

Developing the wave and tidal supply chain

Sean Matthews 2nd March 2011



Purpose

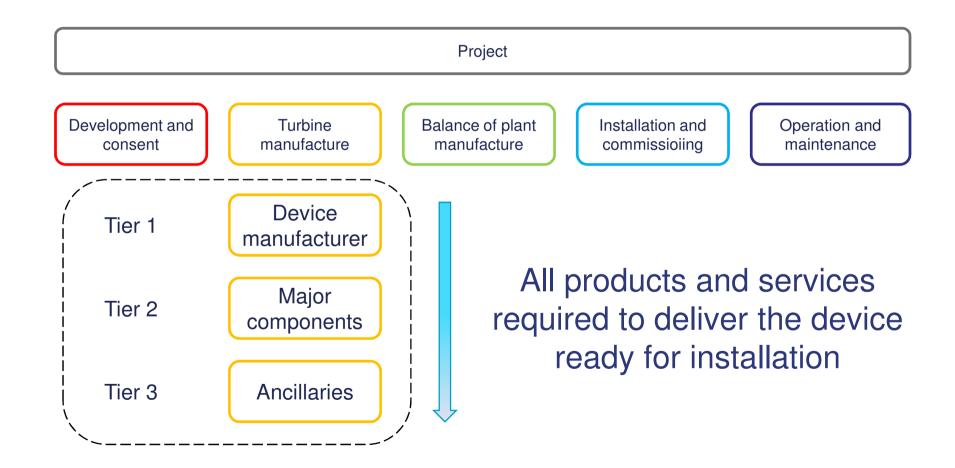
To raise awareness of potential supply chain challenges in moving towards a GW scale industry from one of individual device development

Contents

- Supply chain overview
- Commercial projects
- Challenges of delivery
- Key requirements
- Supply chain readiness
- Who will succeed



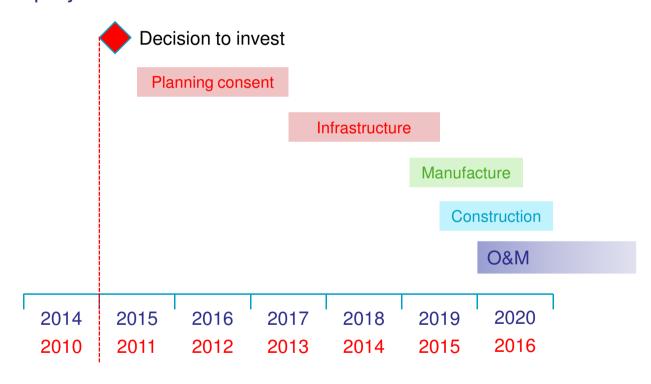
What is a supply chain





Commercial project

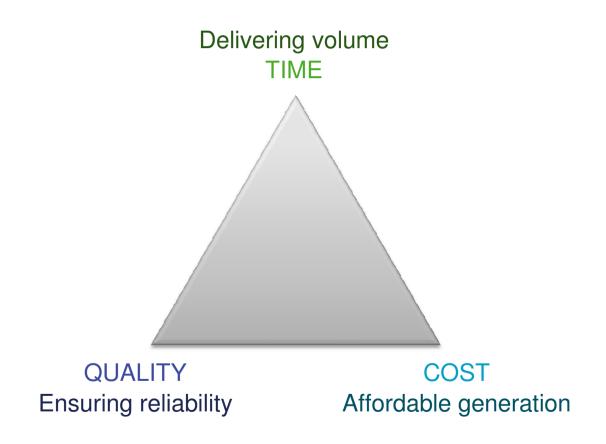
100MW project delivered in 2020



30MW in 2016 – do we have the infrastructure for this?



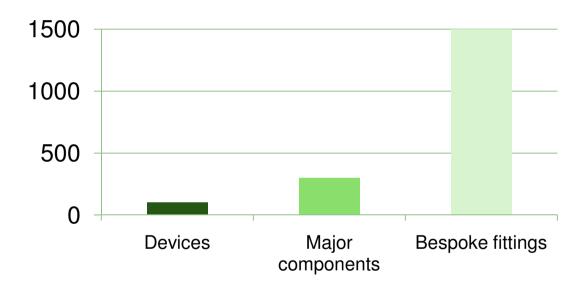
Challenges of commercial delivery





Device manufacture

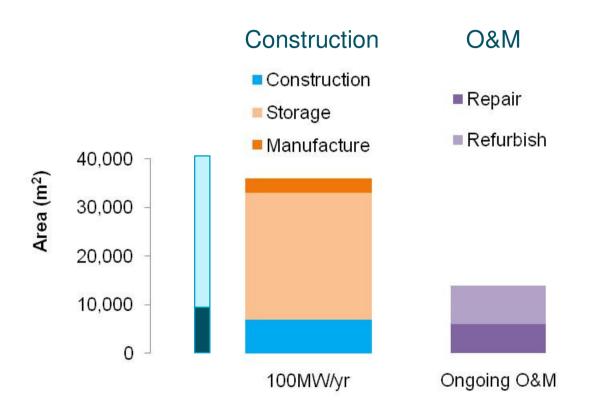
Assume 100MW per annum



- Is supply of key components secure?
 - How many suppliers single point or several
 - Commodity issues prices and availability
- Economies of scale maximised?



Construction & O&M



 Scrabster extension has around 1Ha quayside and 3Ha industrial space





Supply chain readiness

- Understanding
 - Know what you will be producing in 2016 and beyond
 - Move towards scale manufacture and end-to-end production methods in principle during design
 - Identify the global opportunity
- Capacity
 - Suppliers must be able to move from 1 per annum to 100+ output
 - Retain experience gained to date
 - Plan for maximum efficiency in production with room to meet future demand
- Investment
 - To produce quality, to budget and on time
 - In suitable locations and facilities
 - In sufficient time to maintain competitive advantage



Who will succeed

The most innovative device that maximises energy capture

OR

The suppliers able to deliver at scale,
willing to invest to meet future demand,
focused on a worldwide market
and
prepared to constantly push prices down



Thank you

Contact: