ANNUAL REPORT 2019

SAFER, SMARTER, GREENER

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About DNV GL

We are the independent expert in risk management and quality assurance. Driven by our purpose, to safeguard life, property and the environment, we empower our customers and their stakeholders with facts and reliable insights so that critical decisions can be made with confidence. As a trusted voice for many of the world's most successful organizations, we use our knowledge to advance safety and performance, set industry benchmarks, and inspire and invent solutions to tackle global transformations.

CUSTOMERS

≈100,000

EMPLOYEES

≈12,000

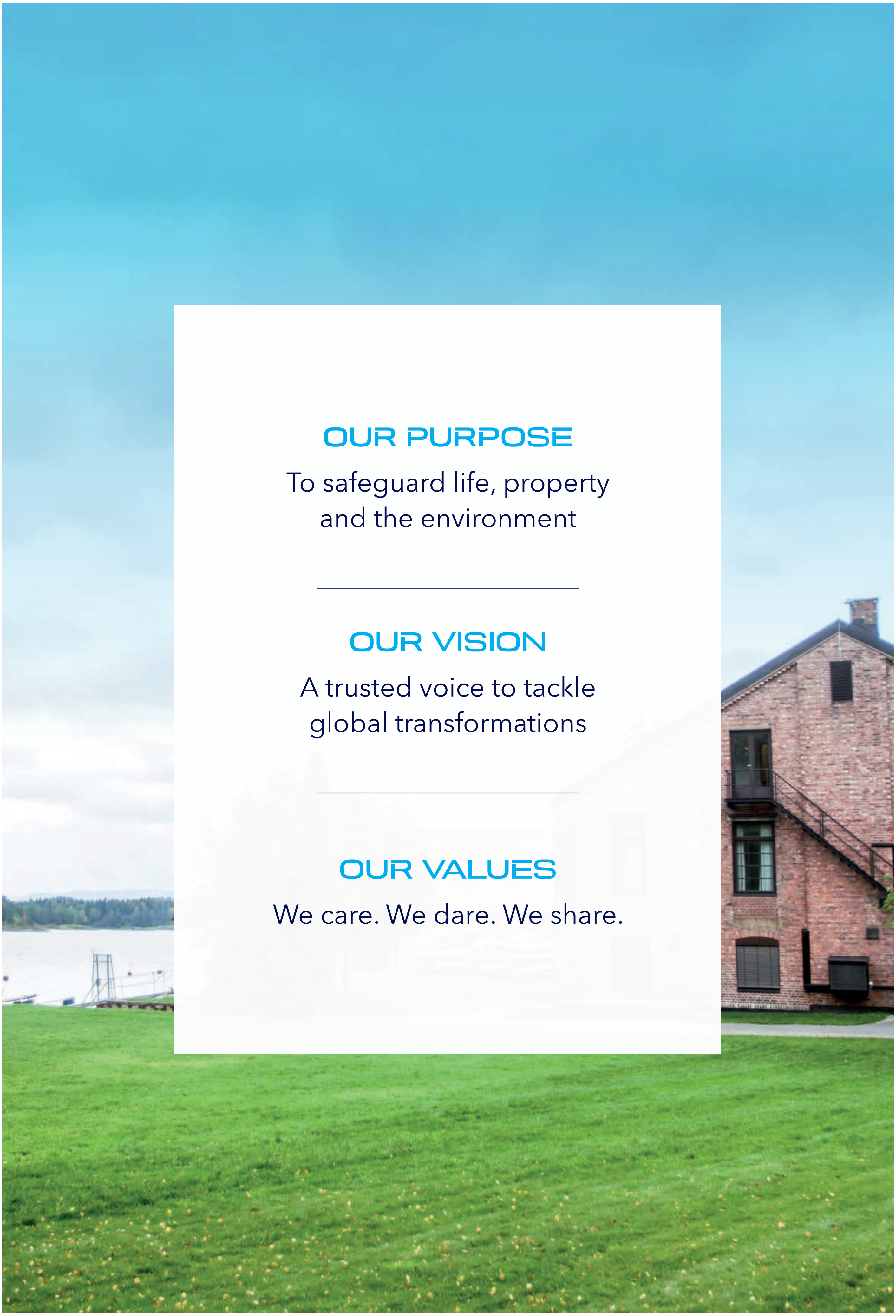
ESTABLISHED

1864

> MORE ON OUR HISTORY

COUNTRIES

100+



OUR PURPOSE

To safeguard life, property and the environment

OUR VISION

A trusted voice to tackle global transformations

OUR VALUES

We care. We dare. We share.

CEO STATEMENT

Tackling global transformations

2019 was a good year for DNV GL. We increased revenue by 9.7%, helped by improved market conditions. Notably, earnings more than doubled as a result of continued cost discipline and increased productivity linked to the use of new digital tools and processes.

The dedication and hard work of our colleagues was evident across our businesses. Our Maritime business area delivered the lion's share of revenue growth. However, Oil & Gas, Energy and Digital Solutions also delivered growth, while Business Assurance as expected had slightly lower activity after a bumper year in 2018. Moving into 2020, DNV GL is in a much stronger position than previous years and poised to take advantage of opportunities ahead.

In the short term, there is of course a major storm to weather. The present disruptions are extraordinary. We are deeply mindful of the effect of the Coronavirus pandemic on the customers and communities we serve, and we are doing everything in our power to contribute as constructively as possible. DNV GL staff are demonstrating great resilience, resourcefulness and care, in keeping with the proud traditions that have sustained our company over the past 150 years. Our foremost priority is the health and safety of our people, as well as ensuring business continuity.

We are also preparing for the challenges and opportunities that lie ahead, because we can expect additional significant changes. The 2020s is being called 'the decade of transformation'. This is the decade where the pace of the energy transition will be set. This is also the decade where our food and health systems will change immensely, and when the digital technologies underpinning Industry 4.0 will mature from experimentation into large-scale application.

Most importantly, this is the decade where humanity will succeed or fail to deliver on the Sustainable Development Goals. Now, more than ever, we are reminded that the great challenges society faces are global, and we must work together to solve them. Therein lie great opportunities too; to decarbonize, to create more sustainable supply chains, to further digitize and leverage new technologies.

I believe DNV GL has a unique role to play in these transformations. With our technical expertise, domain knowledge and understanding of risks, we help customers to manage their assets safely, efficiently and with confidence. We aim to be a trusted voice to tackle the global transformations ahead of us.

In many areas we are already doing so. In 2019, we released the third edition of our *Energy Transition Outlook*. This publication has become the most downloaded report ever produced by DNV GL, demonstrating the interest in the energy transition among our customers and stakeholders. In the outlook, we forecast a staggering growth in electrification towards 2050, mainly powered by wind and solar.

As an organization responsible for assuring, verifying and advising on the assets that will provide the world's energy in the decades to come, DNV GL is at the nexus of the transition. We are a leading source of technical expertise in clean and zero-emission energy – from production and transmission to distribution, storage and use. Taking offshore wind as an example, our work spans the whole value chain from ocean studies, through design, construction, transmission and distribution of power to consumers. We are also increasingly involved beyond that with the assurance work we perform for investors and financial institutions.

The maritime sector is changing in response to the International Maritime Organization's call for 50% reduction of emissions. Currently 6% of ships on order worldwide will be powered by low-carbon alternatives, and this share is expected to increase. Local initiatives such as the Green Shipping Program in Norway demonstrate that new technologies and smarter ecosystems can have a big role to play, if maritime businesses and government work together.

Digital technologies play a critical role in bringing about transformation. In 2019, we opened a research centre in Shanghai to explore how artificial intelligence and advanced machine learning processes can be used to aid inspections and identify possible faults more rapidly, like our new AI-algorithm to detect defects in weld seams that was successfully piloted for use at yards.

> “Now, more than ever, we are reminded that the great challenges society faces are global,and we must work together to solve them. Therein lie great opportunities too; to decarbonize, to create more sustainable supply chains, to further digitize and leverage new technologies.

Consumers are also able to reap the benefits that digital tools bring. The source of a product, the production methods, packaging, safety, carbon footprint and social performance can be traced and checked before purchase, an area of growing focus in the suite of services we offer to global supply chains. This resulting transparency enables consumers to trust and select products with greater confidence.

To achieve these transformations well, and with speed, we must work in partnership. DNV GL works closely with customers, industry associations and international organizations such as the UN Global Compact and the World Business Council for Sustainable Development in pursuit of change to a more sustainable world. We are committed to the ten principles on human rights, labour, environment and anti-corruption, which are integrated in our corporate strategy, management system and day-to-day operations.

We don't know what the coming year will look like. I do know, however, that we at DNV GL will do our part to foster collaboration among key stakeholders to solve global challenges and deliver on our purpose of safeguarding life, property and the environment.

Remi Eriksen, Group President & CEO

HIGHLIGHTS

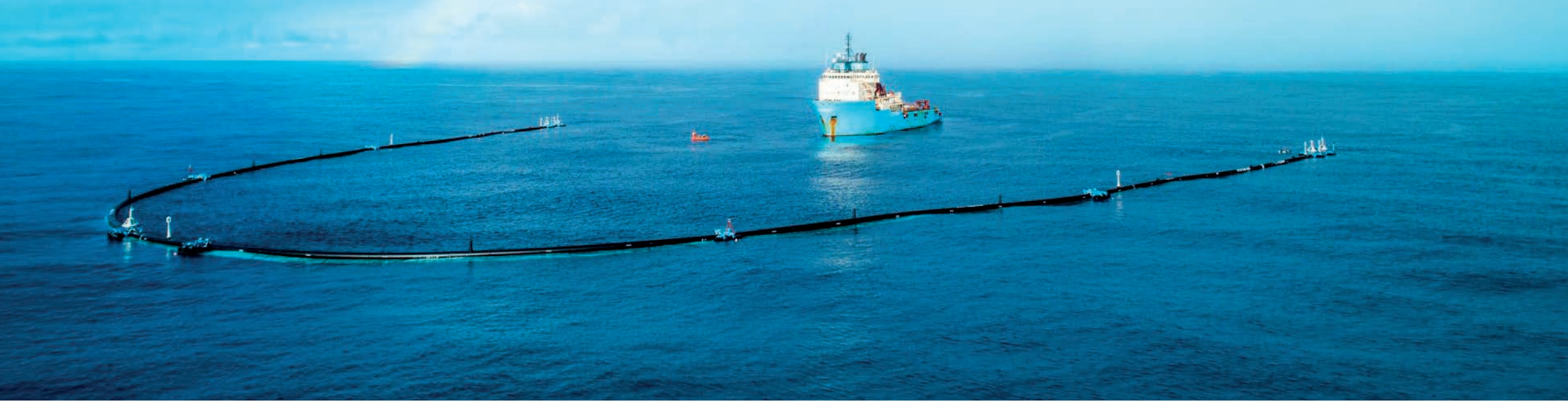
Cleaning up the oceans

DNV GL has joined forces with The Ocean Cleanup to address one of the major environmental challenges facing the planet. The ocean space is core to our business, and we are keen to contribute our expertise and share our vision to clean up the ocean using data-driven technology.

DNV GL has developed a set of requirements and processes that enables verification of the plastic's origin and authenticity and allows full traceability.

In December, the first successful mission to collect plastic debris from the Great Pacific Garbage Patch was completed. The plastic will be recycled into new products involving major consumer brands.

DNV GL will verify the plastic, which will enable consumers buying the products to fully trust that these are sustainable. Turning garbage into valuable products will enable The Ocean Cleanup to secure necessary funds for the further cleaning of our oceans.



Bridging the trust gap

DNV GL has been in the business of assuring physical assets since 1864. As digitalization continues to impact the industries we serve, a natural progression for DNV GL is to help our customers assure their digital assets. DNV GL has entered into a strategic partnership with TechnipFMC to co-develop a framework for assurance of digital twins. Both TechnipFMC and DNV GL recognize that many players are investing in digital assets, but the industries we serve need help in understanding how to trust these digital assets – especially for the high consequence scenarios that our customers face in their daily operations.

Powered by wind

DNV GL provided technical due diligence services on the Dundonnell Wind Farm in Australia to secure project financing by a consortium of six lenders, led by National Australia Bank (NAB) and The Bank of Tokyo-Mitsubishi UFJ. The project consists of 80 turbines and associated infrastructure, providing a total capacity of 336 MW, and will make a key contribution to the region's renewable energy target.

Exploring artificial intelligence

DNV GL's newly opened Artificial Intelligence (AI) research centre in Shanghai explores how AI can enhance audit, inspection and survey services. The team is researching deep learning algorithms to build computer vision technologies. The first joint development project with a leading shipyard has created an automated weld seam defect detection service using a 'digital eye' to detect failures.

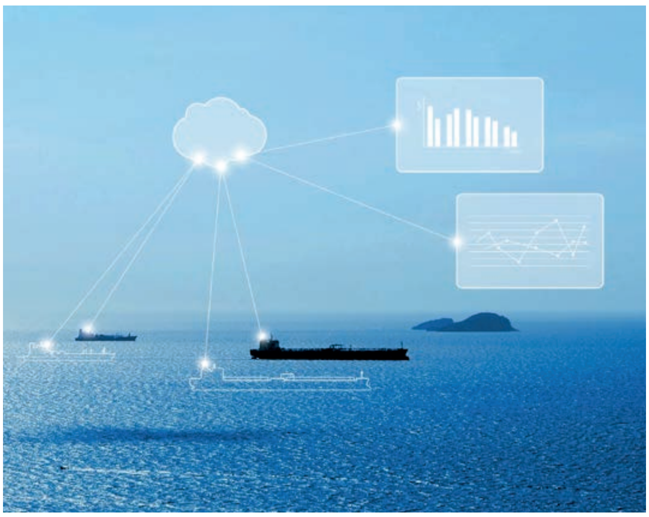
Transforming the energy system

DNV GL research suggests that global energy use will peak in the 2030s, but not before overshooting the global warming limit of 1.5°C. In September, we published the third edition of our Energy Transition Outlook, a forecast of how the world energy system will change over the next three decades.

Our research department also explored the technologies that will transform our industries in the future. Read more about our *Energy Transition Outlook* and *Technology Outlook*.

Veracity enables trust in data

DNV GL – Digital Solutions has developed new software for maritime customers, enabling a better overview of technical, operational and compliance data. Using DNV GL's data platform, Veracity, fleet owners can now access a dashboard showing their strategic fleet data which has been quality-assured and analysed, enabling them to trust the data and make informed decisions.



Remote surveys for smarter class

All DNV GL classified ships are now able to connect with a dedicated team of remote surveyors who can provide support to vessels anywhere in the world. A first in Maritime Class, customers can request and obtain remote surveys through the Veracity data platform. A remote survey means that a DNV GL classed vessel does not need to come to shore for certain inspection services, thus reducing time, costs, and operational downtime.

Using a video link, the crew and surveyor can share documentation and stream equipment recordings to go through the list of inspection items. The new service was recognized by an IT innovation award at the DataccioConnect Conference in Singapore.

12,000

The number of remote surveys conducted by Maritime in 2019.

34%

of DNV GL – Maritime customers have had a remote survey.

Converting gas networks to hydrogen

DNV GL – Oil & Gas is contributing to the H21 project in the UK, where the extensive gas distribution networks in the city of Leeds are being converted to handle hydrogen, a lower carbon alternative. DNV GL is assessing the risks to ensure the new network can operate safely.

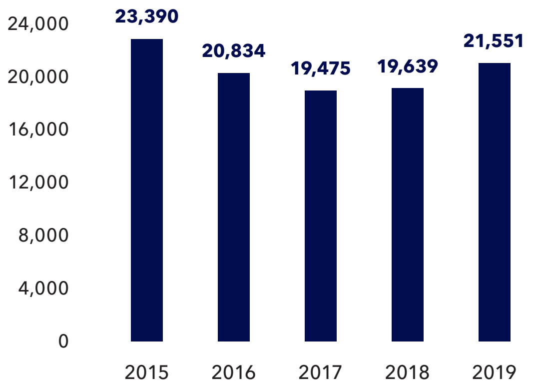
A large-scale model was developed at our Spadeadam testing facility to enable extensive testing.

KEY FIGURES

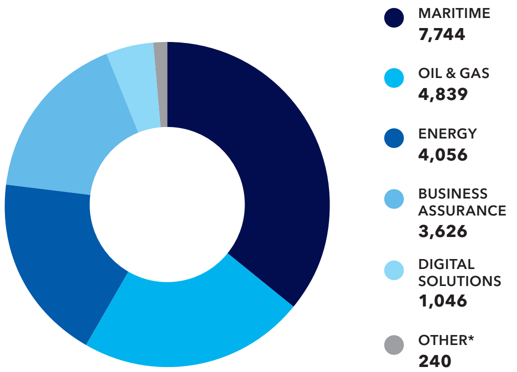
REVENUE (MILLION NOK)

21,551

LAST FIVE YEARS



PER BUSINESS AREA

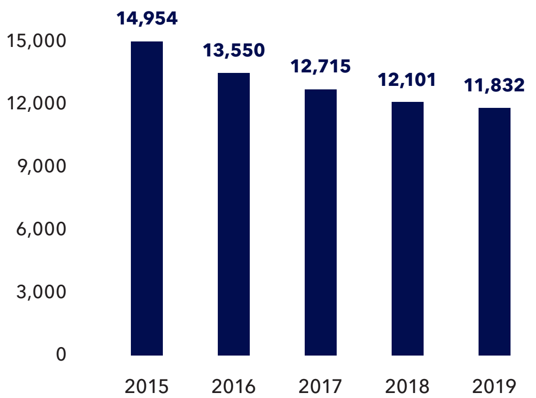


* Global Shared Services and Group functions including Technology & Research, Real Estate and NOK 141 million gain from the divestment of the KEMA laboratories.

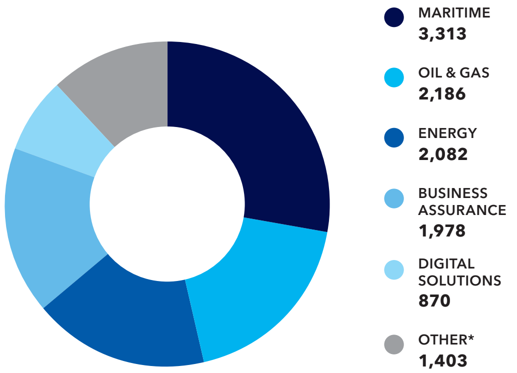
EMPLOYEES

11,832

LAST FIVE YEARS



PER BUSINESS AREA

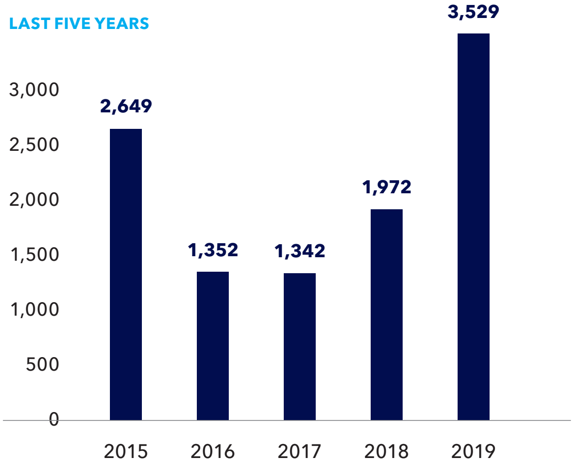


* Global Shared Services and Group functions, including Technology & Research and Real Estate.

EBITDA (MILLION NOK)

3,529

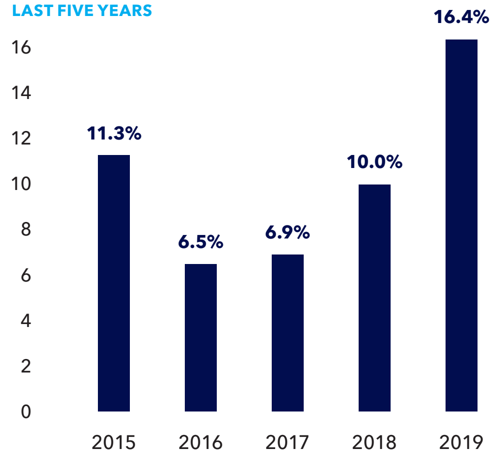
LAST FIVE YEARS



EBITDA MARGIN (%)

16.4%

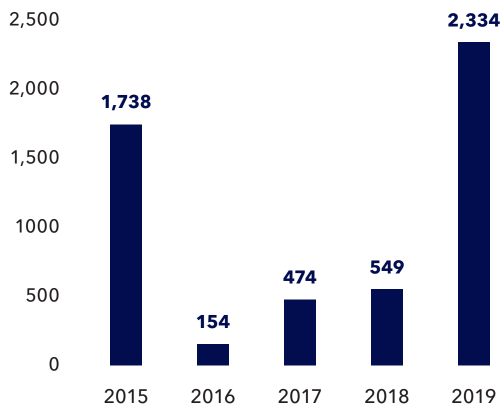
LAST FIVE YEARS



EBIT/OPERATING PROFIT (MILLION NOK)

2,334

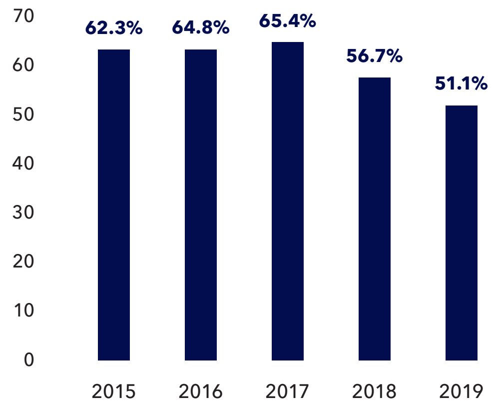
LAST FIVE YEARS



EQUITY RATIO (%)

51.1%

LAST FIVE YEARS

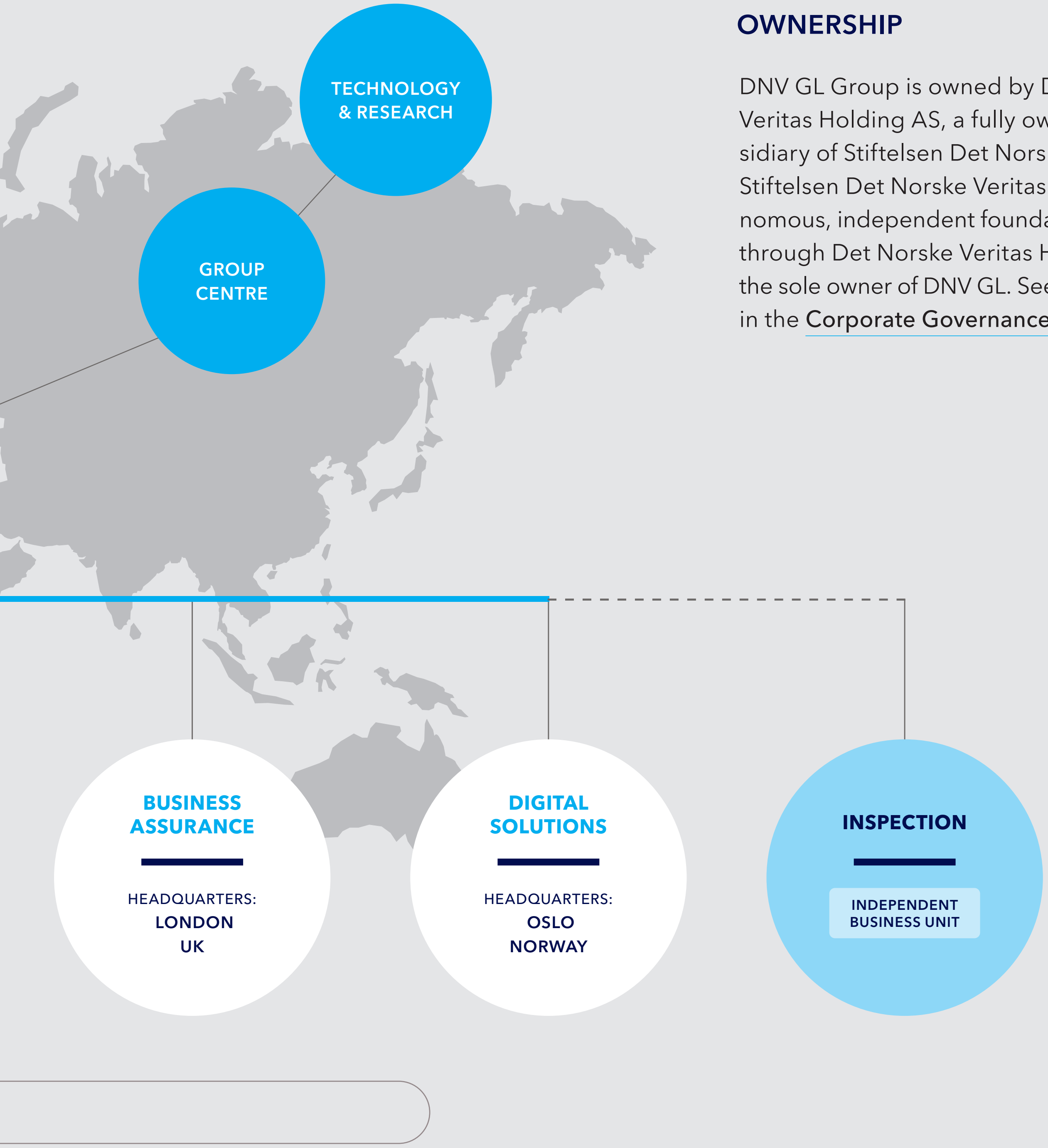


GROUP STRUCTURE

DNV GL is structured into five business areas. In addition, we have a Global Shared Services organization and a Group Centre that includes our strategic research unit, Group Technology and Research. An Independent Business Unit for Inspection services has been established with effect from 1 January 2020.

OWNERSHIP

DNV GL Group is owned by Det Norske Veritas Holding AS, a fully owned subsidiary of Stiftelsen Det Norske Veritas. Stiftelsen Det Norske Veritas is an autonomous, independent foundation and is, through Det Norske Veritas Holding AS, the sole owner of DNV GL. See more details in the Corporate Governance report.



BUSINESS AREAS AT A GLANCE

	MARITIME	OIL & GAS
Our approach	We help enhance the safety, efficiency and sustainability of our customers in the global shipping industry, covering all vessel types and mobile offshore units.	From project initiation 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	**SERVICES INCLUDE:** » Classification of ships and mobile offshore units » Certification of materials and components » Technical, safety, business risk and environmental advisory » Training and competence-related services	**SERVICES INCLUDE:** » Risk management advisory » Technical advisory » Noble Denton marine services » Technical assurance – Certification and verification – Inspection
Revenues Group: 21,551	7,744 NOK MILLION	4,839 NOK MILLION
Employees Group: 11,832	3,313 EMPLOYEES	2,186 EMPLOYEES

ENERGY

We deliver advisory, certification and testing services to the energy value chain including renewables and energy management.

SERVICES INCLUDE:

- Renewables advisory & energy advisory services
- Renewables certification
- Inspection, testing, verification and certification
- Energy management services

4,056
NOK MILLION

2,082
EMPLOYEES

BUSINESS ASSURANCE

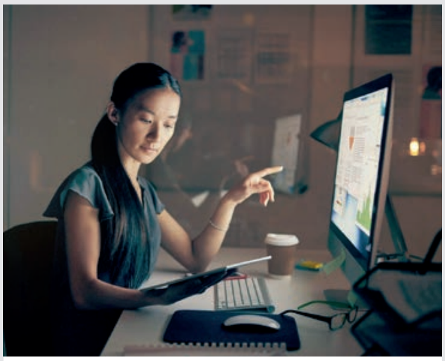
Combining technical, digital and industry expertise, we help customers in all industry sectors build sustainable business performance and create stakeholder trust.

SERVICES INCLUDE:

- Management system certification
- Product certification & assurance
- Supply chain solutions & assurance
- Sustainability practices solutions, audits & strategy
- Competence training & personnel certification
- Functional safety training & assessment
- Digital assurance solutions for supply chains, ecosystems and packaged goods
- Healthcare accreditation & certification
- Food & beverage industry solutions

3,626
NOK MILLION

1,978
EMPLOYEES



DIGITAL SOLUTIONS

We provide digital solutions and software for managing risk, improving safety and performance across industries, including maritime, oil and gas, energy and healthcare.

SERVICES AND SOLUTIONS INCLUDE:

- Generic and industry specific software
- Tailored data analytics solutions
- Digitalization and data management advisory
- Cyber security assurance, advisory and penetration testing
- Veracity industry data platform and marketplace

1,046
NOK MILLION

870
EMPLOYEES

What is important to us

Our purpose, 'to safeguard life, property and the environment', is our reason for being. It has guided us since our foundation in 1864, and is shared with our sole owner, Stiftelsen Det Norske Veritas - a freestanding, independent Norwegian foundation. This enables us to take a long-term view on how we create value for our customers, employees, society and the environment.

Creating value through our work is important to DNV GL and understanding what issues are most important to our business and our external stakeholders helps direct the approach we take. Our key stakeholders are our owner, our customers and our employees. Other stakeholders include suppliers, research institutions, government bodies, industry associations, civil society organizations, and the media. Our scale – almost 12,000 employees, 100,000 customers, and operations in more than 100 countries – means we are in a good position to deliver our aim of creating financial and non-financial value for our stakeholders.

Engaging our stakeholders

We engage with internal and external stakeholders in a variety of ways to understand their thinking and concerns on a range of business and sustainability issues. In this way, we can identify the economic, social and environmental risks, opportunities and impacts that are most important, or material, to DNV GL and our stakeholders.

Customers. For customers, we conduct a large-scale brand survey every three to four years to understand what they think about DNV GL and the brand attributes they find most important. We also run regular customer satisfaction surveys in all of our business areas (see page 56 for more detail).

Employees. In 2019, we changed how we engage with our employees to understand the issues that matter to them. Following successful pilots, we have implemented a pulse survey approach across DNV GL, which involves more frequent employee engagement (see page 66 for more details). We also have an active employee communication channel on Yammer, our social media platform, which enables employees to share their opinions.

Defining our material issues

Our materiality assessment (see below) is based on a wide-ranging stakeholder survey designed to identify the sustainability topics our customers, suppliers, partners, employees and the media consider important. The survey received more than 1,000 responses giving detailed insight into stakeholders' views.

Our important topics are outlined below and covered in detail in the sustainability performance section (see page 46).

We are currently developing a new corporate strategy, which will be launched in 2020 for the period 2021 to 2025. As part of the process, we will update the Group sustainability strategy, including revisiting our materiality assessment to gather a fresh understanding of business and stakeholder views on our priority sustainability issues.

Supporting the Sustainable Development Goals (SDGs)

We are a resolute supporter of the SDGs. Through our business activities we contribute to the SDGs, with a particular focus on Goals 7, 9 and 13, areas where we believe we can contribute most. Business solutions that support these goals include those covering renewable energy, safe and sustainable industrial operations and infrastructure, technology innovations, and climate change mitigation and adaptation. The sustainable innovation examples from across DNV GL on pages 48–51 show some of the ways we work with customers in support of the SDGs.

SDG 7: Affordable and clean energy
SDG 9: Industry, innovation and infrastructure
SDG 13: Climate action

Looking ahead, we are working on projects that support Goals 3, 12 and 14, which relate to key areas of our business.

SDG 3: Good health and well-being
SDG 12: Responsible consumption and production
SDG 14: Life below water

MATERIALITY PROCESS 2019

1 INPUTS

Draw together topics identified as important from a range of evidence:

- Previous materiality results
- 2018 stakeholder survey (more than 1,000 responses)
- Peer company review

2 ASSESSMENT

Evaluate which topics are material to DNV GL and our stakeholders

3 AGREEMENT

Final set of material topics agreed at internal workshop

4 REPORTING

Our annual report

DNV GL'S MATERIAL TOPICS

VALUE TO CUSTOMERS

- Sustainable innovations
- Customer satisfaction
- Data privacy and security

For more on DNV GL's material topics, go to the Sustainability section (page 46).

VALUE TO EMPLOYEES

- Employee health and safety
- Talent acquisition
- Training and development
- Diversity and equal opportunity
- Human rights

VALUE TO SOCIETY

- Ethics and integrity
- Anti-corruption
- Fair competition
- Compliance
- Economic contribution
- Environment and climate
- Sustainable procurement

Value to customers

MATERIAL ISSUES	01 Sustainable innovations	02 Customer satisfaction	03 Data privacy and security
IMPORTANT EXTERNALLY BECAUSE	Our customers rely on our products and services to help them operate safely and sustainably and meet their sustainability goals.	We strive to be the preferred choice for our customers and to ensure they are satisfied that we deliver high quality services and remain a trusted long-term partner.	Our customers expect us to protect their privacy and data.
IMPORTANT INTERNALLY BECAUSE	Supporting customers with sustainable innovations reflects our purpose to 'safeguard life, property and the environment' and our vision of being 'a trusted voice to tackle global transformations'.	Our dedication to customers and focus on customer centricity across DNV GL can increase long-term business performance.	The trust of our customers is crucial to our business.
	Read more on page 46	Read more on page 56	Read more on page 53

Value to employees

MATERIAL ISSUES	01 Employee health and safety	02 Talent acquisition	03 Training and development	04 Diversity and equal opportunity	05 Human rights
IMPORTANT EXTERNALLY BECAUSE	Our people and suppliers perform better when healthy and in a safe work environment. Our customers buying safety services expect high safety performance.	Our customers rely on us to recruit and retain experts, and appreciate long-term relationships with these experts.	Our customers use us for our expertise and ability to deliver the best solutions.	Diversity among employees provides a better basis for delivering excellent services to our diverse customer base.	Awareness of human rights is growing among stakeholders. Large businesses need to show they respect human rights in their sphere of influence.
IMPORTANT INTERNALLY BECAUSE	We strive to be the safest place to work, and safety is embedded in our purpose. We continually work to find improved ways to safeguard our people and deliver on our purpose.	Recruiting employees with values aligned with DNV GL reduces business risk and supports longer careers.	Responsibility for, and development of, expertise provide motivation to excel and innovate in all parts of the company.	We want the best people, regardless of background, and we want to be an attractive place to work in all our locations.	Ensuring we respect the rights of our employees and others involved in our business is critical to sustainable operations.
	Read more on page 58	Read more on page 66	Read more on page 66	Read more on page 66	Read more on page 66

Value to society

MATERIAL ISSUES	01 Ethics and integrity	02 Anti-corruption	03 Fair competition	04 Compliance
IMPORTANT EXTERNALLY BECAUSE	All stakeholders expect us to demonstrate sound business ethics, upholding our ability to act as a trusted independent party.	Our stakeholders expect a strong approach to anti-corruption, and it is a key part of our approach to ethical conduct.	Our policy is to compete vigorously and fairly. We never agree commercial policy or pricing with competitors or external parties.	Complying with all laws and regulations in the countries we operate in is an essential ingredient for building trust with stakeholders.
IMPORTANT INTERNALLY BECAUSE	"We never compromise on integrity" is a an integral part of our strategy.	We have a zero-tolerance policy against corruption and trading in influence. All employees have a duty to uphold this approach.	Our employees have an important role to play in ensuring we compete fairly and comply with competition law.	A compliance culture is an essential part of ensuring compliance. Our compliance programme works to develop employee awareness and understanding.
	Read more on page 74	Read more on page 74	Read more on page 74	Read more on page 74

Value to society

MATERIAL ISSUES	05 Economic performance	06 Environment and climate	07 Sustainable procurement
IMPORTANT EXTERNALLY BECAUSE	Our owner requires profitable operations and society at large appreciates employment, taxes and other economic activity.	Our stakeholders expect us to contribute to science-based targets to reduce greenhouse gas emissions and to pursue opportunities related to climate change resilience.	Helps meet stakeholder expectations by demonstrating sound business ethics and supports our position as a trusted independent party.
IMPORTANT INTERNALLY BECAUSE	Economic sustainability is a prerequisite for running our business and for retaining our independence.	Environmental sustainability is embedded in our purpose and vision. Science-based actions to build climate change resilience are important to our people.	Helps manage risk in our supply chain and deliver best value for DNV GL.
	Read more on page 79	Read more on page 82	Read more on page 86

RESEARCH AND INNOVATION

Transformational expertise

That technology development is accelerating is a given, but how do we begin to understand how it will impact us? It requires dedicated expertise in various fields of science, combined with domain knowledge. Our long-term research programmes are intended to help prepare our customers and ourselves for the future by generating new knowledge in key technology areas that have a long-term impact on the industries we serve.

DNV GL continues to devote 5% of its revenue to investments in strategic research, technology development and innovation efforts to better prepare our customers and ourselves to tackle the many transformations unfolding in today's business environment.

Group technology and research

Current research activities are directed towards facilitating sustainable, integrated energy solutions, mastering digital technologies and facilitating safe, secure and efficient operation of cyber physical systems as well as exploring future profitable business and delivery models. We constantly evaluate the impact of our findings on our customers and their markets, and tailor our research programmes to respond to developing trends.

Our research portfolio

- **Maritime** – research and innovation that contributes to safer, smarter and greener shipping, while preparing DNV GL for future developments in technology and regulations
- **Ocean space** – building knowledge, methods and tools in support of the sustainable management of ocean-based industries
- **Energy transition** – helping DNV GL and its stakeholders to understand and accelerate the transformation in the energy landscape
- **Artificial Intelligence** – developing knowledge and prototypes based on AI, in the areas of computer vision for inspection and advanced IoT device assurance
- **Digital assurance** – exploring new digital technologies and developing methods and technologies to master the assurance of complex and intelligent systems
- **Oil and Gas** – helping to position DNV GL at the forefront of risk-based and model-centric services on a system level
- **Power and Renewables** – building competence, methods and tools to achieve competitive advantage and prepare DNV GL for the future of the rapidly changing energy industry
- **Precision medicine** – developing knowledge, technologies, and business models that contribute to the safe and sustainable clinical implementation of precision medicine to improve the quality of care for patients

Publishing our research

Our research programmes regularly issue position papers to highlight research findings and advance knowledge and progress on safer, smarter and greener operations. During 2019, a dozen position papers were published and shared broadly with the public.

Our most-read position papers in 2019:

- Probabilistic digital twin
- AI and Safety
- Hydrogen as an energy carrier

Knowledge through collaboration

DNV GL leverages its role as an independent party with no vested interest in proprietary technologies or solutions by leading a range of joint industry projects (JIP). These projects link the private sector, academia and regulatory authorities to co-create technological solutions, and global rules, standards and guidelines.

Our research programmes are also staffed with experts on assignment from our business operations.

Learn more about our latest collaborative projects.

Our two main research publications in 2019

Technology Outlook 2030

Which technologies will shape our immediate future? Our *Technology Outlook 2030*, launched at the end of 2019, explores ten technology trends and their associated risks, that will shape different industries and society up to 2030. It looks across the various industries we serve, from the shipping and energy sectors to precision medicine and the food industry, and explores how these trends will enable, transform or sustain these sectors.

Find out more about how technology trends will impact your industry:

dnvgl.com/to2030

Energy Transition Outlook

The energy transition is shifting up the agenda, moving from previously being considered important to now becoming something urgent; a source of great risk, but also of opportunity.

In September 2019, we launched our third *Energy Transition Outlook*, a global and regional forecast of the energy transition through to 2050. Our forecast serves as an important tool for our customers to understand how the transition will unfold and make strategic decisions for the future.

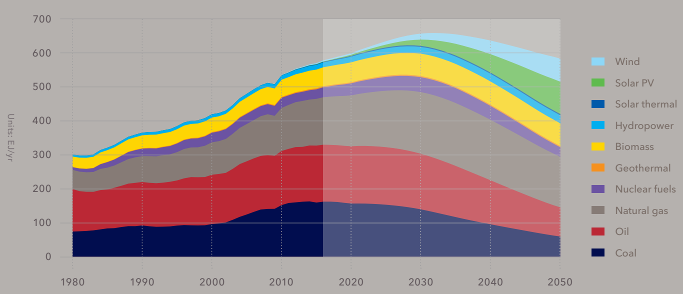
Our forecast points to three main conclusions:

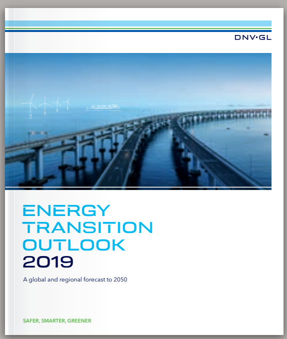
1. We forecast a rapid energy transition unfolding within a single generation, but not fast enough to deliver on the Paris agreement
2. Existing technology can deliver the target set out in the Paris agreement, but only with the right policy backing
3. Global energy use peaks in the 2030s owing to energy efficiency.

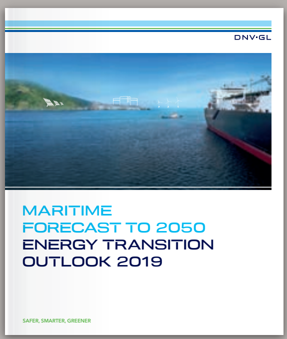
Find out more about how the energy transition may impact your industry and download our forecast data:

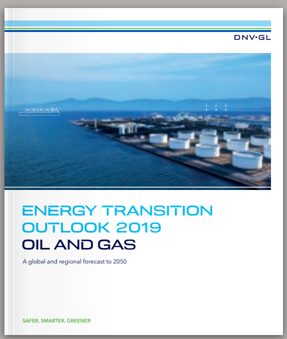
eto.dnvgl.com/2019

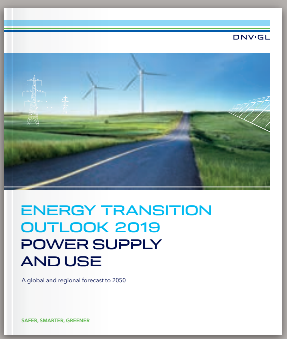
World primary energy supply by source











THE EXECUTIVE COMMITTEE

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.

In 2019, the Executive Committee consisted of ten people. Kenneth Vareide was appointed CEO Digital Solutions in June 2019.

REMI ERIKSEN

Group President & CEO

Remi Eriksen (Norwegian) became Group President and CEO of DNV GL in August 2015, succeeding Henrik O. Madsen. He was previously the Chief Operating Officer of the DNV GL Group, having served as CEO of DNV Maritime and Oil & Gas and in other senior roles in Asia, Europe and the Americas.

Amongst many other leadership roles, he is on the Executive Committee of World Business Council for Sustainable Development (WBCSD).

He holds a Master's in Electronics and Computer Science from the Norwegian Institute of Technology and executive education from Rice University, IMD and INSEAD. Remi joined DNV GL in 1993.

DITLEV ENGEL

CEO Energy

Ditlev Engel (Danish) was Group President & CEO of global wind turbine manufacturer Vestas Wind Systems A/S from 2005 to 2013. Prior to joining Vestas, he had 20 years of experience at the global coatings manufacturer Hempel A/S, the last five years as Group President & CEO.

Ditlev has served as Denmark's Special Envoy for Climate and Energy, chair of Denmark's Green Investment Fund, a member of the Energy Partner Network of the World Economic Forum, advisor to the International Energy Agency, chair of the Green Growth Working Group at G20 Summits, co-founder of the Green Growth Action Alliance and member of UN's Sustainable Energy for All. He has degrees in business administration, finance & accounting from Copenhagen Business School and the General Management Programme from INSEAD. Ditlev joined DNV GL in 2016.

KNUT ØRBECK-NILSSEN

CEO Maritime

Knut Ørbeck-Nilssen (Norwegian) has been heading our Maritime business area since August 2015. Prior to that he was the Chief Operating Officer and President of Maritime and Director of Division Europe, Africa & Americas.

Knut has held senior management positions within both Maritime and Oil & Gas. He holds a Bachelor of Engineering degree from Heriot-Watt University in Edinburgh, Scotland, where he was awarded a First Class Honour's Degree in Civil Engineering in 1990. Knut joined DNV GL in 1990.

LUCA CRISCIOTTI

CEO Business Assurance

Luca Crisciotti (Italian) became the CEO of Business Assurance in March 2012.

With a background in the certification industry, Luca started his career in DNV GL as a Sales Manager in Rome, Italy. He continued as the Business Development Manager for Division South Europe before moving to Japan for three years as Country Manager. He then moved to Shanghai, Greater China, taking over as COO. Luca has a Master's degree in Business Economics from the University 'La Sapienza' in Rome. Luca joined DNV GL in 2001.

LIV A. HOVEM

CEO Oil & Gas

Liv A. Hovem (Norwegian) became the CEO of Oil & Gas in January 2018. She has experience from several managerial roles in DNV GL, most recently as Regional Manager for Continental Europe, Eurasia, Middle East, India and Africa in Oil & Gas. She has served as board member in several research and innovation related institutions.

Liv's technical background is risk and probabilistic modelling, hydrodynamics and strength of ships and offshore structures. She has a MSc in Naval Architecture and Offshore Engineering from UC Berkeley and a MSc in Civil Engineering from the Norwegian Technical University. Liv joined DNV GL in 1988.

KENNETH VAREIDE

CEO Digital Solutions

Kenneth Vareide (Norwegian) became CEO of Digital Solutions in June 2019. He has been with DNV GL since 1996, when he started as a trainee. Kenneth has held several management positions across the company's business areas and regions. Prior to joining Digital Solutions as CEO, Kenneth served as Digital Director for the Maritime business area.

Kenneth holds a Master's degree in Naval Architecture from the Norwegian University of Science and Technology (NTNU) and a Master's degree in Technology Management from NTNU and the Norwegian School of Economics and Business Administration (NHH Bergen), in cooperation with Massachusetts Institute of Technology (MIT), The Sloan School of Management.

THOMAS VOGTH-ERIKSEN

Chief Financial Officer

Thomas Vogth-Eriksen (Norwegian) has been Chief Financial Officer since 2012. He held several senior management positions in DNV GL before that, most recently as the CEO of Business Assurance, the certification arm of the DNV GL Group. Thomas brings international experience of almost 15 years from New York, London, Shanghai, and Milan.

He has served as board member in the International Association of Certification bodies and the Norwegian Chambers of Commerce in London, Oslo and Shanghai. Thomas has a Master of Business & Economics, Business Administration from the Norwegian Business School, and executive education from IMD and INSEAD. Thomas joined DNV GL in 1988.

GRO GOTTEBERG

Chief People Officer

Gro Gotteberg (Norwegian) has been the Chief People Officer at DNV GL since December 2017. She has had several roles within DNV GL, as HR Director and in Leadership Development, most recently as HR Manager in South East Asia & Australia. Prior to that, she had several roles within organizational and competence development in shipping, management consultancy and developing aid & rescue relief.

Gro has a Master of Business & Economics from NHH Norwegian School of Economics and brings 15 years of international experience from Africa, Americas and South East Asia. Gro joined DNV GL in 2008.

ULRIKE HAUGEN

Chief Communication Officer

Ulrike Haugen (German) joined DNV GL as Chief Communication Officer in May 2017. She has more than 15 years of communications, marketing and business development experience within international corporations with positions in Norway, UK, Germany and Italy.

Ulrike was previously VP Marketing & Communications for ABB Marine, and has also held marketing and business development positions in international energy companies and law firms. Ulrike holds a Master of Business Administration degree from London South Bank University in the UK and a Law Degree from the University of Bonn in Germany. Ulrike joined DNV GL in 2017.

KLAS BENDRIK

Chief Digital Transformation Officer

Klas Bendrik (Swedish) has been Chief Digital Transformation Officer since joining DNV GL in September 2018.

Klas has held executive roles in several industries from automotive, medical and industrial equipment to management consulting with global firms. Klas' field of expertise is within Information Technology, software, digital and business development. Prior to joining DNV GL, his most recent positions were as Senior Vice President for Volvo Cars and, most recently, Vice President and Executive Partner at Gartner. Klas holds a bachelor's degree from the University of Gothenburg and a degree from the Royal Swedish Naval Academy, with the rank of Lieutenant Captain.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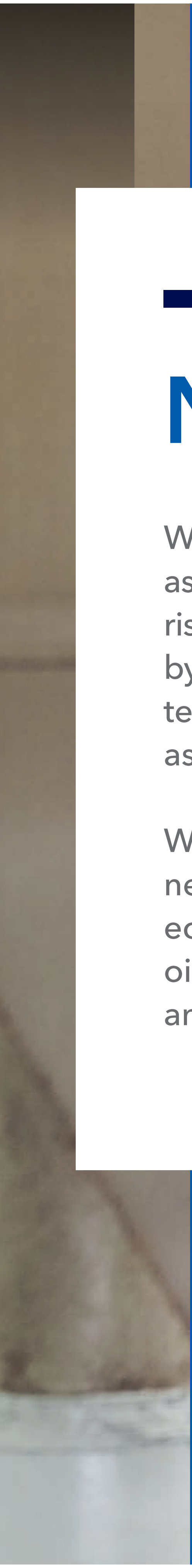


MARKETS

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 and drive new standards, best practices and digital ecosystems within five markets: maritime, oil and gas, energy, business assurance, and digital solutions.

MARITIME

Tectonic shifts

In 2019, the maritime industry demonstrated its resilience and adaptability in the face of continuing challenges and tectonic shifts. Growth in demand for seaborne trade declined from the year before, but freight rates were generally strong as fleet growth slowed. For DNV GL, our priority was to ensure that our customers kept their focus on operating safely and sustainably as commercial and regulatory pressures continued to increase.

2019 REVIEW

ROMAS – ready for remote ops

The ROMAS research project, established by DNV GL together with Høglund, Fjord1 and the Norwegian Maritime Authority, is a project to develop technical solutions and establish a framework of regulations, rules and verification methods to enable the remote, shore-based operation of ship machinery and systems. The first testing campaign used the Fjord1 ferry Fannefjord, with the engine control centre established at Fjord1's office in Molde.

The long-term plan is to use the experience obtained to develop new products and services, including a 'remote ready' integrated automation system (IAS) from Høglund, the applicable rules and Approval in Principle programmes from DNV GL, and regulations from the Norwegian Maritime Authority, to enable Fjord1 and other ship owners to deploy the technology commercially.

The zero-fire engine room

Cruise operator RCL, technology group Wärtsilä, and DNV GL initiated a joint industry project to improve engine room fire prevention. Running since 2016, the partners worked with stakeholders across the whole industry to collect data, analyse key risks, and develop safety barriers to manage the most significant fire risk factors. As a result of this cooperative effort, RCL launched a programme to enhance engine room fire prevention across its entire fleet and Wärtsilä offered technical solutions and procedures for engine maintenance to lower the fire risk.

DNV GL introduced a new class notation F(M-P) which focuses on not only the systems, but also the processes and people to enhance the main safety barriers in order to prevent fires in machinery spaces. The F(M-P) notation will also be implemented in RCL's Navigator of the Seas, putting in place standards and processes focused on the prevention, detection and containment of oil leakage, the system shutdown system, and ignition prevention.

12,000

Number of remote surveys conducted by DNV GL in 2019.

REVENUE

Maritime's share of total (21,551)

7,744

NOK MILLION

EMPLOYEES

Maritime's share of total (11,832)

3,313

EMPLOYEES

Additive manufacturing firsts add up

The shipping industry is looking to take advantage of additive manufacturing (AM), also known as 3D printing, to print spare parts, thereby reducing lead times, costs, stock requirements, and environmental impacts. Certification ensures that AM part users can have the same confidence in an additive manufactured product as a conventionally produced one. DNV GL awarded its first ever Additive Manufacturing Approval of Manufacturer certificate to thyssenkrupp.

The newly issued certificate makes the thyssenkrupp TechCenter the world's first producer of 3D printed parts for maritime applications to obtain manufacturer approval from DNV GL, making it a DNV GL approved supplier for maritime and general industrial applications. Certification was important for thyssenkrupp Marine Systems as the company is working closely with international customers on the integration of additive manufactured parts on ships and submarines.

39%

Global demand for ship transport to increase by 39% towards 2050.

Source: DNV GL *Energy Transition Outlook*

An LNG giant

In recent years, China's Liquefied Natural Gas (LNG) imports have been growing rapidly, increasing by 42% from 2017 to 2018. Transporting large amounts, from diverse suppliers, will require new vessels and greater efficiency. A new joint development project will see Hudong-Zhonghua Shipyard and DNV GL bring their expertise and experience in research and development, engineering, classification, and construction, to the development of a modern ultra large LNG carrier with a capacity of 270,000 m^3. A vessel of this size could transport enough LNG to provide gas for 4.7 million Shanghai homes for a month, and do so 25% more efficiently than a 170,000 m^3 vessel. In addition, a single 270k vessel increases LNG terminal capacity by 50% without any expansion in terminal size.

Performance powerhouse

In 2019, StormGeo and DNV GL agreed to consolidate their fleet performance solutions under one banner. Bringing together DNV GL's ECO Insight and Navigator Insight solutions with StormGeo's FleetDSS and ship reporting solutions creates a new industry leader in fleet performance management.

DNV GL will retain a strong connection to the new solution through the 26.4% share in StormGeo it has held since 2014, as well as continuing to provide technical support to ECO Insight customers. Users will also be able to share data through DNV GL's open industry platform Veracity.

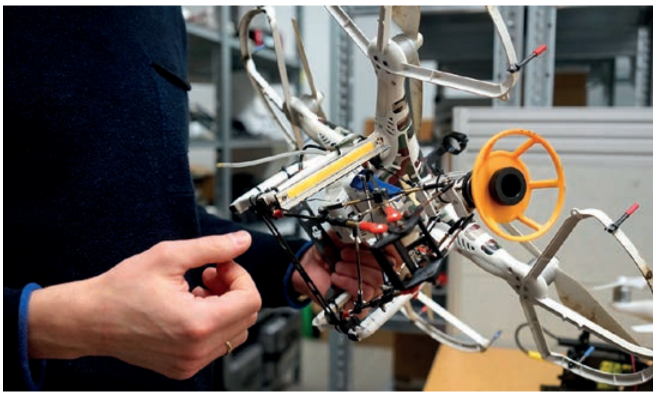
Traditional partners plan greener future

Oshima Shipbuilding and DNV GL signed a long-term strategic cooperation agreement to conduct joint research and development work on new bulk carrier designs. The first design to result from the cooperation, the *Oshima Ultramax 2030,* was launched at the Nor-Shipping trade fair. With an Energy Efficiency Design Index close to 50% lower than comparable vessels, this Ultramax design is one of the most efficient bulk carrier designs to date. It maximizes operational performance while minimizing emissions by utilizing LNG as fuel, an optimized hull shape and a sail to generate extra propulsion. The design also offers ultra-low

emissions in port by using solar panels and a battery to cover the hotel load. The partners aim to continue developing and updating a roadmap towards the IMO zero emissions scenario through annual open JIPs. In November, the project won the Environmental Protection Award at the prestigious IBJ Awards in Hamburg.

Developing drones

Visual inspections and steel thickness measurements are key elements of renewal surveys. DNV GL has continued to develop its drone survey offerings to provide owners and operators with a fast-track solution. Building from an off-the-shelf drone and high-resolution camera, DNV GL now has drones capable



of taking ultrasonic steel thickness measurements, bringing the structure to the surveyor for real-time inspection.

The design for the ultrasonic camera attachment is compact and 'universal', allowing surveyors to interchange the close-up inspection camera for the ultrasonic measurement head on a drone at any time, or attach the frame to another drone in case the original one is damaged.

The key parts of the attachment frame are 3D printed, which means the team can manufacture any number of identical frames in a repeatable process, whether for their colleagues at other DNV GL offices or for spare parts.

Building cyber resilience

DNV GL's Cyber Secure class notation establishes a baseline to identify cyber security levels for the main functions of a vessel, either in operation or during construction, and offers owners and operators a framework to improve and demonstrate their cyber resilience. It gives owners and operators the flexibility to identify the threats and to assess and secure extra systems which are of particular importance to their operations. In 2019, DNV GL signed a contract for the first Cyber Secure class notation with Stena Drilling.

The contract covers the application of the 'Basic+' notation to the drillship Stena IceMAX and includes the vessel's dynamic positioning, drilling, and blowout prevention systems. It will be integrated with Stena Drilling's own safety management systems. Later that year, DNV GL awarded Hyundai Heavy Industries (HHI) the world's first Approval in Principle (AIP) for the Cyber Secure (Advanced) class notation on liquefied petroleum gas (LPG) carriers.

OIL & GAS

Supporting efficiency and decarbonization

The oil and gas industry proved confident and resilient, and our Oil & Gas business area reported solid growth in 2019. DNV GL helped customers to retain a focus on cost efficiency, decarbonization and safety. Going forward, the industry faces an unprecedented combination of market forces, regulation, societal pressure over climate change, and challenges to integrate with other sectors like power and renewables. We foresee increasing digitalization and wider adoption of low-carbon energy carriers such as hydrogen for heating and transport.

2019 REVIEW

Resilience in volatile markets

As oil and gas companies intensify their focus on decarbonization, half (51% in 2019 vs. 44% in 2018) of senior industry professionals expected to focus on actively adapting to a less carbon-intensive energy mix according to our new industry outlook. Many customers continue to shift their portfolios from oil to gas. BP expects to move from about 50% gas today to 60% in 2025. ExxonMobil and Shell are among others increasing spending on non-fossil energy ventures.

Our industry outlook also showed that confidence in the oil & gas sector had increased to 76%, a doubling over the past two years. According to our research, most respondents (70%) expected to maintain or increase capital expenditure in the near future, and this was corroborated by developments in the market. In the midstream segment, more LNG projects reached final investment decisions in 2019 than in any other year, most of them in the US as it ramps up LNG exports.

DNV GL's Oil & Gas business area reported growth in 2019. We continued to expand services to the midstream and downstream sectors, including gas transportation and distribution. We also enhanced our business development model to ensure availability when customers need us.

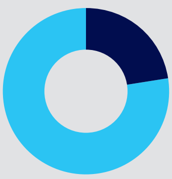
Our customers also remain focused on improving efficiency to control costs, and increasingly seek cost benefits from digitalization. Many upstream customers, particularly emerging independent operators in mature basins, want greater production efficiency. DNV GL is partnering with customers on several efficiency projects.

Connecting supply and demand

Our *2019 Energy Transition Outlook* (ETO) highlighted that gas, renewables and carbon capture and storage (CCS) are needed to secure a rapid energy transition. Gas will become the largest primary energy source from the mid-2020s, increasing the need for more pipelines to connect shifting sources of supply and demand. We expect both LNG liquefaction and regasification capacity to double by 2030. Demand is set to grow in Greater China, the Indian subcontinent, and sub-Saharan Africa.

REVENUE

Oil & Gas' share of total (21,551)

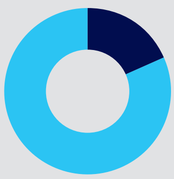


4,839

NOK MILLION

EMPLOYEES

Oil & Gas' share of total (11,832)



2,186

EMPLOYEES

In China, we are supporting the safety, reliability and performance of a number of LNG regasification projects. In 2019, we provided Independent Validation Body services for an offshore development in Australia covering the FPSO, subsea production system package, subsea umbilicals, risers and flowlines (SURF) and gas export pipeline package.

Safe and efficient oil and gas production

We continued to support gas pipeline safety and reliability amid a surge in cross-border projects in 2019. Contract wins included independent verification services and submarine pipeline certification for Energinet's section of the Baltic Pipe gas transportation project, and LNG-related marine service business in the Middle East and Eurasia. We also co-hosted a symposium with Cheniere Energy on issues involved in managing process safety for new LNG liquefaction facilities in the US.

Safety and environmental performance, and regulatory compliance, were core to some of our upstream service contract wins in 2019. These included classification and verification scopes for asset operations and projects involving Apache Corporation and Dana Petroleum offshore UK, and for Equinor offshore Canada.

We also offer virtual reality tools for customer hazard-awareness training. Our use of this with CNOOC International won the Award for Innovation in Safety at the Offshore Safety Awards 2019.

Our growing set of recommended practices for subsea applications is another important step towards a more united, sustainable, and cost-effective sector. One new recommended practice launched in 2019 targets consistency in fabricating subsea pressure-retaining equipment; another unlocks new opportunities for more cost-efficient and environmentally friendly subsea processing for improved hydrocarbon recovery.

A decarbonized gas market

Our *2019 Energy Transition Outlook* (ETO) makes it clear that gas will increasingly complement variable renewables to provide a secure supply of affordable, decarbonized energy for the long-term. The ETO also indicates a need to decarbonize gas production and consumption to help achieve climate change mitigation.

We are applying our longstanding expertise in natural gas transmission and distribution to help governments and operators demonstrate the technical feasibility of adapting existing natural gas infrastructure to carry hydrogen. Work on this in 2019 included support for the Hy4Heat and H21 initiatives in the UK and managing a feasibility project for Dutch gas network operator Stedin, which began supplying hydrogen produced by electrolysis to heat apartments in Rotterdam. We have also produced research on hydrogen gas as a clean energy source in support of the Norwegian government's feasibility study for hydrogen production and use in Norway towards 2030. Read more.

Smart assets

We are partnering with customers to bring our expertise in assuring the safety, reliability and performance of assets in the physical world into the digital one. Our new Deep Search tool, available on our online data-sharing and analysis platform Veracity, lets users discover relevant data and information from vast sources within seconds. Veracity will also host offshore and onshore reliability data for equipment and parts.

Our Smart Mooring machine-learning algorithm accurately predicts potential mooring-line failure in real time for floating assets, providing a more cost-effective alternative to physical sensors for preventing undetected failures. These new digital tools are helping customers to make better decisions and enable safer and more reliable operations.

In partnership with TechnipFMC, we started developing the sector's first methodology for qualifying the integrity of digital-twin technology that creates and updates virtual representations of physical assets and their behaviour. We also unveiled a concept for merging digital twins and risk analysis.

We marked the 40th anniversary of our International Sustainability Rating System™ (ISRS) by releasing a ninth version of this world-leading system for assessing, improving and demonstrating the health of an organization's business processes. ISRS now includes risk categories such as cyber security that are relatively new to some industries.

2026

Global demand for gas is expected to overtake demand for oil in 2026.

2030

LNG liquefication and regasification capacity is likely to double by 2030.

Source: DNV GL *Energy Transition Outlook*

ENERGY

Powered by renewables

The transformation of the energy system and shift towards renewables over the next decade could result in growth of 1,000% in solar power and 500% in wind power. This growth will require an increase in energy storage capacity and a flexible grid infrastructure. Energy efficiency will also be a major driver for a clean energy future.

In the Energy business area, we will continue to offer even more advisory, monitoring and certification services to customers around the globe, accelerating the transition to a clean energy future.

2019 REVIEW

GreenPowerMonitor (GPM)

GreenPowerMonitor (GPM), a DNV GL company, consolidated its position as leader of monitoring, control and asset management solutions for renewable energy plants in 2019. GPM, who in 2018 launched the world's first data monitoring platform for integrated wind, solar and energy storage systems, is playing an instrumental role in realising the full potential of delivering clean energy, by integrating renewables systems using the latest digital technologies.

In 2019, GPM added 9 GW to its portfolio. Currently, GPM manages 30 GW (21.5 GW solar and 8.5 GW wind) and more than 4,200 facilities worldwide. DNV GL acquired GreenPowerMonitor in July 2016 and today, it is three times bigger than its original size with a bright future ahead.

63%

of the world's electricity will be supplied by solar PV and wind by 2050.

Source: DNV GL *Energy Transition Outlook*

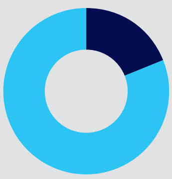
KEMA Laboratories changed ownership from DNV GL to CESI

In 2019, DNV GL transferred ownership of KEMA Laboratories to technical consultancy CESI. The transfer comprises KEMA and all the high-voltage and high-power testing and inspection activities performed by its personnel and laboratories in Arnhem (NL), Prague (CZ) and Chalfont (USA).

All former KEMA advisory employees remain within DNV GL, including those providing all the advisory services as well as DNV GL's testing and verification services for power failures, battery testing, transformer oil testing and smart grid testing.

REVENUE

Energy's share of total (21,551)

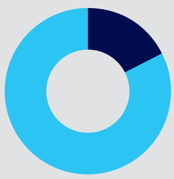


4,056

NOK MILLION

EMPLOYEES

Energy's share of total (11,832)



2,082

EMPLOYEES

Energy storage safety

By 2050, 63% of the world's electricity will be supplied by solar PV and wind. Integrating renewables into our grid will depend in part on energy storage capacity and flexibility. By 2030, we will need a 50-fold increase in battery production alongside new technology to store excess electric energy. This will also require an increased focus on safety.

In 2019, DNV GL completed an in-depth power failure investigation into a major fire at a large-scale South Korean energy storage facility. This was carried out at the request of the facility's insurer. The investigation allowed the insurer to make an evidence-based pay-out decision. In addition to pinpointing the minor glitch that initiated the failure, the investigation highlighted weaknesses in current approaches to monitoring and prevention systems that make small failures more likely to become major issues.

Smarter audits drive energy efficiency

DNV GL's analysis of emissions up to 2050 shows that energy efficiency could help reduce the total energy demand by almost 300 EJ/year. This is equivalent to the annual energy use of 833 cities, with the average metropolis using 100,000 GWh per year. In a rapidly shifting energy landscape, one thing is clear: energy demand reduction can be accelerated in the top three highest use energy sectors – buildings, industry and transport – through a greater understanding and use of digital approaches.

DNV GL has developed an energy audit tool to easily audit multiple business sites and help customers save money by optimizing lighting, ventilation, air control and server rooms.

Today, energy audits rely on manual reports that are often carried out by different auditors across multiple sites, which can affect consistency. Using the new tool, best practices can be identified and shared across multiple sites, maximizing the value of the energy audit. The new tool was financed by DNV GL's global innovation portfolio, an internal scheme intended to fund the development of projects dedicated to digital delivery or data smart services which add value to customers.

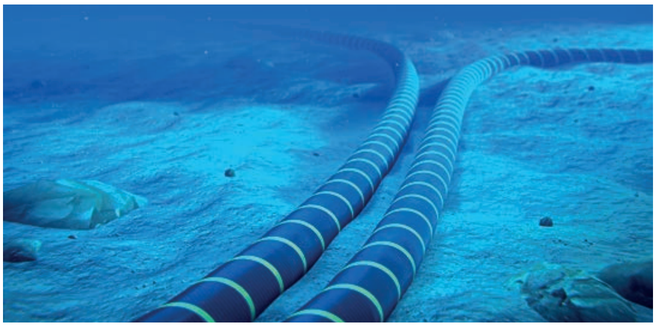
Larger wind turbines drive down wind energy costs

Wind energy is rapidly becoming the new norm for power generation. We forecast that wind will deliver 30% of all global electricity production by 2050, with 12% from offshore wind and 18% from onshore wind.

The industry is continuing to optimize turbine types that deliver significantly improved energy production and cost efficiency. In 2019, DNV GL certified Siemens Gamesa's newest 8 MW offshore wind turbine. This will be installed in offshore wind parks worldwide, including the 1,400 MW Hornsea 2 project in the UK and the 900 MW Greater Changhua 1 & 2a projects in Taiwan. Large-capacity offshore wind turbines result in improved energy capture per project, i.e. a lower cost per MWh.

Digitalizing traditional operations plays a vital role in the energy transition

The energy industry needs to change rapidly, and must strive to reduce carbon emissions and safeguard the planet for future generations. Transforming traditional operations through digitalization plays a vital role in enabling this change and facilitating the energy transition. DNV GL's open industry platform, Veracity, continued to add value to customers in 2019 with key projects such as the Cable Lifetime Monitoring Joint Industry Project (JIP CALM). The project was initiated by DNV GL, TNO (ECN), BREM, VanDerHoekPhotonics, and Deltares, in collaboration with 30+ industry partners, to reduce subsea power-cable failures and make offshore wind energy more reliable.



At present, failing subsea power cables are one of the main risks affecting offshore wind farm development and operations. These failures account for approximately 80% of insurance claims in the offshore wind industry. All the JIP participants will share failure data for windfarm, export and interconnector submarine cable systems with the DNV GL project team in secure Veracity data containers for failure root cause analysis. Confidentiality and anonymity will be maintained by creating company-specific data containers.

Future-proofing our power system

With 1,000 Smart Cable Guard systems implemented in its power grid, Dutch distribution system operator Alliander has confirmed its commitment to safeguarding the reliability of the power grid in the Netherlands. Smart Cable Guard is DNV GL's online monitoring tool which uses sensors to monitor and locate weak spots, intermittent faults and partial discharges in power cables, detecting and preventing faults and avoiding disruptive power outages. Alliander has been installing Smart Cable Guard across its medium-voltage cable network since 2017, with DNV GL providing the hardware, support, monitoring services and data analysis.

As the energy sector evolves, the power grid is exposed to a new range of challenges caused by the decentralization and variability of energy generation, the influx of renewable energy and the digitization of the grid. In 2019, DNV GL awarded TenneT a grid readiness verification statement for its Borssele Alpha offshore grid connection system. This is the first offshore grid connection system in the world to receive a grid readiness verification statement. The grid readiness of the Borssele Alpha offshore grid connection system means that the Borssele I and II wind farms can be connected to the Dutch electricity grid. The wind farms, which are due to be commissioned in 2020, will have a capacity of 700 megawatts (MW) and can generate electricity for approximately one million households.

Global expansion of offshore wind

Offshore wind is growing and set to make up 40% of wind production by 2050. To meet the increasing demand for offshore wind power in the US, DNV GL established a Renewables Certification office in North America. According to the U.S. Department of Energy (DOE), there is the potential to install 22,000 MW of offshore wind projects in the US by 2030. Much of this activity is taking place in the northeast, with Massachusetts and New York setting aggressive targets and leading the way in opening the market for offshore wind. For this reason, DNV GL selected its Medford, Massachusetts office as the base for its US Renewables Certification services.

Much of the potential development of offshore wind lies in federal waters and thus requires third-party certification for the design, manufacturing and installation of the entire facility, leading to increasing demand for verification services.

European investment in Africa's sustainable energy future

DNV GL joined other signatories including ABB, EDP Renewables, Enel Green Power, GE Renewable Energy, Pöyry, Prysmian, PwC, Siemens Gamesa and Vestas to make a commitment regarding its interest and participation in the renewAfrica initiative, which is aimed at boosting renewable energy investments in Africa.

The renewAfrica initiative aims to support the growing renewable energy market on the continent by facilitating the development of policy and regulatory frameworks needed, and prepare projects to secure finance.

BUSINESS ASSURANCE

Assuring trust and transparency

The need for trust is growing in a rapidly digitized world. Consumers are more conscious about their consumption, seeking assurance of authenticity, intentions and quality. Coupled with the decline in brand loyalty, companies are looking to build trust through the products they sell.

Blockchain-enabled solutions and ecosystems, combined with independent assurance and industry expertise, are helping to drive the transformation needed in several industries. With the right audit expertise, industry knowledge and technology partners, DNV GL is ideally positioned to build trust and advance progress on the SDGs, evolving our certification body role into that of a truly global assurance provider.

2019 REVIEW

Digital assurance solutions

DNV GL has made significant advances in providing digital solutions for consumer-packaged goods, digital ecosystems and circular economies.

In collaboration with blockchain technology partner VeChain, we have continued to explore innovative, digital solutions for customers. After its formal launch last January, My Story™ has developed into a more modular and scalable infrastructure. Powered by VeChainThor and combined with DNV GL's independent assurance and industry expertise, My Story™ tells the verified history of a product, giving consumers confidence in what they are buying and allowing brands to differentiate themselves. More consumer goods from the food & beverage and fashion sectors are being added to the portfolio.

VeChain and DNV GL have also developed blockchain-powered solutions that incentivize sustainable behaviour, rewarding users with tokens that can be exchanged for products or services in a linked marketplace. Last year's projects range from the small nation of San Marino, which aims to become the world's first carbon neutral country, to the digital carbon ecosystem created by appliance manufacturer Haier.

As the use of blockchain technology increases, a governance model that maintains the technology's integrity while allowing the technology to flourish is essential. INATBA, the International Association of Trusted Blockchain Applications, was launched in April, with DNV GL as one of its founding members. This EU-backed initiative promotes an open and transparent governance model that serves stakeholders in the private and public sectors using blockchain and other distributed ledger technology infrastructure and applications. The initiative includes private and public partners from across the ecosystem.

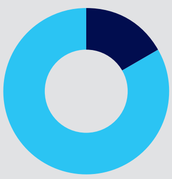
Supply chain transparency and trust

The demand for social and ethical supplier audits is growing. Consumer demands and investor scrutiny of ESG (Environmental, Social and Governance) performance require companies to take a more holistic approach to managing their supply chains. Demand for sustainable products also leads to a need to ensure the traceability of goods and transparency of supply chains.

One example of how standards and verification from independent trusted parties can play a definite role in solving business and societal challenges is a project just launched with The Ocean Cleanup. DNV GL has partnered with The Ocean Cleanup to establish best-practice requirements to verify the chain of custody of reclaimed plastic as it is turned from waste into new valuable products. See more details in Sustainable Innovations section, page 52.

REVENUE

Business Assurance's share of total (21,551)

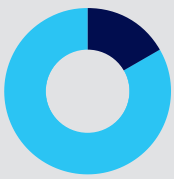


3,626

NOK MILLION

EMPLOYEES

Business Assurance's share of total (11,832)



1,978

EMPLOYEES

Consumer demands and investor scrutiny of ESG (Environmental, Social and Governance) performance require companies to take a more holistic approach to managing their supply chains.

In order to achieve transparency in their supply chains, companies are also turning to blockchain-powered solutions and other digital technologies to optimize their processes and track and trace products throughout product life cycles. Digital solutions and assurance guarantee the immutability of data, and enable the collection and verification of data. The collection of data also allows producers to transform their value chains and operate more efficiently.

Customers find data protection challenging

A DNV GL ViewPoint Survey carried out in 2019 highlighted that most firms fail to fully master data protection; 64% indicated human factors as the biggest risk and that 90% of security breaches start due to human error. However, the vast majority of companies that have certified their system to the ISO/EN 27001 Information security management standard experienced greater management commitment and were able to implement appropriate technical and organizational security measures.

ISO also launched its Privacy Information Management Systems standard (ISO/EN 27701), helping companies address new legislation such as GDPR. The ISO certification requires policies, roles and responsibilities to be clearly defined, technologies and information management processes put in place and staff trained. Certification can also ensure legal compliance.

DNV GL continues its commitment to developing standards by participating in ISO technical committees. Standards help to build trust, facilitate trade and foster innovation, but must continue to evolve, more rapidly, to fit today's business context and digital environment.

In 2019, there was an expected drop in management system certifications after the bumper year before. Our training portfolio grew, complemented by the launch of an online learning management platform. The occupational health and safety standard ISO 45001 is still under migration and will close in 2021.

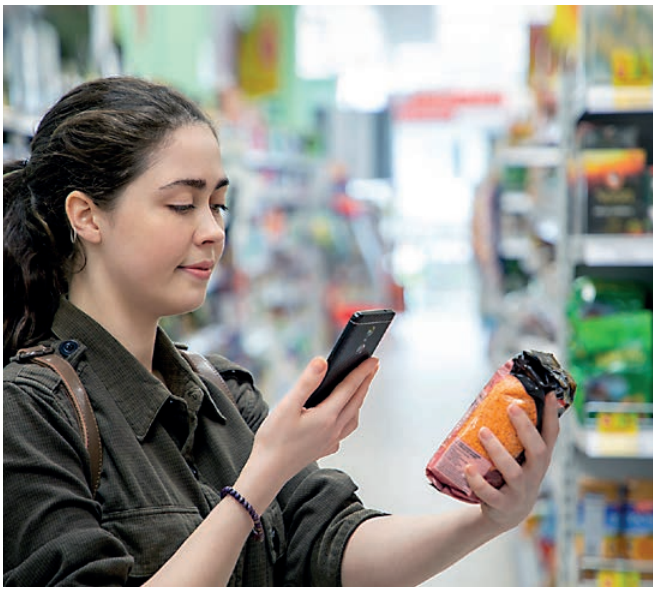
Growing product assurance

Product assurance grew by 6.8%, a rate well above that of the general Test, Inspection & Certification industry. Medical devices and hazardous area certification, in addition to functional safety and inspection, continue to be primary drivers of growth. This growth rate was a result of the strategic focus on high-value, high-growth segments coupled with investment in the DNV GL Presafe Group.

Pending the migration to the EU Medical Device Regulation coming into force in 2020, considerable investments have been made in the notified body application to Norwegian authorities. With the new regulation and higher quality demands for notified bodies, strong market growth is expected.

The continued strong performance in automotive function safety, in particular, is strengthening DNV GL's market position in Japan and Korea. This foothold was expanded to China to serve the expected trend towards semi- and fully autonomous vehicles.

Advancing strategic industries



The healthcare sector has a significant potential to use digital solutions to improve the quality of care and patient safety through a more dynamic hospital accreditation scheme and by making medical device regulation compliance more efficient. DNV GL experienced significant growth in hospital accreditations in the United States and China.

Within the food and beverage industry, food safety continues to be a major concern worldwide. Globally, almost one in 10 people fall ill every year owing to food safety issues, and there are an estimated 420,000 fatalities a year. The industry recognizes these challenges and accepts the importance of standards and certification to safeguard consumers.

This view was confirmed in DNV GL's Viewpoint survey involving 1,700 food & beverage companies. In addition, companies with advanced food safety management systems are adding food safety culture programmes to strengthen their efforts to ensure food safety. While the DNV GL survey indicates less certainty about how digital technologies can support food safety efforts, companies are already moving to apply blockchain-enabled solutions. DNV GL's My Story™ and other digital solutions are used to manage, track and communicate product stories to consumers in an immediate and trusted way.

Seafood continues to be a strategic area for DNV GL. Partnering with Deloitte, an aquaculture report looking into how blockchain can revitalize trust in the seafood industry by boosting transparency was released at the North Atlantic Seafood Forum in March.

DNV GL VIEWPOINT SURVEY CONDUCTED IN 2019 ON FOOD SAFETY:

What's next to assure food safety?

88%

The number of respondents that believe protecting consumers is the most important driver for their food safety efforts.

31%

see the lack of food safety culture a risk for their companies.

4/10

see digitalization supporting food safety within three years.

DIGITAL SOLUTIONS

Digital excellence in data and software

In 2019, Digital Solutions completed its second full year of operation, helping customers realize opportunities and manage risks associated with digital transformation. Throughout the year, Digital Solutions continued working towards its strategic ambition to be a leading global and trusted provider of industrial software solutions, data analytics and platform services.

2019 REVIEW

Veracity

Digital Solutions made significant strides with its digital platform, Veracity, in 2019. Veracity facilitates secure connectivity between industry players – driving business innovation and digital transformation. The Veracity team has worked throughout 2019 to increase industry collaboration and the capturing, storing and sharing of data, as well as offering an open marketplace for services, data and analytics.

In 2019, Veracity and the provider Arundo Analytics partnered with Klaveness to help them realize greater operational efficiencies. The Veracity data platform and ecosystem of service providers are used to unlock thousands of potential data points on board the Klaveness fleet. In addition, Veracity launched 360-degree image storage. Klaveness now uses these images for verification of fleet-wide cargo hold conditions when switching between wet and dry cargo.

The Veracity Marketplace, which enables internal and external customers to sell their products via Veracity, experienced strong uptake in 2019. Veracity collaborated with OREDA (Offshore & Onshore Reliability Data) in 2019 to make oil and gas industry reliability data more accessible and efficient.

Vast amounts of offshore and onshore reliability data were made available through Veracity, as OREDA provided access to its new and updated electronic version on the Veracity Marketplace. DNV GL's own Oil & Gas business area has made its Oil & Gas Recommended Practices and Standards available on the Veracity Marketplace. Digital Solutions also signed an agreement with China-based, world-leading wind turbine provider Goldwind in 2019 to offer the company's Load Portal service on the Veracity Marketplace.

FACTS ABOUT VERACITY

110 Veracity grew by 110 users per day in 2019

1,300 developers innovated on the Veracity platform in 2019

1.5 million service subscriptions in 2019

REVENUE

Digital Solutions' share of total (21,551)

1,046
NOK MILLION

EMPLOYEES

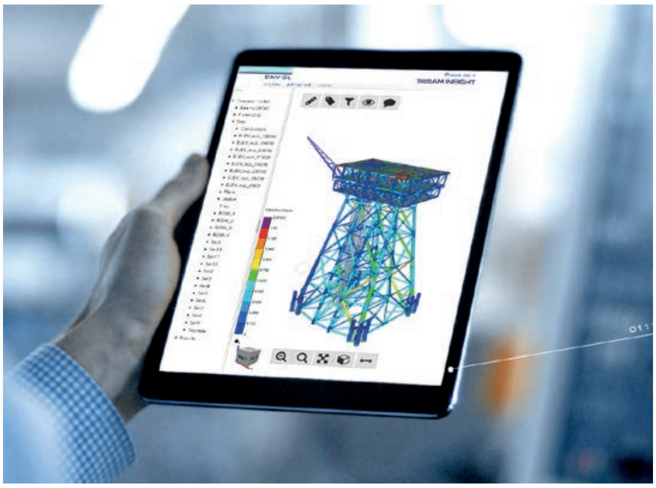
Digital Solutions' share of total (11,832)

870
EMPLOYEES

Golden anniversary for Sesam

In 2019, DNV GL's Sesam software celebrated 50 years of supporting the design, optimization and strength of ship and offshore structures. Sesam has continued to evolve throughout its lifespan and, in September 2019, Digital Solutions launched Sesam Insight, the first cloud-based Sesam product. This product is the first from Digital Solutions' 'Structure' ecosystem to utilize cloud technology. Sesam Insight enables a new level of collaboration in offshore engineering by offering shared access to 3D analysis models.

In 2019, Sesam's Cloud Compute service for offshore wind successfully impacted the industry by enabling multiple design iterations per day. Before Cloud Compute, this task would have required two to three days for a typical set of design load cases for a fatigue analysis. Analysis results obtained using Sesam's Cloud Compute Services can then be shared and collaborated on through Sesam Insight. In 2019, Sesam reported a significant increase in usage related to offshore wind.



Strides for renewables in wind and solar markets

In 2019, Digital Solutions launched its SolarFarmer software in Europe and the US and made it commercially available worldwide. The SolarFarmer software enables the more accurate and efficient modelling, design and analysis of solar photovoltaic plants, particularly in complex terrains. Digital Solutions also had a major release of its WindFarmer: Analyst software in 2019. This allows customers to perform end-to-end wind resource energy assessments. The WindFarmer: Analyst software was made available on Veracity Marketplace during the year as well, making it the first Digital Solutions software to be sold directly from Veracity.

Throughout 2019, the development teams behind Bladed and Sesam increased their collaboration to target the offshore wind turbine market. This partnership will continue in 2020, with a focused campaign to highlight software solutions for customers entering and/or growing their offshore wind turbine portfolio.

ShipManager moves to the cloud

Digital Solutions continued its focus on advancing its software for the Maritime industry. In November 2019, the company presented its cloud-based ShipManager software. The first module to be offered to the market was ShipManager Procurement, with more modules to come in 2020 and beyond. This software is part of DNV GL's ambition to develop modern cloud solutions for managing fleets, while also enabling an updated and modern user experience and fleet overview. The solutions are built on the latest technology, web-based and cloud-ready, with easy

device accessibility. In 2019, Digital Solutions also released a new analytics module for ShipManager and a mobile QHSE inspection app for online and offline use. Throughout the year, Digital Solutions closed ShipManager and Navigator contracts covering 971 vessels.

Digital Solutions also secured a contract with Anglo-Eastern Ship Management Ltd in 2019, which was the largest-ever order for its Navigator Port software, covering installation on 650 vessels.

Cyber Security for critical infrastructure

DNV GL is an independent advisor on cyber security, offering a wide range of domain knowledge for IT and control system security. Cyber Security Services in Digital Solutions has consolidated business in 2019, preparing for significant growth in 2020 and onwards. Risk management, security governance, compliance assessments and security testing are key disciplines within this area.

In 2019, the Petroleum Safety Authority (PSA) of Norway requested independent studies to help them optimize their ICT security work relating to the Norwegian oil and gas industry. DNV GL won the contract and, by November 2019, the team had delivered thorough reports. This team was led by Digital Solutions' Cyber Security team, with significant contributions from other business areas.

In 2019, DNV GL also announced that Digital Solutions has signed an agreement to conduct cyber security certification assessments as an ISO/IEC 17065 accredited ISASecure certification body. This made DNV GL the third certification body within the ISASecure certification programme in South East Asia.

Digital Health in the Nordics

Healthcare represents one of the world's largest sectors. Demographic trends make current delivery models unsustainable. DNV GL believes that the necessary transformation towards becoming a sustainable sector can be enabled by digital technologies, powered by the extensive and intelligent use of data.

In Digital Solutions, this is referred to as 'digital health' and it is considered a new growth position for the company. Digital Solutions has established an incubator that focuses on the Nordic healthcare sector, starting with Norway. Norway aims to create a 'learning healthcare system' in which digitalization is a prerequisite for a more patient-driven approach. The Digital Solutions digital health incubator has explored roles and associated assurance services as an independent trust enabler, facilitating sharing and use of health data. The sharing of sensitive health data raises issues around privacy, security, standardization, data management and quality; areas where DNV GL has strong competence.

In 2019, Digital Solutions initiated testing of Variant Exchange, a service that enables medical genetics laboratories to share DNA variant classification data with trusted partners. Data sharing will improve safety for patients and lead to efficiency gains in the laboratories. This is the first time this kind of data has been routinely shared by clinical laboratories across borders.

In partnership with Crayon AS and Inmeta, Digital Solutions entered into an exclusive framework agreement with Norsk Helsenett SF to deliver public cloud services over the next six years. Norsk Helsenett SF is a Norwegian state-owned enterprise under the Ministry of Health and Care Services, entrusted with modernizing Norway's ICT infrastructure for the health and care service sectors. As a partner in this agreement, DNV GL will work to ensure the viability and sustainability of cloud-based solutions, as well as to identify and reduce risks.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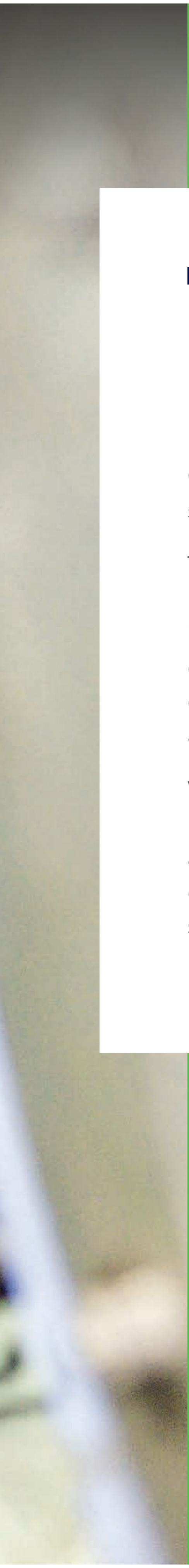


SUSTAINABILITY

Our vision of being a trusted voice to tackle global transformations sets the direction of our business and our conduct.

This section includes how we support our customers through the products and services we provide, how we aim to continuously improve on the safety of our employees and opportunities for career development, how we protect the environment and maintain our standards of ethics and compliance in our own operations and with our business partners.

We continue to report in accordance with the Global Reporting Initiative Standards: Core option. Our GRI index can be found at the back of this report. KPMG has provided limited assurance of the sustainability content in this report. Their assurance statement can also be found at the back of the report.

Contents

SUSTAINABLE INNOVATIONS

Supporting sustainable transformations

Why it matters

At DNV GL, we work to make an impact on creating a better future in two ways. Firstly, we work to reduce our own footprint and make our worldwide operations as sustainable as possible. We are guided by the ten principles of the UN Global Compact and our Code of Conduct. Sustainability is embedded within the DNV GL management system and we seek continual improvement through certification to external standards, such as ISO 14001 for environment and ISO 45001 for occupational health and safety.

Our second, and far greater, impact is through the services we provide to our customers. In each of our business areas, our products, services and expertise help customers become more efficient, improve their performance, and operate safely and sustainably. Investment in research and partnerships provides clarity on today's sustainability challenges and insight into potential solutions. We use the findings in our work with customers and, where they can benefit a wider group of stakeholders, we make them freely available.

The examples presented here are some of the ways we contribute to reaching the Sustainable Development Goals.

> "We support the UN Global Compact principles and actively work with customers and partners to deliver on the UN's 17 Sustainable Development Goals.
>
> **Remi Eriksen**, Group President & CEO

Sustainable innovations

We have the greatest positive impact on sustainability through the services we provide to our customers. The examples below show some of the ways we work with our customers and in partnership with other stakeholders to deliver sustainability benefits and how we contribute to the Sustainable Development Goals.

Energy-saving rotor sail ready for commercialization

SDG 7, 9, 13

In 2019, as part of a long-running research consortium working with the University of Applied Sciences Emden/Leer in Germany, DNV GL tested an innovative Flettner rotor sail designed to provide wind assistance to seagoing vessels. The tests have shown the rotor sail is a highly effective additional power source, reducing energy use and emissions from a ship's main engine. The tests have also proven its seaworthiness and that the sail is ready for commercialization.

Originally developed a century ago, a rotor sail is a tall, rotating cylinder that uses side winds to produce forward thrust. The new ECO FLETTNER rotor represents a complete redesign, and for testing it was installed on the 4,250-tonne Fehn Pollux cargo vessel. The sail is an 18-metre tall, three-metre diameter cylinder, and is constructed of lightweight materials. It uses high-performance bearings that allow it to rotate at high speeds.

The testing over a six-month period exceeded all predictions and has demonstrated fuel savings of 10–20% depending on wind speeds and direction, the speed of the ship and its main engine performance. On the Fehn Pollux, the ship saves an annual average of 108 kW at sea, equivalent to a 15% saving in energy and emissions for the ship's 650 kW main engine.

Helping companies focus on the Sustainable Development Goals

SDG Lens is a freely available, self-assessment tool developed by Business Assurance to help companies better understand the areas where they can best contribute to the SDGs. Through the assessment, the SDG Lens reveals the individual SDGs and associated targets in priority order, based on a company's potential to influence the Goals and become more sustainable. Since its launch in 2018, 224 companies have registered for the SDG Lens. Of these, 47 completed their self-assessments.

From the assessments completed to date, the most frequently prioritized Goals are SDG 8, Decent work and economic growth; SDG 12, Responsible production and consumption; and SDG 13, Climate action. The least prioritised goals are SDG 14, Life below water and SDG 16, Peace, justice and strong institutions.

ALL SDGS

The results provide a picture that will grow over time as more assessments are completed, giving greater insight into trends for specific Goals and sector-wide approaches. It is widely accepted that collective action at a system- and value chain-level will be required to achieve the SDGs and gathering sector-wide data will be useful in assessing system-based approaches to the SDGs.

Capturing carbon for crop nutrition

We are supporting our customer, Taiwan Power Company (TPC), to develop plans to reduce carbon emissions from its coal-fired Taichung power plant. The plans include TPC's first-ever carbon capture pilot project, an important step towards realizing Taiwan's carbon reduction goals.

Our power plant and carbon capture and storage experts from the Arnhem Power Laboratory in the Netherlands are developiong the design concept for the pilot. The Netherlands team is working closely with our Taiwan team who understand TPC's needs, the local culture and regulations. The scope of work includes studying the application of carbon capture technologies and any direct effects they may have on power generation. This is currently a

small-scale pilot project, reducing carbon by 0.05% for one unit, however, the purpose of this pilot is to develop all the necessary data. The results will allow realistic modelling and scaling up towards a commercial carbon capture plant.

The project also intends to demonstrate a use for the captured CO_2, using it to grow fruit and vegetables. DNV GL will help design an agricultural factory equipped with a CO_2 distribution network. The crops from the factory will be served in an adjoining visitor centre.

Hybrid battery power boosts offshore rig efficiency

DNV GL worked with Northern Drilling to make their West Mira drilling rig the first to be awarded the DNV GL Battery (Power) class notation. With this new notation, we are helping customers in the offshore industry take advantage of new hybrid battery power technology for safer, more energy-efficient and environmentally-friendly operations.

The diesel-electric hybrid power system on the West Mira is a world first on a drilling rig and is a prime example of coopera-tion between the project partners – Northern Drilling, Seadrill, Siemens, Kongsberg Maritime and DNV GL. The power solution uses Lithium-ion batteries as an additional power source during peak power demand. They also act as a reserve power source in the event of a blackout. Four converter-battery systems provide up to six megawatts of power reducing runtime of the rig's diesel engines by up to 42%. This saving results in an estimated reduction in NO_X emissions of 12% and CO_2 emissions of 15%, equivalent to annual emissions from approximately 10,000 cars.

Floating solar in Singapore

In Singapore, DNV GL is acting as technical advisor for PUB, Singapore's national water agency, on a public tender for a 50 MW floating solar photovoltaic project. The Tengeh Reservoir floating solar project is due to be operational by 2021 and will become the largest floating solar system in Southeast Asia and one of the largest in the world. It will power the reservoir's water treatment facilities, eliminating 28,000 tons of carbon dioxide emissions per year, equivalent to the emissions of around 6,000 cars.

Despite limited renewable energy options, Singapore has made firm commitments to reducing greenhouse gas emissions and solar power is the country's most viable renewable energy source. DNV GL's energy experts have completed preliminary design,

independent energy assessment, technology benchmarking and business model studies. We will also carry out design reviews, testing and commissioning reviews during construction, and performance analysis and testing once operational.

Supporting San Marino's drive for sustainability with blockchain

The 'San Marino Low Carbon Ecosystem' is a blockchain system designed to reduce CO_2 emissions and stimulate a circular economy business model in the Republic of San Marino. Proposed by DNV GL, in collaboration with VeChain, the platform aims to encourage environmentally-friendly practices by citizens in areas such as energy use, water saving and waste disposal.

Sustainable behaviour by individuals will be rewarded with a crypto-currency-like utility token, the San Marino Innovation Token, which can be used to access other services offered within the Republic. The introduction of the low carbon ecosystem is the first example globally of using a public blockchain and utility token to incentivize citizens to protect the environment.

SDG 9, 11, 12

Using data to help customers mitigate climate change risks

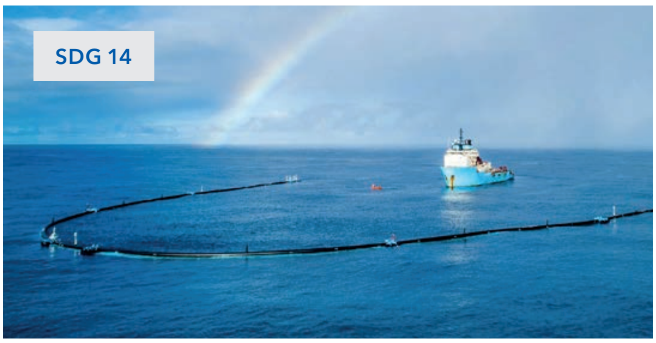
The impact of climate change will be felt significantly by many in the oil and gas sector including operators, investors and insurers. New and extreme climatic conditions will test existing technologies, systems and institutions to the limit. With multiple, global climate and hazard models, the amount of climate risk data can be overwhelming for decision makers who need clear, concise information they can act on quickly.

To rise to this challenge, we have developed a state-of-the-art, digital climate-risk solution called C-GEAR Core (Climatic Geo Enhanced Assessment of Risks). The system integrates several applications and platforms into a cloud-based solution that captures, analyzes and visualizes climate, weather and hazard-related information. For marine services customers, predictions include wavelength changes, airgap decreases, wind strength, precipitation and storm surges. Alongside DNV GL standards and guidance for mitigating risk, C-GEAR Core enables us to deliver industry-leading support in this growing and important area of risk.

Traceability for ocean plastics

DNV GL has joined forces with Dutch NGO, The Ocean Cleanup, to address one of today's major environmental challenges, ocean plastic pollution. The ocean is core to DNV GL's business and we are keen to contribute to solutions with our expertise. The Ocean Cleanup is trialling advanced technologies to collect ocean plastic from the Great Pacific Garbage Patch, the world's largest accumulation of plastic waste, spanning an area of 1.6 million square kilometres. The collected plastic will be recycled into new products and sold to consumers, creating value from the waste and funding The Ocean Cleanup's continued work.

In a growing market for products made with ocean plastic, it is currently not compulsory to independently verify that plastic has, in fact, been sourced from the ocean. This means products labelled as "ocean plastic" may not be entirely sourced from the ocean. We have worked with The Ocean Cleanup for the past 18 months to develop a process and set of requirements that enables verification of the source of ocean plastic. The new process delivers the highest level of traceability and clarifies how ocean plastic is defined,



bringing transparency to this rapidly-developing market. DNV GL will now verify that plastic collected by The Ocean Project is 100% ocean plastic according to the newly created standard.

The verification process is designed to provide transparency and support consumer trust in the market for ocean-plastic products. In 2020, we will develop the process and transparency requirements into a new public standard that will be open to all parties interested in ocean plastic product certification.

DATA PRIVACY AND SECURITY

Data protection in the digital age

Why it matters

DNV GL is a strong advocate for digital technology. We believe in harnessing its benefits to improve how we operate and to make a difference to our customers and wider society. At the same time, there are clear risks to be managed relating to cyber-crime and data protection, and these are high priorities for our stakeholders. For DNV GL, data security is a natural extension of our purpose within the digital age – 'to safeguard life, property and the environment'.

To mitigate digital and data risks we focus on ensuring our own cyber security and using our skills to help customers do the same. Alongside digital security, our data protection management system works to protect the right to privacy of our employees, customers, suppliers and business partners in line with the European General Data Protection Regulation (GDPR).

For DNV GL, data security is a natural extension of our purpose within the digital age – 'to safeguard life, property and the environment.

Progress in 2019

In March 2019, we set a heightened state of IT security and activated our Computer Emergency Response Team as a precautionary measure due to a ransomware attack on a large Norwegian enterprise, a customer of DNV GL. After three days we restored normal IT security levels. During the period of heightened security, we quarantined all e-mails from the customer and enabled Safe Links capabilities in our software to validate the safety of website links before end-users could open the webpage. We also ensured that all VerIT computers connected to the DNV GL IT platform had up-to-date antivirus and that the computers were patched properly.

Awareness and training

Maintaining high levels of awareness is critical to successful data protection. During 2019, we provided further data protection training for our employees. Until year-end, over 6,600 employees have completed an e-learning on data protection and over 1,000 an e-learning on handling data breaches. At our Global Shared Service (GSS) Centre in Poland, workshops with finance and human resources focused on handling personal data breaches and local requirements of Polish data protection law.

Our GSS Quality Management function ran training in GSS units on storage for personal data. Finally, in 2019, targeted Human Resources training has been provided by Group Compliance to business area and GSS human resources employees to increase awareness on matters of relevance. These include privacy when handling employee images and badges, and payroll and health data, as well as privacy in recruitment processes, performance and talent management. The training has been been completed by around 500 employees.

Data risks

To ensure our approach remains focused on risks for data subjects – any person whose personal data is collected or stored – we started a risk assessment process in 2019. Stakeholders from around DNV GL have been asked to identify personal data risks in their area of the business so that mitigation measures can be defined in 2020. We have identified risks in 12 main categories, including: governance and accountability; data flows and data transfer; security and Privacy by Design; data subjects' rights; and training and awareness.

Personal data protection

Following the alignment of our data protection approach with GDPR in 2018, we continued to improve our data protection management system in 2019 and ensure it is fully established throughout the business. To support this, the Group Compliance function has convened a cross-business network to improve communication on data protection, create common understanding on legal requirements and promote alignment across DNV GL. All business areas, Group functions and our Global Shared Services unit are represented on the network. Through the network, advice on data protection measures is shared and progress is reported back to Group Compliance.

The network met twice in 2019 and uses a digital collaboration tool to communicate new developments in data protection. Business areas and GSS are responsible for implementing data protection measures and Group Compliance provides a centralized governance function. All business areas have conducted data protection risk assessments and have incorporated personal data risk into their business area risk management processes.

Looking ahead

Data privacy remains an essential part of ensuring legal compliance. We maintain our understanding of the data protection landscape through our data protection network, external training, legal advice and monitoring cases raised by data protection authorities in the countries and regions where we operate.

In Brazil, a new personal data protection law, very similar to GDPR, will come into force in August 2020. This reflects a growing global trend of countries establishing national data protection laws. Before the deadline in Brazil, Group Compliance will support the local implementation team to ensure a smooth transition to compliance with the new requirements.

Continuing the risk assessment started in 2019, we will focus our attention in 2020 on the areas of high risk for data subjects that we have identified. These include lifecycle management of applications from launch to end-of-life, roles and responsibilities linked to personal data, and unstructured data outside of production systems, such as SharePoint or Excel applications. We will also continue to focus on emerging financial or reputational risks related to data protection identified through our risk assessments.

Internally, we will ensure we maintain high awareness of cyber security and data protection issues and our approach.

Approach

Personal data protection

DNV GL has an established data protection management system that is in line with the ISO 19600 standard on compliance management. Responsibility for data protection sits with Group Compliance and the Global Data Protection Officer.

We have a comprehensive suite of policies, guidelines and instructions that set our standards for data privacy and ensure we protect the personal data of employees and customers. All of our documentation and processes are aligned with, and fulfil, GDPR requirements. An important enabler for data protection is training all employees, and particularly those dealing with personal data as part of their daily work.

Customer data is handled in accordance with the confidentiality obligations outlined in the terms and conditions of our customer contracts. We are also a Binding Corporate Rules (BCR) certified company, meaning that customer and employee data can be transferred within DNV GL Group to countries outside the European Union and European Economic Area.

IT and data security

Our Global Shared Services IT function invests significant resources in continuously monitoring and repairing IT-system vulnerabilities, following best practices on patching. We work on the cyber-security principle of 'assume breach'. This principle assumes that competent and resourceful attackers will be able to break into our systems and we therefore direct resources into our ability to detect and mitigate such security breaches.

During a typical month DNV GL's security system will stop 200,000–300,000 phishing attacks and 40,000–50,000 instances of payload / malware. We use machine learning to develop smarter algorithms with our main IT vendor, IBM, to identify which of these pose the most significant threats in order to detect and prevent cyber attacks. Most attack attempts on DNV GL use email as the attack vector and, as a result, we believe that investing in employees' cyber security awareness and competence is essential.

To ensure that DNV GL adheres to the highest level of data protection, our information security management systems for GSS IT, Energy, Oil & Gas, Digital Solutions and Maritime are certified to the ISO 27001 information security standard. We have a detailed information classification system to segment and secure more sensitive information within our IT system.

Our GSS IT department operates a Computer Emergency Response Team that is activated during more complex and advanced cyber security situations.

CUSTOMER SATISFACTION

Customer centricity in everything we do

OUR VISION

A trusted voice to tackle global transformations

Why it matters

Our success relies on maintaining strong relationships with our customers. We focus on delivering services that truly meet our customers' needs, helping them solve problems, make the most of their opportunities and, ultimately, enhance their own business success.

We believe that a customer-centred approach – one that delivers excellent customer experiences and creates close, value-adding relationships – leads to competitive advantage. This ambition is at the heart of our strategy and each of our business areas is tasked with maintaining high customer satisfaction. We support our customer-focused approach with a business model that is based on trust and a commitment to never compromise on quality or integrity.

Progress in 2019

Each of our business areas measures customer satisfaction separately using measures that are suited to their services and market segment.

MARITIME conducts an annual customer satisfaction survey. In 2019, the online survey received 2,000 responses from 940 customers. Overall, customer satisfaction is high with a rating of 5.46 out of seven (2018: 5.45). Customers again rated Maritime very highly on the core elements of service delivery and commercial interaction. Compared to 2018, customers' appreciation of DNV GL's platform, Veracity, and information provision has increased.

OIL & GAS measures individual customer satisfaction by conducting a survey with customers on project completion. Customers provide a rating from one to ten and, in 2019, the average score was 9 (2018: 9.1). However, the number of responses was quite low. Initiatives have been taken to increase the number of responses in 2020 to ensure that results better represent the customer base.

ENERGY has improved its annual customer relationship strength indicator (CRSI) among their key accounts from 64% in 2016 to 75% in 2019 (2018: 69%). This was right on target and shows very positive progress towards our target CRSI of 80% in 2020, which reflects our high ambitions for customer centricity.

BUSINESS ASSURANCE conducts an annual online customer satisfaction survey and received around 10,000 unique answers in 2019. This provided a customer satisfaction index score of 5.14 out of 6, improving on the 2018 score of 5.09 and well above the threshold of full satisfaction.

DIGITAL SOLUTIONS has improved its customer satisfaction score from 74% to 76% over the past two years. Nearly 1,000 customers responded to the satisfaction survey, representing approximately 35% of the customer base. Separately, project completion surveys show a satisfaction score of 87%.

Looking ahead

Improving customer satisfaction

In 2020, we will work to standardise and adopt best practice on how we seek customer satisfaction feedback across our five business areas. As the first year of implementation, 2020 will provide a baseline on overall satisfaction, preference of DNV GL over other suppliers, and recommendation across the company. One key objective is to gauge better how our customers rate their satisfaction and strength of their relationship with DNV GL overall, providing a strong leading indicator for our future business performance.

Brand strength

Maintaining the trust of our customers has enabled DNV GL to grow over its 155-year history. Continuing this is essential to sustaining our success in the future. To understand current levels of trust in DNV GL compared to our competitors, we carried out a global brand survey in 2018. We use the results to identify areas to maintain or improve our services. We plan to re-run the brand survey in the next 2–4 years.

Approach

A customer-centred approach to business is anchored in our 2020 business strategy. For DNV GL this approach means:

- Putting our customers at the centre of our business to deliver services that truly meet their needs, help them solve problems and make the most of their opportunities

.

- Getting close to our customers, spending time with them, meeting them in their environment, and building business relationships based on trust.

Our aim is to continually serve our customers in a proactive and responsive way, including using digital solutions to improve their experiences and our cost competitiveness. We continue to focus on developing a more customer-centred working culture, one in which our commitment to customers drives a curiosity and desire to anticipate their needs.

The success of our customer-centred approach is measured by the value we create for the customer through projects, customer satisfaction and market share within our business areas.

EMPLOYEE HEALTH AND SAFETY

A safe place to work

Why it matters

Our vision is zero harm to anyone working for, or on behalf of DNV GL. Our view is that no work is so urgent or important that it cannot be conducted in a safe and healthy way. Safeguarding our people is not only about preventing accidents and injuries, it is also about maintaining a healthy and resilient workforce.

In striving to be the safest place to work, we continue to empower our people to make the right decisions about their own safety, health and wellbeing every day. Our risk assessments show the main health and safety risks our people face come from: field work; slips, trips and falls; stress linked to high workload; and driving. Our approach is to address safety and health risks with both immediate and more long-term initiatives. We want to demonstrate that DNV GL cares about its people and equips them to deliver exceptional safety performance over the long term.

Progress in 2019

Safeguarding our people

Our overall goal is to prevent injury and occupational illness to everyone linked with our business activities. Our occupational health and safety performance in 2019 continued the positive and stable trend seen over the last three years as we strive towards our ambition of zero harm.

In 2019, our rates involving employees:

- **Lost time injury rate, stable at 0.9** (2018: 0.9)
- **Absence rate, stable at 2.3%** (2018: 2.4%).

Full details of our performance, including regional breakdowns, are provided in the performance section on page 62.

Enhancing resilience and wellbeing in DNV GL

We rolled out our global medical health check guideline in 2019. Developed in 2018, the guideline is applicable to DNV GL field workers in all countries. It details the minimum requirements that medical check-ups for these employees need to cover and helps ensure our employees are fit for the work they do. The objective is to ensure that field workers performing high-risk activities are aware of their own state of health and can do their job without a detrimental effect on their own and other's health or safety.

Although voluntary, employees are encouraged to have a medical health check and are recommended to raise issues with their line manager to adjust their work, if necessary. However, this is not a requirement and all test results are confidential and do not need to be shared with DNV GL.

We comply with applicable local legislative, industry-specific, or client requirements for employee health checks. We comply with whichever requirements are most stringent or our own medical health check guideline.

Individual resilience

Our 2018 Health and Safety Culture survey showed important improvements to our health and safety culture, especially related to health and safety competence and compliance within DNV GL. It also showed areas for improvement with some employees feeling they struggle to manage conflicting goals and demands, both at business unit and individual level. The weakest scores were for individual employee resilience, including work-life balance and health and wellbeing.

In 2019, therefore, our priority focus areas were resilience and health and wellbeing. Resilience is an inner strength that can be developed like any other skill. It enables employees to be more prepared to manage work challenges, recover from setbacks and thrive in an ever-changing work environment.

Improving our global resilience framework

Our resilience framework is a long-term initiative to help strengthen employees' individual resilience and develop a growth mindset. With a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work, and that brains and talent are just the starting point. This view creates a passion for learning and a resilience that is essential for high levels of accomplishment.

In 2019, we improved and relaunched the resilience framework – a set of tools, techniques and knowledge resources aimed at building healthy and lasting habits. It is available to all employees through our intranet. The revised version includes additional resources, competitions and challenges for individuals and teams, and includes modules on physical activity, nutrition, sleep and mental wellbeing. In 2019, the updated framework was accessed by 3,025 employees. The number of visits was in line with expectations and we will explore further developments of the framework in 2020.

The relaunch of the framework also includes a pilot health awareness initiative, called Global Challenge. 1,386 employees took part and some key highlights include:

- 65% of participants now achieve the recommended 10,000 steps per day vs. only 17% pre-Global Challenge
- 53% are now more aware of what they eat
- 56% of those who tracked their weight have lost weight
- 66% now get the recommended amount of sleep vs. 50% pre-Global Challenge
- 66% have reported a decrease in their stress levels either at home or at work
- 58% have reported an increase in either their productivity or concentration.

Resilience Index

As part of our new global pulse survey approach for engaging employees (see page 67), we have developed a Resilience Index to measure employee resilience at a Group level and help managers to follow-up locally in a timely manner. The index includes the following questions:

- My work schedule is flexible enough to deal with family or personal life
- My manager cares about me as a person
- DNV GL really cares about my health and well-being
- I find my workload manageable.

Through the pulse survey, these four questions are frequently asked across DNV GL and the new approach is replacing our global Health and Safety Culture survey, which was conducted every three years, most recently in 2015 and 2018. The frequency varies between business areas, ranging from weekly to every 2–3 months. Results from the pulse surveys in 2019 show a slight improvement in resilience through the year.

By reflecting on resilience and wellbeing in our daily work, and measuring progress with our employees through the pulse surveys, we are moving further towards a learning culture on resilience. As a result, our approach to health and wellbeing is progressively becoming more mature and more integrated.

Looking ahead

Health, safety and environment governance

In 2020, we will continue to work on improving the health, safety and environment (HSE) management and support structure that ensures we safeguard our people and deliver a more agile way of working in line with our digital transition.

During 2019, we refreshed our company values. Our new values are **WE CARE, WE DARE, WE SHARE**. In terms of how we approach HSE:

WE CARE for ourselves and our colleagues to ensure we stay safe, resilient and fit for work; we balance our work and home priorities.

WE DARE to say no and stop work if it is not safe, or if it compromises on quality or our integrity.

WE SHARE our expertise, knowledge and learnings from incidents to continuously grow, develop and improve.

Our refreshed values will be fully incorporated into our HSE work processes during 2020.

Health and wellbeing

We will continue our health and wellbeing programme in 2020. This includes:

- Developing resources for employees and line managers to support them in strengthening the resilience of themselves and their teams.

Incident reporting and learning from incidents

As in 2019, we will continue to focus on near miss and hazard reporting in 2020. We will also continue with the initiative to automate incident and hazard reporting using machine learning. This will simplify the process and reduce time spent on HSE case reporting and processing. By capturing more incidents, we aim to learn more about the risks we face and improve prevention.

Approach

Health and safety management

Health and safety is fully embedded in our purpose, vision and values, and our commitment to safeguarding people extends to everyone linked to our business. Our approach is based on our HSE policy and global health and safety management system, which is fully integrated within the overall DNV GL management system.

Our health and safety policy and management system cover all functions, processes and activities related to the management and delivery of our products and services across DNV GL. Our management system complies with all laws and regulations in countries where we operate and is certified to the ISO 45001:2018 standard. In areas where legislation is weak or does not exist, we adhere to our Group requirements, which comply with Norwegian regulations.

Our work is never so urgent or important that we cannot take time to do it safely. The right to say 'no' if an employee does not feel safe is embedded in our HSE policy.

Governance

Within DNV GL, health and safety is structured on two lines of responsibility – by geography and by business area. The Group CEO and Executive Committee are responsible for all HSE matters, ensuring they receive attention at the highest level. Health and safety performance are reported to the Executive Committee every two months and the CEO reports to the Board of Directors at least every two months. Quarterly HSE reports are made available to all employees on the intranet.

It is the responsibility of our line managers to ensure safe and healthy working conditions for their employees. They are also responsible for promoting open communication and a culture where incidents and feedback are treated as learning opportunities. All our health and safety support resources are internal, and we do not outsource any health and safety responsibilities.

We conduct a management system review process annually. This is a bottom-up process and ensures continual improvement of our occupational health and safety performance. The review has a fixed agenda with elements such as risk management (including HSE and quality) and information related to performance and effectiveness of the management system.

Risk assessment

DNV GL has set clear principles and processes, and has defined key responsibilities, for hazard identification and risk assessment relating to working at office premises, travelling, driving, conducting field work, operations at laboratories and test sites. Occupational health and safety risks, including those related to field and laboratory work, are periodically identified, assessed and reviewed by business areas or through the global risk register.

A record of common hazards across DNV GL are maintained at the group and regional level. These generally relate to office-related work, travel and driving.

Business areas identify and manage the significant hazards associated with their field work and laboratory and test site activities. Hazards associated with team building and other events in the workplace are managed by the event organizer.

Risk assessments are required at the planning stage of activities, involve relevant people associated with the activity and are documented. The process includes a review of reported incidents and hazards, and any changes to our services or major incidents within the industry. No activities should be undertaken unless the associated risks have been reduced to an acceptable level.

The work-related hazards that pose a risk of high-consequence injury

The main hazards associated with DNV GL activities that present a risk of high-consequence injury include:

- Line of fire hazards, in particular objects dropped or falling from height, high pressure/tension releases, contact with moving vehicles, moving parts of machinery and work equipment
- Vehicle collisions and over-turning vehicles
- Places at height or at ground level from which a person could fall from height, including transfers at sea with a risk of drowning and/or crushing
- Entry into confined spaces where an oxygen deficient or toxic atmosphere may be present
- Hot environments.

In DNV GL, high-consequence hazards are considered those where the most probable outcome is death or significant disability or impairment, including the following:

- Serious multiple fractures
- All amputations
- Permanent loss of sight or reduction of sight in one or both eyes
- Crush injuries leading to internal organ damage
- Serious burns (covering more than 10% of body; third-degree burns; internal electrical burns; or damage to the eyes, respiratory system, or other vital organs)
- Nervous system injuries with loss of function
- Unconsciousness caused by head injury, asphyxia, heat, electric shock or chemical exposure
- The person cannot, does not or is not expected to recover to pre-incident health status within 6 months.

We determined these hazards by several means, including operational risk assessments, audit findings and incident analysis. They are recorded in health and safety risk registers, which include:

- A description of the risk – the main hazards, the causes and contributory factors for the risk
- The risk control measures and monitoring/assurance process
- An evaluation of the risk with a risk rating based on the likelihood and severity of harm
- Actions to reduce the residual risks to an acceptable level and ongoing monitoring activities.

Incident reporting

We manage and report incidents and hazards using Synergi Life, a commercial HSE software platform developed in-house by DNV GL. Our approach complies with Norwegian regulations and is aligned with the ILO code of practice on recording and notification of occupational accidents and diseases. Read more.

Employees involved in, or observing, a work-related incident or hazard are required to report it through Synergi Life. Employees concerned about revealing their identity can anonymously report incidents and hazards.

All reported cases with the potential for high-consequence injury are investigated and corrective actions implemented. Any cases with the potential for high-consequence injury are reviewed in the next health and safety risk assessment.

Learning from incidents

A significant objective of incident and hazard reporting is to share experiences across the business and learn from them. Learnings are shared regularly through presentations on incidents with medium- or high-consequence injury potential in several levels of the organization, including top management. We also maintain an open-access incident and hazard database.

Involving employees

We share information and consult with elected representatives of employee works councils and unions in accordance with our collective agreements and local legislation.

Performance in 2019

Our health and safety performance is considered sound and stable. The lost time injury rate is stable and a there is a slightly decrease in the sickness absence rate. However, we are continuously attempting to improve. Our focus is on preventative measures identified by our Peakon employee survey, cases recorded with the potential for high loss and increasing awareness.

Lost time injury rate

In 2019, we had an employee injury rate of 0.9 (2018: 0.9), continuing the stable trend of the last three years. There were no serious injuries involving employees in 2019 that lead to lost time.

Three lost time injuries to other workers were reported in 2019. The lost time injury rate for other workers was 1.1. Unfortunately, one serious accident occurred in September. A contractor installing a met mast and was working at height when the mast toppled, badly injuring the contractor. A full recovery is expected. The two other cases related to a finger injury during field work and a slip, trip, fall injury when a sub-contractor was travelling home after an audit.

0.9 Injury rate from to lost day injuries per million employee working hours.

2.3% Absentee rate due to sickness.

0.15 Incidents and hazards reported per employee.

The most common types of injuries recorded were bruises/contusions, cuts/punctures and sprains/strains. Field work continues to be a focus area, and in some cases, lack of awareness and stress are contributing factors. No workers are involved in activities with a high incidence of specific diseases.

FIGURE 01 **LOST TIME INJURY RATE** BY REGION

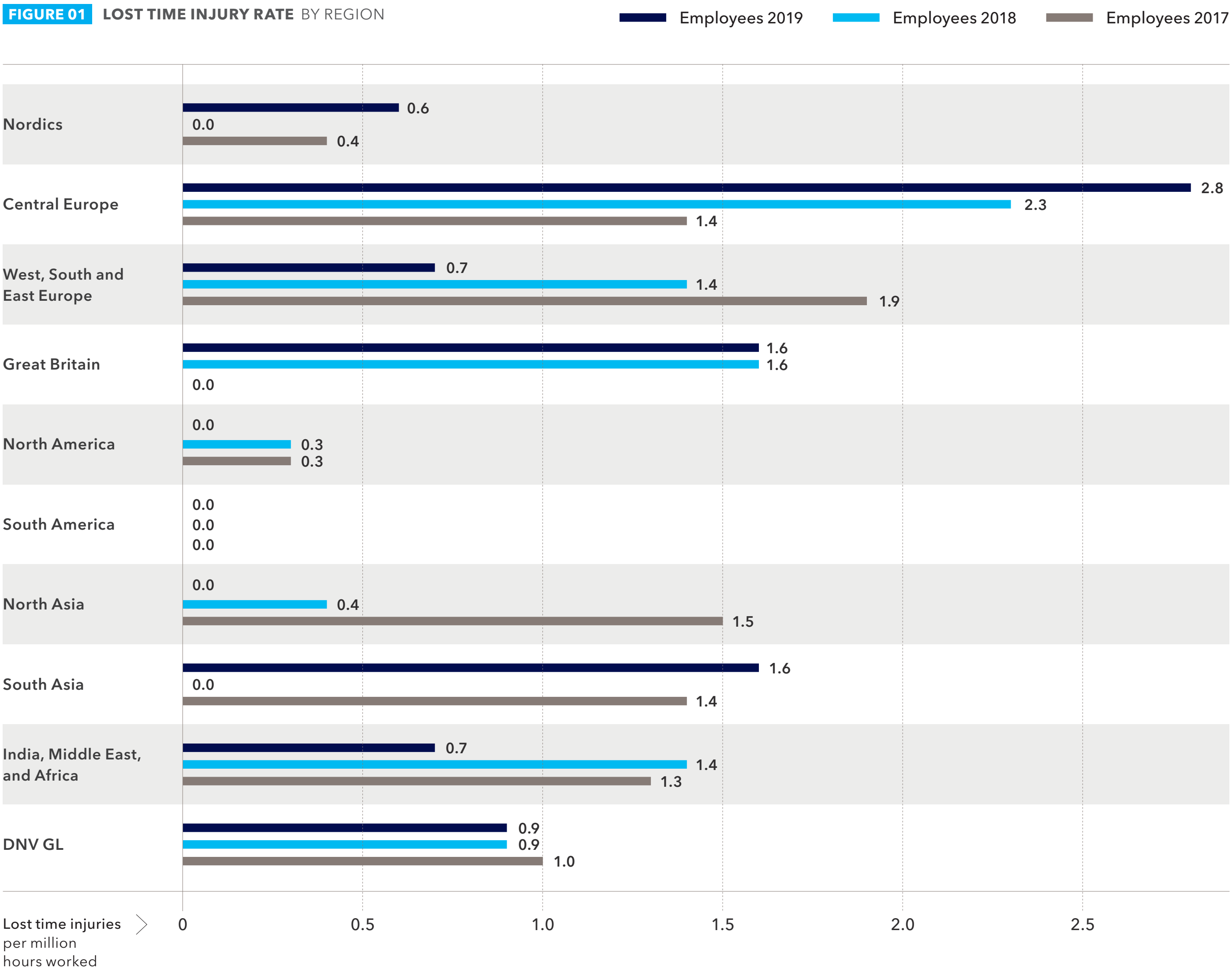
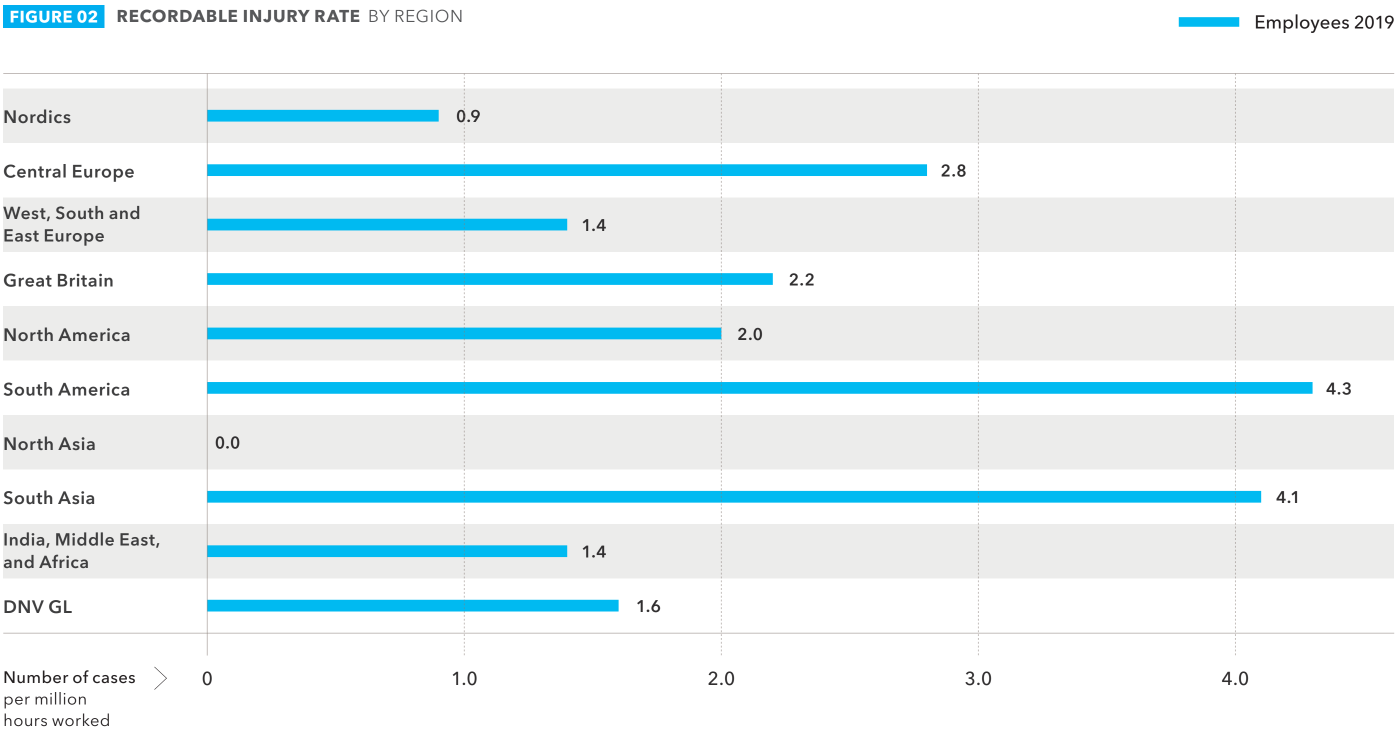


FIGURE 02 **RECORDABLE INJURY RATE** BY REGION



Absentee rate

Our absentee rate continues at a low level of 2.3% (2018: 2.4%). Our reporting system does not currently capture absence by region.

Incident and hazard reporting

During the year, 1,781 incidents and hazards related to occupational health, safety and the environment were reported (2018: 1,995). This represents 0.15 reports per employee (2018: 0.16).

5.5% of the near misses reported had the potential for high-consequence injury to the people involved (related to fieldwork, laboratory and driving). All these near misses are closed and actions to mitigate the risk implemented.

TABLE 01 HEALTH AND SAFETY PERFORMANCE

	2019	2018	2017
Work-related fatal accidents	0	0	0
High-consequence injuries, employees	0		
High-consequence injuries, other workers	1		
High-consequence injury rate, employees	0		
High-consequence injury rate, other workers	0.4		
Recordable injuries, employees	36		
Recordable injuries, other workers	3		
Recordable injury rate, employees	1.6		
Recordable injury rate, other workers	1.1		
Injuries with lost time, employees	19	19	23
Injuries with lost time, other workers	3	4	4
Occupational diseases with lost time, employees	13	14	24
Occupational diseases with lost time, other workers	2	1	0
Near misses with the potential for high consequences	21	39	11
Lost time injury rate, employees	0.9	0.9	1.0
Lost time injury rate, other workers	1.1		
Absence rate (%)	2.3	2.4	2.4

DEFINITIONS

- **Absentee rate (%):** Total hours of absence due to sickness/worked hours x 100.
- **Hazard:** Unsafe act or unsafe condition with the potential to cause an incident.
- **Lost time injury rate:** Number of injuries with lost days per million worked hours.
- **Injuries with lost time:** Any work-related injury which prevents an injured employee or other workers from doing any work on any day (or shift) after the day (or shift) on which the injury occurred, including weekends and holidays.
- **Injuries with high consequence:** Injuries that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.
- **Near-misses:** An event or exposure(s) which did not result in injury, ill health or environmental impact, but where, given a slight shift in time or position easily could have.
- **Occupational diseases with lost days:** A harmful effect on a person caused by prolonged or repeated exposure(s) with lost days (not back to work the next day).
- **Recordable injuries:** Work-related injury or ill health that results in any of the following: death; days away from work; restricted work or transfer to another job; medical treatment beyond first aid; loss of consciousness; significant injury or ill health diagnosed by a physician or other licensed healthcare professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.

CASE STUDY

Mental health focus in UK

In the UK, 'Time to Talk Day' is a national awareness day held in February each year, providing an opportunity to bring the nation together to get talking and break the silence around poor mental health.

We were inspired by this at DNV GL and used 'Time to Talk Day' to launch a continuous focus on mental health and wellbeing in our UK offices.

The response from employees was very positive and follow-up activities were arranged at all of our UK locations. Outcomes and specific suggestions from employees were shared in Yammer posts.

In the past year, as well as participating in 'Time to Talk Day' and other national awareness days, we have introduced mental health awareness training for line managers. Around 60 managers have attended the one-day Mental Health Awareness training so far, and courses will continue in 2020.

Some of our other activities include:

- Quarterly 'Time to Talk' events, with social lunches
- Yoga and mindful movement classes
- Lunch and learn sessions with visiting speakers.

PEOPLE

Connecting with our people

Why it matters

Our 12,000 employees represent the face of DNV GL with customers and other stakeholders all over the world, every day. The relationships we develop with our customers are based on trust in our technical ability and the integrity and personal conduct of our people. Our values – WE CARE, WE DARE, WE SHARE – are beliefs that shape our performance. These ideals are the behaviours expected of all of us and are important for achieving our purpose and vision.

Our aim is to attract, retain and develop people who are committed to our purpose, vision and values. We see diversity within our workforce as a way of delivering excellence and we recruit the best people regardless of their background. This is backed up by an attractive employee-value proposition and varied development and career opportunities. By continuously developing our people's competencies, we enhance the skills and expertise we offer to our customers.

Progress in 2019

After facing a challenging financial reality for a number of years, with associated headcount reductions, we experienced a more stable and sustainable situation in 2019. Although headcount fell slightly in 2019, this was due to the divestment of the KEMA Laboratories in the Energy business area (see page 35).

Investing in our digital transformation

We continued to invest in our digital transformation in 2019, underpinning our belief that being a digitally-agile organization will support our future strength and success.

Training is a key component of our digital transformation and across 2018 and 2019, more than 1,100 managers have taken our DNV GL/INSEAD Leading Digital Transformation programmes. The programmes are designed to enhance our capability with both digital technologies and methods to accelerate our transformation into a truly digital organization.

Building on this success, we have designed a condensed programme for all employees. All 12,000 employees have been invited to participate in weekly online challenges related to Digital Transformation. To engage participants, questions have been posted on Yammer, the DNV GL social media channel. The first module broke our internal record for Yammer activity, with over 4,900 messages posted and 51,000 read messages. In total, over 5,300 employees – almost 45% of our workforce – took part in module one, demonstrating a high level of engagement among employees. This has continued into module two with 2,900 employees taking part since its launch in September.

HR system

We launched a new global human resources (HR) platform in late 2017, which provides improved efficiency and people analytics. In 2019, we broadened the system's functionality, including performance management, regular check-in dialogues, onboarding and succession.

Employee engagement

Following successful pilots in 2018, we have implemented pulse surveys across DNV GL in 2019 to assess engagement among our employees. Pulse surveys involve more frequent, less comprehensive assessments with quicker, more targeted follow-up actions. It is a more agile approach than previous annual engagement surveys and provides an effective way to enhance communication between employees and management. The case study provides more information on our pulse surveys.

To engage employees in our strategy and provide feedback to leadership, we have created a 'Strategy Champions' initiative. Almost 100 strategy champions from all business areas and more than 20 countries are selected and execute strategy-related 'missions' in their local offices. The goal is to stimulate discussions about how strategic goals are understood and acted on in a local context.

Looking ahead

DNV GL launched a new vision and revised values in January 2020. We will run various initiatives throughout 2020 to embed the new vision and values across the organization. A new DNV GL Strategy will also be introduced in 2020 and we will review our current people policies and principles to ensure they are aligned with and support our new vision, values and strategy.

Our people-related governance documents will be revised and simplified in 2020 to enable a more empowered organization. We will also review the DNV GL compensation and benefits approach and we will revise our short-term incentive / profit share system for implementation in 2021.

Approach

As a professional services provider, we rely on the knowledge and skills of our people to deliver our products and services. We strive to foster a company culture with people who are committed to our purpose, vision and values.

Strategy and management system

Our Group strategy and management system, including our people policy, governs how we attract and develop employees and build our company culture. This system also underpins our value-based leadership approach.

Our people processes are designed to create a common culture within a flexible work environment and provide career and development opportunities for all.

Governance

The Group President and CEO approves our people, leadership, and roles & responsibilities policies. The Group HR function establishes these policies and sets the direction for HR management. It works closely with HR teams in the business areas and Global Shared Services to ensure an aligned approach company wide. People management is a line responsibility and line managers are supported by HR managers and a range of HR tools.

We 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 unions.

Diversity and equal opportunity

We seek diversity at all levels of our company in terms of age, gender, nationality, experience and mindset. Diversity is a source of strength for DNV GL. It provides the widest access to global talent and is the best basis for delivering excellence to our customers. Managed well, diverse teams can also identify and capture more opportunities and manage more risks than homogenous teams.

116 nationalities are represented among our employees, and 22 countries have 100 or more employees.

87% of employees have a higher education at PhD, Master or Bachelor degree levels.

33% of employees are female and 37% of new hires in 2019 were women.

To support our diversity efforts, we run mentoring programmes, including the reverse mentoring of senior leaders by 'next generation' colleagues. We also hold an annual global summit for up-and-coming talent.

Human rights

DNV GL is a signatory to the United Nations Global Compact. We are committed to adhering to its principles in the areas of human rights, labour standards, environmental protection and anti-corruption in our business strategy, day-to-day operations, organizational culture and sphere of influence.

Our Code of Conduct establishes our commitment to non-discrimination, equal opportunity, the right to join labour unions and fair employment. All employees are introduced to the company's policies during the onboarding process and human and labour rights are part of this.

DNV GL's Statement on Modern Slavery and Human Trafficking has been issued further to section 54 (1) of the UK's Modern Slavery Act 2015 and constitutes the DNV GL UK's slavery and human trafficking statement for the financial year ending 31 December 2019.

Freedom of association and collective agreements

Employees' right to freedom of association and collective bargaining is documented in DNV GL's management system and our commitment to the UN Global Compact. Around 45% of our employees are covered by collective agreements.

Employee training and development

Our approach to employee development and competence is detailed in internal governing documents. We follow the 70:20:10 learning model; with 70% gained from on-the-job experience, 20% through interaction with others, and 10% from e-learning and classroom training. Training provided through individual business areas ensures the right competencies are in place to deliver our different services.

In addition to a range of mandatory training, cross-DNV GL programmes develop leadership and technical stewardship. Mentoring is a key part of how we work and we enable learning from colleagues around the globe through various mentoring programmes.

Our global career model facilitates employees' competence development. Competence development planning includes an individual development plan, which is a key part of our performance management process.

All employees are assessed annually on results and behaviour through a structured performance management process. The assessment, development and selection of new managers is based on DNV GL's expectations for leaders: respect and care, foresight, customer centricity, and results orientation.

Remuneration
As a knowledge-based company whose main resource is our employees, we depend on cooperation, teamwork and knowledge sharing. DNV GL remuneration systems are set up to support this. Our annual salary review and remuneration process is the same for all employees, including management, and is outlined in the DNV GL management system. Our collective agreements with employee groups do not include voting on remuneration policies.

External remuneration consultants are used to benchmark remuneration in our markets. For the largest countries in which we operate, this happens through country-specific salary and benefit databases covering thousands of people. There is no relationship between our management and the remuneration consultants.

For the Executive Committee, the review procedure differs slightly. The Board's Compensation Committee conducts a review and makes recommendations before the procedure is concluded. The final decision on remuneration for the Group President and CEO is taken by the Board of Directors, using input from the Compensation Committee.

Profit sharing
Profit-share schemes provide the most appropriate variable pay structures to support our values. We have two major global profit-share schemes:

- Grades 1–9: all eligible employees receive a percentage of their base salary in bonus, based on DNV GL Group results.
- Grades 10–15: the annual individual profit share is determined based on grade and a target percentage, individual assessment rating, annual base salary and DNV GL Group and business area EBITA at reference rates versus targets.

In addition to these global schemes, sales schemes are available in some business areas. No employee can be a member of more than one scheme.

Career endings

Transition assistance programmes are implemented locally to meet local legislation and requirements. In the case of significant headcount reductions, local assistance programmes are set up. At all times, we seek to retain the employees in the organization, including the following ways:

- All available positions are advertised internally
- External recruitment restrictions are used to facilitate internal transfers
- All employees should have a development plan which focuses on DNV GL's future capability needs and the employee's own career ambitions.

The DNV GL management system stipulates that mitigating actions are to be sought before staffing reductions are considered or executed.

CASE STUDY

A new approach to employee engagement

In the past, DNV GL conducted annual Engagement Surveys to test employee engagement and highlight areas of positive performance and areas for improvement. In July 2019, we shifted our global approach to a pulse survey methodology. Compared to annual engagement surveys, the pulse survey approach is more frequent and more agile. Annual surveys only provide a snapshot of employee engagement and do not identify issues in a timely way, meaning it can be slow to establish corrective action and changes can only be measured a year later.

In contrast, the pulse methodology allows much more frequent engagement leading to swifter responses. Our pulse surveys are aligned with regular manager-employee check-ins, which were introduced earlier in 2019, and are intended to be part of the day-to-day operation of our business areas, rather than an annual project.

The pulse survey includes 21 common questions asked to all DNV GL employees. Individual business areas can ask additional questions based on their specific needs. Each business area has set different survey frequencies, ranging from weekly to every second month. With more frequent surveys, fewer questions are asked per survey. Currently, the DNV GL response rate is 83%, which is close to the benchmark of other companies.

The benefits of DNV GL Pulse surveys include:
- More regular, open and honest communication between managers and their teams
- Enabling employees to provide regular feedback to managers on what's working and what needs improving
- Allowing employees to anonymously share comments with their managers, which managers can acknowledge or respond to without the identity of the employee being disclosed
- Providing managers with real-time feedback through dashboards, allowing them to identify issues as they arise and to address them swiftly, together with their teams
- Allowing managers and their teams to track changes in engagement over time, to see if what they are doing is making a difference in their team
- Tracking the DNV GL Transformation Index and the DNV GL Resilience Index (page 60).

Feedback received so far from managers and employees suggest the benefits outlined are being delivered at the local level. Results are also actively being used by senior management to track the development of business areas and the company as a whole.

Performance

Workforce profile

TABLE 02 **EMPLOYEES** BY EMPLOYMENT CONTRACT AND GENDER

Employment contract	Female	Male	Total
Permanent employees	33%	67%	11 643
Time-limited employees	51%	49%	189
Total	3 896	7 936	11 832
Permanent employees			
Full-time	31%	69%	10 902
Part-time	60%	40%	741
Total	3 799	7 844	11 643
Subcontractor and temporary personnel			
Temporary staff	14%	86%	1 442
External business support	20%	80%	1 454
Supplier	15%	85%	222
Subcontractor	21%	79%	5 951
Total	1 759	7 310	9 069

TABLE 03 **EMPLOYEES BY REGION**

Region	Permanent employees	Time-limited employees	Total
Nordics	2 515	11	2 526
West, South and East Europe	2 218	66	2 284
North America	1 686	3	1 689
Central Europe	1 337	5	1 342
North Asia	1 237	54	1 291
UK, Ireland	994	10	1 004
India, Middle East and Africa	748	21	769
South Asia	656	19	675
South America	252		252
Grand Total	11 643	189	11 832

Permanent employee: On DNV GL payroll without contracted time limitation.

Time-limited employee: On DNV GL payroll with contracted time limitation.

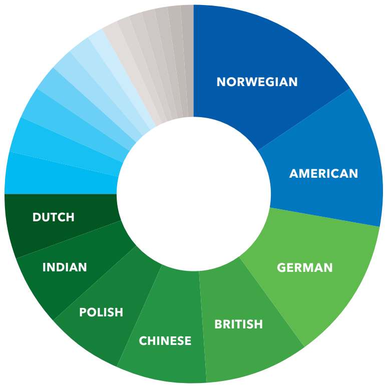
Temporary staff: E.g. summer temps and interns.

External business support: Hired from other companies to do work for DNV GL under their own management system.

Supplier: External service or product supplier. Registered in order to be granted certain access.

Subcontractor: Hired from other companies to do work on behalf of DNV GL under DNV GL management system.

FIGURE 04 **EMPLOYEES BY NATIONALITY**



Norwegian	1 652
American	1 288
German	1 279
British	955
Chinese	845
Polish	683
Indian	622
Dutch	535
Italian	393
South Korean	325
Spanish	315
Brazilian	258
Danish	221
Singaporean	190
French	156
Japanese	133
Swedish	132
Malaysian	123
Greek	123
Australian	118
Canadian	114
Mexican	101

Nationalities > 100 shown in table
Nationalities > 500 shown in pie chart

In total there were 116 nationalities among the permanent and time-limited employees at the end of 2019 (128 for all staff categories).

Employee turnover

TABLE 04 **EMPLOYEE TURNOVER AND NEW EMPLOYEE HIRES** BY AGE, GENDER AND REGION

AGE

Employee turnover	<31	31–40	41–50	51–60	>60	Total
Total number	110	412	276	165	78	1 041
Rate*	13%	11%	7%	6%	9%	8.8%
Opening count 2019	857	3 603	3 720	2 764	902	11 846

New employee hires	<31	31–40	41–50	51–60	>60	Total
Total number	367	336	125	57	8	893
Hires	41%	38%	14%	6%	1%	

GENDER

Employee turnover	Female	Male	Total
Total number	339	702	1041
Rate*	9%	9%	9%
Opening count 2019	3 739	8 107	11 846

New employee hires	Female	Male	Total
Total number	326	567	893
Hires	37%	63%	

GLOBAL SHARED SERVICES **REGIONS**

Employee turnover	Nordics	Central Europe	West, South and East Europe	Great Britain	North America	South America	North Asia	South Asia	India, Middle East and Africa	Total
Total number	193	97	229	91	215	32	42	76	66	1 041
Rate*	7%	7%	10%	9%	13%	13%	3%	12%	9%	9%
Opening count 2019	2 576	1 374	2 386	966	1 658	251	1 221	646	768	11 846

New employee hires	Nordics	Central Europe	West, South and East Europe	Great Britain	North America	South America	North Asia	South Asia	India, Middle East and Africa	Total
Total number	118	48	221	97	210	28	53	64	54	893
Hires (% of total hired)	13%	5%	25%	11%	24%	3%	6%	7%	6%	

Only permanent employees are included, as the other employment categories by contract are intended to join/leave. Turnover is based on number of employees leaving the company in the year divided by the opening count (1 January).

* Turnover as a % of total employees

Employee training and development

TABLE 05 **AVERAGE HOURS OF TRAINING* PER EMPLOYEE** BY GENDER AND EMPLOYEE GRADE

Employee grade	HOURS / EMPLOYEE Female	HOURS / EMPLOYEE Male
2	11.8	5.3
3	5.8	14.7
4	10.3	8.5
5	13.0	16.1
6	19.6	22.3
7	17.5	16.3
8	15.2	16.7
9	15.0	19.8
10	12.5	18.2
11	11.7	15.4
12	9.8	14.2
13	7.3	9.0
14	2.8	4.9
15	5.1	5.6
Total	**15.1**	**17.2**

***Basis of reporting employee training:**

Internal training only is included. External training is not consistently tracked. 7.5 hours per day is used. Permanent and time-limited employees only are included. Subcontractors and temporary staff are excluded as their inclusion is not relevant for internal competence development activities.

TABLE 06 **PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS** BY GENDER AND EMPLOYEE CATEGORY

		Rated performance	Unrated performance
Female	Permanent employee	99.3%	0.7%
	Time-limited employee	95.6%	4.4%
Male	Permanent employee	99.7%	0.3%
	Time-limited employee	98.8%	1.2%
Total, male and female		99.5%	0.5%

TABLE 07 **EMPLOYEE EDUCATION LEVEL IN OUR TEN BIGGEST COUNTRIES AND GLOBALLY** PERMANENT EMPLOYEES

Country	Basic education	Professional / Technical (0-3 years)	College (two-years)	Bachelor degree	Master degree	Doctorate
Norway	106	37	61	368	1 268	187
United States	179	8	65	638	445	85
Germany	82	221	16	157	752	48
China	11	3	43	462	263	18
United Kingdom	29	17	22	209	254	99
Poland	28	7	1	130	449	8
The Netherlands	33	32	11	181	179	31
Singapore	40	7	4	154	108	20
Italy	81	5	21	101	92	21
India	9	2	1	172	124	4
Global workforce	771	390	318	3 886	4 997	621

Diversity and equal opportunity

TABLE 08 **GENDER AND AGE PROFILE OF EMPLOYEES** BY EMPLOYEE GRADE

	GENDER			AGE GROUPS					TOTAL
Grade	Female	Male	% female	< 31	31-40	41-50	51-60	> 60	
2	8	5	62%	2	3	2	5	1	13
3	48	19	72%	20	16	13	15	3	67
4	218	72	75%	70	102	74	28	16	290
5	569	245	70%	259	262	176	95	22	814
6	776	619	56%	501	470	232	156	36	1 395
7	659	802	45%	252	690	318	153	48	1 461
8	555	1 298	30%	89	978	462	263	61	1 853
9	445	1 620	22%	9	734	811	425	86	2 065
10	343	1 459	19%		282	843	514	163	1 802
11	152	958	14%		52	441	477	140	1 110
12	86	519	14%		5	171	329	100	605
13	22	187	11%			50	114	45	209
14	10	92	10%			13	56	33	102
15	5	41	11%			2	23	21	46
Grand total	3 896	7 936	33%	1 202	3 594	3 608	2 653	775	11 832
				10%	30%	30%	22%	7%	

TABLE 09 **BOARD OF DIRECTORS** BY AGE, GENDER AND NATIONALITY

	GENDER		AGE	
Nationality	Female	Male	< 50	> 50
Danish	10%			10%
British		10%		10%
German		10%		10%
Norwegian	30%	40%	20%	50%
Grand total	40%	60%	20%	80%

ETHICS AND COMPLIANCE

Upholding our reputation for integrity

Why it matters

As a business based on knowledge and technical expertise, trust is an essential part of attracting and retaining customers. Building trust in our services, our skills and our behaviour everywhere we operate is essential and is reflected in DNV GL's values. Trust can only be achieved when we consistently maintain high standards of business and personal conduct and strict adherence to our Code of Conduct which is built on DNV GL's values supports this.

Our Code of Conduct provides the framework for what we consider ethical, responsible and sustainable conduct. Along with our values, it provides the foundation for our business activities. It supports our vision and our business ambitions, and applies to everyone involved in DNV GL's business.

Progress in 2019

In 2019, we focused on awareness of export control law, an area of increasing importance in a world with many volatile political environments. We also continued to implement measures on data privacy aligning our approach with relevant stakeholders. Our approach is not to simply impose a set of rules, but to deliver our compliance programme in a way that raises awareness by explaining the background and practical implications of compliance.

Training

Managing supply chain risks continues to be a global trend. In response, one of our focus areas in 2019 was training suppliers – including subcontractors, agents and freelancers – on risks related to ethical conduct, anti-corruption, antitrust, personal data protection, reporting of misconduct, export control and sanctions, and impartiality. The web-based training includes interactive exercises and requires suppliers to confirm they understand and commit to comply with the expectations set out in our Supplier Code of Conduct.

The training was rolled out in 2019 by business areas and Global Shared Services, with each applying a risk-based approach for suppliers in countries with a Transparency International Corruption Perception Index score below 60. The training includes a Supplier Declaration for those who have not signed it before. Where no access to the e-learning platform was possible, web-files were made available. We will continue to roll out the training in 2020 and beyond.

With the aim of supporting employees in their daily work, we continue to introduce training and relevant guidelines on a range of topics identified through internal audit findings, potential compliance issues and discussions in workshops.

In 2019, a mandatory e-learning for all employees was rolled out, designed to create further awareness on reporting misconduct.

So far, 90% of our employees have completed the training and we are following up on completions. We also continued to offer our interactive web-based team training for ten high-risk countries (see page 76).

Another area of training for 2019 was export control and sanctions compliance. We continued to promote our e-learning course on export control laws and sanctions, which was developed in 2018 for a specific group of employees in operations handling projects related to export control law.

Export control laws and sanctions

We completed a number of initiatives to define export control risks and build awareness. Group Compliance asked all business areas to perform global risk assessments to evaluate export control risks relating to their services. We also reviewed our existing processes and risk workshops have been completed in Norway, France, Germany and the US.

Following the workshops, local export control manuals were published in Germany and Norway during 2019, and manuals were prepared for the US and France for release in 2020. The manuals support compliance with all aspects of local export control law and provide proof of proper export control processes for local authorities. Each document reflects the specific requirements in that country, including clear instructions, roles and responsibilities, a process for evaluating whether an export license is necessary, and administrative requirements, such as record keeping, monitoring and handling non-compliance situations.

To ensure constant monitoring of sanctions, our business areas' customer relationship management tools automatically check sanctions and blacklisting of potential business partners. Group Compliance continues to raise awareness on the importance of automated sanction checks with our business areas and encourages them to ensure complete implementation.

Compliance

We continued the compliance trend of previous years in 2019, with no critical concerns leading to legal actions or disclosure to authorities. Also, no legal actions were pending or completed during the year regarding anticompetitive behaviour or antitrust and monopoly legislation. There have not been any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations relating to environmental, social or economic issues. In a few cases, we have taken disciplinary action at the employee level.

Anti-corruption

In the US, we acted to improve our local compliance programme in line with new guidance from the US Department of Justice on corporate compliance programmes. We established a network to connect our employees responsible for the US compliance programme, which also includes export control law. In addition, we ran a compliance workshop. Within our US operations, the Compliance Liaison Members will be updated on a quarterly basis.

High-risk countries

As part of our compliance process, we have identified ten countries with a high-risk of corruption and fraud for the period 2018–2020. These were the focus of targeted actions in 2019. Our internal audit function completed compliance reviews in several of these countries using the existing fraud and corruption questionnaire. The results showed that knowledge, awareness and commitment to DNV GL's compliance programme is at an adequate level. Risks identified through the reviews will be the focus of further action in 2020 and include those related to subcontractors, agents, travel expenses and facilitation payments. We also plan to complete additional compliance reviews in other high-risk countries in 2020.

In addition, we continued to offer our interactive team-training on anti-corruption and fraud. The training includes group sessions where employees describe typical corruption scenarios and collectively develop actions for avoiding and handling these scenarios. By year-end, 96% of employees in the high-risk countries for 2018–2020 had been trained.

Looking ahead

Awareness

The Group Compliance function's aim is to maintain high levels of awareness on all topics in the compliance programme. In line with the wider DNV GL digitalization strategy, we will use new digital tools to develop awareness on compliance topics.

In 2020, we will focus on personal data protection and ensuring alignment with other initiatives, such as IT Security. We will also work with our Group human resources function to align with other employee initiatives. Based on a risk evaluation in late 2019 and early 2020, we will use communication, training and monitoring to ensure potential compliance risks regarding data protection are handled in line with GDPR.

Status check

To measure the status of awareness on the Code of Conduct within DNV GL, we plan to conduct a survey at the end of 2020.

Export control and sanctions

We will work at a country level to increase awareness of export control and sanctions requirements during 2020. We will also develop processes to strengthen export control and sanctions compliance across the business, monitor implementation and offer additional trainings, focusing on topics identified through business requests.

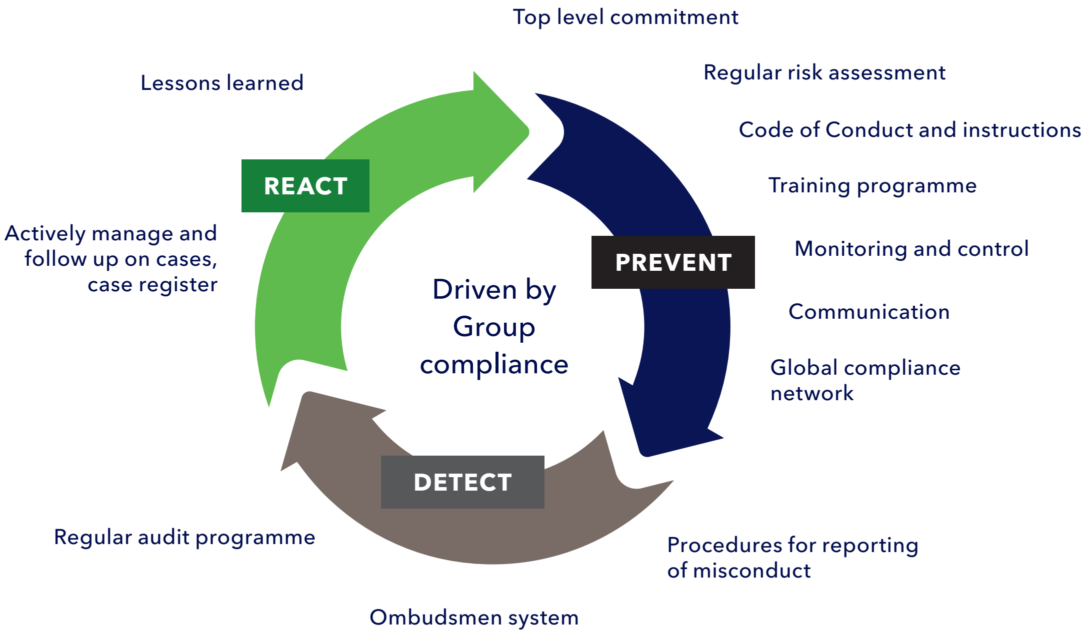
Approach

Code of Conduct

The DNV GL Code of Conduct outlines our requirements and expectations for ethical conduct. It clearly expresses what is expected from DNV GL as a business and from every individual working for, or on behalf of, DNV GL. The Code of Conduct can be downloaded *here*.

The Code sets out high-level principles in two main areas: Firstly, the conduct of our business operations overall and, secondly, 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. Separately, instructions and guidelines for employees are in place for all issues covered in the Code of Conduct.

FIGURE 05 COMPLIANCE PROGRAMME ACCORDING TO ISO 19600



Zero tolerance

We do not tolerate any violation of applicable laws, including those on anti-corruption, privacy and export control, nor of our Code of Conduct or internal instructions. Violations can result in disciplinary procedures, including termination of employment or contract, as well as potential legal proceedings.

Compliance programme

As a global company operating in over 100 countries and with activities in a range of sectors, we work to multiple sets of local regulations and practices. This results in a diverse landscape of compliance risks. Our compliance programme protects against these and our business areas review risks annually as part of our risk reporting process. We also develop a common understanding of our compliance requirements and integrity performance through tailor-made awareness initiatives.

Our compliance programme is based on the Code of Conduct and is owned by the Board of Directors. All focus areas – anti-corruption, antitrust, export control law and sanctions, and personal data protection – are based on the ISO standard 19600 for compliance management. This creates an integrated and tailor-made approach. Lessons learned are used to build competence and resilience, enabling our employees to understand the structure and requirements of the compliance management system and meet customer requirements.

Training

Training and raising awareness are at the core of our approach. Awareness is key to reducing compliance risks and we continually invest in new and updated trainings on a number of topics related to the compliance programme (see page 76).

Governance

Effective compliance is based on the global governance of our compliance programme and clear reporting lines. The compliance programme is governed and managed at Group level. It involves close cooperation between our Group Compliance unit, all business areas and Global Shared Services, within a global compliance network. The global compliance network works to communicate the compliance programme and raise awareness of compliance issues in the countries we operate in.

The CEO and Board Audit Committee receive quarterly updates and the latest legal and political developments through presentations and training. The Board of Directors and Control Committee receive annual updates.

Anti-corruption

We manage corruption and fraud risks through our Group risk management process and the Group compliance officer is a member of DNV GL's Group risk forum. All business areas conduct an annual risk assessment using the DNV GL risk management tool, which includes identified and active fraud and corruption risks. In addition, we review risks reported by high-risk countries in a separate risk reporting process.

The risks are evaluated and discussed annually in the Group risk forum. Actions to mitigate identified risks are developed based on these discussions.

Antitrust

Commercial policy and pricing are set independently and never agreed with competitors or other non-related parties. It is a fundamental corporate principle of DNV GL Group AS and its subsidiaries to compete vigorously and fairly, in full compliance with all applicable antitrust and competition laws. Any obstruction of free and open competition is strictly prohibited.

For employees, antitrust is part of our mandatory training programme and our antitrust instructions are supplemented by a guideline on the 'dos and don'ts for competition law'.

Supply chain

We expect our suppliers and subcontractors to uphold the same standard of business ethics as we do and we have a supplier Code of Conduct outlining our requirements. A supplier training is available, emphasizing the ethical and sustainability standards that extend to our relationships with suppliers (see above).

We continue to advise on, and actively monitor, implementation of our Group-wide instruction on subcontractors and intermediaries, as well as conducting risk-based due diligence checks in all business areas. The sustainable procurement section (page 86) provides more details on how we work with suppliers.

Reporting misconduct

Our employees and customers are encouraged to report actual or suspected misconduct. This could include concerns related to bribery, fraud, labour grievances, discrimination or other ethical issues concerning colleagues, suppliers, subcontractors or agents working on behalf of DNV GL. A new mandatory e-learning on reporting of misconduct for our employees was made available in early 2019.

Channels for raising concerns are set out in our instructions on reporting misconduct, the Code of Conduct, the DNV GL intranet and on our website.

Performance

TABLE 10 REPORTED NEW POTENTIAL COMPLIANCE CASES

Case type	2019	2018	2017
Labour (suspicion of harassment, discrimination or breach of other labour-related instructions)	10	5	9
Financial (suspicion of financial misconduct)	6	9	11
Data Protection (suspicion of breach of data protection laws)	20	17	5
Ethical Behaviour (suspicion of unfair treatment)	16	15	25
Other (all other suspicions of breach of law or internal instructions)	15	12	12
Total	67	58	62

Benchmarking our compliance reporting

In 2019, a benchmark of the number of DNV GL's reported compliance cases was completed, covering:

- Labour cases (suspicion of harassment, discrimination or breach of other labour-related requirements)
- Financial (suspicion of financial misconduct)
- Data protection (suspicion of breach of data protection laws)
- Ethical behaviour (suspicion of unfair treatment)
- Legal/internal (suspicion of breaches of laws or internal instructions).

The benchmark reviewed sustainability reports of comparable organizations and data from NAVEX, a provider of comprehensive ethics and compliance software.

The results showed that while DNV GL has seen an increase in reporting rates since 2014 (2014: 32 cases, 2019: 67 cases), this is in line with comparable companies and global trends. The increases can be attributed to increasingly diverse reporting channels, maturing compliance programmes leading to enhanced employee awareness, and general awareness due to media coverage.

In summary, this shows that companies, including DNV GL, need to be prepared to investigate and manage higher numbers of reports of potential compliance issues. We view the increase in case numbers as an opportunity to address the issues and take preventive actions.

ECONOMIC CONTRIBUTION

Maintaining sustainable operations

Why it matters

For DNV GL, ensuring robust financial performance is essential to maintaining our independence as an organization. A solid financial base enables us to deliver our strategic ambitions, develop our people, building their skills and competence, and invest in research and innovation, so we remain relevant to our customers. Economic performance is part of how we view sustainability – delivering long-term value in financial, environmental, social and ethical terms.

By delivering a profit, we are able to generate sustainable benefits to society; from creating direct and indirect employment, to paying taxes where we operate, which contributes to local communities. Ultimately, being a profitable company ensures we maintain sustainable operations, invest in our future and deliver on our purpose.

Progress in 2019

Revenue for the year was NOK 21,551 million with an operating profit of NOK 2,334 million. At the end of 2019, DNV GL Group had a total equity of NOK 15,419 million. We employed 11,832 employees paying a total of NOK 11,716 million in employee wages and benefits. Total tax expenses were NOK 610 million for the year.

We continue to commit 5% of our annual revenues to research and innovation programmes, which helps us to fulfil our purpose to safeguard life, property and the environment.

By being a profitable company, we ensure that we maintain sustainable operations, invest in our future and deliver on our purpose to safeguard life, property and the environment.

5% of our annual revenues are dedicated to research and innovation programmes

Looking ahead

Towards the end of 2019, we started work on developing a new five-year strategy that will support robust financial and sustainable performance from 2021 to 2025. Our strategy project will run into 2020 and the strategy will be completed and launched at the end of the year.

Approach

We are solely owned by Stiftelsen Det Norske Veritas, an independent Norwegian foundation with the long-lasting purpose to safeguard life, property and the environment. This purpose is realized mainly through the 100% ownership of DNV GL Group AS.

Our owner requires DNV GL to run profitable operations so that society at large benefits from the employment, taxes and other economic activity we create. As a result, many stakeholders, including employees, suppliers and subcontractors, and customers, rely on DNV GL to effectively manage our economic performance.

Sustainable and profitable growth is a key criterion for our success. All business areas are expected to meet or exceed their annual revenue targets, but growth must not take place at the expense of profitability, quality or the integrity of our operations.

Tax policy

DNV GL's approach to managing our tax affairs are as follows:

- DNV GL is dependent upon society's trust
- DNV GL shall not participate in tax planning or financial transactions which can damage this trust
- DNV GL is to comply with the letter and spirit of tax law in all countries in which we operate
- All group company transactions are to be made on an arm's length basis as set out under the OECD Guidelines
- Tax cost and risk assessments are to be integrated in all core business considerations, both strategic and in day-to-day operations
- DNV GL is committed to being fully compliant and will provide sufficient information and economic context when reporting to and negotiating with tax authorities.

More information on our tax liabilities in 2019 is available in the financial statements on page 106.

Performance

The economic value we generated and distributed globally in 2019 was:	Nordics	Central Europe	West, South and East Europe	Great Britain	North America	South America	North Asia	South Asia	India, Middle East and Africa
Revenues [1]	5 881	1 457	3 267	1 461	3 909	321	2 786	1 121	1 397
Operating costs [2]	1 849	98	1 077	417	1 611	164	857	378	610
Employee wages and benefits	3 240	1 403	1 758	906	1 926	170	1 038	598	678
Payments to providers of capital [3]	8	48	2	2	0	-1	0	1	8
Payments to governments	108	3	109	15	13	4	282	30	50
Community investments	9	0	0	0	0	0	0	0	0
Economic value retained	666	-94	322	120	360	-16	609	113	51

1 External revenue and interest income
2 Operating costs excluding employee wages and benefits, amortizations and impairment
3 External interest expenses

ENVIRONMENT AND CLIMATE

Reducing our climate impact

Why it matters

In 2019, more than ever, climate change and the need for rapid action to tackle it has been a high-profile issue. In the coming years, climate action needs to be a priority for all – for governments, for businesses and for individuals alike.

At DNV GL, our aim is to deliver safer, smarter and greener performance in everything we do. We achieve this in two ways – by reducing our own environmental impact and by providing services to our customers that help them do the same.

We offset our greenhouse gas emissions from offices, laboratories and travel in order to be carbon neutral, while continuing to focus on reducing our footprint across the business.

Progress in 2019

In line with the commitment set out in our Group strategy 2015–2020, we became carbon neutral in 2018. This continued in 2019 with verified carbon offsets from the Isangi REDD+ project in the Democratic Republic of Congo, the Rainforest Community project in Peru, and projects providing efficient cooking stoves in Ghana. The offsets were provided by South Pole, a provider of carbon credits.

During the year we continued with initiatives to reduce greenhouse gas (GHG) emissions from our three main emission sources – employee air travel, company cars and our laboratories and offices. These initiatives include restrictions on non-customer-related air travel and managing our company car fleet to reduce emissions.

We also developed and communicated a new Energy Efficiency Guideline to encourage energy and emissions reductions in our nearly 300 offices. Our Green Building Guideline was also introduced in the last quarter of 2019, which outlines our goal of seeking green building certification and reducing floor space in our offices (see also page 86).

GHG emissions

In 2019, we emitted a total of 78,635 tonnes of CO_2 equivalent (tCO_2e) emissions, 20% up from 2018 (65,496 tCO_2e). 43% of our emissions are from business air travel, 51% from offices and labs, and 6% from business car travel.

The key reason for the rise in our GHG emissions is increased testing activity at our KEMA Laboratories. Our laboratories use Sulfur hexafluoride (SF6), a powerful greenhouse gas, to test the reliability of high-voltage electrical equipment. In 2019, the KEMA laboaratory in Chalfont emitted 48 kg of SF_6 gas and in Arnhem the laboratory emitted 970 kg. In total we emitted 1,018 kg of SF_6 (2018: 147.8 kg), which is equivalent to 23,210.4 tCO_2 (2018: 3,400 tCO2e).

Energy use

In 2019, we used 94.7 gigawatt hours (GWh) of energy in our operations, down 13% from 2018 (109 GWh)[1]. 25% of this energy was from certified renewable sources.

Incidents and compliance

We had no environmental incidents in 2019 and no non-compliances or fines related to environmental regulations.

100% **of our emissions** in 2019 were offset through verified schemes.

78.6 **thousand tonnes of CO_2e** emitted from offices, lab operations, air and car travel.

1 The reported energy use in 2018 was adjusted to replace estimations with actual numbers.

Looking ahead

During 2020, we will work on programmes that further reduce GHG emissions from our main sources–travel by air and car, and emissions from offices and laboratories (see the sustainable procurement section on page 86 for more details).

In January 2020, we completed the sale of our KEMA Laboratories, that include the Arnhem and Chalfont laboratories. This will positively impact our total environmental footprint.

Energy efficiency

We will continue to review the impact of the European Energy Efficiency Directive on our operations. Under the Directive, large companies are required to independently audit their energy consumption every four years to help identify ways to reduce it. Our review to date has shown the need for more quantitative energy targets and additional energy audits in our operating countries.

A new environmental strategy will be launched in 2020. The strategy consists of five key initiatives:

- Reduce our GHG emissions by 25% per employee and by revenue by 2025, using 2018 as a baseline year
- Initiate a project to reduce plastic consumption and plastic waste
- Encourage employees to travel less, instead making use of digital technology to interact with external and internal stakeholders
- Engage our employees on environmental topics
- Invest in natural carbon capture and storage opportunities as a complement to offsetting.

Approach

Our purpose and vision promote environmental protection. Our aim is to continuously reduce the environmental and climate impact of our own operations and those of our customers (see also sustainable innovations on page 48).

As signatories to the UN Global Compact, we take a precautionary approach to managing our environmental and climate impacts. Our Code of Conduct also commits us to reduce the environmental impact of our operations, procurement, and investment and property management.

Environmental management system

Since 2008, DNV GL Group has been independently certified to the ISO 14001 environmental management system standard. Periodic audits take place to maintain our certification, which is key to identifying and reducing our environmental impacts on an ongoing basis. It also contributes to our reputation as a service provider that enables the safe and sustainable performance of our customers.

Environmental management reporting system and tool

We measure and monitor our key environmental aspects and any environmental incidents using Synergi Life software, which was developed in-house. We measure GHG emissions from air and rail travel with reporting tools from our travel agencies.

Green supply chains

As part of our approach to sustainable procurement (page 86), all suppliers are required to adhere to our Supplier Code of Conduct, including our environmental policies and standards.

Climate and environmental governance

Our health, safety and environment (HSE) policy sets out our common approach, processes and systems for managing environmental performance throughout the Group. The Group HSE function is responsible for governing and controlling environmental performance across the Group.

How we calculate our GHG emissions

We calculate our GHG emissions in line with the GHG Protocol. We use the financial and operational control approach, with the operational control criteria defining the boundary for consolidating the greenhouse gas emissions. Location-based emissions are reported globally.

We use Defra CO_2 emission factors for calculating air travel, chemical consumption and fossil fuel use.

Indirect emissions from electricity and district heating have been calculated using country-specific grid average emission factors published in the IEA 2019 revision.

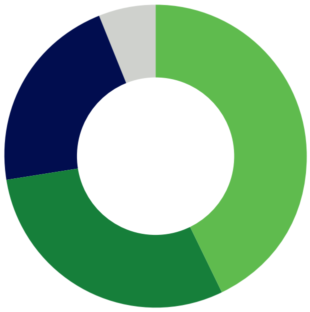
We report on SF_6 emissions from the KEMA laboratories. We do not report the greenhouse gases CH_4, N_2O, HFCs, PFCs or NF_3. We do not report on NO_X and SO_X emissions. We are not aware of having any emissions of ozone depleting substances.

Performance

ENERGY CONSUMPTION (GWH)	2019	2018	2017
Energy consumption (GWh)	94.7	109	103.4

GREENHOUSE GAS EMISSIONS (tCO_2e)	2019	2018	2017
Scope 1: Direct GHG emissions from operations	25.5	5.6	9.9
Scope 2: Indirect GHG emissions from consumed energy	14.7	18	15.5
Scope 3: Direct GHG emissions from air, car and rail travel	38.4	41.9	43.7
Total GHG emissions	78.6	65.5	69.1

GHG EMISSIONS (tCO_2e)



Air travel	33.8
SF_6	23.2
Buildings	17.0
Car travel	4.6

Basis of reporting GHG emissions

Scope 1 and 2 emissions come from DNV GL energy consumption and burning of liquid fuel and gas within our offices and operations and emissions of SF6 gas.

Scope 3 emissions come from business air, rail and car travel. Scope 1, 2 and 3 GHG emissions per person from DNV GL operations were 6.7 tCO2e per employee (2018: 5.4).

- Air travel resulted in 33,850 tCO_2e in 2019 (2018: 36,307) and is based on data from travel agencies covering 97.5% permanent and temporary employees (2018: 97%). Emissions are estimated for the remaining 2.5% of employees.

- Car travel resulted in 4,575 tCO_2e in 2019 (2018: 5,550). Numbers for private cars are taken from our financial system.

SUSTAINABLE PROCUREMENT

Reducing our footprint through purchasing

Why it matters

DNV GL is a global organization with operations in more than 100 countries. To deliver our products and services effectively, we are supported by a global network of subcontractors and suppliers. It is important to us to build a sustainable supply chain.

We use our procurement process to achieve energy and greenhouse gas reductions.

Progress in 2019

In 2019, we created an Energy Efficiency Guideline that outlines how employees can help to save valuable resources, reduce greenhouse gas emissions and save money at home and in the office. The advice includes suggestions on energy and water saving in our daily operations, reducing travel, increasing video conferencing and encouraging recycling in all offices. The launch of the guideline sparked employee engagement and discussions, which show that DNV GL employees care about the environment and are eager to do more.

Energy use and greenhouse gas emissions

We use our procurement process to focus on energy and greenhouse gas reductions. This includes more fuel-efficient company cars and renting environmentally-sound offices.

Company cars
Over 2018 and 2019, we have changed how we manage our global fleet of approximately 1,500 company cars to make the procurement and administration process more efficient. A global fleet management team was set up and a fixed maximum CO_2 emission limit was established (160 g/km for passenger cars[1]). We have also added electric and hybrid cars to the list of company cars.

Green offices
Our goal is for all offices with more than 100 employees to have a gold-rated, or equivalent, green building certification by the end of 2024. This means our minimum requirement is the second highest rating by any of the green building standards. Currently, 27% of our office space (measured by floor area) is in green-certified buildings (BREEAM excellent or LEED gold standard), including offices in Oslo, Houston, London, Singapore, Shanghai and Arnhem, the Netherlands.

Green buildings are estimated to consume 30 to 50% less energy, use 30 to 40% less water, emit 30 to 40% less CO_2 and produce up to 70% less solid waste than standard offices.

Improving procurement processes

In 2019, we continued working on our ongoing sustainable procurement projects. This included evaluating the best options for procurement software that will provide standardized and more automated purchasing and payment, as well as supporting our internal and external compliance requirements. We also completed a procurement guide outlining our end-to-end procurement process, including standard templates.

All relevant governance documents for procurement were reviewed and updated in line with business needs and changes. Procurement staff who joined DNV GL since February 2018 attended a training course on procurement governance in Oslo in late 2019.

Assessing suppliers

DNV GL's internal requirements state that all supplier contract shall include our Supplier Code of Conduct. We continued our programme of auditing suppliers against the code. 13 indirect suppliers were audited, who are suppliers that support our business activities but are not involved in delivering products and services to customers. The audits showed no significant infringements.

The risk assessment tool for indirect suppliers developed over the last two years will be used to screen key suppliers' risk level against the requirements of our Supplier Code of Conduct. The risk assessment tool was launched in 2019.

Human rights

Our Supplier Code of Conduct outlines our expectation that suppliers are not complicit in human rights abuses.

We have not identified any human rights breaches in our supplier audits in 2019 (see above). We will continue to assess suppliers through our supplier audit programme.

1 This is based on the latest EU standard WLTP (Worldwide harmonized Light vehicle Test Procedure) for car emissions, which is an update of NEDC (New European Driving Cycle).

Looking ahead

We will continue to embed our global procurement programme in 2020. It has established common processes, tools and systems for the whole company with the aim of improving the efficiency, quality and digitalization of procurement. The key objectives are to:

- Set up a standardized procurement process and templates across DNV GL.
- Pilot and roll out a purchase-to-pay software system and contract management tool that combines supplier and contract management.
- Improve supplier assessment, monitoring and management to ensure compliance with DNV GL governance documents.

Assessing suppliers

Our audit programme for indirect suppliers will continue in 2020, with a minimum of 10 supplier audits planned. We will select the suppliers to be audited based on how critical they are to our business.

Improving office efficiency

To deliver modern, practical and fit-for-purpose offices, we rely on our real estate guidelines and a recently developed standard for effective office spaces. The standard aims to improve workplace performance, office efficiency and reduce energy consumption. Our aim is to increase visibility and connectivity between teams and managers in order to enhance teamwork and knowledge sharing.

Part of our office standard involves reducing vacant office space. Analysis of our future office needs indicates that we can reduce office space by 30% by 2024. The plan will lead to a reduction in energy use and related CO_2 emissions. For office leases signed in 2019, we have successfully reduced floor space per employee from an average of 25 m^2 in 2017 to 16 m^2 today.

Approach

Our suppliers need to adhere to our Supplier Code of Conduct and to consider our sustainability goals in their own operations. We work closely with our suppliers and monitor their progress towards more sustainable operations through our global procurement programme, which includes systematic and standardized procurement policies and processes across the company.

Global governance, local purchasing

Although we procure most of our products and services locally, our procurement strategy, policy and processes are managed centrally by our Global Shared Services (GSS) unit, which also manages global procurement projects.

Our suppliers are divided into two groups: **Direct suppliers** contribute to our service to customers, for example, subcontractors providing technical expertise or working on customer projects. **Indirect suppliers** provide goods and services that support our overall business activities but are unrelated to our service to customers. Examples include, facilities management, travel, ICT hardware and software, financial services, insurance, and office supplies.

Individual business areas are responsible for direct procurement, while indirect procurement is managed by GSS. Our largest supplier category is subcontractors, which makes up 24% of the total procurement spend. The other large supplier categories are office and real estate expenses, ICT, travel and insurance.

Setting high standards

Our expectations for suppliers are outlined in our Supplier Code of Conduct. It is aligned with the UN Global Compact's ten principles on human rights, labour standards, environmental performance and anti-corruption.

All suppliers must accept our Supplier Code of Conduct and must sign the code or accept it as a mandatory attachment to the contract.

Further guidelines that promote high standards and support sustainability are provided in our management system documents, such as instructions for contracting subcontractors and intermediaries, policy for real-estate management and real-estate leasing guidelines.

Risk management

Although our supplier portfolio is mostly service-related and has a low risk of non-compliance, all new indirect suppliers are screened for inherent sustainability risks before we complete the contracting process. We also carry out audits on selected suppliers.

To manage risk, and ensure cost savings and transparency, we are working to consolidate suppliers globally and select trustworthy suppliers whose values and service quality meet our requirements.

Competence development

We train new employees involved in procurement centrally every year. Training includes general procurement governance, management systems instructions and guidance related to procurement, and the Supplier Code of Conduct.

Our expectations for suppliers are outlined in our Supplier Code of Conduct. It is aligned with the UN Global Compact's ten principles on human rights, labour standards, environmental performance and anti-corruption.

PARTNERSHIPS

Partnership for sustainable development

At DNV GL, we firmly believe that we can achieve more in partnership with others than on our own. We collaborate with several organizations, contributing our expertise in technology and sustainability as well as providing funding to reach shared goals.

Why it matters

Our purpose and vision establish an ambition for sustainability both in how we operate and how we make a difference. Our vision, in particular, commits us to tackling global transformations. Yet, many of today's sustainability challenges cannot be tackled in isolation. They are global in nature, and delivering solutions with global reach can be best achieved by combining knowledge, ideas and effort. As a knowledge-based organization, we constantly need to learn, be challenged and inspired by other organizations, and in turn to challenge and inspire them.

We work widely on projects of shared interest with customers, suppliers and competitors in industry associations, and on initiatives at national, regional and global levels. We strive to bring our primary skillset – technical insight and market foresight – into our collaborations to help create sustainable business solutions.

Industry partnerships

DNV GL Group

- United Nations Global Compact (UNGC)
- World Business Council for Sustainable Development (WBCSD)
- Confederation of Norwegian Enterprise (NHO)

Maritime

- International Association of Classification Societies (IACS)
- Entity for the Quality Assessment and Certification of Organisations Recognised by the European Union (QACE)
- International Council on Combustion Engines (CIMAC)

Oil & Gas

- Norwegian Oil and Gas Association (NOROG)
- International Gas Union (IGU)
- Oil and Gas UK

Energy

- International Council on Large Electric Systems (CIGRE)
- EURELECTRIC
- WindEurope

Business Assurance

- Independent International Organisation for Certification (IIOC)
- International Association of Trusted Blockchain Applications (INATBA)

Digital Solutions

- Institute of Electrical and Electronics Engineers (IEEE)
- Pipeline Simulation Interest Group (PSIG)
- American Gas Association (AGA)

UN Global Compact

DNV GL became a signatory to the UN Global Compact in 2003. We are committed to embedding the ten principles on human rights, labour, environment and anti-corruption in our corporate strategy, management system and day-to-day operations.

Our annual report acts as our Communication on Progress, outlining our progress against the principles of the Global Compact. In 2019, we continued our long-standing collaboration with the UN Global Compact, working together on initiatives to find solutions to global challenges and opportunities to achieve the UN Sustainable Development Goals (SDGs).

Sustainable Ocean Business

DNV GL is a founding member of the UN Global Compact Action Platform for Sustainable Ocean Business. In 2019, we managed and edited the UNGC report Global Goals, Ocean Opportunities.

The report gives an overview of how ocean industries contribute towards the SDGs. It also presents key opportunities for scaling up existing efforts and commitments in this critical area, focusing on the links between a healthy, productive and well-governed ocean.

World Business Council for Sustainable Development

DNV GL has been an active member of the World Business Council for Sustainable Development (WBCSD) since 1999. Our Group President and CEO is a member of its Executive Committee. We use our membership of the WBCSD as a platform to advocate for more sustainable and responsible business practices globally.

Vision 2050

DNV GL is part of the Vision 2050 project, which is working to identify a pathway to a world in which nine billion people can live well and within the planet's resources by mid-century. The project is tasked with reviewing significant social, economic and political shifts and providing business with the positive, opportunity-based, action agenda it needs to achieve the SDGs and further progress beyond these.

In November, DNV GL and Yara, the only two Norwegian Executive Committee members, hosted a group of CEOs to discuss how Norwegian businesses can contribute to achieving Vision 2050. The discussion centred on how systems transformation can help to deliver the Vision 2050 goal of nine billion people living within our planetary boundaries.

The Red Cross

DNV GL has partnered with the Red Cross since 2004 with the dual objective of strengthening its capacity to carry out humanitarian work and creating opportunities for our employees to volunteer on Red Cross projects. We support the partnership financially and with our skills. We make an annual financial contribution to the Norwegian Red Cross organizations, alongside ad hoc donations, and our employees provide technical, digital, safety and sustainability expertise to Red Cross projects that are related to our core business.

Helping the Red Cross achieve digital transformation

As part of our sponsorship of the Norwegian Red Cross, we are helping the Red Cross with their digital transformation and competency development, including providing input into a digitization roadmap for the Red Cross Strategy 2030. Digital transformation is one of seven transformations targeted through their 2030 strategy and has the aim of utilising data and digital technologies to strengthen the work of the Red Cross.

Through this process, we have worked closely with both the Norwegian Red Cross and the International Federation of Red Cross in Geneva. Staff from our Digital Technology Centre provided training in data management and data quality, and provided advice at various Red Cross events, including the Global Innovation Forum, Digital Transformation Workshop and the 33rd International Conference. A data specialist from DNV GL also joined a field trip to a community-based health workshop in Malawi in order to understand how digital transformation can be implemented at local level and provide advice as to how digital strategies could be implemented.

Donations and volunteering

Many of our employees volunteer as blood donors to help alleviate the national shortage in Norway. We invite the Red Cross blood donation bus to our headquarters at Høvik several times a year. In 2019, 179 bags of blood were filled. Employees also donated clothes for recycling and volunteered during fundraisers.


DNV·GL

PERFORMANCE

The Board of Directors' report provides a comprehensive review of DNV GL's strategy and performance for the year as well as the Board's outlook for the future.

The financial statements are prepared in accordance with the Norwegian Accounting Act and regulations on simplified IFRS.

The sustainability reporting is according to the GRI Standards Core option. KPMG has audited the financial reporting and provided limited assurance on the sustainability reporting.

Board of Directors' report 2019

The company recorded operating revenues of NOK 21,551 million in 2019 and strengthened its position with key customers and targeted segments. The Board sincerely thanks the management and employees for the hard work and commitment they have displayed throughout 2019.

Strategy

The Board's objective is to further develop DNV GL as a world leading assurance and risk management company.

A new corporate vision (a trusted voice to tackle global transformations) and new set of company values (we care, we dare, we share) were developed in 2019 and launched at the beginning of 2020. Many employees throughout DNV GL were involved in the process. The objective is to inspire and unite the company and give it a direction and ambition for the next decade, as well as to modernize and simplify the company values to ensure they resonate with employees today and in the future and contribute to achieving DNV GL's purpose and vision.

In the current strategy the ambition has been to direct DNV GL towards a digital, agile and efficient future. The strategy aims to leverage digital technologies to position DNV GL as a data smart company that can develop new revenue streams and market positions across all business areas.

DNV GL has conducted detailed analysis into understanding the energy transition. The transition will affect both DNV GL, its customers and society. Our research into the transition and technologies for the future shapes our thinking as we create our next strategy. Work on developing the 2025 strategy is well under way with a plan to have it approved by the end of the year.

The company is upholding its commitment to invest 5% of its annual revenues in research, development and innovation activities. More than half of these activities are dedicated to digitalization. DNV GL is actively pursuing joint innovation projects and partnerships with academia and business in areas such as artificial intelligence, machine learning and autonomous systems.

DNV GL will continue to develop its employees' skills and knowledge in order to stay at the forefront of technology and innovation and fulfil its purpose and vision.

Market

MARITIME. Over the past few years, the maritime industry has been asked to demonstrate its resilience and adaptability in the face of tectonic shifts in the market, technology and regulations that are driven by increased digitalization and the push towards decarbonization.

This rapid transformation is creating challenges which DNV GL is working to help address on many fronts, ranging from new cyber security rules and notations to research to aid the safe adaptation of environmental technology, and joint industry projects to enable the wider uptake of less carbon-intense fuels. Hence, the role of class as an independent technical advisor that takes a holistic view is more important than ever. In addition, many new initiatives in class operations and digital tools, such as digital certificates, remote surveys, Direct Access to Technical Experts, and smart survey booking, have enhanced the effectiveness of DNV GL's services to its customers.

In the shipping markets, almost every sector faced challenging conditions in 2019. Growth in seaborne trade was markedly lower than in 2018, falling to 1.7%. However, freight rates remained steady as fleet growth slowed, resulting in improved earnings across most ship segments. This strength did not translate into ship newbuilding activity, with orders falling far short of the 2018 totals.

In the newbuilding market, DNV GL captured the largest market share of all the classification societies, with 24% of orders measured in gross tonnes (GT). At the end of 2019, the DNV GL-classed fleet stood at 11,297 vessels and mobile offshore units, totalling 284 million GT – an increase of almost 1.5%. With 20% of the total world fleet measured by gross tonnage, DNV GL retained its position as the largest classification society.

> “ DNV GL will continue to develop its employees' skills and knowledge in order to stay at the forefront of technology and innovation and fulfil its purpose and vision.

For the third time in a row, DNV GL was named the top classification society by Lloyd's List. This influential publication noted DNV GL's "pure dominance in the general cargo segment and leadership in unitised vessels" as well as its global reach and many R&D projects.

OIL AND GAS. DNV GL – Oil & Gas had surpassed its growth targets by September 2019 as the industry displayed rising confidence in achieving acceptable margins.

Companies across the oil and gas value chain entered the year showing signs of greater resilience to volatile market conditions and of increased capital spending. DNV GL assisted customers on safety, efficiency and decarbonization efforts as the sector adapted to the energy transition.

The business area maintained its focus on innovation and competence building to create long-term value for oil and gas customers. For example, together with Nanyang Technological University in Singapore, DNV GL is supporting academic advances in additive manufacturing – the process of 3D printing – for the maritime, oil and gas and other industries through a four-year research collaboration agreement.

The Oil & Gas business area also improved its internal efficiency, through the continued roll-out of a new production system to create a common way of managing and delivering projects for customers and enhancing worldwide collaboration between DNV GL's experts. The further digitalization of services for delivery on Veracity, DNV GL's secure platform for digital innovation and industry collaboration, included a Deep Search add-on for the ultra-rapid retrieval and analysis of business-sensitive text and image data.

DNV GL separated the inspection services from the Oil & Gas business area and formed an Independent Business Unit (operational from 1 January 2020) in order to create a more effective service model for customers.

ENERGY. Advisory services relating to power and renewables experienced high demand in 2019 as climate concerns grew, and businesses and governments continue to seek solutions to help reduce carbon emissions. Globally, renewable energy will provide almost 80% of the world's electricity by 2050. This electrification will drive many changes for the energy industry. It will require investment in the expansion and reinforcement of power grids, extensive demand-response solutions to balance variable wind and solar power, increased electrification of manufacturing processes, including heating, and an increase in the production of batteries for electric vehicles alongside investments in new technology to store excess energy.

> DNV GL Group recorded operating revenue of NOK 21,551 million in 2019, NOK 1,912 million more than in 2018 and representing growth of 9.7%.

These developments boosted the need for expert support in decision-making in a complex energy market and meant that DNV GL's energy business improved, growing by 8%. Large new contracts were secured with leading energy industry players.

Certification services for renewables experienced growth in 2019, up 5% from 2018, which was combined with a consistent focus on cost-cutting measures, business process optimization and improved customer relationships. In 2019, DNV GL established a Renewables Certification office in the United States to meet the growing demand for certification services for the nascent offshore wind industry.

At the end of 2019, DNV GL sold the KEMA Laboratories to CESI, an Italian inspection and technical consultancy company. The transfer includes the sale of the KEMA brand and all the high-voltage and high-power testing and inspection activities in Europe. The sale of US assets was concluded early March 2020.

The divestment gives DNV GL a more focused global energy organization of 2,000 power and renewables experts which can be scaled faster in the years to come in order to meet rapidly changing market and technology demands as the electrification and decarbonizing of the world continues.

BUSINESS ASSURANCE. A significant part of DNV GL – Business Assurance´s revenue is generated by management system certification. The management systems market was extremely challenging in 2019 following a peak year in 2018, when many customers transitioned to new versions of ISO standards. For DNV GL, this contributed to an expected contraction in this area. Emphasis was put on efforts to streamline and create opportunities for growth in the future. Capitalizing on last year's full acquisition of Presafe, product certification showed solid growth. The continued focus on supply chain management paid off and the positive footprint here continues to grow.

The increasing demand for greater transparency and traceability throughout supply chains brought new market opportunities. There is a growing need to verify the identity and ecological footprint of products and assets and to bridge the physical and digital worlds. DNV GL is responding to this trend with new digital assurance offerings. Several projects were piloted with customers with positive results, mainly in the food & beverage and healthcare sectors. Enabled by blockchain technology and new digital business models, innovative solutions related to ecosystems and supply chains are ready to be launched in 2020.

DIGITAL SOLUTIONS. In 2019, DNV GL's Digital Solutions business area entered its second year of operation, continuing to build a position as a leading, global and trusted provider of software and platform services as well as data analytics. Digital Solutions experienced overall global growth of 14.7% in 2019, largely driven by sales of software licenses, software services and cyber security services. During the year, Digital Solutions focused on establishing new growth positions for DNV GL, particularly within cyber security and digital health. In addition, Digital Solutions continued to provide support to the other four DNV GL business areas, helping them to succeed in their own digital transformations.

Digital Solutions' primary market segments are aligned with the company's key markets; maritime, oil & gas, energy and healthcare.

Digital Solutions continues to invest on behalf of DNV GL in data management and platform services through its Digital Technology Centre and the Veracity industry platform. In mid-2019, Veracity revised its strategy, resulting in a prioritization of the maritime and renewables industries. Veracity currently has more than 185,000 activated users and 1.5 million subscriptions. In 2019, Digital Solutions also explored how its data quality advisory services can complement solutions offered on the Veracity data platform and thereby increasing the benefit to customers.

During the year, Digital Solutions continued to advance on its strategic ambition to move more of its on-premise software to a Software-as-a-service (SaaS) platform. There are clear signs of strong customer appreciation, indicated by a year-on-year doubling of revenue.

Digital Solutions is exploring digital opportunities in the health sector through a digital health incubator. This unit has established the Nordics as its key region of operation.

Financial performance

DNV GL Group recorded operating revenue of NOK 21,551 million in 2019, NOK 1,912 million more than in 2018 and representing growth of 9.7%. The sale of the KEMA Laboratories business in December generated a sales gain of NOK 141 million in 2019. The currency adjusted growth (6.3%) was primarily driven by regulatory requirements in the maritime industry and volume growth in the energy and oil & gas industries.

Business area Maritime recorded revenue of NOK 7,744 million in 2019, corresponding to growth of 15.5% compared to 2018. Oil & Gas reported revenue of NOK 4,839 million, representing growth of 8.6%. Energy achieved 15.9% revenue growth and revenue of NOK 4,196 million, including the sales gain from divestment of the KEMA Laboratories business (3.9%). Business Assurance ended the year with revenue of NOK 3,626 million, in line with last year. Digital Solutions experienced growth of 14.7% in 2019 and delivered external revenues of NOK 1,046 million.

Earnings before interest, taxes, depreciation and amortization (EBITDA) increased by NOK 1,557 million from NOK 1,972 million in 2018 to NOK 3,529 million in 2019. Of this, NOK 421 million comes from the implementation of IFRS 16 Leases, which technically led to reduced operating expenses and increased depreciation. The operating profit (EBIT) for 2019 ended at NOK 2,334 million, NOK 1,785 million up from NOK 549 million in 2018. The EBITDA and EBIT improvements are primarily driven by strong growth and financial performance in business area Maritime.

The net financial expenses were NOK 349 million in 2019, compared to NOK 273 million in 2018. The change from 2018 is primarily due to the implementation of IFRS 16, which led to a NOK 67 million interest cost on lease liabilities as well as interest expenses on a loan from the parent company, Det Norske Veritas Holding AS. The other main financial items are net interest costs of NOK 27 million from defined benefit pension plans, net currency losses of NOK 143 million and other financial expenses.

The 2019 tax expense of NOK 610 million represents an average tax cost of 30.7%. The average corporate income tax is 26% of the pre-tax profit from operations, while the additional tax cost is caused by withholding taxes on remitted earnings, losses from operations without recognition of tax assets and non-tax-deductible items. The net profit for the year was NOK 1,375 million, compared to last year's net profit of NOK 116 million.

> " The Board regards DNV GL's financial performance as strong and liquidity as very good.

The cash flow from operations ended at NOK 2,679 million in 2019, compared with NOK 1,091 million in 2018. This improvement comes primarily from the strong financial performance (EBITDA) in 2019. The implementation of IFRS 16 had no net cash flow effect but led to an increase in cash flow from operations and a decrease in cash flow from financing activities of NOK 421 million in 2019.

The cash flow from investments was NOK 733 million in 2019. The net cash effect of divesting the KEMA Laboratories business in December 2019 was NOK 1,139 million. The investment of NOK 280 million in intangible assets relates to the development of commercial software within Digital Solutions, in-house Oracle ERP implementation and system integration in the business areas.

Financing activities of NOK 2,234 million, of which NOK 1,400 million pertain to the payment of dividend to Det Norske Veritas Holding AS, led to a net positive cash flow for the year of NOK 1,178 million.

At year-end, the DNV GL Group had liquidity of NOK 3,809 million plus an unused credit line of NOK 1,000 million. The Group has a strong balance sheet, with an equity ratio of 51.1% of total assets. A NOK 2,100 million dividend to the parent company, Det Norske Veritas Holding AS, and Group contributions after tax of NOK 131 million were declared in 2019 and reduced the equity accordingly.

A net actuarial gain of NOK 460 million from defined benefit pension plans was recognized in equity at the year-end.

The accounts of the parent company, DNV GL Group AS, show a profit for the year of NOK 1,478 million, mainly generated from dividends from subsidiaries and group contributions received.

DNV GL Group AS has total assets 31 December 2019 of NOK 17,261 million and a total equity of NOK 11,085 million. 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 the best of 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 other material events after the balance sheet date affecting the 2019 financial statements.

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 and initiate adequate 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 strategy revision process and the annual plan process.

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 operations, foreign-exchange exposure 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.

In order to mitigate cyber security risks, DNV GL's information security management systems for GSS IT, Energy, Oil & Gas, Digital Solutions and Maritime are certified to the ISO 27001 information security standard. The Board continues to review the cyber security risk annually.

Severe 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 that the company is managing this risk satisfactorily.

DNV GL's main financial risks are its market risk (interest rate and foreign currency risk), credit risk, liquidity risk, pension plan risk and political risk related to trade sanctions.

Addressing global concerns about the climate is a major driver of the energy transition which will affect both DNV GL and its customers. DNV GL conducts significant research into this, which is fed into our strategy development.

Interest rate risk: as the company has limited borrowings, its exposure to interest rate risk is primarily connected 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 77% of the total revenue. In most currencies, the company has a natural hedge through a balance of revenues and expenses. The foreign currency policy is to focus on hedging expected cash flows, primarily in US dollars. However, DNV GL is also 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 the 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 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 the financial assets (e.g. accounts receivable, other financial assets) and projected cash flows from operations.

Pension plan risk: the company has closed all existing defined benefit pension schemes to new entrants. However, DNV GL is exposed to volatility in the financial markets affecting the value of the pension plan assets. The Group is also exposed to interest rate volatility affecting the pension commitments. Lower interest rates over the past years have led to an increase in the pension commitments.

Political risk: compliance with applicable trade sanctions is monitored at business area and Group level. This risk is considered to be limited.

Climate risk: international concern about the climate emergency has moved up the agenda. Addressing these concerns is a major driver of the energy transition which will affect both DNV GL and its customers. DNV GL conducts significant research into this, which is fed into our strategy development.

Corporate Governance

DNV GL considers sound corporate governance to be fundamental for securing trust in the company and a cornerstone for achieving sustainable value creation in the best interests of DNV GL's customers, employees, owner and other stakeholders.

DNV GL issues an annual Corporate Governance Report to verify corporate governance in accordance with the Norwegian Code of Practice for Corporate Governance ("Code of Practice") to the extent relevant for the DNV GL Group as a private limited company. DNV GL's Corporate Governance Report deals with each of the 15 topics covered by the Code of Practice and describes DNV GL's adherence to the Code of Practice. The Corporate Governance Report also describes the legal basis and principles for DNV GL's corporate governance structure.

The management company of the DNV GL companies is DNV GL Group AS, registered in Norway and governed by the Norwegian Private Limited Liability Companies Act. DNV GL Group is owned 100% by Det Norske Veritas Holding AS ("DNV Holding"). DNV Holding is a private limited company registered in Norway and is fully owned by Stiftelsen Det Norske Veritas. Stiftelsen Det Norske Veritas issues a separate annual corporate governance report available on www.detnorskeveritas.com. The Board of Directors of DNV GL Group AS consists of ten Board members. Six of these are elected by the shareholders while four are elected by and from among DNV GL employees worldwide. The Board consists of six men and four women from four nationalities, with an average age of 58.2 years. The Board's combined expertise represents a range of stakeholders, markets and competences.

In June 2019, Morten Ulstein, Lasse Kristoffersen, Birgit Aagaard-Svendsen and Silvija Seres were up for re-election. Morten Ulstein was replaced as Vice-Chairman of the Board by Jon Fredrik Baksaas, while Lasse Kristoffersen, Birgit Aagaard-Svendsen and Silvija Seres were re-elected.

Of the Board members elected by and from among the employees, Clemens Keuer was re-elected by the constituency "Europe (except Norway)" and David McKay was elected to replace Tian Da Wei as a Board member representing the constituency "Worldwide (except Europe)".

Because of the changes in corporate governance that were decided on by the Board in June 2018, the position of Observer to the Board, held by Nikolaos Papanikos, was discontinued as of 31 July 2019.

The Board sincerely thanks Tian Da Wei, Nikolaos Papanikos and Morten Ulstein for their contributions as Board members of the company.

The Board held six ordinary Board meetings and five extraordinary meetings in 2019. The average attendance at these Board meetings was close to 100%. The Board's Audit Committee held four ordinary meetings in 2019 and the attendance at these was 100%. The Board's Compensation Committee held three ordinary meetings in 2019 and the attendance at these was 100%.

Further information related to DNV GL's corporate governance can be found in the company's Corporate Governance Report for 2019 published on the DNV GL website.

DNV GL pursues continuous improvement in its sustainability performance and its management systems are certified to the ISO 9001, ISO 14001 and OHSAS 18001 standards.

Corporate sustainability

DNV GL's commitments to customers, employees and business partners are guided by DNV GL's purpose of safeguarding life, property and the environment.

DNV GL pursues continuous improvement in its sustainability performance and its management systems are certified to the ISO 9001, ISO 14001 and OHSAS 18001 standards.

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 as critical for achieving long-term value.

In 2019, DNV GL continued its partnerships with the World Business Council for Sustainable Development, the Red Cross and the UN Global Compact.

DNV GL supports the UN Sustainable Development Goals and aims to use this framework to create customer value through meeting societal needs. The Board considers the UN Sustainable Development Goals to be a framework for strengthening the company's market positions. DNV GL provides strong business solutions for many of these global goals, including **7)** Affordable and Clean Energy, **9)** Industry, Innovation and Infrastructure, and **13)** Climate Action. The Group strategy also reflects relevant market opportunities for the goals **3)** Good Health and Well-being, **12)** Responsible Consumption and Production, and **14)** Life below Water.

DNV GL reports in accordance with the core level GRI Standards. KPMG has conducted limited assurance of the sustainability reporting on material topics. A global brand survey conducted in 2018 sought to identify the factors that stakeholders value when selecting assurance and advisory services. The replies were used to guide the priorities for reporting in 2019 and onwards.

The Board refers to the Annual Report for a complete account of corporate sustainability, including information on the priorities, management approach, targets and performance within the topics of: sustainable leadership; health and safety; business ethics and anti-corruption; people, environment and climate; sustainable procurement; and partnerships for sustainability. The Board's audit committee has reviewed DNV GL's sustainability reporting, including recommendations made by KPMG.

Organization and people

The DNV GL Group has employees in close to 80 countries and headquarters located at Høvik, just outside Oslo, Norway. DNV GL is organized in a group structure with five business areas: Maritime, Oil & Gas, Energy, Business Assurance, and Digital Solutions. An Independent Business Unit for Inspection was established and became operational on 1 January 2020. Common support is provided through a global support organization – Global Shared Services.

The total number of employees at year-end 2019 was 11,832, of whom 98.4% are permanent employees.

In addition, 9,069 qualified subcontractors and expert personnel were engaged throughout the year. Employee turnover was 8.8%, with voluntary turnover at 6.5%. The decline in the number of employees over the past year is mainly the result of the divestment of KEMA Laboratories.

DNV GL strives for diversity at all levels of the organization and is firmly committed to providing equal opportunity in all aspects of employment. 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 a diverse workforce necessary in global markets. The Board also emphasizes the importance of sound management of human and labour rights. The DNV GL statement pursuant to the UK Modern Slavery Act is signed by the Board and published on the company website.

The employees represent 116 nationalities, and DNV GL has 100 or more employees in 20 countries. The largest DNV GL operations are in Norway, US, Germany, the UK and China.

Of the permanent employees, 86.5% have a higher education. The proportion of female employees is 33% and the proportion of female managers is 27%.

As of 31 December 2019, the Executive Committee consists of 3 women and 7 men.

Health and safety

The journey towards being the safest place to work continues – focusing on the resilience of its people. DNV GL's vision is zero harm to, and a healthy working environment for, its workforce. To achieve this goal, the company continued to empower its people to make the right decisions about their own safety, health and wellbeing every day. No work is so urgent or important that employees cannot do it in a safe and healthy way. DNV GL addresses safety and health with both immediate and more long-term initiatives. DNV GL cares about its people in tangible ways and equips them with a stronger ability to embrace change and deliver results in a sustainable manner. DNV GL is continuously looking for ways to improve the health of employees and encourage a healthy lifestyle. To support this, global medical health check-up requirements have been implemented and an improved resilience framework has been re-launched. In addition, a resilience index has been developed to measure progress and for managers to follow up.

The company's main occupational health and safety risks are related to slips, trips and falls, field work, driving and stress due to a high workload.

The long-term trend in the number of injuries and occupational diseases has been stable for the last couple of years, with a slight improvement in the injury and absentee rates in 2019 compared with 2018. The number of workdays lost among employees increased in 2019 compared to 2018. The increase in reported hours lost mainly relates to stress and a high workload. More details are provided in the health and safety section of the annual report.

Employee health and safety performance is reviewed by the Board twice a year and part of the CEO report for every Board meeting. DNV GL's health and safety performance is on par with industry benchmarks, and a programme is in place to continuously strengthen the resilience of our employees and foster a learning health and safety culture.

Business ethics and anti-corruption

DNV GL's business model and success are based upon trust at all levels and in all business environments. Building trust is enshrined in the company's values and new vision. The Board emphasizes the necessity of reflecting DNV GL values and demonstrating ethical leadership in society.

The DNV GL group has a zero-tolerance policy for corruption and unethical behaviour that applies to all employees, subcontractors, agents and suppliers. DNV GL's compliance programme and related instructions are based on the Code of Conduct for which the Board is responsible.

The Code of Conduct covers anti-corruption, antitrust, export controls, sanctions and personal data protection, and processes to handle cases are in place. Information on how to report occurrences or suspicions of misconduct is published on the company website and the intranet, and a mandatory e-learning module on the reporting of misconduct is available to all employees. There is also an ethical helpline and anonymous whistleblowing channel.

Compliance risks are regularly assessed as part of the corporate risk management process and measures are taken accordingly.

The Group Compliance Officer reports on performance to the Board's Audit Committee quarterly, as well as to the Executive Committee when relevant.

In 2019, 67 (62) potential compliance cases were reported and handled. There was no legal action regarding anti-competitive behaviour or violations of antitrust or monopoly legislation in which DNV GL was identified as a participant during the reporting period. No significant fines or non-monetary sanctions or non-compliance with laws and/or regulations in the environmental, social or economic areas were identified.

Measures implemented in 2019 to sustain a high level of integrity include training, communication and updates to governing documents following statutory amendments. The company performed compliance reviews in countries identified for special anti-corruption and fraud measures. A training course for suppliers in all business areas were made available, and improvements were made to export control law handling. Around 800 employees received individual training on compliance programme topics.

Environment and climate

Safeguarding the environment is part of DNV GL's purpose. The company is committed to take a precautionary approach, managing and continually improving its environmental and climate performance. Assessments, improvement actions, incident reporting and performance monitoring of material topics such as energy consumption, emissions to air and waste management are followed up annually. Internal and external audits are undertaken to assure performance. DNV GL is certified to ISO 14001 and this is monitored continuously across all locations. Performance is reported to the Board twice a year.

Climate change mitigation and adaptation initiatives are prioritized by DNV GL. DNV GL was verified as carbon neutral in relation to office buildings, laboratories and travel activity also in 2019. A new environment and climate strategy has been outlined which will include further carbon reduction initiatives, measurable goals and a clear direction for how operations are to be managed. The Board is monitoring the implementation of the strategy to ensure that DNV GL continues to set ambitious targets and reduce the environmental impact of its operations.

DNV GL prefers suppliers and subcontractors that provide services in compliance with the Group's environmental and climate policies.

In 2019, zero cases of non-compliance with environmental regulations and zero fines related to environmental aspects were registered.

For further details about DNV GL's environmental and climate performance, please see the sustainability section of DNV GL's annual report.

Outlook

Late in 2019 the world economy slowed, with weakened trade, manufacturing and investments. The IMF cut the GDP growth forecast.

The coronavirus (COVID-19) outbreak has already brought considerable human suffering and major economic disruption. Growth prospects for 2020 and 2021 are therefore highly uncertain. Risk aversion has increased in the financial markets, with interest rates falling to record low levels and equity prices declining sharply, commodity prices have dropped, and business and consumer confidence have turned downwards.

Relative to other pandemic in modern times, such as the SARS outbreak in 2003, the global economy has become substantially more interconnected, and China plays a far greater role in global output, trade, tourism and commodity markets. This magnifies the economic spillovers from an adverse shock in one region to all other countries. Even if the peak of the outbreak proves short-lived, with a gradual recovery in output and demand it will still exert a substantial drag on global growth in 2020.

Provided the effects of the COVID-19 virus outbreak fade, the impact on confidence and incomes of well-targeted policy actions in the most exposed economies could help global GDP growth to recover in 2021. However, there is a downside risk in that the impact of the COVID-19 virus proves longer lasting and more intensive than assumed in the present projections, possibly with second and third waves of the pandemic.

The COVID-19 virus outbreak is in an early state, and ahead we already see significant business impact for DNV GL. The situation is monitored closely and the impact on employees, customers and business will be assessed continuously and necessary mitigations will be implemented as required.

DNV GL has an ambitious program of digital transformation and using these digital tools and processes will be critical in the new business environment. The effects of the cost restructuring and productivity initiatives implemented across all business areas and in the shared services organization the past four years have contributed to improved performance and positioned DNV GL to better deal with the prevailing market conditions.

The trade tensions between China and the US will be a decisive factor for future economic development, including world trade. The signing of the "Phase 1" trade agreement in January 2020 reduces and stabilizes the tension in the US-China trade relations.

Europe has a relatively open economy and is therefore very exposed to global trade developments. The political uncertainty in Europe related to Brexit and Europe's relatively weak ability to implement social reform programmes may have a negative influence on the global economy.

The strong political wind blowing in the direction of ambitious climate transition targets enforced by further regulation will continue, and all markets and industries will search for solutions to the climate- and environment-related challenges – which many companies see as business opportunities.

For 2020, a fall in seaborne trade and a higher level of scrapping, is expected. The IMO 2020 global sulphur cap requirements led to a peak in retrofit and conversion projects in 2019 and will continue to have some impact in 2020. The consequences of the COVID-19 virus, political risks in major economies, trade wars and sanctions will contribute to increased volatility in the market. Competition continues to be fierce, but DNV GL has managed to maintain its market share in the newbuilding market. The global ship newbuilding market has stabilized at a 40–50 million GRT level, and we expect this to continue into 2020. The company aims to win 25% of global newbuilding contracts measured in gross tonnes and will work to attract new tonnage from targeted customers and minimize the transfer of DNV GL classed ships to other classification societies.

In the oil and gas market, oil prices are highly volatile. The oil producing countries have not been able to reduce production to the level of oil demand and the oil prices are record low. Trade tensions and unrest in the Middle East region add to the volatility. The trade war is also limiting the important LNG expansion in the US. Offshore oil and gas developments will focus on less capital-intensive projects with a shorter payback time. The existing infrastructure across the value chain, including pipelines and refineries, will continue to demand operations support services.

The oil & gas industry is being challenged to set ambitious targets for reduced emissions from its production and to engage in making end-products cleaner. 2020 will be a difficult year for DNV GL's oil and gas customers and we foresee a very demanding year for DNV GL's services to the oil & gas industry.

The trend towards decarbonization of the world's energy systems strengthened in 2019, leading to a demand for renewable energy, power grid and storage services. The energy transition, with planned grid integration and an increased transition to renewable energy sources, is expected to continue in many countries. Energy efficiency will continue to be high on the agenda, particularly in the US and Middle East. The successful divestment of the KEMA Laboratory business has contributed to a more focused strategy for our energy services, and a better position for further investments in our core areas.

After the extraordinary growth achieved by DNV GL management system certification services in 2018, driven by the implementation of new ISO standards, 2019 was a year of stabilization. We expect 2020 to be a good year for our management system services, however, executing the order book will be challenging given the COVID-19 lockdown in many countries. The underlying demand for product assurance, supply chain assurance and digital assurance is strong and is expected to create new business opportunities post COVID-19. DNV GL will continue to strengthen its industry position within the food & beverage, healthcare, automotive and aerospace sectors.

The revenue from DNV GL's portfolio of software products and other digital services grew in 2019, and pre-COVID-19 this trend was expected to be maintained in 2020 based on the upgrade of several applications and continued move towards a software-as-a-service platform. The Veracity platform will continue to be developed, with increased attention to the maritime and energy markets, the creation of digital wallet functionality and an increase in the number of registered users to benefit from network effects and drive scale.

The Board believes that DNV GL's performance in 2019 demonstrates that the company has responded well to the challenges posed throughout the year and is entering the next decade more robust than ever. The company will continue to develop its broad competence and resource base to provide guidance and support to customers in a business environment where trust is at a premium and where the need for technical expertise and risk management will be in increasing in demand to tackle the extraordinary situation the world currently faces and the global transformations ahead.

HØVIK, 1 APRIL 2020

LEIF-ARNE LANGØY CHAIRMAN	**JON FREDRIK BAKSAAS** VICE-CHAIRMAN	**LASSE KRISTOFFERSEN**	**CLEMENS KEUER**
NINA IVARSEN	**JON EIVIND THRANE**	**BIRGIT AAGAARD-SVENDSEN**	**LISELOTT KILAAS**
SILVIJA SERES	**DAVID MCKAY**	**REMI ERIKSEN** GROUP PRESIDENT & CEO	

BOARD OF DIRECTORS' PROFILES

LEIF-ARNE LANGØY (CHAIR)

Member of the board: Since 2010
Chair since 2011

Nationality: Norwegian **Born:** 1956

Position: Managing Director, LAPAS AS

Education: MSc Norwegian School of Economics and Business Administration

Directorship(s) outside DNV GL: Chairman of Kværner ASA; Chairman of Sparebanken Møre; Vice Chairman of The Resource Group AS (TRG); Chairman of Stiftelsen Det Norske Veritas; Chairman of Det Norske Veritas Holding AS

JON FREDRIK BAKSAAS (VICE-CHAIR)

Member of the board: Since 2019

Nationality: Norwegian **Born:** 1954

Position: Board pluralist

Education: Norwegian School of Economics and Business Administration, 1979, and IMD PED, 1991

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS; Ericsson AB; Handelsbanken AB; Chairman of Statnett SF

LISELOTT KILAAS

Member of the board: Since 2016

Nationality: Norwegian **Born:** 1959

Position: Professional board member

Education: MBA, IMD International; MSc in Math. Statistics

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS; Orkla ASA; Norsk Hydro ASA; Folketrygdfondet; Peab AB; Nobina AB; Ambea AB; Stamina-Avonova; Coala Life

CLEMENS KEUER

Member of the board: Since 2013

Nationality: German **Born:** 1959

Position: Chair of German Works Council, DNV GL

Education: Msc in Computer Science, University of Hamburg

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS

BIRGIT AAGAARD-SVENDSEN

Member of the board: Since 2017

Nationality: Danish **Born:** 1956

Position: Independent Board professional

Education: Constructional Engineering, The Technical University of Denmark, 1980. Graduate Diploma in Business Administration, Copenhagen Business School, 1985. Misc. executive program at IESE, Barcelona. IMD, Lausanne. INSEAD, Paris.

Directorship(s) outside DNV GL: Deputy Chair Dalhoff Larsen & Horneman A/S, Copenhagen Malmö Port AB, Audit Committee Chair in Prosafe SE, Aker Solution AS, Seadrill Ltd. and West of England Ship Owners Mutual Insurance Ass., Board member Otto Mønsted A/S, Reapplix A/S, Axis Offshore Pte. Ltd, Stiftelsen Det Norske Veritas and Det Norske Veritas Holding AS

LASSE KRISTOFFERSEN

Member of the board: Since 2017

Nationality: Norwegian **Born:** 1972

Position: President and CEO Torvald Klaveness; Various board positions in daughter companies of Torvald Klaveness

Education: Executive Manager Program, INSEAD, Paris, 2004. Senior Manager Program, IMD, Lausanne, 2002–2003. MSc Naval architecture and marine engineering, NTH, 1995.

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS; President and CEO; Various board positions in daughter companies of Torvald Klaveness Group; President / Chairman of Norwegian Shipowners' Association; Board member and Vice President of ICS

SILVIJA SERES

Member of the board: Since 2017

Nationality: Norwegian (originally Hungarian and Yugoslavian) **Born:** 1970

Position:
Independent Investor and Board Member

Education: Top Leadership Course at the Norwegian Defence College, Oslo, 2015. MBA Program, INSEAD, France and Singapore, 2013. PhD and MA in Mathematical Sciences, Oxford University, UK, 2001. MSc and BSc in Computer Science, University of Oslo, 1996.

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS; NRK; Academedia AB; Ruter AS; Chairman Rikstoto; Owner of Technorocks AS; President of Polytechnic Society of Norway; Corporate Assembly Member of Telenor ASA; Advisory Board of Digital Norway

NINA IVARSEN

Member of the board: Since 2016

Nationality: Norwegian **Born:** 1962

Position: Chair of VEFF and Head of Global Employee Forum, DNV GL

Education: Master of Management, Stavanger University; a number of courses from other universities, incl. University of Denver, US, and a PhD programme in Psychology from the University of Oslo. Digital Leadership course with INSEAD

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS

JON EIVIND THRANE

Member of the board: Since 2018

Nationality: Norwegian **Born:** 1961

Position: Head of Group IT office, DNV GL

Education: MSc Applied Physics, Trondheim

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS

DAVID MCKAY

Member of the board: Since 2019

Nationality: British **Born:** 1963

Position: Chief Surveyor Offshore / Director of Projects, North America, DNV GL

Education: BSc in Naval Architecture, University of Strathclyde, 1985

Directorship(s) outside DNV GL: Stiftelsen Det Norske Veritas; Det Norske Veritas Holding AS

Financial performance

The financial statements for DNV GL Group AS include consolidated income statement, statement of comprehensive income, consolidated statement of financial position, 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.

Key figures

AMOUNTS IN NOK MILLION	2019[1]	2018	2017	2016	2015
INCOME STATEMENT					
Operating revenue	21 551	19 639	19 475	20 834	23 390
EBITDA	3 529	1 972	1 342	1 352	2 649
Depreciation	765	358	336	364	370
Impairment of fixed assets	0	552	14	4	5
EBITA	2 764	1 062	993	984	2 274
Amortization	420	513	503	519	536
Impairment of goodwill					
and other intangible assets	9	0	15	311	0
EBIT / Operating profit	2 334	549	474	154	1 738
Net financial income (expenses)	(349)	(273)	(110)	(18)	(12)
Profit before tax	1 985	276	364	136	1 726
Profit for the year	1 375	116	61	(216)	1 014
BALANCE SHEET					
Non-current assets	18 350	17 155	16 631	15 469	16 575
Current assets	11 821	10 992	12 112	11 533	13 705
Total assets	30 171	28 147	28 743	27 002	30 279
Equity	15 419	15 951	18 810	17 509	18 850
Non-current liabilities	7 167	5 423	4 010	3 798	4 046
Current liabilities	7 585	6 773	5 924	5 695	7 383
CASH FLOW ITEMS					
Net cash flow from operations	2 679	1 091	656	662	2 214
Net cash flow from investments	733	(425)	(669)	(682)	(1 099)
Net cash flow from financing activities	(2 234)	(1 698)	45	(607)	(908)
Net cash flow	1 178	(1 032)	32	(628)	207
Liquidity	3 809	2 631	3 660	3 628	4 193
FINANCIAL RATIOS					
PROFITABILITY					
EBITDA margin	16.4%	10.0%	6.9%	6.5%	11.3%
EBITA margin	12.8%	5.4%	5.1%	4.7%	9.7%
EBIT / Operating margin	10.8%	2.8%	2.4%	0.7%	7.4%
Pre-tax profit margin	9.2%	1.4%	1.9%	0.7%	7.4%
Net profit margin	6.4 %	0.6%	0.3%	-1.0%	4.3%
LEVERAGE					
Equity ratio	51.1%	56.7%	65.4%	64.8%	62.3%
NUMBER OF EMPLOYEES	11 832	12 101	12 715	13 550	14 954

1 The group implemented IFRS 16 from 01.01.2019 by applying the modified retrospective approach. Previous years have not been restated.

DEFINITION OF RATIOS

Profitability

EBITDA:
Earnings before financial items, tax, depreciation, amortization and impairment

EBITDA margin:
EBITDA x 100 / Operating revenue

EBITA:
Earnings before financial items, tax, amortization and impairment

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 (loss) for the year x 100 / Operating revenue

Cash flow

Net cash flow:
Net change in liquidity from cash flow statement

Liquidity:
Cash and bank deposits

Leverage

Equity ratio:
Equity x 100 / Total assets

Consolidated income statement

DNV GL GROUP AS 2019	DNV GL GROUP AS 2018	AMOUNTS IN NOK MILLION	NOTE	DNV GL GROUP AS CONSOLIDATED 2019	DNV GL GROUP AS CONSOLIDATED 2018
		OPERATING REVENUE			
28.0	26.2	Sales revenue	4	21 409.9	19 638.5
0.0	0.0	Gain divestment (sale of operations)	3	141.1	0.0
28.0	26.2	Total operating revenue		21 551.0	19 638.5
		OPERATING EXPENSES			
0.0	0.0	Payroll expenses	5,7,8	11 715.6	11 223.9
29.8	29.4	Other operating expenses	6,7	6 306.6	6 442.7
(1.8)	(3.2)	EBITDA		3 528.8	1 971.9
0.0	0.0	Depreciation and amortization	12,14	1 185.1	871.3
0.0	0.0	Impairment	12,13,14	9.3	552.0
(1.8)	(3.2)	**Operating profit (loss)**		2 334.4	548.7
		FINANCIAL INCOME AND EXPENSES			
0.0	0.0	Loss from associates	15	(5.6)	(3.2)
1 670.6	2 028.6	Other financial income	8,9	48.0	42.5
(169.4)	(147.4)	Financial expenses	8,9	(391.5)	(312.1)
1 501.2	1 881.2	Net financial income (expenses)		(349.1)	(272.8)
1 499.5	1 877.9	**Profit before taxes**		1 985.3	275.9
(21.5)	27.6	Tax expense	11	(610.4)	(159.9)
1 478.0	1 905.5	**Profit for the year**		1 374.8	116.0
		Profit for the period attributable to:			
		Non-controlling interest		14.1	12.9
		Equity holders of the parent		1 360.7	103.1
		Total		1 374.8	116.0

Consolidated statement of comprehensive income

DNV GL GROUP AS		AMOUNTS IN NOK MILLION		DNV GL GROUP AS CONSOLIDATED	
2019	2018		NOTE	2019	2018
1 478.0	1 905.5	**Profit for the year**		1 374.8	116.0
		Other comprehensive income not to be reclassified			
		to profit or loss in subsequent periods:			
		Actuarial gains/(losses) on defined benefit pension plans		460.2	(21.1)
		Other comprehensive income to be reclassified			
		to profit or loss in subsequent periods:			
		Currency translation differences /			
		Translation differences foreign operations		44.4	133.4
		Share of other comprehensive income from associates		4.6	0.6
0.0	0.0	**Other comprehensive income for the period, net of tax**		509.2	112.9
1 478.0	1 905.5	**Total comprehensive income for the period**		1 884.0	228.9
		Total comprehensive income attributable to:			
		Non-controlling interest		14.1	12.9
		Equity holders of the parent		1 869.9	216.0
		Total		1 884.0	228.9

Consolidated statement of financial position

ASSETS

DNV GL GROUP AS 31 DEC 19	DNV GL GROUP AS 31 DEC 18	AMOUNTS IN NOK MILLION	NOTE	DNV GL GROUP AS CONSOLIDATED 31 DEC 19	DNV GL GROUP AS CONSOLIDATED 31 DEC 18
		NON-CURRENT ASSETS			
		INTANGIBLE ASSETS			
0.0	17.7	Deferred tax assets	11	1 012.1	1 198.5
0.0	0.0	Goodwill	12,13	8 531.7	8 781.2
0.0	0.0	Other intangible assets	12	2 536.2	2 852.2
0.0	17.7	**Total intangible assets**		12 080.0	12 831.9
		TANGIBLE FIXED ASSETS			
0.0	0.0	Land, buildings and other property		1 812.5	2 142.7
0.0	0.0	Office equipment, fixtures and fittings		563.0	1 034.3
0.0	0.0	Right-of-use assets		1 796.8	0.0
0.0	0.0	**Total tangible fixed assets**	14	4 172.3	3 176.9
		NON-CURRENT FINANCIAL ASSETS			
11 813.4	11 813.4	Investments in subsidiaries	2	0.0	0.0
0.0	0.0	Investments in associates	15	182.3	183.4
0.5	0.6	Equity instruments		27.4	27.4
411.0	411.0	Other investments	8	0.0	0.0
0.0	0.0	Net pension asset	8	1 483.9	539.7
2 472.9	3 760.7	Loan to subsidiaries		0.0	0.0
0.0	0.0	Other long-term receivables	18	403.8	395.9
14 697.8	15 985.6	**Total non-current financial assets**		2 097.5	1 146.4
14 697.8	16 003.4	**Total non-current assets**		18 349.8	17 155.1
		CURRENT ASSETS			
		DEBTORS			
0.0	0.0	Trade debtors	17	4 479.2	4 426.0
0.0	0.0	Contract assets		2 630.8	3 078.1
186.7	74.1	Other receivables group companies		7.2	16.5
22.3	1.0	Other debtors		895.1	840.8
209.0	75.1	**Total debtors**		8 012.4	8 361.5
2 354.0	1 133.2	Cash and bank deposits	21	3 809.0	2 630.6
2 563.0	1 208.3	**Total current assets**		11 821.4	10 992.0
17 260.8	17 211.7	**TOTAL ASSETS**		30 171.1	28 147.2

Consolidated statement of financial position

EQUITY AND LIABILITIES

DNV GL GROUP AS 31 DEC 19	DNV GL GROUP AS 31 DEC 18	AMOUNTS IN NOK MILLION	NOTE	DNV GL GROUP AS CONSOLIDATED 31 DEC 19	DNV GL GROUP AS CONSOLIDATED 31 DEC 18
		EQUITY			
		PAID-IN CAPITAL			
100.0	100.0	Share capital	24	100.0	100.0
9 323.5	9 323.5	Share premium		9 323.5	9 323.5
		RETAINED EARNINGS			
1 661.9	2 283.9	Other equity		5 953.7	6 475.7
0.0	0.0	Non-controlling interest		42.0	51.7
11 085.4	11 707.4	**Total equity**		15 419.2	15 950.9
		LIABILITIES			
		NON-CURRENT LIABILITIES			
0.0	0.0	Interest bearing loans and borrowings	22	0.0	0.0
0.0	0.0	Pension liabilities	8	2 689.0	2 479.3
2.8	0.0	Deferred tax liabilities	11	373.5	412.5
2 563.8	2 670.8	Loan from group companies	23	2 100.0	2 100.0
0.0	0.0	Lease liabilities	20	1 550.5	0.0
0.0	0.0	Non-current provisions	19	95.0	138.5
0.0	0.0	Other non-current liabilities		358.7	292.5
2 566.6	2 670.8	**Total non-current liabilities**		7 166.7	5 422.8
		CURRENT LIABILITIES			
0.0	0.0	Overdrafts		22.0	30.7
0.0	0.0	Trade creditors		427.8	544.7
0.0	0.3	Taxes payable	11	515.1	357.4
0.0	0.0	Public duties payable		439.1	366.7
3 607.6	2 761.0	Current liabilities group companies	23	1 113.8	600.3
0.0	0.0	Lease liabilities	20	409.9	0.0
0.0	0.0	Current provisions	19	163.2	264.6
1.3	72.2	Other current liabilities	16	4 494.3	4 609.1
3 608.8	2 833.4	**Total current liabilities**		7 585.3	6 773.5
6 175.4	5 504.3	**Total liabilities**		14 751.9	12 196.3
17 260.8	17 211.7	**TOTAL EQUITY AND LIABILITIES**		30 171.1	28 147.2

HØVIK, 1 APRIL 2020

LEIF-ARNE LANGØY CHAIRMAN	JON FREDRIK BAKSAAS VICE CHAIRMAN	BIRGIT AAGAARD-SVENDSEN	JON EIVIND THRANE	NINA IVARSEN	CLEMENS KEUER
LISELOTT KILAAS	LASSE KRISTOFFERSEN	SILVIJA SERES	DAVID MCKAY	REMI ERIKSEN GROUP PRESIDENT & CEO	

Consolidated statement of cash flow

DNV GL GROUP AS 2019	DNV GL GROUP AS 2018	AMOUNTS IN NOK MILLION	NOTE	DNV GL GROUP AS CONSOLIDATED 2019	DNV GL GROUP AS CONSOLIDATED 2018
		CASH FLOW FROM OPERATIONS			
1 499.5	1 877.9	Profit before tax		1 985.3	275.9
0.0	0.0	Gain on disposal of tangible fixed assets	14	(2.8)	(202.8)
0.0	0.0	Loss (gain) on divestments	3	(141.1)	23.7
0.0	0.0	Loss (gain) from change of defined benefit pension plans	8	(6.4)	11.2
(150.7)	0.0	Group contributions recorded as financial income		0.0	0.0
0.0	0.0	Depreciation, amortization and impairment	14	1 194.4	1 423.2
0.0	(42.5)	Tax payable	11	(614.6)	(477.8)
0.0	0.0	Change in work in progress, trade debtors		247.1	57.7
		and trade creditors			
(62.6)	64.4	Change in accruals, provisions and other		17.6	(19.8)
1 286.2	1 899.8	**Net cash flow from operations**		2 679.4	1 091.4
		CASH FLOW FROM INVESTMENTS			
0.0	0.0	Acquisitions	3	0.0	(44.6)
0.0	0.0	Divestments of subsidiaries	3	1 138.9	0.0
0.0	0.0	Investments in tangible fixed assets	14	(146.8)	(306.4)
0.0	0.0	Investments in intangible assets	12	(279.9)	(358.9)
0.0	0.0	Sale of tangible fixed assets (sales value)		20.3	287.9
0.0	0.0	Change in other investments		0.0	(3.4)
0.0	0.0	**Net cash flow from investments**		732.6	(425.4)
		CASH FLOW FROM FINANCING ACTIVITIES			
1 180.8	327.5	Change in loan from subsidiaries		0.0	0.0
0.0	0.0	Change in overdraft		(8.6)	(14.1)
110.6	(585.0)	Change in net position towards participants		(194.6)	215.8
		in the cash pool system			
0.0	0.0	Change in lease liabilities		(420.9)	0.0
(1 400.0)	(1 900.0)	Dividend paid		(1 400.0)	(1 900.0)
43.1	(83.6)	Group contribution (paid) /received		(209.4)	0.0
(65.5)	(2 241.1)	**Net cash flow from financing activities**		(2 233.6)	(1 698.3)
1 220.8	(341.3)	**Net increase/(decrease) in cash and bank deposits**		1 178.4	(1 032.3)
1 133.2	1 474.4	Liquidity at beginning of period		2 630.6	3 659.7
0.0	0.0	Cash in acquired companies		0.0	3.1
2 354.0	1 133.2	**Liquidity at end of period**		3 809.0	2 630.6

Consolidated statement of changes in equity

CHANGES IN EQUITY IN DNV GL GROUP AS

AMOUNTS IN NOK MILLION

	SHARE CAPITAL	SHARE PREMIUM	OTHER EQUITY	TOTAL
Equity at 1 January 2018	100.0	9 323.5	4 345.2	13 768.7
Profit for the period			1 905.5	1 905.5
Group contribution			33.2	33.2
Dividend decleared			(4 000.0)	(4 000.0)
Equity at 31 December 2018	100.0	9 323.5	2 283.9	11 707.4
Profit for the period			1 478.0	1 478.0
Dividend accrued			(700.0)	(700.0)
Dividend paid			(1 400.0)	(1 400.0)
Equity at 31 December 2019	100.0	9 323.5	1 661.9	11 085.4

CHANGES IN EQUITY IN 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 2018	100.0	9 323.5	5 599.0	3 748.0	39.7	18 810.1
Profit for the period			103.1		12.9	116.0
Dividend declared			(4 000.0)			(4 000.0)
Group contribution			(161.3)			(161.3)
Merger difference merger Det Norske Veritas Eiendom AS			1 082.2			1 082.2
Actuarial gains/(losses) on defined benefit pension plans			(21.1)			(21.1)
Exchange differences				133.4		133.4
Share of other comprehensive income from associates			0.6			0.6
Other equity changes			(8.3)		(0.8)	(9.2)
Equity at 31 December 2018	100.0	9 323.5	2 594.3	3 881.4	51.7	15 950.9
Adjustment on correction of error related to previous years [1]			(158.3)			(158.3)
Equity at 1 January 2019 (restated)	100.0	9 323.5	2 435.9	3 881.4	51.7	15 792.6
Profit/(loss) for the period			1 360.7		14.1	1 374.8
Dividend paid			(1 400.0)			(1 400.0)
Dividend accrued			(700.0)			(700.0)
Group contribution payable			(130.7)			(130.7)
Actuarial gains/(losses) on defined benefit pension plans			460.2			460.2
Exchange differences				44.4		44.4
Share of other comprehensive income from associates			4.6			4.6
Other equity changes			(2.9)		(23.8)	(26.7)
Equity at 31 December 2019	100.0	9 323.5	2 027.9	3 925.8	42.0	15 419.2

1 In 2019, prior year's errors of NOK 158.3 million have been identified. The main effects are related to pre 2019 imbalances in group internal trade receivables and payables built up over multiple financial years, cleared during 2019. The accumulated effect (NOK 115 million) has not been possible to allocate back to the respective financial year. The majority of the remaining corrections relate to old DTA differences related to pensions and GAAP differences in Germany. The errors are considered material and thus an adjustment is made to the opening balance as at 1 January 2019.

NOTES

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.

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 control of a product or service is transferred to the customer. For sale of services, the revenue is recognized over time by applying percentage of completion method. Stage of completion is measured by reference to actual expenses incurred to date as a percentage of total estimated expenses for each contract. When the contract outcome cannot be measured reliably, revenue is recognized only to the extent that the expenses incurred are recoverable. A contract asset is recognized for all work performed, not yet invoiced.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately. Revenue from sale of software licenses are recognized at a point of time. For software maintenance services delivered in the maintenance period, revenue is recognized over time based on the stage of completion of the contract.

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. The group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. DNV GL Group use a provision matrix as a practical expedient to calculate the expected credit losses on trade receivables. The provision matrix represents the Group's expected credit risk. Impairment of trade receivables are recognized in the income statement.

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 the 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 relates 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.

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. The Group has applied IFRS 16 using the modified retrospective approach.

IDENTIFYING A LEASE. At the inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To determine whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- The agreement creates enforceable rights of payment and obligations
- The identified asset is physically distinct
- It has the right to obtain substantially all of the economic benefits from use of the asset
- It has the right to direct the use of the asset
- The supplier does not have a substantive right to substitute the asset throughout the period of use

SEPARATING COMPONENTS IN THE LEASE CONTRACT. For contracts that constitutes, or contains a lease, the Group separates lease components if it benefits from the use of each underlying asset either on its own or together with other resources that are readily available, and the underlying asset is neither highly dependent on, nor highly interrelated with, the other underlying assets in the contract. The Group then accounts for each lease component within the contract as a lease separately from non-lease components of the contract. The Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components. If an observable stand-alone price is not readily available, the Group estimates this price by maximizing the use of observable information.

RECOGNITION OF LEASES AND EXEMPTIONS. At the lease commencement date, the Group recognizes a lease liability and corresponding right-of-use asset for all lease agreements in which it is the lessee, except for the following exemptions applied:

- Short-term leases (defined as 12 months or less)
- Low value assets

For these leases, the Group recognizes the lease payments as other operating expenses in the statement of profit or loss when they incur.

MEASURING THE LEASE LIABILITY. The lease liability is initially measured at the present value of the lease payments for the right to use the underlying asset during the lease term that are not paid at the commencement date. The lease term represents the non-cancellable period of the lease, together with periods covered by an option to extend the lease when the Group is reasonably certain to exercise this option, and periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option.

The lease payments included in the measurement comprise of:

- Fixed lease payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date
- Amount expected to be payable by the Group under residual value guarantees
- The exercise price of a purchase option, if the Group is reasonably certain to exercise that option
- Payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate the lease.

The Group do not include variable lease payments in the lease liability arising from contracted index regulations subject to future events, such as inflation. Instead, the Group recognises these costs in profit or loss in the period in which the event or condition that triggers those payments occurs.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payments made and remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect adjustments in lease payments due to an adjustment in an index or rate.

Group presents its lease liabilities as separate line items in the statement of financial position.

MEASURING THE RIGHT-OF-USE ASSET. The right-of-use asset is initially measured at cost. The cost of the right-of-use asset comprise:

- The amount of the initial measurement of the lease liability
- Any lease payments made at or before the commencement date, less any lease incentives received
- Any initial direct costs incurred by the Group
- An estimate of costs to be incurred by the Group in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

The right-of-use asset is subsequently measured at cost less accumulated depreciation and impairment losses. The Group applies the depreciation requirements in IAS 16 Property, Plant and Equipment in depreciating the right-of-use asset, except that the right-of-use asset is depreciated from the commencement date to the earlier of the lease term and the remaining useful life of the right-of-use asset. The Group has elected to not apply the revaluation model for its right of use asset for leased buildings.

The Group applies IAS 36 Impairment of Assets to determine whether the right-of-use asset is impaired and to account for any impairment loss identified.

Group presents its right-of-use assets as separate line items in the consolidated statement of financial position.

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 is 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 is 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.

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.

RESTRUCTURING PROVISIONS. Restructuring provisions are recognized only when the Group had a constructive obligation, which is when a detailed formal plan identifies the business or part of the business concerned, the location and number of employees affected, a detailed estimate of the associated costs, and an appropriate timeline, and the employees affected have been notified of the plan's main features.

ONEROUS LEASE. Provision for onerous lease contracts in 2018 represents the present value of the future lease payments that the Group is presently obligated to make under non-cancellable onerous operating lease contracts, less revenue expected to be earned on the onerous lease, including estimated future sub-lease revenue, where applicable. The estimate may vary as a result of changes in the utilization of the leased premises and sub-lease arrangements where applicable. On initial application of IFRS 16 1 January 2019, the onerous lease provisions were recognized as impairment of the right of use assets.

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.

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 INVESTMENTS IN SUBSIDIARIES

DNV GL GROUP AS CONSOLIDATED CONSISTS OF THE PARENT COMPANY DNV GL GROUP AS AND THE FOLLOWING SUBSIDIARIES:

AMOUNTS IN NOK MILLION	BUSINESS OFFICE		SHARE CAPITAL IN 1000 LOCAL CURR.[1]	OWNERSHIP	BOOK VALUE
DNV GL AS	Bærum, Norway	NOK	5 000	100%	9 567.5
DNV GL Business Assurance Group AS	Bærum, Norway	NOK	1 033	100%	1.1
DNV GL Netherlands B.V.	Arnhem, The Netherlands	EUR	9 015	100%	2 236.7
Det Norske Veritas Eiendom AS	Bærum, Norway	NOK	8 129	100%	8.1
Total investment in subsidiaries					11 813.4

[1] incl. share premium

194 legal entities are consolidated in DNV GL Group's financial statements at 31 December 2019 of which 6 entities has non-controlling interest.

03 BUSINESS COMBINATIONS AND SALE OF OPERATIONS

SIGNIFICANT CHANGES IN GROUP STRUCTURE 2019

30 December 2019, the KEMA Laboratories in Arnhem (KEMA B.V.) and Prague (Zkusebnictvì a.s.) were sold to CESI. The transfer comprised KEMA and all the high-voltage and high-power testing and inspection activities performed by its personnel in its own laboratories in Arnhem and Prague. A sales gain of 141 million from the transaction is included in the income statement for 2019. The net sales amount of NOK 1 139 million was settled in cash in 2019.

SIGNIFICANT CHANGES IN GROUP STRUCTURE 2018

With retroactive effect from 1 January 2018 the shares in the real estate company Det Norske Veritas Eiendom AS were transferred from Det Norske Veritas Holding AS to DNV GL Group AS through a combined demerger-merger transaction. Det Norske Veritas Eiendom AS has consequently been consolidated into DNV GL Group in 2018. The financial statements for 2017 have not been restated.

1 June 2018, DNV GL acquired the remaining 50% shares of the associated company, DNV GL Presafe AS (Presafe), leading to a 100% ownership of the company. Presafe is an accredited Certification Body and EU Notified Body. By having full ownership of the company, DNV GL secures a strong business foundation with single leadership, enabling it to create a more competitive and agile organization. Presafe is fully consolidated from 1 June 2018 in the 2018 financial statements. Until 31 May 2018 Presafe was recognized in accordance with the equity method.

31 December 2018, DNV GL sold its solar testing labs to the management of DNV GL PVEL LLC. USA (PVEL). NOK 24.7 million has been recognized as a loss of sale PVEL in 2018 (note 6).

ACQUISITIONS 2018

COMPANY / ACTIVITIES	TRANSACTION DATE	OWNERSHIP	PURCHASE CURRENCY	ACQUISITION COST, LOCAL CURRENCY MILL	EXTERNAL REVENUE INCL. IN 2018 ACCT. MILL NOK
Presafe	01/06/2018	100%	NOK	25.4	44.9

The total purchase price for the shares in Presafe (total of fair value/ acquisition cost paid 1 June 2018 for 50% of Presafe and the book value of the 50% joint venture investment as per 1 June 2018) in excess of net book value of the equity, NOK 34.9 million, has been allocated to goodwill.

CASH FLOW ON ACQUISITION

AMOUNTS IN NOK MILLION

Net cash acquired with the subsidiary	3.1
Consideration paid in cash	(25.4)
Net cash flow on acquisition	(22.3)

04 EXTERNAL OPERATING REVENUE

DNV GL GROUP AS CONSOLIDATED

GEOGRAPHICAL AREA

AMOUNTS IN NOK MILLION

	2019	2018
Nordic countries	5 697.7	5 028.6
Europe and Africa	6 298.8	6 337.9
Asia Pacific	5 183.4	4 413.9
North and South America	4 230.0	3 858.1
Total operating revenue	21 409.9	19 638.5

BUSINESS AREA

AMOUNTS IN NOK MILLION

	2019	2018
Maritime	7 743.6	6 701.7
Oil & Gas	4 838.8	4 454.7
Energy	4 055.5	3 620.2
Business Assurance	3 626.4	3 645.4
Digital Solutions	1 046.3	911.9
Real Estate	8.2	205.5
Other	91.2	99.2
Total operating revenue	21 409.9	19 638.5

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 Digital Solutions, and one independent business unit, DNV Real Estate.

Operating revenue in DNV GL Group AS of NOK 28.0 million (NOK 26.2 million in 2018) mainly consist of global liability insurance expenses charged to subsidiaries.

05 PAYROLL EXPENSES

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION	2019	2018
Salaries	8 696.8	8 496.2
Bonus expenses	597.0	400.0
Payroll tax	1 016.5	958.7
Pension costs	785.4	779.9
Effect of pension plan changes / curtailment effects	(6.4)	11.2
Other contributions	626.3	578.0
Total payroll expenses	11 715.6	11 223.9
Full time equivalent	11 618	11 877

06 OTHER OPERATING EXPENSES

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION	2019	2018
Travel expenses (refundable and non-refundable)	1 091.6	1 067.1
External hired assistance	1 890.9	1 764.8
IT and communication expenses	588.5	586.8
Rent and real estate expenses	433.6[1]	878.5
Losses on accounts receivables	56.2	75.5
Loss on sale DNV GL PVEL LLC. USA	0.0	24.7
Other expenses (refundable and non-refundable)	2 245.8	2 045.4
Total other operating expenses	6 306.6	6 442.7

1 The change in rent and real estate expenses is related to the implementation of IFRS 16. See note 28 for further details

07 REMUNERATION TO GROUP CEO, EXECUTIVE COMMITTEE, BOARD OF DIRECTORS ETC.

REMUNERATION GUIDELINES FOR THE GROUP CEO AND THE MEMBERS OF THE EXECUTIVE COMMITTEE. The remuneration guidelines for the members of the Executive Committee (EC) including the Group CEO support DNV GL's vision of being a global organization with a focus on sustainability and a long-term perspective. The main compensation elements are a market-based salary, a bonus/profit-share scheme, and selected common employee benefits in line with the local market.

The Group CEO and Executive Committee participate in the pension and insurance schemes applicable in the country where their employment contracts are signed (currently Italy, Netherlands, and Norway).

DNV GL has a bonus/profit-share scheme in place for employees in higher employment grades, including the Executive Committee except for the Group CEO. The scheme is based on a combination of the DNV GL results at Group and business areas levels: achievement of financial targets (EBITA) at Group level (60%); and achievement of financial targets (EBITA) at business area level (40%). Target bonus for the Executive Committee is 25% of base salary with maximum value at 50% of base salary, which is in line with the guidelines for all companies organised as ASAs in Norway. The total pay-out across DNV GL will be capped at 20% of EBITA for 2019.

EXECUTIVE COMPENSATION DURING 2019. Ahead of the salary review process that takes effect as of 1 April every year, the senior executive compensation is compared to external benchmarks at a home country and pan-European level. Data is collected from Korn Ferry or similar service providers. Information publicly accessible from other comparable companies is also reviewed in this process.

The Group CEO is not part of the general bonus/profit-share programme, but has a discretionary bonus determined annually by the Board of Directors. The bonus calculation is reviewed against the principles for the other EC members, as well as some specific individual goals for the Group CEO. The bonus should not exceed 50% of annual base salary. Bonus pay-out for the Group CEO in 2019 based on the 2018 results was NOK 2.000.000.

The compensation package for Remi Eriksen consists of: Annual base salary of NOK 5 900 thousand and a car allowance of NOK 250 thousand. Eriksen has a right to retire at 65 years. If terminated from DNV GL while in the position as Group CEO, Eriksen is entitled to 12 months of base salary beyond notice period.

REMUNERATIONS AND LOANS TO THE EXECUTIVE COMMITTEE FOR 2019

AMOUNTS IN NOK THOUSAND

	REMUNERATIONS				LOANS AT 31 DEC. 2019			
	SALARY	OTHER BENEFITS	BONUS	PENSION COST	LOAN AMOUNT	INTEREST RATE	REPAYMENT PERIOD	SECURITY
Remi Eriksen	5 984	281	2 000	387				
Thomas Vogth-Eriksen	2 953	184	545	340	782	1.13 %	Apr. 2024	Mortgage
Gro Gotteberg	1 640	195	298	111				
Luca Crisciotti	3 177	100	711[2]	839[3]				
Kenneth Vareide [1]	1 114	96	155	108				
Ditlev Engel	3 598	503	532	211				
Knut Ørbeck-Nilssen	2 900	354	655[2]	285				
Liv Hovem	2 332	255	444	255				
Klas Bendrik	2 592	697	176	111				
Ulrike Haugen	1 562	165	417	111				

[1] Member of the Executive Committee from 1 June 2019, remuneration disclosed for June to December
[2] Bonus paid net of tax due to International Assignment status
[3] Statutory payments to the Italian social security institute INPS

07 REMUNERATION TO GROUP CEO, EXECUTIVE COMMITTEE, BOARD OF DIRECTORS ETC.

REMUNERATIONS TO THE BOARD OF DIRECTORS PAID OUT IN 2019

AMOUNTS IN NOK THOUSAND

	REMUNERATION BOARD OF DIRECTORS	REMUNERATION BOARD AUDIT COMMITTEE	REMUNERATION BOARD COMPENSATION COMMITTEE
Leif-Arne Langøy	445		45
Morten Ulstein [1]	201	13	7
Jon Fredrik Baksaas [2]	148	27	15
Nina Ivarsen	297		
Clemens Keuer	297		
Liselott Kilaas	297	53	
Lasse Kristoffersen	297		
David McKay [4]	126		
Nikolaos Papanikos [3]	171		
Silvija Seres	297		29
Birgit Aagaard-Svendsen	297	66	
Da Wei Tian [3]	171		
Jon Eivind Thrane	297		

[1] Vice-chairman of the Board of Directors until 31 July 2019
[2] Vice-chairman of the Board of Directors from 1 August 2019
[3] Member of the Board of Directors until 31 July 2019
[4] Member of the Board of Directors from 1 August 2019

FEES TO THE AUDITORS FOR 2019

AMOUNTS IN NOK THOUSAND

	DNV GL GROUP AS	GROUP AUDITOR OTHER NORWEGIAN ENTITIES	GROUP AUDITOR NON-NORWEGIAN ENTITIES	OTHER AUDITORS	TOTAL
Statutory audit	2 055	4 107	24 603	463	31 227
Tax consulting services	-	-	908	778	1 685
Other audit related services	-	-	177	1	178
Non-audit services	-	-	10	76	85

08 PENSION COSTS, PLAN ASSETS AND DEFINED BENEFIT PENSION LIABILITIES

DNV GL Group AS has both defined contribution pension plans and defined benefit pension plans. 10 137 employees are covered by the defined contribution pension plans while 2 921 persons (employees and pensioners) are covered by defined benefit pension plans. All defined benefit pension plans are closed for new entrants, however active members still build up their pension rights under these plans. End of service benefit schemes in some countries outside Norway (mainly Middle East and Asian countries with statutory defined benefit plan requirements) are still open for new entrants. These end of service benefit schemes are required by law and fully settled at retirement/ resignation.

The structure of the defined benefit 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.

The defined benefit pension plans in Norway are financed mainly 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 (closed in 2017) are financed through a separate pension fund, while the other plans are mainly financed through independent administrative funds/insurance companies. The pension cost and the pension liabilities as included in the accounts and in this note, are 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 and statutory regulations in the country where the pension plan is administered. Total pension costs for 2019 are NOK 779.0 million of which NOK 185.0 million are related to the defined benefit pension plans and NOK 593.9 million are related to the defined contribution pension plans and end of service benefit schemes.

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. 19	31 DEC. 18
Buildings and property	188.0	181.0
Mutual equity funds and hedge funds	4 355.7	3 622.2
Norwegian bonds and bond funds	1 843.8	1 567.2
Non-Norwegian bonds and bond funds	110.3	98.8
Bank accounts, other assets and liabilities	640.2	784.3
Total market value of plan assets Norway (DNV GL Pension fund)	7 138.0	6 253.5
Actual return/(loss) on plan assets	960.9	(64.7)

Capital contributed from DNV GL Group AS to the Norwegian Pension Fund, NOK 411 million, is reflected as other investments in the balance sheet for DNV GL Group AS.

08 PENSION COSTS, PLAN ASSETS AND DEFINED BENEFIT PENSION

PENSION COST – DEFINED BENEFIT PENSION SCHEMES AMOUNTS IN NOK MILLION	FUNDED NORWEGIAN DEFINED BENEFIT PENSION PLANS		GERMAN DEFINED BENEFIT PENSION PLANS		OTHER DEFINED BENEFIT PENSION PLANS	
	2019	2018	2019	2018	2019	2018
Net present value of this year's						
pension contribution	129.0	137.1	39.2	40.4	5.1	5.7
Effect of plan changes/curtailments	0.0	0.0	(6.4)	0.0	0.0	11.2
Payroll tax	18.2	19.3	0.0	0.0	0.0	0.0
Net present value of this year's						
pension contribution	147.1	156.4	32.7	40.4	5.1	16.9
Net interest on the net defined						
benefit liability (asset)	(16.1)	(17.8)	46.8	42.8	(1.7)	(0.7)
Payroll tax	(2.3)	(2.5)	0.0	0.0	0.0	0.0
Net interest on the net defined						
benefit liability (asset)	(18.3)	(20.3)	46.8	42.8	(1.7)	(0.7)

NET PENSION ASSET (LIABILITIES) – DEFINED BENEFIT PENSION SCHEMES AMOUNTS IN NOK MILLION	FUNDED NORWEGIAN DEFINED BENEFIT PENSION PLANS		GERMAN DEFINED BENEFIT PENSION PLANS		OTHER DEFINED BENEFIT PENSION PLANS	
	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18
Market value of plan assets	7 138.0	6 253.5	75.9	69.9	2 185.9	1 881.5
Actuarial present value of pension liabilities	(5 617.0)	(5 697.9)	(2 700.8)	(2 498.4)	(2 194.0)	(1 850.8)
Payroll tax	(93.1)	(97.3)	0.0	0.0	0.0	0.0
Net pension asset (liabilities)	1 427.9	458.2	(2 624.9)	(2 428.5)	(8.0)	30.7

END OF SERVICE BENEFIT SCHEMES AMOUNTS IN NOK MILLION	NORWEGIAN SCHEMES		GERMAN SCHEMES		OTHER SCHEMES	
	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18
Net liability	0.0	0.0	0.0	0.0	(184.9)	(171.5)
Hereof recorded in the balance sheet as:						
Net pension asset	1 427.9	458.2	0.0	0.0	56.0	81.5
Pension liabilities	0.0	0.0	(2 624.9)	(2 428.5)	(64.1)	(50.8)
Other non-current liabilities	0.0	0.0	0.0	0.0	(184.9)	(171.5)

08

PENSION COSTS, PLAN ASSETS AND DEFINED BENEFIT PENSION

The assumptions (discount rate, covered bonds) for calculation of the pension liabilities in Norway have been changed from 2.5% to 2.3%, the real income in society has been reduced from 0.75% to 0.25%. The changed assumptions led to reduced pension liabilities of NOK 98 million in 2019.

The assumptions (discount rate) for calculation of the pension liabilities in Germany have been changed from 2.0% to 1.3%. The changed assumptions led to increased pension liabilities of NOK 222 million in 2019.

NOK 460.2 million net actuarial gain on defined benefit pension plans have been reflected in other comprehensive income / other equity in 2019.

THE CALCULATIONS OF THE PENSION LIABILITIES ARE BASED ON THE FOLLOWING ACTUARIAL ASSUMPTIONS:	NORWEGIAN SCHEMES[2]		GERMAN SCHEMES		OTHER SCHEMES	
	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18	31 DEC. 19	31 DEC. 18
Discount rate[1]	2.30%	2.50%	1.3%	2.0%	0.5-5.3%	0.5-7.0%
Projected annual salary adjustment	2.25%	2.75%	2.5%	2.5%	2.0-5.0%	2.0-5.0%
Projected annual increase in pension benefit	1.58%	1.75%	1.5%	1.5%	0.5-2.9%	0.5-2.3%
Projected annual increase of Norwegian						
government basis pension	1.75%	2.25%				
Expected annual return on plan assets	2.30%	2.40%	2.0%	1.8%	0.5-5.3%	0.5-7.0%

[1] Covered bond rate for Norwegian schemes.
[2] The pension liability calculations for the Norwegian schemes are based on K2013BE (standard best estimate mortality table).

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 has been determined based on reasonably possible changes of the respective 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	434.8	(493.4)	(137.8)	169.3
Impact on defined benefit obligation German plans	196.0	(200.7)	(21.6)	21.4

09 FINANCIAL INCOME AND FINANCIAL EXPENSES

DNV GL GROUP AS 2019	DNV GL GROUP AS 2018	AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED 2019	DNV GL GROUP AS CONSOLIDATED 2018
1 406.4	2 003.2	Dividend from subsidiaries	0.0	0.0
150.7	0.0	Group contribution received	0.0	0.0
0.0	0.0	Profit (loss) from investment in associates (note 15)	(5.6)	(3.2)
13.1	0.0	Gain from sale of available for sale investments	0.0	1.0
0.0	0.0	Net interest on the net defined benefit liability (asset) (Note 8)	(26.8)	(21.8)
13.6	3.6	Other interest received	49.8	37.2
6.5	0.8	Net interest income (expense) group companies	(61.6)	(16.9)
0.0	0.0	Interest expense for lease liabilities	(66.8)	0.0
(17.1)	(20.7)	Other interest expenses	(43.3)	(53.8)
(66.5)	(103.9)	Currency gains (losses)	(143.2)	(141.8)
(5.4)	(1.7)	Other financial items	(51.5)	(73.5)
1 501.2	1 881.2	**Net financial income (expenses)**	(349.1)	(272.8)

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 (EUR, USD, NOK, GBP, CNY and KRW) make up for 76% 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 nominal value of forward exchange contracts equivalent to NOK 2 377 million. The Group does not apply hedge accounting and realized and unrealized gains and losses are recognized in the income statement. Unrealized gain at year-end is NOK 54.8 million.

NOK 1 069 million of the NOK 2 377 million nominal value of forward exchange contracts is hedging of the settlement of the KEMA Laboratories in EUR. Net hedge gain of NOK 13.7 million has been reflected in the sales gain from divestment of KEMA Laboratories in 2019.

A change in USD exchange rate of +/- 1 percentage point will lead to a change in operating revenue of approximately +/- NOK 36 million and a change in operating profit (EBIT) of approximately +/- NOK 4 million.

A change in EUR exchange rate of +/- 1 percentage point will lead to a change in operating revenue of approximately +/- NOK 45 million and a change in operating profit (EBIT) of approximately +/- 4 million.

CREDIT RISK. Receivable balances (NOK 4 634 million) 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 (NOK 3 809 million) and certain derivative instruments (NOK 54.8 million), 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. Both risks are considered to have limited effect.

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 2019	DNV GL GROUP AS 2018	AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED 2019	DNV GL GROUP AS CONSOLIDATED 2018
		Tax expense consists of:		
(0.0)	0.3	Norwegian income tax	82.8	1.0
1.0	0.5	Income tax outside Norway	531.8	476.8
1.0	0.7	Total tax payable	614.6	477.8
0.0	(9.9)	Tax effect group contribution	36.9	48.2
20.5	(18.4)	Change in deferred tax in Norway	35.4	(68.7)
0.0	0.0	Effect of changed tax rates	0.0	30.6
0.0	0.0	Change in deferred tax outside Norway	(76.4)	(328.0)
20.5	(18.4)	Total change in deferred tax	(41.0)	(366.1)
21.5	(27.6)	**Tax expense**	610.4	159.9
329.9	431.9	Tax on profit at 22% (23% in 2018)	436.8	63.5
		Tax effect of:		
0.0	0.0	Foreign tax exempt branches	0.0	(1.0)
1.0	0.5	Non refundable foreign withholding taxes	61.0	37.2
0.0	0.0	Gain sale of shares	(114.3)	(0.2)
(309.4)	(460.7)	Other permanent differences	41.3	67.6
0.0	0.8	Effect of changed tax rates	0.0	30.6
0.0	0.0	Changes of previous years taxes	152.9	(57.8)
0.0	0.0	Tax assets not recognized current year	21.8	14.2
0.0	0.0	Differences between tax rates in Norway and abroad	11.0	5.8
21.5	(27.6)	**Tax expense**	610.4	159.9
		Effective tax rate	31 %	58 %
		Net tax-reducing/tax-increasing temporary differences:		
0.0	0.0	Non-current assets	1 355.2	945.8
12.7	0.0	Current assets	40.1	(115.6)
0.0	(80.6)	Liabilities	(2 620.2)	(2 359.8)
0.0	0.0	Tax loss to be carried forward	(1 133.7)	(1 667.6)
12.7	(80.6)	**Basis for deferred tax asset/liability**	(2 358.6)	(3 197.1)
22 %	22 %	Tax rates applied	17%-42%	17%-42%
0.0	17.7	**Deferred tax asset**	1 012.1	1 198.5
(2.8)	0.0	**Deferred tax liability**	(373.5)	(412.5)

In addition to the tax loss to be carried forward of NOK 1 133.7 million above, the Group has accumulated tax-loss to be carried forward amounting to NOK 794 million. As the future utilization of these tax losses cannot be demonstrated, the related deferred tax asset (DTA) of NOK 166 million, is not recognized in the balance sheet.

NOK 109.9 million deferred tax cost related to actuarial gains on defined benefit pension plans, has been reflected in other comprehensive income/ other equity, together with the related actuarial gain.

12 INTANGIBLE ASSETS

AMOUNTS IN NOK MILLION	GOODWILL	CUSTOMER CONTRACTS AND RELATIONS	TRADEMARKS	OTHER INTANGIBLE ASSETS	TOTAL
Acquisition cost					
1 January 2018	9 075.9	2 740.4	558.5	2 354.6	14 729.4
Additions	35.3	0.0	0.0	356.1	391.4
Disposals	(20.0)	(2.9)	0.0	0.0	(22.9)
Currency translation differences	49.3	16.0	3.0	7.2	75.5
Total acquisition cost 31 Dec. 2018	9 140.5	2 753.5	561.5	2 718.0	15 173.4
Additions	0.0	0.0	0.0	279.9	279.9
Disposals from divestments (note 3)	(188.5)	(92.8)	(130.5)	(3.9)	(415.6)
Currency translation differences	(60.8)	(19.4)	(3.6)	(8.3)	(92.1)
Total acquisition cost 31 Dec. 2019	8 891.2	2 641.3	427.4	2 985.7	14 945.6
Accumulated amortization and impairment					
1 January 2018	(359.3)	(1 465.5)	0.0	(1 181.8)	(3 006.6)
Amortization	0.0	(251.3)	0.0	(261.7)	(513.0)
Impairment	0.0	0.0	0.0	0.0	0.0
Disposals	0.0	5.6	0.0	0.0	5.6
Currency translation differences	0.0	(15.9)	0.0	(10.1)	(26.0)
Total accum. amortization and impairment 31 Dec. 2018	(359.3)	(1 727.1)	0.0	(1 453.7)	(3 540.1)
Amortization	0.0	(233.8)	0.0	(186.7)	(420.5)
Impairment	0.0	0.0	0.0	(9.3)	(9.3)
Disposals from divestments (note 3)	0.0	72.8	0.0	0.0	72.8
Currency translation differences	(0.3)	11.9	0.0	7.6	19.3
Total accum. amortization and impairment 31 Dec. 2019	(359.6)	(1 876.2)	0.0	(1 642.0)	(3 877.8)
Net book value					
31 December 2019	8 531.7	765.2	427.4	1 343.6	11 067.9
31 December 2018	8 781.2	1 026.4	561.5	1 264.3	11 633.4
Useful life		1-10 years	Indef.	5-10 years	

Other intangible assets are amortized linearly, based on evaluation of useful life.
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).
Trademarks have 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 and Digital Solutions.

The test is performed at year end. An impairment loss is recognized if the estimated recoverable amount is lower than the carrying amount of the cash generating unit.

Goodwill is allocated to the business areas as follows:

AMOUNTS IN NOK MILLION	2019	2018
Maritime	3 121.4	3 141.5
Oil & Gas	3 488.5	3 512.6
Energy	1 688.1	1 893.7
Business Assurance	185.8	185.4
Digital Solutions	47.9	47.9
Total goodwill	8 531.7	8 781.2

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) - POST TAX	LONG-TERM NOMINAL GROWTH RATE
Maritime	7.5 %	1.5 %
Oil & Gas	7.6 %	1.5 %
Energy	7.6 %	1.5 %
Business Assurance	7.5 %	1.5 %
Digital Solutions	8.2 %	1.5 %

SENSITIVITY ANALYSIS. In connection with impairment test of goodwill, sensitivity analyses are carried out for each individual cash-generating unit. For Energy a decrease in EBITA-margin of 4.4% or an increase in WACC of 5.5% will lead to impairment. For Oil & Gas a decrease in EBITA-margin of 1.9% or an increase in WACC of 1.5% will lead to impairment.

None of the other cash-generating units will be in an impairment situation unless 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 EQUIP-MENT, FIXTURES AND FITTINGS	RIGHT-OF-USE ASSETS	TOTAL
Acquisition cost				
1 January 2018	1 701.2	4 126.0	0.0	5 827.3
Additions	117.2	189.2	0.0	306.3
Additions from business combinations	1 710.4	308.9	0.0	2 019.2
Disposals	(47.5)	(226.4)	0.0	(273.8)
Currency translation differences	12.9	29.6	0.0	42.6
Total acquisition cost 31 December 2018	3 494.2	4 427.3	0.0	7 921.6
Recognition of right of use asset on initial application of IFRS 16			1 879.2	1 879.2
Total acquisition cost 1 January 2019	3 494.2	4 427.3	1 879.2	9 800.8
Additions	48.8	97.9	318.1	464.9
Disposals	(8.6)	(48.0)	0.0	(56.5)
Disposals from divestments (note 3)	(355.3)	(1 085.6)	0.0	(1 441.0)
Currency translation differences	7.9	14.7	25.2	47.8
Total acquisition cost 31 December 2019	3 187.0	3 406.4	2 222.5	8 815.9
Accumulated depreciation and impairment				
1 January 2018	735.8	2 547.2	0.0	3 283.0
Depreciation	129.2	229.0	0.0	358.2
Impairment	58.2	493.8	0.0	552.0
Additions from business combinations	424.6	280.3	0.0	705.0
Disposals	(9.1)	(179.5)	0.0	(188.7)
Currency translation differences	12.8	22.4	0.0	35.2
Total accumulated depreciation and impairment 31 Dec. 2018	1 351.5	3 393.2	0.0	4 744.7
Depreciation	135.5	203.4	425.7	764.6
Impairment	0.0	0.0	0.0	0.0
Disposals	(4.3)	(34.8)	0.0	(39.0)
Disposals from divestments (note 3)	(111.9)	(727.6)	0.0	(839.5)
Currency translation differences	3.7	9.2	0.0	12.9
Total accumulated depreciation and impairment 31 Dec. 2019	1 374.5	2 843.5	425.7	4 643.7
Net book value				
31 December 2019	1 812.5	563.0	1 796.8	4 172.3
31 December 2018	2 142.7	1 034.3	0.0	3 176.9
Useful life	15-67 years indefinite (land)	3-15 years	1-15 years	
Depreciation plan	Linear	Linear	Linear	

The right-of-use assets consist of leased office premises.

Due to a significant deterioration in the market conditions for High Power laboratory testing, an impairment loss related to Energy laboratories of NOK 552 million was recognized in 2018. The impairment loss was based on the value in use estimated using the future expected cash flows covering a 30-year period and no residual value. Discount ratec (WACC) was set to 7.9%.

The disposals for 2018 are mainly related to sale of properties and a plot of land in Det Norske Veritas Eiendom AS, leading to a gain of NOK 196.9 million.

15 INVESTMENT IN ASSOCIATES

DNV GL Group AS' ownership (through DNV GL AS) in StormGeo Holding AS is 26.4%. The investment is recognized in accordance with the equity method in the consolidated financial statements.

COMPANY AMOUNTS IN NOK MILLION	BUSINESS OFFICE	OWNERSHIP	ACQUISITION COST	SHARE OF LOSS FOR THE YEAR	BOOK VALUE
StormGeo Holding AS	Bergen	26%	145.5	(5.6)	182.3
Total investment in associates				(5.6)	182.3

16 OTHER CURRENT LIABILITIES

	DNV GL GROUP AS CONSOLIDATED	
AMOUNTS IN NOK MILLION	31 DEC. 19	31 DEC. 18
Contract liabilities	2 241.8	2 559.5
Accrued bonus to employees	597.0	400.0
Accrued holiday allowances	428.4	428.5
Unrealized loss and interest related to forward contracts	0.0	80.5
Accrued expenses and other current liabilities	1 227.1	1 140.7
Total other current liabilities	4 494.3	4 609.1

17 TRADE DEBTORS

AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED 31 DEC. 19	31 DEC. 18
Gross trade debtors	4 633.7	4 600.6
Provision for bad debts	(154.5)	(174.6)
Net trade debtors	4 479.2	4 426.0

18 OTHER LONG-TERM RECEIVABLES

AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED 31 DEC. 19	31 DEC. 18
Loans to employees	19.7	29.0
Other long-term receivables	384.2	366.9
Total other long-term receivables	403.8	395.9

19 PROVISIONS

DNV GL GROUP AS CONSOLIDATED

AMOUNTS IN NOK MILLION	CLAIMS AND CONTINGENCIES	ONEROUS LEASE	RESTRUCTURING	OTHER PROVISIONS	TOTAL
Balance at 1 January 2018	121.6	136.4	252.4	116.8	627.2
Currency translation differences	0.4	1.9	1.3	0.2	3.9
Additions	0.0	30.3	113.9	36.3	180.5
Utilization	(5.8)	(67.4)	(220.4)	(54.8)	(348.4)
Reversal	(34.3)	(3.7)	(20.2)	(1.8)	(60.1)
Balance at 31 December 2018	82.0	97.4	127.0	96.7	403.1
Current	82.0	27.0	115.3	40.2	264.6
Non-current	0.0	70.4	11.6	56.5	138.5
Recognition of impairment of right of use					
asset on initial application of IFRS 16		(97.4)			(97.4)

Balance at 1 January 2019	82.0	0.0	127.0	96.7	305.7
Currency translation differences	(0.3)	0.0	1.4	(1.2)	(0.2)
Additions	34.1	0.0	76.7	16.5	127.2
Utilization	(26.1)	0.0	(83.5)	(11.1)	(120.7)
Reversal	(41.5)	0.0	(12.4)	0.0	(53.8)
Balance at 31 December 2019	48.2	0.0	109.2	100.8	258.2
Current	16.2	0.0	109.2	37.8	163.2
Non-current	32.0	0.0	0.0	63.0	95.0

Provisions for claims and contingencies reflect fair value of pending legal disputes from acquisitions and provisions for other pending legal disputes.

The exposure for other claims classified as contingent liabilities, less likely than not to materialize, amounts to less than NOK 20 million.

Onerous lease provisions 31 December 2018 represent best estimates of the net lease obligations (net of incoming cash flows expected from sub-lease) under the onerous lease contracts. The provisions have been discounted. On initial application of IFRS 16 1 January 2019, the onerous lease provisions were recognized as impairment of the right of use assets.

Included in other provisions are provisions for onerous contracts and lease contract dilapidations.

20 LEASE LIABILITIES

OVERVIEW OF FUTURE MINIMUM LEASE

Within one year	409.9
After one year but not more than five years	1 148.2
More than five years	469.9
Future minimum lease	2 027.9

SUMMARY OF THE LEASE LIABILITIES IN THE FINANCIAL STATEMENTS

At initial application 01.01.2019	1 976.7
New lease liabilities recognised in the year	244.9
Cash payments for the principal portion of the lease liability	(420.9)
Interest expense on lease liabilities	66.8
Reassessment of the discount rate on previous lease liabilities	65.7
Currency exchange differences	27.2
Total lease liabilities at 31 December 2019	1 960.4

Non-current lease liabilities	1 550.5
Current lease liabilities	409.9

21 CASH AND BANK DEPOSITS

DNV GL Group AS has the following cash pool systems:

BANK	OVERDRAFT FACILITY (MILL)	PARTICIPATING ENTITIES	BALANCE 31 DEC. 19 (MILL NOK)
Danske Bank	NOK 200	All DNV GL subsidiaries in Norway, Denmark, Sweden,	633
		Finland, UK, Ireland, Faroe Islands, and the Baltics	
Deutsche Bank	EUR 20	Several subsidiaries in Europe	1 182
Bank of America		Most of the DNV GL subsidiaries in US	236
Bank of America		Most of the DNV GL subsidiaries in Canada	19
DNB ASA	NOK 50	Some of legacy DNV legal entities	135
Handelsbanken		Some DNV GL subsidiaries in Sweden, Poland, Finland, Estonia,	29
		Latvia, Lithuania and Germany	
Citibank - AED		Some DNV GL legal entities in Middle East	4
Citibank - AUD		Some DNV GL legal entities in Australia	12
Citibank - USD (UAE)		Some DNV GL legal entities in Middle East	69
Citibank - USD (SG)	USD 13	Some DNV GL legal entities in Singapore and South East Asia	34
Citibank - SGD		Some DNV GL legal entities in Singapore and South East Asia	27
Citibank - EUR		Some legacy DNV legal entities in the Euro-countries	(27)

Balances on bank accounts participating in the cash pooling systems are considered as internal assets or liabilities vis-à-vis other Group participants. Cash pool balances 31 December are included in Cash and bank deposits in the balance sheet at 31 December.

The following DNV GL Group AS' wholly owned subsidiaries have the following local credit facilities guaranteed by DNV GL Group AS or DNV GL AS through parent company guarantees:

BANK	OVERDRAFT FACILITY (MILL)	PARTICIPATING ENTITIY	DRAWN 31 DEC. 19 (MILL)
Citibank China	CNY 50	Det Norske Veritas China Company Ltd	Undrawn
Citibank India	INR 40 + INR 30	DNV GL Business Assurance India Private Ltd	Undrawn
Citibank India	INR 200	Garrad Hassan India Private Ltd	Undrawn
Citibank Korea	KRW 17 000	DNV GL Korea Ltd	Undrawn
Citibank Brazil	BRL 15	DNV GL Classificacao Certificacao e Consultoria Brasil Ltda	BRL 10.1

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.

22 INTEREST BEARING LOANS AND BORROWINGS

DNV GL Group AS has an agreement for a NOK 1 000 million multi-currency revolving credit facility with Handelsbanken Norwegian branch of Svenska Handelsbanken AB. The facility expires in May 2022 and was undrawn per year-end 2019. 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 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.

23 LIABILITIES GROUP COMPANIES

DNV GL GROUP AS		AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED	
31 DEC. 19	31 DEC. 18		31 DEC. 19	31 DEC. 18
		Non-current liabilities		
2 100.0	2 100.0	Group internal loan from Det Norske Veritas Holding AS	2 100.0	2 100.0
463.8	570.8	Group internal loans from subsidiaries	0.0	0.0
2 563.8	2 670.8	Total loans from group companies	2 100.0	2 100.0
		Current liabilities		
0.0	0.0	Group contribution	167.6	209.4
700.0	0.0	Dividend accrued	700.0	0.0
2 839.9	2 727.5	Debt to cash-pool participants	185.8	380.8
67.7	33.5	Group internal accounts payable	60.4	10.1
3 607.6	2 761.0	Total current liabilities group companies	1 113.8	600.3
6 171.4	5 431.8	Total liabilities group companies	3 213.8	2 700.3

24 SHARE CAPITAL AND OWNERS

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 100% by Det Norske Veritas Holding AS, with business office in Bærum, Norway.

25 RELATED PARTY TRANSACTIONS

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 2019 amounts to NOK 7.3 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 (100 % shareholder). The revenue recognized for these services in 2019 is NOK 7.5 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 2019 is NOK 0.3 million.

26 FINANCIAL ASSETS AND FINANCIAL LIABILITIES

	31 DECEMBER 2019				31 DECEMBER 2018			
	DNV GL GROUP AS CONSOLIDATED				**DNV GL GROUP AS** CONSOLIDATED			
AMOUNTS IN NOK MILLION	FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH P&L	AMORTIZED COSTS	FAIR VALUE THROUGH P&L	OTHER FINANCIAL LIABILITIES	FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH P&L	LOANS AND RECEIVABLES	AVAILABLE FOR SALE	OTHER FINANCIAL LIABILITIES
ASSETS								
Non-current assets								
Equity investments			27.4				27.4	
Loans to employees		19.7				29.0		
Other long-term receivables		384.2				366.9		
Current assets								
Cash and bank deposits		3 809.0				2 630.6		
Trade debtors		4 479.2				4 426.0		
Other debtors		1 005.4				857.4		
Forward contracts	12.7							
FINANCIAL LIABILITIES								
Non-current								
Other non-current liabilities				358.7				292.5
Current								
Trade creditors				427.8				544.7
Overdrafts				22.0				30.7
Forward contracts					80.5			

27 GUARANTEES

DNV GL GROUP AS 31 DEC. 19	DNV GL GROUP AS 31 DEC. 18	AMOUNTS IN NOK MILLION	DNV GL GROUP AS CONSOLIDATED 31 DEC. 19	DNV GL GROUP AS CONSOLIDATED 31 DEC. 18
0.0	0.0	Guarantee commitments not included in the accounts	367.6	304.6

These guarantees are not secured by mortgage.
Guarantee commitments are mainly related to customer contracts entered into by DNV GL Group subsidiary companies.

The 100% shareholder of DNV GL Group AS, Det Norske Veritas Holding AS, has an agreement for a NOK 1 500 million multi-currency revolving credit facility and a NOK 5 000 million term loan with a bank syndicate consisting of Danske Bank, Handelsbanken Norwegian branch of Svenska Handelsbanken AB and Nordea. The facilities are secured with a pledge in properties belonging to Det Norske Veritas Eiendom AS.

28 IMPLEMENTATION OF NEW STANDARDS ISSUED

IFRS 15 REVENUES FROM CONTRACTS AND IFRS 9 FINANCIAL INSTRUMENTS. The Group has initially applied IFRS 15 and IFRS 9 from 1 January 2018. The implementation of the new IFRS standards have no material impact on DNV GL's consolidated financial statements and no implementation effects have been recognized in 2018.

IFRS 16 LEASES. At 1 January 2019, DNV GL Group implemented IFRS 16 applying the modified retrospective approach with no restatement of comparable figures for 2018. At the date of initial application of IFRS 16, the Group recognised a lease liability for leases previously classified as operating leases after IAS 17 Leases. The Group measured the lease liabilities at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate 1 January 2019. The Group also recognised right-of-use assets on a lease-by-lease basis measured at an amount equal to the lease liability.

A lease liability of NOK 1 977 million and a right-of-use (ROU) asset of NOK 1 880 million was recognized 1 January 2019. The difference between the lease liability and the ROU asset being recognized relates to the derecognition of former onerous lease contract provisions of NOK 97 million which are now presented as impairment of ROU asset.

See note 14 for right-of-use assets and note 20 for lease liabilities.

EFFECT OF IMPLEMENTING IFRS 16

	31 DEC. 19
Deferred tax asset	17.3
Tangible fixed assets	1 796.8
Total assets	1 814.0

	31 DEC. 19
Other equity	(54.4)
Non-current liabilities	1 486.2
Current liabilities	382.2
Total equity and liabilities	1 814.0

29 SUBSEQUENT EVENTS

During the first quarter of 2020, the spread of the Coronavirus (COVID-19) has impacted an increasing number of countries with increasing severity. In March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic.

The COVID-19 outbreak is in an early state. The impact of the outbreak for DNV GL for the first two months was limited and varies among the business areas. The situation is monitored closely and the impact on employees, customers and business is assessed continuously and necessary mitigations are and will be implemented as required. The full extent, consequences and duration of the COVID-19 pandemic and the resulting operational and economic impact for DNV GL cannot be predicted at the time of publication of the DNV GL Group consolidated financial statements for 2019.

Independent auditor's report

TO THE GENERAL MEETING OF DNV GL GROUP AS

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

OPINION. We have audited the financial statements of DNV GL Group AS, which comprise:

- The financial statements of the parent company DNV GL Group AS (the Company), which comprise the statement of financial position as at 31 December 2019, the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and

- The consolidated financial statements of DNV GL Group AS and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion:

- The financial statements are prepared in accordance with the law and regulations.
- The accompanying financial statements give a true and fair view of the financial position of the Company as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with simplified application of international accounting standards according to section 3-9 of the Norwegian Accounting Act.
- The accompanying consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with simplified application of international accounting standards according to section 3-9 of the Norwegian Accounting Act.

BASIS FOR OPINION. We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company and the Group as required by laws and regulations, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OTHER INFORMATION. Management is responsible for the other information. The other information comprises information in the annual report, except the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard..

RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE MANAGING DIRECTOR FOR THE FINANCIAL STATEMENTS. The Board of Directors and the Managing Director (Management) are responsible for the preparation in accordance with law and regulations, including fair presentation of the financial statements in accordance with simplified application of international accounting standards according to the Norwegian Accounting Act section 3-9, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's and the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error. We design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit 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 Company's or the Group's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company and the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company and the Group to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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 Board of Directors' report concerning the financial statements, the going concern assumption and the proposed 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 management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the Company's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 1 April 2020
KPMG AS

Øyvind Skorgevik
State Authorised Public Accountant

Independent auditor's assurance report

TO THE READERS OF DNV GL GROUP'S SUSTAINABILITY REPORTING 2019

We have been engaged by the management of DNV GL GROUP AS ('DNV GL') to provide limited assurance in respect of the sustainability reporting in the Annual Report of DNV GL. Included in the scope is the following sections; What is important to us, Sustainability, Value to customers, Value to employees, Value to society and GRI index 2019 (hereafter sustainability reporting 2019). The scope excludes future events or the achievability of the objectives, targets and expectations of DNV GL and information contained in webpages referred to in the sustainability reporting 2019 unless specified in this report.

OUR CONCLUSION. Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

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

Based on the limited assurance procedures performed and the evidence obtained, as described below, nothing has come to our attention, to indicate that the sustainability reporting 2019 is not presented, in all material respects, in accordance with the criteria as defined by the GRI Standards; Core option.

MANAGEMENT OF DNV GL'S RESPONSIBILITY. The management of DNV GL is responsible for the preparation and presentation of the sustainability reporting 2019 in accordance with the criteria as defined by the GRI Standards; Core option. It is important to view the information in the sustainability reporting 2019 in the context of these criteria.

These responsibilities include establishing such internal controls as management determines are necessary to enable the preparation of the information in the sustainability reporting 2019 that are free from material misstatement, whether due to fraud or error.

OUR RESPONSIBILITY. Our responsibility is to provide a limited assurance conclusion on DNV GL's preparation and presentation of the sustainability reporting 2019.

We conducted our engagement in accordance with the International Standard for Assurance Engagements (ISAE 3000): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board.

ISAE 3000 requires that we plan and perform the engagement to obtain limited assurance about whether the information in the sustainability reporting 2019 is free from material misstatement.

The firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

LIMITED ASSURANCE OF THE SUSTAINABILITY REPORTING 2019. The procedures selected depend on our understanding of the sustainability reporting and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. Our procedures for limited assurance on the sustainability reporting 2019 included, amongst others:

- A risk analysis, including a media search, to identify relevant sustainability issues for DNV GL in the reporting period;
- Interviews with senior management and relevant staff at corporate level concerning sustainability strategy and policies for material issues, and the implementation of these across the business;
- Enquiries to management to gain an understanding of DNV GL's processes for determining material issues for key stakeholder groups;
- Interviews with relevant staff at corporate level responsible for providing the information, carrying out internal control procedures and consolidating the data in the sustainability reporting 2019;
- Reviewing relevant internal and external documentation, on a limited test basis, in order to determine the reliability of the sustainability reporting 2019;
- Assessment of the GRI index;
- Reading the sustainability reporting 2019 to determine whether there are any material misstatements of fact or material inconsistencies based on our understanding obtained through our assurance engagement.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement, and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

PURPOSE OF OUR REPORT. In accordance with the terms of our engagement, this assurance report has been prepared for DNV GL for the purpose of assisting the management in determining whether DNV GL's limited assurance sustainability information is prepared and presented in accordance with the GRI Standards; Core option and for no other purpose or in any other context.

Oslo, 1 April 2020 KPMG AS	Mona Irene Larsen *State Authorized Public Accountant*	Anette Rønnov *Director*

CONTACT INFORMATION

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fasett.no

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GRI index

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards, core level. The report is independently assured by KPMG and their independent auditors assurance report concludes that the report is presented, in all material respects, in accordance with the core level of the GRI Standards. This report also constitutes our Communication on Progress to the UN Global Compact.

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GRI DISCLOSURE		WHERE REPORTED	PAGE
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Omissions from the GRI Standards

[1] **205-2 DISCLOSURE PARTLY REPORTED.** The reason for the omission is a lack of information on employee category and region for our communication of anti-corruption policies and procedures. As 98% and 97% of all employees across categories and regions have completed the mandatory Code of Conduct and Anti-corruption and Antitrust e-learning respectively, we will not register more details.

[2] **403-10 DISCLOSURE PARTLY REPORTED.** DNV GL monitors the work-related ill health of employees, but we have chosen not to report on this fully.

Reporting period and format

The reporting period for the information provided is the 2019 calendar year. Our sustainability reporting is integrated into our Annual Report. The Annual Report for 2018 was made available on 5 April 2019 on the company website.

TOPIC-SPECIFIC DISCLOSURES

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103-3	Evaluation of the management approach	What is important to us, and in each topic specific chapter	
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SAFER, SMARTER, GREENER

HEADQUARTERS:

DNV GL AS
NO-1322 Høvik, Norway
Tel: +47 67 57 99 00
www.dnvgl.com

ABOUT DNV GL

We are the independent expert in risk management and quality assurance. Driven by our purpose, to safeguard life, property and the environment, we empower our customers and their stakeholders with facts and reliable insights so that critical decisions can be made with confidence. As a trusted voice for many of the world's most successful organizations, we use our knowledge to advance safety and performance, set industry benchmarks, and inspire and invent solutions to tackle global transformations.

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