

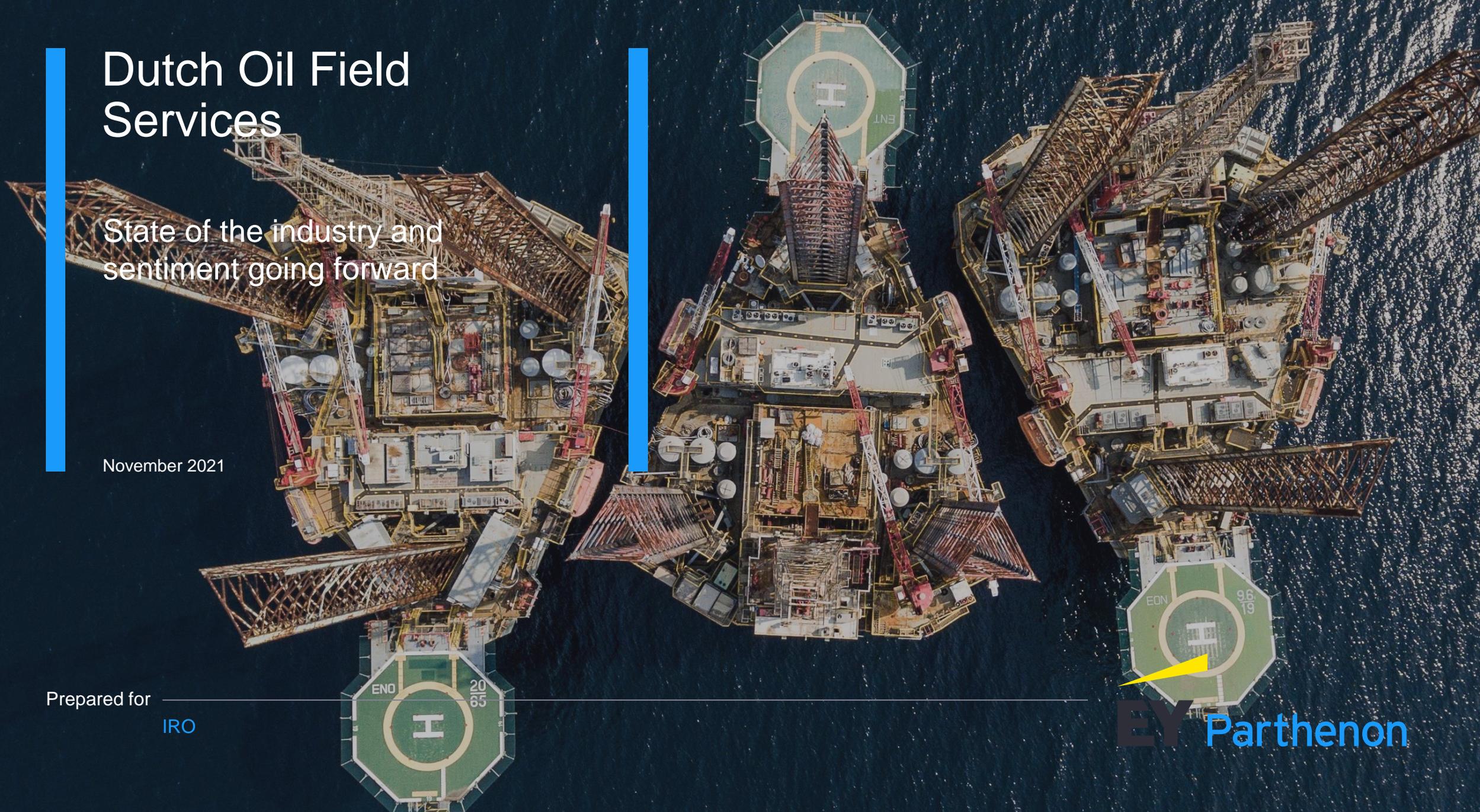
Dutch Oil Field Services

State of the industry and sentiment going forward

November 2021

Prepared for
IRO

EY Parthenon



OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

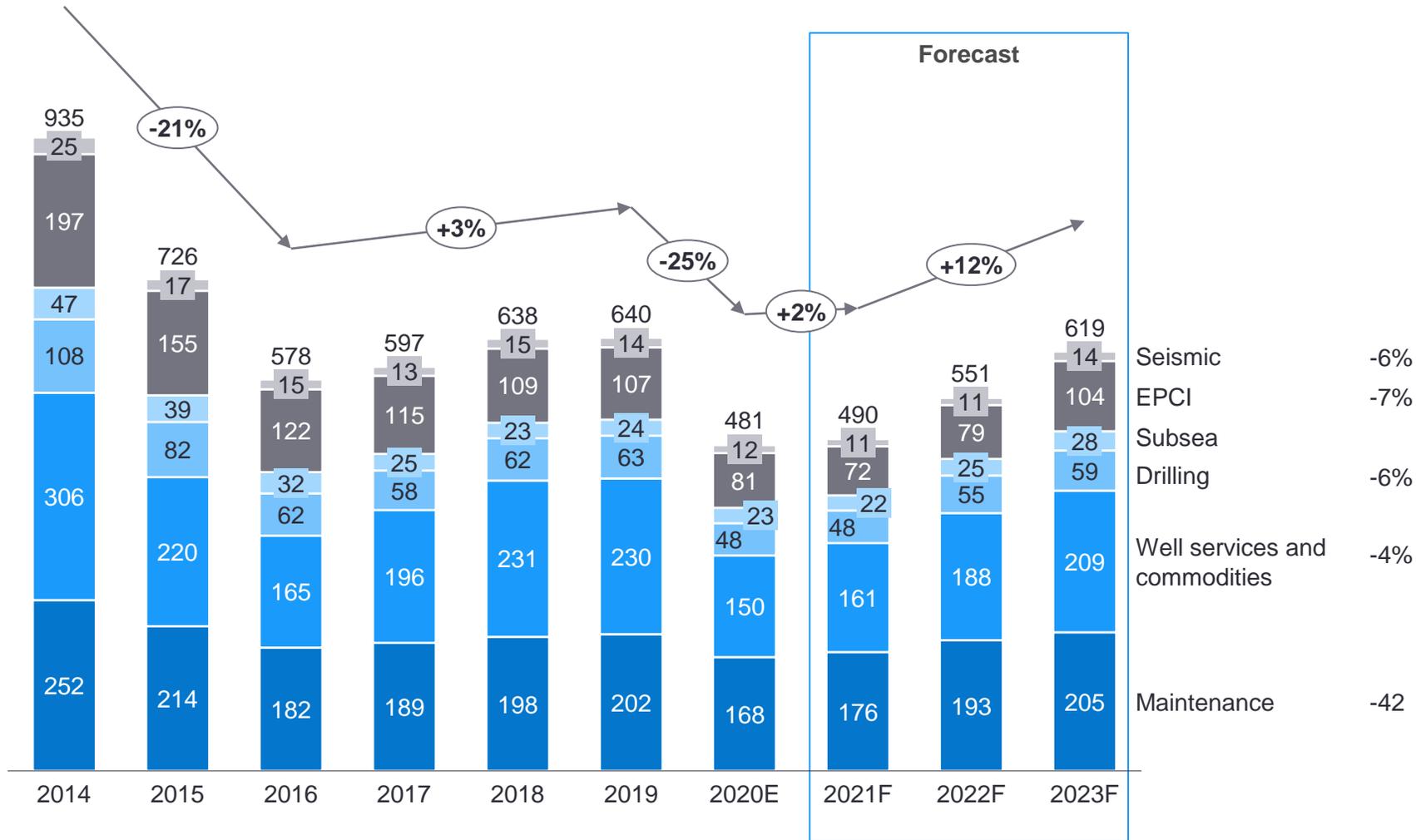
Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached

After the COVID crisis, slight recovery of the fossil oilfield services market is expected

Global OFS demand forecast by segment, 2014 – 2023F (\$b)



Interview commentary

- “The market is **opening up** again.”
- “**Slow recovery is visible**, yet lacking demand still tempers a true revival.”
- “**The market picks up**, because of overdue maintenance and a truly low level of investments over the last years.”
- “**A big upswing is coming**, but it will be temporary and '14/'15 levels will never be reached.”

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



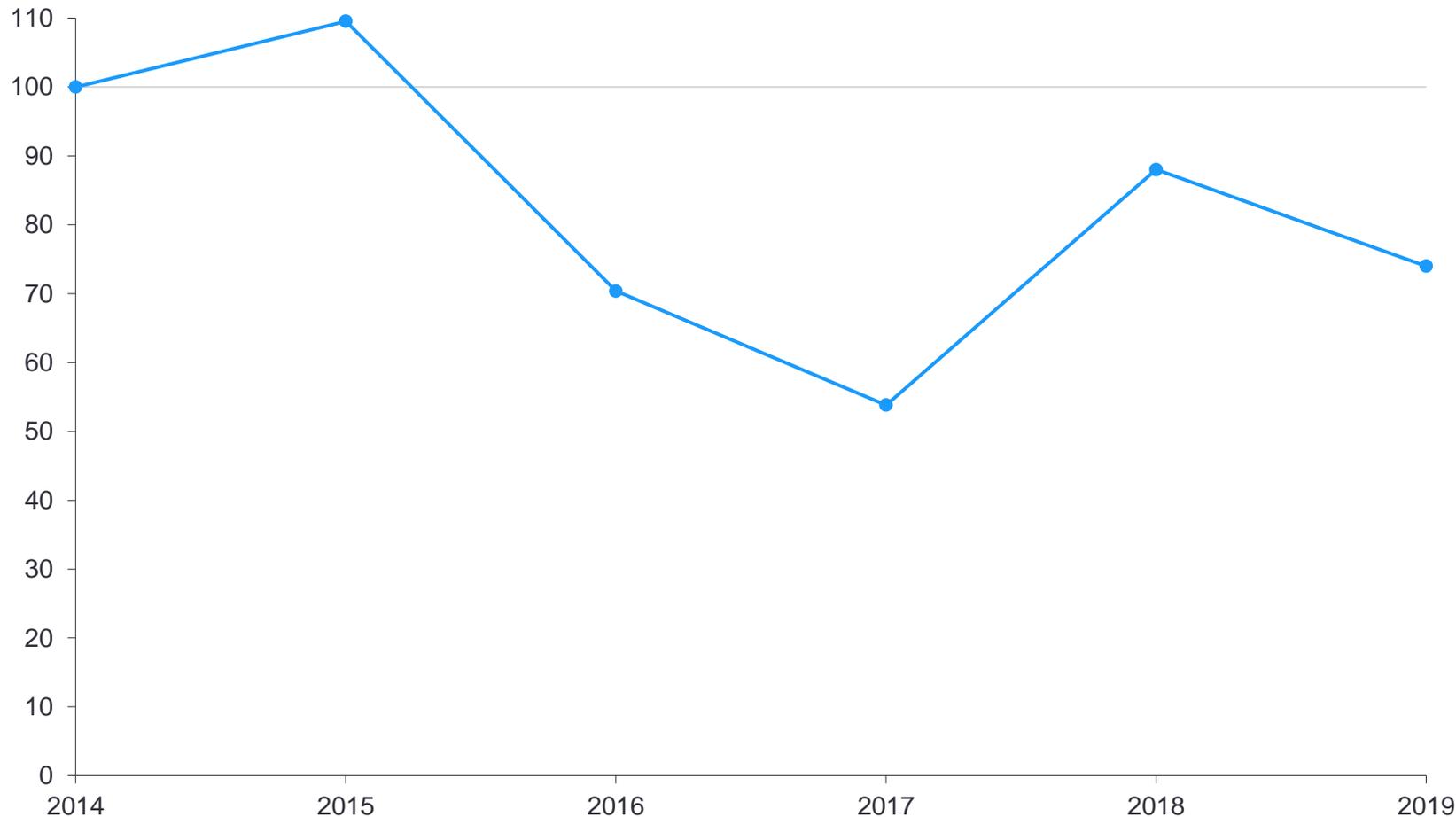
After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide

The industry is expected to continue experiencing pressure on margins

OFS margin development, Netherlands, 2014 – 2019 (EBITDA-% normalized to 2014=100)

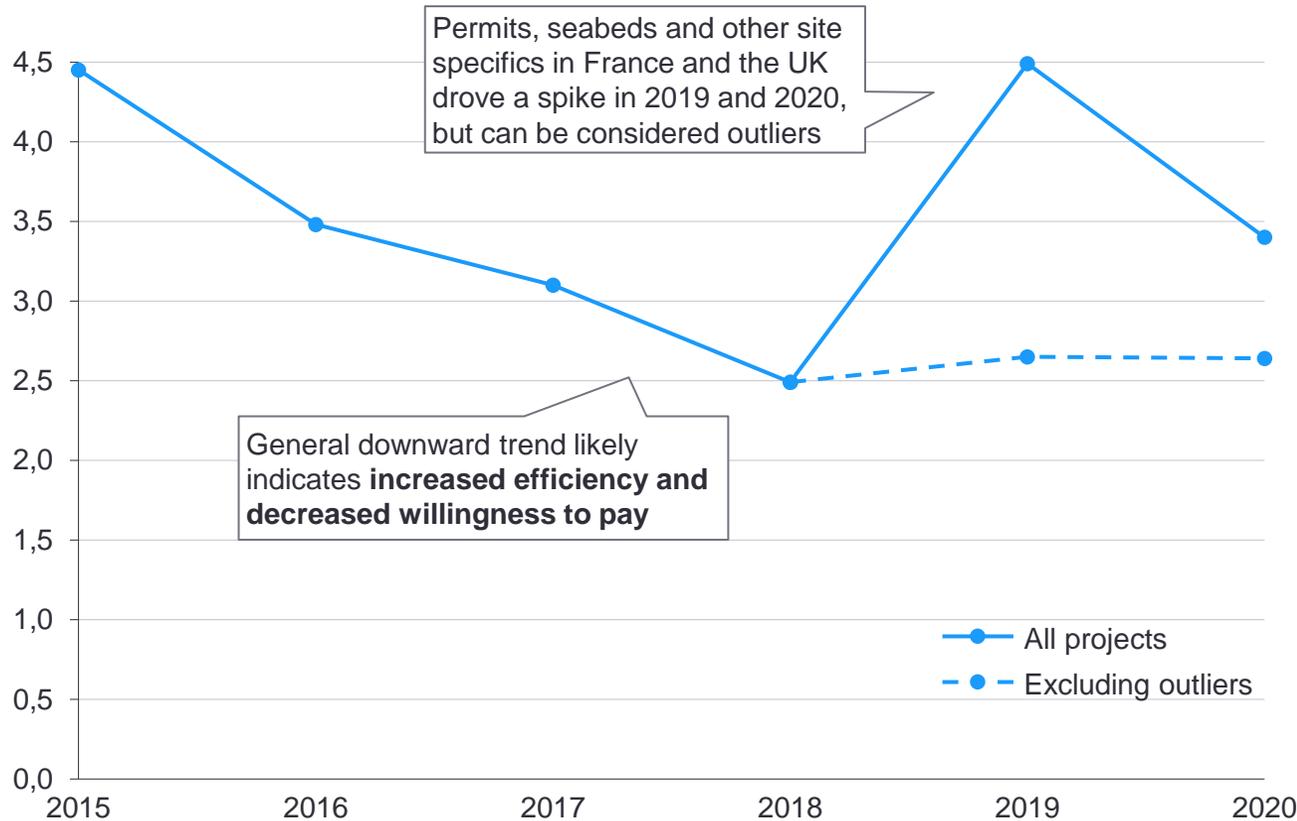


Interview verbatim

- “ All the margins are seeping away. There is way **too much capacity (ships) and lack of large E&P projects**. There is no effect from the rising oil price on the margins so far and capital reduction or asset lightening will not contribute to improving margins.”
- “ There is **fierce competition**, which results in deteriorating margins.”
- “ In the short term: competition in the offshore wind market will increase without many more opportunities. **In the medium term however, the trend can only be positive.**”

The growing offshore wind industry does not necessarily render better margins

Average CAPEX per MW in new offshore wind farms, Europe, 2015 – 2020 (€m/MW)



Installed capacity (GW)

12.5

22.1

6.1

9.7

6.6

26.3

Interview commentary

- “Offshore renewables are a **tough and highly competitive** market, especially since subsidies were withdrawn.”
- “In the short term, competitive pressure in offshore wind puts **pressure on the margins**. Going forward, the trend will be more positive.”
- “The **margins in the renewable industry will stay lower** than in the oil industry. However, the volumes and new businesses (greenfield investments) will be large.”

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



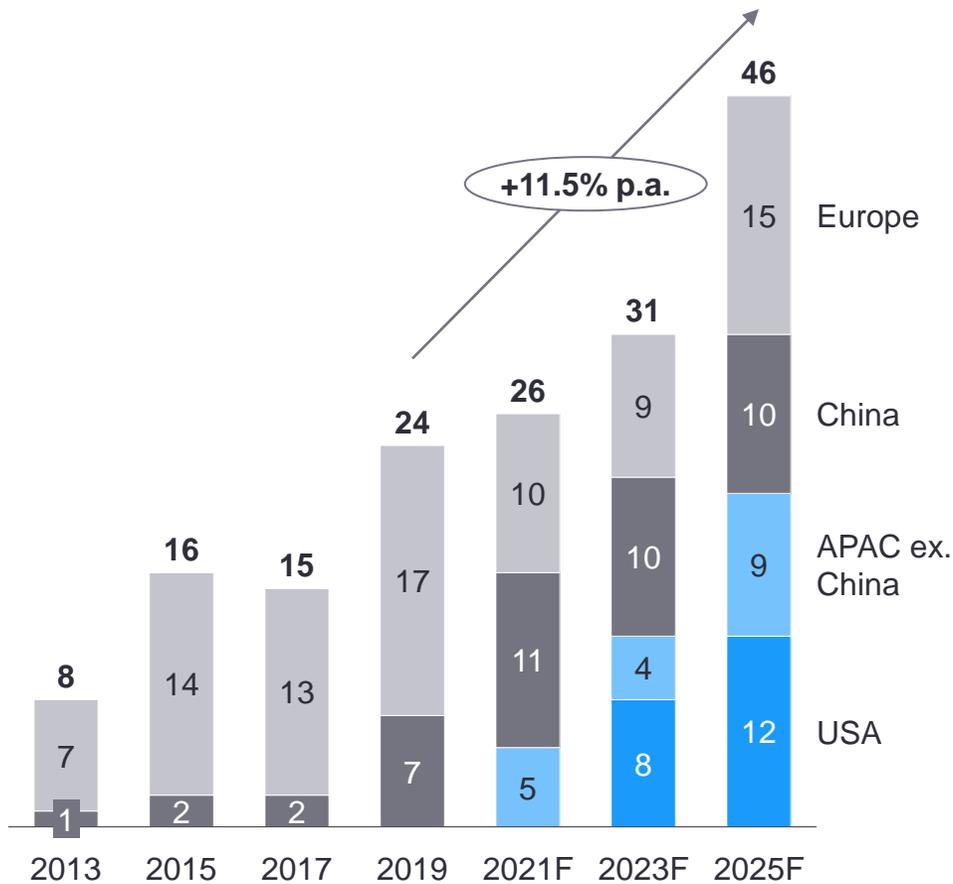
Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen

Activity in offshore wind continues to increase, with regions outside of Europe being most promising

Global offshore wind CAPEX investment and planned project examples, 2013-2025F (€b)



Shapa 
Country: China
Year of commission: 2021
Capacity: 1700 MW



Pecém Port Complex 
Country: Brazil
Year of commission: 2021
Capacity: 1216 MW



SA Offshore Windfarm 
Country: Australia
Year of commission: 2021
Capacity: 600 MW

Recent policy changes boosted offshore wind project applications



Gulf of Mexico 
Country: United States
Year of commission: T.b.d.
Capacity: 500-600 MW

Studies show high potential in Gulf of Mexico

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G

Offshore wind is a more commoditized service market, thus lowering the threshold for new entrants

Awarded tenders for offshore wind parks, Netherlands, 2016 – 2020

	Borssele I/II	Borssele III/IV	HKZ I/II	HKZ III/IV	HKN V
Year	2016	2016	2017	2019	2020
Size (GW)	0.8	0.7	0.8	0.8	0.8
Subsidy awarded (€/MWh)	73	54	0	0	0
Tender participants	<ul style="list-style-type: none"> ▶ Ørsted ▶ Vattenfall ▶ Shell, Eneco, Van Oord ▶ Innogy, EPDR, Macquarie Capital 	<ul style="list-style-type: none"> ▶ Shell, Eneco, DGE, Van Oord ▶ Vattenfall ▶ Ørsted ▶ E.ON ▶ Northland Power, Siemens, DEME ▶ WPD 	<ul style="list-style-type: none"> ▶ Vattenfall ▶ Eneco, DGE, Van Oord ▶ Equinor ▶ Innogy 	<ul style="list-style-type: none"> ▶ Vattenfall ▶ Eneco, Van Oord, Shell ▶ Ørsted ▶ Green Investment Group (Macquarie), Iberdrola ▶ Engie, Northland Power, EDPR, Green Giraffe 	<ul style="list-style-type: none"> ▶ Eneco, Shell ▶ Ørsted

Traditional field owners, IOCs and suppliers

New entrants into offshore

Interview commentary

“ There is a **lot of competition**, many new entrants such as dredging companies who are also active in this field. In general, **the barrier to enter is too low** and the product is like a **commodity**, which results in **low margins**.”

“ We have grown double digit. There are many opportunities, although **wind is much more of a commodity product**.”

“ The renewable market is difficult to compete in because of **less clear legislation and regulations**, for example around safety. For traditional companies from oil & gas that is a disadvantage”

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G



In general, Dutch OFS companies feel a lack of government support in developing and further innovating renewable offshore solutions

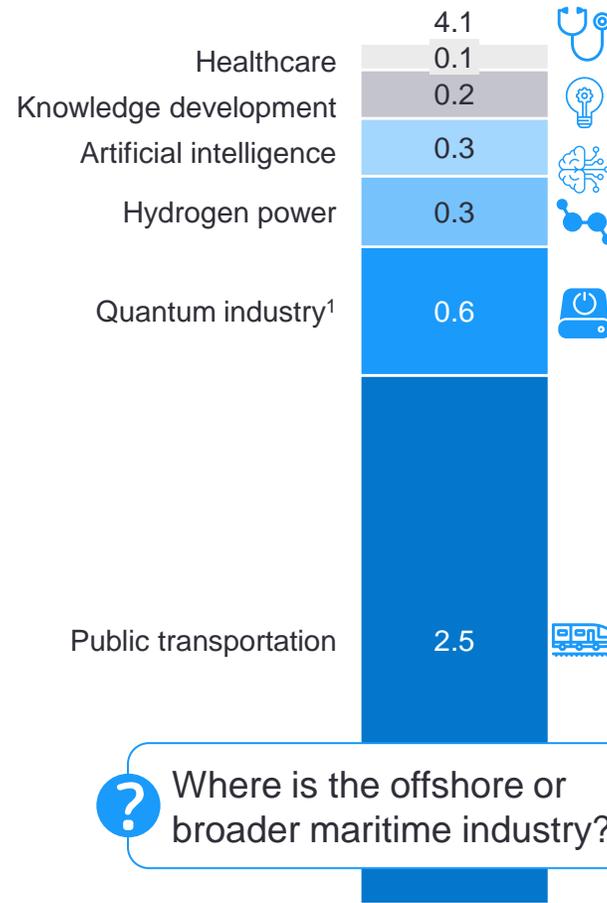
Offshore projects are not sufficiently in the focus of government support, despite (or thanks to) available investment budgets

Government committed investments from the Dutch National Growth Fund, 2021 (€b)

Nationaal Groeifonds
Voor economische groei en welvaart, ook voor komende generaties

<p>Budget</p> <p>€ 20 miljard voor de komende 5 jaar</p> <p>Voor investeringen in</p> <ul style="list-style-type: none"> Kennisontwikkeling R&D en innovatie Infrastructuur 	<p>Wie doet wat</p> <p>Ministers van Financiën en EZK Fondsbeheerders</p> <p>Parlement Goedkeuring begroting Nationaal Groeifonds</p> <p>Onafhankelijke commissie Beoordelen voorstellen, adviseren kabinet, monitoren voortgang</p>
--	--

- ▶ The Dutch National Growth Fund aims to **support innovative projects** that help economic prosperity
- ▶ Currently, projects receiving investments are mostly focused around **economic sustainability, technology and climate change**
- ▶ A **total budget of €20b** is reserved for the the period 2020-2025



Interview commentary

- “ There is a **big opportunity** for the Netherlands in offshore renewables, only the government is not stimulating this.”
- “ **Governmental support is important for renewables**, as companies are closer to the cost price for renewables than for O&G.”
- “ There is and was no support from the government. The Dutch **companies need to be more active in seeking governmental support**”
- “ The Dutch government has started to support hydrogen initiatives. Yet, **the offshore wind industry could deliver just as much value to them**”

1. Initiatives that aim to increase the computational power of technologic systems
Source: Nationaal Groeifonds; EY-Parthenon interviews and analysis

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G



In general, Dutch OFS companies feel a lack of government support in developing and further innovating renewable offshore solutions

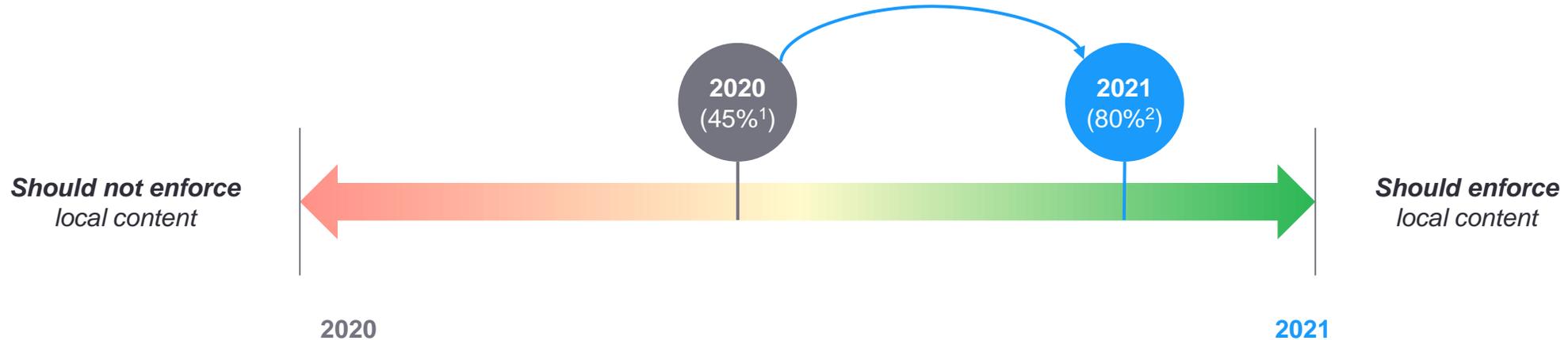


A growing number of market participants stress the importance of enforcing local content to safeguard the development and competitiveness of the Dutch sector

1. Based on interviews with management of leading firms in the OFS industry across the value chain
Source: EY-Parthenon interviews

Opinions have shifted towards pushing local content requirements to help safeguard the development and competitiveness of the Dutch sector

Local content enforcement, 2020 – 2021



“ We **should not enforce local content** as Dutch companies are highly competitive anyway...The fact that other countries do so says a lot about their lack of competitiveness.”

“ I would **not advocate strict local content** but would encourage **more public-private partnerships** with Dutch universities for R&D.”

“ I do **not think that enforcing local content is a good policy** to stimulate Dutch business, as most of our activities are global anyway and it might hurt relationships with other countries.”

“ The government **should enforce local content** to help the Dutch industry. Dutch companies can't compete in other countries because there you need to be local, and within their home market they have to compete with all other countries.”

“ In principle, **it is not correct** that France supports French companies, but since **this happens everywhere**, the Netherlands should also do this to prevent imbalanced growth.”

NOS

DNB warns: protectionism advances and the Netherlands are vulnerable

January 2021

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G



In general, Dutch OFS companies feel a lack of government support in developing and further innovating renewable offshore solutions



A growing number of market participants stress the importance of enforcing local content to safeguard the development and competitiveness of the Dutch sector



Increasing investor and consumer awareness of environmental and climate impacts are driving OFS companies to embrace sustainability (ESG) as a core part of business strategy, rather than a niche add-on activity

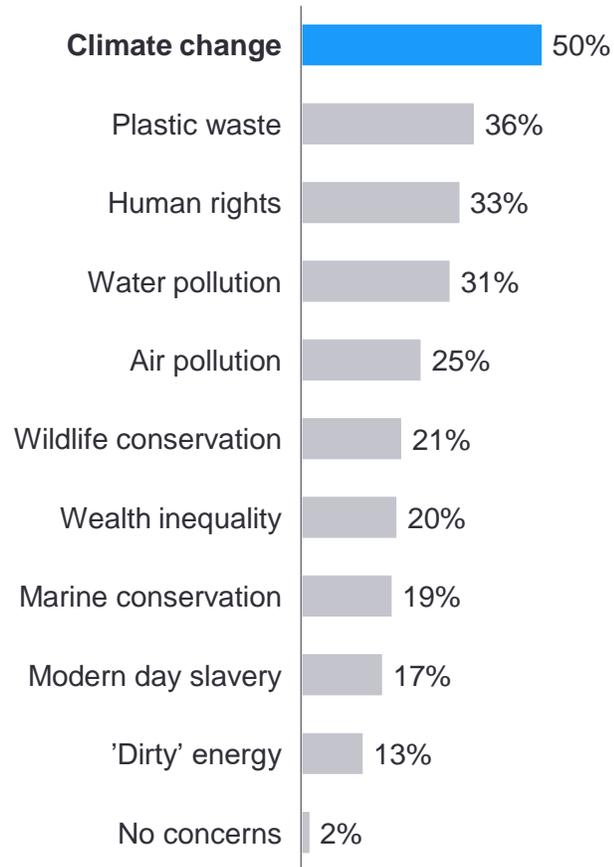
1. Based on interviews with management of leading firms in the OFS industry across the value chain
Source: EY-Parthenon interviews

Increasing investor and consumer awareness of environmental and climate impacts are driving OFS companies to embrace sustainability

Climate change and sustainability on the global agenda, 2021

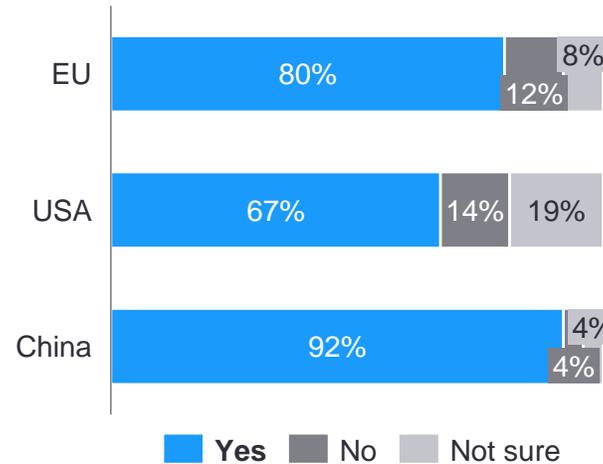
Consumers

Most concerning issues to consumers, Europe, 2021



Investors

Investors increasing their ESG investments, 2021



First large Dutch pension fund exits oil and gas

September 2021

PME turns their back on fossile energy and diverges into renewables.

Interview commentary

“ We have always engaged in **clearing our own 'waste'**. ESG targets are on the agenda and have received another internal push recently.”

“ We feel pressure from the bottom up to reduce emissions. The desire of employees and management resulted in the installation of **solar panels and use of electric vehicles.**”

“ We **have a clear vision** yet currently lack the implementation. The energy consumption of our production is still relatively high.”

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G



In general, Dutch OFS companies feel a lack of government support in developing and further innovating renewable offshore solutions



A growing number of market participants stress the importance of enforcing local content to safeguard the development and competitiveness of the Dutch sector



Increasing investor and consumer awareness of environmental and climate impacts are driving OFS companies to embrace sustainability (ESG) as a core part of business strategy, rather than a niche add-on activity

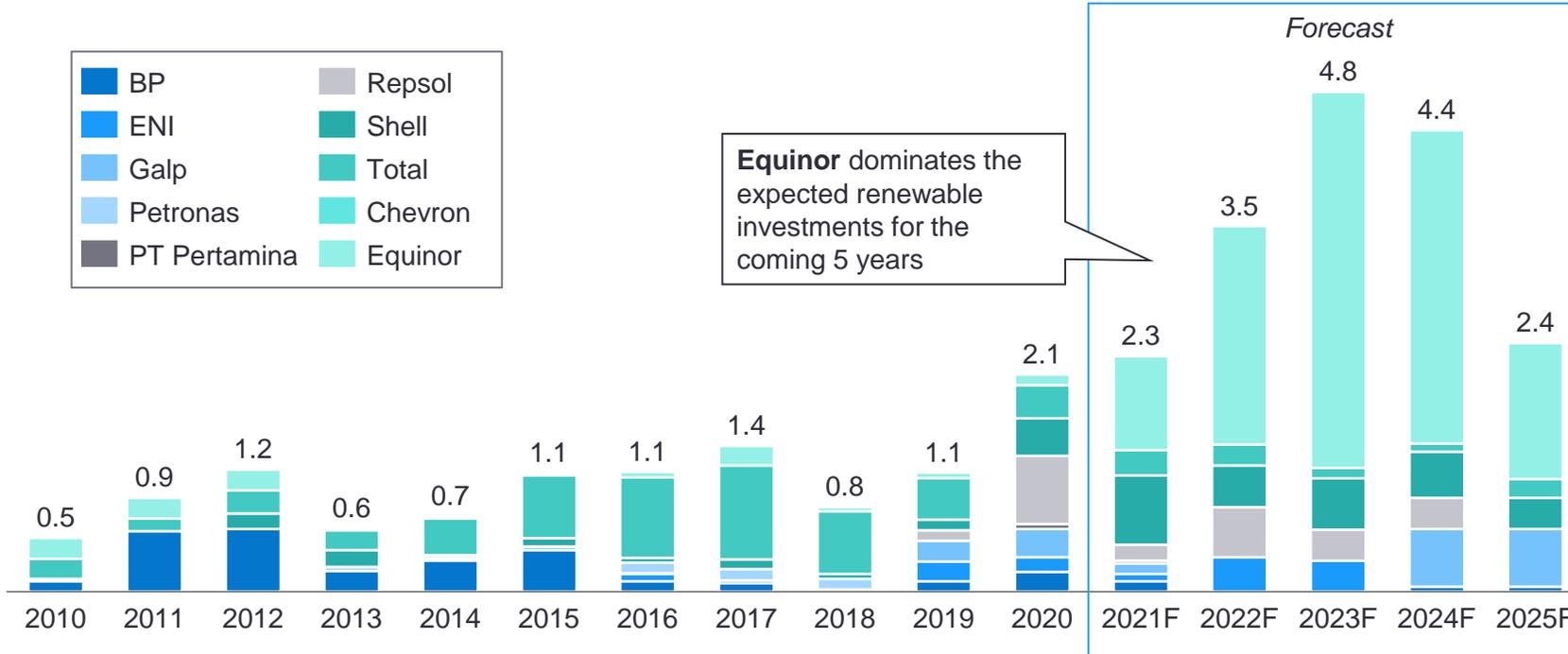


And it's not just about plans and communications. IOCs and OFS companies are increasingly investing in renewable energy and are trying to reduce their own environmental and carbon footprints

1. Based on interviews with management of leading firms in the OFS industry across the value chain
Source: EY-Parthenon interviews

Oil majors increase investments in offshore renewables, creating new opportunities for the supplying industry

Upcoming renewables investments from IOCs, 2010 – 2025F¹ (\$b)



Interview commentary

- “The sector will not mainly focus on ‘brownfield’ investments but also on ‘greenfield’ investments. **Developments around renewables are greenfield driven.**”
- “There is an ongoing change as **more investments are environmentally driven.**”
- “Investments will mainly be greenfield, driven by the **development of offshore wind.**”

In the longer term, Rystad Energy expects **big oil majors to invest about \$18bn in specific renewable energy projects by 2025**. Although that represents a major leap from the investment levels of the previous decade, it remains **just a fraction of the \$166bn that oil majors are expected to pump into greenfield oil and gas projects** in the next five years.

Rystad Energy - June 2020

1. Excluding planned investments announced after may 2020 and non-project-specific spending commitments
Source: Rystad Energy; EY-Parthenon interview program

OFS companies are cautiously optimistic about the current environment, despite (or thanks to) the surge of renewables and the challenges this poses

Overview of key insights¹



After the pandemic-driven fall in oil prices and the consequent industry downturn, recovery of fossil OFS services is expected yet historical levels will not be reached



Margins are not necessarily expected to bounce back. Fierce competition, overcapacity and high costs put pressure on OFS margins industrywide



Moderate activity in O&G is expected to be counterbalanced by increased activity in renewables, particularly in offshore wind parks and hydrogen



Competition for projects in offshore renewables stems from more than just the usual suspects, also driven by simpler regulations compared to O&G



In general, Dutch OFS companies feel a lack of government support in developing and further innovating renewable offshore solutions



A growing number of market participants stress the importance of enforcing local content to safeguard the development and competitiveness of the Dutch sector



Increasing investor and consumer awareness of environmental and climate impacts are driving OFS companies to embrace sustainability (ESG) as a core part of business strategy, rather than a niche add-on activity



And it's not just about plans and communications. IOCs and OFS companies are increasingly investing in renewable energy and are trying to reduce their own environmental and carbon footprints

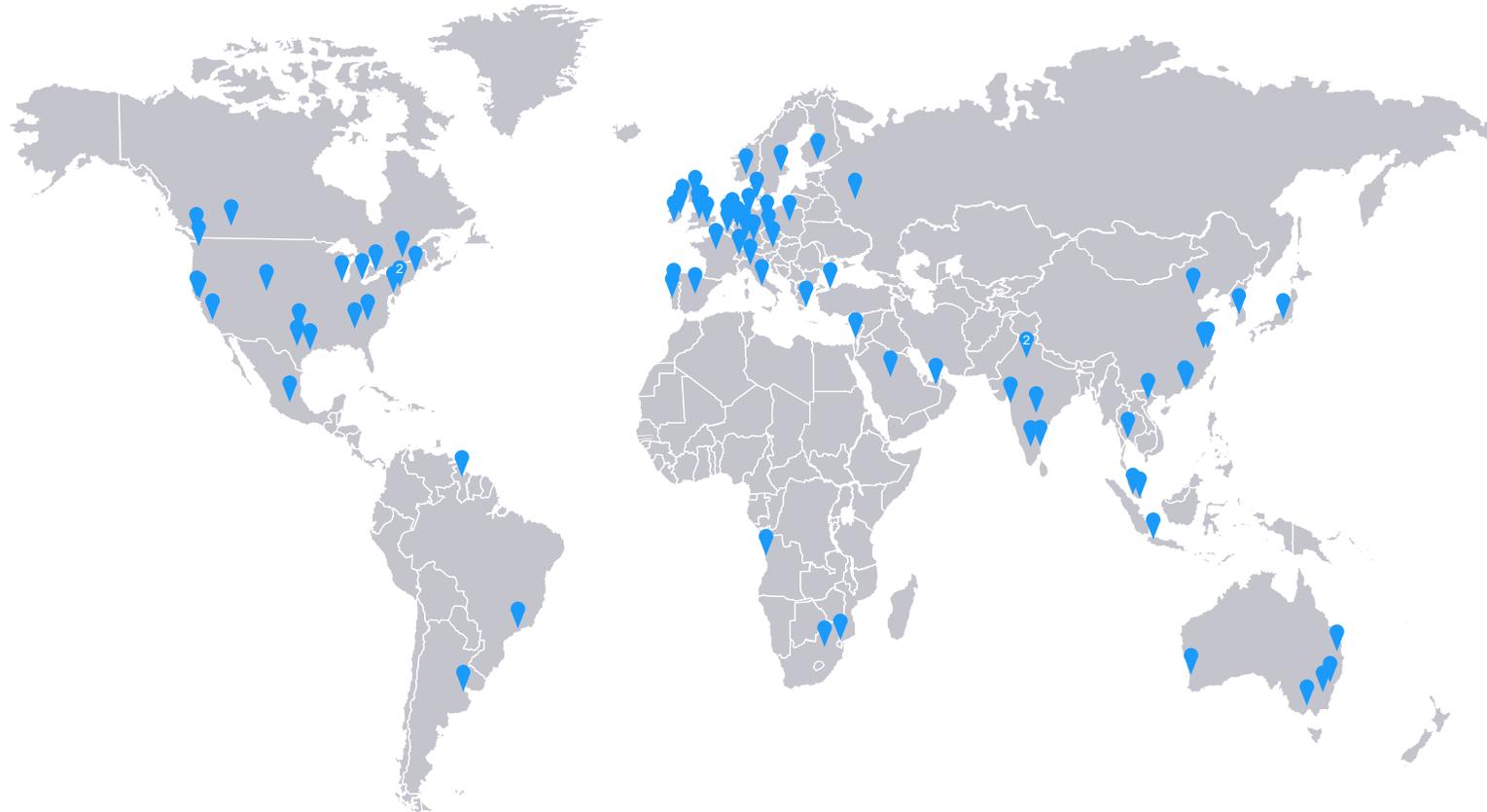
1. Based on interviews with management of leading firms in the OFS industry across the value chain
Source: EY-Parthenon interviews

Bram Kuijpers

+31 6 21 23 8008

Bram.Kuijpers@parthenon.ey.com

Office Rotterdam



EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.



EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via [ey.com/privacy](https://www.ey.com/privacy). EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit [ey.com](https://www.ey.com).

EY-Parthenon is a brand under which a number of EY member firms across the globe provide strategy consulting services. For more information, please visit [ey.com/parthenon](https://www.ey.com/parthenon).

© 2021 EYGM Limited. All Rights Reserved.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

[ey.com](https://www.ey.com)