

# 5G O-RAN: Driving the Sustainable Development of Offshore Wind Power

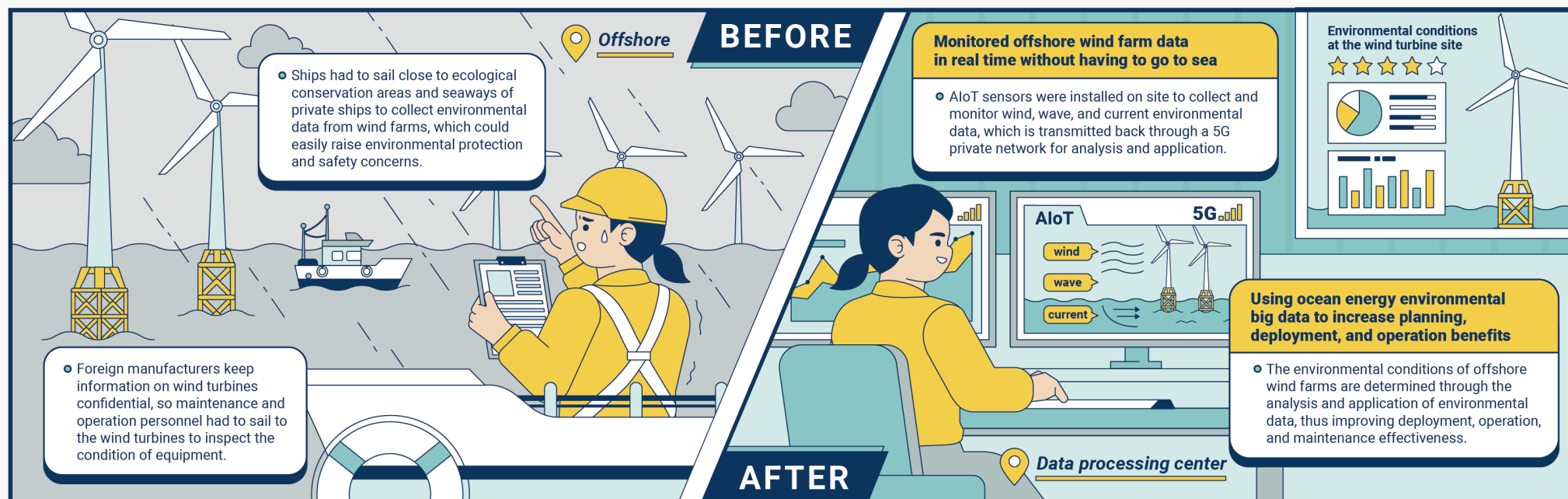
## Taiwan Domestic 5G Private Network Integrate with Oceanic & Meteorological Applications for Offshore Wind Farms

Offshore wind power is a renewable energy with great potential in Taiwan, but its installation, maintenance, and operation require analyzing a large amount of environmental data. Domestically produced 5G O-RAN equipment provide adequate resilience in complex outdoor environments at sea, and the integration of AIoT can facilitate the analysis of metocean and geological big data of offshore wind farms.

### Project Results

**#First Case in Taiwan** | The first domestically produced offshore 5G O-RAN standalone has increased the resilience of marine communication and elevated the capabilities of domestic 5G integrated AIoT network solutions, thus aligning with international standards.

**#Sustainable Development Infrastructure** | Integrated information and communications with AIoT to collect data on the meteorological, marine, and geological environment, provided data for offshore wind power operations, reduced the number of offshore inspections, and established Taiwan's environmental big data on ocean energy.



**Key Technology**

# 5G O-RAN

# AIoT Sensors

# Satellite Link

**Technology Unit**

INTERNATIONAL INTEGRATED SYSTEMS, INC.

**Domestic Trial Site**

Keelung city, Changhua county