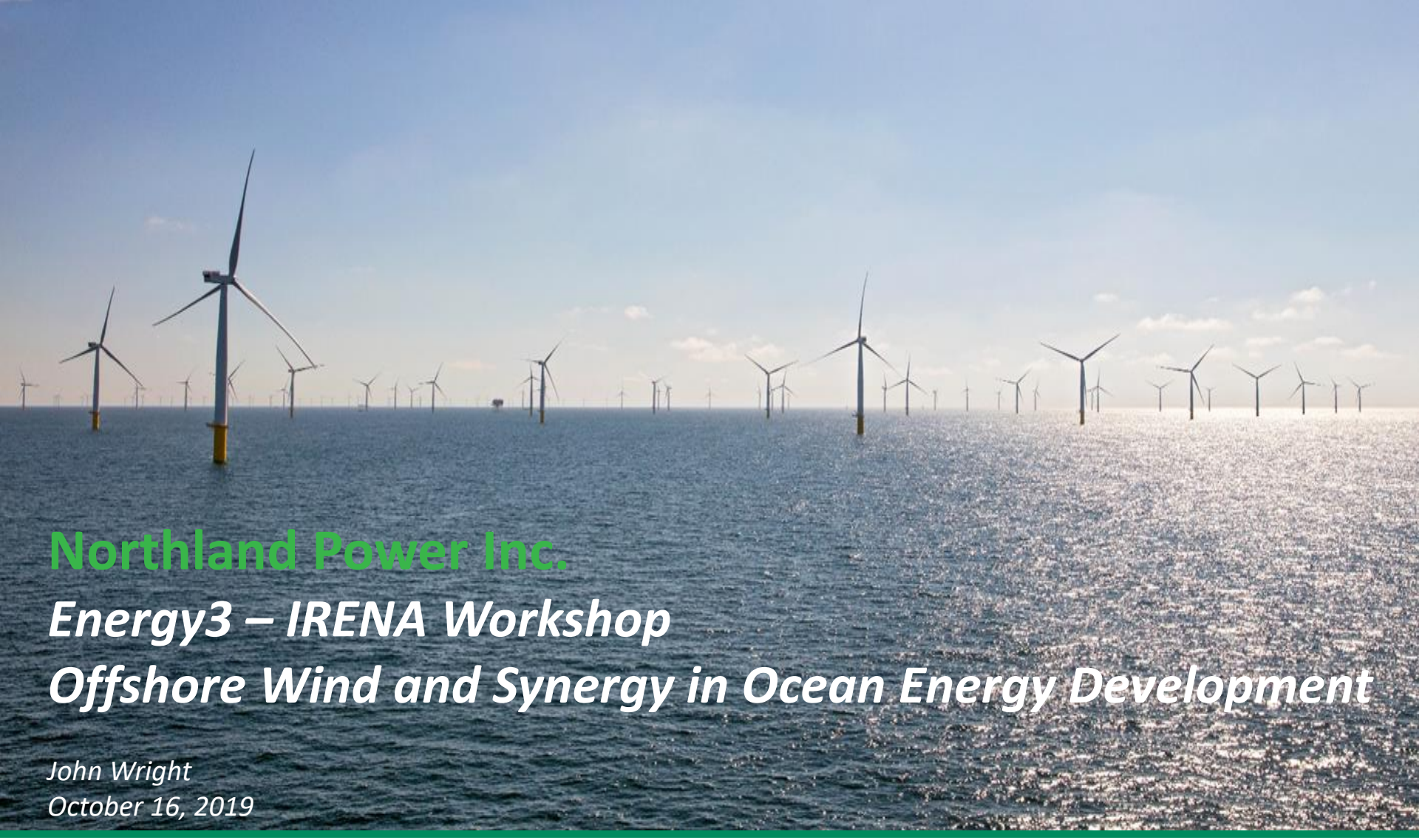


Northland Power Inc.

Energy3 – IRENA Workshop
Offshore Wind and Synergy in Ocean Energy Development

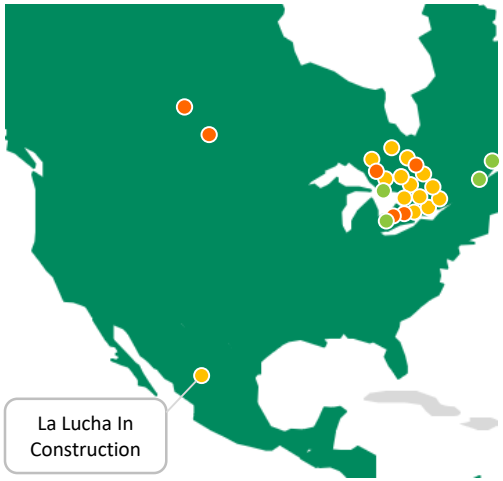
John Wright
October 16, 2019

TSX: NPI

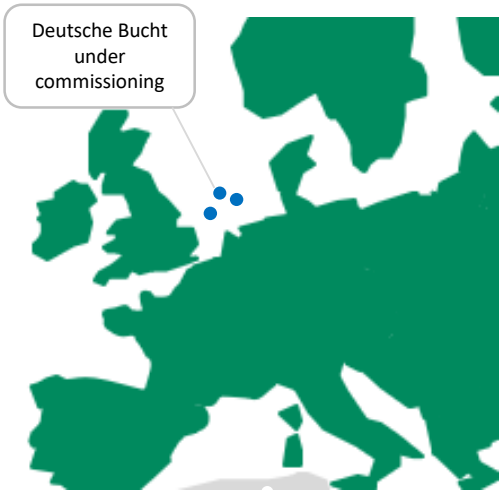
NORTHLAND POWER

Diversified Asset Portfolio

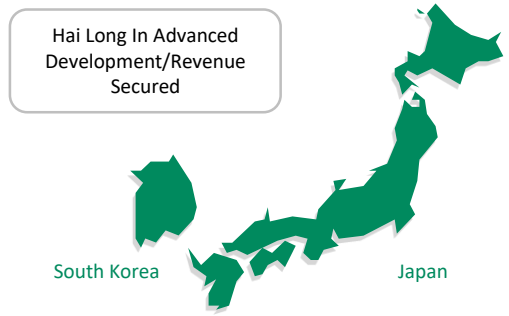
North & Latin America



Europe



Asia

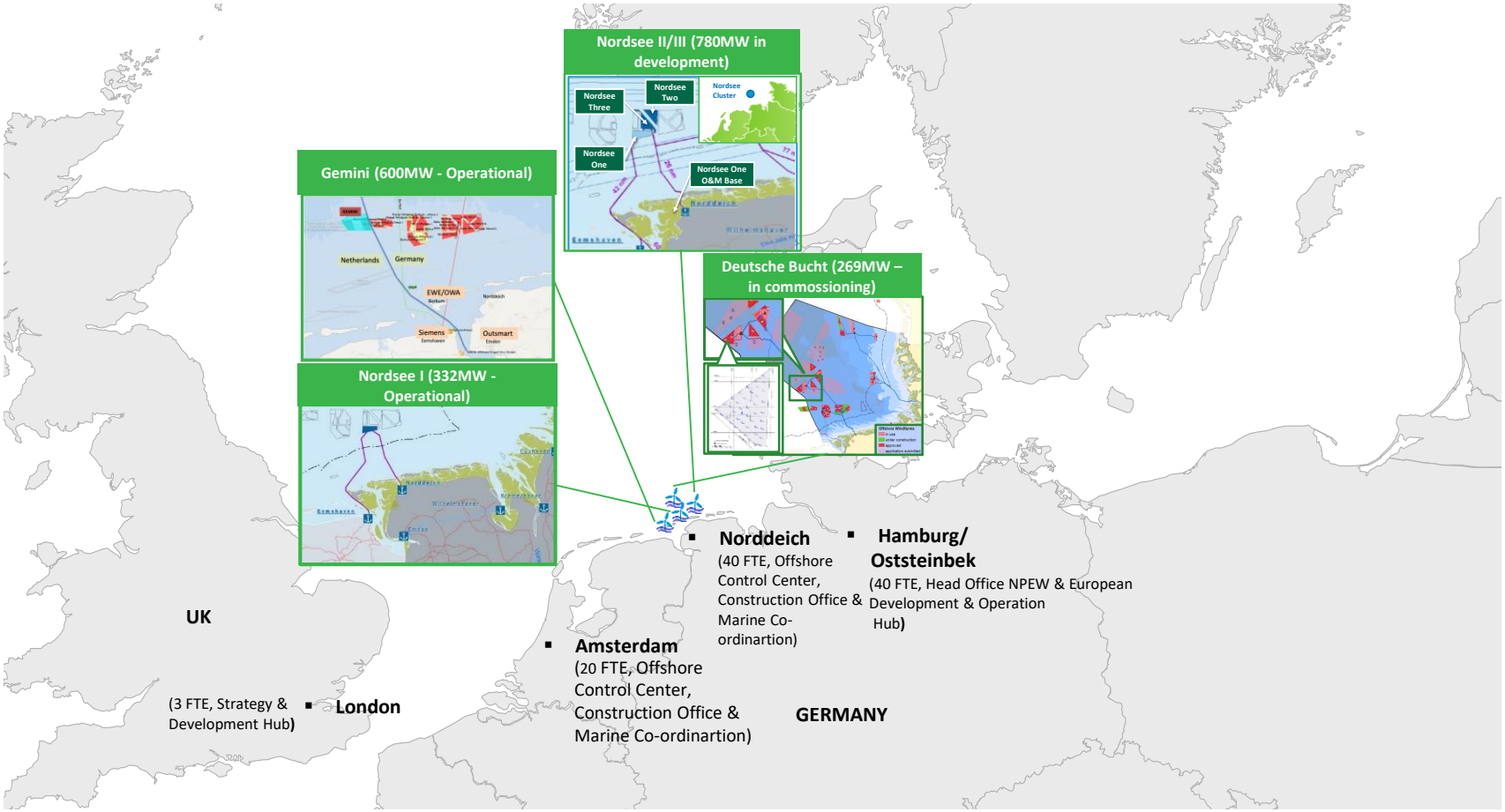


Technology:	Operating[1]	Under Construction & Adv. Development[1]
Offshore Wind	932 MW	1,313 MW
Onshore Wind	394 MW	-
Solar	130 MW	130 MW
Thermal	973 MW	-
Total (Gross)[2]	**2,429 MW**	**1,443 MW**

Northland Power owns and operates 2.4 GW of power assets globally

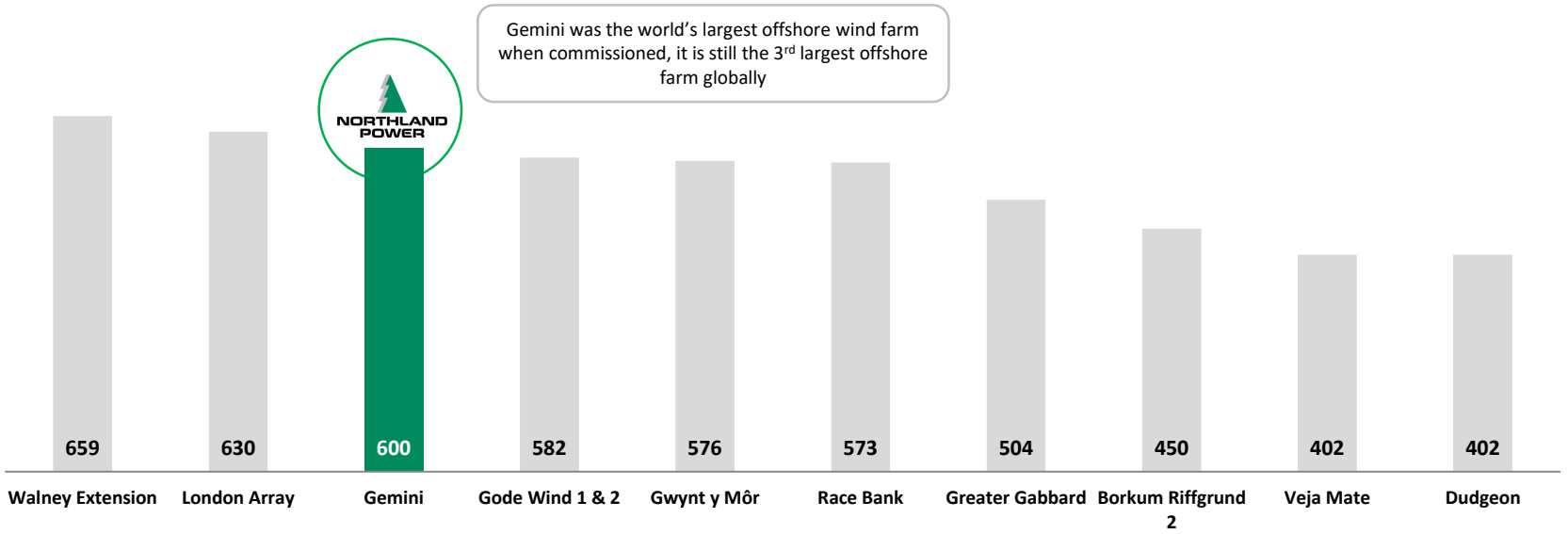
1. *Please note that these figures exclude 795 MW Nordsee Two and Three offshore wind projects currently under development in Germany.*
2. *Total Net Capacity: 2,014 MW (Operating) and 1,025 MW (Under Construction & Advanced Development).*

Northland Offshore in Europe



Global Offshore Wind Leadership

Top 10 Global Offshore Wind Operating Projects *(gross MW)*



1st North American IPP to enter Offshore Wind

NORTHLAND POWER

Acquisition of stake in Gemini
August 2013

Largest Project Financing for Renewables Project

Gemini

€2.8B Gemini Financial Close
May 2014

1st Offshore Wind Project Financing with Only Commercial Lenders

Nordsee One GmbH

€1.2B Nordsee One Financial Close
March 2015

Opportunity to Create Offshore Energy Synergies

Canada's Context

- ✓ Motivated to reduce carbon
- ✓ Good offshore wind resource (oceans and Great Lakes), also means good wave energy
- ✓ Significant tides
- ✓ Opportunity to leverage offshore oil and gas expertise in transition to carbon free energy (i.e., Statoil in Norway)
- ✓ Growing energy storage capabilities
- ✓ In depth expertise in marine ecology, geology and marine life protection/management.
- ✓ Well developed capabilities in renewable ocean energy (tidal, offshore wind, wave) technologies and the supporting supply chain

From Northland Power Inc.

From Nova Scotia Dept Energy and Mines Website

Synergies Throughout Project Development

Development and Approvals Phase

- **Sharing experience and insight regarding:**
  - the local marine environment (i.e., build shared resource data sets including marine life/habitat, shipping, fisheries, existing underwater infrastructure, geophysical, storm history….)
  - stakeholder engagement experience (Who's been engaged in the past? What are the common issues and how have they been addressed?)
  - supply chain and capacity, port capacity (for staging), transmission capacity (can the power be moved)

Construction Phase

- Major equipment supply and installation including anchoring systems (domestic, local or both)
- Balance of plant including array cabling, export cabling and substations
- Known scheduling peculiarities (seasonal issues, shipping, fisheries)

Operations Phase

- Development of subsurface assessment technology for installed equipment

Decommissioning Phase

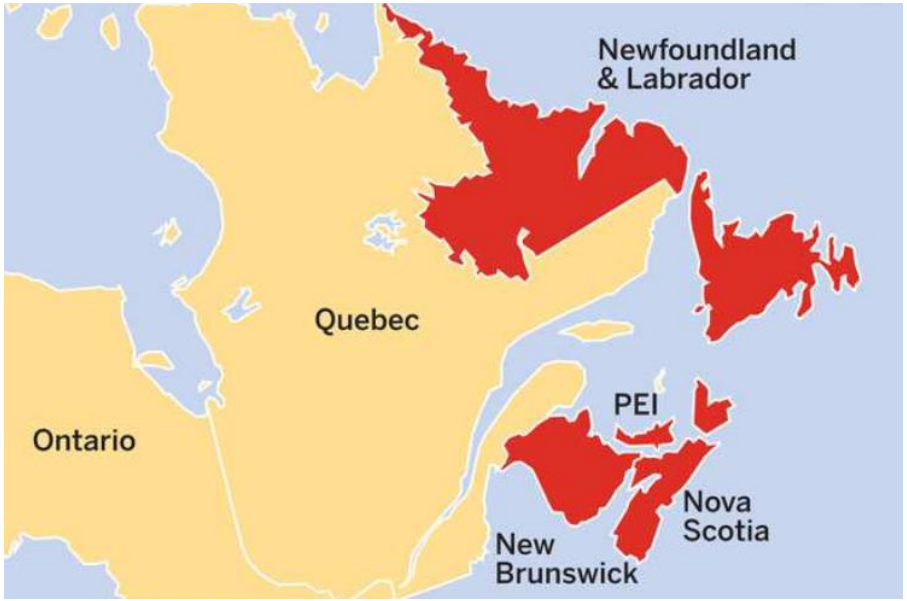
- Accessing best practices in decommissioning including marine ecology impact mitigation

Conclusions

It's about "And", not "Or"

- Not about picking winners and losers
- Economies of scale within the supply chain can increase with the combined growth of all technologies
- Renewable ocean energy market is massive and growing at an unprecedented rate, supporting increasingly improved economics
- Canada has the ocean energy expertise to be a global leader.
- We are of but a few nations that have major tidal, offshore wind and wave resources in a single geographic region.
- Let's use what we have and know to increase our own supply chain capabilities and ride the global ocean energy wave.

It's about securing our place in the global renewable ocean energy economy



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