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# Adaptive Industrialization Tailored to Local Content

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## **Industrialization - What Do We Deliver?**

Local Content & regulation

CO<sub>2</sub> Footprint Consideration

Serial & Mass Production

Standardized & Consistent Product



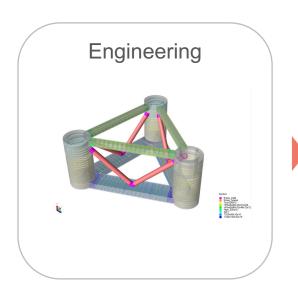
Robust & Flexible Execution Plan

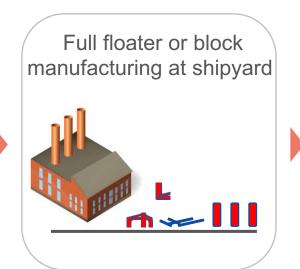
Global Application

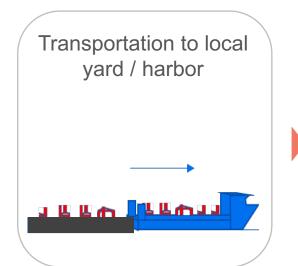


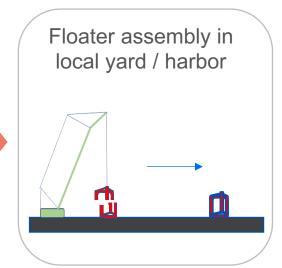


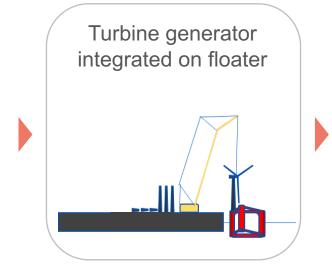
## **Robust and Flexible Execution Plan**

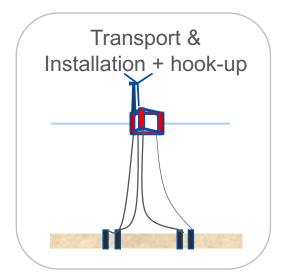










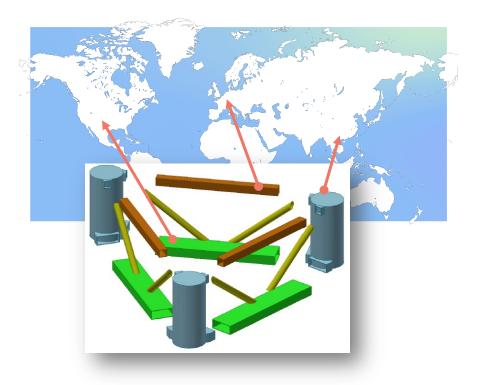




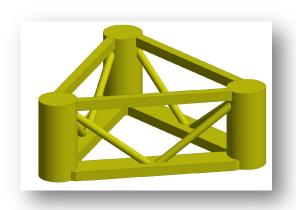


# Flexibility through Modularization Approach

Multi-source Block Fabrication



Local Assembly and Turbine Integration

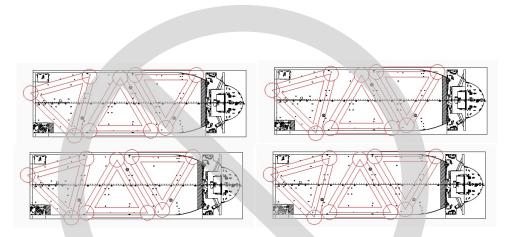




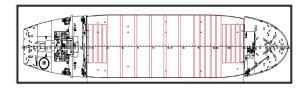
> Increased Local Content

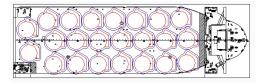


## **Optimized Transportation**



Fully Assembled Foundation Transport





### **Cluster Block Transport**

- Efficient
- Lower Cost
- Lower Carbon Footprint



## **Turbine Integration Considerations**

#### Challenge

Heavy Cranage for integration of WTG
15MW: +800t nacelle, +140m heights

Mobilization of Heavy Lift Crane
12-18months, high cost

Ground Bearing Capacity
+20t/m² for lifting

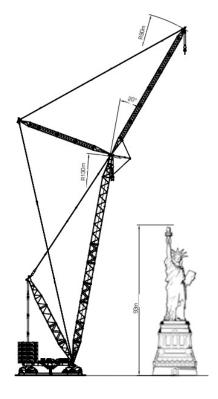
Quay Space Limitations
For storage and handling

Water / Air Draft
Shallow / bridges

#### Solutions

- Innovative Products & Block Fabrication
  - minimize heavy cranes use
  - maximize local yard/harbor scope
- INO Floater requires minimal draft





**Typical Heavy Lift Crane** 



# **Local Content Opportunities - USA**

- Oil & Gas expertise utilized in FOW
- Local supply chain
  - Local procurement (WTG components, cables, etc.)
  - Vessels
  - Shipyards/ports/marshalling yards for assembly and integration
- Investments (east coast projects)
- O&M Hubs (long-term maintenance contracts)
- Digital Expertise











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