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Korea Offshore Wind EPC Market Trends Newsletter (2024–2025)

Introduction

South Korea is expanding its renewable energy portfolio with a goal of achieving carbon neutrality by 2050, and offshore wind has become a central pillar of its energy strategy. According to the 11th Basic Plan for Long-Term Electricity Supply and Demand, the country aims to increase its total renewable energy capacity from 30 GW in 2023 to 121.9 GW by 2038. Of this, wind power targets are set at 18.3 GW by 2030 and 40.7 GW by 2038.

To support this trajectory, two major pieces of legislation were enacted in March 2025: the Special Act on Promotion and Fostering of Offshore Wind Power, and the National Power Grid Expansion Act. These laws aim to streamline permitting procedures and accelerate the construction of transmission infrastructure.

Recent Tenders and Project Updates

1st Competitive Bidding Results (Announced in December 2024)

In the first competitive bidding round in December 2024, four fixed-bottom offshore wind projects and one floating wind project were selected, totaling 1.886 GW:

- 532 MW Anma (both phases)
- 500 MW Taean (Vena Energy & Copenhagen Infrastructure Partners)
- 104 MW Yeonggwang Yawol (Daehan Green Power)
- 750 MW Bandibuli/Firefly (floating, Equinor)

In May 2025, the government announced its plan to conduct additional bidding for 1.25 GW of fixed-bottom offshore wind and 1 GW of solar PV.

2025 Supply Chain Contracts and Construction Updates

Project	EPC / Supply Chain Updates	Details
Anma (532 MW)	HBA Future Energy designated as EPC contractor for the offshore substation. LS Cable & System and LS Marine Solution awarded subsea cable supply and installation contracts.	Construction to begin in 2025, completion expected in Q1 2029. Contract value approx. KRW 255 billion (USD 185 million).
Haesong 1 & 3 (1 GW)	In July 2025, LS Cable & System selected as preferred supplier for subsea cables.	Developed by CIP and COP. Execution

	Grid connection agreement signed with KEPCO.	expected post-2025.
Bandibuli/Firefly (750 MW, floating)	First floating wind project selected in 2024 auction.	Will require collaboration between Korean EPCs and international tech providers for design and execution.
Yeonggwang Yawol (104 MW) & Taean (500 MW)	Fixed-bottom projects selected in 2024.	Expected to contribute to regional economies. Multiple SME contracts likely (subsea cables, foundations).
Jeonnam 1 (96 MW)	All turbines installed as of December 18, 2024. Commercial operation expected in 1H 2025.	Developed by CIP and SK Innovation E&S. First large-scale private offshore wind project in Korea with strong local content.
Chujin (1.5 GW)	DNV appointed in 2022 as Owner's Engineer overseeing design, procurement, construction, and commissioning.	Project to be located off Jeju Island, offering significant opportunities for Korean EPCs and suppliers.

Multi-Contracting vs. EPC Wrapping

Most Korean offshore wind projects currently adopt a multi-contracting structure. This involves separate contracts for supply and installation, which increases project coordination complexity and risk of delays due to weather and vessel availability.

Korea still lacks a deep pool of experienced EPC contractors capable of delivering full-wrapped EPC packages competitively. However, as the market matures and project sizes grow, demand for single-point EPC wrapping is increasing, particularly to reduce schedule and interface risks in large-scale developments.

Opportunities for EPC Firms and Local Suppliers

• **Increased Local Content Requirements:** The government's evaluation framework gives 30% weight to industrial and economic benefits, including local manufacturing and job creation. This enhances opportunities for domestic suppliers of turbines, foundations, and cables.

• **Strong Performance by LS Cable & System:** LS Cable and LS Marine Solution secured contracts for both Anma and Haesong projects in 2025, demonstrating the competitiveness of domestic players.

• **Jeonnam 1 Case Study:** This project showcases successful collaboration with local ports, suppliers, and community programs. It highlights how private-led projects can foster local acceptance and supply chain development.

• **Large-Scale EPC Demand Ahead:** Projects like Chujin (1.5 GW) and Bandibuli/Firefly (750 MW) will likely require full-scope EPC contractors. DNV has indicated it will work with Korean EPCs to manage technical risks and oversee project delivery.

Conclusion and Outlook

Through the enactment of the Offshore Wind Promotion Act and National Power Grid Expansion Act, Korea is addressing longstanding permitting and grid constraints. The government has set clear offshore wind targets of 18.3 GW by 2030 and 40.7 GW by 2038.

In 2024, 1.886 GW was awarded in the first competitive bidding round, with 1.25 GW of additional capacity to be auctioned in 2025. While multi-contracting remains the mainstream model, rising scale and localization incentives are creating demand for EPC wrapping solutions.

With domestic players like LS Cable expanding their market share, private-led success cases like Jeonnam 1, and upcoming mega-projects such as Chujin and Bandibuli, Korean EPC companies are well-positioned to capture a broader role across engineering, procurement, and construction functions.

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