduct. For more information please refer to pages 12-15 and the relevant chapters in this report.

Certification shows our compliance with internationally recognized management, environmental and safety standards. All key Boskalis business units are certified according to ISM, ISO 9001, ISO

14001 and OHSAS 18001, or VCA for our Dutch operations. A list of the various certificates we hold is included in the appendix.

During 2016 we made great strides in developing a new uniform quality management system: the Boskalis Way of Working. The system is centered on an integrated business process and a uniform customer approach. The basic principle of the system is to keep quality as close as possible to the primary processes. The system is based on and will be implemented to complement existing processes, tools and certifications. The Boskalis Way of Working will be introduced across the company in the course of 2017.

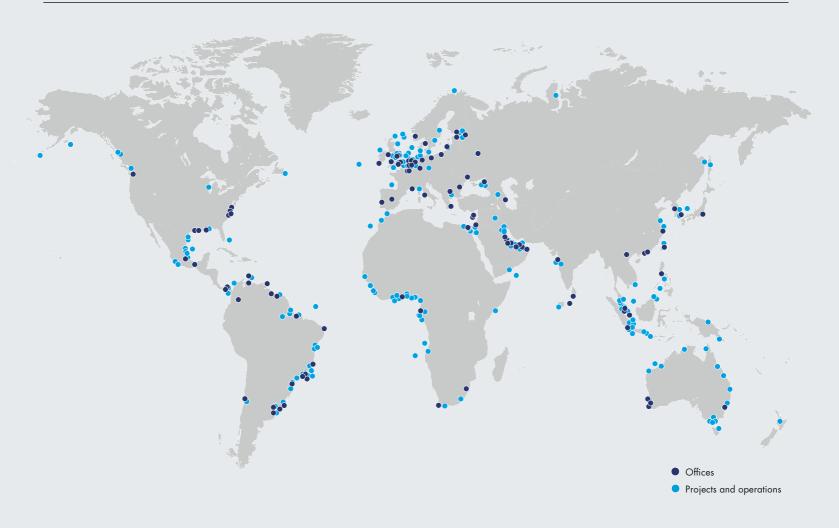
For more information on investors and shareholders, suppliers and partnerships in our value chain please refer to page 12.

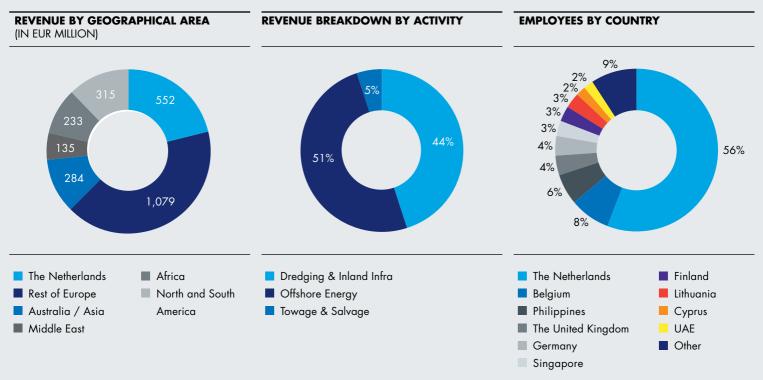
For more detailed information on our corporate strategy please refer to our Annual Report 2016.

#### VALUE CREATION MODEL

LONG-TERM MACRO DRIVERS	INPUT	MISSION AND VISION	OUTPUT	IMPACT
<ul> <li>Growth in global trade</li> <li>Growing demand for natural resources and energy</li> <li>Global population growth with increasing prosperity</li> <li>Climate change</li> </ul>	<ul> <li>Over 100 years of experience</li> <li>11,700 employees</li> <li>More than 900 vessels and floating equipment</li> <li>Strong financial position</li> <li>Global presence</li> <li>Engineering, environmental and technical expertise</li> <li>Risk management and contracting expertise</li> <li>Procurement of services and resources</li> <li>Open dialogue with stakeholders</li> </ul>	Boskalis is the leading dredging and marine expert that creates new horizons for all its stakeholders. As a leading global maritime contractor and services provider, we offer a unique combination of people, vessels and activities. We provide innovative and competitive solutions for our clients in the offshore industry, ports and coastal areas against the highest standards of safety and sustainability.	KEY CSR OUTPUT Please refer to pages 13-15 and 69 for more information on the selection and output of our material CSR themes: impact on local communities, our environmental impact, care for human capital and responsible business conduct KEY ECONOMIC OUTPUT Revenue total and by segment (in EUR million): • Total: 2,596 • Dredging & Inland Infra: 1,164 • Offshore Energy: 1,334 • Towage & Salvage: 121 For more information on our key economic output refer to page 69	We facilitate growth in world trade through the maintenance and expansion of ports and waterways We contribute to meeting the growing demand for (renewable) energy including offshore wind We create new land for residential, commercial and recreational purposes We provide flood protection. Through our coastal defense and riverbank protection activities, we are able to help countries adapt to the consequences of climate change We assist vessels in distress and attempt to avert potential environmental damage

#### BOSKALIS' OFFICES, PROJECTS AND OPERATIONS





**CSR 2016 - BOSKALIS** 

### **STRATEGY**

Boskalis' principal strategic objective is the creation of long-term sustainable profitability. Systematic execution of the corporate strategy is an important cornerstone for Boskalis' success, and the strategy is reviewed regularly in light of relevant market developments. In early 2017 Boskalis presented its Corporate Business Plan for 2017-2019. For further information please refer to the Strategy section of the Annual Report 2016.

Our corporate strategy and the dialogue with our stakeholders have resulted in our CSR strategy which is aimed at a healthy balance between long-term profitability and our social and environmental responsibility. The reasonable expectations and interests of our stakeholders are a key reference point in establishing our CSR strategy and CSR Report.

#### STAKEHOLDER INCLUSIVENESS

We engage with our stakeholders at all levels in our company. Entering into dialogue with our stakeholders fosters mutual awareness and understanding, gives us a clear picture of their expectations and interest and allows us to establish the relevant material CSR themes. Our most important stakeholders are:

#### **EMPLOYEES**

Our activities are largely project-based, and knowledge and capital intensive. Talented, enterprising and highly skilled employees are the key to our success, which is why talent management plays a crucial role in the way we operate our business. The majority of our staff are employed on a permanent appointment and of this group many have a long tenure with the company. For projects we supplement our core staff with employees drawn from a flexible shell. Depending on the project requirements these employees are hired locally where possible or appointed on a temporary contract, which in many cases is discontinued at the conclusion of the project.

#### **CLIENTS**

CSR 2016 - BOSKALIS

- Our most important clients are to be found in the following key market segments:
- Ports: port and terminal operators, governments, shipping companies and insurance companies.
- Energy: oil, gas and wind energy companies and related EPC contractors and subcontractors.
- Infrastructure and Climate change-related: national and

international project developers and local and regional governments.

#### **INVESTORS AND SHAREHOLDERS**

We consider our financial stakeholders to include existing and potential shareholders. The following shareholders are known, based on the public register of the AFM, to have been holders of at least 3% in Boskalis share capital as at 31 December 2016: HAL Investments B.V.: 35.45%, Sprucegrove Investment Management Limited: 5.16%, Blackrock Inc.: 4.38%, Marathon Asset Management: 3.57% and Oppenheimer Funds Inc.: 3.07%. Besides these large shareholders, an estimated 15% of the shares are held by shareholders in the UK, 13% in the US and Canada and the remainder in mainly the Netherlands, Norway, Germany, France, Switzerland and Hong Kong. Our policy on engaging with investors is specified on our website and for more information please refer to our Annual Report 2016.

#### **SUPPLIERS**

Boskalis maintains relationships with around 1,376 suppliers for the central procurement of machinery and hydraulics, electronics and survey equipment, wearing and construction parts, and facility goods and consumables. 253 of these are strategic suppliers accounting for 90% of the purchasing volume. Our suppliers are bound by a Supplier Code of Conduct and we perform annual implementation scans to ensure compliance.

#### NGOS AND CIVIL SOCIETY ORGANIZATIONS

Boskalis is involved in a large number of cross-sectoral partnerships in the chain, the main ones being:

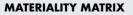
- The EcoShape foundation, a partnership with public authorities, knowledge centers, businesses and Non-Governmental Organizations (NGOs). Boskalis has invested EUR 4.25 million in the Building with Nature program over the past seven years.
- Partnership with the NGO Shipbreaking Platform for the sustainable dismantling of our vessels. We have been recognized repeatedly by the NGO as an industry leader.
- Partnership with the NGO The North Sea Foundation, through which we are the main sponsor of the Boskalis Beach Cleanup Tour.

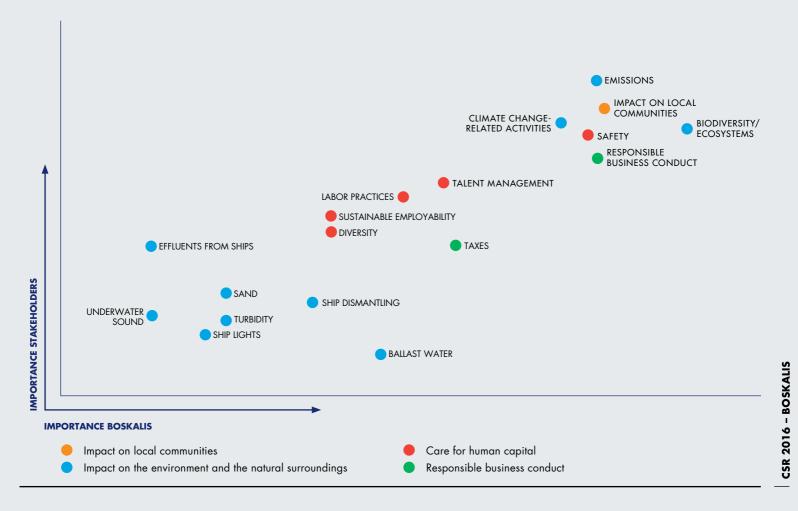
In addition to the above, we have partnerships with sector organizations, educational institutions and knowledge centers, and also engage with NGOs at a local level. For an overview of our stakeholder dialogue in 2016 please refer to pages 70-71. For more information on our employees please refer to pages 72-73.

#### MATERIALITY

In the CSR domain a materiality analysis is used to gain insight into the relevance and importance of CSR themes for the company on the one hand and the stakeholders on the other. Based on the dialogue with our stakeholders in 2016 we have updated our materiality matrix. The process by which this matrix was established is described on page 64. The dialogue showed that our current strategic agenda is considered relevant and important by our stakeholders, an endorsement which encourages us to continue on the path we have taken.

All themes are relevant to Boskalis; the position in the matrix is only a representation of our understanding of the relative importance of these themes to the company and its stakeholders. Themes displayed in the top right of the matrix are considered most material by both the stakeholders and Boskalis. These themes are the key elements of the Boskalis CSR strategy. The materiality matrix is by definition a snapshot and as such is monitored or revised if and when necessary.





### MANAGING OUR MATERIAL THEMES

Our material themes are integrated in our CSR strategy. The material themes and strategy are closely connected to our business model (as shown in the value creation model on page 10) and opportunities and risk, as shown in the overview below. To manage our material themes we have formulated objectives and identified the associated opportunities and risks/dilemmas. We defined key performance indicators to measure our performance and the correspondent results achieved in 2016 are stated below. Detailed information is given in the CSR material theme chapters and the Corporate Governance chapter of this report.

For more information on the management of operational and financial risks please refer to the risk management chapter in our Annual Report 2016.

#### ENVIRONMENTAL IMPACT

Be the distinguished provider of sustainable solutions and mitigate and where possible avoid (potential) adverse impact. Realization of at least one Building with Nature project a year

#### OPPORTUNITIES

- Protect ecosystems through Building with Nature approach
- Innovative application of Environmental Impact Assessments
- Facilitate renewable energy through wind farm-related activities
- Apply environmentally-friendly fuels and energy saving schemes
- Provide flood defense through coastal and riverbank protection activities
- Contribute to cleaner environment through salvage and wreck removal operations

#### KEY PERFORMANCE INDICATORS

- Supporting the Building with Nature program
- Number of Building with Nature projects
- Wind farm-related activities
- Energy-saving measures and pilots
- Reporting on CO<sub>2</sub> emissions
- Coastal defense-related activities
- Assisting vessels in distress

#### **RISKS/DILEMMAS**

- We have no influence on infrastructure investment decisions
- Certain clients focus on price as the sole selection criteria
- Absence of an industry standard prevents the formulation of an industry-wide CO<sub>2</sub> reduction target
- In the absence of regulations, voluntary use of costly alternative environmentally-friendly fuels creates a competitive disadvantage, unless clients are prepared to pay a premium

#### **RESULTS IN 2016**

- Building with Nature program EUR 500,000
- Building with Nature projects (see page 29)
- Various wind farm-related activities: 138 foundations installed and 420 km of cables laid
- Biofuel pilot program with GoodFuels and LNG tugs in the port of Singapore (see pages 36-39)
- Action plan to reduce the energy consumption at our offices and warehouses in the Netherlands with 2% a year (see page 36)
- Scope 1 CO<sub>2</sub> 1,246 MT('000), scope 2 CO<sub>2</sub> 3 MT('000) (see pages 38-39)
- Various salvage activities (see page 30)

15

#### IMPACT ON LOCAL COMMUNITIES

Create positive value for both the local community and Boskalis, and avoid, mitigate or remedy (potential) adverse impact

#### OPPORTUNITIES

- Provide employment to local employees with fair wages, good labor practices and respect for human rights
- Purchase goods and services from local suppliers
- Build infrastructure facilitating further economic growth and employment opportunities
- Provide flood protection
- Early identification of projects with a potential social impact
- Support education, scientific research and community programs

#### KEY PERFORMANCE INDICATORS

- Facilitate a diverse employee base
- Safety training for local hires
- Community investment programs
- Support education, research and community programs

#### **RISKS/DILEMMAS**

- We have no influence on infrastructure investment decisions
- Availability of qualified local employees and suppliers
- Our leverage towards our client or government bodies may be limited
- We seldom have leverage with regard to the further development of the infrastructure we build

#### **RESULTS IN 2016**

- Number of nationalities: 63. Number of employees in Boskalis majority owned entities: 3,444 in the Netherlands, 1,582 in Rest of Europe and 1,127 in the Rest of the world
- Safety training on projects (see page 19)
- EUR 500,000 in sponsorship and donations in the Netherlands (see pages 20-21)
- 232 interns, graduates and doctorate students

#### CARE FOR HUMAN CAPITAL

Attract and retain talent by providing a safe work environment with the objective No Injuries No Accidents (NINA) and by offering excellent career development opportunities

#### OPPORTUNITIES

 Offer a varied and inspiring work environment
 Provide a safe and healthy environment for our employees and subcontractors

#### KEY PERFORMANCE INDICATORS

- Retention of employees
- Percentage of employees with a performance review
- Training employees
- Number of work-related safety incidents

#### RESPONSIBLE BUSINESS CONDUCT

Be a business partner that acts with integrity, reliability and responsibility towards stakeholders

#### OPPORTUNITIES

- Acting with integrity, reliability and responsibility by applying our General Code of Business Conduct and endorsing the principles of the ILO, the OECD Guidelines for Multinational Enterprises and the UN Global Compact
- Further evolve our supply chain management

#### KEY PERFORMANCE INDICATORS

- Percentage of (strategic) suppliers that have signed the Supplier Code of Conduct
- Number and outcome of implementation scans

#### RISKS/DILEMMAS

- Finding qualified, skilled professionals
- Safety plays a central role in our operations

#### **RESULTS IN 2016**

- Retention (see pages 48, 51, 73)
- Performance reviews: 83%
- Training hours: 112,174
- Training by employee category (see page 72)
- LTIF: 0.08; TRIR: 0.66

#### RISKS/DILEMMAS

- Our leverage in the value chain can be limited
- Large number, and globally diverse suppliers following our projects

#### **RESULTS IN 2016**

- 76% of (strategic) suppliers have signed the Supplier Code of Conduct
- 10 implementation scans. For results see pages 58-59

# IMPACT ON LOCAL COMMUNITIES

Through a unique integration of mangrove restoration, small-scale engineering and sustainable aquaculture the Building with Nature project in Java will stop coastal erosion.



- 18 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS
- 19 LOCAL WORKERS AND SUPPLIERS
- 20 COMMUNITY INVESTMENT PROGRAMS

### ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS

Each project is unique and requires tailor-made solutions. Environmental and Social Impact Assessments (ESIAs) are a widely used tool to measure the social and environmental impact of a project on the local community and the environment. They are often prepared by or on behalf of our clients to comply with legislation, before applications can be made for the necessary permits. In most countries ESIAs are used by financiers like the World Bank when clients apply for funding for their projects, and by governments as part of permit applications. In turn our clients require us to comply with the ESIA conditions relating to our part of the work. To ensure that environmental and social risks are identified and assessed and appropriate management is secured we develop an Environmental and Social Monitoring Plan.

When it comes to defining how we address environmental and social risks, we take into account the international frameworks. In this respect we endorse the OECD Guidelines for Multinational Enterprises.

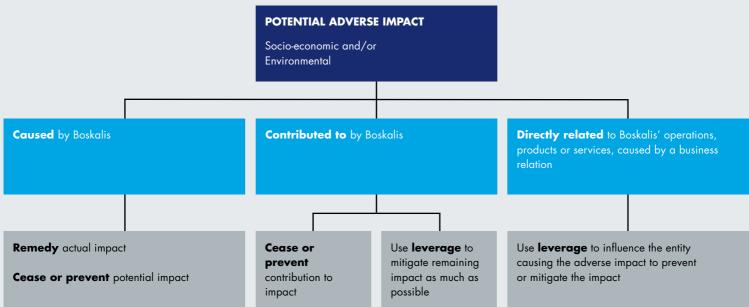
We seek to avoid potential adverse impact arising from our activities and services, and otherwise to mitigate or remedy this impact. We exercise our leverage if we are in a position to influence the entity responsible for the impact to bring about change in the situation. Our ability to do so can be limited, depending, for example, on the nature of the business relationship. The influence we have over clients as opposed to our influence over direct suppliers can vary widely. In 2016, we launched the Social Impact program, which has three objectives:

- To increase awareness of our social impact and the international frameworks within the company.
- To develop a standard evaluation mechanism to identify projects in the tender phase that have a (potential) higher risk profile.
- Consistent application of our social impact principles and procedures on projects.

Our approach is based on the OECD Guidelines for Multinational Enterprises, the IFC Performance Standards, the OECD Common Approaches, the Boskalis General Code of Business Conduct and the Suppliers Code of Conduct.

For more information about our environmental impact and our approach please refer to the chapter on biodiversity and ecosystems on pages 28-30.

#### OECD GUIDELINE APPROACH TO POTENTIAL ADVERSE IMPACT



### LOCAL WORKERS AND SUPPLIERS

On projects where our presence is temporary, we aim to hire as many local workers as possible and offer fair wages and decent working conditions. On these projects the share of temporary employment contracts can reach close to 90%. Depending on the nature, size and duration of a project, we can offer jobs in areas including logistics (such as the transport of people, goods and equipment and arranging visas), support (such as HR, SHE-Q, (financial) administration, procurement, PR, catering, security and accommodation) and operations (such as engineers, welders, deck hands and workshop staff). Local workers are given additional training if necessary as well as safety training to ensure that they are able to carry out their work according to our own high (safety) standards. Local workers participated in our NINA safety training and work shops on projects like Punta Pacifica in Panama, Pluit City in Indonesia and on the offshore wind farm projects Wikinger and Veja Mate. We take care to

provide good accommodation, recreational facilities and means of keeping in touch with the home front. The local medical facilities are assessed at every project site and where necessary we set up a temporary clinic and hire medical staff. In a number of countries, including Germany, Finland, Sweden, the United Kingdom, Mexico and Singapore, we have a permanent presence and make targeted investments in the training of local, mostly permanent, staff.

In addition, we purchase goods and services from local suppliers whenever possible. Such goods may include fuel, food, facility consumables, wearing and construction parts for our equipment, safety products and equipment such as bulldozers, cars, trucks, cranes and small floating equipment. Office space is mostly rented and where possible we use local shipyards. Our Supplier Code of Conduct is also applicable to our local suppliers. For more information on our Supplier Code of Conduct please refer to pages 58-60.



### COMMUNITY INVESTMENT PROGRAMS

#### THE OCEAN CLEANUP

Boskalis was one of the main sponsors of The Ocean Cleanup's North Sea Prototype test. Boyan Slat, a young Dutch entrepeneur, aims to develop an installation of up to 100 kilometers to clean up the Great Pacific Garbage Patch between Hawaii and California. He estimates that deployment of the barrier could remove half of the so-called plastic soup in a decade. The purpose of the North Sea Prototype test, which involved the deployment of a 100 meter-long barrier 23 kilometers off the coast of the Netherlands, is to examine the structural integrity of the barrier in a harsh environment like the North Sea. In November 2016 Boskalis won the SponsorRing 2016 award in the 'Society' category for its sponsorship. The SponsorRing is the annual award for the best sponsorship cases in the Netherlands.

#### **BOSKALIS BEACH CLEANUP TOUR**

The objective of the annual Boskalis Beach Cleanup Tour, an initiative of NGO The North Sea Foundation, is to clear waste along the full length of the Dutch North Sea coast and thus raise awareness of the issues around plastic soup. Boskalis has been the main sponsor of the initiative since 2013. During the 2016 tour a total of 19,000 kilograms of waste was collected by 2,300 volunteers, including Boskalis colleagues with their family during a Boskalis family day.

#### **EXHIBITION AT DELFT'S PRINSENHOF MUSEUM**

Tens of thousands of interested visitors saw the exhibition 'Vermeer comes home' in the Prinsenhof Museum in Delft, the Netherlands in the summer of 2016. Johannes Vermeer's famous painting 'The Little Street' was the highlight of the exhibition. The precise location of the real-life little street was identified in 2015 using 17th-century records of dredging work in Delft's canals – one of the reasons why Boskalis decided to support the exhibition as a main sponsor. In addition, Boskalis has had close ties to Delft for many years, partly because many Boskalis colleagues with a technical background studied at Delft University of Technology. Another factor was the museum's cultural and historical significance: the Prinsenhof was the last residence of William of Orange, 'Father of the Nation', whose name was also given to one of the trailing suction hopper dredgers in the Boskalis fleet. Boskalis used the event as an opportunity to host our employees and their relatives.

#### SUPPORTING SCIENTIFIC RESEARCH AND EDUCATION

Boskalis has a tradition of supporting scientific research that is of direct or potential relevance to our sector. Together with knowledge centers and universities we support (fundamental) research as well as sharing knowledge through lectures and presentations. At Delft University of Technology we co-fund a Chair of Dredging Technology and supply a scientific officer. In addition, we facilitate a dual lectureship between Delft University of Technology and Wageningen University. Every year Boskalis supervises interns, graduates and doctorate students. The number for 2016 was 232 (2015: 201).



#### OTHER COMMUNITY INVESTMENT PROGRAMS

In addition to the initiatives above, dozens of community initiatives were carried out at project level or by local offices in 2016. These activities took place in many countries, ranging from the UK to Mexico. Examples include donations to primary schools and orphanages and sponsorships to support health and cultural programs. Furthermore, hundreds of employees engaged in various local charity initiatives.

Boskalis also sponsored the sculpture Ocean Reef I created by Dutch artist Ruud Kuijer. In September 2016 the sculpture was unveiled on Punta Pacifica, the man-made island constructed by Boskalis off the coast of Panama City. The sculpture was presented by Boskalis CEO Peter Berdowski to the mayor of Panama José Isabel Blandón in the presence of Alfredo Aleman, CEO of Ocean Reef Marina. The sculpture contains elements that refer to the marine life in the immediate vicinity of the islands. The sculpture, standing 13.75 meters tall and weighing 35 tons, will be accompanied by a smaller sculpture on the second island early 2017.

In previous years we reported on the Socio-Economic Development (SED) program of SMIT Amandla Marine (SAM) in South Africa. In 2016, once again, scholarships were awarded, donations were made and employees took part in a number of community projects.

For more information on the Ocean Cleanup, Boskalis Beach Cleanup Tour and the Vermeer exhibition please refer to our online magazine (boskalis.com/magazine).

### SOCIAL ENGINEERING IS CONSISTENT WITH THE BOSKALIS TRADITION



In 2016 Boskalis launched a social impact program. The main objectives of this initiative are:

- To increase awareness of our social impact and the applicable international frameworks within the company.
- To develop a standard evaluation mechanism to identify projects in the tender phase that have a (potential) higher risk profile.
- Consistent application of our social impact principles and procedures on projects.

CEO Peter Berdowski and Lara Muller, director of Public Affairs, talk about the how and why of the approach.

#### **CONSIDERATIONS**

Berdowski: "This program emphasizes the importance Boskalis attaches to the impact our projects can have on the environment, and local communities in particular. This in itself is nothing new for Boskalis. The program is the culmination of a process of many years and reflects how we have developed and how we respond to changing circumstances. For many years our dredging and infrastructural projects have involved interventions in existing environments. Two aspects come into play here: the impact on the environment and the social impact. Consideration for the environment is a feature that has become deeply embedded in our organization, and something that we take into account right from the initial design of a project. One of the results of our focus on the environment is our successful Building with Nature program, which involves us adopting the natural system as a basic design principle. Our environmental experts at Hydronamic assess the ecological aspects of a project and devise groundbreaking solutions, such as coral relocation. But in addition to this the realization has gradually grown - both among ourselves and among financiers, credit insurers, governments, NGOs and other stakeholders – that these interventions can also have a major impact on the social environment. If you look at the social component of projects you can conclude that the impact of our projects at macro and at meso-level is almost always positive: our interventions generally enhance the safety and prosperity of the surrounding area.

At the same time at micro level, at the site of the actual intervention, you can come up against specific social consequences that might be negative if no measures are taken. In other words, it's nearly always about the general, common interest versus the individual interest."

#### RESPONSIBILITY

Berdowski: "The social impact of a project depends on the location. Many of our projects take place in regions that are virtually uninhabited, meaning that local community engagement does not play a major role. But sometimes we carry out dredging work in traditional fishing areas, and on some of these projects we are asked to manage the local social risks, for example by informing and consulting the local stakeholders or seeing to it that the fishermen receive reasonable and adequate compensation if this is appropriate. Projects where we are able to handle such compensation ourselves, in accordance with our own standards and in line with international guidelines, generally go smoothly. However, it does also happen that clients or local authorities assume this role, in which case our influence is limited."

Muller: "The question is always: who holds responsibility for the social impact of a project? Is Boskalis given the space to get involved? And so it is crucial to determine and clarify for each individual project what our role is and what our responsibilities are. This can be contractually agreed with the client, but may also

#### "AS A COMPANY WE WANT TO APPROACH THE SOCIAL IMPACT OF OUR PROJECTS IN A DECENT AND RESPONSIBLE WAY, TAKING INTO ACCOUNT THE INTERNATIONAL RULES."

be influenced by international rules such as the OECD guidelines and our own business principles."

Berdowski: "Our presence when constructing new infrastructure or reclaiming land is relatively brief but many of these projects have a lasting impact. We are temporary guests in a local community, and it is in everyone's interest that we cooperate effectively with all parties involved. As a company we want to approach the consequences at micro level with due care, insofar as we are able to influence these. We want to do so in a decent and responsible way, taking into account the international rules. This is consistent with the internal and external reputation of our company, and also allows us to show our employees what kind of company we are."

#### DISTINGUISHING FACTOR

Berdowski: "It goes without saying that it takes time and effort to develop and embed a company-specific method. But with a good social impact program Boskalis can create a competitive edge. Positioning ourselves as a company that is experienced at managing the social impact of a project will also enable us to provide clients with advice and practical support. Our aim is to gain the support of the local communities for our projects. Creating support and removing resistance also reduces failure costs. In a way you can compare this development to our earlier efforts with regard to Building with Nature: something we initially also put a lot of extra energy into and are now reaping the benefits of. I expect that a growing number of our clients will come to view a responsible social impact approach as a license to operate, a requirement that contractors have to meet. This development is a good fit with our organization, which evolved from a technical background into environmental engineering. And now we are adding social engineering. The approach could be described as Building with Society, because here, again, we are proceeding on a value-based philosophy. In our experience the social impact of our projects is greatest on infrastructural works and dredging projects."



#### **PRACTICAL TOOLS**

Muller: "At Boskalis we already have many social impact initiatives, but these tend to be at project level. Now we are working on a coordinated, company-wide approach. The program was initiated by a steering committee, which started by mapping the existing situation. Phase one involves establishing the 'as is' situation and determining which current and forthcoming projects require special attention. We are covering the entire spectrum, i.e. all projects around the world. Following on from this we are working on formulating and defining the details of the 'to be' policy, partly based on best practices. We are doing so by creating awareness and developing training programs, so that this topic becomes a fixed element for colleagues on projects. We focus on employees who are involved in tender processes and execution, but also for example on finance and treasury colleagues. Social impact issues differ from project to project and there are no 'one size fits all' solutions. In each situation employees need to think about their role and the responsibility they want and are able to take at both project and corporate level. The program is a structured way of offering practical tools to enhance knowledge and awareness in this area. Our ultimate goal is that our colleagues come to view this topic as a natural part of their work."

#### **ENTHUSIASTIC RECEPTION**

Muller: "It is great to see how positive and enthusiastic the response of our colleagues to the program is; it is clearly meeting a need. Obviously a lot was already being done in this area on various projects, but it is a topic that people at Boskalis feel strongly about and want to take further. What the colleagues mainly want to know is how they can operate within which frameworks and limitations and these are the frameworks we are now developing."

Berdowski: "A program such as this is strongly consistent with the Boskalis tradition, in which we are used to showing respect towards other cultures. Many of our colleagues are curious about local traditions and are open to them – otherwise they probably wouldn't be working here. This program will help us to operate more effectively at a local level and create the value that the client and the community require of us."



on a project in Java, Indonesia.

24

"THIS PROGRAM WILL HELP US TO OPERATE MORE EFFECTIVELY AT A LOCAL LEVEL AND CREATE THE VALUE THAT THE CLIENT AND THE COMMUNITY REQUIRE OF US."



# ENVIRONMENTAL MAGE

Inspection of one of the world's largest monopiles on the Veja Mate wind farm project.



28	BIODIVERSITY AND ECOSYSTEMS
31	ACTIVITIES RELATED TO OUR FLEET
32	CLIMATE CHANGE
34	CONTRIBUTING TO THE CIRCULAR ECONOMY
36	EMISSIONS

#### 

### BIODIVERSITY AND ECOSYSTEMS

The urgent need to protect the world's water resources and marine habitats means that sustainability is essential to our business and is our license to operate. And so it has never been more important for us to have a leading reputation for sustainable solutions for the management and development of vulnerable river, delta and coastal areas. In addition, mining firms and oil and gas companies are pushing the boundaries in terms of the exploration of natural resources, which includes moving into highly sensitive areas. Here again, our ability to offer leading-edge sustainable solutions in increasingly challenging environments can create value. A substantial part of our work is focused on ensuring we maintain a leading role, offering increasingly innovative solutions to protect and preserve the natural environment.

#### ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS

Environmental and Social Impact Assessments (ESIAs) are widely used in our industry as a tool for measuring the social and environmental impact of a project. You can read more about this on page 18. Every project is unique and requires a tailor-made solution. We are renowned for our environmental expertise based on the innovative Building with Nature program. We are able to optimize the sustainable execution of our activities by applying environmentally-friendly techniques and working methods, as well as advanced prediction models and monitoring systems.

#### **BUILDING WITH NATURE**

Launched in 2008, Building with Nature is a program aimed at developing knowledge and design guidelines for maritime infrastructure, adopting the natural system as a basic design principle. The program, part of the Dutch government's Top Sector policy, is executed by the EcoShape foundation, of which Boskalis was an initiator. The foundation includes businesses, government agencies and research institutes. An ever-increasing number of parties from various backgrounds participate in the EcoShape foundation, including NGOs such as Wetlands International. The Building with Nature program offers independent knowledge that clients, government authorities and other stakeholders can use to make balanced decisions about the integration of maritime infrastructure, nature and society.

The years of research and development have produced a lot of knowledge on Building with Nature solutions. To ensure that this is also available to the engineers of the future, we keep universities and higher vocational colleges informed about the program and get them involved. This has led to the creation of various readerships, guest lecturer positions and post-academic and other courses. In addition, Delft University of Technology launched a Building with Nature Massive Open Online Course (MOOC) in 2016, with thousands of participants from around the world.

#### TASKFORCE ECO-ENGINEERING

We aim to realize at least one Building with Nature project a year. Building with Nature solutions can only be applied successfully if our clients are prepared to embrace the concept and take on projects. To date, it has been mainly our clients in the high-end segment of the market who have been open to doing so. However, we actively promote the concept to all our clients, with the Taskforce Eco-Engineering playing a leading role in this respect. In addition, the Taskforce discusses, coordinates and shares knowledge and successes, as well as promoting internal awareness of the Building with Nature program within the divisions. This enables opportunities for projects and initiatives to be identified at an early stage, as well as creating a platform within the company. Chaired by a member of the Board of Management, the Taskforce includes representatives of both Boskalis' in-house engineering department Hydronamic and senior managers.

#### **BUILDING WITH NATURE PROJECTS IN 2016**

As an EcoShape partner Boskalis is involved in a five-year project to halt coastal erosion in Java, Indonesia. The coastline in the Demak district has been retreating at an alarming rate and as it is home to some 70,000 residents, so urgent action is needed. The integrated project aims to turn the tide through a unique combination of mangrove restoration, small-scale engineering, education of the local community and sustainable land use.

In 2016 we also started work on the Marker Wadden nature restoration project and executed the Griend nature preservation project. In addition, we continued to work on the pilot project involving 3D printed reefs in Monaco.

All these projects feature prominently in our online magazine (boskalis.com/magazine).



#### ECOSYSTEM SERVICES VALUATION

Ecosystem Services (ES) is a term used to denote the benefits that humans derive from nature. Using an ecosystem services valuation model to monetize the value of an ecosystem allows stakeholders to weigh the 'natural capital' against the economic and social benefits. While a large number of scientists are working on this concept, translation into practice is sorely lacking. Since dredging contractors already implement Building with Nature solutions in projects which reflect a deep concern with ecosystem preservation, taking the next step to an ES approach is a natural progression. In 2016 the International Association of Dredging Companies (IADC) commissioned the study 'Ecosystem services: Towards integrated marine infrastructure project optimization.' The study was conducted by the University of Antwerp, with a specialist in ecosystem services. Boskalis participated in a group of experts from the dredging industry which was actively involved throughout the study to provide input and discuss intermediate results. The findings of the study have been presented in a report, which is available for download from the IADC website. The report explains the general concept of ecosystem services and the overall considerations on its use in the context of dredging projects. The ES concept is complicated and its implementation even more so. Clearly, research into valuing ecosystems and biodiversity and the relationship between the two is only just beginning.

#### SALVAGE AND WRECK REMOVAL

Through SMIT Salvage (salvage and wreck removal) we provide assistance to shipowners with vessels in distress and seek to avert potential major environmental disasters. We employ solutions that take the environment and natural surroundings into consideration. Wreck removal operations always take place in cases where a wreck is obstructing safe navigation or presents an environmental hazard. We use advanced technology and expertise to remove potentially hazardous substances such as bunker fuel and cargo from wrecks, and have a successful track record in salvaging vessels and platforms under challenging circumstances.

SMIT Salvage attended to more than 50 marine casualties in 2016. The spectacular salvage operation of the ro-ro carrier Modern Express in the Bay of Biscay and the refloating of the containership CSCL Indian Ocean on the Elbe River received a lot of media attention. For more information on the salvage of the Modern Express please refer to our online magazine (boskalis.com/magazine).



### ACTIVITIES RELATED TO OUR FLEET

#### SHIP DISMANTLING POLICY

Boskalis is committed to the safe and sustainable dismantling of the vessels it decommissions and is ahead of existing international legislation and regulations in this area. Prerequisites include additional stricter safety requirements, a hard surface on which to dismantle the vessel and the responsible disposal of waste. For each vessel the possibilities for responsible dismantling locally are assessed and weighed against the environmental and other costs of transporting it over a long distance, for example to a certified ship dismantling yard in Europe. Where relevant, agreements are made with local yards in close consultation with the NGO Shipbreaking Platform to adapt business processes in such a way that they meet Boskalis' stringent requirements. During the ship dismantling process knowledge is shared with the local yards. We have been repeatedly recognized as an industry leader in this field by the NGO Shipbreaking Platform.

#### **DISMANTLING IN 2016**

In 2016 three vessels of 500 GT+ were dismantled at certified shipyards: two in Belgium and one in the Netherlands. In early 2017 an offshore support vessel, a floating sheerleg crane and a heavy transport vessel were taken out of service to be dismantled. One vessel of 500 GT+ was sold in 2016, as well as various smaller pieces of floating equipment. Based on the fleet rationalization program announced in July 2016, 24 vessels will be taken out of service in the 2016-2018 period. The fleet rationalization will be implemented through the dismantling, laying-up and sale of vessels. Vessels of 500 GT+ will be dismantled at certified shipyards in accordance with the Hong Kong Convention and Boskalis' own stricter standards. For older vessels of 500 GT+ offered for sale we draw up an inventory of hazardous materials as part of the sales contract which stipulates that in the event of a future dismantling the new owner must comply with the Hong Kong Convention as well as a hard surface on which to dismantle the vessel.

#### SUSTAINABLE FLEET MANAGEMENT

Our new equipment complies with the most stringent energy consumption standards. Where possible we make our equipment more sustainable by means of:

- Energy-saving measures by making the installations we use on board our vessels, such as cooling, ventilation, airconditioning and lighting, as efficient as possible.
- The Ship Energy Efficiency Management Plan (SEEMP) on board our vessels, which serves to promote awareness of efficient energy consumption among our crew.

Raising environmental awareness among our crew. In 2016, we once again organized Marine Environmental Awareness courses for our fleet personnel in collaboration with the ProSea marine education foundation. The two-day course provides basic knowledge on relevant environmental legislation, the rationale behind the legislation, technical requirements, ecological principles and environmental challenges. The course specifically focuses on the contribution of the human element in preventing pollution and is intended to educate, encourage and empower officers on board vessels and project/office personnel to contribute to environmentally sound shipping and to ensure compliance with pollution prevention measures.

- Separate collection and processing of waste. We comply with the IMO MARPOL regulations, which prohibit waste being discharged overboard. All our vessels over 400 GT have a waste management plan.
- Mitigation of turbidity by using green valves on our trailing suction hopper dredgers. Boskalis has also developed a monitoring system that enables it to analyze turbidity caused by a dredging project at any given time, adapt the performance of the work accordingly and thus limit or prevent the ecological impact.
- Responsible treatment of ballast water.
- Preventative measures against oil spills.

### **CLIMATE CHANGE**

Climate change and the consequences thereof, such as rising sea levels, are increasingly important topics for our sector and for society. With much of the country below sea level, the Netherlands has had to battle to fend off the ravages of the sea for centuries. The Dutch expertise and skills in the field of delta technology and hydraulic engineering are highly rated throughout the world. Boskalis' core business enables it to provide innovative adaptive and mitigating solutions to combat the impact of climate change.

Through our coastal defense and riverbank protection activities we are able to help countries to adapt to the consequences of climate change. Boskalis specializes in designing, realizing and maintaining sea defenses and beach replenishments. We widen rivers and channels and create floodplains to contain the water or facilitate drainage. Our Building with Nature approach plays an important part in the realization of these projects. In doing so, we also apply the basic principles of the circular economy by substituting materials such as concrete, basalt and rock with natural, renewable materials such as sand and mangroves.

Our offshore wind farm activities contribute towards greater availability of renewable energy. We have made our mark with successful projects and, as one of the top players in this market, we keep expanding our role by providing a broader range of services for increasingly complex projects. We provide our services for the transportation, installation and scour protection of substations, turbines and turbine foundations as well as handling the supply and installation of cables. In addition, we offer a growing number of construction, procurement and engineering services, in which logistics and risk management play an increasingly important role. We take our responsibility in relation to climate change by looking into innovative and established ways of saving energy and reducing the emissions produced by our equipment. Our Taskforce Energy Management keeps a close eye on developments in national and international legislation and regulations on emissions. Chaired by a member of the Board of Management, the Taskforce includes specialists and professionals from the key divisions. The Taskforce has a steering role, pools knowledge and best practices, and promotes awareness within the organization. For more information on  $CO_2$  emissions and energy-saving measures we refer to pages 36-39.

#### **FLOOD PROTECTION**

In 2016 we executed and were awarded the following projects to protect large parts of the Netherlands from flooding:

- Reinforcement of the Wadden Sea dike on the island of Texel over a distance of fourteen kilometers as well as raising and widening the Wadden Sea dike between Eemshaven and Delfzijl over a distance of twelve kilometers.
- Execution of various Room for the River projects including landscaping and improving nature.
- Reinforcement of the 33-kilometer long Markermeer dike in the Dutch province of North Holland.
- At the end of 2016 the Dutch Ministry of Infrastructure and the Environment announced the contract award for the reinforcement of the 25-kilometer long Houtrib dike to Boskalis. Execution will start in 2017. The Houtrib dike is located between Enkhuizen and Lelystad.



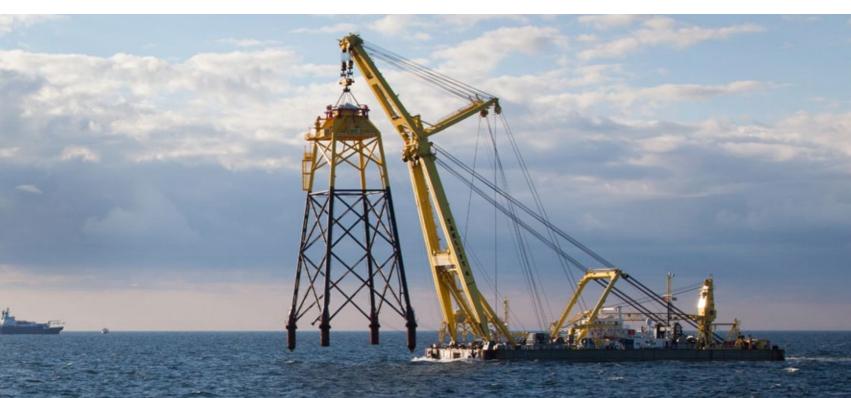
#### SUPPORTING RENEWABLE ENERGY

The acquisition of the offshore activities of VolkerWessels in 2016 is consistent with our increased level of activity in the field of renewable energy. The acquired activities consist of VBMS, in which Boskalis already held a 50% stake, Stemat and Volker Stevin International (VSI). VBMS is the European market leader in offshore cable installation and VSI specializes in the installation of offshore foundations and maritime structures.

In 2016 we installed 138 foundations and laid 420 kilometers of cables. We executed and were awarded the following projects in 2016:

- Transport and installation of the DolWin 3 platform.
- Construction of the Wikinger and Veja Mate offshore wind farms. Strict environmental requirements were successfully met on both projects. For more information on these projects and the stringent noise mitigation measures taken, please refer to our online magazine (boskalis.com/magazine).
- Installation of the first 45 kilometer-long export cable for the Galloper offshore wind farm. The wind farm, which will consist of 56 wind turbines, is located about 27 kilometers off the coast of Suffolk, United Kingdom. In 2017, our subsidiary VBMS will install the second export cable as well as 56 inter-array cables for the Galloper offshore wind farm.
- Installation of 142 kilometer-long export and inter-array cables for the Dudgeon offshore wind farm. The wind farm is located 32 kilometres off the coast North of the town of Cromer in North Norfolk, UK and 20 kilometres to the north east of the Sheringham Shoal OWF and consists of 67 wind turbines with a total capacity of approximately 400 MW.

- Installation of 100 kilometer-long inter-array cables for the Sandbank offshore wind farm. The Sandbank Offshore Wind Farm is located in the German Bight, next to the DanTysk OWF and consists of 72 wind turbines with a total capacity of approximately 288 MW.
- In addition, several smaller cable installation projects were executed.
- In July Boskalis was awarded the Aberdeen offshore wind farm, an Offshore Balance of Plant contract by Vattenfall. The use of suction bucket jacket foundations in conjunction with the large wind turbines and the use of high-capacity 66kV power cables make this project unique. The execution is scheduled to commence in September 2017
- In October Boskalis was awarded a contract by DONG Energy Wind Power A/S for the transport and installation of the jacket foundations for part of the Hornsea Project One offshore wind farm. Located approximately 120 kilometers off the coast of Yorkshire, UK, the entire wind farm will have a total capacity of 1,200 MW. The transport and installation of the foundations will be executed by Boskalis' new offshore transport and installation crane vessel, for which an existing F-class heavy transport vessel is currently being converted. The vessel will be equipped with a 3,000-ton mast crane, dynamic positioning (DP2) and additional accommodation for up to 150 people.
- In November Boskalis was awarded the Borssele Alpha contract by TenneT for the installation of two 61-kilometer export cables that will connect the Borssele offshore wind farms 1 and 2 to TenneT's onshore grid in the Netherlands. Separately, the option was awarded for the installation of the export cables that will connect the Borssele offshore wind farms 3 and 4 to the Dutch onshore grid (Borssele Beta), subject to financial close.
- In addition, numerous cable installation projects were awarded.



### CONTRIBUTING TO THE CIRCULAR ECONOMY

For Boskalis the most important natural resource is sand. Sand is extracted from borrow areas, which can be designated by clients on an individual project basis. In addition, Boskalis has access to licensed sand borrow areas around the world. When deepening waterways and ports we aim to re-use as much of the sand as possible for land reclamation. While not all sand is suitable for this purpose, thanks to innovations and research we are now able to re-use sand and sediment that was previously unusable.

Although sand is a renewable rather than a finite resource, in some areas its use is increasingly being restricted by legislation and regulations. Backed by scientific research from the Building with Nature program, we are able to advise our clients on making responsible choices when designating sand borrow areas and selecting sand extraction methods. We can also advise our clients to opt for sand replenishment combined with the planting of mangroves for coastal protection, as is the case in Indonesia. Please refer to pages 40-41 for more information.

Our expertise can also be called upon for soil and waterbed remediation. Boskalis Environmental carries out noteworthy remediation projects both in and outside of the Netherlands, whereby it re-uses as much material as possible after processing.

We recycle worn floating dredging pipelines, impellers, dredging pumps and pick points, resulting in the recycling of 520,000 kilograms of material in 2016. More information can be found in the case studies on our corporate website.



"CLEANING AND PROCESSING THE INCINERATOR BOTTOM ASH IS A FINE EXAMPLE OF THE CIRCULAR ECONOMY." In 2016 Boskalis Environmental and HVC, the largest non-commercial waste collection company in the Netherlands, opened the world's first bottom ash washing plant. The plant recycles incinerator bottom ash, a by-product of the incineration of household waste in waste-to-energy plants.

For many years this contaminated bottom ash could only be used as a building material in the Netherlands if stringent conditions were met, with the material having to be sealed in sheeting to prevent pollutants leaking into the environment. However, the use of incinerator bottom ash required such an intensive and expensive management program by the Dutch government that it will be banned.

Boskalis Environmental developed its own patented separation and flushing technology and offers a unique sustainable method of cleaning incinerator bottom ash. Once processed, almost all of the bottom ash is suitable for re-use as a raw material, allowing Boskalis to contribute to the circular economy. Haico Wevers, director of Boskalis Environmental: "The mineral fraction, consisting of sand and granulate, will be used as a freely applicable building material in Boskalis' civil engineering works while the valuable and rare metals can be marketed as commodities by the waste-to-energy plants."

The Netherlands has twelve waste-to-energy plants and they produce approximately two million tons of bottom ash annually. "Cleaning and processing the incinerator bottom ash is a fine example of the circular economy. The plant fulfils the Green Deal that the government has with the waste-to-energy sector," points out Dion van Steensel, director of HVC. "The agreement is that 50% of all processed bottom ash must be re-used sustainably by 2017, rising to 100% in 2020."

At the beginning of 2017 Boskalis announced, together with Inashco, that it will process all bottom ash produced by Attero's waste-to-energy plants in the Netherlands for a period of ten years. A new state-of-the-art plant at Nauerna in the Port of Amsterdam area will process the bottom ash.

# **EMISSIONS**

#### **ENERGY-EFFICIENT OFFICES**

To further reduce our CO<sub>2</sub> footprint we use electricity generated from wind energy in the Netherlands at our head office.

The objective formulated in 2015 to achieve a three-star BREEAM rating for the four main buildings at our head office in Papendrecht in 2016 has been met. BREEAM is an international environmental assessment method and rating system for buildings. Its main purpose is to drive sustainable improvements through awareness of energy consumption, operational efficiency, and sustainable practices among owners and users.

In line with the target of the EU's Energy Efficiency Directive (EED) Boskalis aims to have energy-neutral office and warehouse locations in Europe in 2050. To achieve this goal we will need to implement a single overall Energy Management System (EMS) for our office and warehouse locations. In 2016 we investigated how to structure and optimize the energy management systems of our Dutch office and warehouse locations, focusing on those which are owned by us. The results of the investigation have been translated into an action plan with objectives for the period up to mid-2020. These objectives are:

- · Identification of consumption and processes.
- Annual decrease in CO<sub>2</sub> emissions through a 2% energy reduction for office and warehouse locations, sustainable energy generation through for instance heat/cold storage, and replacement of fossil fuels with a renewable alternative.

Where possible the BREEAM and  $CO_2$  Performance Ladder results will be integrated in the EMS. Setting up the EMS is an ongoing process that will be audited annually by an external party. The results will be reported to the Taskforce Energy Management. An EED support team has been established and will be responsible for the further implementation and monitoring of the system.

#### **CO<sub>2</sub> PERFORMANCE LADDER**

In the Dutch market, Boskalis pursues a  $CO_2$  reduction of 5% of its local operations by 2020, compared to 2009. In 2016 Boskalis once again obtained certification on the  $CO_2$  Performance Ladder, achieving the highest level attainable (5) for the fifth consecutive year. The certificate applies to all business units operating on the Dutch market. The  $CO_2$  Performance Ladder is a tool used by government agencies and businesses in the Netherlands to encourage companies that take part in often complex tenders to adopt carbon awareness procedures in their own operations, in the execution of projects and in the supply chain. The basic principle of the  $CO_2$  Performance Ladder is to recognize efforts made by businesses in the areas of energy saving, efficient use of materials and renewable energy. The level achieved by companies on the  $CO_2$  Performance Ladder translates into an advantage in tender evaluation procedures: the higher the level on the Ladder, the greater the advantage to the company during the tender procedure.

Various other initiatives were started or continued in the Netherlands during 2016. These include technical and organizational measures as well as an initiative under the slogan 'Keep Fuel in Mind', aimed at bringing about a change in behavior. By recording and monitoring equipment fuel consumption levels and discussing ways of saving fuel while on the job we work constantly to change behavior among our operators. Another initiative is a 'Green Deal' signed by Boskalis in 2016. It concerns a partnership, including (national) government, industry and educational institutions, aimed at reducing emissions of  $CO_2$ ,  $NO_x$  and particulate matter caused by dry earthmoving equipment through training and education of operating staff.

#### **EMISSIONS FROM OUR FLEET**

With a large global fleet, Boskalis is constantly on the lookout for ways to reduce dependence on oil and reduce emissions. Boskalis contributes towards environmentally-friendly solutions for emissions with innovations in equipment, working methods, energy saving and fuels. Our extensive R&D program enables us to anticipate changes in national and international legislation and creates the right conditions for rapid implementation.

#### **BIOFUEL PILOT PROGRAM**

In 2015 Boskalis, in a consortium with GoodFuels and Wärtsilä, started a two-year pilot program aimed at the development of marine biofuels that meet the most stringent sustainability standards with the potential of a significant reduction in emissions. Biofuels are currently not part of the marine fuel mix that operators and shipowners can choose from. This means that shipping is missing an opportunity to utilize what could be an attractive, environmentally-friendly fuel option.

At the moment, all commercially available biofuels suitable for diesel engines are produced from oils and fats. As the consortium only believes in truly sustainable biofuels, the fuels tested in the program are produced from waste and residue streams, and no primary vegetable oils such as rapeseed oil or palm oil are used. Qualifying biofuels are selected on three criteria: firstly, technological match with marine application; secondly, top-notch sustainability performance; and thirdly, possibility of large-scale production. Furthermore, the aim for the biofuels is to be of a 'drop-in' quality, ensuring current operations can remain in place,

allowing all parties to continue business as usual. Any biofuel that meets these criteria will be considered.

The consortium believes that these biofuels have a viable role to play in reducing emissions that no other fuel can currently achieve, without a capital-intensive fleet renewal or retrofitting expenses. Aside from the advantages of a 'drop-in' biofuel as described above there are also operational considerations for Boskalis. Boskalis vessels operate around the world and do not have fixed, regular ports of call. Vessels are commonly deployed for prolonged periods of time at remote locations with very limited infrastructure. The current LNG bunkering network is too limited to guarantee global sourcing. A drop-in biofuel will give us the flexibility to bunker the fuel when it is available, and to fall back on fossil fuel when there are no other alternatives.





Cutter suction dredger Edax operating on biofuel on the Marker Wadden project.

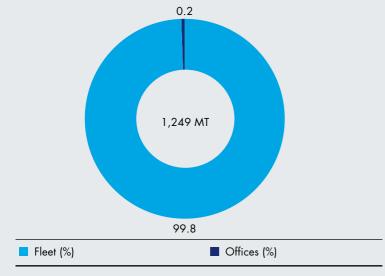
biofuels, although the program also features a Heavy Fuel Oil (HFO)-type biofuel. Boskalis provided funding to source biofuels for testing and for the bunkering of its own vessels, which it made available for the pilot. We used hydrotreated vegetable oil (HVO) to start off with. We supplied one vessel – our trailing suction hopper dredger Willem van Oranje, running on Wärtsilä 32 engines – with a 30% blend biofuel in 2015.

In the first half of 2016 we funded and performed testing on the cutter suction dredger Edax, as it worked on the first phase of the Marker Wadden project in the Netherlands. The biofuel used on the Edax was a blend made out of lignocellulosic waste streams from a Finnish pulp and paper company, in bio-/fossil blends of up to 50%. Lignin is the wood polymer that provides structural

CO, (Metric Tons '000)

support to plant tissues. Lignin is a by-product of many industrial processes, for example the production of cellulose from wood, and is therefore available in large quantities for use as an energy source. There were no performance issues on either the Willem van Oranje or the Edax and CO<sub>2</sub> reductions were in line with expectations. In later phases of the program we will be testing HFO-type biofuels. The aim of the program is to define the parameters that have been set for these fuels.

Boskalis is a strong believer in creating a business case around sustainability. If the business objectives, including technical compliance, economic viability and scalability, can be aligned with sustainability, this initiative has tremendous potential for broad adaptation and could result in meaningful emission reductions.



		FLEET		OFFICES	CO <sub>2</sub> 2016 <sup>*</sup>	CO <sub>2</sub> 2015*	
	<b>FUEL HFO</b> MT ('000)	FUEL MGO MT ('000)	<b>ELECTRICITY</b> KWh (million)	<b>GAS</b> Mj (million)	MT ('000)	MT ('000)	
Dredging & Inland Infra	54	85			440	663	
Offshore Energy	164	87			790	793	
Towage & Salvage	-	5			16	61	
Offices			4	11	3	5	
Total	218	177	-	-			
CO <sub>2</sub> MT ('000)	679	567	2**	1	1,249	1,521	

\* For the method used to convert fuel to CO<sub>2</sub>, see page 65 of this report.

\*\* Estimated CO<sub>2</sub> reduction 3 MT, due to use of electricity generated from wind energy

#### LNG DUAL-FUEL

In 2016 Boskalis joint ventures Keppel Smit Towage and Maju Maritime ordered two innovative LNG dual-fuel harbor tugs. This marks a breakthrough in realizing clean, environmentally-friendly harbor towage services in the port of Singapore as the tugs will run entirely on LNG. In light of this, the Maritime and Port Authority of Singapore awarded a grant under its LNG Bunkering Pilot Programme. The 65 ton bollard pull ASD tugs will be built by Keppel Singmarine in Singapore according to the shipyard's proprietary design and are expected to be delivered in 2018. The LNG will be supplied by Shell and bunkered through FueLNG, a joint venture between Shell and Keppel. The two LNG-fuelled tugs will be the first clients of LNG as marine fuel as part of the pilot aimed at developing Singapore into one of the world's main LNG bunkering ports.

#### AN INDUSTRY STANDARD TO MEASURE CO, EMISSIONS

We consult with the authorities via national and international sector associations, such as the European Dredging Association (EuDA) and the Dutch Association of Hydraulic Engineers. We also share our technical knowledge with them in order to make emissions measurable. In doing so, we seek to work towards broadly supported, realistic regulations for our industry. In early 2016 EuDA published a report in which it attempted to establish a generic methodology for predicting the carbon footprint of different dredging vessels (trailing suction hopper dredgers, cutter suction dredgers and backhoe dredgers). The report concluded that each dredging project has a different scope and is carried out under specific conditions and technical requirements. The combination of unrepeatable project conditions and very diverse equipment specifications make it impossible to transpose efficiency indices and indicators for regular shipping to dredging operations for the purpose of assessing CO<sub>2</sub> emissions and establishing reduction targets. It is clear that optimizing CO<sub>2</sub> emissions for the dredging sector can only be achieved at project level. Despite these complexities the EuDA-affiliated companies, including Boskalis, have produced a joint report containing generic estimates of projected CO<sub>2</sub> emissions for specific types of equipment under defined project conditions. While these generic estimates can be useful as a guideline for clients, they cannot be used to measure CO<sub>2</sub> emissions per production unit as a proxy for company-wide CO<sub>2</sub> reduction targets. The most important findings of the report were presented in our CSR Report 2015.

#### CO2 EMISSIONS 2016

Boskalis measures and reports on the fleet's total  $CO_2$  emissions based on fuel consumption. Total emissions of the group in 2016 amounted to 1.25 million tons of  $CO_2$  (2015: 1.52 million). This decline was due to lower utilization levels and further deconsolidation of the Towage activities.

#### **Dredging & Inland Infra**

 $\rm CO_2$  emissions at Dredging & Inland Infra amounted to 440,000 tons (2015: 663,000 tons), approximately 89% of which was attributable to the traditional trailing suction hopper dredgers and cutter suction dredgers. The 34% decrease is the result of the following factors: utilization of the trailing suction hopper dredgers decreased to 27 weeks (2015: 43 weeks). This is mainly caused by the decrease and delay of the Dredging activities resulting in low utilization levels for the large trailing suction hopper dredgers in particular. The decrease in activities was partially offset by the consumption from the backhoe Magnor, which was taken into service in the second quarter of 2016, and the acquisition of two trailing suction hopper dredgers as part of the acquisition of the activities of STRABAG Wasserbau.

Utilization of the cutter suction dredgers fell sharply to nine weeks (2015: 34 weeks) and is primarily caused by the decrease in activities where last year the utilization rate was positively impacted by the Suez project.

#### **Offshore Energy**

CO<sub>2</sub> emissions produced by the Offshore Energy fleet in 2016 totaled 790,000 tons (2015: 793,000 tons), of which 63% was attributable to the heavy transport vessels (2015: 61%). The stabilization of the emissions was attributable to the high utilization of the large capacity heavy transport vessels, which offsets the lower utilization level of the Dockwise fleet as a whole (not being a weighted average), which was 66% in 2016 (2015: 76%). A limited increase (on average) in sailing distances further offsets the lower utilization level, resulting in relatively higher fuel consumption and thus relatively higher emissions.

#### Towage & Salvage

CO<sub>2</sub> emissions at Towage & Salvage equaled 16,000 tons (2015: 61,000 tons). The 46,000 ton decline was fully attributable to the transfer of vessels to the KOTUG SMIT Towage joint venture. As all Towage vessels are incorporated in joint ventures as from the first quarter of 2016, only emissions from assets owned by Salvage are reported.

### CALLING A HALT TO COASTAL EROSION

Boskalis, as one of the partners in the EcoShape consortium, has embarked on a five-year Building with Nature project to halt coastal erosion in Central Java. Through a unique integration of mangrove restoration, small-scale engineering and sustainable land use the project is expected to turn the tide.

#### **URGENT ACTION NEEDED**

With some 70,000 residents in the Demak district in Indonesia, urgent action was needed as the coastline has been retreating at an alarming rate, with the sea already having taken more than three kilometers of land in some places. Mangrove forests that can help dampen waves and stabilize sediment have been chopped down for aquaculture development. There is also significant subsidence as a result of the extraction of fresh water, making the impact of rising sea levels even worse. EcoShape knew that it could help prevent further deterioration of the situation by using the Building with Nature principles to restore the mangrove coast. Fokko van der Goot, EcoShape Program Manager and Senior Environmental Engineer at Boskalis, and Femke Tonneijck, Program Manager at Wetlands International, the NGO coordinating the Java project, explain why a technical solution is not enough to make this crucial project a success; education and socio-economic considerations are just as important.

#### A TECHNICAL SOLUTION IS NOT ENOUGH

Fokko: "Boskalis is a specialist in managing sediment and in Java we are specifically looking at how sediment can be brought to the shore to restore the coastline. Actually, we were inspired by how the Netherlands used to reclaim land centuries ago by constructing permeable dams made from willows. The dams were used to dampen the waves and take the energy out of the water, while the



#### "WE BELIEVE IT CAN TRANSFORM THE WAY IN WHICH EROSION PROBLEMS ARE ADDRESSED ALONG MUDDY COASTS ACROSS THE TROPICS."

sediment could still filter through and accumulate and settle behind the dams. In Java the approach is similar: villagers hammer bamboo poles at least two meters into the seabed and use bundles of brushwood from the shore, binding them together to form dams of about 100 meters long. In just one year, the level of the bed can rise by up to 50 centimeters. However, it is not enough that we provide a technical solution in Demak; there are many ecological and socio-economic issues to be addressed through the program. Here we see the benefit of the multidisciplinary character of the Building with Nature program. Our EcoShape team consists of companies with a lot of engineering expertise like Boskalis and Witteveen+Bos, but also includes research institutes like Deltares and Imares, NGOs like Wetlands International and Blue Forests as well as local and national government agencies."

#### LOCAL COMMUNITY ENGAGEMENT

Femke: "The local community had to be convinced that a wide natural mangrove belt is needed both for their own safety and for keeping their land. In addition we had to show that they can still farm shrimp behind the restored mangrove greenbelt: this is their livelihood. So a lot of education and training is needed. We have set up Coastal Field Schools to train villagers so that they can identify and develop successful aquaculture practices and care for the mangroves they depend on for coastal safety and water purification. We also developed Bio-rights, an innovative financing mechanism for reconciling environmental conservation with sustainable development. For example, we provide financial support and training so that farmers can revitalize their shrimp ponds, start a crab farm or develop ecotourism. In return for this support, villagers help to maintain the permeable dams, they monitor mangrove recovery and safeguard the mangroves once restored. In some cases farmers need to give up ponds near the seafront or along rivers to facilitate mangrove restoration. This then needs to be compensated, for example by achieving higher aquaculture productivity in ponds behind the intended greenbelt."

#### **RESTORING ECOSYSTEM SERVICES WORLDWIDE**

Fokko: "Looking at the equator, we could take a similar approach in countries with comparable vulnerable coastlines such as Vietnam, the Philippines, Malaysia, Bangladesh, India, as well as countries in Africa and Central America. Suriname, for instance, is one of the seven globally most endangered countries in terms of sea level rise. In May 2016 a Building with Nature project in Suriname was launched to protect the coastline from seawater flooding and prevent salinization of arable land. The approach replicates the Building with Nature program in Central Java to bring a halt to coastal erosion."

Femke: "This represents a new way of looking at coastal safety and coastal defense systems. It is a low-tech solution but requires high-tech knowledge and expertise. In many locations it is not ecologically and economically feasible to implement hard infrastructure solutions, such as dams or dikes. Instead, this approach is cost-effective and brings multiple benefits to various stakeholders by restoring ecosystem services. We believe it can transform the way in which erosion problems are addressed along muddy coasts across the tropics."

# CARE FOR HUMAN CAPITAL

Start of 'another day in the office' at the Griend nature preservation projec



44	SAFETY
46	TALENT MANAGEMENT
47	LABOR PRACTICES
49	SUSTAINABLE EMPLOYABILITY
50	DIVERSITY

## SAFETY

Safety is a core value and a top priority at our company. With the objective of No Injuries No Accidents (NINA), which is also the name of our safety program, we want our employees to return from work safely each day. Since the implementation of NINA six years ago safety awareness at Boskalis has increased significantly and, more importantly, has resulted in a decline of the Lost Time Injury Frequency (LTIF) by more than 85% during this period. NINA has become an inextricable part of our culture and generates a lot of positive energy throughout the company. Our clients increasingly see NINA as best practice, and our project partners enthusiastically participate in our interactive NINA training courses.

NINA holds people personally responsible for their own safety and creates an environment in which safety can be discussed openly. The NINA values and rules make it clear what we stand for. NINA is not just about procedures, it promotes ownership and

#### NINA VALUES AND RULES

#### VALUES

- I am responsible for my own safety
- I approach others about working safely
- I take action in case of unsafe operations if necessary,
   I will stop the work
- I accept feedback about my safety behavior regardless of rank and position
- I report all incidents, including near-misses, to inform others and build on lessons learned

#### RULES

- Prepare a risk assessment for each project, vessel or location
- Obtain a permit to work for defined high-risk activities
- Make a job hazard analysis for hazardous non-routine activities
- Be informed about risk and control measures
- Be fit for duty and wear the Personal Protective Equipment required

creates a safety-driven mindset. Five short and clearly worded values with five supporting rules provide the framework and help us achieve our objective: no injuries and no accidents.

#### **SAFETY PERFORMANCE IN 2016**

In 2016 the number of incidents per 200,000 hours worked resulting in absence from work (Lost Time Injury Frequency) remained stable at 0.08. As from 2015 we also report on Medical Treatment Cases and Restricted Work Cases to further improve our safety performance. By aiming for a reduction in all three categories (together known as TRIR - Total Recordable Injury Rate) we expect to achieve a further decline in the number of incidents resulting in injury. The TRIR declined from 0.70 in 2015 to 0.66 in 2016.

Prevention is a crucial part of safety awareness. Most accidents can be prevented if people are fully aware of the (potential) risks associated with the tasks at hand. In order to achieve a safer working place employees are encouraged to report dangerous situations using Safety Hazard Observation Cards (SHOCs). The number of SHOCs in 2016 was 7,354, with 703 near misses also being reported in the year under review. We view SHOC and near misses reports as a measure of the proactive safety culture within the organization. NINA encourages reporting of such situations, allowing us to make proactive adjustments.

Repeat incidents can be prevented by analyzing the causes. In line with our industry the list of most common incidents is headed by struck by or against an object. The number of falling, slipping and tripping incidents is also relatively high. In an attempt to prevent these incidents from reoccurring we introduced the new Mooring Workbox and Safe Mind Workbox, which provide practical training methods and tools.

The pyramid chart shows the number of incidents reported, starting with the SHOCs and ending with Lost Time Injuries (LTIs). No fatal accidents were recorded in 2016.

During 2016 the embedding of NINA proceeded apace at the Offshore Energy division and at Salvage. At the Offshore Energy division the office staff, almost all the fleet staff and half of the mostly foreign crews of the Dockwise vessels are now NINA trained.

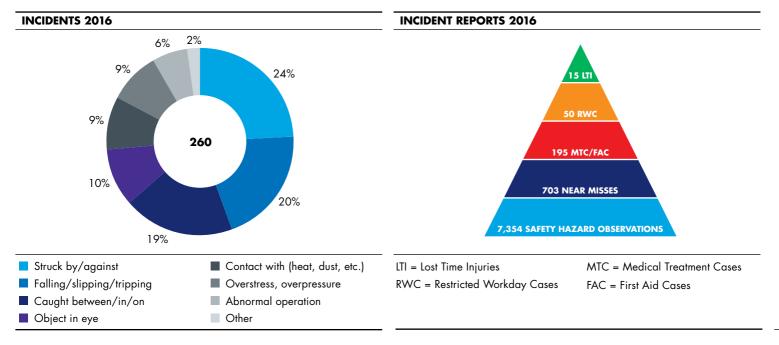


Under the supervision of the senior management of the Dredging & Inland Infra division a review of the current status of NINA and possible improvements was conducted. The peer groups constituted a cross section of the division, from captains and superintendents to crew members and colleagues from all the areas and home markets. The outcome showed that the employee perception of the NINA philosophy remains very strong, with a high level of commitment.

In October the Boskalis Group Management held a NINA reflection day to identify actions to further enhance the vitality and effectiveness of the program.

#### AUDITS

In 2016, we conducted 21 external and 21 internal audits on our projects. In addition, 88 external and 64 internal audits were carried out on our dredging and offshore vessels. Clients also performed office and project audits at the business units.



# TALENT MANAGEMENT

46

Our field of work is largely project-based and knowledge intensive. Talented, enterprising and highly skilled employees are the key to our success, which is why talent management plays a crucial role in the way we operate our business. Talent management encompasses all the activities we develop in the areas of recruitment, performance management, training and development, and compensation and benefits. All our efforts in these areas are aimed at ensuring the best possible match between our employees' skills and the qualifications needed to execute our business plan and our strategy.

After a few very busy years the market outlook for Boskalis has changed drastically as a result of continuing low energy and commodity prices. Because we expect these market conditions to persist in the coming years it is essential that we adapt to this new situation. We therefore pursue a selective recruitment policy which is geared to market demand.

#### **PERFORMANCE MANAGEMENT**

An important part of developing talent consists of recording and supporting the personal development of our staff. In 2016, as part of our HR information system Workday, we started rolling out the performance management module, so that the entire performance management cycle is now conducted in a uniform and interactive way. The majority (83%) of our employees are given an annual or semi-annual performance review.

#### TRAINING AND DEVELOPMENT

#### TRAINEE PROGRAM FOR YOUNG TALENT

As a leading international company that undertakes high-profile projects, we hold a great attraction for young people. We offer a trainee program for graduates with a technical or financial/ economic background, who are further trained at our company under the supervision of a mentor. They are introduced to a wide range of our business activities and follow training modules to increase their knowledge and develop their personal skills. A group of 25 trainees is currently gaining experience on various projects in different teams within the divisions during three six-month periods.

#### YOUNG PROFESSIONAL PROGRAMS

In order to develop our knowledge and expertise, we attract experienced young professionals. In addition, we invest in developing the competencies of our own young professionals, for example in the areas of planning, calculation, risk management and contract management. Our training portfolio is constantly developing so that we can continue to meet the needs in the market. In 2016 we once again selected a group of young professionals for the Boskalis Offshore Professional Program, which involves imparting knowledge specific to the offshore sector in modules based on actual Boskalis projects. In addition, a group of cost engineers continued their two-year post-graduate degree, combining their learning experiences with working practice. Boskalis also launched an ICT Young Professional program, in which a group of employees are taking part. The program is aimed at giving an impulse to the further professionalization of the ICT department.

#### MANAGEMENT DEVELOPMENT PROGRAMS

Leadership and personal development are a constant point of attention within the organization. Developing personal leadership, building an internal network and encouraging innovation and entrepreneurship are important core values in our management development programs. From February to December 2016, a group of experienced tender and sales managers participated in the Boskalis Contracting Academy program aimed at optimizing their expertise on tender and sales management. Boskalis also started preparations for a new Boskalis Operational Development Program (BODP). This program is scheduled to start early 2017. The BODP target group consists of around twenty project managers from the divisions Dredging & Inland Infra, Salvage and Offshore Energy. The two main subjects of the program are personal leadership and project management.

# LABOR PRACTICES

Boskalis reports on employees employed by majority owned entities (2016: 6,153 employees). More details on the reporting scope can be found on page 65 About this report. 38% are covered by a Collective Labor Agreement, including most of our crew and project staff. Corporate and operational staff are covered by separate agreements reached in consultation with the employee representation.

Boskalis offers decent working conditions and is committed to freedom of association and the right to collective bargaining. We endorse the guidelines of the International Labour Organization (ILO), the UN Global Compact and the OECD Guidelines for Multinational Companies in this respect.

#### **EMPLOYEE ENGAGEMENT**

Boskalis engages in close and structural consultation with the employee representation bodies regarding subjects relevant to our employees, in accordance with the laws of the countries where we are based.

Our operations in the Netherlands account for 56% of our workforce. The dialogue with the Dutch Works Council was once again open and constructive in 2016. Topics discussed included the competence management framework and the safety and financial performance of the company.

In 2016 the Dutch Works Council rendered a positive advice on the fleet rationalization plan, the joint venture with Kotug, the acquisition of VolkerWessels' offshore-related activities and the cancellation of the voluntary large-company regime. The Works Council consented to the social plan as a result of the fleet rationalization plan and the adaption of the Boskalis pension scheme.

#### ADAPTING TO THE NEW REALITY

In light of the strongly deteriorated market conditions a fleet rationalization study was conducted in the first half of 2016. Because these conditions are expected to persist in the coming years the decision was taken to adapt the size and composition of the Boskalis fleet. In the period up to mid-2018 a total of 24 vessels will be taken out of service: ten at Dredging and fourteen at Offshore Energy. As a result, around 650 jobs will be lost worldwide in this period, mostly involving crewmembers of the vessels concerned.

Following a careful process and in close consultation with the Dutch Works Council a social plan was drawn up, which was also approved by the majority of the Dutch trade unions. The most important elements of the social plan are:

- the principle of redeployment is leading;
- the establishment of a mobility center;

• good arrangements should redundancy prove inevitable. At the end of the year under review more than 250 jobs had been discontinued. The timing of the remaining workforce reduction is partly dependent on factors including the current deployment of vessels and national legislation.

In order to maintain a cost-efficient business proposition we will be looking at ways of making our crewing model more flexible and variable without compromising safety and quality. Options under consideration include a more flexible crew-planning model whereby crew can be deployed across a pool of vessels and greater flexibility in crew composition.

In the wake of the fleet rationalization program we will also review our cost base at head office. A comprehensive cost study will therefore be conducted in the first half of 2017. While the objective of this study will be to reduce costs where possible, it will also take the organization's growth ambitions into consideration. The cost review should therefore be seen in the broader context of our organizational alignment and strategic agenda.

#### **PENSION SCHEMES**

The Boskalis pension plan, managed by the PGB pension fund, includes an unconditional indexation for all Boskalis participants that were employed on 31 December 2014. This unconditional indexation is also applicable for members of the Board of Management. The level of indexation was equal to the annual general wage level increase at Boskalis. However, this defined unconditional pension indexation led to high volatility in the pension liabilities in the statement of profit or loss under IFRS due to fluctuations in the discount rate and deviations in the calculation of the pension liability compared to the method in which PGB calculates and establishes the premium. This resulted in undesirable and disproportionate effects on the statement of profit or loss and the balance sheet. To mitigate these undesirable effects, an amendment has been made to the indexation arrangement. This amendment and the associated compensation was approved by the Works Council in December 2016. Subsequently the unconditional indexation was abolished as per 31 December 2016. To compensate for the change from unconditional to conditional indexation, Boskalis has provided an amount to PGB that allows for a one-off 5% increase in accrued pension rights as of 31 December 2016.

#### **CONTRACT TYPE AND STAFF TURNOVER**

The majority of our employees (76%) are on a permanent appointment (2015: 75%) and of this core staff many have a long tenure with the company. Staff turnover is relatively low at 9.2% (2015: 8.3%). Turnover within the Dutch organizations was even lower at 6.7% (2015: 4.8%). The increase in turnover in 2016 is mainly caused by a higher (voluntary) resignation rate and is partly explained by the fleet rationalization program.

For projects we supplement our core staff with employees drawn from a flexible shell. Depending on the project requirements these employees are hired locally where possible or appointed on a temporary contract, which in many cases is discontinued at the conclusion of the project.

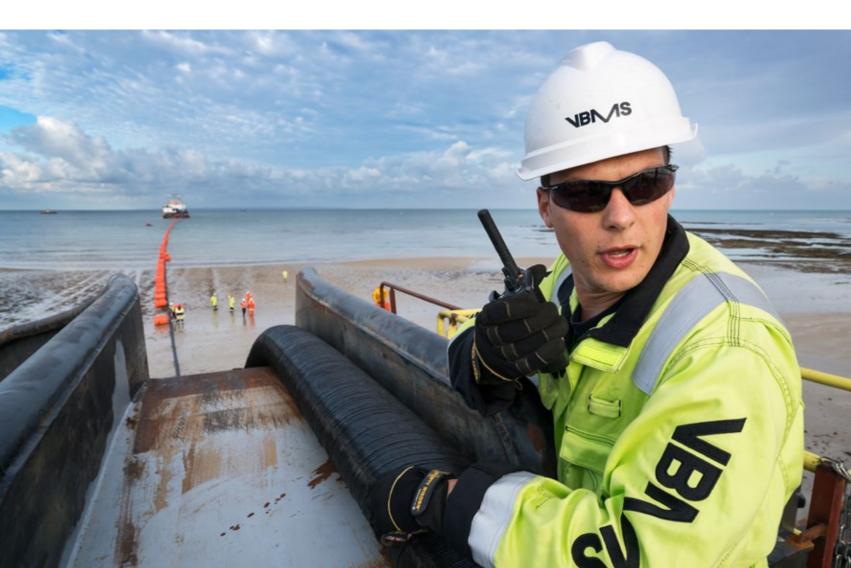
In 2016 we were able to welcome 1,903 new employees (2015: 1,454) while 3,090 employees left Boskalis. Of these 3,090 employees, 672 were permanent employees, 1,345 were from the flexible shell and 1,073 left Boskalis as a result of divestments. In relation to the fleet rationalization program, 250 jobs were discontinued as per year end, divided over permanent and flexible positions.

#### **PREVENTION OF OCCUPATIONAL AND OTHER DISEASES**

In some of the regions where we operate, there is a risk of becoming infected with diseases such as malaria, Ebola and Zika. To mitigate the risk to our employees, we have a long-standing policy of providing vaccinations and (regular) medical check-ups as well as running prevention programs. In addition, in 2003 we established an Emergency Response Team (ERT) to enable a rapid response in the event of a health crisis. The team comprises employees from our SHE-Q and HR departments and doctors from the Travel Clinic of the Havenziekenhuis hospital in Rotterdam, the Netherlands. After the Zika outbreak in South America in 2016 the ERT issued a policy statement on the virus, explaining the nature and symptoms of the virus and advised on preventive measures to be taken.

# SUSTAINABLE EMPLOYABILITY

To support the continued employability of our employees we enable them to develop their talent and skills through our training and development programs. In addition we have explored with the Dutch Works Council and the Dutch trade unions how to keep employees healthy, safe and motivated through to their retirement. The various training programs we offer to our fleet personnel include the module Fit for Duty, which aims to provide employees with tips for a healthy lifestyle and encourage them to put these into practice. Because lifestyle involves more than just physical fitness, attention is also paid to mental health with a course on effectiveness and mindfulness at work. Shaping one's own career is a fixed item in performance reviews. Employees can say whether they would like to retrain, for example for a different, less physically demanding job. We are open to this approach and try to accommodate the various life stages as much as possible, for example enabling staff to work on projects in the Netherlands for a number of years if that is more appropriate to their current phase in life.



# DIVERSITY

50

In an international project environment such as ours, which requires a flexible, broad and innovative approach, we take a broad view on diversity.

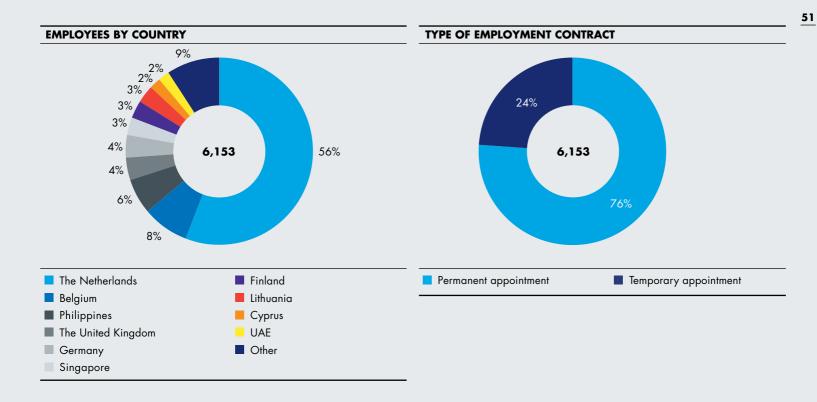
Boskalis operates a strict equal opportunities policy for all employees, regardless of race, nationality, ethnic background, age, religion, gender, sexual orientation or disability.

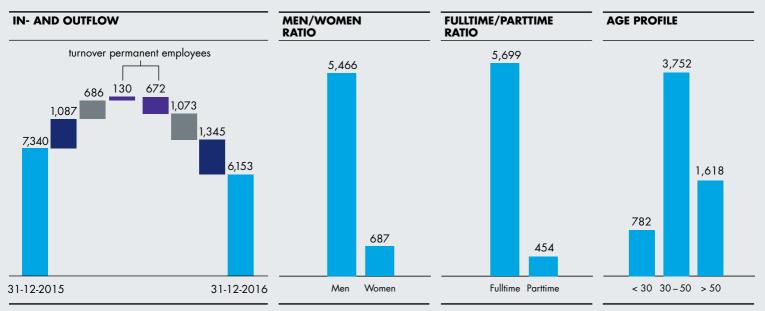
Boskalis' employees represent 63 different nationalities with a balanced age profile. Almost 74% of our employees are under 50, with over half (61%) being in the 30-50 age category. This age distribution provides a good level of staffing for positions at junior, medior and senior levels, as well as resulting in a manageable outflow of staff due to retirement.

We employ a relatively large number of men and relatively few part-time staff. The ratio of men to women and of full-time to part-time staff at Boskalis is consistent with the nature of our work. We are to a large extent a project organization that sends out trained technical, financial and maritime staff all over the world for longer periods of time to projects, often in remote locations. Deployment to projects has proved to be a less attractive option for women and a less obvious choice for part-time workers.

The ratio of men to women in 2016 was identical to 2015: 89%-11%. The participation rate for women is higher for activities which are fixed, office-based and of a structural nature. In 2016 the ratio of men to women was 75%-25% for management and office staff working at the Boskalis head office (2015: 69%-31%). The percentage of part-time workers in 2016 was 7% (2015: 6%).

The ratio of operational staff (fleet, yards and projects) to management and office support staff was 66%-34% as a result of the fleet rationalization and divestments (2015: 71%-29%). This ratio is consistent with the profile of the company and the nature of the activities and the equipment deployed. Proportionately the most managers and support staff work at the head office in the Netherlands.



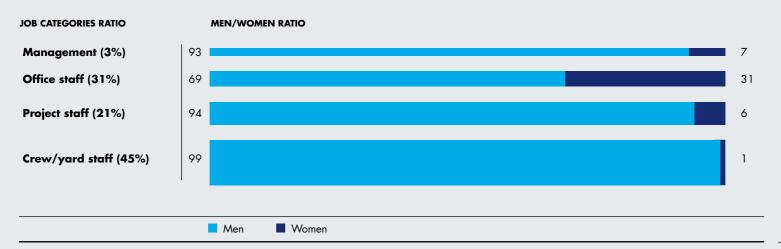


Inflow/outflow flexible shell

Inflow acquisitions/outflow divestments

Inflow/outflow permanent employees

#### JOB CATEGORIES MEN/WOMEN IN 2016 (IN %)



# GRIEND NATURE PRESERVATION PROJECT

Aerial view of the uninhabited island of Griend in the Dutch Wadden Sea.

Boskalis teamed up with the Dutch Society for the Preservation of Nature (Natuurmonumenten) to protect the uninhabited island of Griend in the Dutch Wadden Sea. The island provides a vital habitat for hundreds of thousands of migratory and breeding birds. However, due to erosion this bird paradise was at risk of being washed away.

#### PROTECTION

Hundreds of thousands of birds forage for food on the mud flats around Griend in the spring and fall. Red knots, sanderlings, bar-tailed godwits and other waders stop off here to build up their reserves before continuing their journeys, sometimes flying thousands of miles.

"Natuurmonumenten awarded us this project mainly because of all the measures we proposed to minimize any disruption of nature" says project leader Johan Miedema. "An important pre-condition on this project was that we had to minimize disruption levels. So all our colleague were housed on dry land rather than in an accommodation vessel.



"WE HOPE THAT THE ISLAND IS NOW ABLE TO DEVELOP NATURALLY ONCE AGAIN AND WILL REMAIN A BIRD PARADISE IN THE DECADES TO COME."

That meant taking them to work in small boats and they sometimes had to walk up to two kilometers across the mud flats. The entire team wore waders and they walked to their work and back through the sludge, with their boots around their necks and their food and drink in backpacks. It was hard work. I was born and raised around here so I love the area but I lost five kilograms in a very short time," says Johan with a smile.

#### **NESTING PLACES FOR TERNS**

Boskalis started work immediately after the nesting season, using sand extracted during the maintenance of shipping channels to create a 400-meter wide foreshore that will protect Griend from erosion in the decades to come. The island's natural protection consists of a barrier of shells, plant debris and sand with a salt marsh on the lee side. The new shore includes shellfish banks, consistent with the natural situation on Griend. The work on the new shore continued day and night, with Boskalis using green light on the island at night to protect nature. In order not to disturb the migratory birds, the project was suspended during the spring tides.

To make Griend more appealing for nesting birds, the topsoil was removed in some parts of the island. Terns and common terns have a preference for barren and sparsely vegetated locations and the higher parts of Griend were very much overrun with vegetation. Boskalis used the topsoil that was removed for the new shore. In addition, a small opening was created in the dike on the northern side, allowing the seawater to flow into the salt marsh at high tide and deposit clay, thus naturally raising the level of the salt marsh.

#### NATURAL DEVELOPMENT

The island is expected to move eastward by an average of seven meters a year. Ranger Erik Jansen of Natuurmonumenten: "We hope that the island is now able to develop naturally once again and will remain a bird paradise in the decades to come."

# RESPONSIBLE BUSINESS CONDUCT





### PRINCIPLES 58 **SUPPLY CHAIN** MANAGEMENT 61 CORPORATE GOVERNANCE

- 56
- GENERAL BUSINESS

55

### GENERAL BUSINESS PRINCIPLES

Integrity, reliability and responsibility are key elements for building trust between Boskalis and its stakeholders. These intrinsic values are reinforced by establishing guidelines and principles for responsible business conduct, and ensuring these are maintained.

Boskalis has a General Code of Business Conduct (the "Code"), which is based on international guidelines, including the Universal Declaration of Human Rights.

We endorse the principles of the International Labour Organization, the UN Global Compact and the OECD Guidelines for Multinational Enterprises. Boskalis accepts responsibility for matters which lie within its sphere of influence. In the countries where Boskalis operates, we are subject to national legislation and regulations. Boskalis refrains from cultural judgments and conducts itself as a good citizen or guest. We adhere to relevant international and national sanctions. Boskalis reviews its Code at least once every two years, most recently at the beginning of 2016.

The full text of our General Code of Business Conduct is available on our corporate website.

#### ANTI-BRIBERY AND ANTI-CORRUPTION POLICY

The Boskalis anti-bribery and anti-corruption policy is enshrined in the Code. The Code states that Boskalis shall not offer, pay, request or accept bribes or other favors for the purpose of acquiring or bestowing any improper business, financial or personal advantage.

The Code forms part of the employment contracts of Boskalis



staff, having been incorporated in the accompanying employee manual. Boskalis employees are provided with targeted information and are monitored with regard to regulations and legislation concerning bribery and corruption.

Boskalis has a Whistleblower Policy in place that offers employees the possibility to report suspected misconduct within the company. These include any subject of a general, financial or operational nature which are not in line with the Code. A confidential independent counsellor has been appointed for the purposes of the Whistleblower Policy. The counsellor shall take the reported suspected misconduct immediately into consideration and gain information in relation thereto. Based on this information the counsellor shall decide which actions are appropriate and necessary, including a possible investigation on the reported misconduct. The employee who has in good faith reported the suspected misconduct to the counselor, in accordance with the Whistleblower Policy, shall not suffer any detriment as a consequence of this notification.

The Whistleblower Policy was reviewed at the beginning of 2016 and can be found on the corporate website.

Furthermore the principle that no bribes or other favors shall be offered, paid, requested or accepted for the purpose of acquiring or bestowing any improper business, financial or personal advantage has also been incorporated in the Supplier Code of Conduct, which is part of the contractual relationship between Boskalis and its suppliers. Suppliers are obliged to select their own suppliers in accordance with the Boskalis Supplier Code of Conduct.

In many countries where Boskalis operates it is impossible to conduct activities without a local partner or sponsor. The guidelines for collaborating with such a partner are set out in a contract, which also specifically includes the principle from the Code as described above. Local contacts are maintained by an agent, who also assists in the efficient setting up and execution of projects. Control of integrity risks and compliance with the procedures for concluding agent contracts are part of the internal audits as well as being included by the external auditor in the audit of the financial statements.

#### TAX PAYMENTS

We believe a coherent and responsible position on tax to be an important element of our CSR strategy. In this context, we have adopted the following tax principles.

#### COMPLIANCE

Boskalis follows the statutory regulations relating to tax payments. Over the last five years we have paid an average of around 15% tax in more than 50 tax jurisdictions around the world, including more than 30 jurisdictions classified as developing countries by the OECD. Compliance is monitored within a Tax Control Framework.

#### **BUSINESS RATIONALE**

Tax follows business and profit is allocated to countries where value is created in accordance with domestic and international rules and standards as well as applying the arm's length principle. Boskalis does not seek to avoid taxes through 'artificial' structures in tax haven jurisdictions.

#### **RELATIONSHIP WITH TAX AUTHORITIES**

We seek an open and constructive dialogue with tax authorities on the basis of disclosure of relevant facts and circumstances. We aim to enhance clarity and upfront certainty around tax and have covenants in place with Dutch tax authorities.

#### TRANSPARENCY

We are transparent in our approach to tax and our tax position. Disclosures are made in accordance with the relevant domestic regulations, as well as applicable reporting requirements and standards such as IFRS.

### SUPPLY CHAIN MANAGEMENT

In our supply chain the top three material themes are care for human capital, responsible business conduct and impact on local communities. Responsibility for the procurement policy and the selection of strategic suppliers rests with the general manager for Procurement & Logistics, who reports to Group Management.

Boskalis maintains relationships with around 1,376 suppliers for the central procurement of machinery and hydraulics, electronics and survey equipment, consumables, wearing and construction parts and facility goods. 253 of these are regarded as strategic suppliers who account for some 90% of the Corporate Procurement department's purchasing volume. Over half of the 1,376 suppliers are Dutch companies, 15% are established in other European countries and 30% are based outside Europe.

Boskalis is involved in a large number of cross-sectoral partnerships in the supply chain, the main ones being:

- Partnerships with Van Voorden, Vosta, Allard-Europe and Magotteaux resulting in the establishment of cradle-to-cradle chains for worn impellers, dredging pumps and pick points, as a result of which 520,000 kilograms of material was recycled in 2016. (See also the case study on our corporate website.)
- Partnership with GoodFuels Marine, focusing on the development of a drop-in marine biofuel to meet the highest sustainability standards, which could lead to a significant reduction in emissions. (See also pages 36-38 of this report.)
- Partnership with the ProSea marine education foundation with which we organize Marine Environmental Awareness courses for our fleet crew.

#### SUPPLIER CODE OF CONDUCT

Boskalis wants to do business with parties who act responsibly and with integrity. Our Central Procurement department aims to establish long-term relationships with suppliers conform to the latest NEVI Code of Conduct. In addition to quality, delivery reliability and price, we also take sustainability criteria into account when selecting our suppliers. We are the first in our sector to work with a Supplier Code of Conduct, which mirrors our own General Code of Business Conduct.

By signing the Supplier Code of Conduct suppliers declare that the Supplier Code of Conduct is also applicable to their own suppliers. In 2016 we were able to declare the Supplier Code of Conduct applicable to 76% of the strategic suppliers of the Corporate Procurement department. This percentage can fluctuate from year to year, due to variations in purchase patterns. The Supplier Code of Conduct and our General Purchasing Terms and Conditions can be downloaded from our corporate website.

#### **IMPLEMENTATION SCAN**

Each year we conduct an implementation scan at approximately 10% of our strategic suppliers. This equates to around 20 companies representing a cross section of our strategic suppliers. The implementation scans, including first- and second-line suppliers, were first performed in 2012 and over five years scans have been conducted at 80 unique suppliers, based in Europe, North Africa, Southeast Asia, China, the United States and the Middle East. An independent external consultant assesses to what extent these suppliers have adopted the Supplier Code of Conduct criteria in their own CSR policy. This is done using the Socially Responsible Procurement monitoring method of the Chartered Institute of Purchasing and Supply. The procedure comprises:

- A fixed questionnaire, compiled in conjunction with the external consultant. Questions are subdivided into the topics covered by the Supplier Code of Conduct.
- An onsite implementation scan. These company visits are conducted by the external consultant along with one of our senior procurement staff. This is a two-way process: besides evaluating the performance we are also open to feedback from our suppliers, which allows us to learn from them. The aim is to work together to create and develop a sustainable supply chain. Our suppliers take a positive view of this approach.
- A risk matrix is used to show the level of risk that applies to the various suppliers in terms of CSR and to what extent this might impact Boskalis' business operations or reputation. We will eventually terminate our relationship with suppliers who are in the segment indicating a significant risk and a significant impact and in the segment indicating a high risk and high impact. Suppliers in both segments are given the chance to improve under our supervision. In the absence of sufficient progress we will terminate our relationship with these suppliers. The dialogue with the other

suppliers is structured according to the matrix on the next page. Buyers monitor adherence to the Supplier Code of Conduct through their own check lists during visits to suppliers, in addition to the formal implementation scans.

#### Result in 2016

Given the material purchase volume at the Wikinger and Veja Mate wind farm projects we decided to conduct the 2016 implementation scans at the top ten suppliers to these projects, based on monetary procurement value. All (100%) were monitored against our Supplier Code of Conduct criteria in the areas of sustainable procurement, including human rights. The outcome is shown in the matrix on the next page. Six suppliers were rated as having 'a low risk with a low impact' and four suppliers as having 'an average risk with an average impact'. In 2016 we also visited two suppliers in Europe who had achieved a sub-standard score in 2015 and had been rated as having 'a significant risk with an

58

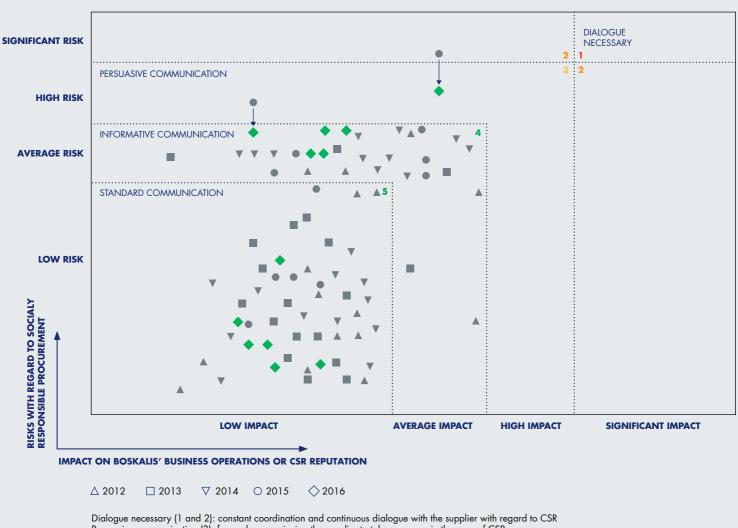
average impact' and 'a high risk with a low impact', respectively. We continued the dialogue with these two companies in 2016, which led to the desired result. One was rated at having 'a high risk with an average impact' and the other as having 'an average risk with a low impact' respectively. We will continue the dialogue with them.

#### A SINGLE CSR ASSESSMENT TOOL FOR DUTCH MARITIME SUPPLIERS

In 2015 Boskalis launched an initiative in conjunction with the Maritime Cluster of CSR Netherlands (MVO Nederland) aimed at

developing a web-based sustainable procurement tool to assess the sustainability level of suppliers. The project participants include renowned parties from across the maritime sector: shipbuilders, contractors and subcontractors, shipping companies and yards working on behalf of the maritime and offshore industries. The tool allows companies across the entire Dutch maritime sector to carry out assessments of the sustainability level of their suppliers. It contains a questionnaire that builds on the supplier codes of project partners and conforms to international standards: first and foremost ISO 26000 and the upcoming ISO 20400. The tool enables information sharing amongst the maritime network

#### CSR IMPLEMENTATION SCAN 2012-2016: 80 SUPPLIERS, SCORED BY YEAR



Parague necessary (1 and 2): constant coordination and continuous alabague with the supplier with regard to CSR Persuasive communication (3): focused on convincing the supplier to take measures in the area of CSR Informative communication (4): explaining the reasons behind the Boskalis CSR policy to enable an organization to adopt this internally Standard communication (5): general discussions on CSR; keeping up-to-date on each other's developments partners. This means that suppliers only need to adhere to one standard and will receive only one audit request. Not only will overlapping audits be avoided, the tool also helps suppliers to gain an understanding of their organization's risk level and areas where improvement is needed to remain competitive in today's global business environment. In 2016 the questionnaire was finalized and the online audit tool was designed and tested. The assessments will be verified by an independent institution, which will also manage the tool. Implementation will take place in 2017.



## CORPORATE GOVERNANCE

Boskalis operates a two-tier board model, which means that management and supervision are segregated. The Board of Management is responsible for the day-to-day management of the business, and for setting out and realizing the company's long-term strategy along with the associated risks, the results and entrepreneurial aspects relevant to the company. The Supervisory Board is responsible for supervising management performance and also provides the Board of Management with advice. At Boskalis there is close collaboration between the Supervisory Board and its committees, as well as the Board of Management to ensure that the interests of all our stakeholders are taken into account.

The Supervisory Board reviews the strategy and the risks associated with it. Early 2017, the Corporate Business Plan 2017-2019 was discussed and approved. For more information, please refer to the strategy section in our Annual Report 2016.

At the Extraordinary General Meeting of Shareholders in November Ms. Ilona Haaijer was appointed to the Supervisory Board for a four-year term. Ms. Haaijer is considered to be very qualified to fulfill the Supervisory Board role thanks to her extensive management experience gained at a diverse group of international listed companies.

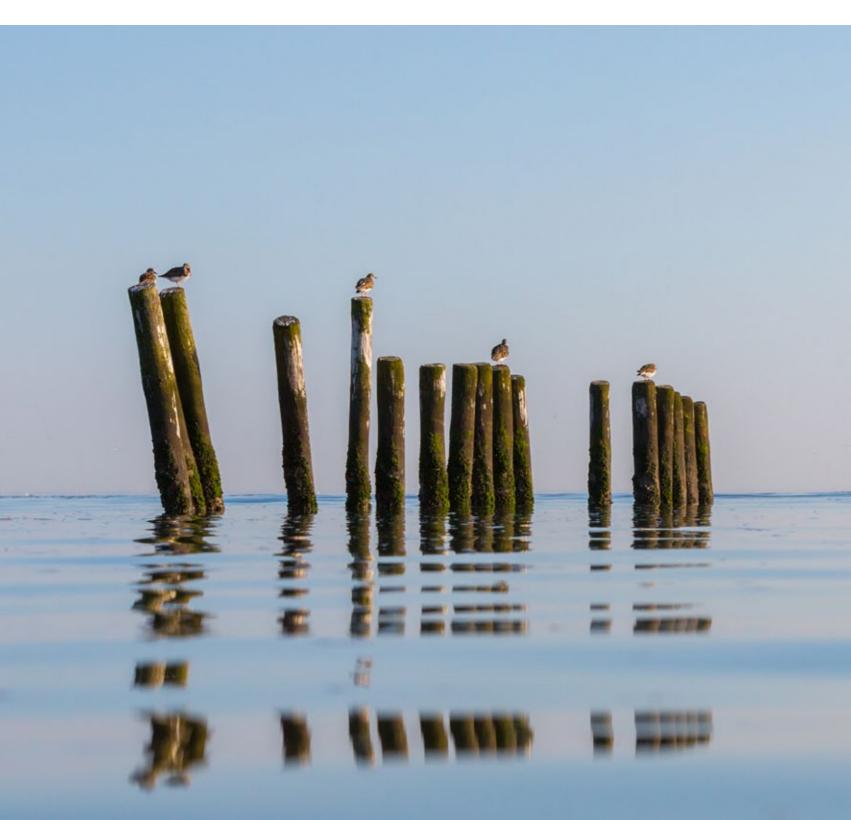
The remuneration policy and remuneration elements are directly derived from the Boskalis strategic agenda, incorporating not just financial-economic objectives but also CSR objectives such as safety and talent management. The 2016 Remuneration Report states clearly that these CSR aspects are part of the long-term corporate objectives. The external auditor is involved in determining the remuneration and is responsible for ensuring that the relevant procedures are followed correctly. Please refer to our corporate website for the Remuneration Report.

The Board of Management is responsible for the company's CSR policy and is supported in this role by the Taskforces Energy Management and Eco-Engineering. The manager SHE-Q reports to the Board of Management on safety related topics. With regard to HR-related objectives the HR director reports to the Board of Management. The business unit directors and the heads of the relevant staff departments report to the Board of Management on respective CSR key performance indicators.

This CSR Report was drawn up under the responsibility of the director IR & Corporate Communications who also reports directly to the Board of Management. The report is reviewed by the Board of Management of Boskalis and is discussed in its entirety with the Supervisory Board.

For the reports of the Supervisory Board, the Board of Management, our corporate governance policy, terms of office and our organization – including the composition of the Supervisory Board and the Board of Management – please refer to our Annual Report 2016, the Remuneration Report and our corporate website.







64	ABOUT THIS REPORT
66	GRI TABLE G4 CORE
69	KEY ECONOMIC AND CSR OUTPUT
70	STAKEHOLDER DIALOGUE OVERVIEW
72	HR DATA
74	SHE-Q DATA
75	INDEPENDENT VERIFICATION STATEMENT
76	GLOSSARY

### ABOUT THIS REPORT

#### PURPOSE AND SCOPE OF THE REPORT

We have been reporting on our Corporate Social Responsibility (CSR) strategy, performance and results in a separate annual report since 2009.

The scope of our CSR reporting is based on the information requirements of our key stakeholders. Our key stakeholders either have an influence on our license to operate or can be significantly impacted by our activities. In order to ensure we meet their information requirements we carried out a materiality analyses in 2015. Boskalis' group management selected relevant key and sub-topics derived from Boskalis' strategy, its activities as well as from international guidelines, regulations and legislation. Of the key stakeholder groups a total of 66 stakeholders was selected. Desk research and interviews were used to determine how important the individual sub-topics were to the stakeholders. This process was also used with the Boskalis group management to determine how important the topics were to Boskalis. Based on the results of this process the materiality matrix was determined. The findings of this analysis provided valuable input for our CSR strategy and reporting.

The materiality matrix was updated in 2016 based on our engagement with our stakeholders. This dialogue confirmed that our CSR strategy and structure of our current CSR reporting is regarded as relevant and significant for our stakeholders.

In 2016 we have taken steps to make the correlation between the various sections of the report clearer. These include setting up a value creation model and making a clear link between our material topics and our strategy, opportunities and risks as well as the results achieved in 2016.

We strive to improve the quality of the information and where meaningful add quantitative key performance indicators.

The CSR Report includes only CSR data from entities that are fully or majority owned and from joint ventures in which Boskalis has a controlling interest. However Boskalis relies on a significant number of contractors to perform daily activities. Boskalis acknowledges its responsibility for the safety of its contractors and therefore includes contractors in its safety performance reporting.

Acquisitions and divestments are reported in accordance with the financial reporting rules for consolidation. This means that acquisitions are reported as from the moment control (ownership) is acquired and divestments are reported up to the moment that control is relinquished. Please refer to our Annual Report for an overview of acquisitions and divestments in 2016.

#### **REPORTING PROCESS**

The CSR Report is compiled by a multidisciplinary CSR team under the responsibility of the Board of Management. Its contents was discussed in its entirety with the Supervisory Board. The consolidation of CSR data takes place at successive levels, starting with the projects and local office organizations, moving up through the relevant business units and staff departments and ending with the consolidated group reports. This is based on quarterly reporting, which is monitored by our Group Accounting & Reporting department in close consultation with our Corporate Communications department that is responsible for the production of the CSR Report. In addition, like in previous years, a number of internal audits were conducted on material CSR topics and indicators in 2016.

#### **REPORTING PRINCIPLES**

The CSR data is prepared in accordance with our reporting principles, which are based on the international Global Reporting Initiative (GRI) standards. In 2016 we started reporting in accordance with the GRI G4 guidelines. The GRI G4 reference table is included on pages 66-68 of the report. KPIs are selected on the basis of interactive stakeholder dialogue and the issues relevant to Boskalis' operations.

#### **EXTERNAL VERIFICATION**

The information contained in this report faithfully represents the outcome of systematic data gathering and analysis. As in previous years, Boskalis appointed an external assurance provider to verify its key CSR metrics. Please refer to page 75 for the assurance report and conclusion of our external assurance provider.

### METHODS OF ESTIMATION, MEASUREMENT AND CALCULATION

We use generally accepted protocols to compile, measure and present information, including the GRI technical protocols for indicators comprised in the guidelines. We aim to ensure reliability of our reported data by performing internal audits and externally verifying our data. However, due to the nature of sustainability data there are some limitations associated with measuring and calculating data.

No changes were made to definitions and measurement methods of the reported data compared to the 2015 reporting period.

64

#### HR DATA

The employees of joint ventures and the employees of Anglo Eastern, crew of the Dockwise vessels, are included in the overall reporting in view of this group's substantial size. However, these employees are not employed by a Boskalis majority owned entity and are not included in the detailed reporting. For more information please refer to pages 72-73.

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

The CO<sub>2</sub> data covers all fuel consumed by vessels of the Dredging & Inland Infra and Offshore Energy divisions. The fuel consumption of the vessels of Stemat will be reported as per 1-1-2017. ISO and ISM standards are used for the conversion of fuel to CO<sub>2</sub>. For the conversion of volume to weight, the ISO 8217:2012 standard is followed. The most stringent density factor of 0.890 kg/l is applied to the MGO/MDO conversion. The following ISO and ISM standards are used for the conversion of fuel to CO<sub>2</sub>:

- Volume to weight conversion takes place according to ISO specification 8217E, using the following specific gravity per liter:
   MGO/MDO 0.890kg
- HFO 0.991kg.
- Conversion of MT of fuel to CO<sub>2</sub> takes place according to IMO Resolution MEPC.212(63), using the following conversion factor per MT of fuel:
  - MGO/MDO 3.206 MT CO<sub>2</sub>
  - HFO 3.114 MT CO<sub>2</sub>.

#### SAFETY DATA

Lost Time Injury (LTI) expresses the number of workplace accidents serious enough to result in absence from work. Lost Time Injury Frequency (LTIF) expresses the number of workplace accidents resulting in absence from work per 200,000 hours worked. The LTIF overview on page 74 shows a breakdown for the various divisions. In addition to LTIF, we also provide the Total Recordable Injury Rate (TRIR). TRIR is composed of LTIs, Medical Treatment Cases and Restricted Work Cases, per 200,000 hours worked.

#### COMMUNITY INVESTMENT DATA

Material permanent operations outside the Netherlands are limited. Most of our activities are project-based and therefore temporary in nature. We provide qualitative reporting on the community activities for these operations. In view of our permanent presence in the Netherlands we provide quantitative reporting on the community initiatives undertaken by our domestic operations. Our operations in the Netherlands account for 56% of our workforce. Community investment data includes the investments in community programs made by Corporate Head Office and by Boskalis Nederland.

#### **SUPPLY CHAIN DATA**

The supply chain data refers to the procurement spend by the suppliers of the Central Procurement department. 253 of these suppliers are regarded as strategic suppliers who account for some 90% of the Corporate Procurement department's purchasing volume.

#### BENCHMARKS

In 2016 our sustainability performance was monitored and benchmarked:

- Boskalis was once again certified for the highest level of the CO<sub>2</sub> Performance Ladder (level 5) in the Netherlands.
- We finished 46th out of 485 companies surveyed for the Transparency Benchmark of the Dutch Ministry of Economic Affairs.
- Once again we took part in the Carbon Disclosure Project, a global reporting platform that makes information on emissions available to subscribed investors.

#### **PUBLICATION DATE**

The CSR Report 2016 was published at the same time as the Annual Report 2016 on 8 March 2017 on the corporate website.

#### CONTACT

Any suggestions you may have for improving our CSR policy or the way we report on it are greatly appreciated. We are happy to engage with you on this subject, in which case you are kindly requested to contact: Martijn L.D. Schuttevâer

Director Investor Relations & Corporate Communications Telephone: +31 78 6969822 Email: csr@boskalis.com

Website: www.boskalis.com/csrreport

# **GRI TABLE G4 CORE**

This report follows the GRI G4 guidelines. The overview below lists the indicators that we are reporting on along with the references to the chapters where this information can be found. In the overview we also link the relevant Sustainable Development Goals (SDGs) to our material topics.

#### **GENERAL STANDARD DISCLOSURES**

INDICATOR DESCRIPTION REFERENCE AND RECOMMENDATIONS STRATEGY & ANALYSIS G4-1 Statement CEO about the relevance of sustainability to the organization Chairman's statement and the organization's strategy for addressing sustainability **ORGANIZATIONAL PROFILE** G4-3 Name of the organization CSR Report: Creating long-term value - Value chain G4-4 Primary brands, products, and services CSR Report: Creating long-term value - Value chain G4-5 Location of the organization's headquarters CSR Report: Creating long-term value - Value chain G4-6 Number of countries where the organisation operates, and names of CSR Report: Creating long-term value - Value chain, Impact on countries where either the organisation has significant operations or that local communities - Local workers and suppliers, Responsible business are specifically relevant to the sustainability topics covered in the report conduct - Supply chain management G4-7 Nature of ownership and legal form CSR Report: Creating long-term value - Value chain G4-8 Markets served (including geographic breakdown, sectors served, CSR Report: Creating long-term value - Strategy, Responsible and types of customers and beneficiaries) business conduct - Supply chain and Appendix - Key economic and CSR output Annual Report: Strategy and Financial performance G4-9 Scale of the organization CSR Report: Creating long-term value - Value chain and Appendix - Key economic and CSR output Annual Report: Financial performance and Outlook Profile of the workforce G1-10 CSR Report: Care for human capital - Labor practices and Diversity, Appendix - HR data G4-11 Percentage of total employees covered by collective bargaining agreements CSR Report: Care for human capital - Labor practices G1.12 The organisation's supply chain CSR Report: Creating long-term value - Strategy and Responsible business conduct - Supply chain management, G4-13 Significant changes during the reporting period regarding the Annual Report: Chairman's statement and Financial performance organization's size, structure, ownership, or its supply chain G4-14 Whether and how the precautionary approach or principle is CSR Report: Impact on local communities - Environmental and addressed social impact assessment G4-1.5 Economic, environmental and social charters, principles or CSR Report: Creating long term value - Value chain and Impact on other initiatives local communities - Environmental and social impact assessment G4-16 Memberships of associations CSR Report: Creating long term value - Value chain and Strategy **IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES** G4-17 All entities included in the organisation's consolidated financial Annual Report: Other information CSR Report: Appendix - About this report statements or equivalent documents G4-18 CSR Report: Creating long-term value - Strategy and Appendix -Process for defining the report content and the aspect boundaries About this report G4-19 All the material Aspects identified in the process for defining CSR Report: Creating long-term value - Strategy and Managing our material themes report content G4-20 The Aspect Boundary within the organisation for each material Aspect CSR Report: Human Capital and Responsible business conduct G4-21 The Aspect Boundary outside the organisation for each material Aspect CSR Report: Impact on local communities, Environmental Impact and Responsible business conduct G4-22 The effect of any restatements of information provided in previous reports, No restatements were made with regard to information provided in previous CSR Reports. and the reasons for such restatements G4-23 Significant changes from previous reporting periods in the Scope and CSR Report: Appendix - About this report Aspect Boundaries

66

G4-24	List of stakeholders	CSR Report: Creating long-term value - Strategy
G4-25	The basis for identification and selection of stakeholders with whom to engage	CSR Report: Creating long-term value - Strategy
G4-26	Approach to stakeholder engagement	CSR Report: Appendix - About this report
G4-27	Report key topics and concerns that have been raised through stakeholder engagement	CSR Report: Appendix - Stakeholder dialogue overview
REPORT PR	ROFILE	
G4-28	Reporting period	1 January 2016 - 31 December 2016
G4-29	Date of most recent previous report	2015 CSR Report, published on the 9th of March 2016
G4-30	Reporting cycle	Annually
G4-31	Contact point	CSR Report: Appendix - About this report
G4-32	Reporting guideline and reference to External Assurance	GRI G4 - Core level CSR Report: Appendix - About this report
G4-33	Policy and current practice with regard to seeking external assurance	CSR Report: Appendix - About this report and Verification statemer
GOVERNA	NCE	
G4-34	The governance structure of the organization, including committees of the highest governance body	CSR Report: Responsible business conduct - Corporate governance
ETHICS AN	D INTEGRITY	
G4-56	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	CSR Report: Creating long-term value - Value chain, Responsible business conduct - General business principles, Responsik business conduct - Supply chain management
G4-56	The organization's values, principles, standards and norms of behaviour such	Responsible business conduct - General business principles, Responsib
G4-56 MATERI INDICATOR	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics ALASPECTS DESCRIPTION	Responsible business conduct - General business principles, Responsibl business conduct - Supply chain management
G4-56 MATERI INDICATOR RESPONSIE	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	Responsible business conduct - General business principles, Responsibl business conduct - Supply chain management
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics IAL ASPECTS DESCRIPTION BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION)	Responsible business conduct - General business principles, Responsib business conduct - Supply chain management
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE SDG 17: P.	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics IAL ASPECTS DESCRIPTION BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION) SCENT WORK AND ECONOMIC GROWTH	Responsible business conduct - General business principles, Responsib business conduct - Supply chain management REFERENCE AND RECOMMENDATIONS CSR Report: Creating long-term value - Strategy, Creating long-term
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics IAL ASPECTS DESCRIPTION BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION) ECENT WORK AND ECONOMIC GROWTH ARTNERSHIPS FOR THE GOALS (a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its	Responsible business conduct - General business principles, Responsible business conduct - Supply chain management REFERENCE AND RECOMMENDATIONS CSR Report: Creating long-term value - Strategy, Creating long-term value - Managing our material topics, Appendix - About this report,
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE SDG 17: P. DMA HR10	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics <b>IAL ASPECTS</b> DESCRIPTION <b>BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION)</b> SCENT WORK AND ECONOMIC GROWTH ARTNERSHIPS FOR THE GOALS (a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	Responsible business conduct - General business principles, Responsible business conduct - Supply chain management REFERENCE AND RECOMMENDATIONS CSR Report: Creating long-term value - Strategy, Creating long-term value - Managing our material topics, Appendix - About this report, Responsible business conduct - Corporate governance CSR Report: Creating long-term value - Managing our material topics
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE SDG 17: P. DMA HR10 SAFETY (G4	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics <b>AL ASPECTS</b> DESCRIPTION <b>BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION)</b> SCENT WORK AND ECONOMIC GROWTH ARTNERSHIPS FOR THE GOALS (a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach Percentage of new suppliers that were screened using human rights criteria	Responsible business conduct - General business principles, Responsib business conduct - Supply chain management REFERENCE AND RECOMMENDATIONS CSR Report: Creating long-term value - Strategy, Creating long-term value - Managing our material topics, Appendix - About this report Responsible business conduct - Corporate governance CSR Report: Creating long-term value - Managing our material topic
G4-56 MATERI INDICATOR RESPONSIE SDG 8: DE SDG 17: P. DMA HR10 SAFETY (G4	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics <b>AL ASPECTS</b> DESCRIPTION <b>BLE BUSINESS CONDUCT (G4 ASPECT: COMPLIANCE, ANTI-CORRUPTION)</b> SCENT WORK AND ECONOMIC GROWTH ARTINERSHIPS FOR THE GOALS (a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach Percentage of new suppliers that were screened using human rights criteria <b>4 ASPECT: OCCUPATIONAL HEALTH AND SAFETY)</b>	Responsible business conduct - General business principles, Responsib business conduct - Supply chain management REFERENCE AND RECOMMENDATIONS CSR Report: Creating long-term value - Strategy, Creating long-term value - Managing our material topics, Appendix - About this report, Responsible business conduct - Corporate governance CSR Report: Creating long-term value - Managing our material topic

INDICATOR DESCRIPTION STAKEHOLDER ENGAGEMENT REFERENCE AND RECOMMENDATIONS

CSR 2016 - BOSKALIS

#### TALENT MANAGEMENT (G4 ASPECT: TRAINING AND EDUCATION)

SDG 4: QU	ALITY EDUCATION	
DMA	(a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	CSR Report: Creating long-term value - Strategy and Managing our material topics, Care for human capital - Talent management, Responsible business conduct - Corporate governance and Appendix - About this report
LA1	Total number and rates of new employee hires and employee turnover by age group and reason	CSR Report: Creating long-term value - Strategy and Managing our material topics, Care for human capital – Labor practices and Diversity and Appendix - HR data
LA9	Average hours of training per year by employee category.	CSR Report: Creating long-term value - Strategy and Managing our material topics, Care for human capital - Talent management and Appendix - HR data
LA10	Programs for skills management and lifelong learning	CSR Report: Creating long-term value - Strategy and Managing our material topics, Care for human capital – Sustainable employability
LAII	Percentage of employees receiving regular performance and career development reviews	CSR Report: Creating long-term value - Strategy and Managing our material topics, Care for human capital - Talent management
BIODIVERSI	TY/ ECO SYSTEMS (G4 ASPECT: BIODIVERSITY)	
SDG 4: LIFE	BELOW WATER	
DMA	(a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	CSR Report: Creating long-term value - Strategy and Managing our material topics, Environmental impact - Biodiversity and ecosystems, Responsible business conduct - Corporate governance and Appendix - About this report
EN12	Description of signifcant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	CSR Report: Environmental impact - Biodiversity and ecosystems
EMISSIONS	(G4 ASPECT: EMISSIONS)	
SDG 7: AFF	ORDABLE AND CLEAN ENERGY	
SDG 13: CL	IMATE ACTION	
DMA	(a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	CSR Report: Creating long-term value - Strategy and Managing our material topics, Environmental impact - Emissions, Responsible business conduct - Corporate governance and Appendix - About this report
EN15	Direct greenhouse gas emissions (scope 1)	CSR Report: Creating long-term value - Managing our material topics and Environmental impact - Emissions
EN16	Direct greenhouse gas emissions (scope 2)	CSR Report: Creating long-term value - Managing our material topics and Environmental impact - Emissions

68

#### OTHER MATERIAL ASPECTS THAT BOSKALIS REPORTS ON

INDICATOR	DESCRIPTION	REFERENCE AND RECOMMENDATIONS
IMPACT ON	LOCAL COMMUNITIES (G4 ASPECT: LOCAL COMMUNITIES)	
SDG 8: DEC	CENT WORK AND ECONOMIC GROWTH	
DMA	(a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	CSR Report: Creating long-term value - Strategy and Managing our material topics, Impact on local communities, Responsible business conduct - Corporate governance and Appendix - About this report
Own Indicator	Description of the activities involving supporting local communities	CSR Report: Creating long-term value - Managing our material topic and Impact on local communities
	ANGE RELATED ACTIVITIES (G4 ASPECT: EMISSIONS)	
SDG 7: AFF	ORDABLE AND CLEAN ENERGY	
SDG 13: CL	IMATE ACTION	
DMA	(a) Report why the Aspect is material. Report the impacts that make this Aspect material, (b) report how the organization manages the material Aspect or its impacts, and (c) Report the evaluation of the management approach	CSR Report: Creating long-term value - Strategy and Managing our material topics, Environmental impact - Climate change and Emissions, Responsible business conduct - Corporate governance and Appendix - About this report
Own	Description of activities related to climate change	CSR Report: Creating long-term value - Managing our material topic and Environmental impact - Climate change and Emissions

# KEY ECONOMIC AND CSR OUTPUT

In EUR million, unless stated otherwise	2016	2013
Revenue	2,596	3,240
Order book	2,924	2,490
EBITDA	660.5*	884.7
Net result from joint ventures and associates	11.3*	43.3
Depreciation and amortization	277.2	278.0
Operating result	384.6	577.3
Impairments	842.6	14.3
EBIT	-458.1	562.
Net profit	276.4*	440.2
Net profit/loss	-563.7	440.3
Net group profit/loss	-561.8	443.
Cash flow	464.0	765.4
Shareholders' equity	3,121	3,71
Figures per share (in EUR)		
Profit	2.16*	3.5
Dividend	1.00	1.6
Cash flow	3.62	6.10
CO <sub>2</sub> emissions (MT ('000))	1,249	1,52
CO <sub>2</sub> emissions scope 1	1,246	1,51
CO <sub>2</sub> emissions scope 2	3	
Number of employees		
Employees including associated companies	11,733	n.c
Employees in Boskalis majority owned entities	6,153	7,34
Employee data w.r.t. Boskalis′ majority owned entities		
Number of nationalities	63	6'
Fixed term/project based contract (%)	24	2
Permanent/indefinite contract (%)	76	7
Women/men ratios (%)	11/89	11/8
Full-time/part-time ratios (%)	93/7	94/
LTI's	15	1
LTIF	0.08	0.0
TRIR	0.66	0.7
Percentage of strategic suppliers having signed the Supplier Code of Conduct	76	6

# **STAKEHOLDER DIALOGUE OVERVIEW**

Entering into dialogue with our stakeholders gives us a clear picture of their expectations and interests and allows us to establish the relevant material CSR themes. We engage with our stakeholders at all levels in our company, including the highest governance level. In 2016 we engaged with our stakeholders on the following topics. For each stakeholder group the top three material themes are indicated.

#### **INVESTORS AND SHAREHOLDERS**

#### MATERIAL THEMES

- 1. Long-term sustainable profitability
- 2. Responsible business conduct
- 3. Impact on local communities

#### HOW WE ENGAGED

- Three (Extraordinary) General Meetings of Shareholders
- Project visit for shareholders
- More than 350 meetings
- Conferences, email, telephone
- Press releases and website

#### TOPICS DISCUSSED

Information about our company and the general developments in the markets that are relevant for us. We strive to inform our stakeholders as completely and transparently as possible about our strategy and the ensuing financial performance

#### **RESULT OF DIALOGUE IN 2016**

Please refer to our Annual Report 2016

#### **CLIENTS**

#### MATERIAL THEMES

- 1. Impact on local communities
- 2. Responsible business conduct
- 3. Care for human capital

#### HOW WE ENGAGED

- Meetings, personal contact, email, telephone
- Conferences and exhibitions
- Creating New HORIZONS magazine
- Press releases and website

#### **SUPPLIERS**

#### MATERIAL THEMES

- 1. Care for human capital
- 2. Responsible business conduct
- 3. Impact on local communities

#### HOW WE ENGAGED

- Meetings, personal contact, email, telephone
- Implementation scans
- Conferences and exhibitions

#### TOPICS DISCUSSED

- Contract negotiations
- Aligning sustainable design and execution
- Project progress
- Stakeholder engagement on projects

#### **RESULT OF DIALOGUE IN 2016**

 Multiple projects were successfully executed for our clients in 2016. Please refer to our Annual Report for more information

#### TOPICS DISCUSSED

- Sustainability in the supply chain
- Contract negotiations
- Supplier Code of Conduct implementation scans
- Single supplier code of conduct for Dutch maritime sector

#### **RESULT OF DIALOGUE IN 2016**

- Result of implementation scans (see pages 58-59)
- Pilot audit tool for single supplier code of conduct for Dutch maritime sector (see pages 59-60)
- Edax biofuel pilot on Marker Wadden project (see pages 36-38)

APPENDIX

#### NGOs AND CIVIL SOCIETY ORGANIZATIONS

#### MATERIAL THEMES

- 1. Environmental impact
- 2. Impact on local communities
- 3. Care for human capital

#### HOW WE ENGAGED

- Meetings, personal contact, email, telephone
- Supporting events in kind and/or financially

TOPICS DISCUSSED

- Creating shared value in the value chain
- Social and cultural initiatives

**RESULT OF DIALOGUE IN 2016** 

- North Sea prototype test with The Ocean Cleanup (see page 20)
- Boskalis Beach Cleanup Tour with NGO The North Sea Foundation (see page 20)
- Vermeer exhibition at the Prinsenhof museum (see page 20)
- Local community education on Java project with Wetlands International (see pages 40-41)
- Workshop on export credit insurance led by NGO Both ENDS for Dutch government representatives
- Ocean Reef I sculpture in Panama

#### EMPLOYEES

#### MATERIAL THEMES

- 1. Environmental impact
- 2. Care for human capital
- 3. Responsible business conduct

#### HOW WE ENGAGED

- 25 consultation meetings between Works Council and Board of Management
- Corporate Plan meeting with senior management
- Frequent visits by Board of Management to projects and vessels
- Project visit by Supervisory Board
- Two senior staff meetings
- Training sessions
- Fleet staff contact days
- Dozens of NINA meetings and training sessions
- Four issues of Cohesion staff magazine
- Family days

### TOPICS DISCUSSED WITH THE WORKS COUNCIL INCLUDED AMONG OTHERS

- Acquisitions and divestments
- Fleet rationalization plan and associated social plan
- Competence Management Framework
- The company's financial and safety performance
- Market developments and strategy

#### **RESULTS OF DIALOGUE IN 2016**

- The Dutch Works Council rendered a positive advice on the fleet rationalization plan, the joint venture with Kotug, the acquisition of VolkerWessels' offshore-related activities and the cancellation of the voluntary large-company regime. The Works Council consented to the social plan as a result of the fleet rationalization plan and the adaption of the Boskalis pension scheme.
- The Dredging & Inland Infra division started a NINA impulse plan (see page 45)
- Roll-out of a Competence Management Framework started at the end of 2016
- 112,174 training hours

# HR DATA

The employees of joint ventures and the employees of Anglo Eastern, crew of the Dockwise vessels, are included in the overall reporting in view of this group's substantial size. However, these employees are not employed by a Boskalis majority owned entity and are not included in the detailed reporting.

#### NUMBER OF EMPLOYEES

	2016	2015
Boskalis	6,153	7,340
Anglo Eastern	807	928
Subtotal	6,960	8,268
Joint Ventures	4,773	n.a.
TOTAL	11,733	_

#### **COMPOSITION OF WORKFORCE**

TYPE OF CONTRACT

NUMBER OF EMPLOYEES BY COUNTRY	2016	2015
The Netherlands	3,444	3,555
Singapore	191	425
Belgium	496	590
South Africa	18	531
Philippines	368	439
UK	266	298
Nigeria	46	111
UAE	119	127
Brazil	35	59
Mexico	104	157
Other	1,066	1,048
TOTAL	6,153	7,340

AGE PROFILE	2016	2015
Age <30	13%	16%
Age 30 – 50	61%	55%
Age >50	<b>26</b> %	29%
TOTAL	100%	100%
COLLECTIVE BARGAINING	2016	2015

2010	2013
<b>62</b> %	62%
38%	38%
100%	100%
	62% 38%

	049/	0.5%
Fixed term/project based	24%	25%
Permanent/indefinite	76%	75%
TOTAL	100%	100%
WOMEN/MEN RATIOS	2016	2015
Women	11%	11%
Man _	89%	89%
TOTAL	100%	100%
FULLTIME/PARTTIME RATIOS	2016	2015
Fulltime	93%	94%
Parttime	7%	6%
TOTAL	100%	100%

2016

NATIONALITIES	2016	2015
Number of different nationalities	63	69

#### TRAINING

2015

TRAINING HOURS	2016	2015
	0.007	5 ( 00
Management	2,027	5,600
Office staff	21,281	24,730
Project staff	27,965	40,657
Crew/yard staff	60,901	58,516
TOTAL	112,174	129,503

#### RECRUITMENT

INFLOW BY AGE	2016	2015	
Age <30	379	389	
Age 30 – 50	1,162	845	
Age >50	362	220	
TOTAL	1,903	1,454	
OUTFLOW BY REASON	2016	2015	
Divestments	35%	11%	
End of project/contract	44%	57%	
Voluntary resignation	13%	18%	
Retirement/death	3%	6%	
Termination	<b>6%</b>	8%	
TOTAL	100%	100%	
OUTFLOW BY AGE	2016	2015	
Age <30	557	357	
Age 30 – 50	1,645	1,157	
Age >50	888	558	
TOTAL	3,090	2,072	

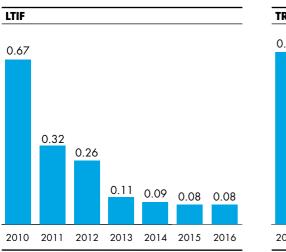
#### DEVELOPMENT

JOB CATEGORIES	2016	2015
Management	3%	2%
Office staff	31%	27%
Project/Site Staff	21%	19%
Workforce/Crew	45%	51%
TOTAL	100%	100%

JOB CATEGORIES WOMEN/MEN RATIOS		2016		2015
	WOMEN	MEN	WOMEN	MEN
Management	7%	<b>93</b> %	9%	91%
Office staff	31%	<b>69</b> %	33%	67%
Project staff	<b>6</b> %	<b>94</b> %	5%	95%
Crew/yard staff	1%	<b>99</b> %	1%	99%
TOTAL	11%	<b>89</b> %	11%	89%

JOB CATEGORIES BY AGE RATIOS			2016			2015
	<30	30 T/M 50	>50	<30	30 T/M 50	>50
Management	0%	45%	55%	1%	46%	53%
Office staff	11%	<b>66</b> %	<b>23</b> %	11%	63%	26%
Project staff	18%	61%	<b>21%</b>	21%	58%	22%
Crew/yard staff	13%	<b>58%</b>	<b>29</b> %	16%	51%	33%
TOTAL	13%	61%	26%	16%	55%	29%

#### LOST TIME INJURY FREQUENCY (LTIF) AND TOTAL RECORDABLE INJURY RATE (TRIR) BOSKALIS





74

				2016				2015
	TRIR	LTIF	HOURS (MILLION)	LTI'S	TRIR	LTIF	HOURS (MILLION)	LTI'S
Dredging & Inland Infra	0.83	0.10	15.06	7	0.83	0.09	19.6	9
Offshore Energy	0.41	0.04	14.00	3	0.37	0.05	11.8	3
SMIT Amandla Marine	0.19	0.09	2.15	1	0.44	0.07	2.71	1
Towage (Northwest Europe) & Salvage	4.30	0.99	0.60	3	2.15	0.09	2.33	1
Others & Fleet Management	0.61	0.05	3.96	1	0.42	0.14	4.3	3
GROUP TOTAL	0.66	0.08	35.77	15	0.70	0.08	40.8	17

#### **OVERVIEW OF CERTIFICATIONS BOSKALIS**

	ISO 14001	OHSAS 18001 OF VCA <sup>1)</sup>	ISO 9001
DREDGING & INLAND INFRA	-		
	✓	✓	1
OFFSHORE ENERGY	_		
SUBSEA CONTRACTING	✓	1	✓
MARINE CONTRACTING	🗸 (50%)	1	✓
SUBSEA SERVICES	✓ (50%)	✓ (75%)	1
MARINE SERVICES	✓ (33%)	✓ (33%)	✓
SALVAGE	_		
	-	_	1

1) VCA only for projects and activities carried out in the Netherlands, instead of OHSAS 1800

# INDEPENDENT VERIFICATION STATEMENT

To the Stakeholders of Royal Boskalis Westminster N.V.

#### Introduction and objectives of work

Bureau Veritas Inspection & Certification The Netherlands B.V. (Bureau Veritas) was engaged by Royal Boskalis Westminster N.V. (Boskalis) to provide limited assurance over selected performance indicators to be presented in its Corporate Social Responsibility Report 2016 ("the CSR Report"). This Assurance Statement applies to the related information included within the scope of work described below.

#### **Selected information**

The scope of our work was limited to assurance over the following Global Reporting Initiative (GRI) G4 indicators: EN15, G4-10, LA1, G4-11, LA6, LA7, LA9, LA10, LA11, LA12, SO1, HR10 for the period from 1st of January 2016 to 31st of December 2016 (the "Selected Information"). These indicators are published in the CSR Report.

#### **Limitations and Exclusions**

The scope of the verification work did not include information relating to activities outside the defined reporting period, statements of a descriptive or interpretative nature, or of opinion, belief, aspiration or commitment to undertake future actions.

This limited assurance engagement relies on a risk based selected sample of CSR data and the associated limitations that this entails. The reliability of the reported data is dependent on the accuracy of metering and other production measurement arrangements which is not addressed as part of this assurance. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

#### Responsibilities

The preparation and presentation of the Selected Information in the CSR Report are the sole responsibility of the management of Boskalis.

The responsibilities of Bureau Veritas were to:

- obtain limited assurance over the Selected Information;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Board of Management.

#### **Assessment Standard**

We performed our work in accordance with International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after December 15, 2015), issued by the International Auditing and Assurance Standards Board.

#### Summary of work performed

As part of our independent verification, our work included:

- 1. Conducting interviews with relevant personnel of Boskalis;
- Reviewing the data collection and consolidation processes used to compile the Selected Information, including assessing assumptions made, collection processes, and the data scope and reporting boundaries;

- 3. Reviewing documentary evidence produced by Boskalis;
- 4. Confirming the accuracy of a selection of the Selected Information to the corresponding source documentation;
- 5. Reviewing Boskalis systems for quantitative data aggregation and analysis;
- 6. Performing analytical procedures of the Selected Information;
- 7. Reperforming aggregation calculations of the Selected Information; and
- 8. Assessing the disclosure and presentation of the Selected Information to ensure consistency with assured information.

#### Conclusion

On the basis of our methodology and the activities described above nothing has come to our attention to indicate that the Selected Information is not fairly stated in all material respects.

#### Statement of Independence, Integrity and Competence

Bureau Veritas is an independent professional services company that specialises in quality, environmental, health, safety and social accountability with over 185 years history. Its assurance team has extensive experience in conducting verification over environmental, social, ethical and health and safety information, systems and processes.

Bureau Veritas operates a Quality Management System which complies with the international standards and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Bureau Veritas has implemented and applies a Code of Ethics, which meets the requirements of the International Federation of Inspections Agencies (IFIA)<sup>1</sup>, across the business to ensure that its employees maintain integrity, objectivity, professional competence and due care, confidentiality, professional behaviour and high ethical standards in their day-to-day business activities.

The assurance team for this work does not have any involvement in any other Bureau Veritas projects with Boskalis.

Bureau Veritas Inspection & Certification The Netherlands B.V.





Sebastiaan ter Horst, CER Director Benelux & UK Amersfoort, 7 March 2017

# GLOSSARY

**Backhoe dredger** A large hydraulic excavating machine positioned on the end of a pontoon. The pontoon is held firmly in place using spuds. Backhoes can dredge in a range of soil types with extreme precision.

**Ballast water** Ballast water in ships is used to improve depth, stability and strength when the ship is not fully loaded. Ballast water discharged by ships can have a negative impact on the marine environment.

**Building with Nature** Innovation program focused on the development of new design concepts for river, coastal and delta areas. The aim of the program is to investigate the best approach to strengthen the interaction between human activities and nature.

 ${\rm CO}_2$  Carbon dioxide is an odorless and colorless gas and exists in the earth's atmosphere. Carbon dioxide is a greenhouse gas.

**CSR Netherlands** CSR Netherlands is a network of Dutch companies, authorities and NGOs that are striving towards corporate social responsibility. More than 200 companies are affiliated with this networking organization.

**Cutter suction dredger** A vessel that dredges while being held into place using spuds and anchors. This technique combines powerful cutting with suction dredging. Cutter suction dredgers are mainly used where the sea- or riverbed is hard and compact. The dredged material is sometimes loaded into hoppers but is generally pumped to land through a pressure pipeline.

**Decommission** To dismantle and/or remove oil and gas rigs which have been taken out of service permanently.

**EBITDA** Group earnings before the result of associated companies, interest, tax, depreciation, amortization and impairments.

**EuDA (European Dredging Association)** Non-profit industry associaton for European dredging companies and related organizations.

EPC Engineering, procurement and construction services.

**Green valve** A system to exclude air bubbles from the excess water during the overflow from the hold of a trailing suction hopper dredger. The excess water contains fine sediment. Through the use of green valves the sediment more rapidly reaches the bottom, decreasing the turbidity in the water column.

HFO Heavy Fuel Oil.

**IADC (International Association of Dredging Companies)** Global umbrella organization for private dredging contractors.

**IMO** The International Maritime Organization is a specialized agency of the United Nations. The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for safe and substainable shipping.

**ISM-Code** International Safety Management Code for the Safe Operations of Ships and for Pollution Prevention: an international standard for compliance with safety regulations and the prevention of pollution on sea-going vessels. The ISM-code requires ship managers to implement and maintain a safety management system.

**ISO standard** Standards of the International Organization for Standardization; the global federation of national normalization organizations that issues

standard requirements for, amongst other things, quality management systems (ISO-9001) and environmental management systems (ISO-14001).

**LTI** Lost Time Injury expresses the number of workplace accidents serious enough to result in absence of work

LTIF Lost time Injury Frequence per 200,000 hours worked

LNG Liquefied Natural Gas.

MDO/MGO Marine Diesel Oil/Marine Gas Oil.

Net Group profit Net profit + net profit attributable to non-controlling interests.

NINA (No Injuries No Accidents) To achieve an incident and accident-free working environment Boskalis applies the NINA safety program. NINA sets out Boskalis' vision on safety and describes the safety conduct the company expects from its staff and subcontractors. The program makes people aware of their own responsibility and encourages them to take action to prevent unsafe situations.

Operating result EBIT - impairments including joint ventures.

**Order book** The revenue accounted for by parts of orders as yet uncompleted.

**Room for the River** The goal of the Dutch Room for the River Program is to give the rivers in the Netherlands more room to prevent flooding. At more than 30 locations, measures will be taken that provide safety and improve the quality of the immediate surroundings.

**Sustainable Development Goals** The Sustainable Development Goals are a set of seventeen goals with specific targets. Formulated by the United Nations through a deliberate process involving its 193 Member States as well as global civil society, the goals define the global sustainable development priorities and aspirations for 2030.

**Trailing suction hopper dredger** A self-propelled vessel that loads its well or hopper using centrifugal pumps and pipes that trail over the bed as the vessel sails. Trailing suction hopper dredgers can operate independently of other equipment and can transport material over long distances. The dredged material is dumped through flaps or bottom doors, by rainbowing, or pumped onto land using a pipeline.

**Transparency Benchmark** The Transparency benchmark is an annual research on behalf of the Dutch Ministry of Economic Affairs on the content and quality of corporate social responsibility reports of Dutch companies.

**TRIR** Total Recordable Injury Rate Number of LTI's, restricted work cases and medical treatment cases per 200,000 hours worked

**Turbidity** Turbidity is caused by churning up the sea- or riverbed during dredging activities, which reduces the incidence of light in the water; this can be temporarily detrimental to underwater animal and plant life.

**VCA** Safety, Health and Environment Checklist for Contractors applicable to our Dutch operating companies.

APPENDIX



Compiled and coordinated by Royal Boskalis Westminster N.V. Corporate Communications Department Group Controlling Department

www.boskalis.com





Royal Boskalis Westminster N.V.

Rosmolenweg 20 PO Box 43 3350 AA Papendrecht The Netherlands

royal@boskalis.com T +31 78 6969000

www.boskalis.com

