



# Business Overview

# Seaforth Energy Overview

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- ▶ **An established wind turbine manufacturer and renewable energy integrator**
  - 12 year track record of manufacturing, distributing and installing 50 kW wind turbines
  - Largest regional player in Atlantic Canada in renewable energy systems integration for residential and commercial clients
  - FY 2010 – 215% projected growth
- ▶ **Competing in rapidly growing domestic and international markets**
  - Feed-in-tariff and tax credit programs driving renewable energy and wind adoption
  - Growing demand/willingness to invest in renewable energy systems – stronger economic cases
- ▶ **Experienced and proven management team**
  - Founded by experienced and successful entrepreneur engineers
  - Part of the Seaforth Group of Engineering companies
  - 20 years of renewable energy, marine and mechanical engineering expertise

# Seaforth Energy

Seaforth Energy Consists of Two Complementary Businesses

## Wind Turbine Manufacturing

Experienced manufacturer of commercial-size (i.e. 20 - 100 kW) wind turbine

- Purchased assets and IP of Entegrity Wind
- Over 90 units installed in Canada, USA, UK, Ireland, India, USVI, Morocco, Greece, Russia



Businesses are complementary:

- diversified revenue streams - export and domestic markets
- Leverage core cleantech engineering skills across related lines of business
- Combine short and long sales cycle business models for more revenue visibility and predictability

## Renewable Energy Systems Integration

Leading full service integrator of renewable energy systems in Atlantic Canada

- More than 200 projects
- Solar PV, solar thermal, small wind, off grid
- Commercial, Industrial and Residential



# Wind Turbine Manufacturing

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**Wind Turbine  
Manufacturing**

# Wind Turbine Manufacturing

## Seaforth Energy's Wind Turbine Strategy

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- ▶ **Build highly reliable, low maintenance and cost-effective commercial-size wind turbines**
  - AOC 15/50 50 kW wind turbine uses off-the-shelf, proven parts with custom blades and installation
- ▶ **Prime geographic and export market characteristics**
  - High electricity cost, windy and/or favourable policy areas
  - Focus on rural, semi-rural and industrial locations
- ▶ **Marketing through both direct sales and distributors**
  - Focus on distributors, but coupled with direct involvement in engineering, deployment and support
  - Provide superior engineering, installation and ongoing service for distributors and customers



# Wind Turbine Manufacturing

## R&D Projects

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- ▶ **Major R&D projects for wind turbine assets**
  - Canadian Industrial Research Assistance Program and Scientific Research and Experimental Development Supported
  - Partnerships with local Universities engineering schools and N.S. Community College
- ▶ **Integration of Entegri Wind IP and R&D Assets**
  - R&D enhancements potential to apply to AOC 15/50
  - Improvements to Manufacturing, R&D and Productivity
- ▶ **Enhancements to Braking and Blade Extension System**
  - Reduce Maintenance
  - Power production at lower wind speeds
  - Backwards compatible with existing turbines



# Canada

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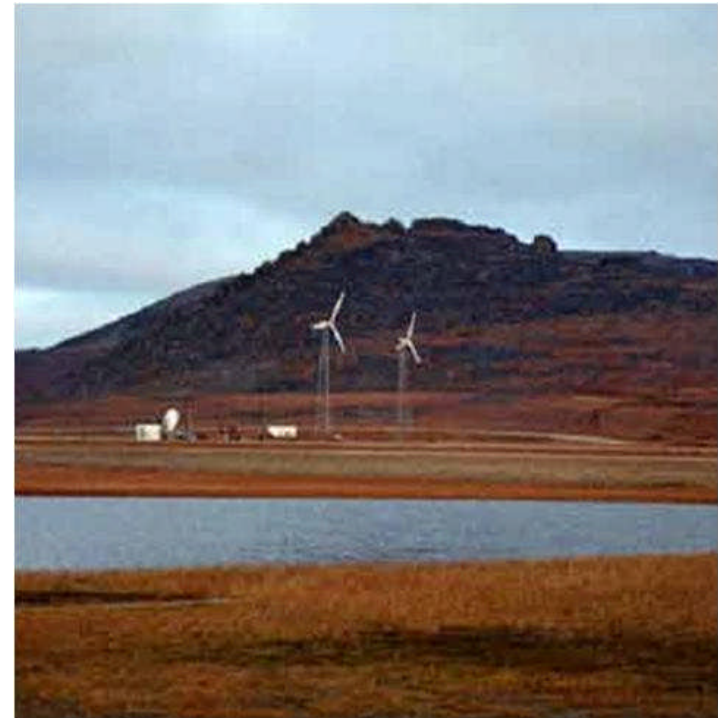
- ▶ **Support in Canada is currently limited**

- ▶ **Incentives:**

- ▶ Province of Saskatchewan provides rebate for 35% of cost up to a maximum of \$35,000 for systems up to 100 kW
- ▶ Farm Credit Canada provides special interest rate and no loan processing fees on the first \$500,000 for small wind
- ▶ Nova Scotia recently announced enhanced net metering program for generation up to 1 MW (all renewables) and will offer retail rate for excess power

- ▶ **Legislation**

- ▶ Net metering allowed in most provinces; many municipalities with small wind-specific zoning bylaws



# Canada

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## ▶ Ontario:

- ▶ Feed-in-tariff program for solar: 44.3-80.2 ¢/kWh; All onshore wind: 13.5-14.4 ¢/kWh
- ▶ Big demand for small wind and its inclusion in the FIT program

## ▶ Nova Scotia:

- ▶ Excellent wind resource, manufacturer of mid-sized systems in Nova Scotia
- ▶ Enhanced net metering program
- ▶ Community FIT program to be introduced this year: price levels TBD

## ▶ Alberta:

- ▶ Significant interest in policy for mid-sized applications (farm and commercial)

## ▶ British Columbia:

- ▶ To introduce a Green Energy and Technology Act in May 2010



# Challenges

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## ► Certifications

- A lot of them - CSA, CE, MQS, AWEA, SWCC, NYSERDA, ...
- Keep changing
- Expensive

## ► Financing

- Banks
- Customers
- Investors
- R&D

## ► Distributors

- Location, financial capability, technical capability, commitment



# Business Assistance

## ▶ Scientific Research and Experimental Development

- Canadian R&D Tax Credit Program
- Strong financial assistance with R&D

## ▶ Industrial Research Assistance Program (IRAP)

- Industrial Research Assistance Program provided by National Research Council of Canada
- Provides funding to Research projects

## ▶ ACOA

- Atlantic Canada Opportunities Agency
- Provides loans or funding for business development activities

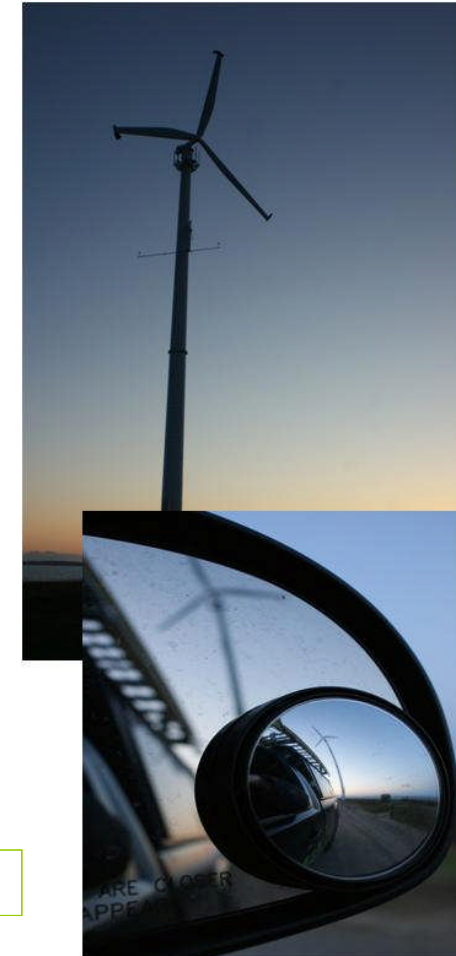
## ▶ Nova Scotia Government

- Provides funding for business development export activities

## ▶ Export Development Corporation

- Provides number of programs around contract guarantees, account receivable insurance, and buyer financing

*Financing manufacturing and growth capacity is always a challenge*





**Thank You**