

# ANNUAL REPORT 2015



## ABOUT THIS REPORT

This annual report integrates a review of the business with financial and sustainability performance reporting. The report is designed to be read and distributed as a digital publication and the format, page layout and font sizes of the print report are optimized for this.

### Our purpose

To safeguard life, property and the environment

### Our vision

Global impact for a safe and sustainable future

### Our values

We build trust and confidence  
We never compromise on quality or integrity  
We are committed to teamwork and innovation  
We care for our customers and each other  
We embrace change and deliver results

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# TURNING RISKS INTO OPPORTUNITIES

In 2015, we once again took the lead in helping our customers in the maritime, oil and gas, renewable and power sectors set new benchmarks of safer, smarter and greener performance in their industries. We also strengthened our ability to assure the value chain of companies across a wide range of industries - helping them build trust and confidence with their stakeholders.

I am proud to have taken over as the new President & CEO of DNV GL. Driven by our purpose of safeguarding life, property and the environment I am passionate about quality and delivering excellent service to our customers.

With two of our core markets, maritime and oil and gas, facing challenging times, I am nevertheless satisfied with the financial performance we achieved in 2015. However,

I foresee challenging conditions persisting for at least the next two years, including slower global economic growth, a low oil price and overcapacity of shipping tonnage. In DNV GL, we have taken measures to cut costs, increase our efficiency by working smarter, and right-size the organization in line with lower activity levels in some markets.

Tough market conditions also present opportunities for DNV GL to assist customers to innovate, standardize and reduce complexity. Moreover, I am pleased to see robust performance in segments less dependent on the oil price, and I am eager to implement our new strategy to pursue digitalization opportunities for new, smarter and more efficient services and growth opportunities within markets such as energy and life sciences.

**NEW DNV GL RULES.** We reached many of our goals in 2015. The merger integration has progressed according to plan and is successfully nearing completion, creating synergies

of scope, scale and skills across the company. This will further strengthen our leading position in our chosen industries and enable us to better serve our customers.

A major achievement in 2015 was the completion of our new ship and offshore Classification Rules, which came into effect on 1 January 2016. We promised our customers that the merger of DNV and GL would result in the best basis for them to design, construct and operate their vessels. Few companies are given the opportunity to have a fresh look at the core of their operations. By involving 250 of our own experts along with more than 800 customers and maritime stakeholders, we grabbed the opportunity.

I am confident that we delivered on our promise and that ship owners, yards, ship designers, manufacturers and other maritime stakeholders worldwide will embrace the modern class rules as the new industry benchmark.



In a difficult oil and gas market, we secured two mega-projects and additional strategic projects for the midstream market. Our energy business delivered strong results in North America and good growth in Scandinavia, and we are reinforcing our position as a leading certification and advisory company within renewable power, as well as in power grids and energy use. Our Business Assurance entity enhanced its position through data smart solutions and is developing new positions within life sciences. Software has become a separate business area and has strengthened its sales performance, reduced its cost base and further developed its digital ecosystem. All business areas - and Group IT in particular - have taken action to prepare for our digital transformation.

**LEADING THE WAY TOWARDS A DIGITAL, AGILE AND EFFICIENT FUTURE.** Our 2016-2020 strategy sets the ambition and direction for DNV GL for the next five years - how we will tackle challenging markets and at the same time create new opportunities. I am confident that our new strategy will help us excel in our existing domains, as well as develop new positions through new services, industries and geographies.

**“ I AM CONFIDENT THAT WE WILL CONTINUE TO IMPROVE AND DEVELOP AS AN ORGANIZATION, AND ENABLE OUR CUSTOMERS TO TURN A BROADER SPECTRUM OF RISKS INTO OPPORTUNITIES.**

The strategy also outlines our continued strong commitment to invest in R&D and innovation to maintain and enhance our leadership position in many fields of expertise. We will continue to strive for standard-setting roles and to drive industry development through joint industry collaboration.

At the same time, we will be making changes. I have placed a strong focus on serving customers with a higher degree of pro-activeness, responsiveness and efficiency. We will also increase the use of digital solutions to offer better services, generate new revenue streams and streamline processes internally.

**SUSTAINABILITY AT THE CORE OF BUSINESS.** Society has new expectations for companies. This was demonstrated at the COP21 climate agreement in Paris, which raised ambition levels on action for all stakeholders. It is clear that the industries in which we operate will be challenged with stricter safety, environment and broader sustainability requirements stemming from not only regulators, but also increased customer expectations. I see great business opportunities for DNV GL in this demand for increased transparency and in the ongoing transition to a low-carbon society.

We remain committed to making a positive impact on society - doing the right things and doing things right. Our support for the UN Global Compact principles continues, and we are working to deliver on the UN's 17 new sustainable development goals together with customers and partners.

The safety of our employees comes first in DNV GL and we have high expectations for our performance in this area. I am proud to see the broad engagement in our safety culture programme across the organization and for our new goal of becoming carbon neutral in relation to our travel and office buildings by 2020.

We continue to outperform the high-performance norm for the engagement and enablement of our employees. Our 2015 people engagement survey results showed improvements in prioritized areas, but also pointed to areas for further focus in 2016, including those related to 'clarity and direction'. I take it as a personal challenge to improve on those results, in line with my belief in the power of highly skilled and engaged people working towards the same goal.

We have a key role to play in managing risks in the new business reality facing our customers, and we have the skilled people, relevant multi-disciplinary services and global presence to make an impact. I am confident that we will continue to improve and develop as an organization, and enable our customers to turn a broader spectrum of risks into opportunities.



Remi Eriksen, Group President & CEO



## Setting the new benchmark for classification

We introduced a completely new set of classification rules - our technical standards for ships and offshore structures. Developed from the combined expertise gained from over 150 years of operation, they represent the most comprehensive and modern rule set for the maritime and offshore oil and gas industries. 30,000 pages of technical documents have been improved and we consulted with more than 800 industry players to boost the market relevance and ease-of-use of our rule set.



## Appointment of a new Group President & CEO

On 1 August 2015, Remi Eriksen became Group President & Chief Executive Officer of DNV GL. He replaced Henrik O. Madsen, who retired after having led the company since 2006.

Remi Eriksen's solid track-record in leadership positions within the company for two decades includes international experience from the oil and gas, maritime and renewable energy industries, in Asia, Europe and the Americas. His latest role was as Group Chief Operating Officer, where he led the merger integration of DNV and GL.



## Strategy for an agile, efficient and data smart future



Our new strategy for the period 2016–2020 sets the direction for reinforcing our leading positions in the maritime, oil and gas, and energy industries. It will also help us create new positions through new services, industries or increased geographical presence. In particular, this strategy emphasizes the strengths that the merger has given us to leverage our scale and to broaden and enhance our service scope. A key theme for the strategy is digitalization – enabled by developments in sensor technology, connectivity, cloud technologies, data analytics and Internet of Things. The strategy will guide us in taking advantage of opportunities that will emerge and in defending against threats.

## UN Global Compact: impact assessment delivered

In June, DNV GL presented our assessment of the UN Global Compact’s first 15 years to the UN Secretary General Ban Ki-moon and more than 1,000 top executives at the UN General Assembly in New York. In addition to assessing the impact of the Global Compact, the report provides unique insight into business risks and opportunities related to sustainability through a comprehensive analysis of market drivers, trends and roadmaps, and industry-specific frameworks.



## Adapting to challenging markets

A broad range of cost-efficiency and right-sizing measures were implemented during the year to respond to challenging situations in our core markets. The number of employees was reduced by 750 during the year – mainly through recruitment freeze, natural turnover and voluntary resignations.

Synergies from the DNV and GL merger were captured as planned. Approximately 95% of the merger integration activities were completed by the end of 2015, creating more value to customers in terms of a denser and wider network of skilled technical experts and a broader and better set of services.

Despite challenging market conditions, we continued our commitment to invest 5% of our annual revenue in research and innovation projects to help customers become safer, smarter and greener. We are focusing half of these investments on digital innovations and one fifth is dedicated to long-term strategic research.

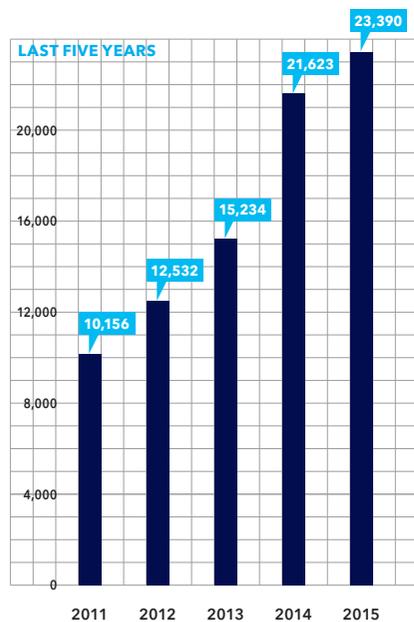


# KEY FIGURES

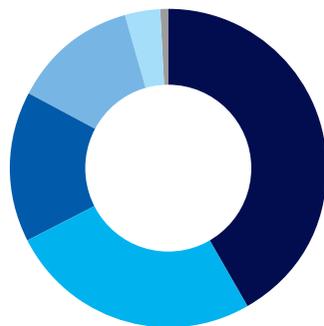
**2013:** DNV Group and GL Group merged with effect from 1 October.  
**2012:** Key figures for 2012 have been restated to reflect the demerger of DNV Petroleum Services and the real estate companies in Norway (effective 1 Jan. 2013).  
**2009-2011:** Key figures for the years 2009-2011 are in line with financial figures as presented in the audited financial accounts of Det Norske Veritas Group AS for these years.

## REVENUE (MILLION NOK)

# 23,390



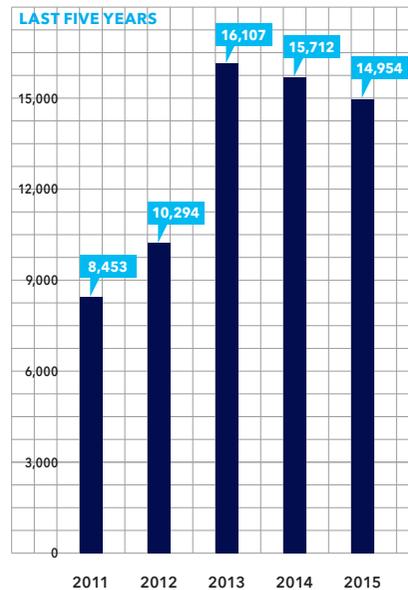
### PER BUSINESS AREA



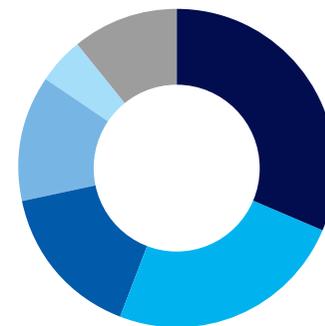
- MARITIME 9,790
- OIL & GAS 6,054
- ENERGY 3,523
- BUSINESS ASSURANCE 3,024
- SOFTWARE 824
- OTHER 175

## NUMBER OF EMPLOYEES

# 14,954



### PER BUSINESS AREA



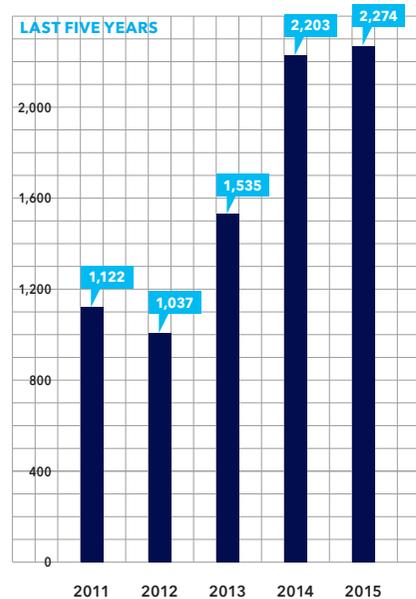
- MARITIME 4,702
- OIL & GAS 3,671
- ENERGY 2,347
- BUSINESS ASSURANCE 1,915
- SOFTWARE 739
- OTHER 1,580



# KEY FIGURES

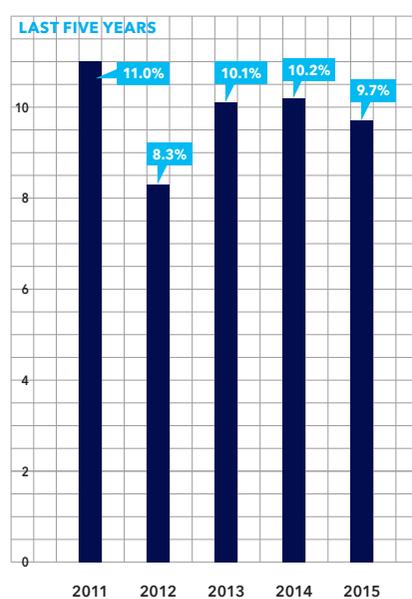
## EBITA (MILLION NOK)

# 2,274



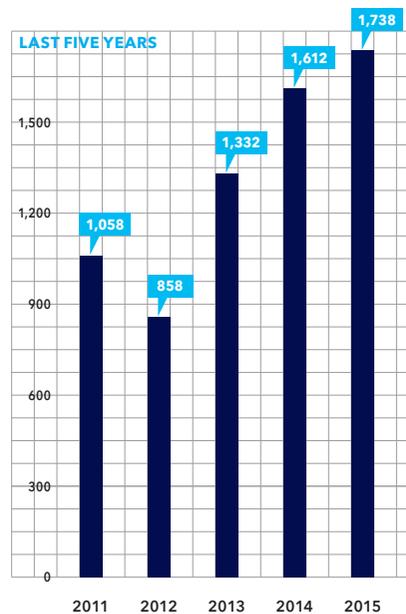
## EBITA MARGIN (%)

# 9.7%



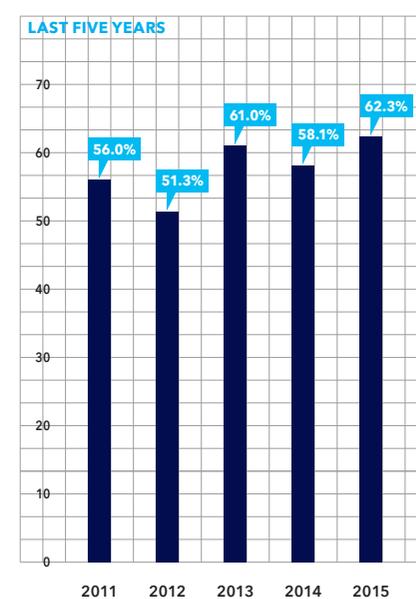
## EBIT/OPERATING PROFIT (MILLION NOK)

# 1,738



## EQUITY RATIO (%)

# 62.3%



# WHO WE ARE

DNV GL is a world-leading classification society and risk management company, driven by our purpose of safeguarding life, property and the environment. We enable organizations to advance the safety, efficiency and sustainability of their business.

Our origins stretch back to 1864, and our reach today is global. Operating in more than 100 countries, our 15,000 professionals are dedicated to helping customers make the world safer, smarter and greener.



In this section:

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Worldwide presence

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Main services

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Organization

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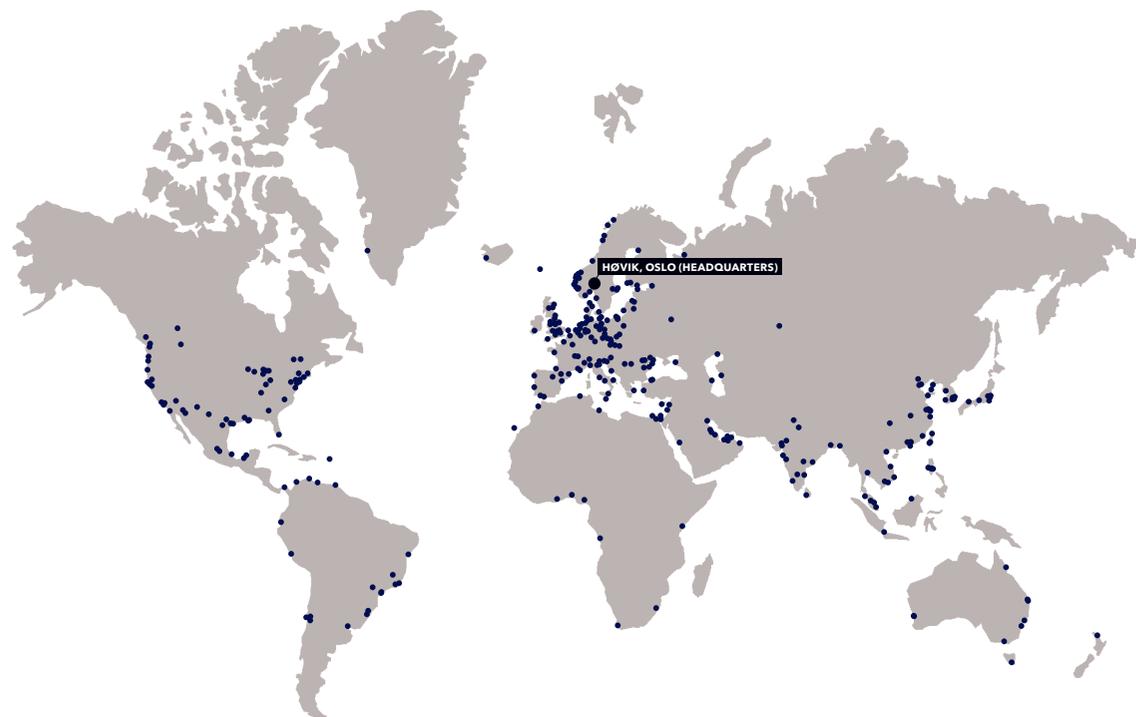
Executive Committee

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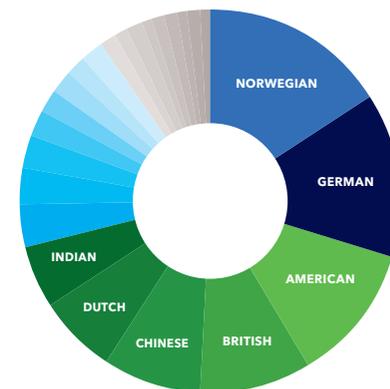
History

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# 1 WORLDWIDE PRESENCE



→ EMPLOYEES BY NATIONALITY AS PER 31.12.2015



● Norwegian	2,165	● Danish	252
● German	1,847	● Malaysian	246
● American	1,594	● Spanish	239
● British	1,268	● Swedish	190
● Chinese	1,118	● French	179
● Dutch	885	● Japanese	160
● Indian	718	● Canadian	141
● Korean	495	● Mexican	139
● Italian	405	● Egyptian	137
● Polish	373	● Australian	132
● Brazilian	313	● Greek	127
● Singaporean	259	● Indonesian	102

Nationalities > 100 shown in table  
Nationalities > 700 shown in pie chart

→ CUSTOMERS

80,000+

→ ESTABLISHED

1864

→ OFFICES WORLDWIDE

350 

→ COUNTRIES

100+ 



## MARITIME

We help enhance the safety, efficiency and sustainability of our customers in the global shipping industry, covering all vessel types and mobile offshore units.

### SERVICES INCLUDE:

- » Classification of ships and mobile offshore units
- » Certification of materials and components
- » Technical, safety, business risk and environmental advisory services
- » Training and competence-related services



## OIL & GAS

From the drawing board to decommissioning, we provide technical advice to enable oil and gas companies to enhance safety, increase reliability and manage costs in projects and operations.

### SERVICES INCLUDE:

- » Risk management advisory
- » Technical advisory
- » Noble Denton marine services
- » Technical assurance
  - Certification and verification
  - Inspection services



## ENERGY

We support our customers across the electric power value chain in ensuring reliable, efficient and sustainable energy supply.

### SERVICES INCLUDE:

- » Power testing, inspections and certification
- » Renewables advisory services
- » Renewables certification
- » Electricity transmission and distribution advisory services
- » Energy efficiency services



## BUSINESS ASSURANCE

We help customers in all industry sectors build sustainable business performance and create stakeholder trust.

### SERVICES INCLUDE:

- » Management system certification
- » Product assurance
- » Supply chain assessment and assurance
- » Sustainability strategy and reporting
- » Certification of persons
- » Training services
- » Food & beverage certification and assessment
- » Healthcare accreditation and assessment

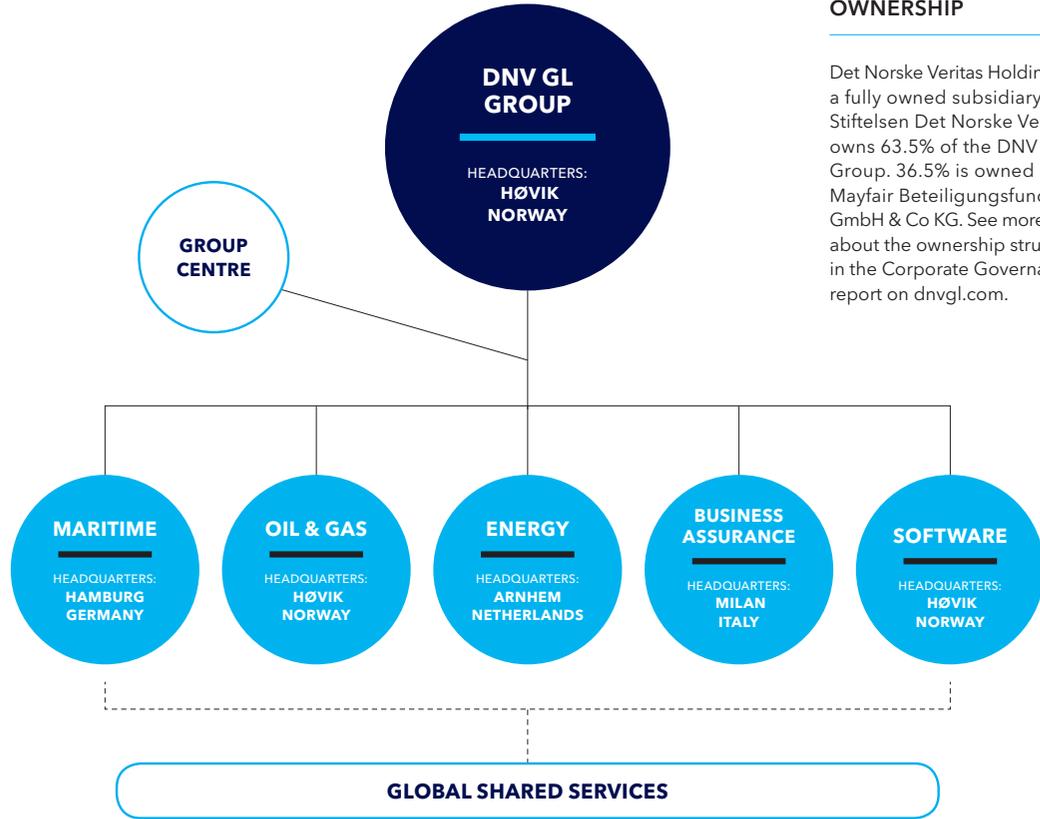


## SOFTWARE

Our software solutions are based on our broad domain competence and developed to improve our customers' operational efficiency and business optimization.

### PRODUCTS INCLUDE SOFTWARE FOR:

- » Design and Engineering
- » Process safety, Risk and Reliability
- » Asset Integrity and Performance
- » Asset Simulation and Optimization
- » Ship Management and Operations
- » QHSE and Enterprise Risk
- » Ship and Offshore Class
- » Electric Grid, Reliability and Performance



## OWNERSHIP

Det Norske Veritas Holding AS, a fully owned subsidiary of Stiftelsen Det Norske Veritas, owns 63.5% of the DNV GL Group. 36.5% is owned by Mayfair Beteiligungsfunds II GmbH & Co KG. See more details about the ownership structure in the Corporate Governance report on [dnvgl.com](http://dnvgl.com).

## GROUP STRUCTURE

DNV GL is structured into five business areas, a Global Shared Services organization and a Group Centre. In 2015, Software became the fifth business area, after previously being organized as an independent business unit with a separate Board. Another independent business unit, Marine Cybernetics, became part of the Maritime business area per 1 January 2016.

Global Shared Services provides HR, Finance and IT support services to all business areas and Group Centre functions. A new Group Centre function called Group Development was established to include strategic planning, M&A, business development, research and technology, corporate sustainability, IT governance and external communications.

## MANAGEMENT

The Executive Committee is the Group President & CEO's management team. It deals with issues and decisions related to strategy, markets and customers, target setting, financial development, investments, performance management, mergers and acquisitions, pricing strategy, and major management appointments.

As of 1 November 2015, the Executive Committee was reduced from 11 to nine people. It includes the CEOs of the business areas, the Chief Financial Officer, Chief HR Officer and Chief Group Development Officer.

In 2015, a new CEO was appointed for the Maritime business area, and in the first quarter of 2016 a new CEO was appointed for the Energy business area.

 [dnvgl.com/about-dnvgl](http://dnvgl.com/about-dnvgl)

# 1 THE EXECUTIVE COMMITTEE



**REMI ERIKSEN**

**Group President & CEO**

Norwegian. Joined DNV GL in 1993



**CECILIE B. HEUCH**

**Chief HR Officer**

Norwegian. Joined DNV GL in 2004



**THOMAS VOGTH-ERIKSEN**

**Chief Financial Officer**

Norwegian. Joined DNV GL in 1988



**DAVID WALKER**

**Chief Group Development Officer**

British. Joined DNV GL in 2007



**KNUT ØRBECK-NILSSEN**

**CEO Maritime**

Norwegian. Joined DNV GL in 1990



**ELISABETH TØRSTAD**

**CEO Oil & Gas**

Norwegian. Joined DNV GL in 1995



**DITLEV ENGEL**

**CEO Energy**

Danish. Joined DNV GL in 2016



**LUCA CRISCIOTTI**

**CEO Business Assurance**

Italian. Joined DNV GL in 2001



**ARE FØLLESDAL TJØNN**

**CEO Software**

Norwegian. Joined DNV GL in 1992, rejoined in 2009

# 1 HISTORY

1864

Det Norske Veritas (DNV) is established by Norwegian insurance companies as a national alternative to foreign classification societies.

1867

Germanischer Lloyd (GL) is founded in Hamburg by a group of 600 shipowners, shipbuilders and insurers.



1870

Steamships are introduced in the 1870s, and most of the sail ships are phased out by the 1920s.

1872

Samuel Plimsoll starts the process leading to the compulsory load lines on every British ship, put into force in 1891.

GL Headquarters moved to Berlin, where they will remain until 1945.

1883

Norway has the third-largest fleet in the world, measured in registered tonnage.



1888

First DNV surveyor stationed in China.

1893

GL adds its first motorized ship, the gaff schooner Frieda, to the registry.

1900

Close to 100% of the DNV-classed ships were owned by Scandinavian shipowners.



1912

Following the Titanic disaster, safety at sea becomes the subject of increasing public concern.

1914



The first International Convention for the Safety of Life at Sea (SOLAS) is adopted.

GL has some 10% of the world's merchant fleet in class.

1920

From 1920 to 1940, diesel engines are introduced as propulsion on new ships. DNV is quick to adopt this new technology and 'engineering surveyors' are recruited.

1927

KEMA is established as the Dutch electricity industry's Arnhem-based test house by provincial and large municipal authorities that own electricity companies and a number of private power generators.

1927

Working as part of the Association of International Registers, GL adds the classification of non-military aircraft to its activities. This lasts until the end of the Second World War.

1938

As the Netherlands' electricity infrastructure continues to develop, KEMA grows with it. In the 1930s, a short-circuit lab is built to carry out tests at high voltages.



1940

During the Second World War, DNV is divided in two; one half in Newcastle, UK, and one half in occupied Norway. This leads to close cooperation with Lloyds Register that lasts until 1952.

1945

A provisional GL headquarters is established in Hamburg, following the loss of the Berlin HQ.



1948-49

1949: The decision to return to Hamburg is made permanent.

1948: The International Maritime Organization (IMO) is created.

1951

Georg F. Vedeler is appointed managing director of DNV. He introduces a scientific approach to ship construction. His vision is to build safer ships in a more profitable way.

1953

As the first classification society to do so, DNV publishes new rules, based on an analytical and theoretical scientific approach.



1954

DNV takes a significant and pioneering step by establishing a dedicated research department.

1964

DNV is finally united in one headquarters. The DNV fleet grows to almost 20 million gross tonnes (GT), twice as much as in 1960.

GL is the first classification society to develop rules, new test methods and a class notation AUT for unattended machinery spaces.

1967

The golden age for both shipping and DNV. The internationalization and expansion of the Society take off.



1968

Formation of IACS in Oslo, GL holds the chairmanship for the first two years of the association's existence.

1969

KEMA starts to build a new lab, still known today as the world's biggest short-circuit laboratory.

# 1 HISTORY

1970

DNV enters the oil business, in both the offshore installations and cargo sectors, including pipelines and vessels. This develops into a new important market.



1970-76

GL begins to provide technical services to the oil and gas industry, including assessing the design and supervising the installation of the 'Nordsee' offshore research platform and the first German oil platforms.

1975

The Berge Istra (1975) and Berge Vanga (1979) accidents occur.



1977

Wind energy services are first added to GL's portfolio.

1978

DNV becomes an independent foundation.

1980

The Alexander Kielland platform disaster in the North Sea. Regulations are subsequently improved.

1984

Based on analysis harnessing the increasing power of computers, GL introduces the COLL notation, the first which indicates the collision resistance of a ship.

1989-90

The fall of the Berlin Wall unites the East German class society DSRK, founded after the separation of Germany, with GL.

1990

The ISO standards are introduced and DNV quickly grows its management system certification activities.

KEMA expands its activities internationally and acquires ABB's Powertest Laboratory in Chalfont, in the US.

1992

DNV acquires Technica, a pioneer in the development of quantitative risk analysis and provider of the software tool Safeti.

2004

DNV becomes the first company to be accredited by the United Nations Framework Convention on Climate Change to validate climate change mitigation projects under the CDM (Clean Development Mechanism) scheme.



2004

Risk Based Certification introduced, representing a revitalisation of management system certification.

2005

DNV acquires Cortest Columbus Technologies (CCT) - a specialist in corrosion control, pipeline and plant integrity analyses and material evaluation for the pipeline industry.

2007-09

GL acquires Helimax, Windtest and merges with Garrad Hassan, creating the world's largest renewable energy consultancy.

Gas consultancy Advantica is also acquired by GL.

2008

DNV acquires Global Energy Concepts, a US-based wind power consulting firm with 95 employees.



2008

DNV approved to accredit hospitals in the US.

2009

GL acquires Noble Denton. KEMA acquires Gas Engineering Services from Gasunie and sells part of its testing and certification activities to the German company DEKRA.

2010

The launch of GL Noble Denton, formed after the merger of GL with Noble Denton, an independent oil and gas technical advisor.

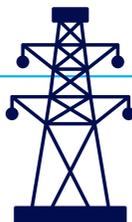


2010

DNV opens the Clean Technology Centre in Singapore.

2011

DNV acquires KEMA, creating a world-leading consulting and certification company within cleaner energy, sustainability, power generation, transmission and distribution.



2011

DNV submits a report containing the conclusions of its forensic examination of the Deepwater Horizon blowout preventer.

2012

DNV and GL announce the merger agreement.



2013

On 12 September, the DNV and GL merger is official. The first-ever merger of two global classification societies. Stiftelsen Det Norske Veritas becomes the majority shareholder with 63.5%, while Mayfair Vermögensverwaltungs SE holds the remaining 36.5%.

2014

The company marks its 150th anniversary and first year as DNV GL. It is established as a leading global technical assurance and advisory company within the maritime, oil and gas and power sectors and a world-leading certification body.

2015

A completely new set of classification rules for ships and offshore units is released, combining the best of DNV and GL and modernizing and simplifying the rules.



# WHAT WE DO

We assist our customers in identifying, assessing and managing their most critical risks. We enhance their business performance by assessing and advising on safety, quality, technology, business and sustainability aspects.

We certify or verify compliance with standards, rules and regulations and thereby perform a balancing act between business and society. We also set standards and best practices and innovate together with our customers to make them safer, smarter and greener.

## In this section:

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Maritime

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Oil & Gas

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Energy

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Business Assurance

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Software

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Research & Innovation

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Sustainable solutions

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# LAUNCHING THE FUTURE OF CLASSIFICATION

The future of the maritime industry is looking like it will be very different from the past. Competition is intensifying and there is a rising tide of regulations. DNV GL is working to make sure our customers have a partner that can meet their needs in today's tough marketplace, without missing the opportunities and challenges of the future.



**T**he finalization and publication of our new classification rule set was one of the most important achievements for DNV GL in 2015.

One of the most significant advances in the new rules is the introduction of Equivalent Design Waves (EDW) to calculate environmental loads. EDW enables a more accurate representation of these loads and consequently a more precise stress description of a vessel's structure.

In terms of the overall design and classification process, the new rules are designed to enhance customers' experience of working with us, so we have brought all vessel-related requirements together in one place. As an easy entry point to a new design, 38 Ship Type Class Notations have been defined, while documentation and certification requirements are clearly summarized in all parts of the rules.

# 600+

**VESSELS** have signed on to the ECO Insight fleet performance management solution since its launch in January 2015.

The year was capped with the signing of the first newbuildings to be constructed to the new rule set – two LNG dual-fuelled bulk carriers for ESL Shipping. Due for delivery in early 2018, the two highly efficient 25,600 dwt vessels are optimized for trading in the Baltic Sea region and will also be the first large bulkers to operate using LNG as a ship fuel.

**NEW CEO WITH A NEW STRATEGY.** In August, Knut Ørbeck-Nilssen succeeded Tor E. Svensen as Chief Executive Officer of the Maritime business area. Tor E. Svensen took on the role of Group Executive Vice President. A 25-year veteran with DNV GL, Knut Ørbeck-Nilssen has outlined a strategy built around customer-centricity, improved safety at sea, delivering quality, increased digitalization, process efficiency and technological leadership.

# 2,000

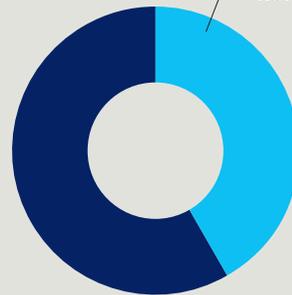
**DETAILED COMMENTS** on our new class rules were submitted by more than 800 yards, manufacturers, owners, academics, and flag states, resulting in 700 modifications.



**REVENUE:**  
MARITIME'S  
SHARE OF  
TOTAL  
(23,390)

# 9,790

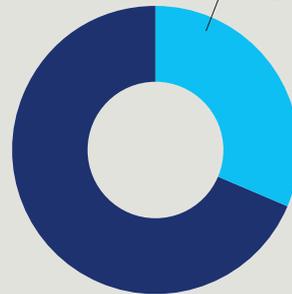
NOK MILLION



**EMPLOYEES:**  
MARITIME'S  
SHARE OF  
TOTAL  
(14,954)

# 4,702

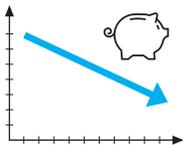
EMPLOYEES



# BATTERIES ON BOARD

(or how electrification can help shipping become more efficient and shrink its environmental footprint)

## Battery costs falling rapidly

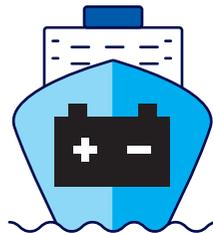


Prices for Li-Ion auto batteries have plummeted. From \$750 in 2010 to \$145 at the end of 2015 (US\$/kWh).

## Engine efficiency



50%



95%

WORLD'S FIRST LARGE ELECTRIC FERRY, AMPERE



34

crossings per day

50% less energy usage



10 minutes charging time

Putting a battery on board a ship reduces 10 times as much CO<sub>2</sub> as putting one in a car



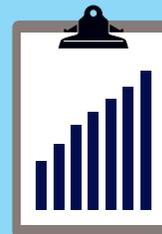
10x



Many countries already generate electricity with CO<sub>2</sub> emissions equivalent or lower than a diesel generator



## BATTERY OR HYBRID VESSELS ON ORDER OR IN OPERATION



2015

50

2020

200

(EXPECTED)



One-third classed by DNV GL

**BUILDING UP GREECE.** The Greek shipping community is the biggest in the world, with owners from the region spending more than USD 7.1 billion in second-hand vessels and newbuilding resales in 2015, roughly one-quarter of all spending. To support our many customers in the region, DNV GL decided to expand the responsibilities of the Piraeus office.

A number of initiatives are being introduced, including: fleet in service approvals to be carried out in Piraeus, DNV GL's new DATE (Direct Access to Technical Experts) service will also be delivered from Piraeus, the existing research and development team will expand and a Chief Surveyor will be allocated to the office. Furthermore, a global network of Greek speaking surveyors will be introduced. The result will be enhanced services to the local shipping community, boosted response times, and strengthened responsibilities and capabilities in the region.

**DIGITALIZATION - CREATING DATA SMART ORGANIZATIONS.** Data smart shipping to leverage and capitalize on opportunities today and in the future is a key part of our strategy. It is not only about generating new big sets of data, but about using and managing already available data in a smart way.

The centrepiece of this strategy for our customers was the launch to market of the ECO Insight platform, a comprehensive and easily accessible way to manage fleet performance, including voyage, hull and propeller, engine and systems performance. A dedicated unit was also established to help customers fast track their implementation of the new platform.

Also, the *My DNV GL* web-portal now offers customers easy access to digital services as well as exclusive information. Customers can order surveys and audits, have an overview of certificates and reports, download survey preparation notes, manage ISM audits and receive automatic alerts and class status reports, all while having full control of users and vessel access.

At our annual Innovation Day, DNV GL showcased some of the innovations to come, including IRIS - a camera and tracking system for inspectors or surveyors working inside tanks which can be used to automatically link photos taken by the surveyor with a 3D model of the vessel - and COSSMOS - a tool, which can simulate and optimize complex and integrated ship machinery systems.

## OTHER ACHIEVEMENTS IN 2015

- **Drones.** DNV GL has completed several tests using drones to support the hull survey of vessels at the Remontowa shipyard in Gdansk, Poland. Using drones to visually check the condition of remote structural components could significantly reduce survey times and staging costs, while at the same time improving safety.
- **Liquefaction Guideline.** DNV GL published a guideline for the design and operation of vessels with bulk cargo that may liquefy. A number of recommendations to reduce the risk of liquefaction in daily operation are made, as well as design guidelines that examine the potential of carrying cargoes with high moisture content onboard specially constructed or fitted ships.
- **Green Coastal Shipping Programme.** DNV GL took the lead in the Norwegian government's Green Coastal Shipping Programme. Winner of the HPH Environment Award at the Lloyd's List Global Awards, the programme aims to create the world's most environmentally-friendly coastal fleet. Five pilot projects were launched covering several different ship types and supporting infrastructure, with an emphasis on alternative fuel concepts.

# CUTTING COMPLEXITY TO REDUCE INDUSTRY COSTS

Falling oil prices and escalating costs affected all aspects of the oil and gas value chain in 2015. Cost management became the primary focus, and industry players across the sector took painful, short-term cost-cutting measures by reducing capital expenditure and headcount, and squeezing the supply chain.



Supporting our customers in realizing cost efficiencies in their projects and operations, while maintaining safety and reliability, continued to be the key priority for our Oil & Gas business area in 2015. DNV GL believes that real change is now needed through cutting complexity, increasing collaboration and driving standardization. These measures will enable the industry to adjust to the new reality and put it on a sustainable growth path for the long term.

**DRIVING EFFICIENCY THROUGH INNOVATION.** DNV GL is calling for industry players to use the current market downturn to leverage cost reductions. While short-term adjustments are necessary, the key objective is to permanently remove inefficiencies from value chains and create simpler systems. In 2015, we continued to invest 5% of our annual revenue in research and innovation, providing a neutral ground for industry collaboration, knowledge-sharing and standard-setting.

**18** LABORATORIES across three continents offer advanced testing capabilities, technical expertise and standards, helping customers apply technology safely, efficiently and cost-effectively.

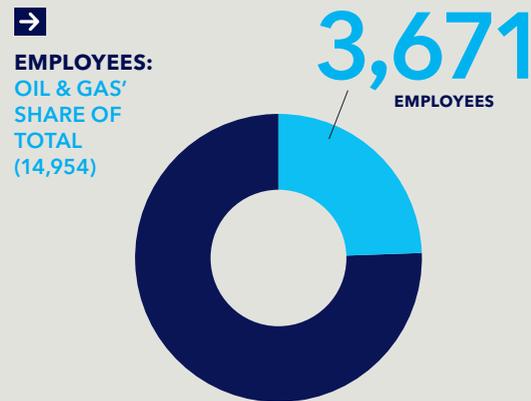
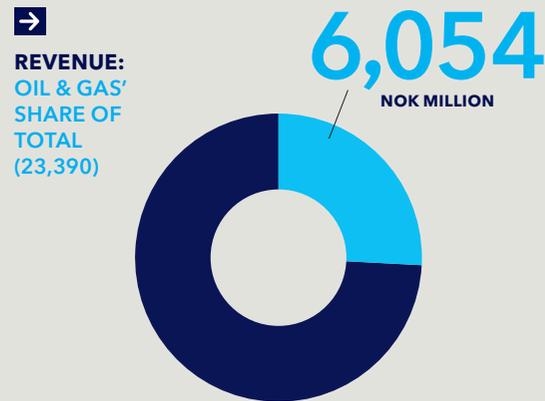
This has led to the publication of several recommended practices; promoting greater industry safety, sustainability and cost efficiency.

As an example, our new Recommended Practice on steel forgings for subsea applications (DNVGL-RP-0034) provides the sector with a harmonized standard for carbon and low-alloy steel forgings. It will reduce industry cost and complexity by enabling reduced lead times, enhanced stock keeping and interchangeability of forgings, and help to improve and maintain consistent quality.

As the new EU Offshore Safety Directive comes into force, we are also supporting efficient industry compliance through another new Recommended Practice (DNVGL-RP-G104). This guides customers through the mandatory requirement for operators to identify major environmental incidents, and associated safety and environmental critical elements.



Our network of laboratories can cycle full-scale components to fatigue failure, facilitating life extension. Our facilities mimic all relevant corrosive conditions such as sea water, H<sub>2</sub>S and CO<sub>2</sub>.



**READY FOR OPERATIONS.** As oil prices remain lower for longer, efficient project management plays a significant role in preparing to bring field development projects into the operational phase. We supported Lundin Norway in its efforts to bring the Brynhild development online offshore Norway, developing a 'ready for operation' roadmap for the company's journey to first oil. This identified a set of common activities to be carried out in the planning for operations, ensuring that all statutory and regulatory requirements are met.

DNV GL is also assisting Total E&P Norge with cyber security risk management for the Martin Linge field development. The project includes day-to-day coordination of cyber security during preparations for operation, with a specific focus on integrated control and safety systems. The initiative also aims to raise awareness of cyber security risks and to train personnel to take simple preventative measures.

In Australia, we won a contract to support INPEX in the operational phase of its Ichthys LNG project. Experts from offices in seven countries provided vendor inspection, verification and offshore classification support to the USD 34 billion mega project since 2012. This latest contract will see DNV GL continue to provide expertise with in-service verification and classification services as the project transitions into operation in 2017.

DNV GL RESEARCH:

## THE OUTLOOK FOR THE OIL AND GAS INDUSTRY IN 2015

ABOUT THE RESEARCH

367



senior professionals across the global oil and gas industry were surveyed

18



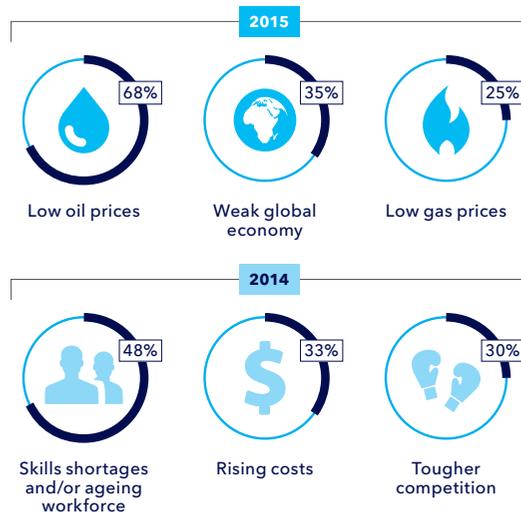
in-depth interviews with a range of experts, business leaders and analysts

37%



of respondents are oil and gas operators

### TOP THREE BARRIERS TO GROWTH



### PRIORITIES FOR IMPOSING STRICTER COST CONTROLS IN 2015



Source: A Balancing Act: The outlook for the oil and gas industry in 2015. Download at: [dnvgl.com/balancingact](http://dnvgl.com/balancingact)

### **REDUCING DOWNTIME, SUPPORTING SAFER AND LONGER LIFE SPANS.**

Retrieving an unreliable blowout preventer (BOP) is a necessary but expensive operation, costing upwards of USD 1 million. It is also the main cause of downtime during drilling activity. Our R&D Centre in Rio de Janeiro, Brazil, has developed a real-time, risk-informed (BOP) retrieval decision support tool. BOP-RDT enables operators to determine the right time to retrieve a BOP for repair after component failure has been detected.

Life extension of ageing offshore structures is also an increasingly important issue, as operators look to maintain asset integrity, safety and productivity while constraining operational expenditure. In the Middle East, we have worked with several customers, including ADMA-OPCO, to implement controlled approaches to asset integrity management and structural integrity management systems. Our 'missing data methodology' helps to address the absence of historic data, a common challenge for operators in the region.

Our work to support safe and reliable operations also extends onshore, and DNV GL is a leader in complex failure and forensic investigation across the world. In North America, we are contributing to enhanced pipeline safety by investigating the majority of major onshore pipeline failures in the region, bringing the learnings from such incidents back to the industry to prevent similar incidents from occurring.

Our Materials and Corrosion Technology Center in Ohio, the US, combines incident investigation with technology development, integrity management, advanced risk assessment methodologies and corrosion management to provide asset integrity services to customers across the Americas. Our laboratories bring together advanced testing with technical expertise and deep-seated knowledge about industry standards to help our customers apply technology safely, efficiently and cost-effectively.

**THE FUTURE OF GAS.** DNV GL believes that gas can play an important role in the transition towards an available, affordable and clean energy supply. In 2015, our downstream gas specialists secured funding through the UK Energy Regulator and British gas distribution operator SGN for a project to demonstrate the viability and practical reality of real-time management of a gas network of the future. The work could radically change how SGN manages and designs its networks, while removing barriers to new sources of gas and stimulating downstream gas renewables.



We operate the world's largest fire and explosion test site. Spadeadam is remote, secure and offers access to some of the world's most advanced destructive and non-destructive test facilities.

### **OTHER ACHIEVEMENTS IN 2015**

■ **Risk management consultancy of the year**  
DNV GL was named Risk Management Consultancy of the Year for the second year running at the Institute of Risk Management's Global Risk Awards in 2015. The Award marks the Institute's recognition for DNV GL's exceptional performance within the oil and gas industry.

■ **ASME authorized inspection agency status**  
We became the first company in the Middle East and India region to be accredited as an Authorized Inspection Agency for code-stamping in line with the American Society of Mechanical Engineers (ASME) codes.

■ **200,000th certified offshore container**  
DNV GL presented its 200,000th 2.7-1 decal to the Ferguson Group during the Offshore Europe conference and exhibition in September 2015. The decal is issued to organizations whose offshore containers have been certified to the DNV 2.7-1 Standard for Offshore Containers. This standard was first published in May 1989.

# ENABLING THE NEW ENERGY REALITY

2015 was a record year for global investment in clean energy. Wind and solar technologies are becoming more mature and cost competitive and are becoming mainstream power generation. Transmission and distribution grids are adapting to increasing demand and are connecting distributed energy sources.

**D**NV GL offers services to the entire power value chain: from policy, regulation and the generation and integration of renewable energy through to the transmission, distribution and efficient use of energy.

Our global service portfolio ranges from independent testing and certification of electricity transmission and distribution components to product and project certification for the renewables industry and advice on transmission and distribution grids, renewables integration, energy storage, measurements, cyber security and energy efficiency.

**WIND ENERGY CAPACITY INCREASING.** DNV GL is the world's leading technical advisor and certification provider to the onshore and offshore wind industry. The offshore wind capacity built in 2015 was four times higher than in 2014 - while onshore wind installations grew by 20% compared to the record set in 2014.

7

MW

OFFSHORE  
WIND  
TURBINE

DNV GL awarded Siemens prototype certification for its new and largest offshore wind turbine, which is undergoing field testing to demonstrate its reliability and performance before being sold to new offshore wind parks.

We supported customers in the wind market across the entire asset life cycle. As an example, DNV GL issued the project certificate for the 288 MW German offshore wind farm 'Meerwind Süd/Ost'. The certification process ensured that requirements were met and that risks were mitigated in order to achieve safe and cost-efficient operation of the wind farm.

In line with our offshore wind manifesto to cut costs in wind by taking an integrated approach, we introduced our in-house tool Turbine.Architect. It enables wind turbine engineers and component developers to quickly calculate the impact of new technology on the levelized cost of energy for a realistic wind project.

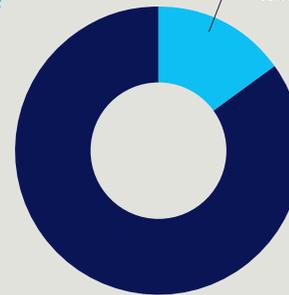
#### PRICE-COMPETITIVE SOLAR ENERGY AND STORAGE.

Solar photovoltaic (PV) systems have declined rapidly in price and reached grid parity price levels, opening up solar as an alternative power generation source for many countries.

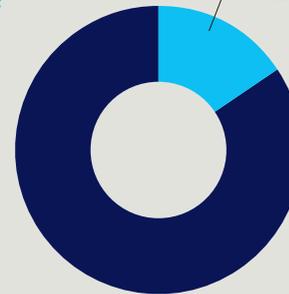
DNV GL has advised on over 300 solar projects around the world, helping customers to plan integrated distributed solar generation, grid code compliance and component and type certification. We offer solar and storage advisory services to project developers, independent power producers, financiers, utilities and component manufacturers in deploying these combined technologies in the energy market.



**REVENUE:**  
ENERGY'S  
SHARE OF  
TOTAL  
(23,390)

3,523  
NOK MILLION

**EMPLOYEES:**  
ENERGY'S  
SHARE OF  
TOTAL  
(14,954)

2,347  
EMPLOYEES

In 2015, we launched our new service specification DNVGL-SE-0078: the project certification of PV power plants that includes procedural requirements for certificates and other statements of compliance related to PV power plant projects.

**A MORE COMPLEX ENERGY SYSTEM.** The availability of renewable energy sources, especially that of wind and solar, is outpacing that of fossil fuels. Every country has access to at least some form and amount of renewable energy.

Considering the dynamic nature of renewable energy, generation is likely to result in more volatile power flows and electricity prices. Many new players will enter the energy markets and new business models will arise. In this cleaner, and more complex power infrastructure, storage and balancing capacity become crucial strategic assets.

With a vast number of energy storage systems currently being deployed across the globe, DNV GL developed the GRIDSTOR Recommended Practice in a Joint Industry Project.

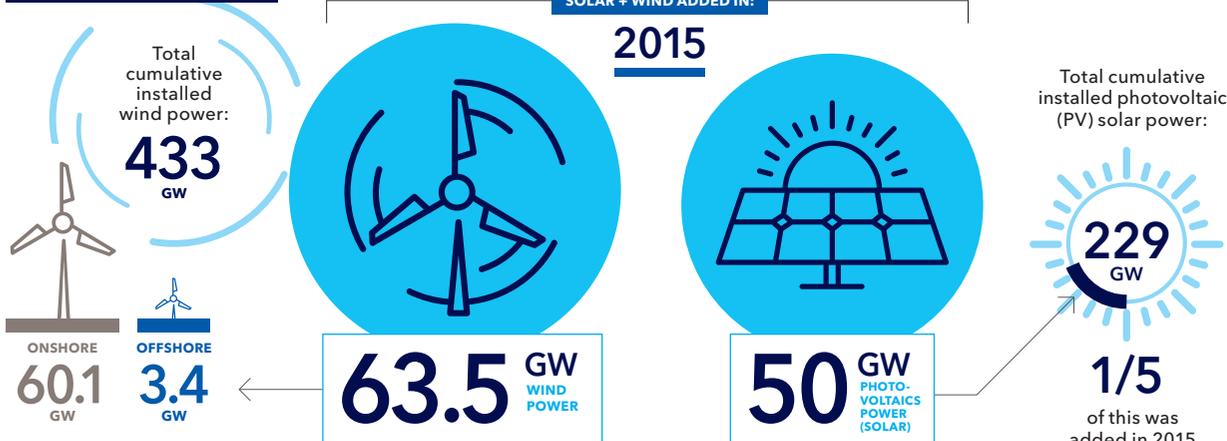
## A RECORD YEAR FOR SOLAR AND WIND



New wind and solar power accounted for about half of all new power generation last year.

### INVESTMENTS IN RENEWABLES

For every dollar invested in new energy generation assets, **60 cents** are spent on renewable energy technologies.



### BIGGEST MARKETS

**662 GW**

CUMULATIVE INSTALLED WIND AND SOLAR CAPACITY BY END OF 2015.



NEW INSTALLED WIND CAPACITY 2015 TOP 3 COUNTRIES

- China 30.8 GW
- The US 8.6 GW
- Germany 6.0 GW



NEW INSTALLED SOLAR CAPACITY IN 2015 TOP 3 COUNTRIES

- China 15 GW
- The US 7.3 GW
- The UK 4.8 GW



This independent set of recommendations provides simple, clear and practice-based guidance on the safety, performance and operation of energy-storage systems for all stakeholders dealing with grid-connected energy storage that enables the integration of renewables.

#### TRANSMISSION AND DISTRIBUTION MARKET DYNAMICS.

The global market for transmission and distribution components is dynamic and challenging. Firstly, through the continuous application of new materials and new technologies. In the manufacturing of these components some 25% of all equipment tested in our laboratories initially fail their type tests. Secondly, the growing demand for electrical power requires electricity to be transmitted over larger distances via a new class of Ultra High Voltage grids. We are currently completing an extension of our high-power laboratory - the largest independent short circuit laboratory in the world - that can test these new components.

# 25%

REDUCTION IN  
POWER FAILURES

The Smart Cable Guard online monitoring system pinpoints weak spots and faults leading to 25% fewer failures in medium-voltage networks. Two major distribution-system operators placed a large order leading to nearly 300 systems in operation worldwide at the end of 2015.

**THE EMERGENCE OF HYBRID GRIDS.** The combined effect of more dependency on electricity and increasing generation from renewables, often in locations far from where electricity is consumed, results in changes in the power system.

Power grids will gradually evolve into hybrid systems, combining the best of alternating current (AC) and direct current (DC) technologies. Ultimately, the DC part of the hybrid grid will evolve into a highly meshed super grid, facilitating the transmission and trade of high volumes of electricity across great distances.

A major transmission system operator in Europe contracted DNV GL as advisor for the implementation of the next generation SCADA/EMS system, which will allow much faster response to changing network conditions by processing signals from many more sensors in the high voltage AC and DC transmission grid.

**ENERGY EFFICIENCY.** More efficient use of energy offers great opportunities to save costs and ensures a cleaner environment. Government agencies and utilities around the world are increasingly introducing programmes to help businesses and households use energy more efficiently. In the US, DNV GL is the market leader in developing, implementing and tracking turnkey energy-efficiency programmes for utilities, with currently 25 ongoing projects. To support the projects, we developed a tablet application to gather field data on energy-use and equipment health data.

#### OTHER ACHIEVEMENTS IN 2015

- **Climate-action planning.** In the US, we served as the technical assistance provider in 12 projects for 11 cities. These projects ranged from climate-action planning to implementing greenhouse-gas reductions and promoting sustainability programmes.
- **Smart grid and smart metering in Turkey.** We worked on institutional capacity building, energy acquisition alignment, unbundling, visibility and public awareness for the Turkish Ministry of Energy. We advised a distribution-system operator on the roll out of one of Turkey's largest smart-metering pilot projects in four distribution networks in 11 provinces.
- **Energy savings and renewables in the Middle East.** In the Middle East region, DNV GL was involved in a project for end-use load research about power consumption patterns to improve end-use efficiency. In Oman, we won a contract for technical advisory services for a 50 MW onshore wind farm project.

# GROWING NEED FOR TRUST AND TRANSPARENCY

In an increasingly connected world, where trade and commerce continue to drive economic integration, the drivers for assurance services are strengthening. A multiplicity of factors is fuelling a growing need amongst consumers for assurance about the quality and provenance of products and services.

Certification and assurance is no longer simply a matter of regulatory compliance, but a basis upon which companies and whole industries can compete, which in turn creates unprecedented opportunities for market-leading providers of assurance and other services related to trust.

The trend for companies to operate more sustainably is continuing, placing more demands on assurance providers like DNV GL to be innovative in their service delivery and role. We see the need to deliver more insight to help customers make sound decisions and to support them to manage their total risk picture and increasing complexity. The assurance providers of tomorrow will continue to evolve their services and role to be agile and relevant to a fast and ever-changing business environment.

**FUTURE MANAGEMENT SYSTEMS.** In 2015, ISO (the International Organization for Standardization) released the much anticipated new versions of its quality and environmental standards (ISO 9001 and ISO 14001). The primary

# ISO

2015 VERSION OF  
ISO STANDARDS

As members of ISO working groups, DNV GL actively contributed to develop the revised standards ISO 9001 Quality Management, ISO 14001 Environmental Management as well as ISO 45001 Occupational Health and Safety Management and the upcoming ISO 22000 Food Safety Management.

# 7%

GROWTH

Our management system certification services grew by 7% in 2015.

objective was to create standards that reflect industry's need for sustainable business performance. This was a very welcome standards change for us in DNV GL. With our proprietary audit methodology, Next Generation Risk Based Certification, DNV GL is well positioned to support companies in making the switch to the new ISO standards during the three-year transition period. In 2015, our management system services portfolio account for the majority of our Business Assurance revenue and continued its positive trend and grew by 7%, manifesting our leading position in this segment in terms of market share and service innovation.

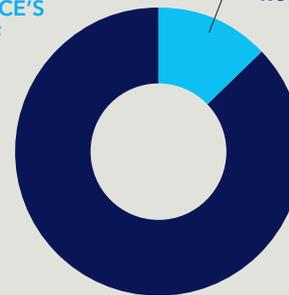
Digitalization is changing the business environment for our customers and we anticipate that management systems of the future will also have to transform. In 2015, we started an exploratory journey called the *Future of Management Systems*. We also started to dive into and implement Big Data concepts with the potential to shift the relevance, value and impact of management system certification and other assessment services.



**REVENUE:**  
BUSINESS  
ASSURANCE'S  
SHARE OF  
TOTAL  
(23,390)

# 3,024

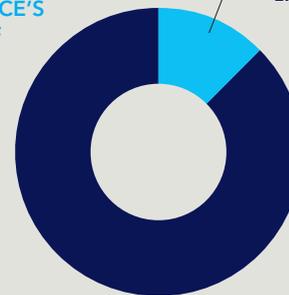
NOK MILLION



**EMPLOYEES:**  
BUSINESS  
ASSURANCE'S  
SHARE OF  
TOTAL  
(14,954)

# 1,915

EMPLOYEES



**EVERY PRODUCT IS THE RESULT OF A SUPPLY CHAIN.**

The trend for companies to have an integrated approach to sustainable business performance persists. We are continuing to expand our assurance portfolio, addressing the need for a holistic and integrated approach to services and products.

Every product produced is the result of a supply chain, and weak links can significantly influence quality, safety and other product aspects. In 2015, we increased our service portfolio and involvement in supply chain assurance, tailored assessments and product assurance. The latter grew by 24%, and combined these services contributed significantly to our growth and ambition as a global assurance provider.

**A HEALTHY WORLD.** The food & beverage and healthcare industries continue to be a key focus for growth. Our services to the food & beverage industry grew by 20%. While the focus on food safety remains firm, we see a growing need across the industry to look at wider food safety and sustainability dimensions of individual products and their supply chains.

Food fraud and defence refers to the dilution of a product by using replacement ingredients for economic gain or the intentional sabotage of products. In addition to building and documenting a sustainable supply chain, this is a growing concern for the industry.

# BUILDING STAKEHOLDER TRUST

## Need for existing and new assurance roles

As the supply chain within the life sciences industries becomes more complex and the use of large scale data and digitalization is gaining speed, the need for independent third parties to help assure quality, safety, security, reliability, integrity, ethics and more is increasing.

## DNV GL's strategy

Focus on two core segments of life sciences:



**PRESERVING HEALTH**



**PROVIDING FOOD**

### FOOD & BEVERAGE



10% of the food in super-markets is adulterated

60% growth in reported incidents 2010 to 2013

USD 10-20 bn Costs of food fraud to the industry per year



**THE NEED TO TACKLE**

**FOOD FRAUD**

- Adulteration
- Substitution
- Dilution
- Misrepresentation
- Mislabeling

**TARGETED CATEGORIES:** milk, olive oil, honey, saffron, fish, coffee, orange juice, apple juice, black pepper, tea.

### A CHANGING WORLD POPULATION

ACCESS TO SAFE AND SUSTAINABLE FOOD

ACCESS TO HEALTH SERVICES

+/- 9 billion people by 2050

6 YEARS LONGER Life expectancy has grown over the past two decades.

70% more food needed globally mid-century

400,000 100 year-olds in the US by 2050 because of better healthcare

### HEALTHCARE

USD 200 bn savings to global healthcare budget due to wearables over the next 25 years



684% growth in global market value first half of 2014

By 2018, 70% of healthcare organizations worldwide will invest in consumer-facing technology.



The growth in our healthcare services also accelerated in 2015, in terms of both traditional management system certification and hospital accreditation, helping hospitals and healthcare providers take a systematic, risk-based approach to patient safety. We also saw a growing interest in our managing infection risk service, underscoring our belief that healthcare institutions feel the need to work in a proactive rather than reactive way to ensure quality and more effective and efficient patient-centred care.

**TRUST AND CONFIDENCE AT THE CORE.** Looking ahead, we see a growing need for assurance services and roles that help companies assess their performance and provide

### PERFORMANCE BENCHMARK

In an increasingly complex business environment, companies crave factual, reliable information upon which to base their decisions. Big data concepts are providing new avenues for better insight.

By structuring our audit data collection and applying sophisticated analytics, DNV GL can now generate a performance benchmark that enables customers to focus on the improvement efforts that will yield the greatest results.

transparency regarding their operations and performance. A connected world, digitalization, global market places and wider sustainability issues are trends that places demands on companies and how they operate.

This pressure comes from all kinds of stakeholders, including investors, regulatory bodies, industry players, local communities, consumers, etc. Thus building trust and confidence in everything one does seems to be a pre-requisite rather than a nice to have. Third-party assurance is an effective means to build trust and confidence, but we also foresee that third-party assurance roles may take new forms in the future.

### FUTURE OF REPORTING

Last year, the Global Reporting Initiative (GRI) launched the project Reporting 2025 in order to drive an international discussion about the future of sustainability reporting. DNV GL participated in two working groups composed of industry leaders, providing expert opinions on:

- The reporting of best practices and disclosures
- The future of integrated reporting – how to best align financial reporting with social and environmental aspects

### OTHER ACHIEVEMENTS IN 2015

■ **Functional road vehicles.** In 2015, over 51 million vehicles were recalled because of a defect. A single car has 30,000 parts, of which the percentage of computer-controlled parts is steadily increasing. Due to their complexity, it is harder to prevent defects. The ISO 26262 standard helps manufacturers put safety into vehicles, as it is intended to reduce the malfunctioning of the computer controlled parts and ensure that there is a back-up safety mechanism. In 2015, DNV GL's assessment based on this standard grew by 28%.

■ **Acquisitions ISC and Noomas.** We expanded our service portfolio for the aquaculture industry with the acquisition of Noomas Certification, Norway's leading certification and inspection body for fish farms. We also strengthened our healthcare portfolio in addition to our presence in Australia and Japan with the acquisition of International Standards Certifications (ISC).

■ **Engaging with customers.** ViewPoint is our customer panel where we engage customers in top of mind issues to share insights within the community and beyond. By the end of 2015, we had engaged 11,000 customers in the community.

# EFFICIENT AND DATA SMART SOLUTIONS

In order to take a leading role in the next step of the digital transformation, we are working toward data smart solutions in all areas, building cloud-enabled digital asset ecosystems. These strategic initiatives will not only increase efficiency and improve risk management, they will also enable unparalleled accessibility, collaboration and insight for our customers.



Our software products and services support design and engineering, risk assessment, asset integrity and optimization, QHSE and asset operations and management. We are a leading software provider to the oil and gas, energy, process and maritime industries.

A key part of the Software strategy for the next five years is to act as a strategic partner in DNV GL's transformation toward a 'data smart' company, where integration of products and services will lead to improved quality and efficiency of processes through digital business processes and digital work-flows.

Our software solutions are important tools for delivering services from other DNV GL entities, such as classification and advisory services to the maritime and oil and gas industries. Software delivered services to other DNV GL units equaling revenues of NOK 169 million in addition to the NOK 824 million in external revenues.

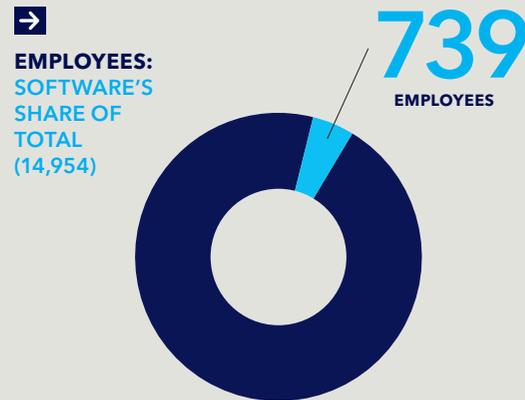
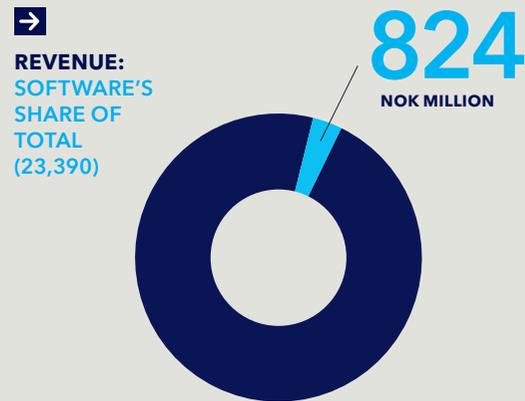
**50**  
YEARS

Over the last 50 years we have become a leading provider of software solutions for quality, safety, reliability and risk management.

**COMPANIES IN THE MARITIME INDUSTRY SEEK EDGE IN IT SOLUTIONS.** Ship operators are under pressure to improve operational efficiency in order to stay competitive and the implementation of efficient software systems can address this need. Customers are looking for high investment security and reliable software partners. DNV GL's maritime software product line is supporting ship management and operations and is therefore independent both of the challenging new-building market and of the ship owner's classification provider.

In 2015, DNV GL's ShipManager software solution was implemented on 350 new vessels, with many new customers, including Wah Kwong, Mont Hope and UASC. A new, highly configurable Risk Management module was developed for ShipManager QHSE in 2015, and the technology will be used for further development of other modules.

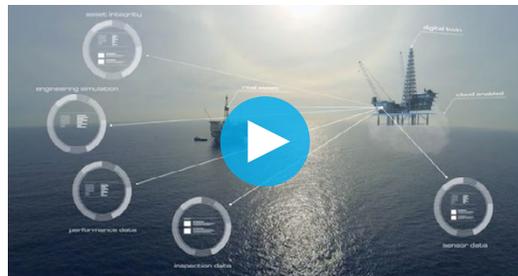
**EFFICIENCY IN ALL STAGES OF THE LIFE CYCLE.** Customers in all industries are focusing heavily on ways to increase efficiency of systems and assets and improve reliable performance in all stages of the life cycle, including requalification and life extension. To support them, we have further enhanced our design and engineering tools to even better support efficiency and increased usability of offshore structures and ships. In 2015, meshing features in our Sesam software were brought to a new level and achieved success in the market, confirming Sesam's position as an efficient and effective engineering software solution.



To address vessel efficiency, Sesam now supports improved analysis of added resistance for floaters.

Our solutions for process safety, risk and reliability are being developed to deliver improved results, not only in the design phase, but also in operations. This enables our customers to reduce unplanned downtime, optimize production, improve efficiency in maintenance strategies, and more. Our new quantitative risk analysis product, Safeti Offshore was very well received by the market.

**SOFTWARE AS A SERVICE.** The development of customer-driven 'Software as a Service' (SaaS) was initiated, including integration of systems in a digital ecosystem that will enable reuse of data between different types of analyses and provide the foundation of a new, more collaborative and effective way of working with models in real time.



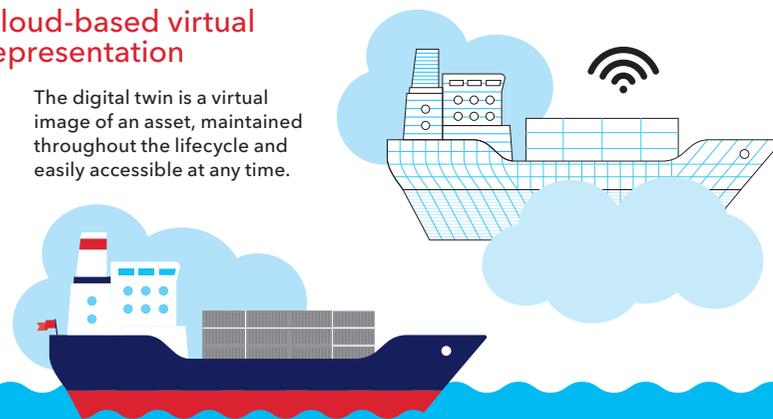
# DIGITAL TWIN



New capabilities and value propositions will emerge from the seamless communication between our software solutions. Cognitive internet of things will provide powerful analysis, insight and diagnostics.

## Cloud-based virtual representation

The digital twin is a virtual image of an asset, maintained throughout the lifecycle and easily accessible at any time.



### COLLABORATION

Enable early insight into risk and performance issues, as well as collaboration with customers and other stakeholders.



Reduce major cost incurred by repeatedly searching for, verifying or reproducing critical information.

### Software to support the asset lifecycle



Our customers are seeking smarter and more efficient solutions to operate their assets.



### ASPECTS OF DESIGN AND OPERATION:

- Engineering simulation
- Risk assessment
- Integrity status
- Performance analysis

**OPTIMIZING ASSET INTEGRITY MANAGEMENT FOR OIL AND GAS COMPANIES.** Although the low oil price has adversely affected customers of our asset integrity management solutions in some sectors, we have been able to achieve business objectives through demonstrating value in helping reduce operating costs to customers such as by reducing costly unscheduled downtime and ensure productivity goals. This continues to secure a high demand for asset integrity management software and services. In 2015, the Asset Integrity Management Software product line integrated solutions from the two legacy organizations. The benefits of the merged products have been a key factor in bringing in significant new contracts.

**LOWERING OPEX.** The Simulation and Optimization product line has a longstanding and loyal customer base. Our software enables customers in the oil and gas and energy industries improve efficiency. In 2015, we released

# 750,000

Our Synergi™ Life enterprise risk management software is used by more than 750,000 users globally.

a Chinese language version of Synergi Gas, which has been well received. Another major release was the Multiphase module of Synergi Gas, opening up a new market segment. Development continues on integration of applications and leading the advancement toward data smart pipeline ecosystems.

**ROBUST UTILITIES MARKETS.** The utilities markets were robust in 2015 and DNV GL expanded its global market to this segment. In North America our Electric Grid, Reliability and Performance product line has a market share of between 25 and 33% of the largest electric utilities and grid operators, with very high customer satisfaction scores. A new tablet-based application was launched, Cascade Inspector.

**OPPORTUNITIES IN QHSE AND ENTERPRISE RISK.** Our customers within Quality, Health, Safety & Environment (QHSE) and enterprise risk management solutions are mainly within the oil and gas sector and are looking for improvements in efficiency in a difficult market situation, but new market opportunities exist within healthcare and transportation. Our QHSE software development in 2015 centred around the merger of EasyRisk into the Risk Management module in Synergi™ Life. As part of this, the new Barrier Management module was launched, allowing users to manage risk by identifying barriers, managing threats and viewing major accident scenarios and effects.

**DOWNSTREAM OIL AND GAS COMPANIES SEEK EFFICIENCY AND PROCESS INTEGRATION.** DNV GL supported companies providing distribution and transmission solutions in the downstream industry by providing software that gives them better control of their pipelines, reducing their costs and potential incidents in a turbulent oil market with high regulatory pressure. In 2015, the Software Consulting unit delivered various successful deployments of process integration. In the UK, we supported five major UK gas suppliers and two main LNG receiving terminals in their transition to align with the continental European 'gas-day,' which covers a variety of operational and commercial aspects.

#### OTHER ACHIEVEMENTS IN 2015

■ **Strategic partnership.** DNV GL – Software became its own Business Area within the DNV GL Group. This change in organizational set-up will enable Software to be a strategic partner for the other Business Areas to provide cloud-enabled solutions and digital asset systems that help build a data smart company.

■ **Opening QHSE markets in Oceania.** We made strides with new contracts in emerging DNV GL software markets, most notably Australia and New Zealand. In addition, focus was on improvement of the Mobile App, a new Excel add-in and on cloud-enabling Synergi™ Life.

# COLLABORATIVE INNOVATION FOR SAFER, SMARTER, GREENER TECHNOLOGY

As a trusted third party and source of technical expertise, DNV GL provides an ideal platform for innovation and industry collaboration. We run more joint industry projects with our customers than any other organization in the industries we serve, and our already extensive network of contacts with regulatory bodies, research institutions and academic bodies continues to expand.



**T**here is heightened interest in collaborative innovation and co-creation in our markets, driven in part by the growing interconnectedness of industries and businesses, but also by the accelerating pace and complexity of technology development and the difficulty of funding research in a slowing world economy.

**STRATEGIC RESEARCH.** Our own collaborative approach enables us to leverage the 5% of our annual revenue we continue to invest in research and innovation, including at least one per cent in long-term strategic research. Working with others is the 'red thread' connecting many of our strategic projects.

Digitalization and the availability of huge amounts of data will change all the industries that DNV GL is involved in. For example in Maritime, classification must adapt to provide assurance in new ways, virtually and remotely, through digital platforms. Of the many projects and demonstration efforts that DNV GL is running in this area, our Model based Data Driven Asset Management (MODAM) project stands out.

# 5%

Each year, we invest approximately 5% of the Group's annual revenues in research and innovation.

It is a substantial collaborative project between DNV GL, ABB and BW Gas, and is supported by the Research Council of Norway. This was the first maritime project to introduce the concept of a digital twin supporting the classification process of ship components and systems in a lifecycle perspective.

In Energy, DNV GL is working with several partners in the E.U. project, Virtual Microgrids for Smart Energy Networks (VIMSEN) to develop and demonstrate a better alternative to feed-in tariffs which have been used to encourage investment in small-scale renewable energy production by individuals, communities and companies.

Collaboration is not merely an input to our research efforts, but frequently integral to the solutions we propose. For example, our Oil & Gas research team's ongoing investigation into a standardized approach to the qualification of subsea systems may help companies to better leverage each other's qualification efforts and results, leading to substantial costs savings.

The co-creation of standards for integrated care is a central element of our research efforts in Healthcare. Our research team is working with a large number of partners on patient empowerment, health policy, clinical practice and academia to improve health services - for example in developing and testing a set of standards that promote a safe, seamless patient journey across multiple care providers.

**LABORATORIES.** We are also increasingly promoting industry collaboration in our global network of high-tech laboratories dedicated to testing, inspection and certification. In January 2016, we announced that we are conducting the oil and gas industry's largest ever controlled release of carbon dioxide from an underwater pipeline at our full-scale Spadeadam Testing and Research Centre, located in Cumbria, UK. The experiment is part of an international Joint Industry Project (JIP) 'Sub-C-O2' to develop safety guidelines on the use of offshore CO<sub>2</sub> pipelines. In February 2016, DNV GL opened up its Flex Power Grid Laboratory in Arnhem, The Netherlands, to customers interested in doing their own research on ideas and devices related to power cybernetics.

**TECHNOLOGY LEADERSHIP.** Our 'Technology Leadership' initiative evaluates and funds projects to advance knowledge in our core disciplines. In 2015, the ten Technology Leaderships were rationalized into eight programmes, providing scale and focus in two important areas:

- The new Cyber Physical and Integrated machinery Systems programme consolidates and advances the work done in the previous programmes relating to integrated systems and software, and integrated machinery systems.
- Our new Materials Technologies and Structural Integrity programme is focused in particular on interdisciplinary projects to enhance advanced numerical modelling and simulation, which in turn encourage the development of develop smart, innovative, cost effective and safe structures and components.

# TECHNOLOGY OUTLOOK 2025

DNV GL publishes its *Technology Outlook* forecast at 5-year intervals to provide our customers with a basis for discussion and insight into the technology landscape in their industries over the next 10 years.



## TRENDS

- » Society
- » Economy
- » Geopolitics
- » Environment



Global population will add 80 million a year between now and 2025

Asia's share of global exports will double to 39% by 2030

Almost 2 in 3 people could face water stress conditions by 2025



## DRIVERS

- » Policy & Regulation
- » Sustainable use of resources
- » Climate change
- » Digitalization



Internet of Things will encompass up to 1 trillion devices

Economic impact: 2.7 to 6.2 trillion USD

Welcome to the sharing economy and the circular economy



## TECHNOLOGIES BY 2025



LIFE SCIENCES

HEALTHCARE



3 billion wearable health sensors

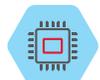
FOOD SUPPLY



Agbots: Dozens or hundreds agricultural robots on farms



3D bio-printing of organs on demand



DNA tracking and organic sensors monitoring food quality and composition



SHIPPING



Digital twins of vessels as a virtual test bench for design and operations enhancement



A large share of new commercial ships deploying hybrid power generation systems



ENERGY

POWER



Onshore wind and solar PV cheapest source of electricity in many countries



Omnipresent sensors in power grids for control of variable renewable energy sources

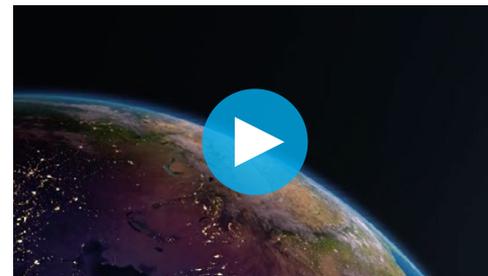
OIL & GAS



Automated drilling reducing drilling time and cost by 30-50%



Operational analytics for smarter subsea tie-ins and simpler, smarter completions



**EXTRAORDINARY INNOVATION.** Each year, DNV GL funds a number of 'Extraordinary Innovation' projects which test and demonstrate our ability to turn insights we gain from our customers' daily operations into extraordinary, business-generating concepts. In 2015, we funded four such projects, including:

- a concept for full-scale offshore service vessel (OSV) that can serve as a much-needed 'test rig' for offshore equipment manufacturers;
- a proposal for a quality assured, independent and secure genomics database serving the needs of a variety of healthcare providers like hospitals, laboratories and clinics;
- a new floating wind concept developed as an open source design, with the intention of providing the industry with a solid, simplified basis for offshore wind design.

The final project, *Nauticus Twinity* delivered a new vessel virtually – a digital ‘twin’ of an offshore service vessel. The project demonstrated DNV GL’s capacity to develop a platform that allows all stakeholders to test and precommission control systems and simulate operational scenarios, etc. on a digital twin.

**CLIMATE CHANGE.** Through the Climate Change Programme in Strategic Research & Innovation, we continued to focus on cross-industry mitigation and adaptation strategies for the inevitable onset of climate change in the coming years and decades.

One strand of our work focuses on researching and modelling the energy transition, building a robust long term forecast of the state of ‘Spaceship Earth’ in 2050, with a particular emphasis on the transition to low carbon energy sources, and the resulting impact on the industries and customers we serve.

A second strand involves working with our customers and other organizations to develop risk-based decision making tools for resilience, adaptation and disaster management. Our unique contribution in this regard is the combination of our deep scientific, engineering and regulatory expertise, which we intend to leverage to build global industry standards tackling the complexity of climate change challenges and, ultimately, a leading position for DNV GL on climate change adaptation for critical infrastructure.

### INNOVATING WITH CUSTOMERS

**MARITIME.** DNV GL – Maritime is continually working on projects which offer solutions to improve safety, increase efficiency and minimise environmental impacts. Some notable projects in 2015 included:

- *Ampere*: DNV GL worked with owners Norled and the Fjellstrand yard to realise this fully electric ferry, which was launched in 2015 with DNV GL class.
- An AIP for Hyundai Heavy Industries’ SkyBench design. This innovative concept increases container capacity by transforming the bridge and upper three decks of a large container vessel into a rail mounted sliding block.
- GTT, CMA CGM/CMA Ships, and DNV GL combined to undertake a technical and feasibility study for a new mega box ship – the Piston Engine Room Free Efficient Containership *PERFECT*.
- The award winning LNGreen JIP developed the highly efficient LNG carrier of tomorrow, with an improved environmental footprint, boil-off rate and cargo capacity.
- DNV GL, Shortsea Services and Marintek, led a group of 27 companies with short sea shipping expertise to develop a new competitive and eco-friendly maritime transport concept – Cargo Ferry.

**ENERGY.** Given the increasing high-voltage direct current (HVDC) developments in both offshore wind farms and sub-sea interconnectors there is an industry-wide drive towards developing alternating current (AC) with embedded direct current (DC) and meshed HVDC grids. Meshed HVDC grids require fast DC breakers which are under development.

We are investing in our high-power testing facilities to be prepared for ultra-high-power testing. We have also started a large innovation project where we work with 33 partners, representing stakeholders from the full energy value chain. The aim is to develop the world’s first test methods for HVDC circuit breaker equipment.

**OIL & GAS.** According to DNV GL’s research on the outlook for the oil and gas industry in 2015, a quarter of senior professionals planned to increase the standardization of tools and processes to impose stricter cost controls. We continue to invest in working together with the industry on Joint Industry Projects (JIPs) that create efficiencies across the oil and gas value chain in this regard.

In 2015, the work of one such JIP led to the publication of a new Subsea Documentation recommended practice (RP), which aims to reduce cost by streamlining documentation requirements. The RP is the result of a team of twenty industry players agreeing upon a set of typical subsea production systems and functions with common terminology, and a required minimum set of documentation between operators and contractors.

# SUSTAINABLE SOLUTIONS

In 2015, all our business areas strived to enable customers to advance the safety and sustainability of their business.

## SUSTAINABLE **MARITIME** SOLUTIONS

To help our maritime customers enhance the sustainability of their businesses, DNV GL develops, implements, certifies and enables new technologies, systems and practices that reduce environmental impacts and improve efficiency. Through our class rules, work at the International Maritime Organization and International Association of Class Societies, and in cooperation with regulators, customers and academia, we also set standards that help bring these innovations to the industry.

In the maritime market, the keys to sustainability are enhancing total energy efficiency and expanding the use of alternative fuels. Through our class rules and collaborative innovation with customers, we constantly promote the adoption of

lower impact fuels. DNV GL has spearheaded LNG as ship fuel for many years. In 2015, the first fully electric commercial ferry was launched and classed by DNV GL. We also took the lead in the Norwegian government's award-winning Green Coastal Shipping Programme, which aims to create the world's most environmentally friendly fleet of coastal vessels.

Through our ECO Insight solution, we enable ship operators to manage their fleet performance and achieve significant fuel-consumption reductions. Launched in January 2015, more than 600 vessels signed up for the solution during the first year, making it the industry's leading fleet-management solution.

## SUSTAINABLE **OIL & GAS** SOLUTIONS

The mix of fossil fuels will change and support a stronger position for gas. There is a big untapped opportunity to extract and use fossil fuels with significantly lower emissions. One such example, where renewable energy is used in combination with hydrocarbons, is demonstrated in a new DNV GL-led joint industry project with seven global companies. The objective of the project, called WIN-WIN, is to bring the concept of using wind power for offshore oil and gas applications closer to commercialization.

We actively support industry collaboration as a means to drive sustainability. We are leading a project on behalf of the Norwegian Oil and Gas Association to further develop and share best practices

and thus enhance energy management and efficiency on the Norwegian Continental Shelf. We are also developing a decision-making framework for oil and gas companies, based on guidance on voluntary sustainability reporting published by IPIECA, the global oil and gas industry association for environmental and social issues.

We believe that gas can play a central role in the transition towards an available, affordable and clean energy supply. New DNV GL research has revealed alternatives to gas flaring, presenting new revenue opportunities, particularly for smaller-scale applications, while helping operators to reduce emissions and stay ahead of regulatory requirements.

## SUSTAINABLE ENERGY SOLUTIONS

**Sustainability is at the core of our energy services. To meet the growing demand for energy and increase the share of renewables in the energy mix, we help our customers develop renewable energy projects and enter the market with new products tested and certified in accordance with the latest standards.**

Our services help operators of transmission and distribution grids to integrate renewables in a safe and reliable way.

We play an active role in industry associations to develop international standards that guarantee safety, reliability and sustainability.

We ensure that buildings and industrial plants are built and operated according to the latest sustainability and green

standards. A programme in the US for heating, ventilation and air conditioning reported 8.46 GWh in total energy savings for two years, exceeding the 5 GWh programme goal setting.

We work with financial institutions and governmental organizations to develop solar and wind projects in the Middle East and Africa, ensuring electricity access for all.

In the UK, we are engaged in a joint government project to develop decarbonization roadmaps for the eight most energy-intensive industrial sectors by 2050. Multinationals are being helped to create a database in accordance with Article 8 of the Energy Efficiency Directive to meet EU deadlines.

## SUSTAINABLE BUSINESS ASSURANCE SOLUTIONS

**With sustainable business performance becoming a stakeholder expectation, companies must manage their operations within this framework while building trust. Through our assurance services, we help more than 70,000 customers worldwide tackle this challenge in a systematic, transparent and innovative way.**

Being a sustainable company is not a constant. Sustainable business performance has to be built over time, and our management-system certification continues to enable this. In 2015, our proprietary audit methodology proved its value when the International Organization for Standardization (ISO) released new versions of its quality (ISO 9001) and environmental (ISO 14001) standards.

Sustainability aspects are incorporated into the new requirements, so DNV GL's Risk Based Certification™ can timely support the transition. We continue to help develop standards and launch new initiatives that allow companies to ensure the safety and sustainability of their operations and build trust through stakeholder engagement. This includes the development of the ISO 20400 for sustainable procurement.

In 2015, we maintained strategic partnerships, for example with the Global Reporting Initiative, to help develop future sustainability reporting models and integrated reporting concepts. We also partnered with organizations such as the Water Footprint Network and UNIDO.



### SUSTAINABLE **SOFTWARE** SOLUTIONS

**DNV GL's software portfolio is used by thousands of customers globally to manage occupational and process safety, improve business efficiency and reduce their environmental footprint.**

Sustainability performance is improved through using DNV GL software solutions to achieve the optimal design, both optimizing energy consumption in processing facilities and identifying, analysing and visualizing business risks.

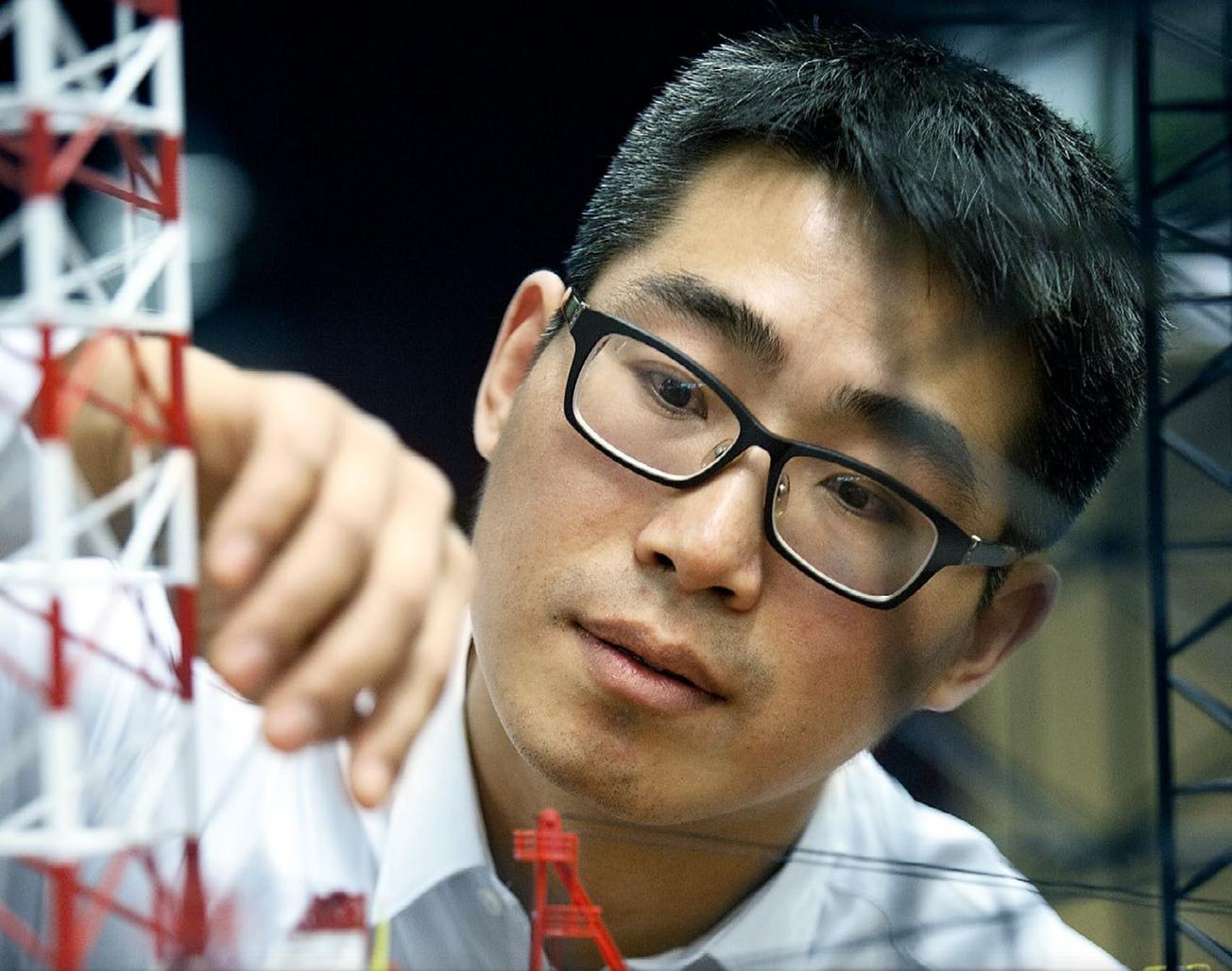
Customers are using our software solutions to improve their business performance, safeguard their people and assets and improve their environmental impact safely and sustainably. More than 350 Synergi™ Life software solutions for QHSE and risk management are deployed on premises or in the cloud in more than 100 countries worldwide. More than 750,000 users have access through mobile, web or offline interfaces across a wide range of sectors.

# HOW WE WORK

Our vision of having a global impact for a safe and sustainable future sets the direction of our business activities. We strive to do the right things and to do things right - pursuing opportunities and delivering on our purpose of safeguarding life, property and the environment.

Our commitment to our customers, ourselves and our partners are guided by our values:

- We build trust and confidence
- We never compromise on quality or integrity
- We are committed to teamwork and innovation
- We care for our customers and each other
- We embrace change and deliver results



In this section:

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Sustainable management

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Health and safety

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Business ethics and anti-corruption

---

People

---

Environment and climate

---

Sustainable procurement

---

Partnerships for sustainability

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# DRIVEN BY SUSTAINABILITY

For DNV GL, corporate sustainability is about delivering long-term value in financial, environmental, social and ethical terms, and this is embedded in the Group's purpose, vision and values. We consider this approach and the fostering of a company culture beyond compliance as fundamental in securing the Group's business success through sound operational performance and strategic positioning for profitable growth.



We report our sustainability performance for the following aspects:

- ➔ Health and safety
- ➔ Business ethics and anti-corruption
- ➔ People
- ➔ Environment and climate
- ➔ Sustainable procurement
- ➔ Partnerships for sustainability

DNV GL reports in accordance with the Global Reporting Initiative G4 Comprehensive Level, and a third party has conducted a limited assurance of the report.

FIGURE 01 FROM VISION TO IMPACT



## OUR APPROACH

DNV GL's Group strategy defines our commitment to corporate sustainability, and this is further outlined in all business areas' annual operating plans. We see both opportunities and risks related to sustainability matters and aim to capitalize on the growing demand for greener, safer and more transparent business solutions.

We intend to influence the global sustainability agenda and to be fit for the future through our close relationships with more than 80,000 business customers, global partnerships and comprehensive analysis of technology and sustainability trends shaping future markets.

We continue to enable sustainable operations through three pillars: business activities for customers, activities within our own organization, and partnerships.

■ DNV GL's business areas are certified according to the ISO 9001 standard and DNV GL as an organization is certified to the ISO 14001 and OHASAS 18001 standards. We joined the UN Global Compact in 2003 and continue to integrate its ten principles on human rights, labour standards, environmental performance and anti-corruption into our business strategy and operations.

■ The Board maintains overall responsibility for the Group's sustainability performance, risk management and compliance with our Code of Conduct. The Group President & CEO is responsible for compliance with relevant governing documents cascaded down the organization according to mandates and KPIs.

■ Our performance in ongoing operations is a line responsibility, and results are monitored on a regular basis through top-down business reviews and bottom-up risk assessments. In addition, the Corporate Sustainability Forum, which has members from all business areas and relevant group functions and an employee representative, acts as an advisory body to the Executive Committee.

■ Our key opportunities are derived from our ability to strengthen our positions in the growing markets for safer and greener solutions. Likewise, opportunities arise from our strongest asset: skilled and motivated employees with a high level of integrity.

■ Our key risks are related to how our revenues are exposed to different degrees of sustainable activities, including adaptation to the COP21 Paris agreement on climate change and to new markets for sustainable products and services. Our corporate sustainability programme is also designed to manage our risk of not conducting our own operations with integrity and quality.

■ As a service provider, our key impact on sustainability is how we enable customers to enhance the safety and sustainability of their operations. Through our classification, certification and technical assurance services, along with software, independent expert advisory services and recommended practices, we help our customers seize opportunities and manage risks. This includes mitigating and adapting to climate change, ensuring safe operations in demanding environments, enabling energy-efficient solutions and implementing responsible sourcing in complex value chains.

■ We see proactive stakeholder engagement as important for continuing to build trust and strengthen our market positions in a digital, low-carbon economy. Our extensive activities within sustainability partnerships include joint industry and research projects, membership of a number of industry associations and standards organizations and partnerships with NGOs.

■ The UN Sustainable Development Goals launched in 2015 are well aligned with DNV GL's purpose, vision and values and will stimulate the way we manage and conduct our business. We already provide strong business solutions for many of the Sustainable Development Goals, including 9) Industry, innovation and infrastructure, 7) Affordable and clean energy and 13) Climate action.

Going forward, we consider these goals to be relevant indicators of market trends and, within our new Group strategy - through our focus on digitalization and agility - we will pursue stronger business positions for goals 12) Responsible consumption and production, 14) Life below water, and 3) Good health and well-being.

**FIGURE 02**

**UN SUSTAINABLE DEVELOPMENT GOALS**

We have strong market positions related to the UN Sustainable Development Goals 7, 9 and 13.

We pursue growth opportunities for the global goals 3, 12 and 14.



**MANAGING MATERIAL ASPECTS**

DNV GL's materiality matrix reflects our key sustainability risks, impacts and opportunities. Our external and internal stakeholders' views on our most material sustainability aspects were assessed in 2013 and updated in 2014. Based on DNV GL's new Group strategy for 2016-20, our materiality matrix was adjusted accordingly during the strategy development process in 2015.

Our stakeholders globally are identified as employees, owners, customers, suppliers, governmental bodies, civil society organisations, industry associations, research institutions and media.

We have adopted a new governing document on external annual sustainability reporting, which also defines the materiality assessments' review process. This is aligned with our risk- and brand-management processes. A materiality assessment engaging external stakeholders and covering the 2016-18 period is planned for 2016.

We give highest priority for what we do and report to the sustainability aspects identified as being of the highest materiality to both internal and external stakeholders. Our sustainability reporting is disclosed in this Annual Report with the GRI notes.

**FIGURE 03** ▶

**DNV GL SUSTAINABILITY MATERIALITY MATRIX**

MATERIALITY ACCORDING TO EXTERNAL STAKEHOLDERS



MATERIALITY ACCORDING TO INTERNAL STAKEHOLDERS

**FIGURE 04** CORPORATE SUSTAINABILITY PROGRAMME

The annual plans in all business areas include a range of sustainability-related activities. These plans reflect prioritized improvement areas and new activities arising from internal and external needs. Aggregated up to Group level, our 2015 corporate sustainability programme comprised:



**BUSINESS ETHICS & ANTI-CORRUPTION**

- Building a culture of sustainability training
- Monitoring compliance performance
- Red flag country assessment
- Compliance with KPI system



**HUMAN & LABOUR RIGHTS**

- Safety culture
- Occupational health
- Emergency preparedness
- Diversity & equal opportunities



**ENVIRONMENT**

- Climate emissions reductions
- Energy efficiency
- Waste management
- WE Do employee footprint



**VALUE CHAIN MANAGEMENT**

- Sustainable supply chain management
- Customer risk review
- Sanctions screening



**PARTNERSHIPS & ENGAGEMENT**

- Strategic partnership engagement
- Review of local partnerships



**COMMUNICATIONS & REPORTING**

- GRI G4 Comprehensive and assured
- Internal awareness-raising and engagement
- Communications and outreach
- Strategic positioning

## SUSTAINABILITY INSIGHTS



### UNITED NATIONS GLOBAL COMPACT REPORT

In 2015, DNV GL conducted a comprehensive assessment of the UN Global Compacts first 15 years. The report *IMPACT: Transforming Business, Changing the World* was launched at the UN General Assembly with more than 1,000 global top executives from business, government, civil society and academia present.

Based on in-depth interviews of more than 250 such top executives and a survey of 1,500 companies, DNV GL assessed the changes in corporate sustainability practices, business environments and dominant worldviews. The report also provides strategic insight for the future, highlighting 15 trends that will significantly impact business risks and opportunities. It covers a range of sustainability matters, including resource constraints, energy transition, socio-economic development, global governance and digitalization.

The report is freely available at

 <http://globalcompact15.org>

### GLOBAL OPPORTUNITY NETWORK AND REPORT

DNV GL is a founding member of the Global Opportunity Network, which launched its first Global Opportunity report in 2015. This report provides insights and outlooks for transforming global risks into opportunities for business and society. Five societal risks are identified through global surveys and roundtables, and 15 opportunities arising from these are presented. The five risks are extreme weather, continued lock-in to fossil fuels, unsustainable urbanization, a lack of freshwater and the continued rise in chronic non-communicable diseases.

The specific opportunities are titled Early Warning and Forecasting Services; Investments in Resilience; Cost-Effective Adaptation; Regulated Energy Transition; Energy Autonomy; Green Consumer Choices; Compact, Green and Connected Cities; Smart Cities; Water-Efficient Agriculture; Rural Growth Initiatives; Fresh Water Production; Smart Water Regulation; Combat NCDs with Mobile Technologies; Innovative Finance for a Healthy Generation; and Everyday Health Enablers.

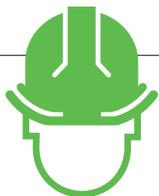
The report is freely available at

 <http://www.globalopportunitynetwork.org>

KEY SUSTAINABILITY PERFORMANCE

SAFETY AND HEALTH

1.5



**LOST TIME ACCIDENTS** per million hours worked and a total sickness absence rate of 2.2%

VALUE CHAIN

> 500,000

**BUSINESS-PARTNER** data screened for sanctions and trade laws

PEOPLE ENGAGEMENT

86%



**OF EMPLOYEES** replied that "DNV GL's Purpose, Vision and Values are important to me"

ENVIRONMENT AND CLIMATE

28



**THOUSAND tCO<sub>2</sub>e** OF DIRECT EMISSIONS, a decrease of 10% from 2014

BUSINESS ETHICS

83%



**OF EMPLOYEES** completed Code of Conduct training, while 81% of employees completed anti-corruption and anti-trust training

DIVERSITY

22%



**FEMALE MANAGERS** and 117 nationalities among our employees

# STRENGTHENING OUR HEALTH AND SAFETY CULTURE

Putting safety first is embedded in our values and our purpose of safeguarding life, property and the environment. We aspire to ensure a healthy working environment for, and zero harm to, our employees and contractors. Health and safety is to be part of everyday work and we encourage incident reporting in order to learn from critical situations and prevent accidents.



**“ WE AIM TO BE THE SAFEST PLACE TO WORK COMPARED TO OTHER COMPANIES IN OUR INDUSTRIES. BENCHMARKS SHOW THAT WE ARE DOING OK, BUT WE ARE CONTINUING TO MATURE OUR HEALTH AND SAFETY CULTURE ACROSS THE COMPANY. ”**

**SARAH D. GRØNDAHL**  
HEAD OF GROUP HSE

## OUR APPROACH

■ **Our working conditions are of significant importance to us and our stakeholders** because they concern the wellbeing of our employees and are important for our reputation as an employer. Moreover, our core business is to enable our customers to enhance their safety and we strive to apply best practice in our own organization.

■ **We are committed to continuously improving our occupational health and safety performance.** We have developed a comprehensive, global occupational health and safety management system. This is certified according to the OHSAS 18001 standard and embedded

in our Group management system. Our health and safety organization is structured along two lines of responsibility: country and business area. The backbone of our occupational health and safety management system is that all employees are fully aware of their right to say 'No' when they consider the situation to be unsafe.

■ **For reporting and managing incidents and hazards, we use our in-house developed, commercial software Synergi™ Life.** This includes the use of the Synergi™ Life Mobile App for the immediate reporting of an occurrence at any time or place. Employees can also anonymously report incidents and near misses.

■ **Our HSE incident-recording system complies with local laws and regulations in the countries where we operate.** In countries with little legislation, the DNV GL Group requirements, which comply with Norwegian

regulations, are adhered to. These are aligned with the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases.

■ **A significant objective of incident and hazard reporting is to share and learn from experience gained across organizational units.** Learning is shared through quarterly presentations of cases assessed as having medium or high loss potential and there are no strict limitations on access to the incident and hazard data base. We focus on transparency, training and tools when working towards a mature health and safety culture.

■ **Health and safety statistics and reviews are reported to the top management on a quarterly basis.** The reports are made available to all employees on the intranet.

**1.5** lost time accidents per million hours worked

**2.2%** total sickness absence rate

**0.23** incidents and hazards reported per employee

# TARGETS AND RESULTS



## Our ambitions

- » We are committed to managing and continually improving our occupational health and safety performance with the overall goal of preventing injury and occupational illness.
- » Develop and implement occupational health and safety plans to deliver continual improvement in health and safety performance.
- » Treat incidents, hazards and feedback from employees and customers as an important learning opportunity.

## What we said

- » Strengthen the overall health and safety culture across the company through a global initiative.
- » Align and re-design the global health and safety training portfolio based on results from the safety culture initiative.
- » Sustain the emergency preparedness level with the continuation of crisis management exercises.

## Where we are

- » The health and safety culture initiative was undertaken globally and completed as planned.
- » An assessment shows that the health and safety culture is not yet at the maturity level which we envision.
- » Based on the results of the health and safety culture initiative, two new courses have been added to the global health and safety training portfolio.
- » Crisis management exercises and emergency preparedness initiatives were conducted as planned.

## What we plan

- » Implement global and local strategies and initiatives to advance the health and safety culture.
- » Strengthen the resilience of our workforce based on the challenging market situation.

## HIGHLIGHTS

■ **Strengthening the health and safety culture programme.** A global initiative was launched to strengthen the health and safety culture through clear goals and systematic assessments, measures, training and tools.

■ **New HSE intranet gateway.** A new intranet site allows easy reporting of incidents and hazards as well as providing monthly updates of HSE performance and trends. The new site also facilitates best-practice sharing across the company.

■ **Increased use of Synergi™ Life.** This reporting tool's improved user interface contributed to a large increase in reported and closed-out health and safety cases.

■ **Cross-business-area field-work safety training.** A web-based course on field-work hazards and how to protect yourself and others was launched. The course covers typical hazards such as confined spaces, transfers at sea, working at height and electrical systems and has been developed with input from HSE representatives in all business areas.

■ **Health and safety questions integrated in the People Engagement Survey.** The replies in 2015 show that 88% responded positively to "In my unit we are empowered to stop unsafe work", 81% responded positively to "In my unit we discuss preventive actions related to safety" and 80% responded positively to "My line manager shows interest in my well-being at work".



## 2015 REVIEW

**H**EALTH AND SAFETY CULTURE. In 2015, we launched a programme with the purpose of strengthening the Group's health and safety culture. Activities were conducted worldwide based on an online survey, interviews, document reviews, and data analysis using a systematic analysis of the culture across several dimensions.

During the assessment phase, there were many positive findings about DNV GL's safety culture. For example, there is generally good collaboration between colleagues and line managers; there are many safety procedures and training courses available; and the notion that 'work is never so urgent or important that we cannot take the time to do it safely' is deeply rooted among employees.

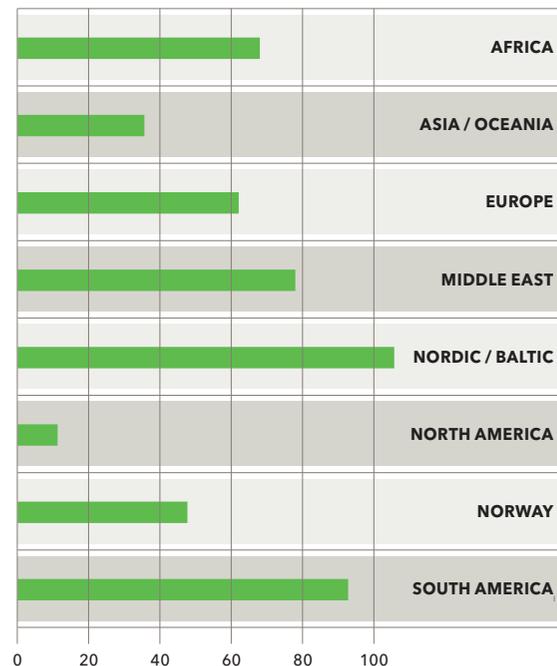
The survey's results indicate that employees face challenges with regard to work-related stress, travel and driving. Going forward, we will initiate actions to address these issues.

**INCIDENTS AND HAZARDS.** During the year, 3,593 incidents and hazards related to occupational health, safety and the environment were reported. This represents 0.23 reports per employee and is an increase of 60% from 2014. This improvement is related to global awareness campaigns in the Oil & Gas business area. There is still a need for increased understanding of the importance of reported incidents and hazards as a knowledge basis for improving occupational health and safety performance.

Of the reported incidents and hazards, 27% were assessed as having medium or high loss potential. In 2015, 326 work-related cases were reported using the Synergi™ Life mobile app, compared to 212 cases in 2014 (54% growth), and 117 occupational health issues were reported. The most common health causes were 'overstrain, exertion or repetitive strain' (48%), and 'exposure to too high or low temperatures, or inadequate lighting or air quality' (22%).

**LOST TIME ACCIDENTS.** The number of Lost Time Accidents per million worked hours was 1.5 in 2015, a 7% rise from 2014. The increase is related to natural variations over the rolling 12 months and is considered to be within acceptable industry standards, but we will continue to strive for improvements.

**FIGURE 05** LOST DAY RATE (LDR): THE IMPACT OF OCCUPATIONAL ACCIDENTS AND DISEASES  
TIME OFF WORK FOR THE AFFECTED EMPLOYEES



### 3 HEALTH AND SAFETY

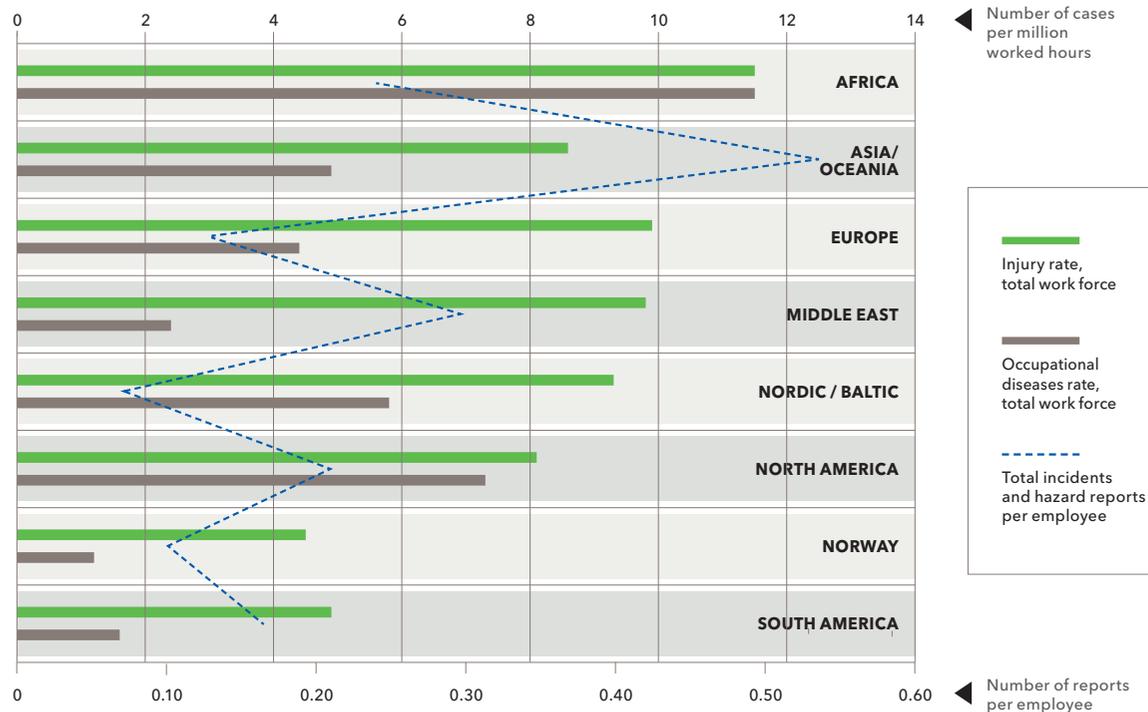
There were 644 days off due to accidents. The Severity Accident Index decreased by 16 compared to 2014. This significant decrease is partly due to one serious accident in 2014. The most common types of lost time injuries were 'fractured bones, sprains and strains' (36%), and 'bruises, contusions and cuts' (25%).

**OCCUPATIONAL HEALTH ISSUES.** The number of occupational health issues leading to absences was 1.3 per million worked hours in 2015, compared to 1.0 in 2014. There were 662 days absences due to occupational health issues. The number of days of absence due to occupational health issues per million worked hours was 24.5, up from 13.5 in 2014. The increase is due to more stress-related cases in 2015 than in 2014.

Most of the absence hours due to occupational health issues were related to office work (61%), surveys and inspections (22%), and travelling (14%). Of the absence hours due to occupational health issues, 78% were related to psychosocial work environment conditions, 17.5% to physical work environment conditions and 4.5% to other.

**INVOLVING EMPLOYEES.** To ensure that employees' opinions are heard, local occupational health and safety evaluations are held annually throughout the company.

**FIGURE 06 INJURY RATE, OCCUPATIONAL DISEASES RATE AND NUMBER OF REPORTS PER EMPLOYEE**



Our objective is to improve occupational health and safety awareness by involving employees in identifying occupational health and safety improvement initiatives.

In 2015, local HSE evaluations in all countries where we have offices were coordinated by the Country Chairs and reported through the annual HSE Management System Review process. About 78% of employees participated in local HSE evaluations in 88% of the offices. In addition, formal occupational health and safety committees are established in 16 countries as a consequence of local legal requirements. At the year-end, 55% of the workforce were represented in formal joint management-worker health and safety committees, the same high level as in 2014.

**IMPROVED TRAINING.** The focus on health and safety competence and awareness training continued in 2015. All new employees are required to complete health and safety induction training within the first two weeks of working. In addition, the Maritime, Oil & Gas and Energy business areas have together developed a cross-business-area field-work safety-training web course with the purpose of ensuring that employees know about field-work hazards and risks and how to protect themselves and others.

In response to the findings from the health and safety culture assessment, a global stress management framework

has been developed, including a new e-learning module on stress. The purpose is to provide all employees with knowledge and practical tools and techniques to be more robust and resilient in situations that could cause stress.

**CRISIS MANAGEMENT.** Following the review of our crisis-management protocol and plan in 2014, the members of the Group Crisis Management Team participated in altogether 12 crisis exercises in 2015. DNV GL's own

Emergency Response Service unit planned and conducted these exercises and ensured integrated interfaces with country-level crisis teams.

Teams from the UK, Denmark, the Netherlands, France, China, South Africa, Mexico, India, the US, UAE, Italy and Norway participated in exercises that included dealing with hurricanes, oil-pipeline explosions, shooters and hostages in the office.

**FIGURE 07 HEALTH AND SAFETY INCIDENTS STATISTICS**

	2011	2012	2013	2014	2015
Fatal accidents	0	0	0	0	0
Lost time accidents (LTA) <sup>1)</sup>	32	30	38	42	41
Injury accidents	101	102	124	221	183
Occupational health issues, with absence	17	17	19	29	36
Near accidents	246	244	284	492	582
Lost time accident frequency (LTAF)	2.0	1.9	2.0	1.4	1.5
Severity accident index (SAI) <sup>2)</sup>	25.2	39.0	14.7	30.5	25.5
Injury accident frequency (IAF)	6.4	6.3	6.6	7.4	6.8
Injury rate (IR) <sup>3)</sup>	NA	NA	NA	NA	8.3
Occupational diseases rate (ODR) <sup>3)</sup>	NA	NA	NA	NA	4.3
Absentee rate (AR) <sup>3)</sup>	NA	NA	NA	NA	49.2
Total sickness absence rate (%)	2.4	2.2	2.1	2.0	2.2

**1)** The LTA reported for 2014 has been corrected due to one LTA occurring in 2014 being recorded after the cut-off for the 2014 external reporting.

**2)** The SAI reported for 2014 has been corrected due to an update of sick-leave hours in 2015 related to an accident registered in 2014.

**3)** The IR, ODR and AR are reported from 2015.

Definitions are provided in the GRI notes.



## CASE

## When safety training counts

**All new employees in DNV GL are required to complete HSE induction training within the first two weeks of working. One part of this training is mandatory for all employees and addresses safety in offices and while driving and travelling.**

The other part is mandatory for all personnel who will take part in field tasks at third-party worksites as part of their regular job. Each business area has also identified additional mandatory training and re-training to ensure that employees know the hazards and risks related to field work and how to protect themselves and others.

This training includes working on ships, offshore and onshore installations, wind farms, construction sites, fabrication yards, manufacturing sites, ship yards and pipelines, etc, as well as general topics such as fire-fighting and first aid.

In 2015, a DNV GL surveyor was visiting a manufacturing facility to conduct a regular inspection of transformers. He arrived earlier than usual and, on his way to the test site, found a man unconscious, pale and foaming at the mouth, in front of a live, excited transformer.

Our surveyor acted quickly. He sounded the alarm and isolated the electrical equipment. With copybook precision, he provided first aid - checked breathing and pulse, maintained the injured person's position except for rotating his head to prevent choking, alerted and advised other workers and called the emergency services. The injured worker recovered eventually, thanks to the quick actions of our surveyor.

Returning to his office, the surveyor thanked his manager for sending him on the surveyors' safety course, which all surveyors must attend every five years. Everyone agreed that professional experience, technical expertise and safety training really played their part in this happy ending.

# SAFEGUARDING OUR CULTURE OF INTEGRITY

Our value 'We never compromise on quality or integrity' is the leading principle for fostering a common culture of integrity across all operations. For this reason, we have a zero tolerance policy for corruption and unethical behaviour by any employees, subcontractors, agents or suppliers. We encourage transparency and strive to foster a learning culture - two key factors that help us build a robust organization.



**“OUR BUSINESS CONDUCT AS WELL AS OUR PERSONAL CONDUCT MUST ALWAYS REFLECT THE DNV GL VALUES, DEMONSTRATE ETHICAL LEADERSHIP AND UPHOLD OUR REPUTATION FOR INTEGRITY.”**

**THOMAS VOGTH-ERIKSEN**  
CHIEF FINANCIAL OFFICER

## OUR APPROACH

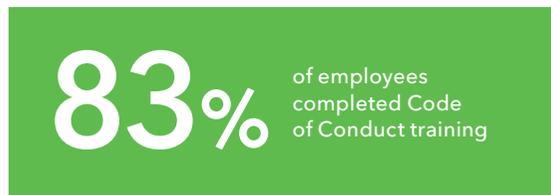
■ **Integrity, ethics and anti-corruption are very important to us and our stakeholders**, and compliance is fundamental to remaining professionally objective and independent when delivering services to our customers and society as a whole.

■ **We do not tolerate any violation of applicable laws, including anti-corruption and privacy legislation, our Code of Conduct or internal regulations.** A robust governance structure and management system are important to ensure this. Our Code of Conduct outlines high-level principles in two main areas: DNV GL's conduct of its business; and the personal conduct of people involved in DNV GL's business at all levels, both in ordinary work situations and when there are challenges to our personal or professional integrity.

■ **As a global company with activities in a range of sectors, we face differing local regulations and practices** which again result in a diverse risk picture. Effective compliance is based on the global governance of our compliance organization and clear-cut reporting lines, as well as close cooperation between Group Compliance and our business areas.

■ **Our compliance programme with its related instructions is based on the Code of Conduct and owned by the Board.** To help our managers meet their responsibilities, the compliance programme focuses on integrity in business dealings, anti-corruption, anti-trust, export controls, sanctions and data protection. Respective instructions on these topics and how to report misconduct are in place. This enables us to:

- 1) mitigate identified business risks
- 2) improve business performance
- 3) build trust amongst our employees, customers and other key stakeholders.



■ **The management of corruption and fraud risks is integrated into the regular risk management processes** and the Group Compliance Officer is a member of the Group Risk Forum.

■ **Communication, including the tone from the top and mandatory e-learning, is a key success factor in the programme.** The Code of Conduct is communicated to all employees through the line and published on the company website and intranet. The governing documents relating to our compliance programme are published as internal management system instructions.

■ **Our employees and customers are encouraged to report actual or suspected misconduct**, such as, but not limited to, concerns related to bribery, fraud or labour grievances by colleagues, suppliers, subcontractors or agents working on behalf of our company. The different channels for reporting misconduct are set out in our misconduct reporting instructions.



### 3 BUSINESS ETHICS AND ANTI-CORRUPTION

Internally, issues should be handled through the normal line-management route. If this is not feasible, the Group Compliance Officer or Ombudsmen should be contacted.

■ **Information on how customers, employees and other stakeholders should report potential misconduct** is published on the company website and intranet. Through the internal and external Ombudsmen, we can ensure anonymous reporting of concerns for our employees and customers.

■ **We expect our suppliers and subcontractors to uphold the same business ethics standards** and we have published instructions on our requirements. The new instructions for subcontractors, agents and other intermediaries, as well as the Supplier Code of Conduct, are to be provided to all relevant business partners, but we do not yet have a system in place to monitor the actual communication.

■ **Customer data are handled in accordance with the confidentiality obligations** that follow from the terms and conditions of our contracts with our customers. With regard to personal data, comprehensive instructions are in place outlining our standards to protect the personal data of employees and customers.

■ **Next to the instructions on anti-trust, we have published 'Do's and Don'ts for competition law' for further guidance.** Anti-trust is also part of the training programme. The e-learning tool, which was made mandatory for all employees in 2015, covers this topic with explanations and samples. Classroom courses on competition law are also held.

■ **Since all employees, regardless of category or region, are to complete the e-learning modules, we do not monitor completion by category and region.** All governance body members on the Board and Executive Committee have been given anti-corruption presentations and training.

■ **We will continue to regularly revise and update our policies to reflect changes in legislation and our own experiences.** Compliance risks are regularly assessed in order to evaluate the main focus areas and continuously improve the compliance programme. In addition, the Group Compliance Officer regularly reports new developments and case statistics to the Board's Audit Committee and the Executive Committee, ensuring frequent discussions on improvement measures and their implementation.





# TARGETS AND RESULTS

## Our ambitions

» We want to ensure that our value ‘We never compromise on quality or integrity’ is adhered to wherever we do business.

## What we said

- » Prepare regional instructions and guidelines.
- » Improve the risk management process related to fraud and corruption risks.
- » Strengthen the compliance network and increase communication measures.
- » Introduce express learning modules on specific topics, such as misconduct reporting.
- » Initiate an annual management review of the compliance programme to evaluate the effectiveness of the management approach.
- » Develop audit questions on compliance with the Internal Audit.
- » Communicate integrity to business partners.

## Where we are

- » Regional gift guidelines ready for local implementation.
- » Fraud and corruption risks included in the corporate risk management process.
- » Compliance network further extended and presentations and workshops conducted in offices worldwide.
- » Training modules 1 and 2 on Code of Conduct, Anti-Corruption and Anti-Trust rolled out.
- » Extensive Customer Audit on the compliance programme, with no findings.
- » Audit questions aligned with the Group Internal Audit, to be finalized in 2016.
- » Business Partner check conducted on more than 500,000 individual data.
- » High-risk country process in place.

## What we plan

- » Monitor implementation of anti-corruption process for high-risk countries.
- » Roll out classroom training Module 3 - Refresher on Anti-Corruption and Fraud.
- » Communication measures to be further improved, better involvement of business-area-nominated persons.
- » Awareness training for personal data protection.
- » A new Supplier Code of Conduct as well as due diligence questionnaires for subcontractors.

## HIGHLIGHTS

■ **E-learning modules mandatory for all employees.** Two e-learning modules on the Code of Conduct as well as anti-corruption and anti-trust were made mandatory for all employees in 2015.

■ **Publication of new governing documents and guidelines.** In 2015, we finalized a number of compliance documents. The new and amended documents relate to M&A due diligences, subcontractors, export controls and data protection.

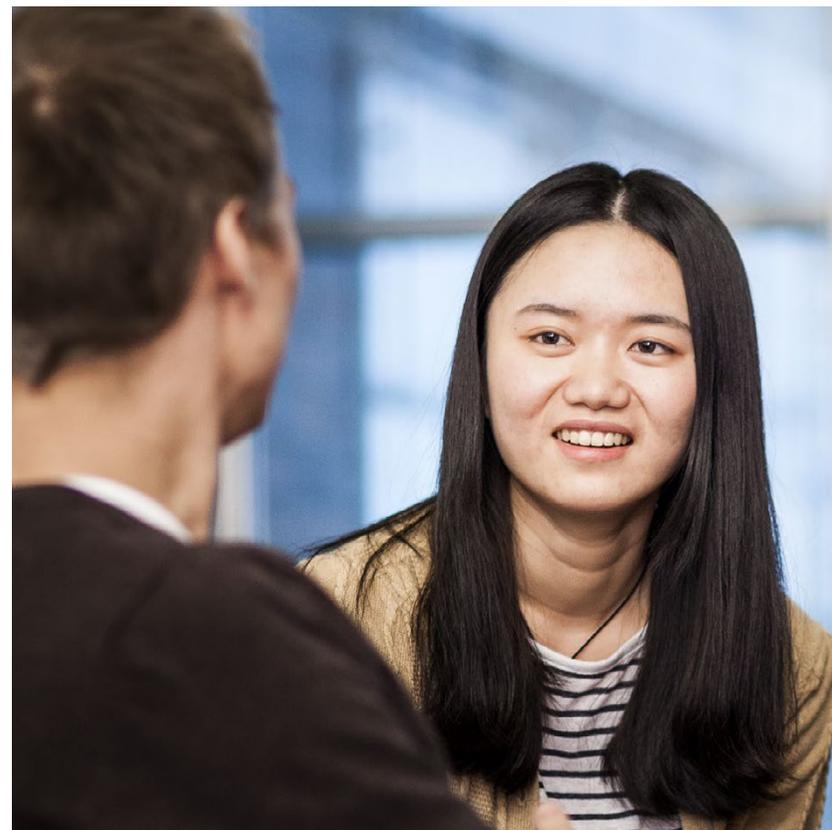
■ **Transparency on gifts.** A new web-based tool for registering accepted gifts was developed along with the establishment of local gift guidelines. It was proposed to introduce a new expense type for expense claims relating to gifts or invitations in the upcoming global financial system.

■ **Customer questionnaires and audits.**

Our customers frequently require us to demonstrate compliance through questionnaires and audits. A customer audit by a major global company gave a positive result for our compliance programme and no findings were made.

■ **Sanctions check tool.** A batch check of all our business partners' addresses was performed and 522,305 individual business partner data were screened.

■ **Data protection.** The Data Protection set-up was reorganized and a new Global Data Protection Officer was appointed to strengthen the management of employees', customers' and other business partners' personal data.



## 2015 REVIEW

**B**uilding an enduring culture of integrity requires constant attention. In 2015, we continued developing our governance documents, created a new training module and improved our management of corruption and fraud risks.

**GOVERNING DOCUMENTS.** In 2015, the Instructions on Subcontractors, Agents and other Intermediaries were adopted. Further, new questions focusing on compliance risks were added to the Group's M&A due diligence checklist.

Moreover, we published a new Export Control Guideline to support the Instructions on Foreign Trade and Export Control Compliance.

The procurement process for suppliers who handle personal data was revised, in particular due to the latest European Court of Justice Safe Harbour Decision. Furthermore, we published a procedure for accessing employees' email accounts or files.

An Anti-Money Laundering Guideline was published, including a reference to the sanctions-check tool. Finally, a new Supplier Code of Conduct and Due Diligence Questionnaires for Subcontractors are currently being prepared.

**TRAINING.** The e-learning modules on the Code of Conduct and anti-corruption and anti-trust that were made mandatory for all employees in 2015, help ensure that every employee recognizes the importance of these topics. They help us to acknowledge our personal responsibility to ensure compliance and make the right decisions on ethical and compliance matters by providing an ethical toolkit addressing the questions we should ask ourselves before making a difficult decision. On these courses, employees must confirm that they have read and understood the Code of Conduct.

# >500,000

business-partner data screened  
for sanctions and trade laws

Furthermore, the courses aim at achieving a common level of knowledge on corruption and anti-trust issues and risks and how to identify and deal with critical situations across the company. The level of understanding is proven through a test, which also includes relevant cases. The Code of Conduct training has been completed by 83% of all employees, while 81% have completed the anti-corruption and anti-trust training and around 350 employees did compliance-programme training. All employees are expected to have completed the two e-learning modules by the year-end 2016.

The training statistics are compiled in line with the different business areas' structures, which deviate from each other with regard to countries and regions. However, due to the overall high completion rate, satisfactory business ethics training can be ascertained across markets and we have not identified any particular employee category that is lagging behind in the mandatory training.

**FRAUD AND CORRUPTION RISKS INCLUDED IN REGULAR RISK PROCESS.** The Global Risk Forum has included a reference to fraud and corruption risks in the Procedure for Corporate Risk Management. Furthermore, a questionnaire was developed to help risk managers evaluate compliance risks in their areas of responsibility and this will be added as a new appendix to the corporate risk management instructions.

### 3 BUSINESS ETHICS AND ANTI-CORRUPTION

Regional risk managers will be responsible for filling out the questionnaire for the countries in their region. All business areas conducted a risk assessment in 2015. Our risk management tool included 17 identified and active fraud and corruption risks, including kickback payments and the falsification of documents or reports. The risks were identified in Oil & Gas (8), Global Shared Services (4), Business Assurance (3) and Maritime (2).

**TABLE 01 COMPLIANCE CASES**

Case type	New cases	
	2014	2015
Labour-related*	6	7
Allegations of a crime	18	10
Data-protection issues	1	4
Ethical issues	1	3
Others	6	16
<b>Total</b>	<b>32</b>	<b>40</b>

\* Five of the new labour-related cases were closed in 2015. One of the newly reported cases was related to discrimination. The investigation did not substantiate the allegations. Furthermore, two cases from previous periods were ongoing in 2015. One of them was resolved.

**MEASURES FOR HIGH-RISK COUNTRIES.** We will execute extra measures in countries with a high risk of fraud or corruption. We identified ten high-risk countries in 2015 and extraordinary measures, such as training, audits, reviews, etc, will be implemented in them all. The Country Chairs of the designated countries will coordinate the measures and ensure reporting through the regular risk process for all business areas.

**TABLE 02 BUSINESS ETHICS TRAINING, COMPLETION RATES ALL EMPLOYEES PER BUSINESS AREA**

	Code of Conduct course	Anti-corruption & anti-trust training
Business Assurance	71%	68%
Energy	87%	87%
Maritime	89%	88%
Oil & Gas	78%	77%
Software	81%	79%
Global Shared Services	84%	80%
Group Centre	74%	67%
<b>Grand total</b>	<b>83%</b>	<b>81%</b>

**COMMUNICATION.** Communication is critical for a compliance programme to be effective, and the top and line management continued to express their commitment to the programme. Updates and highlights concerning the compliance programme were presented to the Board of Directors, Board Audit Committee and Group Executive Committee in 2015.

The Executive Leadership Teams in many business areas, line management and Country Chairs representing all countries where DNV GL operates have all received further training measures. The global compliance network shall continue to actively raise awareness of compliance issues in the respective countries and help communicate the compliance programme.

**REPORTING ON INCIDENTS.** The case report template, introduced in 2014, helps us improve the handling and filing of potential non-compliance cases. In 2015, there were no confirmed incidents of corruption and no registered legal proceedings for anti-competitive behaviour, anti-trust or monopoly practices. We have not registered any significant fines or non-monetary sanctions for non-compliance with laws and regulations, or any substantiated complaints regarding breaches of customer privacy and losses of customer data.



CASE

## A global approach in creating regional gifts guidelines

**We constantly seek to review and improve our business ethics programme. In March 2015, Group Compliance initiated a programme to establish local gift guidelines. Regional guidelines were published as reference documents to the Instructions on the Acceptance and Granting of Gifts, Entertainment, Travel or other Benefits.**

These regional guidelines should help employees to make the right decision when providing or accepting gifts or entertainment to or from customers, including public officials, as well as business partners and suppliers. The limits set by the guidelines are practical and easily complied with.

All Country Chairs have been involved in the setting up of the new governing documents as it is part of their role to promote, support and facilitate

the fulfilment of DNV GL's purpose, vision and values in cooperation with all operating units and managers in the country or area.

The new guidelines align with various regional cultural differences and tax requirements while also taking into consideration our customers' and competitors' approaches to gifts and hospitality.

In June, all local guidelines were finalized for local implementation in the regions US and Canada; Europe including Russia, Azerbaijan, Kazakhstan, Turkey and Ukraine; Asia and Australia; the Middle East, Africa and India, including Bangladesh and Sri Lanka; and Latin America. The guideline for Greater China was implemented in 2014.

# HIGH COMMITMENT DESPITE DOWNSIZING

Our role as a service provider and source of expertise relies on the knowledge, skills and attitudes of our people. Therefore, we work to develop highly competent, high-performing and engaged people who are committed to our Purpose, Vision and Values. In the challenging situations in some of our core markets, engaged people is even more important.



**“ I'M VERY PLEASED TO SEE THE CONTINUED POSITIVE RESULTS OF THE ANNUAL ENGAGEMENT SURVEY, DESPITE THE CHALLENGING MARKETS AND THE LARGE NUMBER OF CHANGE PROGRAMMES FOLLOWING THE DNV GL MERGER. ”**

**CECILIE B. HEUCH**  
GROUP CHIEF HR OFFICER

## OUR APPROACH

■ **Our Group strategy and management system, including our People Policy, provide the overall governance for how we attract and develop experts and build a strong company culture.** These policies also direct our value-based leadership expectations and facilitate the operations of the business areas, regions and Group units, as well as the overall development of DNV GL.

■ **Our Code of Conduct is embedded in our management system and outlines our ethical business conduct and ethical personal conduct principles.** The Code upholds the principles of non-discrimination, equal opportunity, the right to join labour unions and fair employment.

# 92%

of employees agree with this statement: "I am committed to working towards the future success of the DNV GL Group"

We consider the company's Purpose, Vision and Values as instrumental in attracting and retaining the diverse workforce necessary in global markets. We emphasize the importance of sound management of human and labour rights.

■ **We value dialogue and have broad geographic employee representation on DNV GL's Board of Directors.**

Our management works constructively with employee organizations through the Global Employee Forum, regional and local Works Councils, and in daily operations.

■ **We have internal governing documents detailing competence and training.** We follow the 70:20:10 learning model, which has been identified as the most effective mix for learning: 70% from experience and practice of doing the job, 20% through interaction with other people (networks, managers and peers), and 10% from e-learning and classroom courses. Additional business-area-specific training takes place in order to ensure the required competencies within our different services.

# 117

nationalities are represented among our employees. 23 nations have 100 or more employees.

■ **All employees are assessed annually on results and behaviour through a structured performance management process.** The assessment, development and selection of new managers are based on our expectations regarding leaders: Respect and Care, Foresight, Customer Focus, and Result Orientation.

■ **The Group President and CEO approves our People, Leadership, and Roles and Responsibilities policies.**

The Group HR & HSE function establishes our policies and sets the direction for how HR is to be managed. Group HR & HSE works closely with the HR teams in the business areas and Global Shared Services to ensure aligned implementation across the company. People management is a line responsibility and our line managers are supported by HR managers and a range of tools facilitating the HR processes.

# 87%

of employees have a higher education at PhD, Master or Bachelor degree levels

# TARGETS AND RESULTS



## Our ambitions

- » Our strategic goal is 'to develop highly competent, high-performing and engaged people who are committed to our Purpose, Vision and Values'.
- » A career in DNV GL should not be hindered by age, nationality or gender if the employee has the competence, attitude and values needed for the role.
- » We strive to have a consistent, transparent and market-relevant compensation and benefit framework that supports the organization's need for flexibility with respect to tasks, work location and career opportunities.

## What we said

- » Improve the quality of the performance management process and dialogues. The Group-wide Key Performance Indicator was "improvement of the quality of key performance management aspects by 3%".
- » Increase the efficiency of the organizational structure by eliminating one level of management.

## Where we are

- » The KPI of a 3% improvement in selected performance management aspects was reached, with a Group-wide improvement of 3.5% since the 2014 survey.
- » The divisional level was eliminated in the Maritime, Oil & Gas and Energy business areas to make the organization leaner and more responsive to changes in the market and customer demands.

## What we plan

- » Improve clarity and direction, including how the strategy is being implemented and how individual employees contribute to the achievement of strategic goals.
- » Improve leadership capabilities in the organization through digital and targeted offerings.
- » Support the development of a customer-centric culture.

## HIGHLIGHTS

■ **Tough market and overcapacity.** The total number of employees declined by more than 750 to 14,954 during 2015. This was the result of headcount reduction processes in various business and support units in response to the decline in business activity, as well as voluntary turnover, which for the year fell to 5.4%. The largest countries in terms of number of permanent employees are Norway (2,678), Germany (1,848), the US (1,767), the UK (1,332) and China (996).

■ **New Group President & CEO in place.** Remi Eriksen was appointed DNV GL's new Group President & CEO from August 2015 after a thorough recruitment process. He comes from within the ranks of the company, with 22 years of service. Remi Eriksen replaced Henrik O. Madsen, who retired in July after three decades with the company, the last decade as Group CEO.

■ **More operational management.** To be leaner and more responsive to market developments and customer demands, one layer of management was eliminated from the Maritime, Oil & Gas and Energy business areas. This process had already been carried out in the Business Assurance organization.

■ **High levels of employee engagement.** The overall scores on the People Engagement Process Survey in 2015 remained high and above the reference group of high-performing companies, despite possible merger fatigue and difficult market conditions in our core industries.

■ **Improving performance.** The implementation of the individual performance-management process continued in 2015 and was completed for 87% of employees. The KPI of a 3% improvement on selected performance-management aspects was reached, with a Group-wide improvement of 3.5% since the 2014 survey.



## 2015 REVIEW

The past year was challenging for many employees. The downturn in some of our largest markets was reflected in less activity in several parts of the company.

At the same time, the voluntary employee turnover rate declined to 5.4% from 6.9% at the end of 2014. Cost-saving measures and a hiring freeze were not enough to compensate for the decline in business activity. Hence, involuntary headcount reductions were unavoidable in some of the business areas, and these were mirrored by headcount reductions in Global Shared Services and the Group Centre.

**EMPLOYEE ENGAGEMENT AND ENABLEMENT.** We use a People Engagement Process to measure employee engagement and enablement and identify aspects of the working environment that should be improved. The annual survey was conducted in September and 92% of employees replied. More than 1,000 reports were distributed to individual units and management teams for use in facilitating two-way communication with employees and establishing improvement actions.

The Group-wide People KPI for 2015 was to improve key aspects of individual performance management, as measured by the People Engagement Process survey. We improved

by 3.5 percentage points for the selected questions as a result of efforts across the company, including training for managers at company-wide, business-area and local levels.

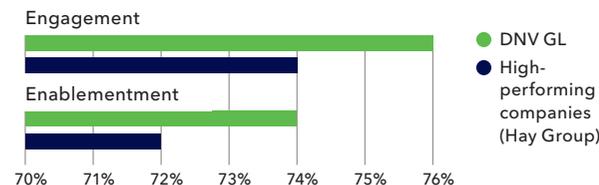
Despite the challenges in large parts of the business, we continued to outperform survey company Hay Group's reference group of high-performing companies. We scored most above other high-performing companies in terms of engagement, as well as line-manager support for employee development. The individual question that was answered most favourably was related to employees' commitment to the future success of the DNV GL Group, with as many as 92% favourable.

**AREAS TO IMPROVE: CLARITY AND DIRECTION.** The annual People Engagement Survey highlighted areas to improve, particularly 'clarity and direction', including the understanding of the relationship between employees' individual goals, unit goals and the overall DNV GL strategy. The communication of the strategy for 2016-2020 should contribute positively in this area. In addition, local managers are expected to take action on local issues highlighted in the local survey results. Improvement in clarity and direction has also been chosen as one of the Group-wide KPIs in 2016.

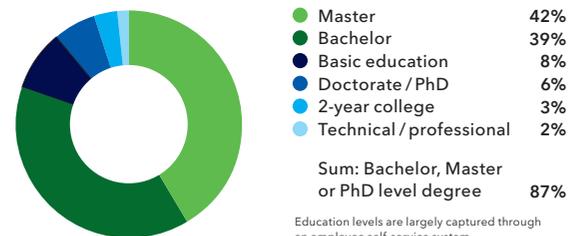
**DIVERSITY SOUGHT AFTER.** We strive for the diversity of our workforce to be reflected at all management levels. The proportion of female employees was 31% at the year-end, and the proportion of female managers is now 22%. Our employees represent 117 nationalities. We will continue

to conduct mentoring programmes and have senior managers located outside headquarters to gain better knowledge of local employees. There will also be a global summit for up-and-coming talent in the organization in 2016. The make-up of the total manager pool should show year-on-year improvement towards reflecting the composition of our workforce.

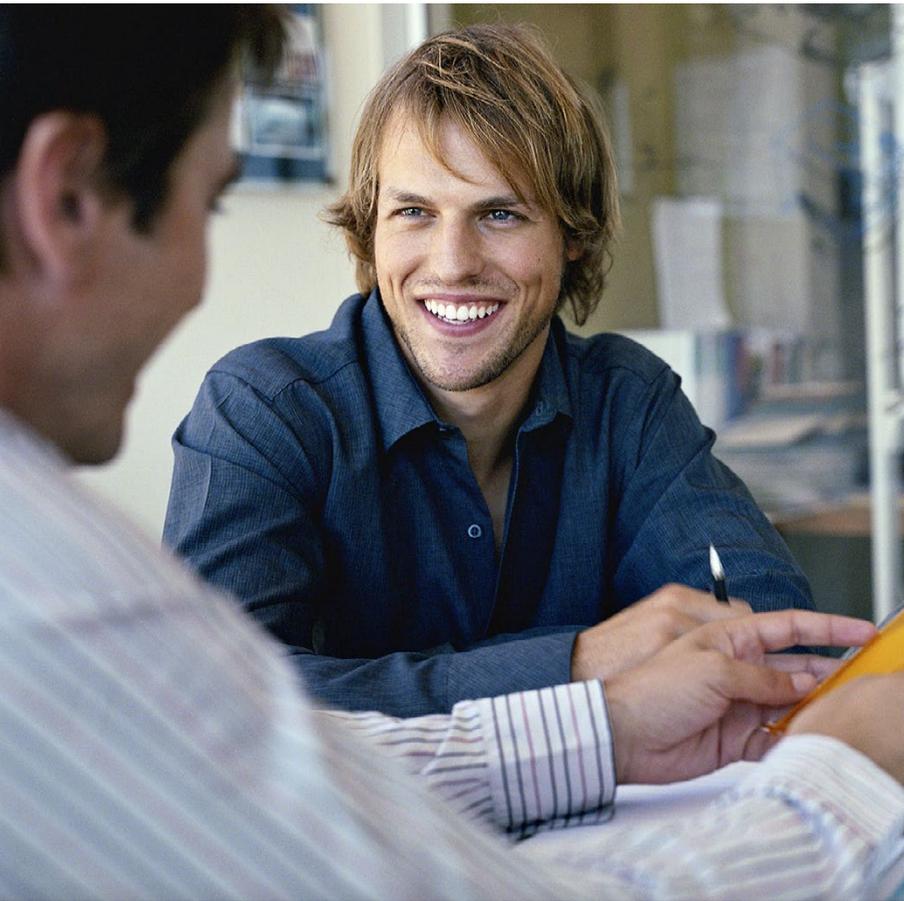
**FIGURE 08** EMPLOYEES' ENGAGEMENT AND ENABLEMENT



**FIGURE 09** EMPLOYEES' LEVEL OF EDUCATION



Education levels are largely captured through an employee self-service system.



## CASE

## Improving individual performance management

**After assessing the 2014 People Engagement Survey results, where some aspects of performance management were lagging behind external benchmarks, a Group KPI was established for 2015 to improve selected performance-management aspects. The business areas had separate action plans to support this improvement.**

A follow-up survey directed at 10% of the employees was launched in April to assess developments and provide feedback to the business areas on the effect of their actions. The questions asked were:

- I receive clear and regular feedback on my work performance
- I understand the relationship between my individual goals and my unit's goals

- My individual goals (annual goals and normal job expectations) are motivating and challenging
- I have an individual development plan including career ambitions and learning goals
- Action has been taken in my unit as a result of issues raised in the last People Engagement Survey

The survey response rate was 75%. The spot-survey results showed an overall improvement of 4.4% compared to the September 2014 results. In the full 2015 People Engagement Survey in September, the performance-management questions showed an improvement of 3.5% compared to 2014, thus surpassing the KPI of 3%.

# REDUCING EMISSIONS AND SAVING COSTS

A fundamental part of our Purpose and Vision is to have a positive impact on the environment through the services we provide. We also continuously work to reduce our operations' negative environmental footprint and our employees' personal footprint. Climate-change mitigation is an urgent global task and also a priority in our own operations.



**“ WE NEED TO MOBILIZE ACROSS INDUSTRIES AND ACROSS BORDERS TO ADDRESS CLIMATE CHANGE.”**

**REMI ERIKSEN**  
GROUP PRESIDENT & CEO

## OUR APPROACH

- We strive to foster a culture where we continuously improve our environmental and climate impact, whether this stems from our operations, services, or employees' personal activities. As a signatory to the UN Global Compact, taking a precautionary approach in managing environmental and climate aspects is embedded in how we run our business.
- Our Code of Conduct states that we are to work to reduce the environmental impact of our own operations, procurements, investments and property management. Further, we are to minimize our emissions and consumption

of energy and natural resources, and actively contribute to environmental protection by promoting the development and deployment of environmentally friendly technologies.

- DNV GL is certified according to the ISO 14001 standard for environmental management systems. We are committed to managing and continuously improving our environmental performance, with the overall goal of protecting the environment and complying with applicable legal requirements. This is stated in our HSE policy and implemented by a common approach, processes and systems for managing our environmental performance throughout the Group. HSE coordinators support line management, and the Group HSE function is responsible for governing and controlling environmental performance across business units using the Synergi™ Life tool.
- We seek appropriate and sustainable approaches and choose green solutions. If no such solution can be found, we shall as far as possible apply the solutions with the

least negative environmental impact. If we undertake work which may have environmental impacts that are different to those of our normal operations, such impacts shall be identified and evaluated. Suppliers and subcontractors who provide services in compliance with our environmental policies and standards shall be preferred.

- Our operational priorities are to reduce our operations' energy consumption and emissions to air, and the measuring and monitoring of these aspects are recorded and followed up annually. We also encourage employees to improve their personal carbon footprint and environmental performance through awareness programmes and funding activities.
- We can positively affect the environment and climate by helping our customers to choose low-carbon and green solutions and ensure operational excellence, thus reducing both emissions and costs.





# TARGETS AND RESULTS

## Our ambitions

- » We are committed to managing and continually improving our environmental performance, with the overall goal to protect the environment.
- » We aim to foster a culture where we take responsibility for our environmental performance through the impact of our services, operations and employees' personal behaviour.

## What we said

- » Increase the focus on environmental management, in particular in relation to test sites and laboratories.
- » Improve the quality of the environmental reporting process to ensure reliable data.

## Where we are

- » Comprehensive internal and external audit plan in place, including for test sites and laboratories.
- » Well-established reporting system through Synergi™ Life, where all environmental events are captured.
- » Environmental performance reporting tool upgraded to improve efficiency and data quality.

## What we plan

- » Establish a Group-wide plan with measures to become climate neutral, as defined in the Group Strategy 2016-2020.
- » Improve data quality and reporting practices for all GHG emissions; Scope 1, 2 and 3.

## HIGHLIGHTS

■ **Two global travel agencies selected to also measure our travel footprint.** In addition to reduced travel costs through global frame agreements, these agencies will help us improve the reporting quality of, and reduce, travel-related emissions.

■ **Moving into environmentally friendly buildings.** We are constructing a BREEAM NOR Excellent building at our headquarters in Norway and have moved into a BREEAM In Use Asset Excellent-rated building in Arnhem, the Netherlands.

■ **225 high-end video-conferencing systems in more than 80 different locations.** With global coverage of video conference rooms, we have increased video usage for management and project meetings by 11%.

■ **Improved Synergi™ Life tool environmental-reporting tool.** We have upgraded our environmental-reporting tool with new functionalities that better support environmental-reporting processes and provide a more user-friendly data-input interface.

■ **NOK 40 million to reduce employees' personal footprint.** For the eighth year running, the WE Do programme funded employee's activities to reduce their personal environmental footprint and benefited 5,474 employees.



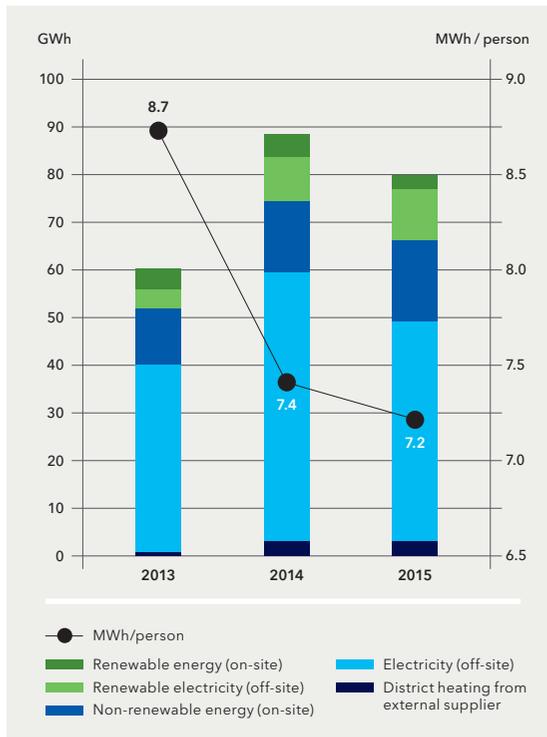
## 2015 REVIEW

Our business relies on people, knowledge and tools, as well as test sites and laboratories. We are committed to helping our customers reduce their carbon footprint and improve their environmental impact, as well as enhancing our own performance. Our priorities are to reduce energy consumption and emissions to air from our operations.

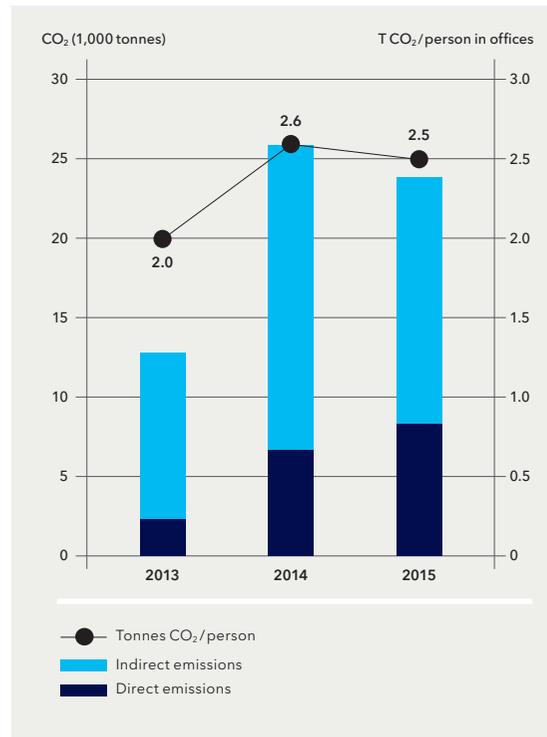
Our reporting on energy and greenhouse gases is not complete and the data quality is uncertain for Scope 1, 2 and 3 emissions. In 2015, we reported on 79 locations that account for 82% of our employees. Due to its recent start, there is still uncertainty as to the completeness of the reporting by many of these locations. As part of our 2016-20 strategy of becoming carbon neutral, we are addressing this in 2016 and will increase the share of our locations reporting their energy consumption and greenhouse gas emissions.

We previously reported on the 15 locations we considered to have the most significant greenhouse gas emissions.

**FIGURE 10 ENERGY CONSUMPTION IN THE 79 REPORTED LOCATIONS**



**FIGURE 11 GREENHOUSE GAS EMISSIONS (SCOPE 1 AND 2) FROM THE 79 REPORTED LOCATIONS**



**ENERGY CONSUMPTION.** The total reported energy consumption for 2015 was 79.6 GWh for the 79 reporting locations, a decrease of 9% from 2014. The energy consumption per person at these locations decreased to 7.2 MWh in 2015, down 3% from 2014. The total surface area of these locations increased by 17% as a result of office relocations and the rebuilding of facilities.

Electricity from the grid decreased to 54 GWh, down 17% compared to 2014. The specifically ordered renewable electricity off-site was 9.5 GWh in 2015, 7% less than in 2014. Non-renewable energy produced on-site at the reporting locations increased to 18.3 GWh, up 22%, due to an increase in on-site gas consumption.

**GHG EMISSIONS FROM OPERATIONS.** The greenhouse gas emissions (Scope 1 and 2) from the 79 reporting locations in 2015 were 28,099 tCO<sub>2</sub>e, mainly from energy consumption, about 10% lower than in 2014.

This is a direct result of a decrease in the reported energy consumption for these locations. Arnhem Power TIC Laboratory is the major contributor to the reduced emissions due to changes in operations and lower energy consumption.

The specific greenhouse gas emissions (Scope 1 and 2) from the 79 reporting locations were 2.5 tCO<sub>2</sub>e per person in 2015, down 4% from 2014.

The estimated NO<sub>x</sub> emissions from the 79 reported locations increased by 22% compared to 2014 due to an increase in on-site gas consumption.

**GHG EMISSIONS FROM AIR TRAVEL.** We aim to minimize air travel, especially for internal purposes, and alternatives such as video conferencing shall always be considered. We have implemented a common global tool accounting for mileage and GHG emissions related

to business flights, but not all travel is registered. The reported emissions from registered business air travel (Scope 3) decreased from 0.9 tCO<sub>2</sub>e in 2014 to 0.8 tCO<sub>2</sub>e per employee in 2015.

**GLOBAL TRAVEL AGREEMENTS.** Two travel agencies have been selected for global implementation. Both agencies will provide greenhouse gas emission reports for countries where roll-out has been completed.

For countries where one of the global frame agreements has been implemented, business flights, hotels and rental cars must be booked through the designated agency. The aim is to have all flights, hotels and rental cars booked through one of these agencies by the end of 2017. Once this has been achieved, we can know our baseline, report more comprehensively and reduce both emissions and costs.



**ENVIRONMENTALLY FRIENDLY OFFICES.** We will seek BREEAM In-Use certification for our Energy headquarters in the Netherlands - which also houses colleagues in Oil & Gas, Business Assurance, Software and Global Shared Services. The BREEAM standard rates a building's sustainability performance. Our aim in Arnhem is to have an Excellent rating for the Asset sub-certificate after the renovation. This includes cold storage, approximately 500 PV panels, triple-glass windows, CO<sub>2</sub>-controlled ventilation, water-saving toilets and waste-separation facilities.

We will apply for certification to the BREEAM NOR Excellent standard for the new building under construction at DNV GL headquarters in Norway. Among other things, we will reduce energy use, reduce or eliminate pollution in indoor environments and ensure adequate daylight, lighting and ventilation for users.

**500** PV panels will be installed in Arnhem when renovating the site

As part of the BREEAM certification, we will also contribute to greater biodiversity in the area. The building will use about half the energy of a building built in 2010. With 125 electricity-charging stations established in the parking garages, we have Norway's largest charging park for electric cars.

**NEW VERSION OF SYNERGI™ LIFE.** DNV GL has upgraded the Synergi™ Life environmental reporting system. The new version better supports environmental-reporting processes and provides a more user-friendly data-input interface. New functionalities support data-quality assurance and save time on enhanced data verification and reports. The administration of emission factors is also more efficient and user-friendly.

**125** electricity charging stations established in our parking garages at Høvik, Norway

**'WE DO' EMPLOYEE PROGRAMME.** The WE Do programme has helped employees improve their personal environmental footprint since 2009. The employees' personal environmental footprint is estimated to be at least comparable to the total footprint from our operations. In 2015, we provided funding of NOK 40 million to 5,474 employees for employee activities, with the most popular activities being 'Low-energy appliances' and 'Cycle to work'.

**ENVIRONMENTAL COMPLIANCE.** In 2015, we did not identify any significant fines or non-monetary sanctions for non-compliance with environmental laws and regulations.

**40** MILLION NOK funding to improve employee's personal environmental footprint



CASE

## Going carbon neutral in Norway

**Our ambition in Norway is to become carbon neutral in 2016 and certified as carbon neutral in 2017. In 2015, our carbon management experts developed a climate strategy for our Norwegian operations.**

“We want to lead the industries we engage in towards a safe and sustainable future. This also applies to our own activities, and this initiative taken by the cross-business-area leadership team in Norway is a very tangible step on the way,” says Remi Eriksen, Group President and CEO.

Carbon neutrality means a commitment to reduce net annual greenhouse gas emissions to zero. This can be done through a combination of internal reduction efforts and external offset purchases.

In 2015, we measured our emissions and potential savings and established the goal of reducing

18,000 tCO<sub>2</sub>e in 2016. Green electricity alone will account for more than 50% of the aimed-for greenhouse gas reduction. The rest will be achieved through less internal travel and by carbon offsetting funding greenhouse gas saving elsewhere.

By purchasing trusted carbon credits to offset these emissions, we will contribute to the financing of renewable energy, forest protection and reforestation projects that would not otherwise be financially viable. Such projects play an important role in climate-change mitigation.

“DNV GL has extensive experience in carbon-emission-reduction mechanisms. We will only select projects that ensure real emission reductions that are additional to business as usual,” says Trine Kopperud, Assessment Services Manager Nordics.

# PREPARING SYSTEMATIC SUSTAINABLE- PROCUREMENT PRACTICES

As a global company, procurement has mainly been managed at a local level and within each business area. Based on internal group guidelines and our Supplier Code of Conduct, local buyers have implemented sustainable procurement to varying degrees.

**“ OUR CURRENT AMBITION FOR THE YEARS AHEAD IS TO FULLY IMPLEMENT A CONSISTENT SUSTAINABLE PROCUREMENT PROGRAMME ACROSS DNV GL WORLDWIDE. AN IMPORTANT PART OF THIS IS TO INCREASE THE AWARENESS OF OUR AMBITIONS, POLICY AND PROCEDURES THROUGHOUT THE COMPANY.**

**LARS KJØNØ**  
DIRECTOR OF REAL ESTATE  
MANAGEMENT AND PROCUREMENT,  
GLOBAL SHARED SERVICES

## OUR APPROACH

■ **We aim for high sustainability standards throughout our supply chain.** Sustainable-procurement principles and instructions are given in our management-system documents; the Supplier Code of Conduct, the instructions for procurement, for subcontractors, agents and other intermediaries, in the real-estate management policy and the real-estate leasing guideline.

■ **Our commitment to corporate sustainability** extends to our relationships with suppliers, subcontractors, contractors and agents. Our Supplier Code of Conduct

outlines our expectations for suppliers and is aligned with the UN Global Compact's ten principles on human rights, labour standards, environmental performance and anti-corruption.

■ **Our suppliers are in two main categories:** direct suppliers provide services that are part of our deliveries to customers. These suppliers provide technical expertise or conduct management-system certifications on our behalf. Suppliers of indirect goods and services are related to services such as facility management of our office buildings, travel, ICT hardware and software, financial services and office supplies.

■ **DNV GL shall use suppliers which accept our Supplier Code of Conduct.** Suppliers are required to sign the Supplier Code of Conduct or accept it as a mandatory attachment to the contract. New indirect suppliers shall be screened for inherent sustainability risks. Where needed, suppliers are requested to conduct self-assessments.

■ **The work of establishing a more systematic approach to sustainable-procurement management continued in 2015,** mainly related to revising and upgrading our procurement instructions. The Supplier Code of Conduct was revised. Our review of current procurement processes has started, but is not yet completed.

■ **In general, the degree of implementation varies across the company.** Our ambition for 2016 is to select integrated procurement software globally that can store key supplier data, including relating to sustainable-procurement processes. This software is expected to be implemented in 2017. Once this has been done, we can also improve our external reporting in this area.

■ **Our Supplier Code of Conduct also applies to our subcontractors.** They have to comply with HSE requirements that are equivalent to our own requirements. The management of subcontractors has been given particular attention, including in our global compliance programme.

Global Procurement organization in the shaping

Updated Supplier Code of Conduct

Renewed instructions for risk management of subcontractors, agents and other intermediaries



# TARGETS AND RESULTS

## Our ambitions

- » We believe that sound sustainability performance reduces risks and costs in our supply chain.
- » Our ambition is to positively influence the sustainability performance of our partners in our value chain, and thereby to improve our suppliers' sustainability practices.
- » To this end, we aim to establish a global procurement process which enables us to effectively engage with our suppliers worldwide and monitor performance.

## What we said

- » Update key governing documents and embed new procedures in the management system.
- » Implement the roll-out of the plan for new policies and procedures, including screening of suppliers' performance based on the criteria set out in the Supplier Code of Conduct.
- » The system for monitoring and following up on these issues in our supply chain will be incorporated in our new financial/procurement system, to be launched in 2015.

## Where we are

- » The DNV GL Supplier Code of Conduct revised.
- » Group procurement processes reviewed to further strengthen sustainability. This work is not yet finalized.
- » Sustainability integrated into instructions for real-estate management and the leasing of property.
- » The instructions for the management of subcontractors, agents and other intermediaries revised.
- » The process for monitoring and following up suppliers initiated, but the roll-out has been delayed.
- » Supplier self-assessments conducted considered necessary.
- » The integration of sustainable procurement into the new financial and production system is pending.

## What we plan

- » Integrate sustainability into all procurement projects.
- » Deliver training to key personnel in procurement functions.
- » Establish software to monitor supplier compliance.
- » Report on and review performance.



CASE

## Setting the standard for leasing of offices

**When we moved to our new offices in Milan, we were looking for not only cost efficient and customer-friendly offices, but also environmentally sound buildings. We are now leasing elegant offices in the Vimercate's Energy Park just outside Milan, and the building recently achieved LEED CS Platinum certification.**

Employees and customers appreciate the functional and aesthetical offices, and the environment-friendly profile also contributes to the wellbeing on the workplace.

Our Global Real Estate Leasing Guideline state that “we aim to select more efficient buildings, while utilizing independent certifications such as BREEAM, LEED, DGNB or other environmental and sustainable assessment methods and rating systems for buildings”.

LEED is a voluntary certification programme that can be applied to any building to follow its project fully, from the design to the realization phase. It rewards a sustainability-oriented approach, highlighting the building's performances in key sectors. There are only 80 LEED Platinum buildings in the world - and we are proud to set the standard for leased buildings.



# IMPACT THROUGH PARTNERSHIPS

We have ever since our beginnings in 1864 worked with partners to safeguard life, property and the environment. As part of our vision to have a global impact for a safe and sustainable future, we support the UN Sustainable Development Goal 17 on partnerships.

We strive to act faster and achieve more in collaboration. We fund and provide technical expertise in local and global partnerships, focusing on climate, social and governance innovation.

## United Nations Global Compact

We joined the UN Global Compact in 2003 and are committed to embedding the ten principles for sustainable business in our corporate strategy, management system and day-to-day operations. We base our sustainability strategy and tactical plan on these principles, and have aligned our annual report with this framework.

**IMPACT ASSESSMENT:** we launched the report *IMPACT: Transforming Business: Changing the World at the UN General Assembly*. This was a joint collaboration with the UN Global Compact to assessing the impact of the initiative since its launch in 2000.

**NEXT: SUSTAINABLE BUSINESS:** we launched a coffee-table book featuring the top 30 executives we interviewed for the IMPACT assessment.

**BOARD MEMBER:** our former Group CEO Henrik O. Madsen was elected a Board Member of the UN Global Compact.

**EVENTS:** we contributed to several forums and seminars throughout the year, including the UN Private Sector Forum, the Sustainable Development Goals Forum, the Sustainable Transportation working group and local network meetings.

**ADVANCED REPORTER:** we achieved the 'UN Global Compact Advanced' reporting level with our Communication on Progress for our 2014 annual sustainability report.

“ The UN Global Compact has brought business to the table as a key partner. We have seen that responsible business practices combined with innovation and collaboration can bring about powerful change. Now, we need more companies around the world to commit to sustainability, and take shared responsibility for achieving a better world.

**BAN KI-MOON**

General Secretary, United Nations, when presenting the DNV GL assessment of UN Global Compact's first 15 years in the UN General Assembly, June 2015.



## Climate Technology Centre and Network

We have since 2014 been assigned by the Climate Technology Centre and Network (CTCN) to support its operations by utilizing our extensive experience in technology transfer, knowledge management and capacity building.

We also facilitate private-sector involvement in the Centre's network in order to stimulate technology cooperation among developed and developing countries. CTCN is the operational arm of the UNFCCC Technology Mechanism, hosted by the UN Environment Programme (UNEP) and the UN Industrial Development Organization (UNIDO).

**KNOWLEDGE MANAGEMENT:** we launched a multi-functional knowledge-management system featuring a matchmaking facility for technology providers and developing countries and a climate-technology library.

**PRIVATE SECTOR ENGAGEMENT:** at COP21, we launched the 'CTCN Engagement Forum' to promote climate technologies and bring together the private sector, governments, investors and other stakeholders. In order to demonstrate the CTCN's overall impact, we also linked the Technical Assistance outcomes to the UN Sustainable Development Goals.

**MONITORING, EVALUATION AND MANAGEMENT SYSTEMS:** we developed, and are implementing, a monitoring and evaluation system which determines the impacts of the CTCN activities in relation to the UN Global Sustainable Development Goals and climate change.



## World Business Council for Sustainable Development

We have been member of the World Business Council for Sustainable Development (WBCSD) since 2000. Currently, we engage in several programmes and the Action2020 roadmap platform to explore and deploy new technologies and solutions.

Our EVP Group Development is a member of the Climate and Energy cluster board. During 2015, we played an active role in the WBCSD Road to Paris strategy, focusing on the Low Carbon Technology Partnerships initiative.

**SCALING UP RENEWABLES:** we are co-lead for the programme, focusing on the action plan to support the deployment of 1.5 TW of additional renewable energy by 2025. We seconded a project manager, providing expertise in renewables and financing mechanisms.

**ZERO EMISSION CITIES:** we are co-lead for the programme and collaborate with city officials and local companies to reach zero emissions in cities focusing on smart mobility, buildings and energy infrastructures.

**BUILDING RESILIENCE TO CLIMATE CHANGE IN GLOBAL SUPPLY CHAINS:** we are co-lead for the programme, which launched its final report at COP21.

**HUMAN RIGHTS WORKING GROUP:** we are a member of the working group.

**BUSINESS ZONE:** we sponsored the WBCSD and IETA Open for Business Zone at COP21 and contributed to side events on technology transfer and private-sector engagement.



## Global Opportunity Network

The Global Opportunity Network is an initiative from DNV GL, the UN Global Compact and the Monday Morning Global Institute. It started in 2013, includes companies, governments and individuals and is an arena for us to build business and competence and share insights.

Each year, more than 200 experts on five continents attend eight panels to discuss the opportunities that emerge from five of the biggest sustainability risks currently facing the world. Their insights are tested against the opinions of 5,000 private- and public-sector leaders through an online survey. The result is presented in the annual Global Opportunity Report.

**GLOBAL OPPORTUNITY REPORT 2015:** the first Global Opportunity Report, addressing risks in 2014, was launched in Zürich in January 2015. It demonstrates 15 opportunities for business and society, addressing the risks Extreme Weather, Continued Lock-In to Fossil Fuels, Unsustainable Urbanization, Lack of Freshwater, and the Continued Rise in Chronic Non-Communicable Diseases.

**GLOBAL OPPORTUNITY REPORT 2016:** the risks addressed in 2015 were Resistance to Lifesaving Medicine, Accelerating Transport Emissions, Loss of Ocean Biodiversity, Global Food Crisis, and A Generation Wasted. Opportunity panels were run in San Francisco, Sao Paulo, Johannesburg, Oslo, Abu Dhabi, London, Delhi and Beijing, with the second Global Opportunity Report launched in Oslo in January 2016.





## SUSTAINIA

We are one of the founding partners of Sustainia, a sustainability think-tank working to scale the deployment of innovative solutions. As well as financial support, we have over the past four years together identified more than 3,200 sustainable solutions for private and public sectors in 150 countries.

**ROUNDTABLE:** in 2015, we hosted a roundtable with business leaders, government representatives, the heads of UN agencies, international think-tanks, civil society and religious organizations, academics, international media, artists and activists.

**SUSTAINIA100:** this study features sustainability innovation solutions, including new ways of saving water, managing waste, building homes and safeguarding food production.

The partners behind it are the UN Global Compact, DNV GL, Connect4 Climate, Regions20, WWF, Realdania, Storebrand and the International Federation for Housing and Planning.

Independent sustainability experts from 18 international research organizations, including Yale University, the World Resources Institute and the Acumen Fund, selected the solutions.

The Sustainia Award and Community Award were launched during COP21 in Paris.

## Red Cross

We have partnered with the Red Cross since 2004 with the objectives of strengthening their capacity to carry out humanitarian work and creating opportunities for our employees to volunteer for Red Cross projects. Our partnership involves annual financial contributions to the Norwegian, Dutch and UK Red Cross organizations as well as extraordinary donations.

Our employees also provide expertise to selected Red Cross projects that are related to our core business. Through this, we aim to make a positive contribution to the UN Sustainable Development Goals on access to clean water and sanitation, as well as the development of sustainable cities and communities.

**CHINA:** we supported building running-water pipelines for households in Shuibe, health education for villagers, Red Cross knowledge training and villager volunteer training.

**THE NETHERLANDS:** we supported a Disaster Relief Partner Programme with fundraising by employees, and the Red Cross offered first-aid courses to all employees.

**NEPAL:** we supported donations to the earthquake disaster, with employee fundraising matched by DNV GL.

**NORWAY:** we provided volunteers and supported fundraising for literacy help and equal opportunities for underprivileged children. Donations to European refugees by employees were matched by DNV GL and donations from our Software Customer Survey were made to the Red Cross Water for Life project.

**THE PHILIPPINES:** we contributed expertise in urban-disaster prevention by means of digitalization and the geographic representation of relevant risk information in Manila.

**THE UK:** we supported both international and national projects, with employee fundraising matched by DNV GL.

**VIETNAM:** we supported and provided expertise to a community water and sanitation project in Khanh Hoa.

**STRATEGIC PARTNERSHIP:** we participated in the Red Cross conference attended by Ban Ki-moon and the Red Cross conference on Climate Change and Disaster Risk Reduction in Urban Informal Settlements.



## WWF

We have been OnePlanetBusiness partners with WWF since 2012, with the aim of ensuring a safe and sustainable future in which biodiversity and ecological processes are conserved and resources are used sustainably.

**COMPETENCE:** the partnership also serves as an arena to build competence and challenge each other on the subjects of Low Carbon Society and Climate Change Adaptation.

We are providing expertise and funding to three projects during the 2015-18 period.

### PROJECTS:

- » Climate-risk management in a public-ownership portfolio, involving our Business Assurance experts.
- » Multi-purpose hydropower and climate-adaptation modelling in the ADAPT tool with integrated ecosystem risks, involving our Energy and Technology & Research experts.
- » The Global Opportunity Network, where WWF has members on the Advisory Board and in the Expert Group.



# HOW WE PERFORM

The financial statements for DNV GL Group AS include consolidated income statement, statement of comprehensive income, balance sheet, statement of cash flow, statement of changes in equity and notes for DNV GL Group AS and all companies in which DNV GL Group AS directly or indirectly has actual control.

## In this section:

- Board of Directors' report
- Board of Directors' profiles
- Financial review
  - Key figures
  - Income statements
  - Balance sheet
  - Cash flow statement
  - Changes in equity
  - Notes
- Auditor's reports
- GRI content index
- Information and contact

# NAVIGATING MARKET CHALLENGES AND GROWTH OPPORTUNITIES

Major achievements were made in completing the merger integration plans and the Board approved a new strategy towards 2020 to further consolidate DNV GL's position as the globally leading classification, certification and technical advisory company. While actual revenue increased, difficult market conditions in the maritime industry and a sharply declining oil price contributed to negative currency-adjusted revenue growth in 2015.

The company achieved revenues of NOK 23,390 million in 2015. This was the second full financial year after the merger of DNV and GL and the merger integration activities were almost completed by the year-end, as planned. The integration achievements included the transfer of the majority of the DNV GL-classed fleet to one common production system. Merger synergies were captured according to plan and the roll-out of common systems will largely be completed by the end of 2016.

Another major milestone was reached with the publication of new maritime and offshore classification rules. These not only bring together the best of DNV and GL rules, but also set a new industry

benchmark, giving customers a modern rule set that is clear, lean and easy to work with. The new rule set was examined by the combined technical and business expertise of the maritime industry, involving leading yards, ship designers, manufacturers and ship owners worldwide. More than 800 customers and maritime stakeholders and 250 internal experts gave input to the new rule set.

The Board sincerely thanks the management and employees for the hard work and commitment they have displayed throughout 2015.

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## MARKET

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The shipping industry in general suffered from an overcapacity of ships in 2015, but a few segments registered strong growth. A total of 2,900 ships, equalling 68 million gross tonnes (GT), were delivered by shipyards around the world. This was a 3% increase over the previous year when measured in GT, but a decrease of 12% based on the number of vessels. Global new-building contracts reached a volume of close to 75 million GT and almost 2,150 vessels ordered, a decrease of 35% based on the number of vessels, and 9% based on GT compared to 2014.

Many of the ships-in-operation segments struggled in 2015, and this was most notable in the offshore market. Hit by the low oil price and combined with an order book at record high levels, there were many cancellations, postponed contracts and bankruptcies in the sector. The bulk market was weak, and the Baltic Dry Index dropped to lows not seen in over 30 years.

The container charter market improved at the beginning of the year, only to fall later in the year, particularly in the Far East to Europe trade. This resulted in vessel lay-ups representing some 7% of the existing global container fleet.

Some sectors enjoyed a more positive year, with gas carriers making the highest earnings in their history. The other bright spot was the global cruise market, where demand continues to increase year on year, most notably in China.

Newbuilding order intake for DNV GL reflected the overall decline in global newbuilding, but the company's performance in the passenger/ferry and container ship segments was strong. At the end of 2015 the DNV GL-classed fleet stood at 12,740 vessels and MOUs, totalling 268.6 million GT, an increase of 1.2% in terms of gross tonnage.

The maritime advisory services were also affected by the challenging market environment, but were able to maintain a level of order intake comparable to 2014. A notable highlight, however, was the launch to market of the ECO Insight portal. Over the course of 2015, ECO Insight became the industry's leading fleet performance management solution, with more than 600 vessels enrolled.

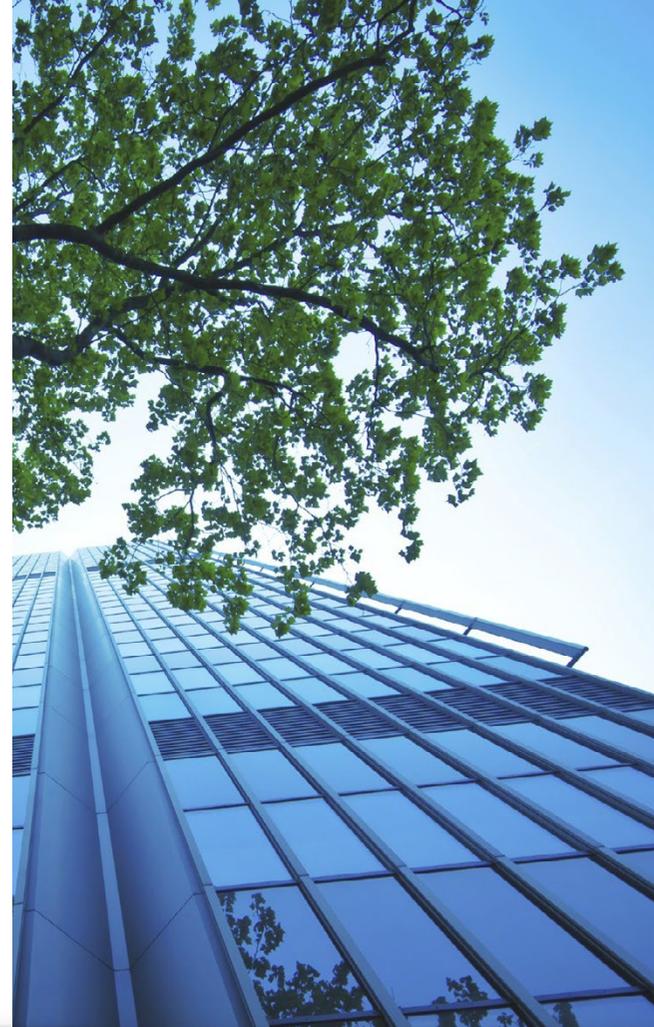
In addition to the expected contraction of the maritime business and the slowdown of the Chinese economy, the collapse of the oil price had a negative impact on DNV GL's markets in 2015. By January, crude-oil prices had fallen below USD 50 per barrel for the first time in six years, and the continued global oversupply of hydrocarbons led oil prices to drop a further 35% by the end of the year. In addition, project cost inflation has been rising sharply for more than a decade, thus eroding margins.

Cost management and efficiency became urgent across the industry, as companies struggled to maintain their positive cash flow. The short-term reactions to market changes included capital investment projects being delayed or cancelled, pressure being put on the supply chain to cut costs, and headcount reductions coming into force.

The oil and gas industry's downturn affected DNV GL's order book in 2015. The company saw its Oil & Gas business contract and made organizational adjustments to maintain its robust financial position in a market where the price of oil could remain low for some time.

As the industry's focus moved towards lower-margin business, DNV GL continued to help customers work smarter to improve the efficiency of their projects and operations in 2015. The company managed more than 30 oil and gas joint industry projects (JIPs) with the aim of standardizing, cutting complexity and increasing efficiency.

One such JIP, which includes partners Hyundai Heavy Industries, Daewoo Shipbuilding and Marine Engineering Company and Samsung Heavy Industries, aims to establish a new international standard for offshore oil and gas projects. The results could potentially cut the costs of a typical tension leg platform project by 15%, for example. The initial phase of the JIP focused on standardizing simple components and equipment. In 2016, this will be extended to include complete modules and equipment packages and a review of industry and company standards, as well as of maritime rules and approaches to standardization.



In the global decommissioning market, activity increased in 2015 as uneconomic platforms were retired to save costs. DNV GL is helping its customers to decommission assets in a variety of locations. These assets range from entire platforms and floating production assets to individual packages and isolated appraisal wells. In 2015, our work included the provision of consultancy and marine warranty services for the decommissioning and dismantling of several platforms.

In a tough market, DNV GL registered some important project wins. For example, Wintershall Norge selected DNV GL as the sole supplier for the combined role of Independent Verification Body (IVB) and Third Party Design Verification for the subsea, umbilicals, risers and flowlines (SURF) element of its Maria field development project in the Norwegian Sea. DNV GL also won a contract with INPEX to provide in-service verification and classification services to a range of facilities at the Ichthys LNG project in Australia. The new contract follows DNV GL's provision of support to this USD 34 billion mega-project during the development phase, with verification, offshore classification and inspection services from DNV GL offices in seven countries.

The challenging upstream sector is driving the need for flexibility in the midstream sector, with the safe and reliable transportation of large volumes of oil and gas to and from diverse markets. As such, DNV GL is pursuing new opportunities to support customers in the design, construction and operation of on- and offshore pipelines in a safe, reliable and cost-efficient manner. This work draws upon experience from working with a wide range of pipeline projects, from the Los Ramones onshore pipeline

system supplying Mexico's industries with US shale gas to the Nord Stream pipeline exporting Russian gas to Germany. Over 65% of all offshore pipelines are designed DNV GL's pipeline code, which was first issued in 1976.

### **NETWORK OPERATORS ARE ADAPTING AND MODERNIZING THEIR TRANSMISSION AND DISTRIBUTION GRIDS TO FACILITATE THE ADOPTION OF RENEWABLES AND ADDRESS INCREASING ELECTRICITY DEMAND. THIS CREATES OPPORTUNITIES FOR DNV GL'S ADVISORY SERVICES.**

In 2015, renewables contributed almost half of the world's new power generation capacity. Global investment in wind, solar and biomass, excluding large hydroelectric facilities, ended at a record USD 329 billion. The renewable energy industry, especially solar, developed fast in 2015 showing progress down the cost curve, but also facing regulatory uncertainty and lower investment in some regions. Onshore wind technology is maturing and offshore wind technologies are showing slower growth, lowering the demand for wind turbine type certification.

Network operators are adapting and modernizing their transmission and distribution grids to facilitate the adoption of renewables and address increasing electricity demand. This creates opportunities for DNV GL's advisory services. In the power grid component-testing market, prospects are good for DNV GL's high-voltage laboratory cable testing, but there is lower demand for high-power testing of high-voltage components.

Following market developments, DNV GL's Energy business achieved mixed results. Advisory services' revenue increased by 8% compared to 2014. Performance was particularly strong in North America, where Sustainable Energy Use services also delivered strong results. Changing market dynamics and increased competition led to a 14% decline in the power testing, inspection and certification business compared to 2014.

The Business Assurance part of DNV GL benefits from a large customer base spread across a wide range of industry sectors. This makes it less vulnerable to industry-specific downturns. Moreover, the drivers for assurance remain strong, arising primarily from stakeholder requirements for individual companies or industries and requirements imposed by regulations. These requirements call for an independent third party to provide transparent information and both demonstrate and communicate performance. The reach of assurance extends far beyond DNV GL's direct customers. An increasingly connected world drives the need for trust and transparency between companies and their stakeholders, making DNV GL well positioned to expand its role and services in the business assurance market.

Business Assurance continued its positive growth pattern in 2015, particularly in the second part of the year. Management System Certification was yet again the main service, growing 7% in 2015. The overall ISO management system certification market expanded by 3.1% worldwide (2014 figures). Within this market, DNV GL is maintaining its leading position in terms of market share and service innovation.

In 2015, Business Assurance grew less dependent upon management system certification and expanded its assurance portfolio to provide a holistic, integrated approach to sustainable business performance for its customers. For example, advancements were made in supply chain management and product certification services, which increased by 24%. Within the food and beverage industry, growth exceeded expectations once again. The increase in healthcare services similarly accelerated in 2015.

DNV GL's software business was also affected by the challenges in the oil and gas industry and sales declined. All software product lines except for Electric Grid Reliability and Performance and Asset Integrity Solutions experienced a downturn. Despite lower revenue from new licence sales, DNV GL – Software secured 279 new accounts. Many of these were in matured and challenged markets with few new entrants and are thus evidence of a growing market share.

## FINANCIAL PERFORMANCE

DNV GL Group AS achieved operating revenues of NOK 23,390 million in 2015, an increase of NOK 1,767 million from 2014. The 8.2% nominal growth is driven by a strong currency effect of 12.7%. Currency-neutral organic growth was negative at -4.8%, while non-organic growth accounted for 0.3%, including acquisitions of International Standards Certification and Noomas. The currency effect was strong throughout the year due to the weakening of the NOK versus major currencies.

The Maritime business area recorded revenues of NOK 9,790 million. That corresponds to an 11.2% increase from 2014 and was the main driver of the 2015 growth in the DNV GL Group. The Oil & Gas business area reported revenues of NOK 6,054 million, representing a contraction of 3.4% as a consequence of a challenging market and a significantly lower business volume. The Energy business area posted revenues of NOK 3,523 million, reflecting growth from favourable currency effects. Business Assurance concluded the year with significant growth of 21.4% and revenues of NOK 3,024 million due to a combination of higher business volume, acquisitions and currency effects. The Software business area recorded revenues of NOK 824 million, an increase of 5.2% due to favourable currency effects.

Earnings before interest, tax and amortizations (EBITA) improved from NOK 2,203 million in 2014 to NOK 2,274 million in 2015. The EBITA was mainly driven by classification, verification and management system certification services. After amortization of intangible assets of NOK 536 million in 2015, the operating profit (EBIT) increased by NOK 126 million from NOK 1,612 million in 2014 to NOK 1,738 million in 2015.

The financial income was NOK 102 million in 2015, including profit from investment in associates and net currency gains. The weakening of the NOK in 2015 led to a positive currency effect of NOK 49 million due to gains on exposure in foreign currencies.

The total financial expenses were NOK 114 million in 2015, of which net interest cost on defined benefit pension plans amounted to NOK 57 million. Other financial expenses were mainly

costs related to the credit line in Handelsbanken, interest on the deferred payment for the remaining 30% of the shares in Marine Cybernetics and costs related to currency hedging. The Group's net financial items were NOK 12 million (net expense) in 2015 compared to NOK 70 million (net income) in 2014. The main contributor to the downward trend is lower net currency gains in 2015 compared to 2014.

In August 2015, a new hedging policy was introduced focusing on cash flow hedging at Group level.

The 2015 tax expense of NOK 712 million represents a 41% average tax, in line with previous years. The net profit for 2015 was NOK 1,014 million, compared to NOK 1,007 million for 2014.

The net cash flow for the year was positive by NOK 207 million. The cash flow from operations was NOK 2,214 million in 2015 and reflects a strong overall performance. The cash flow from investments was NOK 1,099 million in 2015. Net investments in tangible fixed assets of NOK 643 million are mainly investments in laboratories in Business Area Energy, office-related investments and investments in IT equipment. Investments in intangible assets, related to new software platforms were recorded at NOK 256 million. Acquisitions in 2015 totalled NOK 82 million and NOK 118 million was paid in settlement of the remaining 30% shares in Marine Cybernetics. The NOK 908 million negative cash flow from financing activities includes NOK 400 million net repayments of external loans and dividend payments of NOK 504 million. At the year-end, the DNV GL Group had liquidity reserves of NOK 4,193 million plus a credit line of NOK 1,500 million.

The Group has a strong balance sheet with an equity ratio of 62.3% of total assets, after accrual for the dividend to shareholders of 50% of the net profit for 2015. As a result of the weakening of the NOK against most currencies, foreign currency gains of NOK 1,336 million relating to net investments in foreign subsidiaries were reflected in the equity in 2015.

Net actuarial gains of NOK 541 million from defined benefit pension plans are reflected in equity at the year-end. NOK 453 million of the actuarial gains were caused by changed assumptions in the actuarial calculations while NOK 64 million of the gains follow from the actual return on the plan assets in the Norwegian pension fund in excess of the discount rate.

The accounts of the parent company, DNV GL Group AS, show a profit for the year of NOK 4,017 million, including NOK 4,001 million in dividends received from subsidiaries. The Board proposes to transfer the profit for the year to other equity.

The Board confirms that the going concern assumption applies and that the financial statements have been prepared on this basis. The Board regards DNV GL's financial performance as strong and liquidity as very good. Both parameters contribute to a robust platform to achieve our strategic targets and maintain our independence as a financially strong and trusted company. The Board also confirms that, to its knowledge, the information presented in the financial statements gives a true and fair view of the assets, liabilities, financial position and results of the DNV GL Group for the period, and that there are no material events after the balance sheet date affecting the 2015 financial statements.

## STRATEGY

During 2015, the Board approved DNV GL's new strategy for 2016 to 2020. This sets out ambitious goals for further developing the company's established leadership positions within the maritime, oil and gas and energy industries and within management system certification services and software solutions. Customers are to experience a more agile, responsive and data-smart company catering even better for their needs. In order to build further resilience when faced with volatile market conditions in the existing core industries, the strategy also points to new growth opportunities. The company wants to become a trusted assurance provider within the life sciences sector. Both organic and non-organic growth will be pursued within healthcare and food safety, which are markets with significant growth potential. The objectives of safeguarding life and building trust and confidence in these industries fit well with the company's purpose, vision and values.

In the maritime industry, the goal is to be the leading classification society for ships and mobile offshore units, with the largest or second-largest market share in each major segment. DNV GL will take the lead in driving safety at sea and customers are to experience DNV GL as the standard setter and most innovative classification society through applied R&D, cutting-edge advisory services and data-smart, customer-centric solutions and support.

DNV GL aspires to be the leading global provider of assurance, risk management and technical advisory services to the upstream and midstream oil and gas market and downstream gas market.

DNV GL aims to use its technical expertise, innovation capabilities and testing laboratories to enable the oil and gas industry to rapidly improve its safety, environmental and efficiency performance.

With a growing world population, urbanization and increasing demand for energy, DNV GL helps its customers in the energy sector to manage the reliability and end-user affordability of electricity while safeguarding the environment. DNV GL will continue to address all three legs of this energy trilemma by: retaining its globally leading position as a provider of advisory and certification services to both the onshore and offshore wind energy sectors; building a leading position in solar and energy storage; strengthening its position as the world leader in independent testing, inspection and certification of grid components; and further expanding its sustainable energy use services. Also, as grids change, DNV GL wants to become a leading advisor on grid developments and the use of sensor-derived data as well as on emerging technologies.

In Business Assurance, DNV GL aspires to be the world's number one Management System Certification provider by revenue and to generate at least 50% of this area's revenues from assurance and sustainability offerings other than Management System Certification.

As a software provider, DNV GL wants to strengthen its position in the oil and gas and maritime industries and establish a leading position in renewable energy transmission, distribution and use.

The strategy also sets ambitions to stay at the forefront in terms of technology and the skills and knowledge of its employees. The company will increase its use of digital solutions to offer better services to customers, generate new revenue streams and improve efficiency.

## INNOVATION

Innovation is a cornerstone of DNV GL's business model. It is also central to the differentiation strategy that enables DNV GL to meet its strategic goals and has allowed the company to become a preferred and trusted risk-management and technology advisor to the maritime, energy, oil & gas and life sciences industries.

Consequently, the company is upholding its commitment to invest 5% of its annual revenues in research and innovation activities despite ongoing cost-cutting measures. The purpose is to deliver the best insight and technical abilities to help its customers work safer, smarter and greener. Innovative solutions and foresight are co-created and shared with the industries in which DNV GL is active. The ambition is to become a true innovation leader that helps shape and drive industries forward, making them safer, smarter and greener.

Of the total 5% of annual revenues invested in research and innovation, one fifth is allocated to long-term strategic research. In order to support the company's new strategic ambition of becoming a data-smart company, over half of the research and innovation activities are dedicated to digitalization and automation. One such example is the development of the "digital twin" concept which supports the classification and verification process for components and systems in a lifecycle perspective.

## ORGANIZATION

The Group President & Chief Executive Officer of DNV GL, Dr Henrik O. Madsen, retired on 31 July 2015. The Board of Directors is very grateful for Dr Madsen's contribution to DNV GL during more than three decades in a variety of management positions and as Group President & Chief Executive Officer since 2006.

The search for a new Group President & Chief Executive Officer began in 2014. The search process was administered by the DNV GL Compensation Committee, led by the Chair of the Board and assisted by an international search firm. The Board is pleased to have appointed Mr Remi Eriksen, an internal candidate with 22 years of experience with DNV GL, as Group President & Chief Executive Officer of DNV GL Group AS. He took up his appointment on 1 August 2015.

The DNV GL Group headquarters are located at Høvik, just outside Oslo, Norway. DNV GL is organized in a group structure with five business areas: Maritime, headquartered in Hamburg, Germany; Oil & Gas, headquartered in Høvik, Norway; Energy, headquartered in Arnhem, the Netherlands; Business Assurance, headquartered in Milan, Italy; and Software, also headquartered in Høvik, Norway, which became the fifth business area in 2015. Software was previously organized as an Independent Business Unit (IBU). Marine Cybernetics was also organized as an IBU in 2015, but became part of the Maritime business area on 1 January 2016. Global Shared Services provides HR, Finance and IT support services to all business areas and Group functions and is headquartered in Høvik, Oslo.

To ensure a leaner and more responsive organization, one layer of management was eliminated from the Maritime, Oil & Gas, Energy and Business Assurance business areas in 2015.

The total number of employees declined by more than 750 to 14,954 during 2015. This was the result of headcount reduction processes in various parts of the business and support units in response to the fall in business activity, as well as voluntary turnover (5.4% at the year-end). The largest countries in terms of number of employees are Norway (18%), Germany (13%), the US (12%), the UK (9%) and China (7%).

A career in DNV GL should not be hindered by nationality, gender or age if the employee has the competence, attitude and values needed for the role. The Board considers the company's purpose, vision and values to be instrumental in attracting and retaining the diverse workforce necessary in the global markets. The Board emphasizes the importance of sound management of human and labour rights. The proportion of female employees remained stable, ending the year at 31%. The proportion of female managers is now 22%. The DNV GL Board of Directors consists of eight men and six women, while the Executive Committee consists of six men and three women.

DNV GL continues to outperform survey company Hay Group's reference group of high-performing companies in terms of employee engagement and enablement, as measured by the annual People Engagement Performance survey.

**“ IN ORDER TO SUPPORT THE COMPANY'S NEW STRATEGIC AMBITION OF BECOMING A DATA-SMART COMPANY, OVER HALF OF THE RESEARCH AND INNOVATION ACTIVITIES ARE DEDICATED TO DIGITALIZATION AND AUTOMATION.**

## CORPORATE GOVERNANCE

DNV GL considers sound corporate governance to be fundamental in securing trust in DNV GL and as a cornerstone for achieving the greatest possible value creation over time in the best interests of DNV GL's customers, employees, shareholders and other stakeholders.

The Board of Directors has decided to report annually on corporate governance in accordance with the Norwegian Code of Practice for Corporate Governance (the "Code of Practice"), and to apply these principles to the extent relevant for the DNV GL Group as a private limited company with two shareholders. The Code of Practice covers 15 topics, and DNV GL's Corporate Governance report covers each of these topics and describes DNV GL's adherence to the Code of Practice. The Corporate Governance report describes the legal basis and principles for the corporate governance structure. The report is published separately and made available on [www.DNVGL.com](http://www.DNVGL.com).

The management company of the DNV GL companies is DNV GL Group AS, registered in Norway and governed by the Norwegian Private Limited Companies Act. This company is owned by Det Norske Veritas Holding AS ("DNV Holding") (63.5%) and Mayfair Beteiligungs-fonds II GmbH & Co. KG ("Mayfair") (36.5%) and is a result of the merger of the DNV Group and GL Group.

DNV GL's Board of Directors consists of 14 members, of whom nine are elected by the General Meeting based on nominations made by DNV Holding (six members) and Mayfair (three members). Five members are elected by and from among DNV GL employees worldwide.

The Board's combined expertise represents a range of stakeholders, markets and disciplines. The composition of the Board changed in 2015. Günter Herz resigned and board member J. Hinrich Stahl was appointed the new vice-chairman. Heinrich Frankemölle was appointed as a new member of the Board. Betty Bei Xu was elected as a new member of the Board by the DNV GL employees, replacing David McKay. The Board would like to thank Günter Herz and David McKay for their contributions and welcomes Heinrich Frankemölle and Betty Bei Xu as new board members.

The Board held six ordinary board meetings in 2015, including a two-day strategy meeting and three extraordinary meetings. The average attendance at these board meetings was close to 100%. The Board's Audit Committee held four meetings in 2015 and the attendance at these was 100%. The Board's Compensation Committee held eight meetings in 2015 and the attendance at these was 100%.



## CORPORATE SUSTAINABILITY

For DNV GL, corporate sustainability is about delivering long-term value in financial, environmental, social and ethical terms and this is embedded in the Group's purpose, vision and values. The Board considers this approach and the fostering of a company culture beyond compliance as fundamental in securing the Group's business success through sound operational performance and strategic positioning for profitable growth. There are both business opportunities and risks related to sustainability aspects and DNV GL has competitive advantages to capitalize on new customer demands for greener, safer and more transparent business performance in existing and new segments.

DNV GL has been a signatory to the United Nations Global Compact since 2003 and the Board sees the integration of the ten principles on human rights, labour standards, environmental performance and anti-corruption into the business strategy and

**“ THERE ARE BOTH BUSINESS OPPORTUNITIES AND RISKS RELATED TO SUSTAINABILITY ASPECTS AND DNV GL HAS COMPETITIVE ADVANTAGES TO CAPITALIZE ON NEW CUSTOMER DEMANDS FOR GREENER, SAFER AND MORE TRANSPARENT BUSINESS PERFORMANCE IN EXISTING AND NEW SEGMENTS.**

operations across the value chain as critical for capturing long-term value. The Board is responsible for compliance with the Code of Conduct and the Group President and Chief Executive Officer is responsible for compliance with relevant governing documents cascaded down the organization according to mandates and Key Performance Indicators (KPIs). The corporate sustainability performance in ongoing operations is a line responsibility. In addition, the Corporate Sustainability Forum, which has members from all business areas and relevant group functions, acts as an advisory body to the Executive Committee. The Board maintains overall responsibility for the Group's sustainability performance and risk management and monitors this on a regular basis.

In 2015, DNV GL continued to enable sustainable operations through three pillars: business activities for customers, activities within its own organization and collaborative activities through partnerships. Highlights include the product launch of the fleet management solution ECO Insight, which enables fuel consumption reductions and has more than 600 ships signed up; a new joint industry wind power project for offshore oil and gas applications that involves seven leading global customers; our techno-financial assessments of wind energy in Zambia, Tanzania, the Maldives, Egypt, Jordan and Oman for financial institutions and governmental organizations; the strong market position of Risk Based Certification™ under the new ISO 9000 and 14000 standards; the introduction of a step-change barrier management solution using Synergi™ Life QHSE software; and the publication of the report on the UN Global Compact's achievements in its first 15 years. The report was presented in the UN General Assembly in New York to more than 1,000 top corporate executives.

2015 was also a year of extensive activities within partnerships for sustainability, including joint industry and research projects, at COP21 and with IMO, IACS, the World Business Council for Sustainable Development, Climate Technology Centre and Network, UN Global Compact, Global Opportunity Network, SUSTAINIA, Red Cross and WWF. The Board finds collaboration and proactive stakeholder engagement important in order for DNV GL to continue to build trust and strengthen its market position in a digital and low-carbon economy.

Going forward, the UN Sustainable Development Goals launched in 2015 are well aligned with DNV GL's purpose, vision and values and will stimulate the way in which the Group is managed and conducts its business. DNV GL provides strong business solutions for many of the Sustainable Development Goals, including **9) Industry, innovation and infrastructure, 7) Affordable and clean energy and 13) Climate action**. The Board considers the UN Sustainable Development Goals to be relevant indicators of market trends and sees the new Group strategy as an enabler for stronger business positions for goals **12) Responsible consumption and production, 14) Life below water, and 3) Good health and well-being**, through DNV GL's strategic focus on digitalization and agility.

For a complete account of corporate sustainability, including information on Organization, Safety and Health, Business Ethics and Anti-Corruption, Energy and Climate as well as Partnerships, the Board refers to chapter 3, with notes, of the Annual Report. DNV GL reports in accordance with the Global Reporting Initiative Comprehensive Level, and a third party has conducted a limited assurance of the report.

## SAFETY AND HEALTH

DNV GL's purpose is to safeguard life, property and the environment. The Group is committed to managing and continually improving its safety and health performance with the overall goal of preventing injuries and occupational disease among its employees and contractors. DNV GL has been certified according to OHSAS 18001 since 2011 and the Board considers this as key to ensuring that the Group operates in a safer, smarter and greener manner. It also contributes to DNV GL being seen as a leader that enables the safe and sustainable performance of its customers. The Board sees the safety of people as a number one priority and monitors the company's safety performance regularly. The Chief Executive Officer is responsible for all health- and safety-related matters in DNV GL and has delegated mandates to Group HR and HSE, Country Chairs, unit managers and HSE coordinators in all countries where DNV GL operates. All employees are accountable for their own safety performance and have the right to refuse to carry out an activity if they do not believe the level of safety is satisfactory.

In 2015, there were no fatalities involving DNV GL employees or subcontractors. At the year-end, the 12-month rolling average for the Lost Time Accident Frequency (LTAF) was 1.5, the Severity Accident Index (SAI) was 25.5 and the Total Sickness Absence Rate was 2.2%. The number of lost time accidents was 41, the number of occupational health issues involving absence was 36, the number of injury accidents was 183 and the number of near-accidents was 582. The long-term trend is stable and the results are on average the same as industry benchmarks.

In 2015, the Group's governing Procurement document was updated to include compliance with DNV GL's equivalent safety and health requirements, in particular for services rendered on the DNV GL premises and for subcontracted survey-type work outside normal office locations. During the year, 12 emergency preparedness exercises were carried out, involving selected high-risk locations and Group functions. Mandatory common field work safety training was launched across the business areas. A global safety culture project was also started, focusing equally on health and safety and targeting a higher learning culture maturity. An all-employee survey revealed occupational-health-related challenges, including 40% experiencing stress at work. In response, a global stress management framework with e-learning has been implemented. A new KPI on the quality of hazard and incident investigations has been developed and will prevail from 2016.

## BUSINESS ETHICS

The DNV GL value "We never compromise on quality or integrity" is the leading principle for fostering a common culture of integrity across all operations. DNV GL has a zero tolerance policy for corruption and unethical behaviour that applies to all employees, subcontractors, agents and suppliers. Integrity and ethics are of significant importance to DNV GL and its stakeholders and the Board emphasizes the necessity of remaining professionally objective and independent in the services the Group delivers to customers and society as a whole.

DNV GL's compliance programme and related instructions are based on the Code of Conduct and are the responsibility of the Board. Anti-corruption, anti-trust, export controls, sanctions and data protection are the main focus areas of the programme. Respective instructions, e.g. on anti-corruption, gifts, anti-trust and the reporting of misconduct, are in place. Communication, including the tone from the top and mandatory e-learning, is one of the programme's key success factors. Compliance risks are regularly assessed in order to evaluate the main focus areas and continuously improve the compliance programme.

Fraud and corruption risks are included in the corporate risk management process, with regular bottom-up assessments and quarterly reporting to the Board. The Group Compliance Officer reports new developments and case statistics to the Board's Audit Committee and Control Committee as well as to the Executive Committee on a regular basis.

Information on how to report potential misconduct is published on the company website and the intranet.

By the year-end, 83% of all employees had completed the new Code of Conduct e-learning course, while 81% had completed the new anti-corruption and anti-trust e-learning course. All employees are expected to have completed the two e-learning modules by the year-end 2016. DNV GL is in compliance with all applicable foreign trade laws. In 2015, 40 compliance cases were reported and handled, with no confirmed incidents of corruption.

Governing documents related to compliance for mergers and acquisitions, due diligences, subcontractors and agents, export controls, data protection and regional gift guidelines were developed or updated during the year.

## ENVIRONMENT AND CLIMATE

DNV GL is committed to managing and continually improving its environmental performance with the overall goal of protecting the environment and complying with applicable legal requirements. DNV GL has been certified according to ISO 14001 since 2008 and the Board considers this as key to ensuring that the Group operates in a safer, smarter and greener manner. It also contributes to DNV GL being seen as a leader that enables its customers' performance to be safe and sustainable.

Environmental measurements, incident reporting and performance monitoring of significant aspects, energy consumption, emissions to air and waste management are followed up annually using the Synergi™ Life tool. To implement environmental initiatives, internal and external audits are undertaken on test sites and laboratories. The environmental and climate reporting process and data reliability are currently being improved.

In 2015, zero non-compliance cases with environmental regulations and zero fines related to environmental aspects were reported. The recorded energy consumption was 79.6 GWh, a decrease of 9% from 2014, and direct greenhouse gas emissions were 28,099 tCO<sub>2</sub>e, a decrease of 10% from 2014 for the 79 reporting locations.

Two global travel agencies have been contracted, replacing local contracts and ensuring credible travel carbon-footprint tracking. DNV GL uses 225 high-end video conferencing systems in over 80 locations. For the new office building under construction at the headquarters in Norway, DNV GL aims to obtain the Energy Class "passive house" and BREEAM EXCELLENT certification and the new offices in Arnhem, the Netherlands, are certified according to the BREEAM standard. DNV GL funded the WE Do programme with MNOK 40 to help employees reduce their personal environmental footprint.

The Board will monitor the implementation of the new Group strategy in order to ensure that DNV GL takes measures to become carbon neutral in relation to office buildings and travel activity by the end of 2020.

## CORPORATE RISK MANAGEMENT

The Board underlines the importance of continuously having a comprehensive understanding of the risks facing DNV GL that could affect corporate values, reputation and key business objectives. DNV GL has processes in place to proactively identify such risks at an early stage in order to initiate adequate risk mitigating measures and actions.

DNV GL's risk management policy is part of the management system and ensures that the risk management processes and culture are an integral part of everything the company does. The policy is aligned with the ISO 31000 framework.

The Board formally reviews the risk management status and outlook twice a year. The review of risks and opportunities is conducted as part of both the strategic plan process in a long-term strategic perspective and the annual plan process for the year ahead.

DNV GL calculates its risk-adjusted equity on an annual basis, taking into account the most important risk factors. Based on value-at-risk methodology, the analysis includes potential losses from normal operations, foreign exchange exposure, financial investments and pension plan assets and liabilities. The book equity less the maximum calculated loss illustrates

DNV GL's total risk exposure and the amount that can be lost in a worst-case scenario. This exercise gives the Board a measurable overview of the key quantified risks and DNV GL's capacity to take on additional risk.

The drop in the oil price and its effect on the demand for DNV GL's services were a focus area in the Board's risk assessments throughout the year. Developments in the maritime sector were another issue of great concern. Both the declining newbuilding market and the competitive situation in the classification industry have been assessed as part of the risk picture facing DNV GL.

Serious quality, safety and integrity risks in the company represent another focus area. Numerous barriers exist to minimize the chance of such events occurring and DNV GL's management system is constantly being scrutinized to ensure we are managing this risk satisfactorily.

DNV GL's main financial risks are market risk (interest rate and foreign currency risk), credit risk and liquidity risk.

**Interest rate risk:** as the company has limited external borrowings, its exposure to interest rate risk is primarily due to its defined benefit pension commitments. Lower interest rates over the past few years have led to an increase in the pension commitments. The company's policy is to close the existing defined benefit pension schemes to new entrants. In addition, there is limited exposure to the risk of changes in market interest rates for DNV GL's forward exchange contracts.

**Foreign currency risk:** DNV GL has revenues and expenses in approximately 70 currencies. Of these, six (NOK, EUR, USD, CNY, KRW and GBP) make up approximately 75% of the total revenue. In many currencies, the company has a natural hedge through a balance of revenue and expenses. The foreign currency policy was changed to focus on hedging expected cash flows. However, DNV GL will still be materially exposed to the re-evaluation of balance sheet items, including net investments in foreign subsidiaries.

**Credit risk:** receivable balances are monitored on an ongoing basis with the result that the company's exposure to bad debts is limited. There are no significant concentrations of credit risk within the company. With respect to credit risk arising from the other financial assets, which comprise cash, cash equivalents and certain derivative instruments, DNV GL's exposure to this arises from any default of the counterparty, with a maximum exposure equal to the market value of these instruments.

**Liquidity risk:** DNV GL monitors its liquidity risk on a continuous basis. The liquidity planning considers the maturity of both the financial investments and financial assets (e.g. accounts receivable, other financial assets) and projected cash flows from operations.

## OUTLOOK

DNV GL has a leading position in all its industry segments: maritime, oil and gas, business assurance and energy. The future is one where a complex and fast-changing world plays against a period of slower global growth.

The financial situation in the world only marginally improved in 2015 and there was a continued low level of global trade growth. Furthermore, growth is not expected to pick up in 2016 and will continue at a low and uneven level. Growth in Asia is significantly influenced by the uncertainty related to the slower expansion of the Chinese economy. Digital transformation will affect business models, services and service delivery in all of DNV GL's industries. For example, big data analytics, sensor technologies, machine learning and digital twins allow the real-time condition monitoring of assets, optimized operations, smart energy grids and virtual sea trials, but will also introduce new risks. These will create threats as well as opportunities for DNV GL, both in the short and long term, and are addressed by the new 2016-20 Group Strategy and related initiatives.

The maritime industry is characterized by oversupply in many segments, low rates and fierce competition - all against a backdrop of stricter environmental regulations. The oil and gas sector is heavily influenced by an oversupply situation which is expected to remain for some time even with continuous higher consumption. The globalization trend is continuing, but the geopolitical situation is tenuous. Hence, we see a higher level of uncertainty regarding potential signs of national or regional protectionist measures being introduced.

Against this backdrop, the Board believes that the challenging market situation for shipping will remain during the period ahead. The overcapacity situation is persisting and has created a surplus of ships to be delivered, and fleet growth continues to be in excess of trade growth. Hence, the ship new building market has dropped considerably, and we do not expect a recovery in the short term. Classification societies need to adapt to this challenging situation, but the Board regards the current narrow focus on price-led competition as potentially undermining the value of classification's safety and quality assurance role. At the same time, customers' need for cost efficient and standardized solutions presents an opportunity for DNV GL.

The oil and gas sector is heavily influenced by the oil price's low level, and it is likely that the oil price may fluctuate around current levels for some time. Hence, oil companies have been forced to drive the cost of exploration and production down, which is strongly hitting the whole oil service industry.

The need for more cost effective and standardized services is imminent and the overall activity level in the sector has dropped considerably, leading to overcapacity and the need for capacity reduction in the industry. However, the need for energy is expected to increase, and fossil fuels – oil, gas and coal – are likely to persist as the main source of energy, even though renewable energy will grow faster.

Within the energy sector, the company focuses on renewable energy, electricity transmission & distribution and sustainable energy use. The investments in the renewable energy sectors are influenced by the reduced cost of fossil fuel, new trade agreements, political decisions and subsidies. However, the Board believes that this sector, together with power transmission and

distribution and sustainable energy use, will continue to create several opportunities for DNV GL in the coming years. The long-term market fundamentals are looking strong. There will be more wind power capacity installed, with more solar and storage. The transmission systems will undergo massive upgrades in the developed world and new transmission systems and interconnectors will be built. The company has a strong position within the power testing, inspection and certification industries and has an extended service and competence platform.

The demand for business assurance services focusing on sustainable business development, global best practices, standards and business innovation will continue to increase. DNV GL is well positioned to be in the forefront to develop and take on roles and

positions in these areas. The company will particularly explore opportunities within the life science domain, with a focus on healthcare and food supply chains.

The Board of Directors believes that DNV GL's performance in 2015 demonstrates that the company has responded to the challenges in its main markets while defending its global positions. The company will maintain a broad competence and resource base to provide guidance and support in a business environment where the need for cross-disciplinary technical expertise, trust and risk management is clearly evident.

THE BOARD OF DIRECTORS OF DNV GL GROUP AS, HØVIK, 29 APRIL 2016

LEIF-ARNE LANGØY CHAIRMAN	J. HINRICH STAHL VICE CHAIRMAN	HEINRICH FRANKEMÖLLE	SILLE GRJOTHEIM	REBEKKA GLASSER HERLOFSEN
CLEMENS KEUER	JOHANNES LAFRENTZ	CHRISTELLE G. V. MARTIN	METTE BANDHOLTZ NIELSEN	C. THOMAS REHDER
ODD E. SUND	HILDE M. TONNE	MORTEN ULSTEIN	XU, BEI BETTY	REMI ERIKSEN GROUP PRESIDENT & CEO

**LEIF-ARNE LANGØY****CHAIRMAN**

**Norwegian BORN:** 1956 **POSITION:** Managing Director LAPAS AS  
**EDUCATION:** Norwegian School of Economics and Business Administration  
**MEMBER OF THE DNV GL BOARD:** Since June 2010, Chairman since June 2011  
**DIRECTORSHIP(S) OUTSIDE DNV GL:** Chairman of Kværner ASA, Sparebanken Møre, Binleru AS, Inpower AS, Molde Fotball AS, Lag Invest AS, Næringsinvest Møre og Romsdal AS, Nmk Holding AS, Nmk Eiendom AS, Ålesund Sentrumsbygg AS, Norsk Maritimt Kompetansesenter AS, Inpower AS, Nrh Ålesund AS. Vice Chairman of The Resource Group Trg AS and of Trg Holding AS. Member of the Board of Farstad Shipping ASA, Fsv Group AS, Fsv Shipping AS, Novela AS, Moldekraft, Noro Fotball AS. Deputy Board Member of Stiftelsen Molde Fotball.

“ THE COMPANY WILL MAINTAIN A BROAD COMPETENCE AND RESOURCE BASE TO PROVIDE GUIDANCE AND SUPPORT IN A BUSINESS ENVIRONMENT WHERE THE NEED FOR CROSS-DISCIPLINARY TECHNICAL EXPERTISE, TRUST AND RISK MANAGEMENT IS CLEARLY EVIDENT.

**J. HINRICH STAHL****VICE CHAIRMAN**

**German BORN:** 1968 **POSITION:** Managing Director of Maryland GmbH and Director of Mayfair SE  
**EDUCATION:** Business Administration at University of Trier, MBA at INSEAD  
**MEMBER OF THE DNV GL BOARD:** Since September 2013, Vice Chairman since February 2015  
**DIRECTORSHIP(S) OUTSIDE DNV GL:** Vice Chairman of Vapiano SE

**HEINRICH FRANKEMÖLLE**

**German BORN:** 1957 **POSITION:** Director at McKinsey & Company Inc. until end of 2015. Managing Director of Helifra Bet. GmbH  
**EDUCATION:** Diploma degree in Agricultural Sciences and Economics, Doctorate in Risk Management at University of Bonn  
**MEMBER OF THE DNV GL BOARD:** Since February 2014  
**DIRECTORSHIP(S) OUTSIDE DNV GL:** Chairman of the Advisory Board of Deutsche ErdWärme GmbH & Co., Founding member of the Advisory Board of Bonn International School

**CHRISTELLE G. V. MARTIN**

**French BORN:** 1960 **POSITION:** Director of Ethics & Compliance of Engie  
**EDUCATION:** graduated from Paris-Dauphine University (MBA 1983) and from the International Executive MBA 2009 HEC, London School of Economics and New York Stern (Trium)  
**MEMBER OF THE DNV GL BOARD:** Since June 2013  
**DIRECTORSHIP(S) OUTSIDE DNV GL:** GDF SUEZ Energies Services since June 2011, Fondation Paris Dauphine since 2009

**MORTEN ULSTEIN**

**Norwegian BORN:** 1953 **POSITION:** Managing Director of Borgstein AS  
**EDUCATION:** Rolls Royce Business Leadership Program, 2000. Training programs at IMD, Lausanne. The University of Trondheim, The Norwegian Institute of Technology, Master of Science in naval architecture and marine engineering 1973-77  
**MEMBER OF THE DNV GL BOARD:** Since June 2011  
**DIRECTORSHIP(S) OUTSIDE DNV GL:** Chairman of the Island Offshore Group of companies, Ulstein Marine Technology AS, Borgstein AS, Brattøra Eiendom and Board member of Norwegian Hull Club and Tco AS



**JOHANNES LAFRENTZ**

*German* **BORN:** 1971 **POSITION:** Managing Director of Maryland GmbH and of Mayfair Vermögensverwaltung SE **EDUCATION:** Business Administration at Technical University of Berlin, CPA Chicago Illinois **MEMBER OF THE DNV GL BOARD:** Since September 2013 **DIRECTORSHIP(S) OUTSIDE DNV GL:** Member of the Board of Marorka Group

**C. THOMAS REHDER**

*German* **BORN:** 1956 **POSITION:** Managing partner of Carsten Rehder GmbH & Co KG **EDUCATION:** Business Studies at European Business School, Frankfurt **MEMBER OF THE DNV GL BOARD:** Since 2009 **DIRECTORSHIP(S) OUTSIDE DNV GL:** President European Community Shipowners Association, Member of the Council of German Shipowners Association

**SILLE GRJOTHEIM**

*Norwegian* **BORN:** 1970 **POSITION:** Head of section Rules and Standards Publishing House (Norway & Germany), DNV GL **EDUCATION:** M.Sc. – metallurgical/corrosion engineer **MEMBER OF THE DNV GL BOARD:** Since 2007, elected by the Norwegian employees **DIRECTORSHIP(S) OUTSIDE DNV GL:** None

**HILDE M. TONNE**

*Norwegian* **BORN:** 1965 **POSITION:** Executive Vice President, Telenor Group **EDUCATION:** M.Sc., NTH Trondheim, Norway and RWTH Aachen, Germany **MEMBER OF THE DNV GL BOARD:** Since 2008 **DIRECTORSHIP(S) OUTSIDE DNV GL:** Member of the Board of Nordea Bank Norge ASA

**REBEKKA GLASSER HERLOFSEN**

*Norwegian* **BORN:** 1970 **POSITION:** Group CFO in the Torvald Klaveness Group **EDUCATION:** Norwegian School of Economics and Business Administration (MSc) **MEMBER OF THE DNV GL BOARD:** since June 2013 **DIRECTORSHIP(S) OUTSIDE DNV GL:** Member of the Board of Statoil ASA, various Klaveness Group companies

**XU, BEI BETTY**

*Chinese* **BORN:** 1977 **POSITION:** Compliance director (China), DNV GL **EDUCATION:** Bachelor, Business Administration, Informatics **MEMBER OF THE DNV GL BOARD:** Since 2015, elected by the employees worldwide, excluding Norway, Germany and Europe **DIRECTORSHIP(S) OUTSIDE DNV GL:** None

**CLEMENS KEUER**

*German* **BORN:** 1959 **POSITION:** Chairman of Group Works Council DNV GL SE, Germany **EDUCATION:** Diplom-Informatiker **MEMBER OF THE DNV GL BOARD:** Since 2013, elected by the employees in Germany **DIRECTORSHIP(S) OUTSIDE DNV GL:** None

**METTE BANDHOLTZ NIELSEN**

*Danish* **BORN:** 1963 **POSITION:** Senior Support Specialist Oil & Gas (Denmark), DNV GL **EDUCATION:** Bachelor, technical and legal English **MEMBER OF THE DNV GL BOARD:** Since 2011, elected by the European employees outside Norway **DIRECTORSHIP(S) OUTSIDE DNV GL:** None

**ODD E. SUND**

*Norwegian* **BORN:** 1957 **POSITION:** Principal engineer (Norway), DNV GL **EDUCATION:** Engineer, Oslo Ingeniørhøgskole, OIH, Materials, 1980 **MEMBER OF THE DNV GL BOARD:** Since 2009, elected by the Norwegian employees **DIRECTORSHIP(S) OUTSIDE DNV GL:** None



## KEY FIGURES

DNV GL GROUP AS  
CONSOLIDATED

## DEFINITION OF RATIOS

**Profitability****EBITDA:**

Earnings before interest,  
tax, depreciation and  
amortization

**EBITDA margin:**

EBITDA x 100 /  
Operating revenue

**EBITA:**

Earnings before interest,  
tax and amortization

**EBITA margin:**

EBITA x 100 /  
Operating revenue

**Operating margin:**

Operating profit x 100 /  
Operating revenue

**Pre-tax profit margin:**

Profit before tax x 100 /  
Operating revenue

**Net profit margin:**

Profit for the year x 100 /  
Operating revenue

**Liquidity****Cash flow:**

Net change in liquidity  
from cash flow statement

**Liquidity reserves:**

Cash and bank deposits

**Leverage****Equity ratio:**

Equity x 100 / Total assets

AMOUNTS IN NOK MILLION

	2015 IFRS	2014 IFRS	2013 <sup>1</sup> IFRS	2012 <sup>2</sup> NGAAP	2011 <sup>2</sup> NGAAP
<b>INCOME STATEMENT</b>					
Operating revenue	23 390	21 623	15 234	12 532	10 156
EBITDA	2 649	2 551	1 807	1 238	1 271
Depreciation	375	348	271	201	150
EBITA	2 274	2 203	1 535	1 037	1 122
Amortization	536	592	203	179	64
EBIT / Operating profit	1 738	1 612	1 332	858	1 058
Net financial income (expenses)	(12)	70	(14)	38	32
Profit before tax	1 726	1 681	1 318	896	1 091
Profit for the year	1 014	1 007	825	579	763
<b>BALANCE SHEET</b>					
Non-current assets	16 575	15 447	14 135	3 462	2 438
Current assets	13 705	12 930	11 395	6 160	6 347
Total assets	30 279	28 377	25 530	9 622	8 785
Equity	18 850	16 496	15 561	4 937	4 922
Non-current liabilities	4 046	4 939	4 232	1 333	1 212
Current liabilities	7 383	6 942	5 736	3 352	2 651

## KEY FIGURES

DNV GL GROUP AS  
CONSOLIDATED

- 1) The business combination with GL SE Group was effective from 1 October 2013 and GL SE Group is consolidated from this date onwards.
- 2) Key figures for the years 2010-2011 are in line with financial figures as presented in the audited financial accounts of Det Norske Veritas Group AS for these years. Key figures for 2012 (NGAAP) have been restated to reflect the demerger of DNV Petroleum Services and the real estate companies in Norway (effective 1 Jan. 2013).

AMOUNTS IN NOK MILLION

	2015 IFRS	2014 IFRS	2013 <sup>1</sup> IFRS	2012 <sup>2</sup> NGAAP	2011 <sup>2</sup> NGAAP
<b>CASH FLOW ITEMS, WORKING CAPITAL AND INVESTMENTS</b>					
Purchase of tangible fixed assets	695	583	450	236	132
Working capital	6 321	5 988	5 659	2 808	3 696
Cash flow	207	57	(570)	(927)	781
<b>NUMBER OF EMPLOYEES</b>	14 954	15 712	16 107	10 294	8 453
<b>FINANCIAL RATIOS</b>					
<b>PROFITABILITY</b>					
EBITDA margin	11.3%	11.8%	11.9%	9.9%	12.5%
EBITA margin	9.7%	10.2%	10.1%	8.3%	11.0%
EBIT / Operating margin	7.4%	7.5%	8.7%	6.8%	10.4%
Pre-tax profit margin	7.4%	7.8%	8.7%	7.2%	10.7%
Net profit margin	4.3%	4.7%	5.4%	4.6%	7.5%
<b>LIQUIDITY</b>					
Liquidity reserves	4 193	3 978	3 875	1 774	2 874
<b>LEVERAGE</b>					
Equity ratio	62.3%	58.1%	61.0%	51.3%	56.0%

# CONSOLIDATED INCOME STATEMENT

DNV GL GROUP AS

AMOUNTS IN NOK MILLION

DNV GL GROUP AS CONSOLIDATED

	2015	2014	2013		2015	2014	2013 <sup>1</sup>	
				<b>OPERATING REVENUE</b>				
25.0	13.3	0.0		Sales revenue	23 390.3	21 622.8	15 234.1	
25.0	13.3	0.0		<b>Total operating revenue</b>	4	23 390.3	21 622.8	15 234.1
				<b>OPERATING EXPENSES</b>				
0.0	0.0	0.0		Payroll expenses	5,7,8	13 116.0	11 597.5	8 446.3
0.0	0.0	0.0		Depreciation	14	374.8	348.4	271.3
0.0	0.0	0.0		Amortization and impairment	12,13	535.8	591.5	203.0
30.5	15.1	100.1		Other operating expenses	6,7	7 625.5	7 473.8	4 981.0
(5.5)	(1.8)	(100.1)		<b>Operating profit (loss)</b>		1 738.1	1 611.5	1 332.4
				<b>FINANCIAL INCOME AND EXPENSES</b>				
0.0	0.0	0.0		Income / (loss) from associates	15	5.6	22.8	(5.5)
4 386.9	182.0	18.6		Other financial income	9	96.4	175.1	60.7
(357.8)	(209.8)	(10.3)		Financial expenses	9	(114.4)	(128.0)	(69.2)
4 029.1	(27.8)	8.3		<b>Net financial income (expenses)</b>		(12.4)	69.9	(14.1)
4 023.6	(29.7)	(91.8)		<b>Profit (loss) before tax</b>		1 725.7	1 681.5	1 318.3
(7.1)	8.4	(0.4)		Tax expense	11	(711.9)	(674.4)	(493.0)
4 016.5	(21.2)	(92.2)		<b>Profit (loss) for the year</b>		1 013.8	1 007.1	825.3
				<b>Profit for the period attributable to:</b>				
				Non-controlling interest		11.1	8.2	2.6
				Equity holders of the parent		1 002.7	998.9	822.8
				<b>Total</b>		1 013.8	1 007.1	825.3

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

DNV GL GROUP AS			AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED		
2015	2014	2013		2015	2014	2013 <sup>1</sup>
4 016.5	(21.2)	(92.2)	<b>Profit (loss) for the year</b>	1 013.8	1 007.1	825.3
			<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>			
			Actuarial gains/(losses) on defined benefit pension plans	540.5	(920.2)	99.4
			<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>			
			Currency translation differences / Translation differences foreign operations	1 335.5	1 707.0	1 075.2
			Gain/ loss on hedge of net investments in foreign operations	0.0	0.0	(198.2)
			Share of other comprehensive income from associates	(22.7)	(29.4)	0.0
0.0	0.0	0.0	<b>Other comprehensive income for the period, net of tax</b>	1 853.4	757.3	976.4
4 016.5	(21.2)	(92.2)	<b>Total comprehensive income for the period</b>	2 867.2	1 764.4	1 801.7
			<b>Total comprehensive income attributable to:</b>			
			Non-controlling interest	11.1	8.2	2.6
			Equity holders of the parent	2 856.2	1 756.2	1 799.2
			<b>Total</b>	2 867.2	1 764.4	1 801.7

1) The business combination with GL SE Group was effective from 1 October 2013 and GL SE Group is consolidated from this date onwards.

## CONSOLIDATED BALANCE SHEET



### ASSETS

DNV GL GROUP AS			AMOUNTS IN NOK MILLION		DNV GL GROUP AS CONSOLIDATED			
31 DEC. 2015	31 DEC. 2014	31 DEC. 2013		NOTE	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013	
			<b>NON-CURRENT ASSETS</b>					
			<b>INTANGIBLE ASSETS</b>					
9.0	16.0	0.2	Deferred tax assets	11	1 103.7	1 192.6	856.2	
0.0	0.0	0.0	Goodwill	12,13	8 632.7	8 068.3	7 189.4	
0.0	0.0	0.0	Other intangible assets	12	3 313.6	3 420.7	3 459.1	
9.0	16.0	0.2	Total intangible assets		13 050.1	12 681.6	11 504.8	
			<b>TANGIBLE FIXED ASSETS</b>					
0.0	0.0	0.0	Land, buildings and other property		1 039.2	1 011.5	941.2	
0.0	0.0	0.0	Office equipment, fixtures and fittings		1 624.7	1 199.6	906.0	
0.0	0.0	0.0	Total tangible fixed assets	14	2 663.9	2 211.1	1 847.2	
			<b>NON-CURRENT FINANCIAL ASSETS</b>					
11 606.7	11 606.7	10 936.5	Investments in subsidiaries	2	0.0	0.0	0.0	
0.0	0.0	0.0	Investments in associates	15	130.4	147.4	8.5	
0.2	0.0	0.2	Available for sale investments		42.4	42.6	42.4	
516.0	516.0	516.0	Net pension assets	8	283.0	4.9	283.0	
1 385.6	785.3	6.7	Loan to subsidiaries		0.0	0.0	0.0	
0.5	0.0	0.2	Other long-term receivables	18	404.8	359.5	449.3	
13 509.0	12 908.0	11 459.5	Total non-current financial assets		860.6	554.4	783.2	
13 518.0	12 924.0	11 459.7	Total non-current assets		16 574.5	15 447.1	14 135.1	

## CONSOLIDATED BALANCE SHEET



### ASSETS

DNV GL GROUP AS				AMOUNTS IN NOK MILLION		DNV GL GROUP AS CONSOLIDATED		
31 DEC. 2015	31 DEC. 2014	31 DEC. 2013		NOTE	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013	
			<b>CURRENT ASSETS</b>					
			<b>DEBTORS</b>					
0.0	0.0	0.0	Trade debtors	17	5 240.7	5 141.7	4 268.2	
0.0	0.0	0.0	Work in progress		3 388.2	2 881.5	2 501.1	
430.9	175.6	4.3	Other receivables group companies		37.2	30.9	44.8	
0.6	0.0	0.1	Other debtors		845.8	897.6	706.1	
431.5	175.6	4.4	Total debtors		9 511.8	8 951.6	7 520.2	
476.4	592.5	353.1	Cash and bank deposits	20	4 193.0	3 978.2	3 874.7	
907.9	768.1	357.5	Total current assets		13 704.8	12 929.8	11 394.9	
14 425.9	13 692.3	11 817.2	TOTAL ASSETS		30 279.3	28 376.9	25 530.0	

## CONSOLIDATED BALANCE SHEET

### EQUITY AND LIABILITIES

DNV GL GROUP AS

AMOUNTS IN NOK MILLION

DNV GL GROUP AS CONSOLIDATED

	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013		NOTE	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013
<b>EQUITY</b>								
<b>PAID-IN CAPITAL</b>								
100.0	100.0	100.0	Share capital	23		100.0	100.0	100.0
9 323.5	9 323.5	9 323.5	Share premium			9 323.5	9 323.5	9 323.5
<b>RETAINED EARNINGS</b>								
3 926.9	417.4	1 277.6	Other equity			9 386.7	7 037.3	6 120.2
0.0	0.0	0.0	Non-controlling interest			40.0	35.5	17.5
13 350.4	9 840.9	10 701.1	<b>Total equity</b>			18 850.2	16 496.4	15 561.2
<b>LIABILITIES</b>								
<b>NON-CURRENT LIABILITIES</b>								
100.0	500.0	0.0	Interest bearing loans and borrowings	21		100.0	500.0	0.0
0.0	0.0	0.0	Pension liabilities	8		2 520.5	2 824.4	1 952.5
0.0	0.0	0.0	Deferred tax liabilities	11		994.9	988.1	982.7
416.5	528.9	250.2	Loan from subsidiaries			0.0	0.0	0.0
0.0	0.0	0.0	Non-current provisions	19		106.6	110.7	161.7
0.0	0.0	0.0	Other non-current liabilities			323.8	515.5	1 135.5
516.5	1 028.9	250.2	<b>Total non-current liabilities</b>			4 045.8	4 938.7	4 232.5

## CONSOLIDATED BALANCE SHEET



## EQUITY AND LIABILITIES

DNV GL GROUP AS			AMOUNTS IN NOK MILLION		DNV GL GROUP AS CONSOLIDATED			
31 DEC. 2015	31 DEC. 2014	31 DEC. 2013		NOTE	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013	
			<b>CURRENT LIABILITIES</b>					
0.0	0.0	0.0	Overdrafts		0.0	4.5	0.0	
1.3	0.0	0.0	Trade creditors		477.1	476.6	576.8	
0.0	7.0	0.0	Taxes payable	11	741.7	699.1	429.3	
0.0	0.0	0.0	Public duties payable		506.4	482.4	442.4	
25.0	2 263.0	865.9	Short-term liabilities group companies		23.5	27.2	22.7	
506.9	503.5	0.0	Dividend declared to shareholders		506.9	503.5	0.0	
0.0	0.0	0.0	Current provisions	19	475.5	164.4	101.8	
25.8	49.1	0.0	Other current liabilities	16	4 652.1	4 584.0	4 163.3	
559.0	2 822.6	865.9	Total current liabilities		7 383.3	6 941.8	5 736.3	
1 075.5	3 851.5	1 116.1	Total liabilities		11 429.1	11 880.6	9 968.8	
14 425.9	13 692.3	11 817.2	TOTAL EQUITY AND LIABILITIES		30 279.3	28 376.9	25 530.0	

### THE BOARD OF DIRECTORS OF DNV GL GROUP AS, HØVIK, 29 APRIL 2016

LEIF-ARNE LANGØY CHAIRMAN	J. HINRICH STAHL VICE CHAIRMAN	HEINRICH FRANKEMÖLLE	SILLE GRJOTHEIM	REBEKKA GLASSER HERLOFSEN
CLEMENS KEUER	JOHANNES LAFRENTZ	CHRISTELLE G. V. MARTIN	METTE BANDHOLTZ NIELSEN	C. THOMAS REHDER
ODD E. SUND	HILDE M. TONNE	MORTEN ULSTEIN	XU, BEI BETTY	REMI ERIKSEN GROUP PRESIDENT & CEO

## CONSOLIDATED STATEMENT OF CASH FLOW

DNV GL GROUP AS

AMOUNTS IN NOK MILLION

DNV GL GROUP AS CONSOLIDATED

DNV GL GROUP AS			DNV GL GROUP AS CONSOLIDATED			
2015	2014	2013		2015	2014	2013
			<b>CASH FLOW FROM OPERATIONS</b>			
4 023.6	(29.7)	7.4	Profit before tax	1 725.7	1 681.5	1 318.3
0.0	0.0	0.0	Gain/loss on disposal of tangible fixed assets	(23.6)	(2.3)	(0.1)
0.0	0.0	0.0	Gain on divestments	0.0	(18.7)	(12.0)
0.0	0.0	0.0	Gain on conversion of loan to associated companies	0.0	(26.3)	0.0
0.0	0.0	0.0	Loss (gain) from change of defined benefit pension plans	30.6	(175.0)	0.0
(365.0)	(175.4)	(4.3)	Group contributions recorded as financial income	0.0	0.0	0.0
0.0	0.0	0.0	Depreciation, amortization and impairment	910.6	940.0	474.4
0.0	0.0	0.0	Tax payable	(858.1)	(702.9)	(570.0)
1.3	0.0	0.0	Change in work in progress, trade debtors and trade creditors	44.9	(701.1)	(731.0)
85.6	(37.1)	22.8	Change in accruals, provisions and other	384.2	663.0	98.6
3 745.5	(242.1)	25.9	<b>Net cash flow from operations</b>	<b>2 214.3</b>	<b>1 658.2</b>	<b>578.2</b>
			<b>CASH FLOW FROM INVESTMENTS</b>			
0.0	0.0	0.0	Acquisitions (business combinations)	(82.4)	(288.8)	(50.2)
0.0	(670.0)	0.0	Settlement minority share owners N.V. KEMA	0.0	(670.0)	0.0
(118.0)	0.0	0.0	Settlement minority share owners Marine Cybernetics AS	(118.0)	0.0	0.0
0.0	0.0	0.0	Divestments of subsidiaries	0.0	12.0	35.1
0.0	0.0	0.0	Investments in tangible fixed assets	(694.9)	(582.7)	(449.7)
0.0	0.0	0.0	Investments in intangible assets	(256.0)	(175.0)	(48.6)
0.0	0.0	0.0	Sale of tangible fixed assets (sales value)	52.4	32.9	26.9
0.0	0.0	8.8	Change in other investments	0.0	(98.6)	0.0
(118.0)	(670.0)	8.8	<b>Net cash flow from investments</b>	<b>(1 098.9)</b>	<b>(1 770.2)</b>	<b>(486.5)</b>

## CONSOLIDATED STATEMENT OF CASH FLOW

DNV GL GROUP AS

AMOUNTS IN NOK MILLION

DNV GL GROUP AS CONSOLIDATED

DNV GL GROUP AS			DNV GL GROUP AS CONSOLIDATED		
2015	2014	2013	2015	2014	2013
			<b>CASH FLOW FROM FINANCING ACTIVITIES</b>		
(713.2)	(500.0)	250.2	0.0	0.0	0.0
0.0	0.0	0.0	(4.5)	4.5	0.0
(2 302.9)	1 482.7	696.7	0.0	0.0	0.0
(400.0)	500.0	0.0	(400.0)	500.0	0.0
(503.5)	(335.5)	(661.7)	(503.5)	(335.5)	(661.7)
176.0	4.3	(11.8)	0.0	0.0	0.0
(3 743.6)	1 151.6	273.4	(908.0)	169.0	(661.7)
(116.0)	239.4	308.1	207.4	57.0	(570.0)
592.5	353.1	518.1	3 978.2	3 874.7	1 946.1
0.0	0.0	(473.1)	0.0	0.0	(172.2)
0.0	0.0	0.0	7.4	46.5	2 670.8
476.4	592.5	353.1	4 193.0	3 978.2	3 874.7

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

DNV GL GROUP AS

AMOUNTS IN NOK MILLION

	SHARE CAPITAL	SHARE PREMIUM	OTHER EQUITY	CURRENCY TRANSLATION DIFFERENCES	NON- CONTROLLING INTEREST	TOTAL
Equity at 1 January 2014	100.0	9 323.5	1 277.6	0.0	0.0	10 701.1
Profit for the period			(21.2)			(21.2)
Dividend paid			(335.5)			(335.5)
Dividend accrued			(503.5)			(503.5)
Equity at 31 December 2014	100.0	9 323.5	417.4	0.0	0.0	9 840.9
Profit for the period			4 016.5			4 016.5
Dividend accrued			(506.9)			(506.9)
Equity at 31 December 2015	100.0	9 323.5	3 926.9	0.0	0.0	13 350.4

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

DNV GL GROUP AS  
CONSOLIDATED

AMOUNTS IN NOK MILLION

	SHARE CAPITAL	SHARE PREMIUM	OTHER EQUITY	CURRENCY TRANSLATION DIFFERENCES	NON- CONTROLLING INTEREST	TOTAL
Equity at 1 January 2014	100.0	9 323.5	5 243.3	877.0	17.5	15 561.2
Profit for the period			998.9		8.2	1 007.1
Dividend paid			(335.5)			(335.5)
Dividend accrued			(503.5)			(503.5)
Actuarial gains/(losses) on defined benefit pension plans			(920.2)			(920.2)
Exchange differences				1 707.0		1 707.0
Share of other comprehensive income from associates			(29.4)			(29.4)
Other equity changes					9.8	9.8
Equity at 31 December 2014	100.0	9 323.5	4 453.4	2 584.0	35.5	16 496.4
Profit for the period			1 002.7		11.1	1 013.8
Dividend accrued			(506.9)			(506.9)
Actuarial gains/(losses) on defined benefit pension plans			540.5			540.5
Exchange differences				1 335.5		1 335.5
Share of other comprehensive income from associates			(22.7)			(22.7)
Other equity changes					(6.5)	(6.5)
Equity at 31 December 2015	100.0	9 323.5	5 467.1	3 919.5	40.0	18 850.2

## 01

SIGNIFICANT  
ACCOUNTING  
POLICIES

**BASIS FOR PREPARATION.** The financial statements are prepared in accordance with the Norwegian Accounting Act § 3-9 and Regulations on Simplified IFRS as enacted by the Ministry of Finance 3 November 2014. In all material aspects, Norwegian Simplified IFRS requires that the IFRS recognition and measurement criteria (as adopted by the European Union) are complied with, but disclosure and presentation requirements (the notes) follow the Norwegian Accounting Act and Norwegian Generally Accepted Accounting Standards.

The financial statements are presented in Norwegian Kroner (NOK) and all values are rounded to the nearest million (NOK million), except when otherwise indicated.

**CONSOLIDATION PRINCIPLES.** The consolidated statements include the parent company DNV GL Group AS and all companies in which the parent company directly or indirectly has controlling interest. The group controls an entity when the group is exposed to, or has rights to, variable return from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group and deconsolidated from the date that control ceases. The group accounts show the Group's consolidated Income statement, Statement of Comprehensive Income, Balance Sheet, Statement of Changes in Equity and Statement of

Cash Flow as a single economic entity. Subsidiaries follow the same accounting principles as the parent company. All intra group assets and liabilities, equity, income, expenses and cash flows relating to transactions between Group entities are eliminated in the consolidated accounts.

The consolidated financial statements have been prepared on the basis of going concern.

**BUSINESS COMBINATIONS AND GOODWILL.** Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at the acquisition date at fair value. Acquisition-related costs are expensed in Income statement as incurred.

Identifiable assets acquired and liabilities assumed are recognized at their fair value at the acquisition date. Goodwill is recognized as the residual value between fair value of the consideration transferred and the fair value of the identifiable net assets.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units.

The allocation of costs in a business combination is changed if new information on the fair value becomes available and is applicable on the date when control is assumed. The allocation may be altered within one year from acquisition date.

**SUBSIDIARIES.** Investments in subsidiaries are recognized at cost in the accounts of the parent company. Investments carried at cost are measured at the lower of their carrying amount and fair value less costs to sell. The fair values of the investments are tested annually based on external and/or internal indicators implying revaluation. If estimated fair value is less than the carrying amount, the investments are impaired in the Balance sheet statement and the corresponding cost is recognized in the income statement. Impairment losses recognized in prior periods are reversed if the basis for the impaired value no longer exists or have decreased.

In the accounts of the parent company, dividends, group contributions and other distributions are recognized in the same year as they are recognized in the financial statement of the subsidiary according to the Norwegian Regulation of simplified IFRS § 3-1. If dividends/group contribution exceed withheld profits after acquisition, the excess amount represents repayment of invested capital, and the distribution will be deducted from the recorded value of the acquisition in the Balance sheet statement for the parent company.

## 01

**DIVIDEND TO EQUITY HOLDERS OF THE PARENT COMPANY.**

Dividends declared to shareholders are recognized as a liability at the end of the reporting period according to the Norwegian Regulation of simplified IFRS § 3-1.

**INVESTMENTS IN ASSOCIATES AND JOINT VENTURES.**

An associate is an entity in which the Group has a significant influence but does not control the management of its financial and operating policy decisions (normally when the Group owns 20%-50% of the company).

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control, are similar to those necessary to determine control over subsidiaries.

Investments in associated companies and joint ventures are accounted for using the equity method.

Under the equity method, the investment in an associate or a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The income statement reflects the Group's share of profits after tax of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of the associate or joint venture, the Group recognizes its share of any changes, when applicable,

in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The aggregate of the Group's share of profits (or losses) of an associate and a joint venture is shown in the income statement as financial items.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group.

The recognized value of the associate or joint venture in the Statement of Financial Position is tested for impairment annually or more frequently when deemed necessary.

**NON-CONTROLLING INTEREST.** The non-controlling interest in the consolidated financial statements, represent the minority's share of the carrying amount of the equity in entities with minority shareholders.

**CLASSIFICATION AND VALUATION OF ASSETS AND LIABILITIES.**

The Group presents assets and liabilities in statement of financial position based on current/non-current classification. An asset is current when it is:

- » Expected to be realized or intended to be sold or consumed in normal operating cycle
- » Held primarily for the purpose of trading
- » Expected to be realized within twelve months after the reporting period, or
- » Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

Current and non-current liabilities are classified correspondingly.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Current assets are valued at the lower of cost and net realizable value. Short-term debt is recognized at fair value and subsequently measured at amortized cost. Transaction cost on short-term borrowings are usually minor, and the value of short-term debt at amortized cost is therefore normally identical with face value.

Fixed assets are valued at cost. However, if a decline in value is expected not to be temporary, fixed assets are impaired to the recoverable amount. Fixed assets with a limited useful economic life are depreciated in accordance with a linear depreciation plan.

**REVENUE RECOGNITION.** Revenue is recognized when it is probable that future economic benefits will flow to the Group and the revenue can be measured reliably, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties.

Revenue from services is recognized by reference to the stage of completion (percentage of completion method). Stage of completion is measured by reference to hours incurred/contract costs incurred to date as a percentage of total estimated hours/total estimated contract costs for each contract. When the contract outcome cannot be measured reliably, revenue is recognized only to the extent that the expenses incurred are recoverable.

## 01

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

When the selling price of a software product includes an identifiable amount for subsequent servicing (e.g. after sales support and product enhancement /maintenance on the sale of software products), that amount is deferred and recognized as revenue over the period during which the service will be performed. The amount deferred covers the expected costs of the services under the agreement together with a reasonable profit on those services.

**DEBTORS.** Trade receivables and other current receivables are recorded in the balance sheet initially at fair value and subsequently measured at amortized cost less provision for impairment. Provisions for doubtful debts are calculated on the basis of individual assessments. Impairments of trade receivables are recognized in the income statement if objective indicators suggest that the due amounts cannot be covered in full.

**TAXES.** Income tax expense comprises both current tax and deferred tax, including effects of changes in tax rates. Current and deferred tax is recognized in income statement, except to the extent that they relate to items recognized in equity or other comprehensive income, of which the tax is also recognized in equity or other comprehensive income.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The current and deferred income tax is calculated based on tax rates (and tax laws) that have been enacted or substantively enacted, in the countries

where the Group operates and generates taxable income at the end of the reporting period. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax is recognized on temporary differences between the carrying amount of assets and liabilities and the corresponding tax bases as well as on tax losses carried forward at the reporting date. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets for temporary differences and tax loss carry forwards are recognized to the extent that it is probable that future taxable income will be available at the level of the relevant tax authority for utilization. Tax increasing and tax reducing temporary differences expected to reverse in the same period are offset and calculated on a net basis as far as this relate to the same taxable entity and the same taxation authority.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

**FOREIGN CURRENCIES.** The Group's consolidated financial statements are presented in Norwegian Kroner (NOK), which is also the parent company's functional currency. The functional currency of an entity is the currency of the economic environment in which the company primarily operates. For each entity the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Differences arising on settlement or translation of monetary items are recognized in the Income statement. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

Forward exchange contracts are included at market value at the reporting date.

On consolidation, the assets and liabilities of foreign operations, including goodwill and fair value adjustments are translated into NOK at the rate of exchange prevailing at the reporting date. The Income statements are translated at the average exchange rate for the financial year. Exchange rate differences arising are recognized in other comprehensive income (OCI). On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognized in the Income statement.

Realized and unrealized currency effects not reflected in OCI are included on a net basis in either other financial income or other financial expenses.

## 01

**PROPERTY, PLANT AND EQUIPMENT.** Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Depreciation is calculated on a straight-line basis over the expected useful life of the assets. The estimated useful life, residual values and depreciation method are reviewed, and adjusted if appropriate, at the end of each reporting period. Periodic maintenance costs are capitalized and depreciated over the expected maintenance period. Other repair and maintenance costs are recognized in the Income statement as incurred. Improvement and upgrading are assigned to the purchase cost/carrying amount and depreciated along with the asset.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gains or losses is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

**LEASES.** Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Operating lease payments are recognized as an operating expense in the Income statement on a straight-line basis over the period of lease.

**BORROWING COSTS.** Borrowing costs are recognized in the Income statement in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

**INTANGIBLE ASSETS.** Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Except for capitalized development costs, all other internally generated intangibles are reflected in the Income statement in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

**RESEARCH AND DEVELOPMENT COSTS.** Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- » The technical feasibility of completing the intangible asset so that the asset will be available for use or sale

- » Its intention to complete and its ability and intention to use or sell the asset
- » How the asset will generate future economic benefits
- » The availability of resources to complete the asset
- » The ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete and the asset is available for use. The asset is amortized over the period of expected future benefit. During the period of development, the asset is tested for impairment annually.

**IMPAIRMENT OF NON-FINANCIAL ASSETS.** The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

## 01

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the Income statement.

Goodwill is tested for impairment annually as part of the Group's annual plan process and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each CGU to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

Intangible assets with indefinite useful lives are tested for impairment annually at the CGU level, as appropriate, and when circumstances indicate that the carrying value may be impaired.

**CASH AND BANK DEPOSITS.** Cash and bank deposits in the Balance sheet comprise petty cash and cash at bank and short-term deposits with a maturity of three months or less, which are subject to an insignificant risk of changes in value. Cash and bank deposits are initially and subsequently measured at fair value.

**PROVISIONS.** Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable (more likely than not) that the Group will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a financial expense.

**POST EMPLOYMENT BENEFITS.** The group operates various post-employment schemes, including both defined benefit and defined contribution pension plans.

A defined contribution plan is a pension plan under which the Group pays fixed contribution into a separate entity (a fund/insurance company) and will have no legal or constructive obligation to pay further contributions. The pension cost related to the defined contribution plans is equal to the contributions to the employee's pension savings in the accounting period.

Multi-employer plans are accounted for as defined contribution plans.

A defined benefit plan is a pension plan that is not a defined contribution plan. In the defined benefit plans, the Group's obligation is to provide the agreed benefit to current and former employees, actuarial risk and investment risk fall in substance on the Group. The Group's defined benefit plans are both funded and unfunded.

Actuarial assumptions are made to measure the pension obligation and the pension expense. Actuarial assumptions are mutually compatible and reflect the economic relationship between factors such as inflation, rate of salary increase and discount rate. The actuarial assumptions comprise: demographic assumptions such as mortality and employee turnover and financial assumptions such as discount rate, rate of salary- and pension benefit increase.

The pension obligations are measured on a discounted basis. Pension plan assets are valued at their fair value. The fair value of plan assets is deducted from the present value of the defined benefit obligation when determining the net defined benefit liability or assets.

Actuarial gains and losses are recognized through other comprehensive income (OCI). Actuarial gains and losses are not reclassified to profit or loss in subsequent periods.

## 01

Changes to existing defined benefit plans that will lead to changes in pension obligation are recognized in the statement of income as they occur. Gains or losses linked to changes or terminations of pension plans are also recognized in the statement of income when they arise.

Net interest on the net defined benefit/ assets is presented as part of financial items.

Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements is presented as part of payroll expenses.

**USE OF ESTIMATES.** The preparation of the Group's consolidated financial statements in accordance with simplified IFRS requires management to make judgements, estimates and assumptions about the carrying amount of assets and liabilities at the end of the reporting period that are not readily apparent from other sources. The estimates and

associated assumptions are based on historical experiences and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Update of accounting estimates are recognized in the period of which the estimate is updated, if the update affects only that period, or in the period of the update if the update affects both current and future periods.

**CONTINGENT LIABILITIES AND ASSETS.** Contingent liabilities are not recognized in the annual accounts. Significant contingent liabilities are disclosed, with the exception of contingent liabilities that are unlikely to be incurred. Contingent assets (unless virtually certain) are not recognized in the annual accounts but are disclosed if the inflow of economic benefits is probable.

**EVENTS AFTER THE REPORTING PERIOD.** New information on the company's financial position on the end of the reporting period which becomes known after the reporting period is recorded in the annual accounts. Events after the reporting period that do not affect the company's financial position on the end of the reporting period but which will affect the company's financial position in the future are disclosed if significant.

**CASH FLOW STATEMENT.** The cash flow statement is presented using the indirect method. Cash and cash equivalents includes cash, bank deposits and other short-term, highly liquid financial assets with maturities of three months or less.

## 02

GROUP  
INFORMATION
**DNV GL GROUP AS CONSOLIDATED CONSISTS OF THE PARENT COMPANY DNV GL GROUP AS AND THE FOLLOWING SUBSIDIARIES:**

	BUSINESS OFFICE		SHARE CAPITAL IN 1000 LOCAL CURRENCY <sup>1</sup>	OWNERSHIP	BOOK VALUE
DNV GL AS	Bærum, Norway	NOK	5 000	100%	9 368.9
DNV GL Business Assurance Group AS	Bærum, Norway	NOK	1 033	100%	1.1
N.V. KEMA	Arnhem, Netherlands	EUR	9 015	100%	2 236.7
DNV KEMA AS (dormant)	Bærum, Norway	NOK	100	100%	0.1
<b>Total investment in subsidiaries</b>					<b>11 606.7</b>

<sup>1</sup> incl. share premium

## 03

BUSINESS  
COMBINATIONS

## SIGNIFICANT CHANGES IN GROUP STRUCTURE 2015

13 February 2015, DNV GL acquired ISC (100% of the shares in International Standards Certification Pty Ltd., Australia and 100% of the shares in International Standard Certification Japan Co. Ltd). ISC is an international certification body, with a particular presence in Australia and Asia.

ISC is a full-service international certification and training body accredited by JAS-ANZ (Joint Accreditation System - Australia New Zealand) and Exemplar Global as a certified training organization. It provides extensive certification and training services for products and systems across key industry sectors, including healthcare and food & beverage.

For the DNV GL Group, the acquisition of ISC will increase DNV GL's presence and growth in key industries such as the healthcare industry. The acquisition is also strengthening the DNV GL brand, positioning and growth within the Assurance sector.

31 August 2015, DNV GL acquired 100% of the shares in Noomas Sertifisering AS. Noomas is a leading Norwegian inspection and certification body within fish farming and equipment.

Noomas is Norway's leading inspection and certification body within aquaculture and equipment used within the industry. Their objective is to support aquaculture farms through certification to become safer and more sustainable. Noomas primarily delivers accredited certification services to help the industry meet regulations and requirements for floating fish farms and related equipment.

For the DNV GL Group, the acquisition of Noomas increase the capability in the aquaculture section, in particular in Norway which has a strong position in global marine aquaculture. Noomas' technical services targeting the operations of fish farms compliment the existing portfolio for the aquaculture value chain.

70% of the shares in Marine Cybernetics AS (Norway) were acquired May 2014. In addition, DNV GL AS entered into an agreement with the owners of the remaining 30% of the shares, where DNV GL AS had an obligation to acquire the remaining shares after three years at an agreed price. 100% of Marine Cybernetics AS was included in the DNV GL Group AS consolidated accounts from 1 May 2014 with no minority interest. The expected payment for the remaining shares was reflected as a liability. In December 2015 this liability was settled.

## ACQUISITIONS 2015

COMPANY / ACTIVITIES	TRANSACTION DATE	OWNERSHIP	PURCHASE CURRENCY	ACQUISITION COST LOCAL CURRENCY (THOUSAND)	EXTERNAL REVENUE INCL. IN 2015 ACCT. MILL NOK
International Standard Certification Japan Co., Ltd.	13.02.15	100%	JPY	1 046	7.6
International Standards Certification Pty Ltd, Australia	13.02.15	100%	AUD	6 019	21.1
Noomas Sertifisering AS	31.08.15	100%	NOK	43 549	8.5

The acquisition cost in excess of net book value of the equity has been allocated to goodwill.

## CASH FLOW ON ACQUISITION

AMOUNTS IN NOK MILLION

Net cash acquired with the subsidiaries	7.4
Consideration paid in cash	(82.4)
Net cash flow on acquisition	(75.0)

## 03

## SIGNIFICANT CHANGES IN GROUP STRUCTURE 2014

6 May 2014, DNV GL AS acquired 70 % of the shares in Marine Cybernetics AS. In addition, DNV GL AS has entered into an agreement with the owners of the remaining 30% of the shares, where DNV GL AS has an obligation to acquire the remaining shares after three years at an agreed price. 100% of Marine Cybernetics AS has been included in the DNV GL Group AS consolidated accounts from 1 May 2014 with no minority interest. The expected payment for the remaining shares has been reflected as a liability under other non-current liabilities.

Marine Cybernetics is a leading provider of third-party testing and verification of control system software for the maritime and offshore industries.

With increasing importance of software-dependent systems in ensuring safe, reliable and efficient operations, the Marine Cybernetics acquisition is a strategic investment in total system quality assurance to further broaden DNV GL's service portfolio.

9 May 2014, DNV GL Group AS acquired the remaining 25.7% of the shares in the N.V. KEMA Group. As part of the acquisition agreement from December 2011, DNV GL Group AS had an agreement with the minority share owners, where DNV GL Group AS had a call option on acquiring the remaining shares after two years. The option structure was such that it was highly unlikely at time of acquisition that an acquisition of the remaining 25.7% of the shares would not take place after two years. 100% of N.V. KEMA has been included in the DNV GL Group AS consolidated accounts from 1 March 2012 with no minority interest and the net present value of the expected payment for the remaining shares has been reflected as a liability under other non-current liabilities. This liability was settled 9 May 2014.

In January 2014, NOK 47 million convertible loan to StormGeo Holding AS, including interest, was converted to equity. In addition, a capital contribution/share issue of NOK 99 million has been made.

After these transactions, DNV GL Group ownership (through DNV GL AS) in StormGeo Holding AS is 27%. The investment is recognized in accordance with the equity method in the accounts of DNV GL Group AS.

12 March 2014, KEMA USA Inc. acquired 100% of the shares in PV Evolution Labs LLC (PVEL). The purchase price was NOK 34 million which resulted in a goodwill of NOK 20.7 million. PVEL tests, assesses, and predicts the performance of solar panels and also other PV system components. The acquisition fits well with DNV GL's solar business and vision.

In line with IFRS 3 'Business Combinations', adjustments to the preliminary purchase price allocation for the acquisition of GL SE Group have been reflected as a result of new information about facts and circumstances existing at the date of the acquisition. The adjustments led to a reduction of Technology with NOK 10.4 million, increased liabilities of NOK 45.0 million and increased goodwill of NOK 55.4 million. The adjustments were reflected in 2014.

## 03

## ACQUISITIONS 2014

COMPANY / ACTIVITIES	TRANSACTION DATE	OWNERSHIP	PURCHASE CURRENCY	ACQUISITION COST LOCAL CURRENCY	EXTERNAL REVENUE INCL. IN 2014 ACCT. MILL NOK
Marine Cybernetics AS	6 May 2014	70%	EUR	324.1	72.0

The acquisition cost in excess of net book value of the equity has been allocated to goodwill and other intangible assets.

PRELIMINARY PURCHASE PRICE ALLOCATION (PPA) FOR THE ACQUISITION OF MARINE CYBERNETICS AS:	ACQUISITION COST	OF WHICH:						
		CUSTOMER RELATIONS	CUSTOMER CONTRACTS	TECHNOLOGY	LIABILITIES	DEF. TAX	NET ASSETS	GOODWILL
PPA (NOK mill)	209.3	10.8	9.8	79.8	(116.8)	(27.1)	53.1	199.8

The fair value of the trade receivables amounts to NOK 36.1 million. None of the trade receivables have been impaired and it is expected that the full contractual amounts can be collected.

From the date of acquisition, Marine Cybernetics AS contributed NOK 72.0 million of revenue and NOK 8.4 million to profit before tax from continuing operations for the Group. If the combination had taken place at the beginning of the year, revenue from continuing operations would have been

NOK 104.1 million and the profit before tax from continuing operations for the Group would have been NOK 10.7 million. The goodwill of NOK 199.8 million comprises the fair value of expected synergies and workforce from the acquisition.

## CASH FLOW ON ACQUISITION

AMOUNTS IN NOK MILLION

Net cash acquired with the subsidiary	46.5
Consideration paid in cash	(209.3)
Net cash flow on acquisition	(162.8)

## 04

EXTERNAL  
OPERATING  
REVENUE

DNV GL GROUP AS CONSOLIDATED

## GEOGRAPHICAL AREA

AMOUNTS IN NOK MILLION

	2015	2014	2013
Nordic countries	4 438.4	4 542.1	4 119.6
Europe and Africa	7 642.9	7 387.2	4 377.5
Asia Pacific	6 710.8	5 800.6	3 631.0
North and South America	4 598.2	3 892.9	3 106.0
<b>Total operating revenue</b>	<b>23 390.3</b>	<b>21 622.8</b>	<b>15 234.1</b>

## BUSINESS AREAS AND BUSINESS UNITS

AMOUNTS IN NOK MILLION

DNV GL - Maritime	9 789.9	8 805.8	5 700.3
DNV GL - Oil & Gas	6 053.6	6 264.2	4 218.7
DNV GL - Energy	3 522.6	3 122.1	2 612.3
DNV GL - Business Assurance	3 024.0	2 491.7	2 217.2
DNV GL - Software	823.9	783.3	445.0
Marine Cybernetics	96.0	72.0	0.0
Other	80.3	83.7	40.6
<b>Total operating revenue</b>	<b>23 390.3</b>	<b>21 622.8</b>	<b>15 234.1</b>

For management purposes, the Group is organized into business areas based on the industries in which the Group operates. DNV GL is structured into five business areas; Maritime, Oil & Gas, Energy, Business Assurance and Software, and one independent business unit; Marine Cybernetics.

## 05

PAYROLL  
EXPENSES

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION

	2015	2014	2013
Salaries	10 309.5	9 332.6	6 641.4
Payroll tax	1 244.5	1 213.7	908.5
Pension costs	940.5	820.3	593.0
Effect of pension plan changes	70.0	(175.0)	0.0
Other contributions	551.5	406.0	303.4
<b>Total payroll expenses</b>	<b>13 116.0</b>	<b>11 597.5</b>	<b>8 446.3</b>
Man years (average)	14 682	15 428	10 890
Total bonus expenses	67.0	451.8	317.0

## 06

OTHER  
OPERATING  
EXPENSES

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION

	2015	2014	2013
Travel expenses	1 304.5	1 251.0	874.8
ICT and communication expenses	889.4	897.8	417.9
Rent and real estate expenses	1 032.2	826.4	517.4
Loss on claim	98.5	95.2	43.6
Expenses group companies	225.1	228.0	170.3
Other expenses	4 075.9	4 175.4	2 956.9
<b>Total other operating expenses</b>	<b>7 625.5</b>	<b>7 473.8</b>	<b>4 981.0</b>

The Group recognized expenses of NOK 860.5 million in relation to operating leases in 2015.

Operating lease relates mainly to office rent, with lease terms between 1-15 years and company cars, with lease terms between 1-5 years.

MINIMUM LEASE PAYMENTS RELATING TO OPERATING LEASE

	2015	2014
Within one year	742.9	592.2
After one year but not more than five years	2 138.2	1 613.8
More than five years	1 381.9	928.3
<b>Total</b>	<b>4 262.9</b>	<b>3 134.3</b>

## 07

REMUNERATION  
AND LOANS TO  
GROUP CEO,  
EXECUTIVE  
COMMITTEE,  
BOARD OF  
DIRECTORS ETC.

**COMPENSATION GUIDELINES FOR THE GROUP CEO  
AND THE MEMBERS OF THE EXECUTIVE COMMITTEE.**

The compensation guidelines for the members of the Executive Committee support DNV GL's vision of being a global organization with a long-term perspective. The main compensation elements are focused around a market based salary, a bonus scheme with a retention element and standard employee benefits in line with the local markets.

The Group CEO and executive management team participate in the standard pension and insurance schemes applicable to the employees in their home country (where employment contract is legally signed). All members of the Executive Committee have standard employment contracts and standard terms and conditions regarding notice period and severance pay.

DNV GL has a bonus scheme in place with a retention component for employees in higher salary grades. The bonus is based on a combination of DNV GL financial result (EBITA) at Group level and Business Area level. Target bonus and cap varies by salary grade and performance assessment. Target bonus for the Executive Committee is 25% and the maximum value is at 50% of base salary. The earned bonus is divided in three parts and the first part is paid the following year and thereafter another third the following two years. The pay-outs are forfeited if the executive resigns.

**EXECUTIVE COMPENSATION DURING 2015.** Ahead of the salary reviews 1 April 2015 the senior executive compensation was compared to external benchmarks using Hay Group's data collected throughout the second half of 2014.

Remi Eriksen was appointed as Group President and CEO (Group CEO) as of 1 August 2015. Agreed compensation package for Remi Eriksen consist of: Annual salary of NOK 5 500 thousand and a car allowance of NOK 250 thousand. Eriksen has a right to retire at 65 years. The Board of Directors may on an annual basis award a discretionary bonus to the Group CEO, who is not eligible for the bonus bank scheme. If terminated from DNV GL, Group CEO is entitled to 12 months of base salary beyond the notice period of six months.

On 1 November 2015, following the announcement of the new Group CEO in August, there were changes announced with regards to the composition of the Executive Committee. These changes took effect as of 1 November 2015 and are reflected in the detailed overview below.

## REMUNERATIONS TO THE EXECUTIVE COMMITTEE FOR 2015

## LOANS TO THE EXECUTIVE COMMITTEE AT 31 DEC. 2015

AMOUNTS IN NOK THOUSAND	REMUNERATIONS TO THE EXECUTIVE COMMITTEE FOR 2015				LOANS TO THE EXECUTIVE COMMITTEE AT 31 DEC. 2015			
	SALARY	OTHER BENEFITS	BONUS	PENSION COST	LOAN AMOUNT	INTEREST RATE	REPAYMENT PERIOD	SECURITY
Henrik O. Madsen <sup>1</sup>	4 315	4 095 <sup>5</sup>	2 000	583				
Remi Eriksen	4 150	211	645	306				
Thomas Vogth-Eriksen	2 788	1 191 <sup>5</sup>	543	352	1 510	0.93%	Apr. 2024	Mortgage
Tor E. Svensen <sup>2</sup>	2 790	1 144 <sup>5</sup>	645	546	389	0.93%	Feb. 2027	Mortgage
Cecilie B. Heuch	2 334	173	512	123				
Luca Crisciotti	2 486	115	417	843				
David Walker	3 349	260	533	0				
Elisabeth Tørstad	2 517	170	168	274	951	0.93%	May 2035	Mortgage
Elisabeth Harstad <sup>3</sup>	163	19	0	29	295	0.93%	Dec. 2017	Mortgage
Knut Ørbeck-Nilssen	1 482	94	88	268				
Are Føllestad Tjønn <sup>4</sup>	253	32	0	16				
Lutz Wittenberg <sup>2</sup>	1 614	52	858	412				
Thormod Fjell <sup>2</sup>	1 301	117	142	240				

<sup>1</sup> Group President and CEO until 1 August 2015, remuneration disclosed from January - July

<sup>2</sup> Members of the Executive Committee until 31 October 2015, remuneration disclosed from January - October

<sup>3</sup> Member of the Executive Committee from 1 December 2015, remuneration disclosed for December

<sup>4</sup> Member of the Executive Committee from 1 November 2015, remuneration disclosed from November - December

<sup>5</sup> Includes compensation for pension plan amendment

## REMUNERATIONS TO THE BOARD OF DIRECTORS PAID OUT IN 2015

AMOUNTS IN NOK THOUSAND	REMUNERATION BOARD OF DIRECTORS	REMUNERATION BOARD AUDIT COMMITTEE	REMUNERATION BOARD COMPENSATION COMMITTEE
Leif-Arne Langøy	414		82
J. Hinrich Stahl	318	61	53
Heinrich Frankemölle	233		
Sille Grjøtheim	276		
Rebekka Glasser Herlofsen	276	49	
Günter H.W. Herz <sup>1</sup>	53		
Clemens Keuer	276		
Johannes Lafrentz	276		53

<sup>1</sup> Vice Chairman of the Board of Directors until 27 February 2015

AMOUNTS IN NOK THOUSAND	REMUNERATION BOARD OF DIRECTORS	REMUNERATION BOARD AUDIT COMMITTEE	REMUNERATION BOARD COMPENSATION COMMITTEE
Christelle G.V. Martin	276		
David McKay <sup>2</sup>	136		
Mette Bandholtz Nielsen	276		
C. Thomas Rehder	276		
Odd E. Sund	276		
Hilde M. Tonne	276	49	
Morten Ulstein	276		53
Xu Bei Betty	140		

<sup>2</sup> Deputy of the Board of Directors until 30 June 2015

## FEES TO THE AUDITORS FOR 2015

AMOUNTS IN NOK THOUSAND

	DNV GL GROUP AS	GROUP AUDITOR OTHER NORWEGIAN ENTITIES	GROUP AUDITOR NON-NORWEGIAN ENTITIES	OTHER AUDITORS	TOTAL
Statutory audit	2 689	2 145	20 166	2 958	27 958
Tax consulting services	0	525	6 624	55	7 204
Other audit related services	12	321	1 139	119	1 591
Non-audit services	258	0	40	123	421

## 08

## PENSION COSTS, PLAN ASSETS AND DEFINED BENEFIT PENSION LIABILITIES

DNV GL Group AS has both defined benefit pension plans and defined contribution pension plans. The structure of the pension plans depends on the legal, tax and economic conditions in the respective country, and is usually based on length of service and remuneration of the employee. The defined benefit pension plans are covered through separate pension funds, through arrangements with independent insurance companies or through unfunded plans.

4 140 persons are covered by defined benefit pension plans, while 10 815 employees are covered by the defined contribution pension plans.

The defined benefit pension plans in Norway are financed through a separate pension fund. For defined benefit pension plans in Germany, the major plans are unfunded with the gross liability reflected as a pension liability, however there are also pension plans in Germany financed through independent insurance companies. Of the other

defined benefit pension plans, the major UK plans are financed through a separate pension fund, while the other plans are mainly financed through independent administrative funds/insurance companies. The basis for calculating the pension cost and the pension liabilities as included in the accounts and in this note, is based on the presented actuarial assumptions, together with remuneration of the employee and length of service.

Contribution to the Group's pension plans are made in accordance with common actuarial methods in the country where the pension plan is administered. Total pension costs for 2015 are NOK 1 010.5 million of which NOK 317.9 million are related to the defined benefit pension plans, NOK 622.6 million are related to the defined contribution pension plans and NOK 70.0 million are related to closing of pension plans in the Netherlands.

The Norwegian companies in the Group are subject to the Norwegian Pension Act. The companies' pension schemes fulfil the requirements of the law. Norwegian employees are covered either by the Norwegian defined contribution pension plan (mainly employees employed after 1 January 2005), or the defined benefit pension plan organized in one Norwegian pension fund (employees employed before 1 January 2005) and in one unfunded pension plan (employees employed before 1 January 2005). The pension assets in the Norwegian pension fund are invested as follows:

**MARKET VALUE OF PLAN ASSETS IN NORWAY**

AMOUNTS IN NOK MILLION

	31 DEC. 15	31 DEC. 14	31 DEC. 13
Buildings and property	290.0	352.0	330.0
Mutual equity funds and hedge funds	2 399.9	2 325.7	2 222.8
Norwegian bonds and bond funds	1 785.7	1 166.5	745.4
Non-Norwegian bonds and bond funds	197.0	195.0	437.4
Bank accounts, other assets and liabilities	1 316.5	1 754.2	1 636.0
<b>Total market value of plan assets Norway</b>			
(DNV GL Pension fund)	5 989.0	5 793.4	5 371.6
Actual return on plan assets	210.3	459.8	593.3

**PENSION COST**

AMOUNTS IN NOK MILLION

	FUNDED NORWEGIAN DEFINED BENEFIT PENSION PLANS			GERMAN DEFINED BENEFIT PENSION PLANS			OTHER DEFINED BENEFIT PENSION PLANS		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Net present value of this year's pension contribution	176.6	169.2	159.8	50.5	37.8	11.9	66.0	41.5	29.1
Effect of plan changes	0.0	(175.0)	0.0	0.0	0.0	0.0	30.6	0.0	0.0
Payroll tax	24.9	48.5	22.6	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net present value of this year's pension contribution</b>	<b>201.4</b>	<b>42.8</b>	<b>182.4</b>	<b>50.5</b>	<b>37.8</b>	<b>11.9</b>	<b>96.6</b>	<b>41.5</b>	<b>29.1</b>
Net interest on the net defined benefit liability (asset)	1.6	(14.3)	(6.2)	48.6	58.6	18.3	6.1	7.3	(4.2)
Payroll tax	0.2	(2.0)	(1.0)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net interest on the net defined benefit liability (asset)</b>	<b>1.9</b>	<b>(16.3)</b>	<b>(7.2)</b>	<b>48.6</b>	<b>58.6</b>	<b>18.3</b>	<b>6.1</b>	<b>7.3</b>	<b>(4.2)</b>

NET PENSION ASSET (LIABILITIES)	FUNDED NORWEGIAN DEFINED BENEFIT PENSION PLANS			GERMAN DEFINED BENEFIT PENSION PLANS			OTHER DEFINED BENEFIT PENSION PLANS		
	31 DEC. 15	31 DEC. 14	31 DEC. 13	31 DEC. 15	31 DEC. 14	31 DEC. 13	31 DEC. 15	31 DEC. 14	31 DEC. 13
AMOUNTS IN NOK MILLION									
Market value of plan assets	5 989.0	5 808.4	5 397.7	60.7	61.1	46.1	2 276.7	2 018.2	1 445.0
Actuarial present value of pension liabilities	(5 680.6)	(5 955.3)	(5 087.6)	(2 347.7)	(2 347.3)	(1 784.0)	(2 506.4)	(2 311.6)	(1 657.8)
Payroll tax	(29.3)	(93.1)	(28.8)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net pension asset (liabilities)</b>	<b>279.1</b>	<b>(240.0)</b>	<b>281.3</b>	<b>(2 287.0)</b>	<b>(2 286.1)</b>	<b>(1 737.9)</b>	<b>(229.7)</b>	<b>(293.4)</b>	<b>(212.8)</b>
Hereof recorded as plan assets									
in balance sheet	279.1	0.0	283.0	0.0	0.0	0.0	3.9	4.9	0.0
Hereof recorded as pension liabilities									
in balance sheet	0.0	(240.0)	(1.7)	(2 287.0)	(2 286.1)	(1 737.9)	(233.6)	(298.3)	(212.8)

The assumptions for calculation of the pension liabilities in Norway have been changed, including increased discount rate (covered bonds) from 2.3% to 2.6%, salary adjustment from 3% to 2.75%, pension benefit adjustment from 1.8% to 1.75% and Norwegian government basis for pension from 2.5% to 2.25%. The changed assumptions lead to decreased pension liabilities of NOK 444 million in 2015.

The assumptions (salary adjustment) for calculation of the pension liabilities in Germany have been changed from 3.0% to 2.5%, leading to reduced pension liabilities of NOK 122 million in 2015.

End of service benefit schemes in some countries outside Norway, considered to be defined benefit schemes, have been actuarially calculated. The total liability not included in above table amounts to NOK 103 million at year-end (NOK 81 million in 2014 and NOK 61 million in 2013).

In May 2015, the APB pension plan in the Netherlands (Multi Employer Plan) was closed to new entrants. The change in the pension plan led to a non-recurring expense of NOK 39 million, which is included in payroll expenses.

The defined benefit pension plan in the Netherlands has been closed, resulting in a curtailment effect of NOK 31 million reflected in the income statement and an actuarial gain of NOK 46 million reflected in other comprehensive income.

THE CALCULATIONS OF THE PENSION LIABILITIES ARE BASED ON THE FOLLOWING ACTUARIAL ASSUMPTIONS:

AMOUNTS IN NOK MILLION

	NORWEGIAN SCHEMES <sup>2</sup>			GERMAN SCHEMES			OTHER SCHEMES		
	31 DEC. 15	31 DEC. 14	31 DEC. 13	31 DEC. 15	31 DEC. 14	31 DEC. 13	31 DEC. 15	31 DEC. 14	31 DEC. 13
Discount rate <sup>1</sup>	2.6%	2.3%	3.9%	2.2%	2.2%	3.5-3.6%	1.0-9.5%	2.1-3.7%	3.0-4.7%
Projected annual salary adjustment	2.75%	3.0%	4.0%	2.5%	3.0%	3.0%	2.0-10.0%	2.0-4.0%	3.0-4.3%
Projected annual increase in pension benefit	1.75%	1.8%	2.0%	1.5%	2.0%	2.0%	0.0-3.0%	0.0-3.2%	0.0-3.0%
Projected annual increase in Norwegian government basis pension	2.25%	2.5%	3.0%						
Expected annual return on plan assets	2.6%	2.3%	3.9%	2.2%	2.2%	3.6%	1.0-9.5%	2.1-3.7%	3.8-4.7%

<sup>1</sup> Covered bond rate for Norwegian schemes. <sup>2</sup> Mortality assumptions for the Norwegian defined benefit pension plan has in accordance with IAS 19.81 been determined applying observed actual data and best estimates for the plan members.

The retirement age in the group differs from country to country. In the most significant pension plans the ordinary retirement age is 67 years (Norway) and 65-67 years (Germany). To align with German regulations, the major German pension plans are gradually shifting from 65 to 67 years based on the year of birth of the plan members.

Some managers and employees are entitled to early retirement before 67, with full pension rights earned.

**SENSITIVITY ANALYSIS OF PENSION CALCULATIONS.**

The sensitivity analysis below have been determined based on reasonably possible changes of the respec-

tive assumptions occurring at the end of the reporting period, while keeping all other assumptions unchanged.

Sensitivities decrease (increase) defined benefit obligation year-end.

**ASSUMPTIONS**

AMOUNTS IN NOK MILLION

	DISCOUNT RATE		FUTURE SALARY INCREASES	
	0.5% INCREASE	0.5% DECREASE	0.5% INCREASE	0.5% DECREASE
Impact on defined benefit obligation Norwegian plans	456.6	(519.4)	(164.1)	207.4
Impact on defined benefit obligation German plans	162.5	(166.3)	(20.6)	20.4

## 09

FINANCIAL  
INCOME AND  
FINANCIAL  
EXPENSES

DNV GL GROUP AS			AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED		
2015	2014	2013		2015	2014	2013
4 000.5	3.0	4.5	Dividend from subsidiaries	0.0	0.0	0.0
365.0	176.0	4.3	Group contribution received	0.0	0.0	0.0
0.0	0.0	0.0	Profit (loss) from investment in associates (note 15)	5.6	22.8	(5.5)
0.0	0.0	0.0	Net interest on the net defined benefit liability (asset) (Note 8)	(56.5)	(49.5)	(7.0)
5.7	6.7	6.6	Other interest received	38.6	35.6	27.4
6.9	(4.8)	(3.0)	Net interest income (expense) group companies	0.0	0.0	0.0
(17.2)	(12.3)	(0.1)	Other interest expenses	(22.2)	(44.8)	(31.7)
(327.9)	(190.0)	3.4	Currency gains (losses)	49.3	118.8	(7.4)
(3.8)	(6.4)	(7.3)	Other financial items	(27.2)	(12.9)	10.1
4 029.1	(27.8)	8.3	<b>Net financial income (expenses)</b>	(12.4)	69.9	(14.1)

## 10

FINANCIAL  
MARKET RISK

The Group's main financial market risks are liquidity risk, foreign currency risk, credit risk, interest rate risk and pension plan risk.

**LIQUIDITY RISK.** The Group monitors its liquidity risk on an ongoing basis. The liquidity forecasting considers planned investments in non-current assets, financing activities, working capital needs, as well as projected cash flows from operations.

**FOREIGN CURRENCY RISK.** The Group has revenues and expenses in approximately 65 currencies. Of these, six currencies (NOK, EUR, USD, CNY, KRW and GBP) make up for approximately 75% of the total revenue. In many currencies the group has a natural hedge through a balance of revenue and expenses. The policy of the Group is to hedge significant project exposures and future cash flows through forward exchange contracts. As part of the hedging strategy, the Group has forward exchange contracts

equivalent to NOK 1 147 million. The Group does not apply hedge accounting and realized and unrealized gains and losses are recognized in the income statement. Unrealized net loss at year end is NOK 35.9 million.

A change in USD exchange rate of +/- 1 percentage point will lead to a change in operating revenue of approximately +/- NOK 37 million and a change in operating profit (EBIT) of approximately +/- NOK 5 million. A change in EUR exchange rate of +/- 1 percentage point will lead to a change in operating revenue of approximately +/- NOK 54 million and a change in operating profit (EBIT) of approximately +/- NOK 1 million.

**CREDIT RISK.** Receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is limited. There are no significant concentrations of credit risk within the Group.

With respect to credit risk arising from the other financial assets of the Group, which comprises cash and cash equivalents and certain derivative instruments, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the market value of these instruments.

**INTEREST RATE RISK.** The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's forward exchange contracts and the multi-currency revolving credit facility.

**PENSION PLAN RISK.** The Group is exposed to volatility in the financial market affecting the value of the pension plan assets. The Group is also exposed to interest rate volatility effecting the pension liabilities. In addition, inflation and real wages development will have impact on the pension liabilities.

## 11

## TAX

## DNV GL GROUP AS

AMOUNTS IN NOK MILLION

## DNV GL GROUP AS CONSOLIDATED

	2015	2014	2013		2015	2014	2013
				<b>Tax expense consists of:</b>			
0.0	7.0	0.0	Norwegian income tax	101.5	106.2	147.8	
0.2	0.4	0.3	Income tax outside Norway	722.0	656.7	496.6	
0.2	7.4	0.3	Total tax payable	823.5	762.9	644.4	
7.0	(15.8)	0.0	Change in deferred tax in Norway	(113.1)	45.2	(27.8)	
0.0	0.0	0.0	Effect of changed tax rate	(13.9)	0.0	5.9	
0.0	0.0	0.0	Change in deferred tax outside Norway	15.4	(133.7)	(129.5)	
7.0	(15.8)	0.0	Total change in deferred tax	(111.6)	(88.5)	(151.4)	
7.1	(8.4)	0.4	<b>Tax expense</b>	711.9	674.4	493.0	
1 086.4	(8.0)	(25.7)	Tax on profit at 27% (28% in 2013)	465.9	454.0	369.1	
			<b>Tax effect of:</b>				
0.0	0.0	0.0	Foreign tax exempt branches	1.3	(24.1)	(28.4)	
0.0	0.0	0.0	Non refundable foreign withholding taxes	60.1	27.7	44.8	
(1 080.0)	(0.4)	26.1	Other permanent differences	76.8	79.5	87.6	
0.7	0.0	0.0	Effect of changed tax rate	13.9	0.0	0.0	
0.0	0.0	0.0	Changes of previous years taxes	0.2	137.6	(8.1)	
0.0	0.0	0.0	Tax assets not recognized current year	99.9	21.0	7.9	
0.0	0.0	0.0	Differences between tax rates in Norway and abroad	(6.3)	(21.2)	20.1	
7.1	(8.4)	0.4	<b>Tax expense</b>	711.9	674.4	493.0	
			Effective tax rate	41%	40%	42%	

## DNV GL GROUP AS

AMOUNTS IN NOK MILLION

## DNV GL GROUP AS CONSOLIDATED

DNV GL GROUP AS			DNV GL GROUP AS CONSOLIDATED			
2015	2014	2013		2015	2014	2013
			<b>Net tax-reducing/tax-increasing temporary differences:</b>			
0.0	0.0	0.0	Non-current assets	2 717.6	3 127.6	3 332.1
0.0	0.0	0.0	Current assets	94.4	149.5	(93.8)
(36.1)	(59.1)	(0.6)	Liabilities	(2 474.7)	(3 139.1)	(1 890.9)
0.0	0.0	0.0	Tax loss to be carried forward	(1 086.5)	(1 285.5)	(1 081.7)
(36.1)	(59.1)	(0.6)	<b>Basis for deferred tax asset/liability</b>	(749.2)	(1 147.5)	265.7
25%	27%	27%	Tax rates applied	17%-42%	17%-42%	17%-42%
9.0	16.0	0.2	<b>Deferred tax asset</b>	1 103.7	1 192.6	856.2
0.0	0.0	0.0	<b>Deferred tax liability</b>	(994.9)	(988.1)	(982.7)

The Group has accumulated tax-loss to be carried forward amounting to NOK 926 million.

As the future utilization of these tax losses cannot be demonstrated, the related deferred tax asset (DTA) of NOK 187 million, is not recognized in the balance sheet.

## 12

INTANGIBLE  
ASSETS

AMOUNTS IN NOK MILLION

	GOODWILL	CUSTOMER CONTRACTS	CUSTOMER RELATIONS	TECHNOLOGY	TRADEMARKS	OTHER INTANGIBLE ASSETS	TOTAL
<b>Acquisition cost</b>							
1 January 2014	7 246.5	357.4	1 888.6	721.4	461.1	254.1	10 929.1
Additions	219.6	19.0	10.8	79.8	12.6	182.7	524.5
Adjustment to Purchase Price	55.4	0.0	0.0	0.0	0.0	(10.4)	45.0
Allocation GL SE (note 3)							
Currency translation differences	606.0	30.1	169.0	61.7	40.8	22.6	930.3
<b>Total acquisition cost 31 Dec. 2014</b>	<b>8 127.5</b>	<b>406.5</b>	<b>2 068.4</b>	<b>862.8</b>	<b>514.5</b>	<b>449.0</b>	<b>12 428.9</b>
<b>Additions</b>							
Additions	79.3	0.0	0.0	0.0	2.1	0.0	81.4
Additions from internal developments	0.0	0.0	0.0	0.0	0.0	253.9	253.9
Disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Currency translation differences	486.9	25.3	134.0	49.7	33.3	21.5	750.7
<b>Total acquisition cost 31 Dec. 2015</b>	<b>8 693.8</b>	<b>431.8</b>	<b>2 202.5</b>	<b>912.5</b>	<b>549.9</b>	<b>724.4</b>	<b>13 514.9</b>

AMOUNTS IN NOK MILLION

	GOODWILL	CUSTOMER CONTRACTS	CUSTOMER RELATIONS	TECHNOLOGY	TRADEMARKS	OTHER INTANGIBLE ASSETS	TOTAL
<b>Accumulated amortization and impairment</b>							
1 January 2014	(57.1)	(33.6)	(104.1)	(44.9)	0.0	(40.8)	(280.6)
Amortization	0.0	(129.1)	(194.1)	(163.6)	0.0	(49.2)	(535.9)
Impairment	0.0	0.0	0.0	0.0	0.0	(55.6)	(55.6)
Currency translation differences	(2.2)	(14.2)	(25.9)	(17.1)	0.0	(8.4)	(67.8)
<b>Total accum. amortization and impairment 31 Dec. 2014</b>	<b>(59.3)</b>	<b>(176.9)</b>	<b>(324.2)</b>	<b>(225.6)</b>	<b>0.0</b>	<b>(154.0)</b>	<b>(939.9)</b>
Amortization	0.0	(104.5)	(208.3)	(175.6)	0.0	(47.4)	(535.8)
Impairment	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Currency translation differences	(1.8)	(18.8)	(36.5)	(26.3)	0.0	(9.5)	(92.9)
<b>Total accum. amortization and impairment 31 Dec. 2015</b>	<b>(61.1)</b>	<b>(300.1)</b>	<b>(569.0)</b>	<b>(427.6)</b>	<b>0.0</b>	<b>(210.9)</b>	<b>(1 568.6)</b>
<b>Net book value</b>							
31 December 2015	8 632.7	131.7	1 633.5	484.9	549.9	513.6	11 946.3
31 December 2014	8 068.3	229.7	1 744.3	637.2	514.5	295.1	11 489.0
31 December 2013	7 189.4	323.8	1 784.5	676.4	461.1	213.3	10 648.5
Useful life		1-5 years	6-16 years	5-7 years	Indef.	5-10 years	

Other intangible assets mainly consist of capitalized software development costs and acquired software.

Goodwill is not amortized, but is tested annually for impairment (note 13).

Other intangible assets are amortized linearly, based on evaluation of useful life.

Trademarks has an indefinite useful life and are not amortized but tested for impairment annually.

# 13

## IMPAIRMENT TESTING OF GOODWILL

Goodwill obtained through acquisitions is allocated to the Group's business areas and followed up and tested collectively for the group of cash-generating units that constitute the business area. The cash-generating units correspond to DNV GL's business areas Maritime, Oil & Gas, Energy, Business Assurance, Software and Marine Cybernetics. Goodwill is allocated to the business areas as follows:

AMOUNTS IN NOK MILLION	2015	2014	2013
Maritime	2 852.5	2 687.3	2 458.8
Oil & Gas	3 405.7	3 207.8	2 933.9
Energy	2 004.8	1 887.7	1 717.3
Business Assurance	152.5	68.2	62.0
Software	17.4	17.4	17.4
Marine Cybernetics	199.8	199.8	0.0
<b>Total goodwill</b>	<b>8 632.7</b>	<b>8 068.3</b>	<b>7 189.4</b>

The Group has used value in use to determine recoverable amounts for the cash-generating units. Value in use is determined by using the discounted cash flow method. The expected cash flows are based on the business areas' budgets and long term plans, which are approved by the Board of Directors and executive management. Budgets and long-term plans cover maximum a five year period. After the five years of explicit plans, the cash flows are stipulated by extrapolation.

### KEY ASSUMPTIONS PER CASH-GENERATING UNIT

	COST OF CAPITAL (WACC)	LONG-TERM NOMINAL GROWTH RATE
Maritime	7.6%	1.5%
Oil & Gas	7.9%	1.5%
Energy	7.5%	1.5%
Business Assurance	7.1%	1.5%
Software	7.5%	1.5%
Marine Cybernetics	7.5%	1.5%

**SENSITIVITY ANALYSIS.** In connection with impairment test of goodwill, sensitivity analysis are carried out for each individual cash-generating unit. None of the cash-generating unit will be in an impairment situation before there are material changes in the key assumptions, and these changes are considered to be outside the probable outcome.

## 14

## FIXED ASSETS

AMOUNTS IN NOK MILLION

	LAND, BUILDINGS AND OTHER PROPERTY	OFFICE EQUIPMENT, FIXTURES AND FITTINGS	TOTAL
<b>Acquisition cost</b>			
1 January 2014	1 242.0	2 703.9	3 945.9
Additions	75.6	523.2	598.7
Additions from business combinations	8.6	3.2	11.8
Disposals	(2.1)	(109.6)	(111.7)
Currency translation differences	113.2	274.4	387.6
<b>Total acquisition cost 31 December 2014</b>	<b>1 437.2</b>	<b>3 395.1</b>	<b>4 832.3</b>
Additions	64.6	630.3	694.9
Disposals	(27.4)	(118.1)	(145.5)
Currency translation differences	112.1	226.2	338.3
<b>Total acquisition cost 31 December 2015</b>	<b>1 586.5</b>	<b>4 133.5</b>	<b>5 720.0</b>

AMOUNTS IN NOK MILLION

	LAND, BUILDINGS AND OTHER PROPERTY	OFFICE EQUIPMENT, FIXTURES AND FITTINGS	TOTAL
<b>Accumulated depreciation and impairment</b>			
1 January 2014	300.8	1 798.0	2 098.8
Depreciation for the year	90.8	257.6	348.4
Disposals	(0.8)	(80.3)	(81.1)
Currency translation differences	34.9	220.3	255.2
<b>Total accumulated depreciation and impairment 31 December 2014</b>	<b>425.7</b>	<b>2 195.5</b>	<b>2 621.3</b>
Depreciation for the year	99.8	269.8	369.6
Impairment for the year	0.2	5.0	5.2
Disposals	(17.8)	(99.0)	(116.8)
Currency translation differences	39.3	137.5	176.8
<b>Total accumulated depreciation 31 December 2015</b>	<b>547.3</b>	<b>2 508.9</b>	<b>3 056.1</b>
<b>Net book value</b>			
31 December 2015	1 039.2	1 624.7	2 663.9
31 December 2014	1 011.5	1 199.6	2 211.1
31 December 2013	941.2	906.0	1 847.2
Useful life	15-67 years	3-15 years	
Depreciation plan	Linear	Linear	

## 15

## INVESTMENT IN ASSOCIATES

DNV GL Group AS' ownership (through DNV GL AS) in StormGeo Holding AS is 27%. The ownership (through DNV GL Business Assurance Group AS) in DNV Nemko Presafe AS is 50% and the investment is considered to be a joint venture. The investments are recognized in accordance with the equity method in the consolidated financial statements.

COMPANY	BUSINESS OFFICE	OWNERSHIP	ACQUISITION COST	SHARE OF PROFIT FOR THE YEAR	BOOK VALUE
AMOUNTS IN NOK MILLION					
DNV Nemko Presafe AS	Oslo	50%	14.1	2.5	8.8
StormGeo Holding AS	Bergen	27%	145.5	3.1	121.6

Book value in StormGeo Holding has in 2015 been adjusted for a negative change in OCI of NOK 22.7 million.

## 16

## OTHER CURRENT LIABILITIES

	DNV GL GROUP AS CONSOLIDATED		
AMOUNTS IN NOK MILLION	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013
Advances from customers	2 492.7	2 052.4	1 897.2
Accrued bonus to employees	253.9	624.0	620.7
Accrued holiday allowances	542.2	558.8	503.0
Unrealized loss and interest related to forward contracts	35.7	58.7	38.1
Accrued expenses and other current liabilities	1 327.5	1 290.0	1 104.3
<b>Total other current liabilities</b>	<b>4 652.1</b>	<b>4 584.0</b>	<b>4 163.3</b>

## 17

## TRADE DEBTORS

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION

	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013
Gross trade debtors	5 609.3	5 485.9	4 575.2
Provision for bad debts	(369.2)	(344.2)	(307.0)
<b>Net trade debtors</b>	<b>5 240.7</b>	<b>5 141.7</b>	<b>4 268.2</b>

## 18

OTHER  
LONG-TERM  
RECEIVABLES

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION

	31 DEC. 2015	31 DEC. 2014	31 DEC. 2013
Loans to employees	54.7	59.0	69.9
Convertible loan to StormGeo Holding AS	0.0	0.0	46.7
Other long-term receivables	350.0	300.4	332.7
<b>Total other long-term receivables</b>	<b>404.8</b>	<b>359.5</b>	<b>449.3</b>

## 19

## PROVISIONS

## DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION	CLAIMS AND CONTINGENCIES		
	OTHERS	TOTAL	
Balance at 1 January 2013	45.1	52.4	97.5
Currency translation differences	6.1	6.7	12.8
Additions	7.5	20.0	27.5
Additions from business combinations	180.9	20.1	201.0
Utilization	(23.0)	(52.3)	(75.3)
Reversal	0.0	0.0	0.0
<b>Balance at 31 December 2013</b>	<b>216.6</b>	<b>46.9</b>	<b>263.5</b>
Current	66.5	35.3	101.8
Non-current	150.1	11.6	161.7
<b>Balance at 1 January 2014</b>	<b>216.6</b>	<b>46.9</b>	<b>263.5</b>
Currency translation differences	14.2	1.7	16.0
Additions	38.0	70.4	108.4
Utilization	(23.0)	(32.6)	(55.7)
Reversal	(57.1)	0.0	(57.1)
<b>Balance at 31 December 2014</b>	<b>188.7</b>	<b>86.4</b>	<b>275.1</b>
Current	78.0	86.4	164.4
Non-current	110.7	0.0	110.7

## DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION	CLAIMS AND CONTINGENCIES		
	OTHERS	TOTAL	
Balance at 1 January 2015	188.7	86.4	275.1
Currency translation differences	6.9	0.0	6.9
Additions	50.0	396.5	446.5
Utilization	(6.0)	(74.5)	(80.5)
Reversal	(65.8)	0.0	(65.8)
<b>Balance at 31 December 2015</b>	<b>173.7</b>	<b>408.4</b>	<b>582.1</b>
Current	100.0	375.5	475.5
Non-current	73.7	32.9	106.6

Provisions for claims and contingencies concern fair value of pending legal disputes from acquisitions and provisions for other pending legal disputes. Included in other provisions are provisions for restructuring, termination benefits and onerous contracts.

# 20

## CASH AND BANK DEPOSITS

DNV GL Group AS has a cash pool system with DNB ASA, in which most of legacy DNV legal entities participate. This system includes an overdraft facility of NOK 50 million.

DNV GL Group AS has a cash pool system with Handelsbanken, in which all of DNV GL Group AS' legal entities in Sweden, Finland, Estonia, Latvia and Lithuania participate.

DNV GL Group AS has a cash pool system with Citibank, in which some of legacy DNV legal entities in the Euro-countries participate.

DNV GL Group AS has a cash pool system with Danske Bank, in which some of the DNV GL legal entities in Norway, Denmark, Sweden, Iceland, Finland,

UK and the Baltics participate. This system includes an overdraft facility of NOK 100 million.

DNV GL Group AS' wholly owned subsidiary in China, Det Norske Veritas China Company Ltd has an agreement for a CNY 10 million credit facility with Citibank in China. The facility is guaranteed by DNV GL AS through a parent company guarantee. The facility is undrawn at year-end 2015.

DNV GL Group AS' wholly owned subsidiary in India, DNV Business Assurance India Private Ltd has an agreement for an INR 250 million credit facility with Citibank in India. The facility is guaranteed by DNV GL Group AS through a parent company guarantee. The facility is undrawn at year-end 2015.

Balances on bank accounts participating in the cash pooling systems are considered as internal assets or liabilities vis-à-vis other Group participants. For DNV GL Group AS on a consolidated basis, the net total balance of NOK 376 million with DNB ASA, NOK 49 million with Handelsbanken, NOK 45 million with Citibank and NOK 6 million with Danske Bank are included in Cash and bank deposits in the balance sheet at 31 December.

Cash and bank deposits in the balance sheet comprise cash at banks and on hand and short-term deposits with a maturity of three months or less, which are subject to an insignificant risk of changes in value.

# 21

## LONG-TERM LOANS

DNV GL Group AS has an agreement for a NOK 1 600 million multi-currency revolving credit facility with Handelsbanken Norwegian branch of Svenska Handelsbanken AB. The facility expires in May 2021 and as per year-end 2015 NOK 100 mill was drawn.

The credit agreement supporting this facility has certain covenants, including a negative pledge clause, and also restrict DNV GL Group AS' ability to freely dispose of material assets. The credit agreement further requires that DNV GL Group AS on

a consolidated basis maintains a certain minimum level of equity and that the net interest bearing debt does not exceed a set level relative to total equity. DNV GL Group AS was well within all covenants at year-end.

## 22

## GUARANTEES

## 23

SHARE CAPITAL  
AND OWNERS

## 24

RELATED PARTY  
TRANSACTIONS

## DNV GL GROUP AS

AMOUNTS IN NOK MILLION

## DNV GL GROUP AS CONSOLIDATED

DNV GL GROUP AS			DNV GL GROUP AS CONSOLIDATED			
31 DEC. 15	31 DEC. 14	31 DEC. 13		31 DEC. 15	31 DEC. 14	31 DEC. 13
0.0	0.0	0.0	Guarantee commitments not included in the accounts	369.8	293.8	206.1

These guarantees are not secured by mortgage.

The share capital of DNV GL Group AS consist of 1 000 000 shares, with par value of NOK 100 each. The company is owned 63.5% by Det Norske Veritas

Holding AS, with business office in Bærum, Norway and 36.5% by Mayfair Beteiligungs-fonds II GmbH & Co. KG with business office in Hamburg, Germany.

DNV GL AS has a lease agreement for the office buildings at Høvik, Norway with the related party Det Norske Veritas Eiendom AS (wholly owned subsidiary of the majority shareholder of DNV GL Group, Det Norske Veritas Holding AS), the rent expensed in 2015 amounts to NOK 225.7 million.

DNV GL AS has a lease agreement for the office building in Stavanger, Norway with the related party DNV GL Pension fund, the rent expensed in 2015 amounts to NOK 11.4 million.

DNV GL SE has a lease agreement for the office building in Hamburg, Germany with the related party BTK 18 GmbH (a company controlled by the same shareholders that also control the 36.5 % shareholder of DNV GL Group, Mayfair Beteiligungs-fonds II GmbH & Co), the rent expensed for 2015 amounts to NOK 51.7 million.

DNV GL AS has a management services agreement for the delivery of general management and administrative services with the related party Det Norske Veritas Holding AS (63.5 % shareholder). The revenue recognized for these services in 2015 is NOK 6.4 million.

DNV GL AS has a service agreement with the related party DNV GL Pension fund for management and administrative services. The revenue recognized for these services in 2015 is NOK 2.7 million.

Several subsidiaries of DNV GL Group AS have business transactions with the related party DNV Nemko Presafe AS (associated company). Total revenue recognized in 2015 was NOK 8.4 million and total purchases amounts to NOK 15.7 million.

## 25

FINANCIAL  
ASSETS AND  
FINANCIAL  
LIABILITIES

## DNV GL GROUP AS CONSOLIDATED

31 DECEMBER 2015

AMOUNTS IN NOK MILLION

	FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH P&L	LOANS AND RECEIV- ABLES	AVAILABLE FOR SALE	OTHER FINANCIAL LIABILITIES
<b>Assets - non-current assets</b>				
Available for sale investments			42.4	
Loans to employees		54.7		
Other long-term receivables		350.0		
<b>Assets - current assets</b>				
Cash and bank deposits		4 193.0		
Trade debtors		5 277.7		
Other debtors		883.0		
<b>Financial liabilities - non-current</b>				
Interest bearing loans and borrowings				100.0
Other non-current liabilities				323.8
<b>Financial liabilities - current</b>				
Trade creditors				477.1
Overdrafts				
Forward contracts	35.7			

## DNV GL GROUP AS CONSOLIDATED

31 DECEMBER 2014

AMOUNTS IN NOK MILLION

	FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH P&L	LOANS AND RECEIV- ABLES	AVAILABLE FOR SALE	OTHER FINANCIAL LIABILITIES
<b>Assets - non-current assets</b>				
Available for sale investments			42.6	
Loans to employees		59.0		
Other long-term receivables		300.4		
<b>Assets - current assets</b>				
Cash and bank deposits		3 978.2		
Trade debtors		5 141.7		
Other debtors		928.5		
<b>Financial liabilities - non-current</b>				
Interest bearing loans and borrowings				500.0
Other non-current liabilities				515.5
<b>Financial liabilities - current</b>				
Trade creditors				476.6
Overdrafts				4.5
Forward contracts	58.7			

# 26

## TRANSITION TO IFRS

With effect from 2014, including comparable figures from 2013, DNV GL Group has transitioned to International Financial Reporting Standards (IFRS) from Norwegian Accounting Standards (NGAAP).

The financial statements are prepared in accordance with the Norwegian Accounting Act § 3-9 and Regulations on Simplified IFRS as enacted by the Ministry of Finance 3 November 2014. In all material aspects, Norwegian Simplified IFRS requires that the IFRS recognition and measurement criteria (as adopted by the European Union) are complied with, but disclosure and presentation requirements (the notes) follow the Norwegian Accounting Act.

DNV GL Group AS has prepared an IFRS opening balance sheet as of 1 January 2013. The IFRS implementation effects identified for the Group are few and mainly related to amortization of goodwill not allowed under IFRS and accounting for periodical maintenance for the Energy laboratories. The same principles used in the opening balance are used throughout the periods presented, therefore there are no changes in accounting principles in these financial statements.

DNV GL Group have applied the following exemptions from retrospective application of certain IFRSs:

- 1** Cumulative currency translation differences for all foreign operations are deemed to be zero as at 1 January 2013.
- 2** With the exception of the acquisition of N.V. KEMA late February 2012 and the business combination with GL SE Group in September 2013, the classification of former business combinations under previous NGAAP is maintained, and the carrying amount of goodwill recognized under NGAAP has not been adjusted.
- 3** Under previous NGAAP, DNV GL Group did not capitalize or measure development expenditures as assumed by IAS 38, and consequently no reliable estimate for development cost to be capitalized existed at 1 January 2013. Based on this, development costs are only recognized as an intangible asset subsequent to the transition to IFRS.

The main effects of transition to IFRS 1 January 2013 for the Group are:

- A** Acquisition related costs incurred in the acquisition of N.V. KEMA and in the Business Combination with GL have under NGAAP been considered part of the acquisition cost, these costs have in line with IFRS been expensed in the period the costs were incurred.
- B** Goodwill related to the acquisition of N.V. KEMA and the Business Combination with GL have under NGAAP been amortized over the expected economic lifetime. These goodwill amortizations have been reversed to comply with IFRS. No impairment of Goodwill in excess of impairments reflected under NGAAP has been deemed necessary at 1 January 2013.
- C** Periodic maintenance/overhaul related to the laboratories in BA Energy have under NGAAP been built up as provisions for expected maintenance cost. In the transition to IFRS, the periodic maintenance/overhaul have been recognized when the costs are incurred and amortized over its useful life. A related deferred tax effect has been recognized to reflect the temporary difference between the IFRS adjustment for periodic maintenance/overhaul and related tax values.

## RECONCILIATION OF TRANSITIONAL EFFECTS DNV GL GROUP AS CONSOLIDATED

BALANCE SHEET	REF.	DNV GL GROUP AS CONSOLIDATED (1 JAN. 2013)			DNV GL GROUP AS CONSOLIDATED (31 DEC. 2013)		
		NGAAP	EFFECT OF TRANSITION TO IFRS	IFRS	NGAAP	EFFECT OF TRANSITION TO IFRS	IFRS
AMOUNTS IN NOK MILLION							
Intangible assets	A,B,C	1 823.7	30.8	1 854.4	11 309.2	195.6	11 504.8
Tangible fixed assets	C	1 164.8	70.8	1 235.6	1 762.2	85.0	1 847.2
Non-current financial assets		473.8		473.8	783.2		783.2
Trade debtors, work in progress and other receivables		4 386.0		4 386.0	7 520.2		7 520.2
Cash and bank deposits		1 773.9		1 773.9	3 874.7		3 874.7
<b>TOTAL ASSETS</b>		<b>9 622.2</b>	<b>101.6</b>	<b>9 723.7</b>	<b>25 249.4</b>	<b>280.6</b>	<b>25 530.0</b>
Equity	A,B,C	4 937.2	113.6	5 050.8	15 269.7	291.5	15 561.2
Provisions		1 333.1	(12.0)	1 321.1	4 243.4	(11.0)	4 232.5
Current liabilities		3 351.9		3 351.9	5 736.3		5 736.3
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>9 622.2</b>	<b>101.6</b>	<b>9 723.7</b>	<b>25 249.4</b>	<b>280.6</b>	<b>25 530.0</b>

## DNV GL GROUP AS CONSOLIDATED (1 JAN.-31 DEC. 2013)

## INCOME STATEMENT

AMOUNTS IN NOK MILLION

	REF.	NGAAP	EFFECT OF TRANSITION TO IFRS	IFRS
Operating revenue		15 234.1		15 234.1
Payroll expenses		8 446.3		8 446.3
Depreciation	C	267.7	3.7	271.3
Amortization and impairment	B	455.6	(252.6)	203.0
Other operating expenses	A, C	4 887.4	93.5	4 981.0
Operating profit		1 177.1	155.3	1 332.4
Net financial income		(14.1)		(14.1)
Tax expense	C	(491.9)	(1.1)	(493.0)
Profit for the period		671.0	154.3	825.3

There are no effects of transition to IFRS 1 January 2013 for the parent company DNV GL Group AS. IFRS effects included after 1 January 2013:

**A.** Acquisition related costs incurred in the Business Combination with GL have under NGAAP been considered part of the acquisition cost, these costs have in line with IFRS been expensed in the period the costs were incurred.

**RECONCILIATION OF TRANSITIONAL EFFECTS** DNV GL GROUP AS (PARENT COMPANY)**BALANCE SHEET**

DNV GL GROUP AS (31 DEC. 2013)

AMOUNTS IN NOK MILLION

	REF.	NGAAP	EFFECT OF TRANSITION TO IFRS	IFRS
Intangible and tangible fixed assets		0.2		0.2
Non-current financial assets	A	11 558.7	(99.2)	11 459.5
Current assets		357.5		357.5
<b>TOTAL ASSETS</b>		<b>11 916.4</b>	<b>(99.2)</b>	<b>11 817.2</b>
Equity	A	10 800.3	(99.2)	10 701.1
Total liabilities		1 116.1		1 116.1
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>11 916.4</b>	<b>(99.2)</b>	<b>11 817.2</b>

**INCOME STATEMENT**

DNV GL GROUP AS (1 JAN.-31 DEC. 2013)

AMOUNTS IN NOK MILLION

	REF.	NGAAP	EFFECT OF TRANSITION TO IFRS	IFRS
Operating revenue		0.0		0.0
Other operating expenses	A	0.9	99.2	100.1
<b>Operating profit</b>		<b>(0.9)</b>	<b>(99.2)</b>	<b>(100.1)</b>
Net financial income		8.3		8.3
Tax expense		(0.4)		(0.4)
<b>Profit for the period</b>		<b>7.0</b>	<b>(99.2)</b>	<b>(92.2)</b>

## To the Board of Directors of DNV GL Group AS

**REPORT ON THE FINANCIAL STATEMENTS**

We have audited the accompanying financial statements of DNV GL Group AS, comprising the financial statements for the Parent Company and the Group. The financial statements of the Parent Company and the Group comprise the statement of financial position as at 31 December 2015, the statements of income, comprehensive income, cash flows and changes in equity for the year then ended as well as a summary of significant accounting policies and other explanatory information.

**THE BOARD OF DIRECTORS' AND GROUP PRESIDENT & CEO'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS.** The Board of Directors and Group President & CEO are responsible for the preparation and fair presentation of these financial statements in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for such internal control as the Board of Directors and Group President & CEO determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

**AUDITOR'S RESPONSIBILITY.** Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements for the Parent Company and the Group.

**OPINION.** In our opinion, the financial statements of DNV GL Group AS have been prepared in accordance with laws and regulations and present fairly, in all material respects, the financial position of the Parent Company and the Group as at 31 December 2015 and their financial performance and cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.

**REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS**

**OPINION ON THE BOARD OF DIRECTORS' REPORT.** Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Directors' report concerning the financial statements, the going concern assumption and the proposal for the allocation of the result is consistent with the financial statements and complies with the law and regulations.

**OPINION ON REGISTRATION AND DOCUMENTATION.** Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, «Assurance Engagements Other than Audits or Reviews of Historical Financial Information», it is our opinion that the Board of Directors and President & CEO have fulfilled their duty to ensure that the Company's accounting information is properly recorded and documented as required by law and generally accepted bookkeeping practice in Norway.

Oslo, 29 April 2016  
Ernst & Young AS

Finn Ole Edstrøm  
State Authorised Public Accountant (Norway)

## To the Board of Directors of DNV GL Group AS

We have performed an independent control of DNV GL Group AS's reporting on Sustainability for 2015 (Sustainability Report), which involves an assessment of whether the information presented in the Sustainability Report is based on relevant criteria for sustainability reporting as defined by the Global Reporting Initiative G4 "in accordance" option "comprehensive" (GRI G4). Externally assured information is indicated in the GRI G4 index in the Sustainability Report for the financial year 2015.

**MANAGEMENT'S RESPONSIBILITY.** DNV GL Group AS's management is responsible for the selection of the information and collection of the data for presentation and for the preparation of the Sustainability Report in accordance with the GRI G4 criteria.

**OUR INDEPENDENCE AND QUALITY CONTROL.** We have complied with the independence requirements of the Norwegian Law on Auditors and Auditing and other ethical requirements from the Code of Ethics of the Norwegian Institute of Public Accountants which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

We apply International Standard on Quality Control (ISQC1) "Quality control for firms that perform audits and reviews of financial statements, and other assurance and related services engagements" and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**AUDITOR'S TASKS AND DUTIES.** Our task is to issue an independent report to the Board of Directors on the Sustainability Report based on our work. Our work is conducted in accordance with ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". The standard requires that we plan and perform procedures to obtain limited assurance that the information in the Sustainability Report is prepared and presented in accordance with relevant criteria for sustainability reporting in accordance with GRI G4 and does not contain material errors.

Our work has consisted of the following procedures:

- Review of DNV GL Group AS process for the preparation and presentation of the Sustainability Report to provide us with an understanding of how Sustainability is ensured in practice within the business
- Interviewed those in charge of Sustainability reporting to develop an understanding of the process for the preparation of the Sustainability Report
- Verified on a sample basis the information in the Sustainability Report against source data and other information prepared by DNV GL Group AS
- Assessed the overall presentation of the Sustainability Report against the criteria in GRI G4 including a review of the consistency of information

In our opinion the evidence obtained is sufficient and appropriate to provide a basis for our conclusion.

**CONCLUSION.** Based on our work, nothing has come to our attention that causes us to believe that the Sustainability Report, in all material respects, is not prepared and presented in accordance with the GRI G4 criteria, and that the information in the Sustainability Report contains any material misstatements.

Oslo, 29 April 2016  
Ernst & Young AS

Finn Ole Edstrøm  
State Authorised Public Accountant (Norway)

## General Standard Disclosures

GENERAL STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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STRATEGY AND ANALYSIS			
G4-1	p. 4-5, 107-109		Yes
G4-2	p. 50-57		Yes

ORGANIZATIONAL PROFILE			
G4-3	p. 14		Yes
G4-4	p. 13		Yes
G4-5	p. 12		Yes
G4-6	P. 12		Yes
G4-7	p. 14		Yes
G4-8	p. 12-13		Yes
G4-9	p. 8-9, 12-14, 114-125		Yes
G4-10	GRI Notes		Yes
G4-11	GRI Notes		Yes
G4-12	p. 89		Yes
G4-13	p. 77, 106-107, 132-135		Yes
G4-14	p. 81		Yes
G4-15	p. 92-99		Yes
G4-16	GRI Notes		Yes

IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	p. 131, GRI Notes		Yes
G4-18	GRI Notes		Yes
G4-19	GRI Notes		Yes

GENERAL STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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G4-20	GRI Notes		Yes
G4-21	GRI Notes		Yes
G4-22	GRI Notes		Yes
G4-23	GRI Notes		Yes

STAKEHOLDER ENGAGEMENT			
G4-24	p. 54		Yes
G4-25	GRI Notes		Yes
G4-26	GRI Notes		Yes
G4-27	p. 54, 48-99		Yes

REPORT PROFILE			
G4-28	GRI Notes		Yes
G4-29	GRI Notes		Yes
G4-30	GRI Notes		Yes
G4-31	GRI Notes		Yes
G4-32	p. 51, 165-166		Yes
G4-33	p. 51		Yes

GOVERNANCE			
G4-34	Corporate Governance Report p. 6-9		Yes
G4-35	Corporate Governance Report p. 7-9		Yes
G4-36	GRI Notes		Yes
G4-37	GRI Notes		Yes

GENERAL STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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G4-38	p. 112-113		Yes
G4-39	Corporate Governance Report p. 6-8		Yes
G4-40	Corporate Governance Report p. 7		Yes
G4-41	Corporate Governance Report p. 7		Yes
G4-42	Corporate Governance Report p. 10		Yes
G4-43	GRI Notes		Yes
G4-44	Corporate Governance Report p. 10		Yes
G4-45	Corporate Governance Report p. 10-11		Yes
G4-46	Corporate Governance Report p. 12-13		Yes
G4-47	Corporate Governance Report p. 12-13		Yes
G4-48	GRI Notes		Yes
G4-49	Corporate Governance Report p. 11		Yes
G4-50	GRI Notes		Yes
G4-51	p. 139		Yes
G4-52	p. 139		Yes
G4-53	GRI Notes		Yes
G4-54	GRI Notes		Yes
G4-55	GRI Notes		Yes

ETHICS AND INTEGRITY			
G4-56	p. 2, 67		Yes
G4-57	GRI Notes		Yes
G4-58	GRI Notes		Yes

## Specific Standard Disclosures

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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### CATEGORY: ECONOMIC

#### MATERIAL ASPECT: ECONOMIC PERFORMANCE

<b>G4-DMA</b>	p. 4-5, 102-111		Yes
<b>G4-EC1</b>	GRI Notes		Yes
<b>G4-EC2</b>	GRI Notes		Yes
<b>G4-EC3</b>	GRI Notes, p. 142		Yes
<b>G4-EC4</b>	GRI Notes		Yes

### CATEGORY: ENVIRONMENT

#### MATERIAL ASPECT: EMISSIONS

<b>G4-DMA</b>	p. 81		Yes
<b>G4-EN15</b>	p. 84-85, GRI Notes		Yes
<b>G4-EN16</b>	p. 84-85, GRI Notes		Yes
<b>G4-EN17</b>	p. 85, GRI Notes		No
<b>G4-EN18</b>	p. 84-85, GRI Notes		Yes
<b>G4-EN19</b>	GRI Notes		Yes
<b>G4-EN20</b>	GRI Notes		No
<b>G4-EN21</b>	GRI Notes		Yes

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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#### MATERIAL ASPECT: COMPLIANCE (ENVIRONMENT)

<b>G4-DMA</b>	p. 81		Yes
<b>G4-EN29</b>	p. 81		Yes

#### MATERIAL ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT

<b>G4-DMA</b>	p. 89		No
<b>G4-EN32</b>	Not reported	Yes*	No
<b>G4-EN33</b>	Not reported	Yes*	No

### SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

#### MATERIAL ASPECT: EMPLOYMENT

<b>G4-DMA</b>	p. 75		Yes
<b>G4-LA1</b>	GRI Notes		Yes
<b>G4-LA2</b>	GRI Notes		Yes
<b>G4-LA3</b>	GRI Notes	Yes*	Yes

#### MATERIAL ASPECT: LABOR/MANAGEMENT RELATIONS

<b>G4-DMA</b>	p. 75		Yes
<b>G4-LA4</b>	GRI Notes		Yes

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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#### MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY

<b>G4-DMA</b>	p. 59		Yes
<b>G4-LA5</b>	p. 64		Yes
<b>G4-LA6</b>	p. 62-64, GRI Notes	Yes*	Yes
<b>G4-LA7</b>	GRI Notes		Yes
<b>G4-LA8</b>	GRI Notes		Yes

#### MATERIAL ASPECT: TRAINING AND EDUCATION

<b>G4-DMA</b>	p. 75		Yes
<b>G4-LA9</b>	GRI Notes		Yes
<b>G4-LA10</b>	GRI Notes		Yes
<b>G4-LA11</b>	GRI Notes		Yes

#### MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY

<b>G4-DMA</b>	p. 75		Yes
<b>G4-LA12</b>	p. 15, 112-113, GRI Notes		Yes

#### MATERIAL ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN

<b>G4-DMA</b>	p. 75		Yes
<b>G4-LA13</b>	GRI Notes		Yes

## Specific Standard Disclosures

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR LABOR PRACTICES			
G4-DMA	p. 89		No
G4-LA14	Not reported	Yes*	No
G4-LA15	Not reported	Yes*	No

MATERIAL ASPECT: LABOR PRACTICES GRIEVANCE MECHANISMS			
G4-DMA	p. 67-68		Yes
G4-LA16	p. 72		Yes

### SUB-CATEGORY: HUMAN RIGHTS

MATERIAL ASPECT: NON-DISCRIMINATION			
G4-DMA	p. 75		Yes
G4-HR3	p. 72		Yes

MATERIAL ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT			
G4-DMA	p. 89		No
G4-HR10	Not reported	Yes*	No
G4-HR11	Not reported	Yes*	No

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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### SUB-CATEGORY: SOCIETY

MATERIAL ASPECT: ANTI-CORRUPTION			
G4-DMA	p. 67		Yes
G4-SO3	p. 72		Yes
G4-SO4	p. 72	Yes*	Yes
G4-SO5	p. 72	Yes*	Yes

MATERIAL ASPECT: ANTI-COMPETITIVE BEHAVIOR			
G4-DMA	p. 67-68		Yes
G4-SO7	p. 72		Yes

MATERIAL ASPECT: COMPLIANCE (SOCIAL)			
G4-DMA	p. 67-68		Yes
G4-SO8	p. 72		Yes

MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY			
G4-DMA	p. 67-68, 89		No
G4-SO9	Not reported	Yes*	No
G4-SO10	Not reported	Yes*	No

\* Please see the GRI Notes for reason for omission.

DISCLOSURE OF MANAGEMENT APPROACH AND SPECIFIC STANDARD DISCLOSURES	REPORTED	OMISSION	INDEPENDENT ASSURANCE
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### SUB-CATEGORY: PRODUCT RESPONSIBILITY

MATERIAL ASPECT: CUSTOMER PRIVACY			
G4-DMA	p. 67-68		Yes
G4-PR8	p. 72		Yes

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