



# Community Owned Renewable Energy Projects Canadian Experience

June 21, 2018



# Natural Forces

- Private Independent Power Producer based in Halifax, NS;
- Active in the Canadian renewable energy sector since 2001;
- Wind, hydro, solar projects in development in BC, SK, NB, & NFLD;
- Specialize in Partnerships with First Nations, community partners and Universities

## Our Partners:



Tobique First Nations

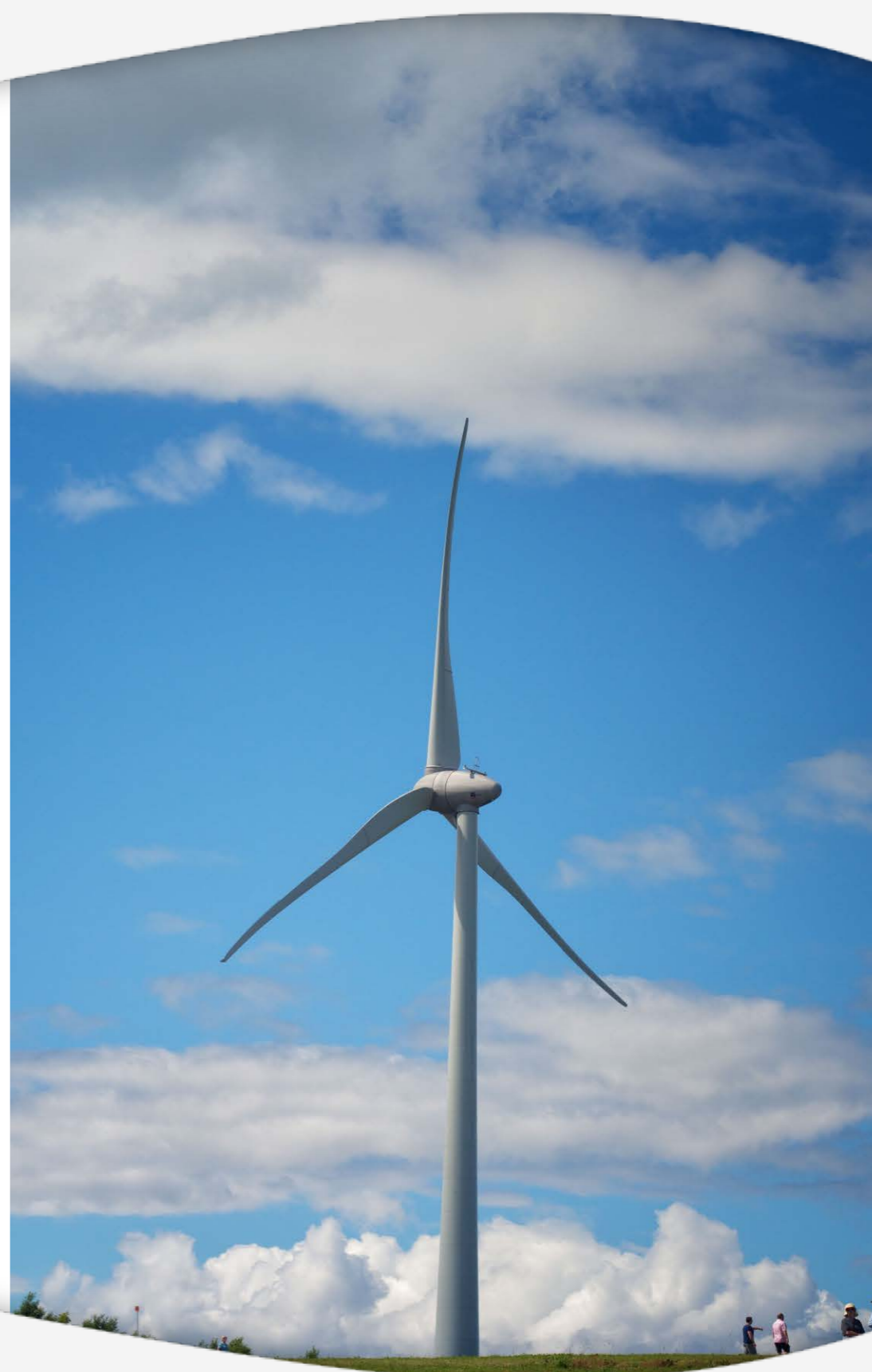
CAPE BRETON UNIVERSITY



ASSEMBLY OF NOVA SCOTIA MPKMAQ CHIEFS



Pictou Landing First Nation





# Corporate Focus

- 180 MW in Operation. 60 MW under contract in three provinces.
- Focus on the professional development and implementation of small renewable energy projects (<1 MW to 30 MW);
- Build local relationships with First Nations, municipalities, universities and local co-operatives with the goal of forming real project partnerships;
- Broaden local participation on renewable energy projects by way of local investment (individual or otherwise). *For example we have raised ~\$17 million from local investors in Nova Scotia to invest directly in renewable energy projects;*
- Work with Utilities and Provinces to develop effective policy to facilitate local ownership of renewable energy assets;

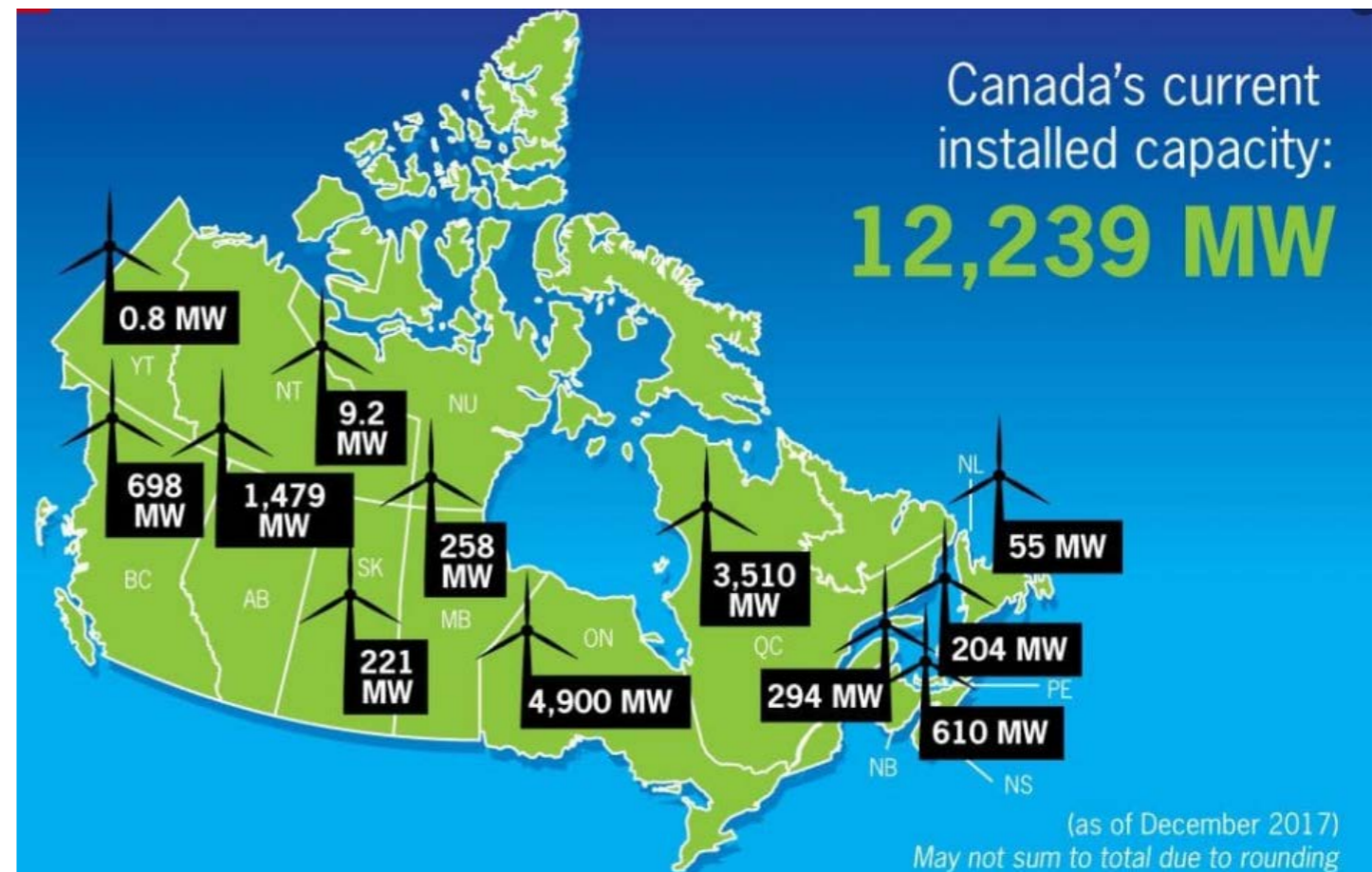
# Canadian Electricity Markets

- 10 Provinces – 10 different regulatory regimes , 10 different markets
- Government owned monopolies (BC, SA, MN, QC, NB, NL)
- Private regulated monopolies (NS)
- De-regulated markets (AB, ON)



# Wind Energy in Canada

- First turbines installed in 1993 in Cowley Ridge, AB, 16 MW, 57 WTGs
- Procurement has been a mixture of Feed in Tariff and Competitive Auction
- Most procurement now done by way of competitive auction
- Largest wind farm Rivière du Moulin in QC – 350 MW. Owned by EDF operates Senvion WTGs



# What is a Community Partner?

- Projects where 'community' entities have equity participation in wind projects that yield returns for the long term.
- What is a 'community' entity in a Canadian context?
  - Municipality (county council)
  - First Nation
  - University
  - Co-op
  - Charity
  - Local Investment Fund



# Questions on Community Procurement?

- Qualification?
- Project Size
- Feed-in Tarrif or Auction?
- Mandatory community participation or optional with price adder?
- When and at what risk does community money get invested?
- Ensuring that community partner has meaningful participation in decisions?
- Ensuring that the partnership is not just a 'waterfall' structure





## Ontario: FIT - Community Adder

Feed-in Tariff with selection based on evaluation of grid connection

Successful projects were awarded 20-year PPAs with Hydro One

Developers have the option of attaining a 'price adder' depending on community involvement

\$10/MWh for >51% First Nation partnership

Up to \$10/MWh for >51% equity participation by 'investors from the province', co-ops or other community entities

***Programme was closed in 2017 following criticism that it was putting undue pressure on electricity consumers.***



## Nova Scotia: FIT - Mandatory Qualification

Feed-in Tariff with selection based on evaluation of community participation + grid availability

Successful projects (130 MW) were awarded 20-year PPAs with NSPI

Community entities must own >20% economic interest & >51% of the voting shares

First Nations, Universities, Co-ops, Charities, Municipalities, CEDIFs (read EIS in an Irish context)

***Programme was closed in 2015 following criticism that it was putting undue pressure on electricity consumers.***



## Quebec: Municipal RFP (Auction)

Municipalities (read county councils) entered into JVs with developers

9 projects of 25 MW were awarded 20-year PPAs with Quebec Hydro under an RFP in 2013

Both parties take development & construction risk

Municipality required to have >20% equity stake + certain voting rights

Equity cheque typically ~\$17 million so Municipality was required to invest ~\$3.5 million

Municipalities have no money! Quebec government provided soft loans to the municipal

government *Programme considered a success as pricing was competitive*



## New Brunswick: Community RFP (Auction)

Community Entities entered into JVs with developers

4 projects of 20 MW each were awarded 25-year PPAs with New Brunswick Power under an RFP in 2016

Development & construction risk dependent on partnership

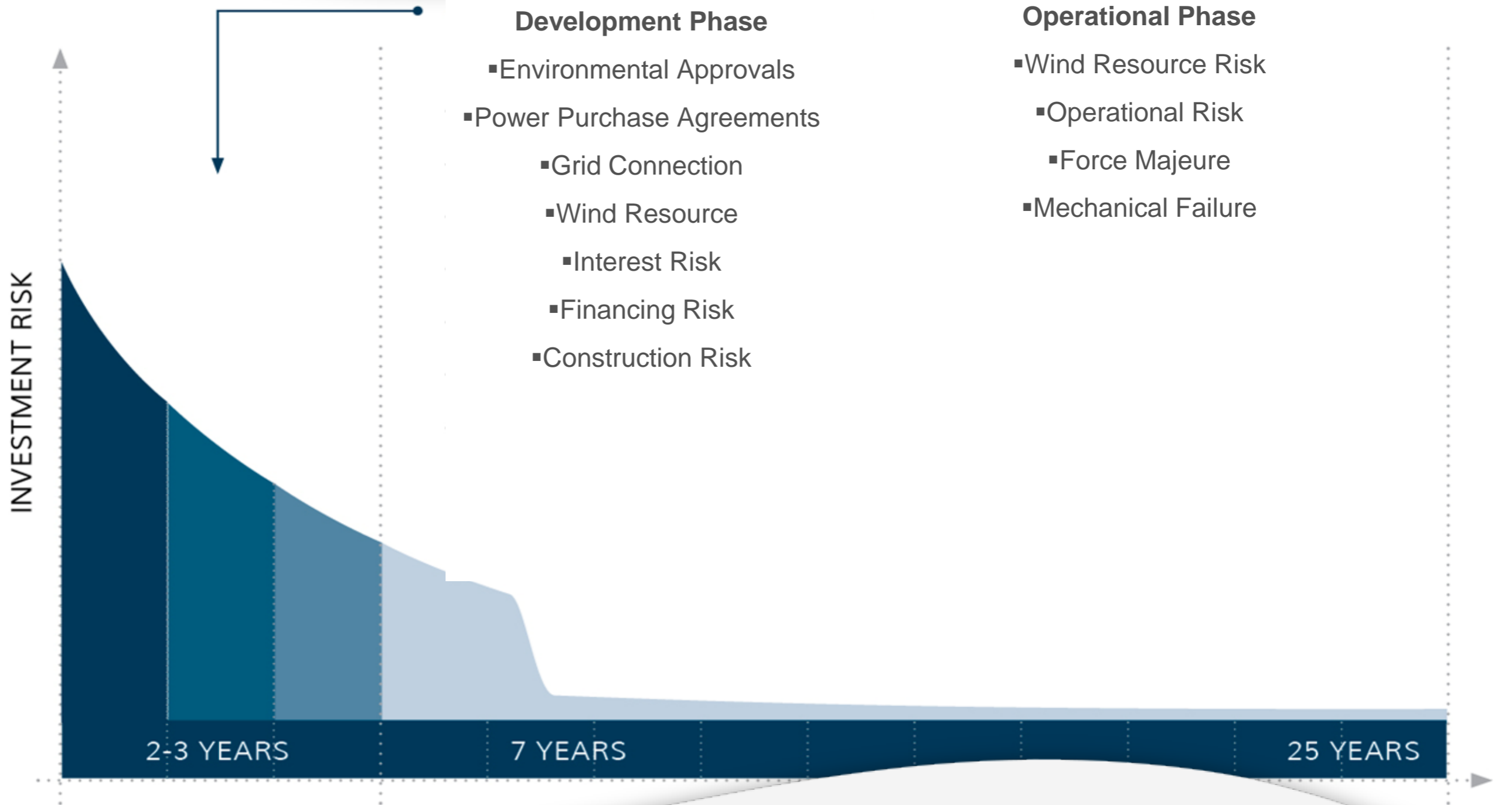
Community Entity required to have >50% equity stake + voting rights

2 First Nation projects selected, 1 municipal project & 1 community investment fund

Pricing very competitive – CA\$70 per MWh / €45.70 per MWh

***Programme considered a success as pricing was competitive***

# Risk! When to invest?



- FiTs are too expensive for the consumer – time and again technology has passed out PPA pricing.
- Price adders again are too expensive for the consumer – why pay an adder when you can mandate?
- Project size is important – community projects >20 MW are not really community project because of the size of the € cheque.
- Auctions have time and again provided best value for consumers.
- Communities should not take development risk.
- Communities should have a seat at the table in projects.
- Mandatory participation is the way to go – industry is inventive – they find solutions!





# Corporate Grand Opening





# Community Grand Opening





**Thank You**

