

### Together, to build a sustainable future





Providing proprietary technologies to the global offshore & maritime industry to support energy transition

**Offshore Wind** 



**Offshore Oil & Gas** 



**Sea Transport & Salvage** 







### **Our Expertise**

- Offshore wind installation jack-ups
- Floating wind mooring system
- Offshore heavy lift cranes
- Deepwater pipelay systems
- Telescopic gangways
- MODU drilling equipment
- Large lattice structures
- Ship/semi/jack-up hull structures
- Marine operation equipment



#### **Jack-up Leg Cushion System**

- Reduce leg landing impact load and increase jacking operation seastates to Hs = 2.5~3m; boost productivity of vessel by 35%
- Provide 50% extra capacity to pull out legs in case spudcan entrapped in soil
- Added to bottom of jack-up legs, no impact to vessel payload and other operations
- Particularly advantageous for hard and very soft seabeds, with improved operating safety and efficiency





# Floating Turbine On-site Component Exchange

- On-site component exchange with crawler crane onboard FOWT platform
- Crane transported to FOWT by a vessel with proprietary heave-compensated platform and bridge
- Offshore lifting capacity up to the crane, attainable: 300t@150m high
- Operation limit: platform inclination  $\leq 2.5^{\circ}$  (equivalent Hs  $\approx 2.5$ m)
- No change to turbines and towers

## Single Anchor Mooring for Floating Offshore Wind

- Applicable for semi, barge and spar type of floaters, reduce CAPEX of FOWT mooring system by 75%
- Weathervane and streamlined floater can reduce max mooring load by 50% (extra saving)
- Suspended leg and single anchor minimize seabed coverage
- Gravity/concrete anchor is cost effective and applicable for all seabed soil conditions

