



Economic and social impact assessment of the European marine contracting sector

Executive summary produced for the
International Marine Contractors Association

June 2025



Bringing Ingenuity to Life.
paconsulting.com

A large-scale photograph of an offshore wind farm. In the foreground, a yellow and blue service vessel is positioned next to the base of a wind turbine. The turbine's tower is yellow, and its nacelle and blades are blue. The vessel has a white cabin and yellow hull. In the background, several other wind turbines are visible across the sea under a cloudy sky. The text "Bringing Ingenuity to Life." is overlaid in white, centered, with two short red horizontal lines above and below it.

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Bringing
Ingenuity
to Life.

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Introduction

PA Consulting was commissioned by the International Marine Contractors Association (IMCA) to conduct an economic impact study of this industry in Europe.

Our study finds that the economic contribution of the marine contracting sector to the wider European economy is highly significant.

PA Consulting's economics team used standard economic impact assessment methodologies and datasets to model the jobs and Gross Value Added (GVA) associated with this sector. We found that there is a sizeable economic opportunity and investment from sustaining and growing the high-wage, high-productivity jobs, this sector provides.

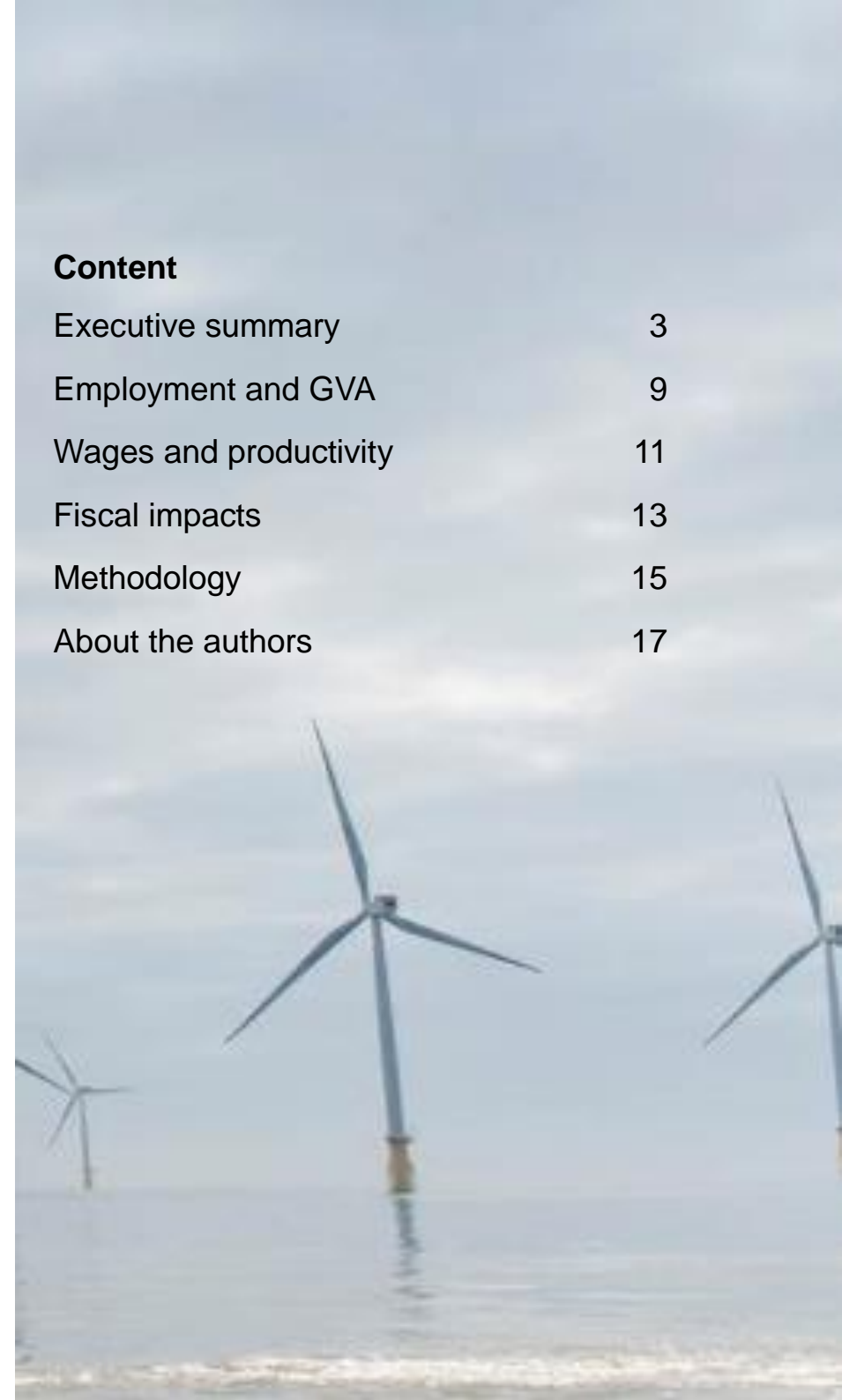
In addition, the sector plays a critical role installing and maintaining offshore energy infrastructure for net zero investments, as well as telecoms cables vital for economic security in increasingly data-driven economies.

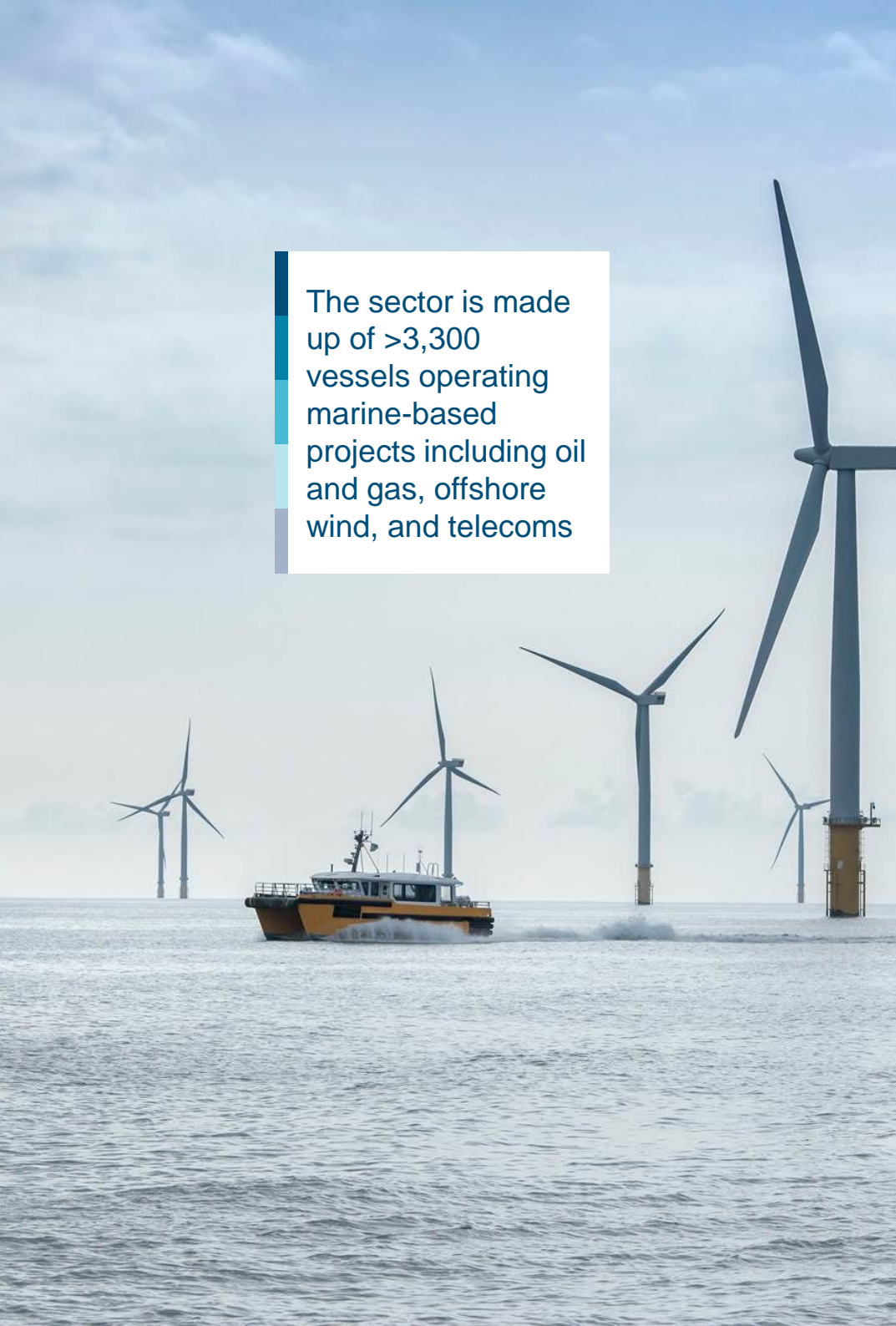
Alon Carmel

Member of PA's Management Group,
Offshore wind expert

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A photograph of an offshore wind farm. Several large wind turbines are visible in the background, and a yellow and black service vessel is moving through the water in the foreground, leaving a white wake. The sky is overcast and the water is greyish-blue.

The sector is made up of >3,300 vessels operating marine-based projects including oil and gas, offshore wind, and telecoms

Europe's marine contracting industry services critical offshore infrastructure across Europe and globally, operating out of key ports across the region

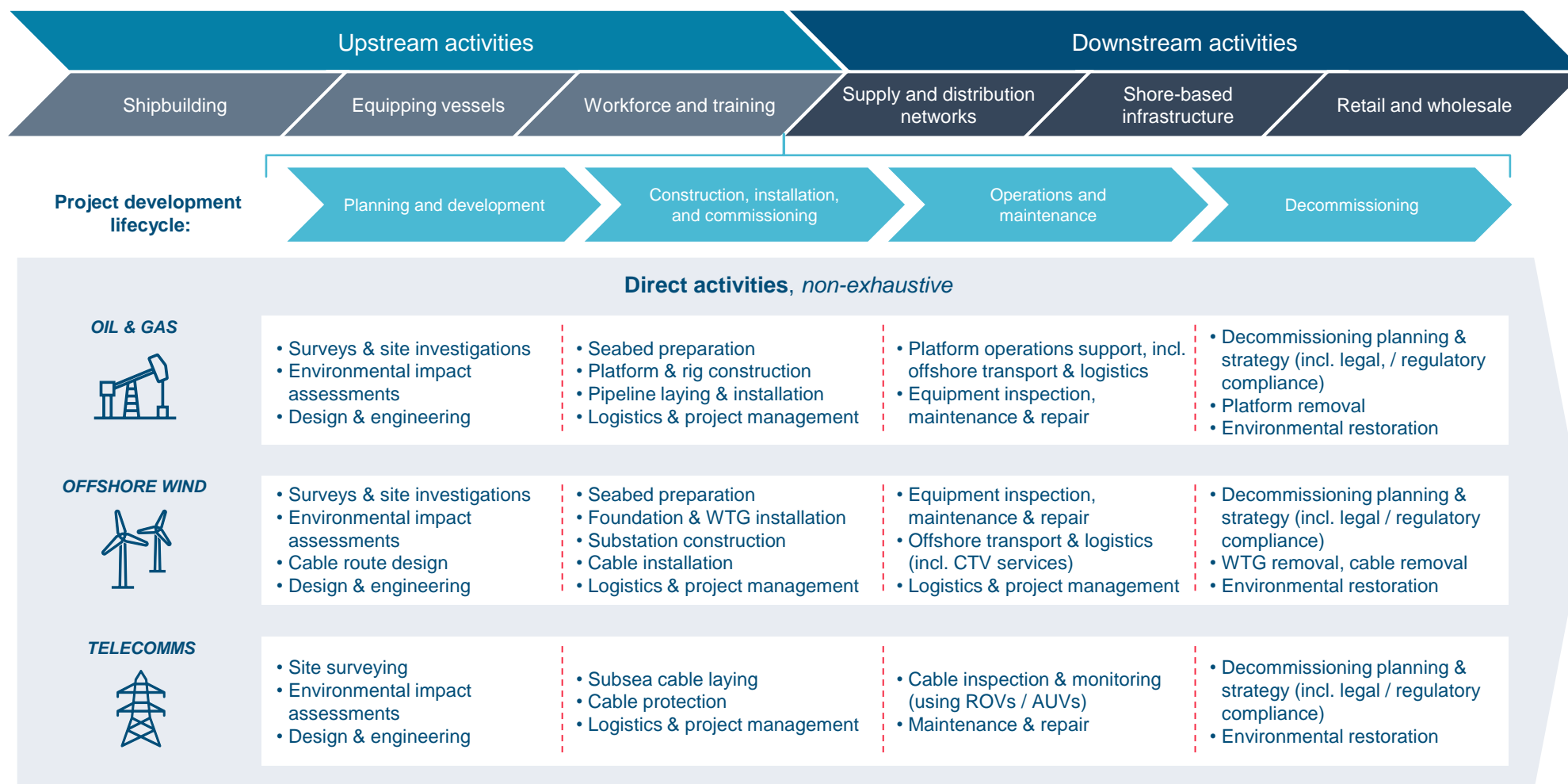
Defining the sector

PA Consulting was commissioned by the International Marine Contractors Association (IMCA) to assess the economic, environmental, and wider impact of Europe's marine contracting industry: EU-27, UK, and Norway.

Our analysis finds that the sector:

- Enables all stages of the offshore infrastructure development life-cycle – from construction to decommissioning
- Catalyses economic activity in upstream sectors such as ship-building, repair, and maintenance
- Is growing despite facing growing sources of volatility and uncertainty.

Illustration of Europe's marine contracting sector value chain



Notes: Elements of Europe's typical marine contracting sector supply chain activities and lifecycle. Sources: PA analysis



The European marine contracting services industry is a vital part of the European economy

The sector provides over 220,000 jobs and over €45bn of gross value added

How to measure economic impact

Our economic impact analysis of the offshore contracting industry has used standard economic methodologies and models to assess:

- Direct impacts: increased economic activity and jobs generated from 'direct' activities of the sector
- Indirect and induced impacts: additional economic activity and jobs in the supply chain, catalysed additional spending
- Fiscal impacts: The taxes and other fees paid by companies operating in the sector
- Productivity and growth: Comparing the average wages and productivity levels of jobs in the sector to national averages, and examining their growth potential.

The sector's economic contribution in numbers



- ✓ **Employment: over 220,000 of Direct FTEs**
- ✓ Including direct, indirect, and induced impacts, this rises to over **490,000 FTEs**



- ✓ **Gross value added: over €45bn of direct GVA** this year
- ✓ Including direct, indirect, and induced impacts, this rises to over **€80bn**



- ✓ **Tax contribution: over €15bn in taxes** expected this year
- ✓ This income is vital for **funding public services** and building national infrastructure



- ✓ **High wage and high productivity jobs:** GVA per worker is 2.5x the average for the region
- ✓ Strong long-term **growth prospects** servicing offshore wind, carbon capture, usage and storage (CCUS); hydrogen; and telecoms/digital cables and platforms

Source: PA analysis, Euro amounts reported in 2023 prices unless otherwise stated



Marine contracting services deliver widespread environmental benefits

The sector is critical for advancing global decarbonisation, maritime sustainability, and the 'blue economy'

Global decarbonisation

Marine contracting services are critical for the development, construction, operations, maintenance and decommissioning of the **offshore infrastructure** needed to advance the energy transition and meet global climate goals.

Maritime sustainability

Innovations in the marine services sector, such as cleaner fuel use for vessels, can be applied to other maritime activities, supporting broader decarbonisation efforts in the industry.

Contributions to the Blue Economy

Marine contracting services enable sustainable ocean use by providing the skills, equipment, and resources to monitor ecosystems, support research and conservation, and build a resilient maritime workforce.

The sector's environmental contribution



- ✓ Provides the vessels, equipment and workforce to enable the installation of the **c.10,000-20,000 turbines¹** required to meet European offshore wind capacity targets for net zero in 2050



- ✓ Enables the deployment of **other marine renewable energy and ocean energy** at sea (e.g. tidal stream, tidal barrage, wave)
- ✓ Enables **carbon capture and storage (CCS)** required to meet the **EU's carbon emissions targets by 2030 and 2050**



- ✓ Provides the **platform for technical advancements** and innovations in offshore wind marine and ocean energy
- ✓ Europe is a **global leader in ocean and marine energies** which by some estimates could provide 100GW by 2050 and €53bn a year²



- ✓ Helps support the **sustainable and equitable use of oceans** by providing the skills, equipment, and resources needed for this

Sources: 1. PA analysis, based on the number of turbines required to meet offshore wind capacity targets given current installed capacity figures and assuming 15-24MW turbines. 2. Ocean Energy Europe



Marine services support critical infrastructure and underpin European security

The sector facilitates deployment of critical infrastructure needed in a modern world

Offshore infrastructure

Maritime contracting services are critical for the development, construction, operations, maintenance and decommissioning of offshore infrastructure needed to support an increasingly interconnected and digitalised world – including telecoms and offshore transmission.

Shore-based infrastructure

Marine services depend on shore-based refuelling, maintenance, and support, making marine contracting sector demand crucial for developing and modernising ports, harbours, and terminals.

Energy and climate security

By protecting European energy supply, interconnector, and telecoms infrastructure, the marine contracting services sector improves European security in an increasingly volatile world, making Europe more resilient to geopolitical and climate threats.

The sector's social and wider contribution



- ✓ Supports an **interconnected and digitalised world**, with submarine cables facilitating over 99% of international data exchange³



- ✓ Drives the development, expansion, and **modernisation of shore-based infrastructure** such as ports, harbours, and terminals aimed at accommodating higher trade volumes



- ✓ **Develops communities through local investment**, key as c.40% of the world's population lives within 100km of coast⁴



- ✓ **Helps improve European security** in an increasingly volatile world by reducing reliance on Russian energy imports and promoting connectivity between European nations

Sources: 3. International Telecommunication Union (ITU); 4. United Nations



Economic impact
assessment

Findings and
methodology



The marine contracting sector in Europe is expected to deliver over 220,000 direct jobs and more than €45bn of direct GVA across Europe this year

Employment and GVA

Economic impact findings

We estimate that Europe's marine contracting sector delivers over 220,000 of direct FTEs and more than €45bn of direct GVA to the European economy.

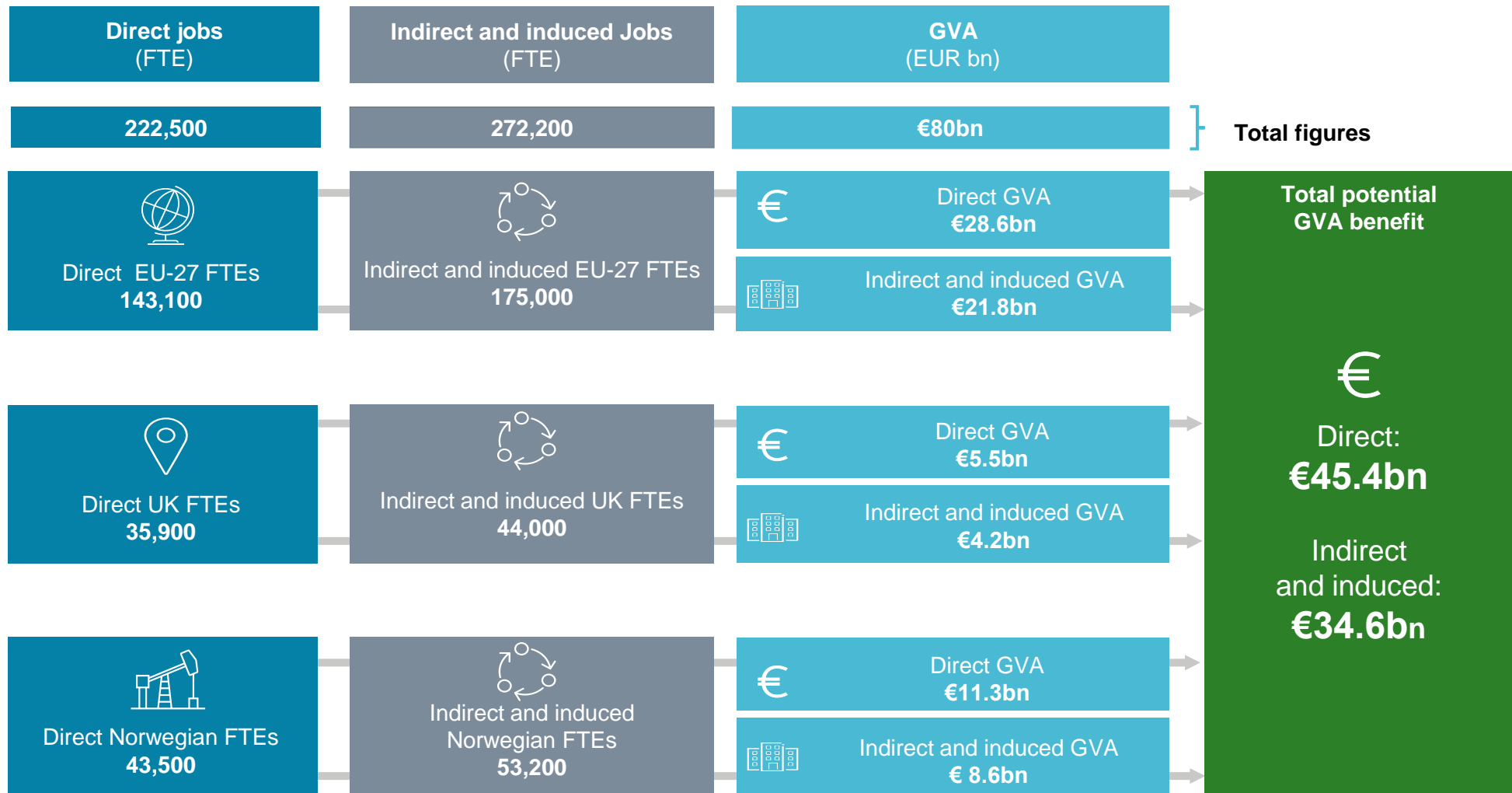
These direct impacts reflect the operations of the marine contractors themselves, typically within oil and gas and offshore wind sectors.

We estimate the sector supports over 270,000 FTEs in the supply chain and wider economy, and more than €34bn in indirect and induced GVA. This is driven by increased supply chain activity and spending from wages in the sector and its supply chain.


The biggest contribution to GVA and FTE impacts comes from the oil and gas sector, and the EU-27 experiences the greatest economic benefits, with sizeable impacts delivered by the UK and Norway's large offshore sectors.

Overview of the Marine Contracting Sector's Economic Impact

The European marine contracting sector is expected to deliver over 220,000 direct jobs and over €45bn of Direct GVA across Europe in 2025



Notes: Detailed Economic Impact Methodology is provided in Appendix 1.



The marine contracting sector is a key source of high-wage, high-productivity jobs in Europe

Wages and productivity

Key insights

The marine contracting sector is a key source of high-wage, high-productivity jobs in Europe.

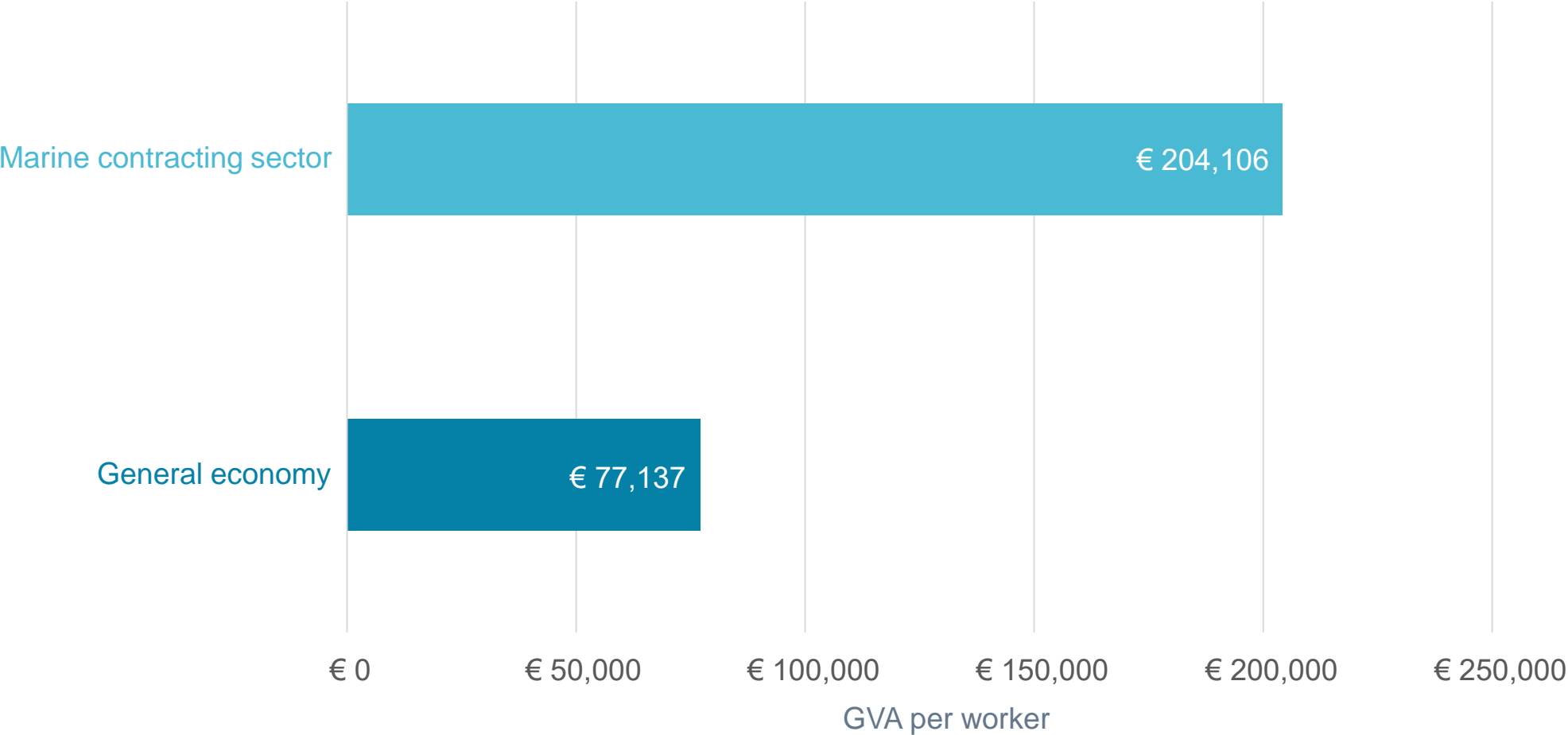
Our analysis indicates that average GVA per offshore contracting roles are over 2.5x higher than average GVA per worker in the economy of the whole – a premium of c.€126,000 per worker.

This increase reflects the higher levels of wages and productivity seen in highly-skilled offshore roles compared to national averages.

Vessels are staffed by project crews, made up of higher-skilled managerial and trade roles, with operational support from mariner crews.

The onshore workforce are typically higher-skilled individuals in strategic planning, engineering, design and corporate services.

Estimated GVA per worker in 2023 – offshore industries compared to European average



Notes: Variation in GVA per worker between the marine contracting sector and general economy across Europe (excluding UK as figures were not submitted to Eurostat), Sources: PA analysis of Eurostat data

An aerial photograph showing a tugboat with a green and white cabin and a black hull, pulling a large barge. The barge is loaded with several blue and red shipping containers. The tugboat is moving through dark blue water, leaving a white wake. A yellow rope is visible connecting the tugboat to the barge.

The sector is a large contributor to government finances – our analysis indicates that the sector delivers c.€15bn in tax and c.€1bn in visa fees annually

Fiscal impacts

Key insights

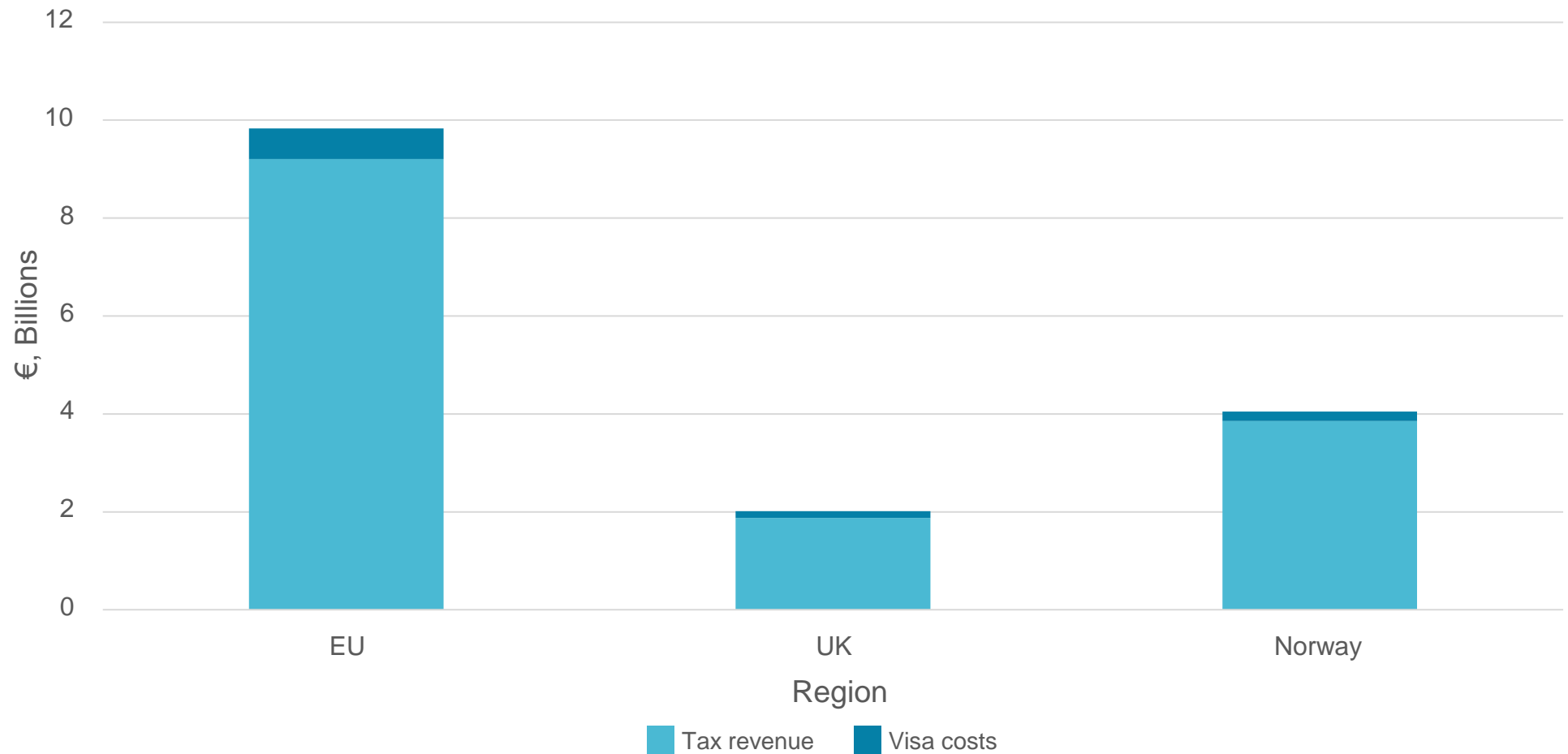
Additional GVA drives **additional tax revenue** in the form of income taxes, sales taxes, corporation taxes, and other tax types.

Based on strategic fiscal impact analysis, we estimate that the sector **contributes c.€15bn in taxes annually**. This highlights the sector's substantial role in supporting public services, infrastructure, and overall government spending.

Given the **international nature of the workforce**, visas are required often for a high proportion of workers onboard vessels.

This can bring in important sources of non-tax revenue for individual European countries – overall we estimate **that the sector contributes >€900m in visa fees across Europe annually**.

Illustrative direct tax and visa revenues – adjusted for sector tax considerations



Notes: Direct tax and visa contributions from the marine contracting sector across EU-27, UK and Norway, Sources: PA analysis of Eurostat, UK Gov, Statistisk Sentralbyrå and IMCA Data



Methodology

Key aspects of our methodology

PA Economics experts have used standard economic impact methodologies and databases to calculate the jobs and GVA impact of the marine contracting industry in Europe.

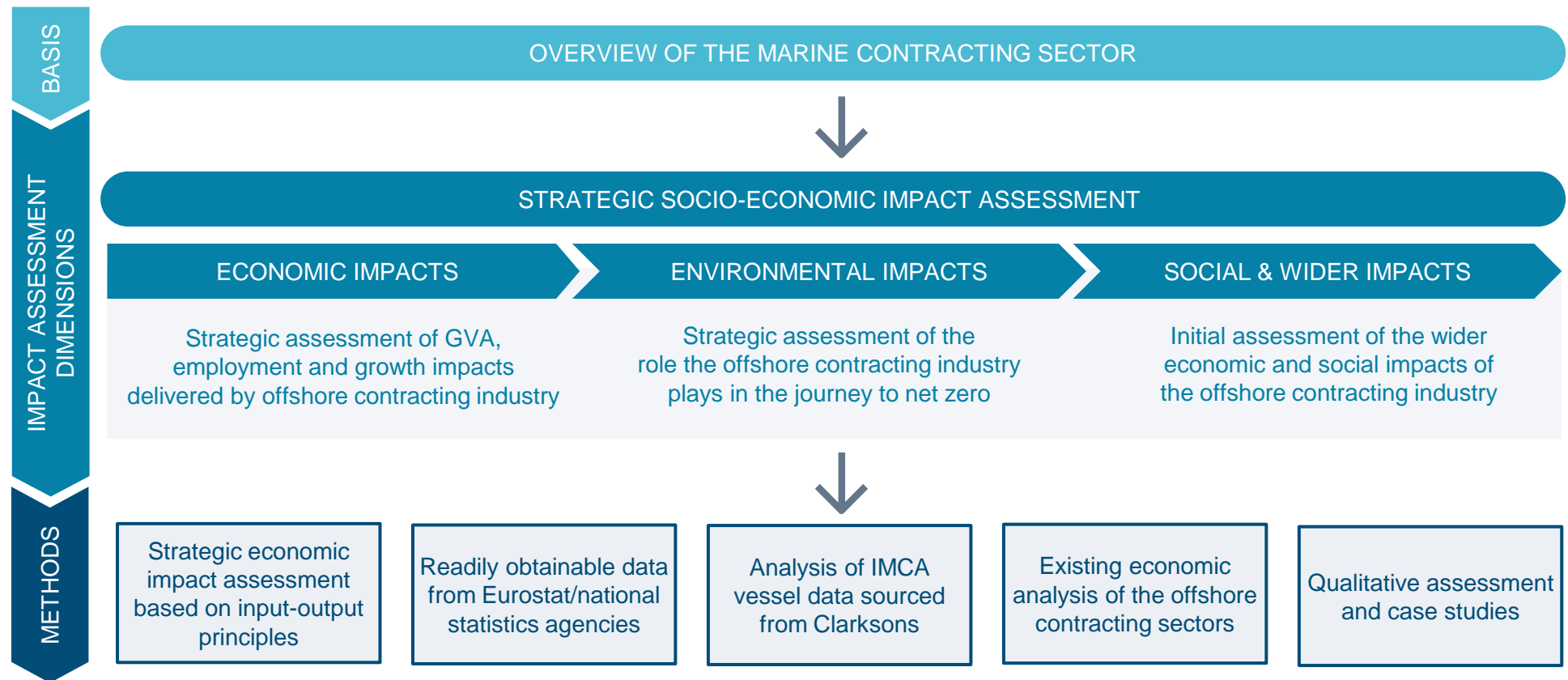
Input-output Analysis was used to assess the value generated by the European offshore contracting fleet in sectors like offshore oil and gas, wind, telecommunications, and emerging fields like CCUS.

The analysis covers direct impacts from vessel operations, indirect impacts from supply chain activity, and induced impacts from worker spending.

Long-term environmental, social, and broader impacts are assessed qualitatively.

The assessment focuses on vessels operating in early 2025, with annual impacts calculated in 2023 prices (€).

PA Consulting's approach to calculating economic impact and wider environmental and social impacts



Source: PA Strategic Socio-Economic Impact Framework



About the authors

PA Consulting's energy transition and economics experts work across the energy value chain to help our clients thrive in complex energy markets using innovation and technology.



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For more information about PA and our energy and utilities capabilities visit www.paconsulting.com/energytransition

A man in a yellow hard hat and orange safety vest stands on a metal platform overlooking a sea of wind turbines. The vest has 'FRON ADULT 43+KG' printed on it. The background shows a vast ocean with many wind turbines under a cloudy sky.

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About PA.

We believe in the power of ingenuity to build a positive human future.

As strategies, technologies, and innovation collide, we create opportunity from complexity.

Our diverse teams of experts combine innovative thinking and breakthrough technologies to progress further, faster. Our clients adapt and transform, and together we achieve enduring results.

We are about 4,000 strategists, innovators, designers, consultants, digital experts, scientists, engineers, and technologists. And we have deep expertise in consumer and manufacturing, defence and security, energy and utilities, financial services, government and public services, health and life sciences, and transport.

Our teams operate globally from offices across the UK, Ireland, US, Nordics, and Netherlands.

PA. Bringing Ingenuity to Life.

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