

# Growing Chicago's Clean Energy Economy

May 2011

- Provides integrated solutions to energy and infrastructure customers
- Decades of experience in welding, gearing and services
- Focus on wind energy
- 2010 revenue: \$136 MM
- Trades on NASDAQ as BWEN: market cap ~\$170 MM
- More than 800 employees at facilities throughout the U.S.



# Broadwind at a Glance



*Founded: 2003*

- Third largest wind tower manufacturer in North America
- Leading producer of new 2 MW+ tower designs
- ISO 9000:2010 certified



*Founded: 1924*

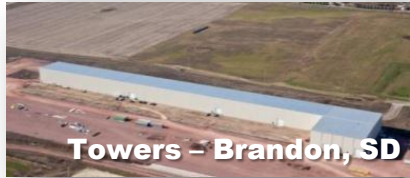
- Leading North American precision gearing system manufacturer for the energy and infrastructure industries
- Approximately 2,500 wind gear sets produced
- ISO 9001:2008 certified



*Founded: 1998*

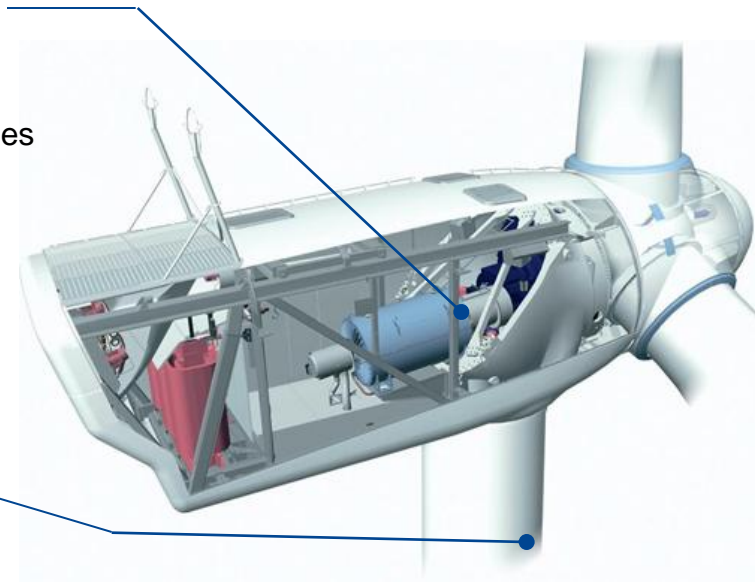
- A leading independent services provider to the U.S. wind industry
- Comprehensive O&M; 24/7 SCADA remote monitoring
- Field service and factory repair of major components such as gearboxes and blades

# Broadwind Key Locations



## GEARING

- Manufactured gearing systems for OEMs
- Engineering and metallurgical competencies



## SERVICES

### Gearbox Services

- Oil changes
- Borescope inspections
- Full-load test on 3 MW test stand
- Gearbox remanufacturing
  - Uptower bearing changes
  - Main-shaft repair
  - Gearbox swap-out and repair

### Blade Services

- Inspections, repairs
- Remediation programs

### O&M Services

- End-of-warranty inspections, 24/7 remote SCADA monitoring and reporting
- Major component repairs
  - Gearboxes
  - Blades
  - Generators

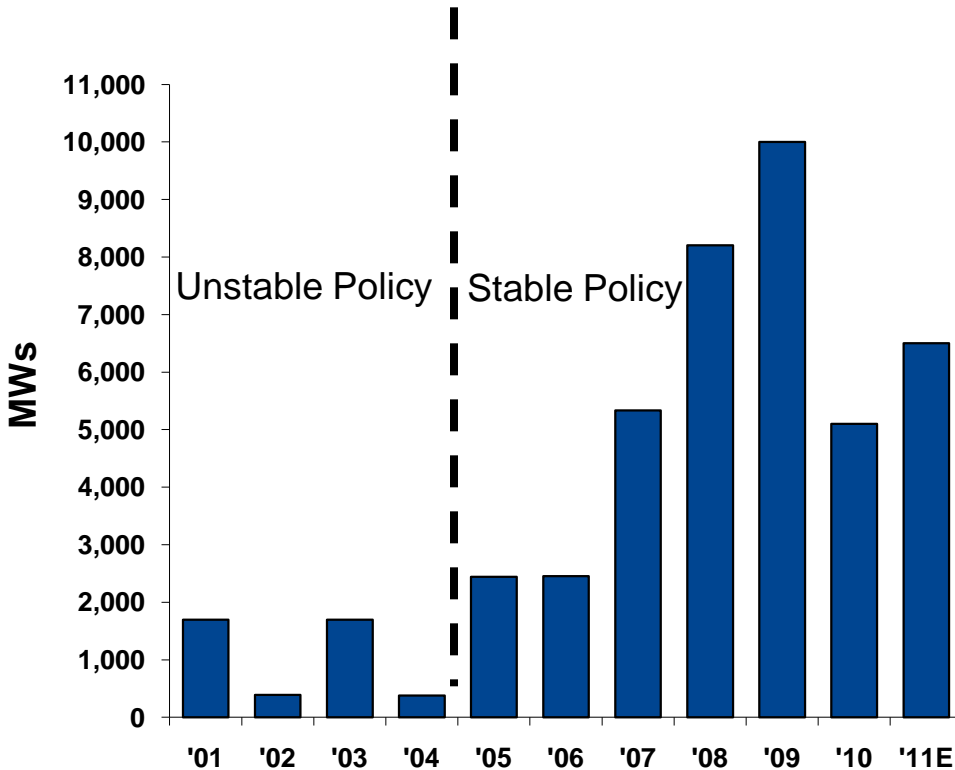
## TOWERS

- Third largest tower manufacturer
- Specialize in multi-megawatt towers
- Ultrasonic testing of all seams
- Custom heavy welding and fabrication solutions

# Historical Installations



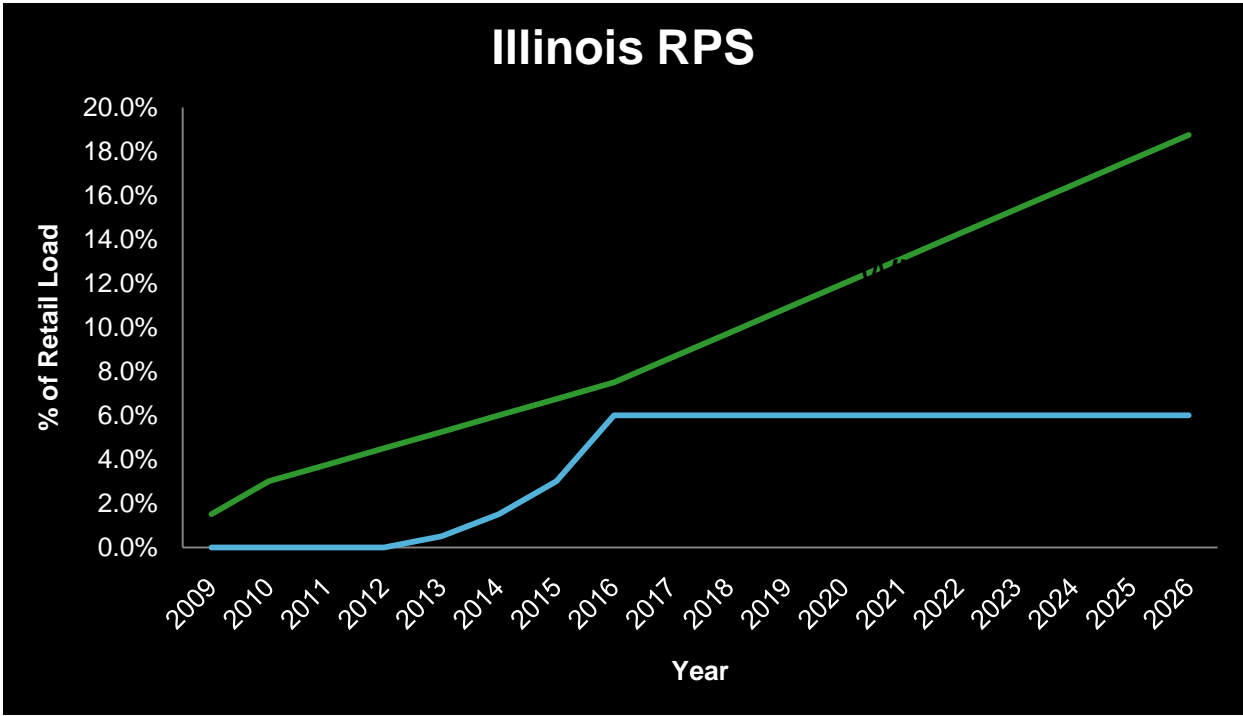
## Annual MWs Installed US



Source: AWEA

### National Incentives

- U.S. - Production Tax Credit (PTC): \$21/MWH income tax credit adjusted annually for inflation
- 29 States have Renewable Portfolio Standards (RPS) and 7 states have Renewable Portfolio Goals
- State RPS targets can generate a base of ~ 6,000 MWs annually
- PTC expires at the end of 2012



# Ontario Feed-In Tariff



## Transmission Investment C\$ 2.3B



## Predictable Energy Pricing

Technology	Sub Group	Base Price (CAD\$/MWh)	
Wind	Onshore	135	
	Offshore	190	
Solar PV	Any type	≤10 kW	802
	Rooftop	>10 ≤ 250 kW	713
	Rooftop	>250 ≤ 500 kW	635
	Rooftop	>500 kW	539
	Ground Mount	> 10 kW	443
Biomass	≤ 10 MW	138	
	> 10 MW	130	

## Transparency

Variable	Onshore Wind	Ground mount PV
<b>OPA Finance Assumptions</b>		
Contract Term	20 years	20 years
Debt/Equity Ratio	70/30	70/30
Cost of Debt	7%	7%
Price Indexation	20% of base price	0%
Inflation	2.25%	2.25%
ecoEnergy Incentive	Not Assumed	Not Assumed
RECs	None	None
Accelerated Depreciation	Monetize	Monetize
After Tax ROE	11%	11%

## Clear Permitting Requirements

- Standard noise requirements
- Standard environmental approach
- Local content requirements
- Setback minimums

- Conduct an independent grid study
  
- Renewable incentives need to be financeable
  - Predictable cash flows
  - Standard underwriting and allocation of risk
  
- Policies need to be consistent
  - Factories and people are long-term investments
  - A typical wind farm costs \$130 MM ... requires stable cash flows
  - Role of the IPA needs to be clear
  
- Transmission investment will facilitate the movement of renewable energy
  - The benefits of a distributed generation source requires investment