Shaping the future of offshore wind energy
Decarbonisation, digitalisation, decentralisation and the need to decrease demand are redefining the world of energy. ENGIE Group, with the extensive experience and expertise of its member companies, is contributing significantly to this new reality. We can cover the entire lifecycle of our customers’ projects. Our services include research & development, design, EPCIc, maintenance and monitoring. They are all geared towards optimum performance and cost of ownership during the entire lifecycle of the project.

**Mission & vision**

At ENGIE Fabricom, we want to:

- Maintain our 40% EPCIc market share in Europe
- Position ourselves via partnerships in the international offshore wind markets
- Provide integrated turnkey EPCIc solutions and full monitoring and maintenance services
- Offer world class technical expertise
- Ensure the safety and wellbeing of our workers, customers, partners and other stakeholders

**Research & Development**

ENGIE Fabricom Offshore Wind has created the next-generation OHVS: simple, smart, secure and scalable. It is a cost-efficient, low-risk alternative to tailormade substations. The new platforms weigh less, can be constructed faster, are easier to transport and install, and can be integrated into an existing wind farm supply chain more quickly. We are continuously exploring new techniques and technologies, together with ENGIE Laborelec, a leading center in offshore wind research. ENGIE Laborelec has a proven track record in the next generation wind offshore installations such as floating and airborne wind turbines.
Project management: EPCIc of substations

ENGIE Fabricom Offshore Wind is an integrated solutions provider offering value added solutions in the area of engineering, procurement, construction, installation and commissioning of offshore high voltage substations (OHVS) and their foundations. Our services include full monitoring and maintenance of offshore wind farms as well. By combining the competences of our people, we are able to offer world class technical expertise to our customers.

To extend our services and expertise even further, we regularly collaborate with other specialist parties, among them our sister companies ENGIE Axima and ENGIE Tractebel.

ENGIE Axima is a specialist in heating, ventilation, and air conditioning (HVAC). We rely on ENGIE Axima, among others, for air humidification and salt filtration to prevent corrosion. ENGIE Tractebel acts as an integrated partner and provides engineering, procurement and project management services in the fields of medium and high voltage equipment. Every year, together with our partners, we execute projects that run into thousands of manhours, involving multiple skills and strict deadlines.

In-house supporting services

- Safety and QA/ QC management systems
- Work preparation
- Project management
- Planning, training and competence management
- Marine logistics and warehousing
Offshore monitoring and maintenance services

We offer full monitoring and multidisciplinary maintenance services for entire offshore wind farms. This includes the monitoring and maintenance of substations, wind turbines, hardware, software, low, medium and high voltage installations. We are supported by ENGIE Laborelec specialized in the inspection & monitoring of wind turbines. They assess the main components and performance of the turbines and offer services to boost their performance. We also rely on European Maintenance Support (EMS), another ENGIE partner, for specialized maintenance and operations know-how. EMS has more than 50 years of experience in improving the profitability of power and heat generation assets through tailor-made management and maintenance.

New digital solutions for increased performance

ENGIE Fabricom Offshore Wind is investing heavily in digitalisation for better monitoring and increased control of offshore wind farm OPEX costs.

To guarantee business continuity at all times, we offer extensive cybersecurity services in collaboration with ENGIE Laborelec. ENGIE Laborelec conducts thorough health checks to ascertain actual security levels. As solutions integrator, it has the capacity and expertise to implement all the security measures our customer might need.

In-house monitoring and maintenance capabilities

- Maintenance engineering
- Offshore technical services
- Multi-disciplinary maintenance E&I/ LV/MV/HV & AUX
- Mobilization of technical support teams (Marine logistics)
- Operations and maintenance management
- Inspection and certification management
- Wind turbines inspection & monitoring (gearbox, blades, CMS & SCADA, oil analysis, root cause analysis)
- Wind turbine performance (power curve measurement, yaw & pitch misalignment correction, north alignment)
Our Health, Safety, Environment and Quality (HSEQ) record is our license to work and it remains our top priority in everything we do. Permanent monitoring and evaluation is an important part of our operational ambitions.

**Compliance to requirements, regulations and standards**

Our work is conducted in accordance with client-specific requirements, local and international regulations, and leading industry standards such as:

- OHSAS 18001
- ASME III nuclear (NQA-1)
- PED (module – H/D1)
- AD Merkblatter
- SCC (Safety Checklist Contractors)
- EEMUA 159
- API 620/650
- GWO
- EN-ISO 3834-2
- EN 14015
- ISO 1090-1, ISO 9001, ISO 14001, ISO 27001

**Engie Fabricom has developed a way of working that ensures the smooth and cost-efficient execution of multi-disciplinary projects throughout their various phases. Our early involvement, flexible approach, and transparent communication allows for good working relations between all project stakeholders.**

**From start to finish**

- 01 | Feasibility and concept studies
- 02 | Feed studies
- 03 | Design and engineering
- 04 | Procurement and logistics
- 05 | Construction
- 06 | Installation and mechanical completion
- 07 | Testing, commissioning and start-up
- 08 | Operational support and maintenance
About ENGIE Fabricom

ENGIE Fabricom designs, builds and maintains multi-technical facilities for companies and local authorities. Many of its solutions improve mobility, safety, distribution systems and the share of renewable energies, as well as operational and energy performance in industrial environments. ENGIE Fabricom and its subsidiaries are active in both Belgium and abroad. ENGIE Fabricom is part of ENGIE, which develops effective and innovative solutions in four key areas: renewable energy, energy efficiency, liquefied natural gas and digital technologies. As part of the ENGIE Group, the Offshore Wind division can rely on a broad international network of expertise and specialised services within the Group.

Other ENGIE members to support your offshore wind project

ENGIE Axima, a specialist in HVAC, fire fighting systems, and commercial and industrial cooling techniques
www.engie-axima.be

ENGIE Tractebel, a leader in consultancy, engineering and project management services
www.tractebel-engie.be

ENGIE Laborelec, a leading expertise and research centre covering the entire electricity value chain
www.laborelec.com

EMS, an expert in tailor-made asset management solutions and maintenance across the entire power generation value chain

Questions and enquiries

Please do not hesitate to send us your questions and enquiries by email:

sales.offshore@engie.com