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Siemens & IWEA – Research Proposal

An Enterprising Wind

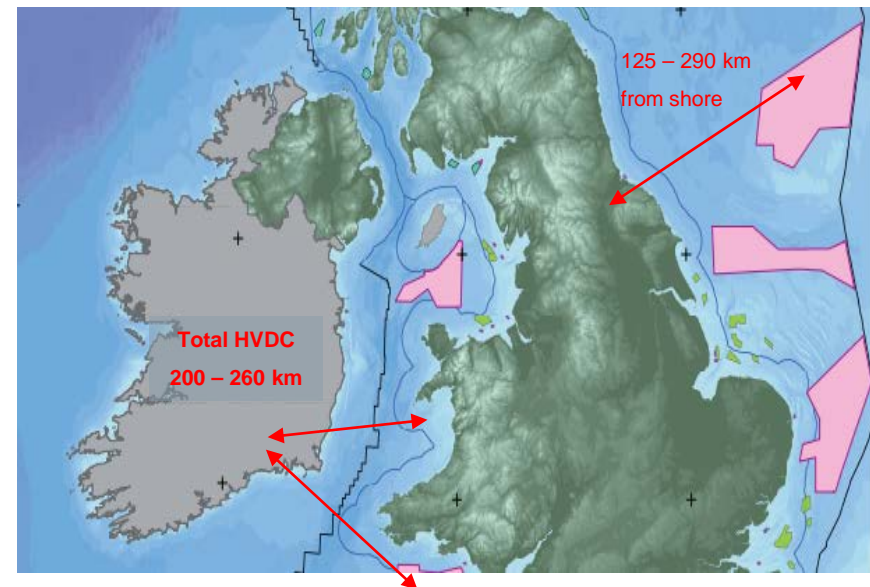
Prepared

May 29013

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The Vision

- Offshore wind, gone so far offshore (from UK) that it has hit onshore (in Ireland)
- Competitive project that can deliver offshore wind at almost onshore prices
 - The WTG's will be high Tip Height, so low turbulence and large generators / Large rotors.
- It harvest energy where the wind exists and transmits affordable power to where the load centre is greatest



The Background

UK Demand - Ireland Supply

Demand Side – UK

1. Commitment to 2020 targets require 15% energy from Renewable sources
 - Needs 30 GW of new RE capacity - Currently estimated to fall short of targets
 - In 2011 total renewables accounted for 3.8% of energy consumption*
2. Depletion of Oil reserves in North Sea → increased dependence and cost
 - Imports of energy exceeded UK production; the first time since 1974
 - UK's reliance on imported fossil fuels hit record 36 year high
3. Prospective decommissioning of aging Nuclear and coal plants
 - By 2020, 25% of the current coal and nuclear plants will be decommissioned

Supply Side – Ireland

1. Commitment to 2020 targets require 16% energy from Renewable sources
 - Ireland is well on its way to achieve its targets for 2020
 - In 2011, the contribution of renewable energy to overall energy demand reached 6.5%
 - Wind energy resources in Ireland could produce 19 times the Irish domestic electricity needs
 - This could lead to potential export opportunities to nearby countries



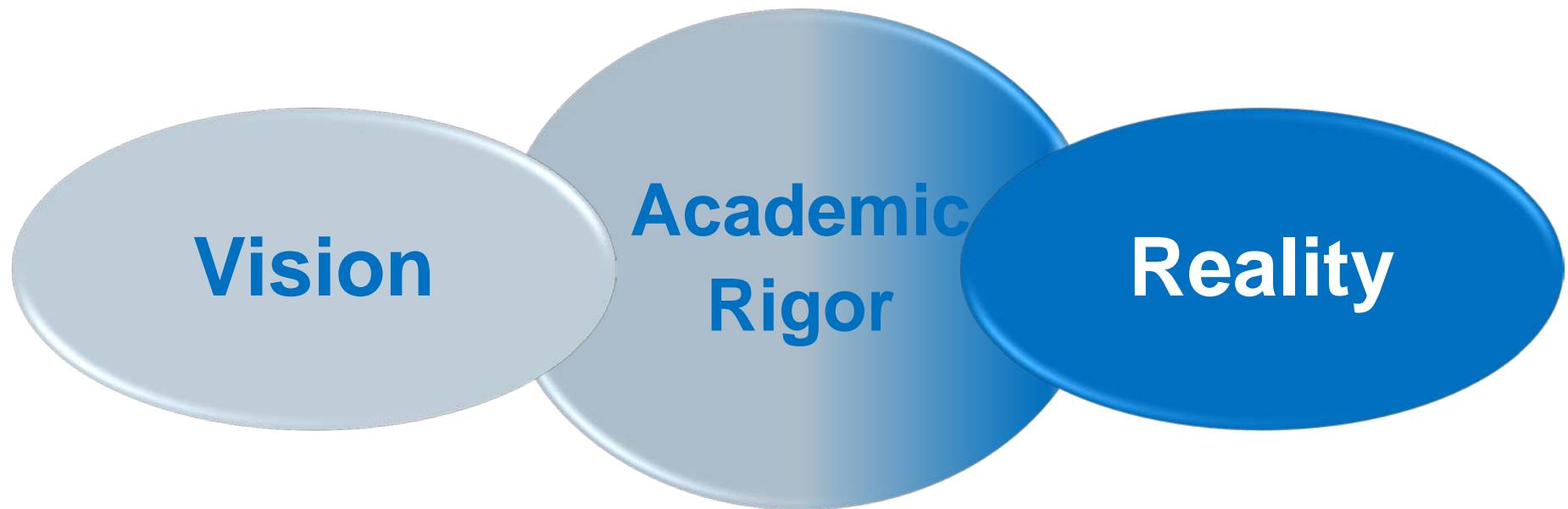
The Proposal

'Offshoring' an Onshore Wind firm

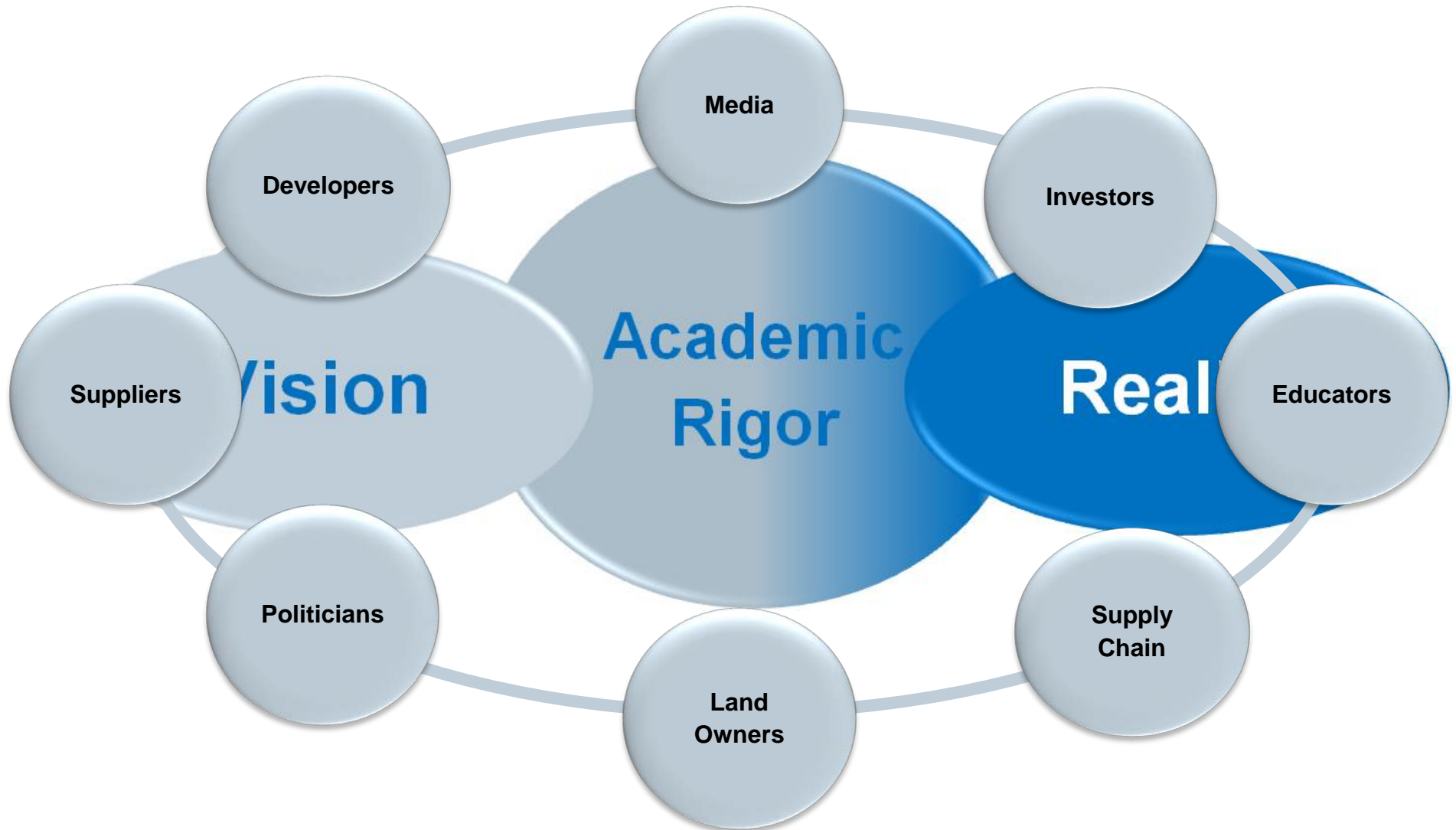
- With surplus wind generating capacity in Ireland, UK could benefit by harnessing the same to meet the 2020 Renewable Target
- The idea is to go so far offshore so as to hit onshore – however, sites in Ireland are closer to UK than some of the Round 3 offshore sites
- As LCoEs are much lower for Onshore wind, it would be cheaper for the UK consumers when compared to energy from a sea based Offshore wind farm
- The EU Joint Project Mechanism will be utilized to ensure all output counts toward UK targets.
- In January 2013, Energy Ministers of UK and Ireland signed a formal MoU on renewable energy trading and intend to have policy signed in early 2014.



Why Produce Report



Who Needs This Report





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Thank You