North Sea Offshore Update

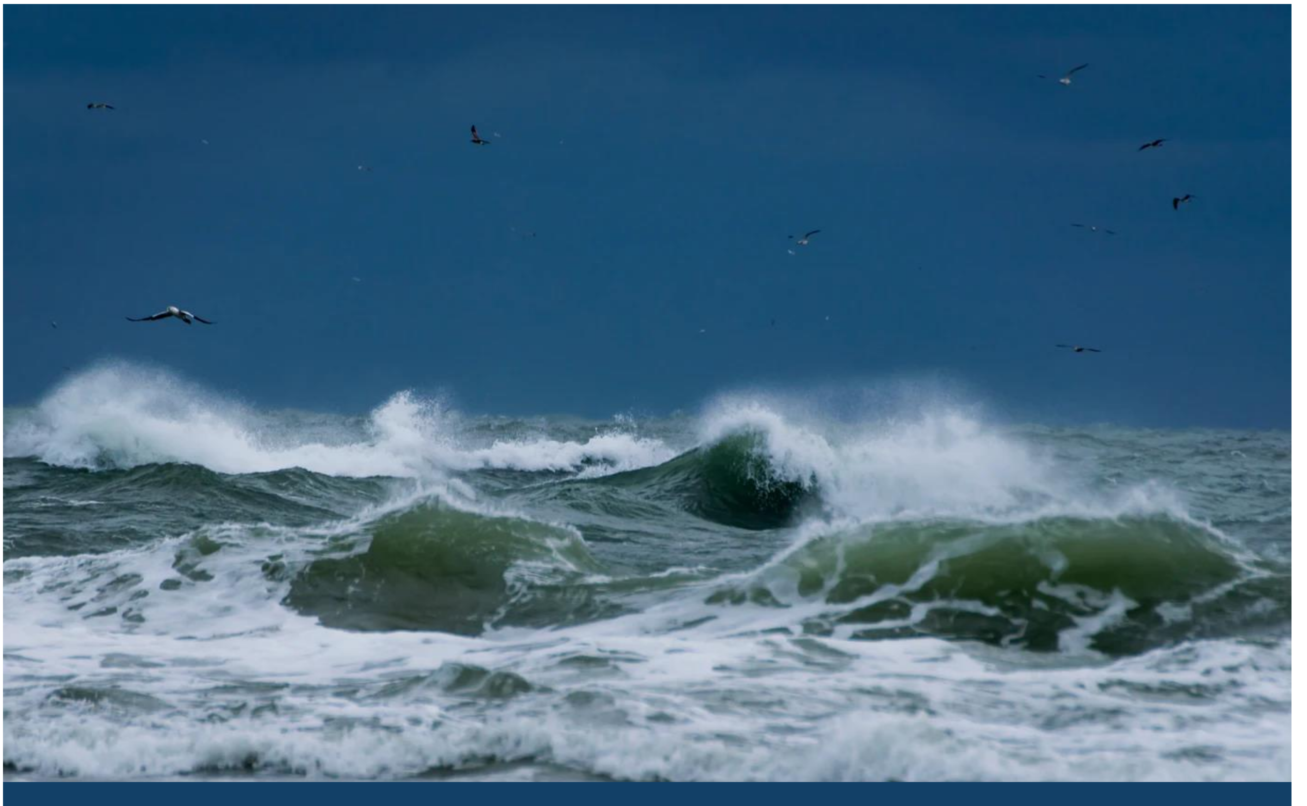
Weathering the COVID-19 storm and a look beyond

April 2020

Turbulence is here to stay for Dutch Offshore: how to weather the storm and safeguard the long term?

The oil price has nose-dived and the COVID-19 pandemic is not only a global health crisis, but also a major accelerator of global recession[1] that deeply affects our daily lives, macro-economics, and industry

In this article we explore the impacts of this compound crisis on the Dutch Offshore sector and why it is important to stay the course. We provide practical advice on cash management, crash prevention, and how we can collectively bolster Dutch Offshore for the future. We are confident the sector can weather the storm, but a collective approach can make Offshore even stronger.



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1 Drop in oil price, demand and glut of supply: a toxic cocktail for Dutch Offshore?

The oil price has nose-dived recently – that's nothing new, but the simultaneous contraction of demand and glut of supply is unprecedented with significant near-term impact – will it impact the longer term?

The Offshore sector is heavily impacted by two simultaneous events, early 2020[2]:

An escalating oversupply of oil, driven by the geopolitical play between OPEC and non-OPEC oil producers, with Saudi Arabia even further opening the tap, which may exceed current availability of storage capacity within months[3]

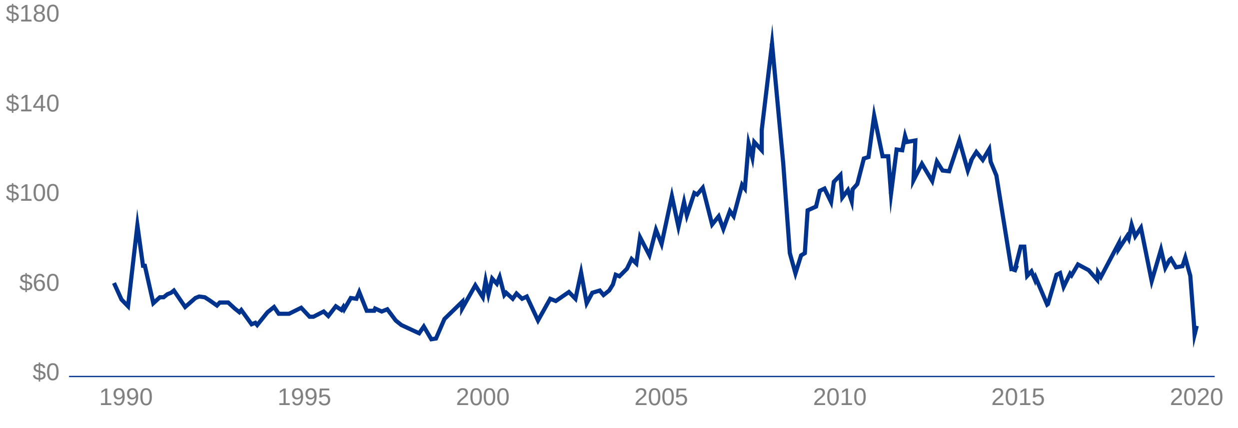
The COVID-19 pandemic and corresponding efforts to mitigate the spread, including travel restrictions and quarantines, are disrupting the global economy, drastically reducing mobility, supply of parts and raw materials, and creating an unprecedented destruction in demand for energy.

The economic impact of the COVID-19 crisis cannot yet be estimated, but as an immediate effect on the industry, large percentages of offshore platform workers are forced to return to shore to be quarantined, substantially limiting offshore companies' operational capabilities in the next few months.[4]

The oil price hit its lowest level since 1998 and uncertainty on oil prices is here to stay.[5] Since organic oil deposits cannot simply be shutdown temporarily without damage, responding now to the contraction in demand could imply permanent loss of oil production and far bigger shortages when the economy picks up.[6]

A heavy recession is predicted for 2020 and perhaps longer, with direct impact on global travel, energy demand, and indirectly on the appetite to invest.

Brent crude oil price in $



Source: Macrotrends, 2020. https://www.macrotrends.net/1369/crude-oil-price-history-chart

2 Clients slash budgets - Dutch Offshore must play in sync to survive

The shock oil market collapse combined with economic impacts of COVID-19 forces integrated oil & gas to cut spending – Dutch Offshore must play in sync to survive, beyond immediate concerns of people's health and safety

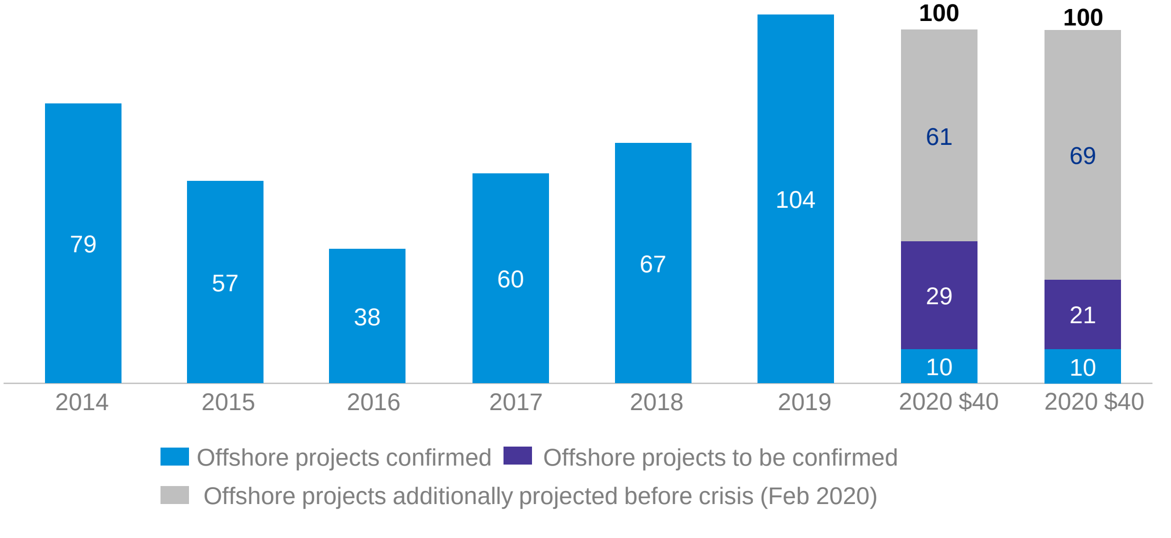
Putting HSE first, leaders in the Dutch Offshore industry are currently focused on protecting the health and safety of their people to cope with the COVID-19 pandemic's effects.

- SBM Offshore introduced a global task force that continuously monitors the situation on a daily basis in their worldwide locations.[7]
- Damen Shipyards has gone beyond protecting its staff, as it used their expertise to initiate a consortium that has developed a COVID Lifesaver Mask.[8]
- Heerema has ordered its entire workforce to work from home, and vessel crew are following stringent measures to protect their health.[9]

Although Dutch Offshore players promise that disruptions will be minimal, impacts of these measures are that projects will be put on hold, limiting income while running costs cannot be covered.

Global E&P companies drastically cut 2020 offshore project sanctioning in wake of coronavirus and oil price collapse

2014-20 status and forecast, $ billion, by commitment year



Source: Rystad Energy ServiceCube, March 2020

2 Integrated Oil & Gas are zero-basing OPEX and re-prioritising CAPEX

As during the Global Financial Crisis, the offshore industry's main project providers, integrated Oil and Gas players such as Shell, Exxon and Chevron, are rapidly zero-basing assets to cut operational costs and slashing capital budgets. These companies are heavily re-prioritising, cutting down on projects, to cope with the new oil-price reality

Energy Live News

Shell to cut $9bn from operational costs to weather oil prices crash during coronavirus

Royal Dutch Shell has announced plans to cut capital expenditure by around 20% and operating costs by $4 billion, as part of raft measures to strengthen the balance sheet to weather the collapse in oil market prices in the wake of the coronavirus outbreak. Ben van Beurden (CEO) said: *"As well as protecting our staff and customers in this difficult time, we are also taking immediate steps to ensure the financial strength and resilience of our business."*[10]

Financial Times

Chevron announces spending cuts and halts buyback programme

Capex would fall by $4bn, or 20 per cent compared with last year, to $16bn, with half the cuts to fall in the Permian shale, Chevron further plans to reduce operating costs by more than 1bn.[11]

Maritime executive

Oil majors announce deep OPEX cuts due to oil price collapse[12]

Oil Price

Oil majors slash spending amid price plunge

Major European and North Sea operator, Aker BP, said it would slash capital expenditure and put on hold development at fields that have not been sanctioned yet. It is slashing exploration spending by 20%, reducing CAPEX by 20% in 2020.[13]

Hellenic Shipping News

Chemical and oil companies to slash CAPEX, slowing investment wave

Saudi Aramco, world's largest oil producer, is slashing 2020 CAPEX by 25%, in the wake of the coronavirus and collapse in crude oil prices.[14]

2 A harsh reality - offshore suppliers will be impacted

It is worth bearing in mind that integrated O&G companies have effectively passed risk onto suppliers. As a result, the Dutch Offshore players will likely see order books decrease and even their near-term project pipeline might be at risk of affecting short-term cash flows

In fact, Rystad Energy Impact Analysis foresees that *E&P companies are likely to reduce offshore project awarding to suppliers from $104 billion globally in 2019 to potentially as low as $31 billion (in scenario of Brent Crude oil price $30/b), a reduction of nearly 70%. Of this $31 billion, only $10 billion is already confirmed.*[15]

Indeed, the harsh reality is that North Sea Offshore companies are canceling near-term projects and see themselves forced to call for government support:

Offshore-mag | UK offshore sector calls for government financial support[16]

The Guardian | North Sea oil and gas in ‘paper-thin’ position as prices plunge[17]

Recharge News | Siemens Gamesa halts UK offshore wind factory for coronavirus safety check – Production pause at OEM’s flagship Hull facility is highest-profile impact yet on offshore wind sector[18]

Offshore Engineer | Axxis Geo Solutions, Polarcus see contracted work in the North Sea cancelled[19]

Offshore Engineer | Aker BP postpones offshore projects due to coronavirus[20]

The combination of this stark time with the long-term pressure on margins due to overcapacity and increasing competition from the East reinforces the need for Dutch Offshore to bring its A-game in terms of short-term cash management, efficiency, and longer-term innovation to stay relevant.

3 These are unprecedented times - Dutch Offshore needs to take action now

Dutch Offshore players have become experienced operators in this tough market. Margins in the past 10 years have been limited to typically 6%-7% due to overcapacity in the industry[21], as O&G producers pursued cost and activity levels, lowering revenue opportunity for offshore companies[22]

Dutch players have oil price dependency risk mitigation strategies in place to actively anticipate and tackle business impact from oil price crises. But can they take the combined hit of oil price drop, supply glut, and COVID-19 impacts on supply chains and the economy?

2019 was a relatively good year, and before the current crisis, the dominant Dutch Offshore players had promising project pipelines and order books:

— **Boskalis'** *2019 order book size (€4.7bn) was the largest in the company's history.*[23]

— **SBM Offshore's** *2019 order book saw an increase with €6bn to a record €20.7bn.*[24]

— **Van Oord Netherlands** *saw an increase in 2019 revenues and a promising order portfolio.*[25]

However, the crisis likely looms larger this time, due to the simultaneous impact of (i) COVID-19 demand destruction and tanking oil prices due to oversupply, (ii) the resulting challenges across the supply chain, and (iii) challenges to secure funding.

If the trend foreseen by Rystad continues, this suggests the Dutch Offshore sector should consider scenario of a reduction in order books by 70% or more[26]

70%

Additionally, storage capacity and transport capacity is expected to be exceeded due to the oversupply[27], which may require halt of production upstream. Whilst this might seem an opportunity for storage/shipping, the agility to expand capacity is highly limited.

In addition, delays and cancellations of capital spending are likely to cause a chain reaction of postponed projects and delayed payments from one Offshore supplier to another, which typically slows down all aspects of business[28]

Combined with the on-going challenge for the Offshore sector to secure support from Dutch government and significantly reduced appetite from investors, this may become a tough ride indeed

Offshore CAPEX display a 1-2 year time lag versus the oil price development, as most suppliers have long-term project timelines

Offshore Transport & Logistics players will be hit hardest & first compared to Offshore EPC, Shipbuilding & Equipment and Consulting & Personnel

4

The short-term response: safeguard cash, smart cost intervention, remain agile

Offshore companies are busy managing the current uncertainties in demand, and supply excess that has exposed risks to the overall value chain and enhanced the need for a rapid turn-around or restructuring.[29] We see four focus areas to overcome this situation with short-term actions

Active expense management[30]

- Assess all expense categories and right-size to project revenue.
- Cut spending on the costly offshore drilling projects due to lower profit margins, the need to control the amount of free cash flow and the cost of financing.
- Zero-based asset costs: standards and processes need to be stripped right back to what is affordable for individual assets, to take out up to 25% of operating costs.

Revenue, cash forecasting and field performance[31]

- Initiate analytics to identify liquidity concerns and improve forecast accuracy.
- Improving day rates and utilisation.[32]
- Adopt risk/exception based well – visit programs to impact cost and volume.
- Enhance KPIs/ incentive programs to drive accountability and performance.

Value-based prioritisation

- Work on the prioritisation of activities, only performing work that adds value and constantly assessing costs versus benefits.
- Prioritise work-scopes and determine affordable support function service levels (i.e. optimising the use of infrastructure and avoid curtailment, improving allocation of risk and developing hedging markets).

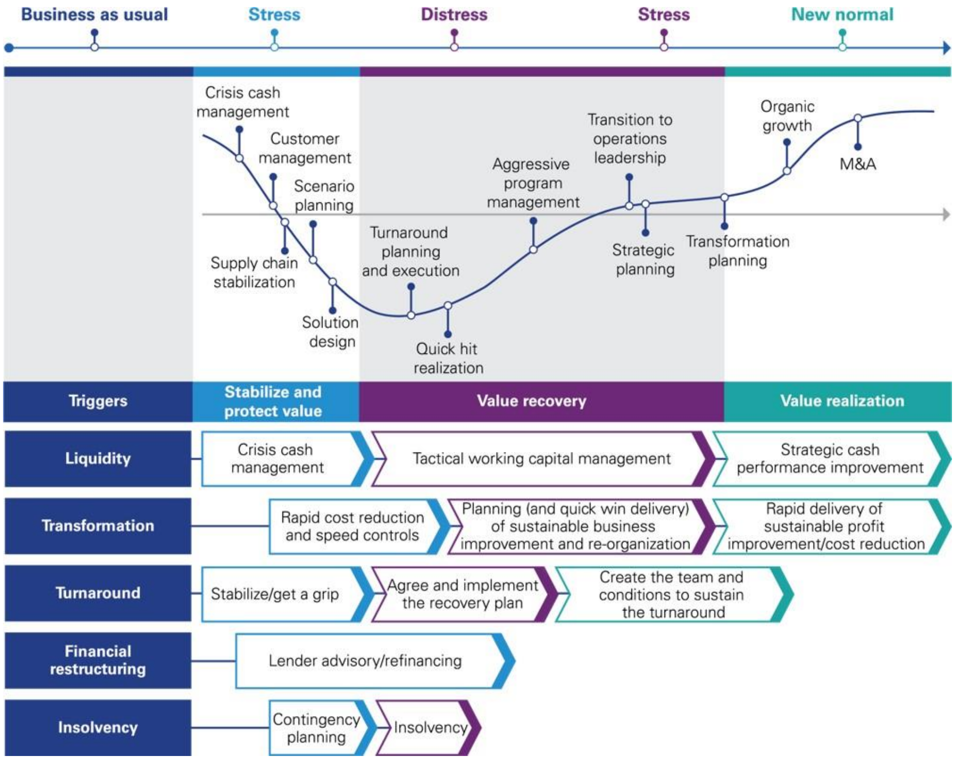
Working capital and supply chain

- Understand the impacts of COVID-19 and the oversupply of oil on suppliers, act quickly to conserve cash. Scanning the supplier network can avoid surprises in business delivery.
- Unlocking trapped cash and immediate, tactical steps to release working capital.
- Determine the level of liquidity and cash needs, as well as tactical working capital actions that will quickly optimise cash flow for the business.
- Work on alternative working/ infrastructure designs and look for modularity and standardisation of supply chains.[33]

4 Focus on stabilisation, then return to value

At the heart of our approach to turn-around is stabilisation and value recovery. This is the journey from immediate action required all the way through to restructuring back to growth. KPMG can provide a comprehensive and hands on solution[34]

KPMG experience to turnaround back to growth



We believe we could add value across this cycle by bringing...

Knowledge of ‘the levers that matter’, having helped address cost and production optimization among numerous operators.

Tools and resources to take a data-driven and granular approach to identify and quantify actionable opportunities using proven methods.

Industry expertise and understanding of the Energy Transition, the most recent climate regulations and how companies should incorporate sustainability practices.

External perspectives on leading practice procedures to improve business efficiency and effectiveness and on how to keep people engaged/committed through the whole changing process.

A ‘deal-pace’ approach that works outside-in, with minimal disruption to management at the outset as we look to shine a light on where value may lie.

5 Don't lose sight of the long game

The global financial crisis of 2008-2009 led to a sharp but short-lived decrease in GDP and global CO_2 emissions within seven months - oil prices falling from a high of $147 in July 2008 to a low of $33 in February 2009 and (LNG) prices falling from $14 to $4

However, within 5 years the energy consumption rapidly recovered and kept growing at the previous projected pace. CAPEX also recovered within the same period.[35] Dutch Offshore should not lose sight of the longer-term opportunity.

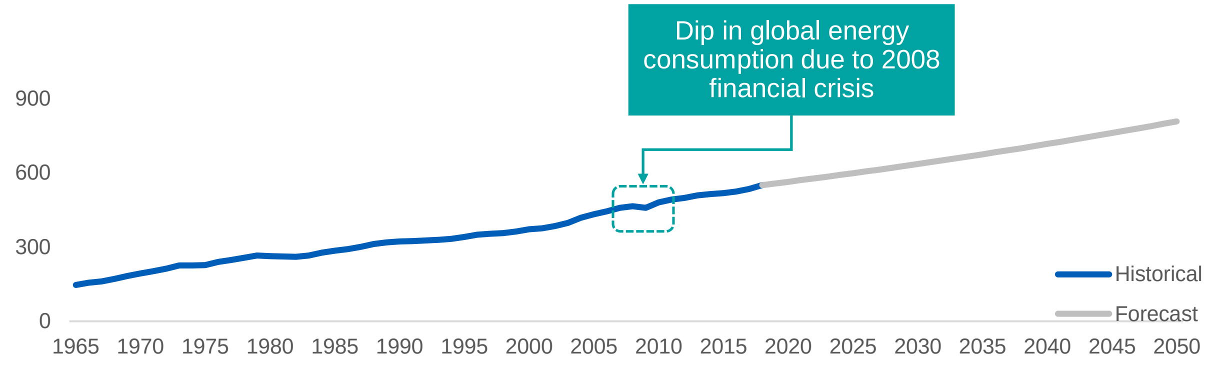
Given the depth of the world recession that ensued after the financial crisis in 2008, it is not surprising that 2009 witnessed a drop in total investment in the clean energy sector. However, Bloomberg New Energy Finance figures showed that new investment ended up dropping less than expected, partly due to soaring clean energy investment. Investments were particularly high in China.[36]

Experience from the past recession suggests that the drop in energy demand could be on the order of 4%, to then continue rapid growth afterwards.[37]

The IEA oil market forecast from March 2020 sees a destruction of global oil demand by 90 to 730 thousand barrels a day (-0.1 to -0.7%) in its mean and pessimistic scenarios, to a demand as low as 99.26 million barrels a day in 2020. This is down from 99.99 million barrels a day in 2019. There is a sharp downgrade by -111% to -188% of the year-on-year growth relative to the original forecast this February of an increase in demand by 825 thousand barrels a day.[38]

Although the current economic activity has been hit by the decrease in oil prices (to a minimum value since 2016) and the COVID-19, which have brought global uncertainties, population and energy demand will continue to grow. Asia and Africa will see its population and energy consumption grow significantly (from 305.1 quadrillion Btu in 2020 to 517.2 quadrillion Btu in 2050) while the other world regions will evolve at a gradual pace.[39]

Global energy consumption in Quadrillion Btu



Note: Forecast data based on CAGR calculated from EIA. 2018 (Global projected energy consumption by region 1990-2050)
Source: BP: Statistical Review of World Energy, Workbook (xlsx), London, 2018

5 The evolving global energy mix presents long-term opportunities in LNG and offshore wind

The evolving global energy mix presents long-term opportunities in LNG and offshore wind. Natural gas is here to stay

Natural Gas and LNG are steadily growing and will surpass the consumption of oil in 2040

The efforts to reduce carbon emissions and improve air quality represent a clear direction requiring reduced use of fossil fuels. Nevertheless, gas is a major contributor to reducing carbon emissions and cleaner air (i.e. switching power generation from coal to gas has the greatest short term impact).

Gas is advancing as a transport fuel, the potential for increasing gas applications is enormous and would have a significant positive impact. There are similar opportunities for gas in the heating sector.[40, 41, 42]

LNG supply is growing rapidly (4%-5% annually) and is a key contributor to the gas growth.

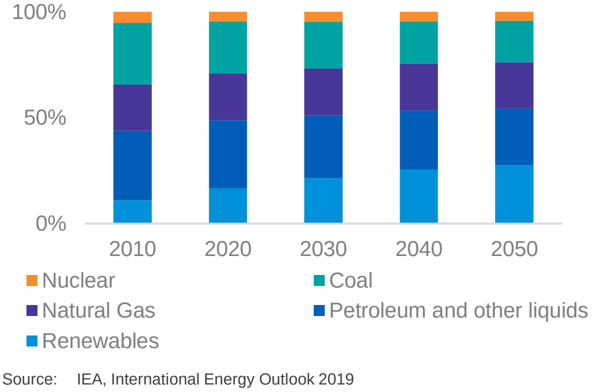
2019 was a record year for investment in new LNG supply, driven in recent years by rapid expansion of Australian and US, even with prices in record lows. These will continue to be growth regions for LNG.[43]

The LNG market is globalising and commoditising, reducing the risk of bringing on new supply if production costs can be contained.[44 45]

Despite rapid deployment of renewable energies, fossil fuel market share will remain very large. In this context, gas is a destination fuel.

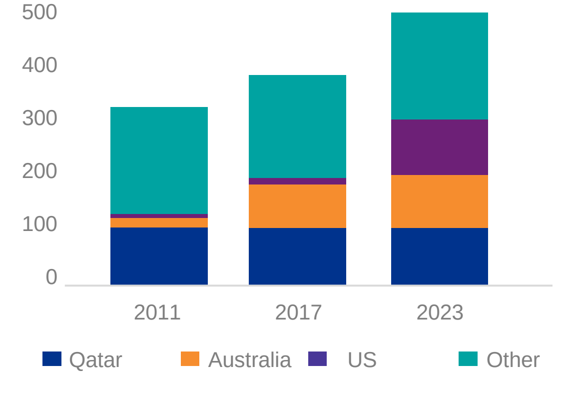
Effective direction/efforts of the industry will ensure that it continues to provide wide-ranging economic benefits and that companies remain anchored to support the energy transition.

Global energy consumption by source
%



Source: IEA, International Energy Outlook 2019

Global LNG supply growth 2011-23
bcm



Source: EM Compass - Natural Gas and the Clean Energy Transition. March 2019

5 Offshore wind is growing exponentially - EU in the lead

Offshore wind is a significant additional opportunity globally, projected to grow almost fourteen times in capacity by 2040

Renewables are expected to grow 42% in the next 10 years (from 106 to 151 quadrillion Btu in 2030) and will represent 28% of the total energy mix in 2050 – becoming its biggest contributor.

Offshore wind is a crucial pillar of the future energy mix, with capacity growing exponentially around the world. Although EU countries will keep being the leaders, Asian countries will definitely enlarge its footprint.

The EU is leading the pack, as developing a European energy system in line with the Paris climate agreement will require large-scale roll-out of offshore wind capacity, with EU projecting growth from 3% of European electricity supply to 23% in 2050.

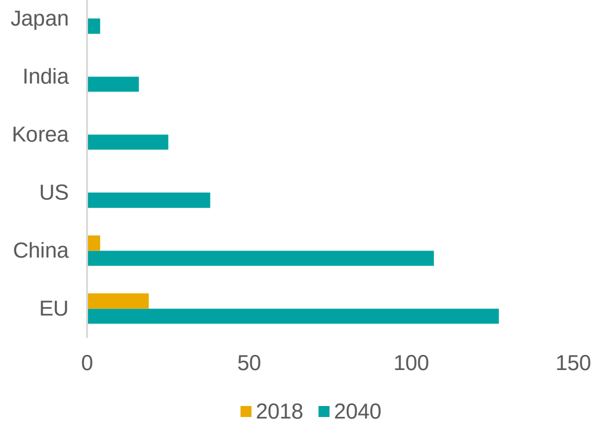
Offshore wind is set to become the largest source of electricity in the European Union by 2050, complementing other renewables sources.[43]

According to IEA, technology (i.e. bigger and powerful turbines) is definitely driving major results on the costs of new projects and consequently on the offshore wind expansion.[46]

The recent cost breakthroughs have established offshore wind power as a crucial pillar for the Netherlands' energy transition.

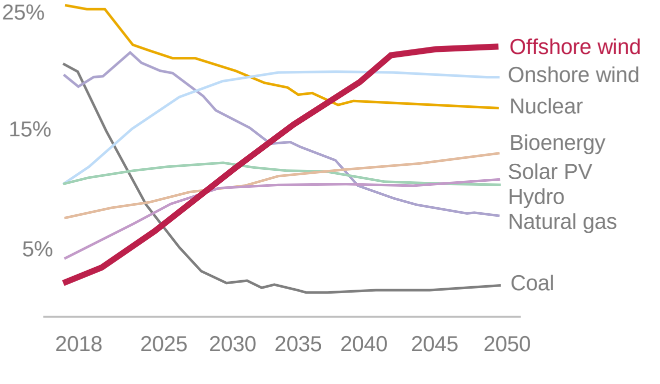
Offshore wind and on-going energy transition present significant opportunities for Dutch Offshore to lead the innovation, both on conventional offshore engineering and integration of increasing digital connectivity to create new revenue streams.[47]

Offshore wind capacity
GW



Source: IEA 2019, Offshore wind capacity. Installed offshore wind capacity, 2018 and 2040. Stated Policies Scenario

Shares of electricity generation by technology in the European Union
Sustainable Development Scenario



Source: IEA. Offshore wind Outlook by Dr. Fatih Birol. October 2019

6 Long-term game - Looking ahead to become more resilient in the future

In the new normal, we see three key capabilities to improve resilience of the Dutch Offshore sector and lay the ground for future success

I. Stress-testing & scenario planning for the industry
II. Leading innovation
III. Go to market together – BV NL

Stress testing & scenario planning for the sector: Are already a common practice within many O&G industry players, supporting those companies on better meet/prepare for turbulent market challenges. KPMG has developed an approach on how to perform these tools, that can be consulted.[48]

These methodologies consider a wide variety of market indicators, risks and trends and are analytics driven, making sure they fit the needs of each individual situation.

These tools determine the company's true sensitivity to extreme events and can be applied to the entire organisation, including financial statements, budgeting, planning and business development tools, and capital planning processes.

Companies will see the bigger picture and make effective trade-off decisions, between apparently conflicting objectives and based on real time information.

By analysing past events and hypothesising future threats, organisations are able to identify strategic and concentrated supplies that are at risk in major crises, and most importantly, recognise when current internal risk capacities prove insufficient.

Leading innovation: The Dutch offshore sector has a proven track-record on innovation and is capable of using the current reality to develop innovative solutions and attract new projects.[49]

Offshore Engineer: Fugro and SEA-KIT team-up to develop a new range of agile and compact, unscrewed surface vessels for marine asset inspections.

4C Offshore: Damen initiates a consortium to develop a protective mask, creating the COVID Lifesaver Mask.

Vopak: developed smart tank terminals in Singapore, using drones and robots for safer inspection and digital vessel clearance tool for more efficient and safer clearance process.[50]

Dutch Offshore Innovators BV: a naval architects studio specialising in innovative solutions for the offshore installation industry, designing new vessels and conversing existing ships.[51]

The Offshore Wind Innovators network has launched the Offshore Wind Innovation Challenge in order to accelerate applied innovations within this sector.[52]

The Netherlands' Long-Term Offshore Wind R&D Agenda initiated by the TKI Wind op Zee and published in October 2019 presents innumerous milestones in detail for the year 2030, exposing its background and the R&D needed to develop each one. We can see different solutions for turbine design and grid connection; optimal wind farm special planning; strong, lightweight, durable composites for blades, just to name a few…[53]

6 How to develop a win-win outcome?

Go to market together – BV NL: Hunting in packs maximises our joint opportunity to gain market relevance and successfully expand in overseas markets.[54]

Foundations, for example, are a significant share of the cost of building a wind farm and R&D will be needed particularly in the area of modular design.

Coordinated discussions between current industry participants and potential future providers of equity and debt to accelerate the widening of the pool of capital able to invest in the merchant renewables sector and efficient.

Run joint tenders for large projects, mitigating the cannibalisation effects financing structures.

The Netherlands beneficiate particularly from its connection and deep expertise within the Offshore sector: it has a successful past of launching innovative solutions, entrepreneurial attitude, well established players in the market, dedicated academic researchers and a great geographic potential.

Work on innovative thinking, partnerships & alliances and meaningful collaboration to help as many as possible to weather the storm.

The 2014-2016 oil price downturn led to a new wave of alliances, joint ventures and mergers among oilfield services and equipment (OFSE) companies. These companies faced improvements in costs and efficiency, a range of innovative solutions and developed new business models.

Some important mergers, acquisitions and alliances in the O&G sector occurred during this period of time:

September 2014

Siemens announces agreement to acquire Dresser-Rand[55]

October 2014

Saipem, Chiyoda and Xodus establish a new company - Xodus Subsea[56]

2015

Subsea Integration Alliance was created - strategic global alliance between Subsea 7 and OneSubsea[57]

2015

Schlumberger acquired Cameron[57]

February 2015

Petrofac and McDermott International formed a strategic alliance[58]

April 2016

ABB and Aker Solutions agree on a business alliance on subsea power[59]

2016/2017

TechnipFMC was formed by the merger of FMC Technologies and Technip[60]

2017

GE Oil & Gas merged with Baker Hughes[61]

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