

WindPower Manufacturing & Supply Chain Summit USA - Chicago

Why Federal Tax and Grant Incentives Are Critical to Wind Energy Expansion in the United States?

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FAH Resume from WINDIANA Conference Presentation

Frank A. Hoffman is president of the newly formed Wind Energy Manufacturers Association (www.wemawind.org) and a partner in the law firm of Krieg DeVault LLP with offices in Chicago, Atlanta and Indianapolis (www.kriegdevault.com). The Wind Energy Manufacturers Association (WEMA) has been created to promote the manufacturing supply chain for the Wind Energy Industry in the United States. Frank Hoffman concentrates his practice in creative and complex federal, state, and local incentive-based financing transactions. Most recently Mr. Hoffman has assisted his clients and WEMA members in obtaining over \$40 million in Recovery Act, state and local economic development incentives and over \$50 million in permanent financing for wind energy component part manufacturing in the United States. (http://www.kriegdevault.com/our_professionals/frank-hoffman).

Tax Incentive Financing Experience

- Created the New Markets Tax Credit Program for the Indiana Bankers Association and its 180 member banks - 2004 \$50 million Allocation
- Assisted in the creation of the New Markets Tax Credit Program for the city of Fort Wayne – 2008 \$15 million Allocation
- Assisted in the creation of the New Markets Tax Credit Program for the town of French Lick and seventeen (17) participating southern Indiana counties – 2009 \$50 million Allocation
- Represents ten (10) other Indiana units of government developing new market Tax Credit Programs
- Combined Indiana CRED Credit, Local TIF Bond and NMTC to fund \$5.5 million start-up manufacturing plant (Marion, Indiana)
- Combined local TIF Bond and NMTC to fund \$20 million hotel/indoor waterpark facility (French Lick, Indiana)
- Closed over \$150 million in NMTC financing (2004 to present)
- Created the Wind Energy Manufacturers Associations, Inc. to attract capital investment under ARRA to Indiana in 2009
- Obtained over \$28 million in ARRA economic development incentives and \$53 million in permanent financing for Indiana start-up wind turbine component part manufactures since February 2009

Education

DePauw University
Indiana University School of Law
Admitted to Indiana Bar

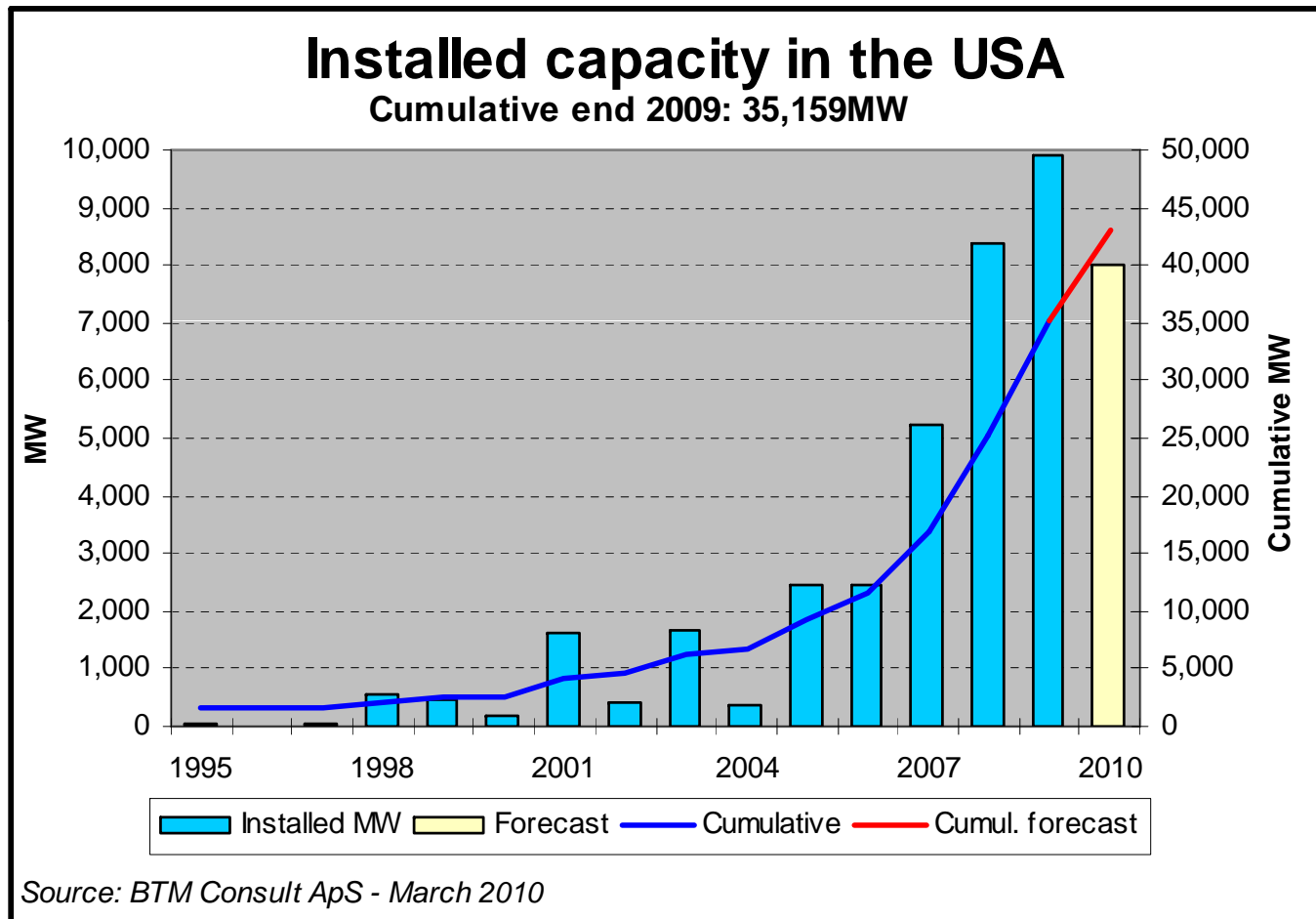
B.A., (Economics), June, 1979
J.D., (Taxation); January, 1982
1983, Indiana

Birth Place: Evansville, Indiana, September 1, 1957

High School: Andean Catholic High School, Merrillville, Indiana; 1975



Why We Are All Here – U.S. Market

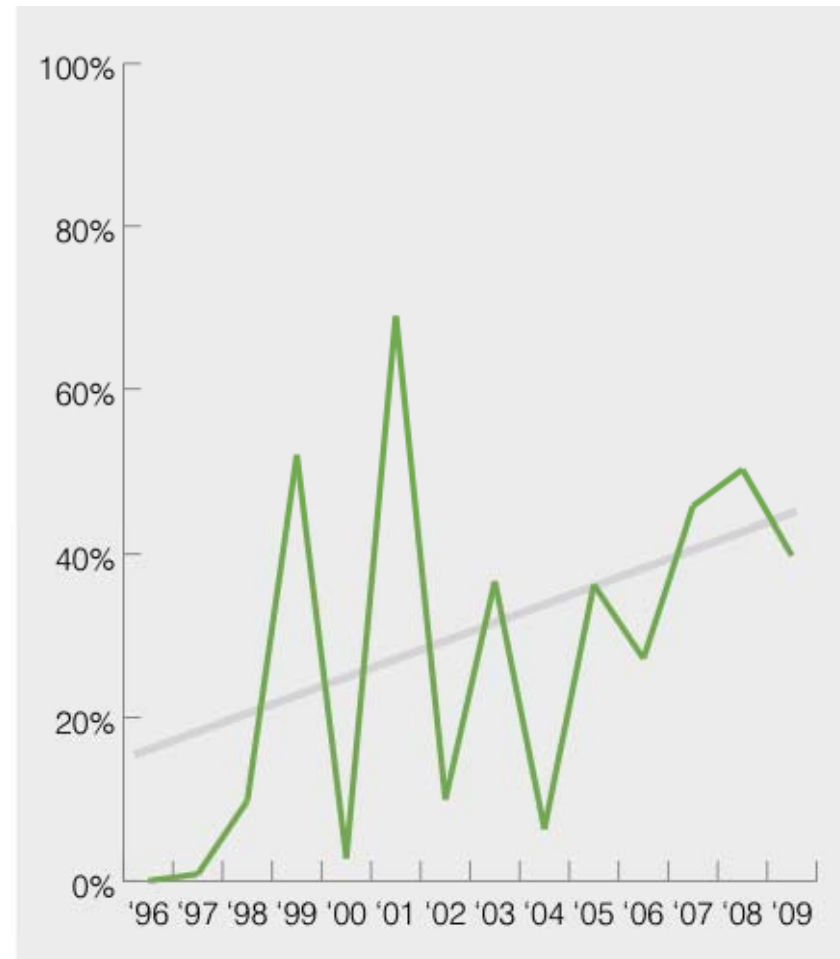


1996-2009 Annual Installations

The five-year average annual growth rate for the industry (2005-2009) is now 39%, up from 32% between 2004 and 2008.

As annual installations have doubled twice in the last three years, the five-year annual growth rate continues to increase.

The volatility in this chart in the early 2000s reflects the strong effect that on-again, off-again tax policy had on the market.

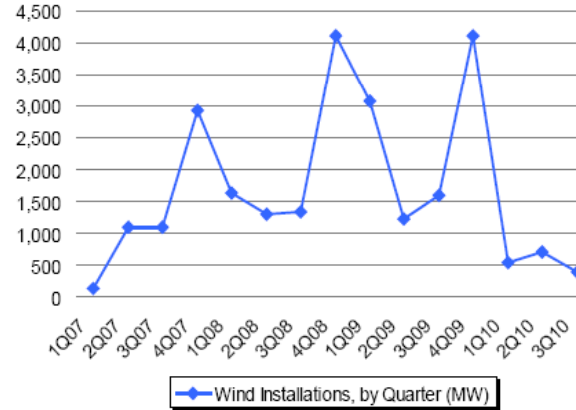


Source: American Wind Energy Association U.S. Wind Industry Annual Market Report – Year Ending 2009

2007-2010 Quarterly Installations Reflect Market Volatility

Wind Power Installations by Quarter

- The boom-and-bust cycle that has developed due to short-term incentives is not conducive to business investment and increased employment.
- This chart of new installations of wind generating capacity by quarter clearly illustrates the consequences of on-again, off-again short-term federal incentives for wind as a market signal. In that connection, it's important to understand that wind projects can be built so quickly (in six months to a year) that the entire pace of activity in the wind industry can be driven by the month-to-month prospects of, say, a tax incentive extension pending before Congress.



Source: AWEA Third Quarter 2010 Market Report



Production Tax Credit – “Start, Almost Stop, Stop” Policy

The PTC was initially enacted by Congress in the Energy Policy Act of 1992. **However, after the initial 1992-2001 period the PTC has incurred the following “star, almost stop and stop” congressional support:**

- **December, 2001 PTC expired.**
- March, 2002 PTC extended through December 31, 2002.
- **December, 2003 PTC expired.**
- October, 2004 PTC extended through December, 2005.
- July, 2005 PTC extended through December, 2007.
- December, 2006 PTC extended through December, 2008.
- **October, 2008 PTC extended through December, 2009.** (TARP Bill)
- February, 2009 PTC extended through December, 2012. (Stimulus Bill)

Financial Crisis – Stimulus Bill 1603 Grant Program

- 30% of Eligible Basis Grant-In-Lieu of Tax Credit Program.
- Response to the collapse of the Tax Credit Equity Market.
- **Expires December 31, 2010.**
- Grants Made Through November 10, 2010:

<u>Source</u>	<u>Number</u>	<u>Amount</u>	<u>%</u>
Wind	196	\$4,634,917,958	85.12
Solar	1,118	\$396,377,178	7.28
Geothermal	22	\$266,915,014	4.90
Biomass	25	\$113,094,212	2.08
Other	<u>26</u>	<u>\$33,553,799</u>	<u>.62</u>
Total	1387	\$5,444,858,161	100.00
Average Project:		\$3,925,637	
Median Project:		\$56,457	
Projects < \$20m	1318		
Projects ≥\$20m	69		

1603 Grant Program – Significant Funding Source for Wind

As of November 10, 2010, twenty-five (25) wind energy developers of the top sixty (60) 1603 Grant Program wind developments received 79.31% (\$4,318,156,063) of the 1603 Grants made. Just eight (8) wind energy developers received over 55% (\$2,997,565,443) of the total 1603 Grants made through November 10, 2010.

<u>Rank</u>	<u>Wind Energy Develop (Headquarters)</u>	<u>Number of Developments</u>	<u>Total 1603 Grants as of 11/10/10</u>
1	Iberdola Renewables (Spain)	12	\$944,296,042
2	E.On (Germany)	5	\$474,566,974
3	NextEra (United States)	7	\$451,040,170
4	Horizon Wind Energy (Portugal)	6	\$388,305,830
5	First Wind (United States)	5	\$254,566,974
6	Noble Environmental (United States)	3	\$221,422,053
7	Invenergy (United States)	3	\$133,003,677
8	Eurus Energy (Japan)	2	<u>\$130,524,470</u>
Total			\$2,997,565,443

Lame Duck Session – Industry Focus Next Three Weeks

Extension of the 1603 Grant Program –

- Part of “Tax Extender Bill”
- Part of “Alternative Minimum Tax Patch”
- Part of “Bush Tax Cut Extension”

Key Player: Senator Jeff Bingaman, (D-N.M.)
Chairman, Energy and Natural Resources

To contact your Legislator, go to: <http://capwiz.com/windenergy/dbq/officials/>

[Legislative Directory](#)

Elected Officials

Find elected officials, including the president, members of Congress, and more.

Search By ZIP Code:

Search By Last Name:

Why Are Incentives So Important?

White Housing Briefing Memo

Appendix Table 1: Cost of Generating Power from New Capacity Investment by Technology Type, ¢/kWh

	Natural Gas	Wind	Solar Thermal
No Subsidy Cost	7.3	8.8	23.2
Cost with 1603	7.3	6.7	16.0
Cost with 1603 and 1705	7.3	4.0	12.6

Source: DOE Energy Information Administration 2010.

Source: WHITE HOUSE BRIEFING MEMO, OCTOBER 25, 2010, PREPARED BY LARRY SUMMERS, CAROL BROWNER AND RON KALIN

Other Important Wind Energy Incentives & Policies

	<u>Status</u>
• National Renewable Energy Standard	Never Passed
• Production Tax Credit	Expires 2012
• Investment Tax Cred	Expires 2016
• 1603 Grant in Lieu of Tax Credit	Expires 2010
• Advanced Manufacturing Tax Credit	Capped at \$2.3 billion; 100% Allocated
• Residential Tax Credit	Expires 2016

Why Extend The 1603 Grant Program? Jobs! Jobs! Jobs!

BlueGreen Alliance, American Wind Energy Association, and USW Provide "Manufacturing Blueprint" to Build Out Domestic Wind Energy Supply Chain and Create U.S. Manufacturing Jobs

According to a report released in June 2010 by the American Wind Energy Association (AWEA), BlueGreen Alliance and the United Steelworkers, the U.S. wind industry **can create tens of thousands of additional jobs manufacturing wind turbines and components** if the U.S. passes long-term policies that create a stable market for the domestic wind energy supply chain.


To read the report go to: http://www.bluegreenalliance.org/press_room/publications?id=0048

Jobs! Jobs! Jobs! Production vs. Manufacturing Jobs

<u>Indiana Examples</u>	<u>Capital Invested</u>	<u>Permanent Jobs</u>	<u>Capitalization Per Job</u>
Benton County Wind Farms	>\$1 billion	<300	>\$3,333,333
Brevini Wind Gear Manufacturer Delaware County	<\$100 million	>400	<\$250,000

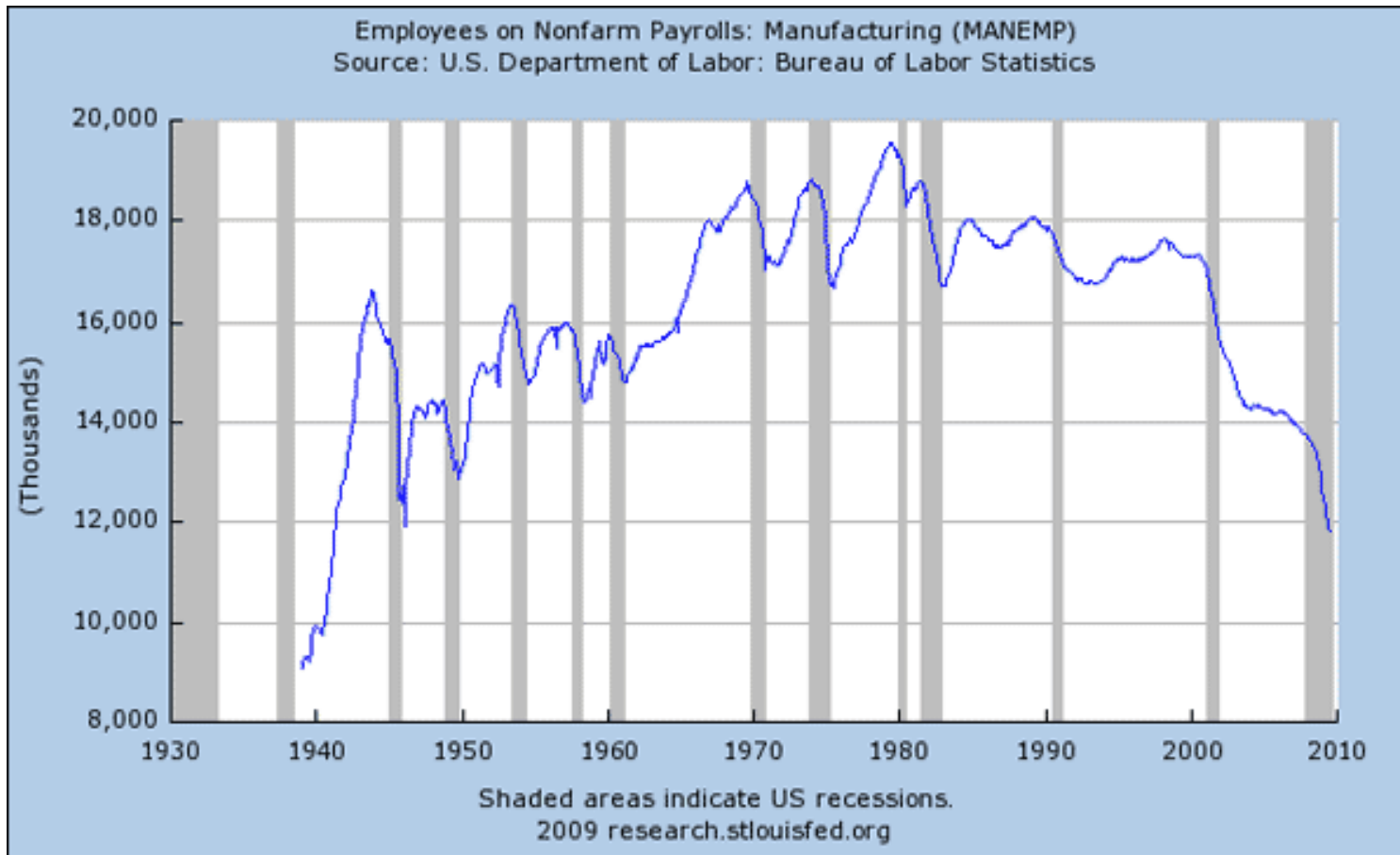
A Great Job Creating Wind Development, Construction, Operation and Maintenance Jobs in the United States

Growth Rates In the Top 10 Markets

 Country	Accu. end 2006	Accu. end 2007	Accu. end 2008	Accu. end 2009	Growth rate 2008-2009 %	3 years average %
USA	11,635	16,879	25,237	35,159	39.3%	44.6%
P.R. China	2,588	5,875	12,121	25,853	113.3%	115.4%
Germany	20,652	22,277	23,933	25,813	7.9%	7.7%
Spain	11,614	14,714	16,453	18,784	14.2%	17.4%
India	6,228	7,845	9,655	10,827	12.1%	20.2%
Italy	2,118	2,721	3,731	4,845	29.9%	31.8%
France	1,585	2,471	3,671	4,775	30.1%	44.4%
UK	1,967	2,394	3,263	4,340	33.0%	30.2%
Portugal	1,716	2,150	2,829	3,474	22.8%	26.5%
Denmark	3,101	3,088	3,159	3,408	7.9%	3.2%
Total "Ten"	63,203	80,415	104,051	137,277	31.9%	29.5%

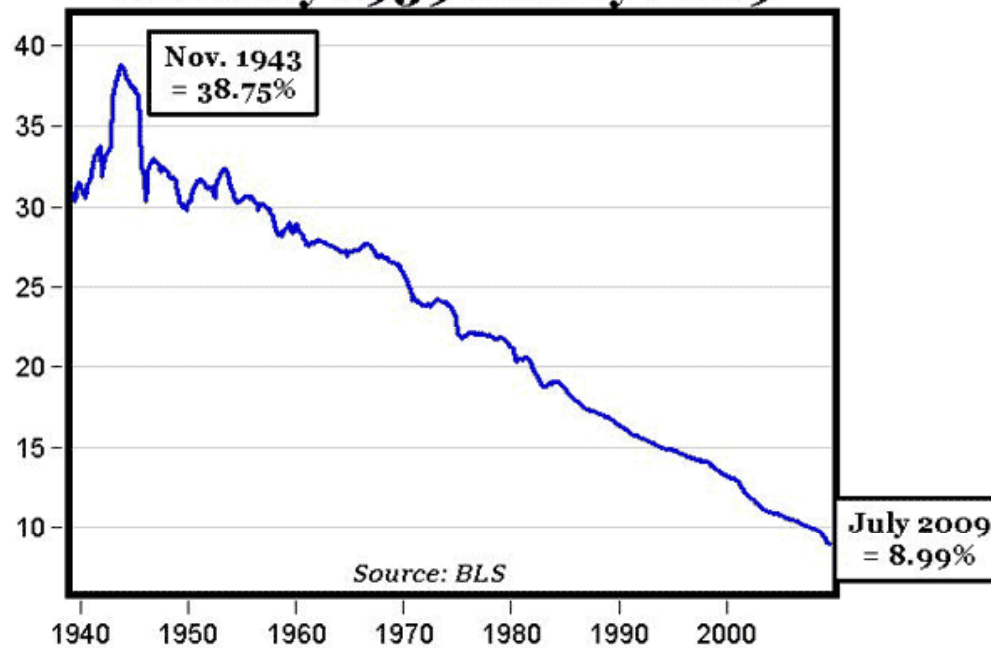
Source: BTM Consult ApS - March 2010

Historically A Terrible Job Creating Manufacturing Jobs



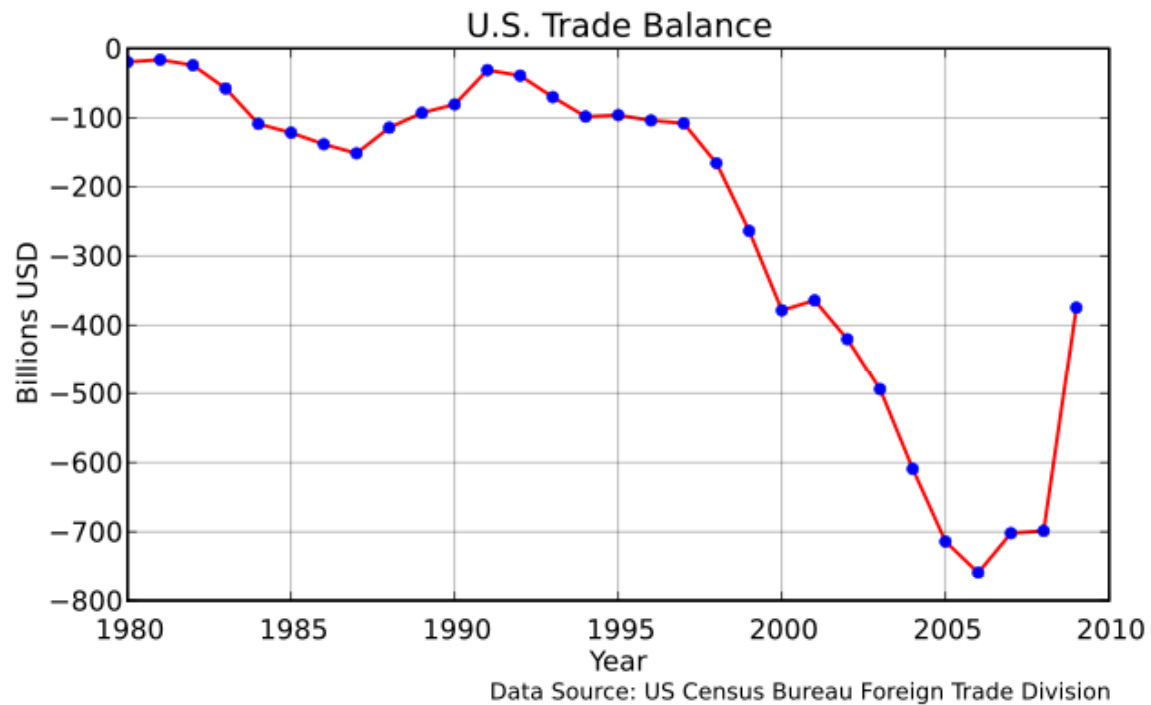
Historically A Terrible Job Creating Manufacturing Jobs

Manufacturing Employment Percent of U.S. Labor Force January 1939 to July 2009



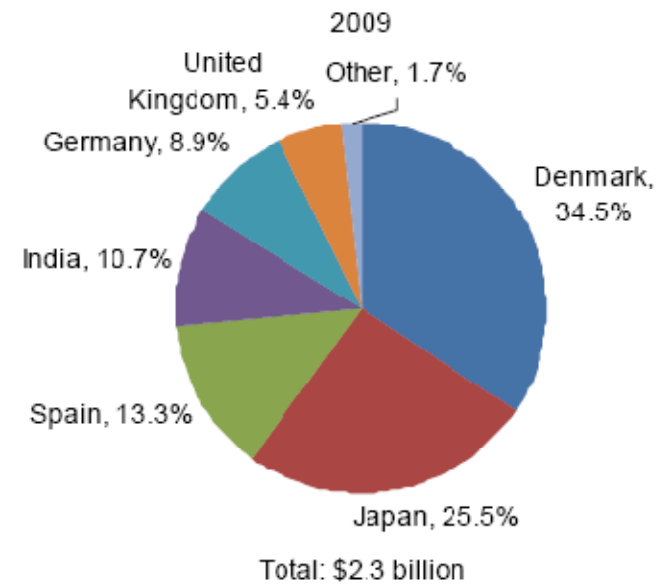
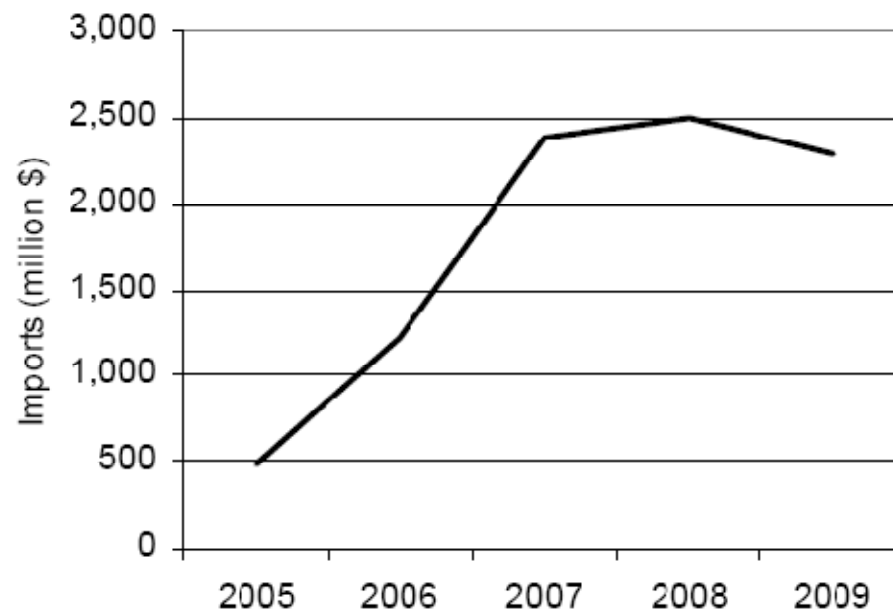
Historically A Great Job of Importing Manufactured Goods & Services!

U.S. Trade Deficit



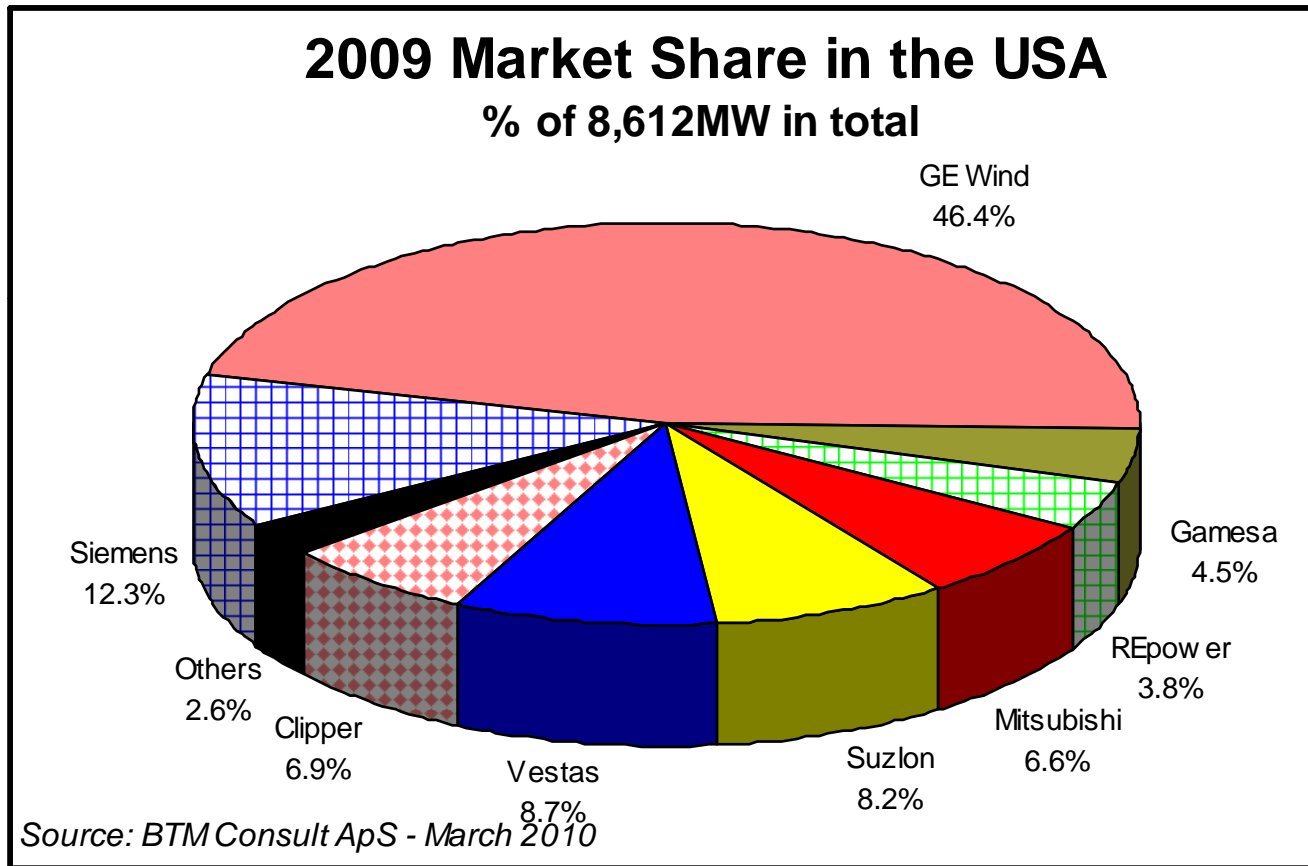
2005-2009 Wind Turbine Imports

FIGURE 4 U.S. imports of wind-powered generating sets (HTS 8502.31.0000)

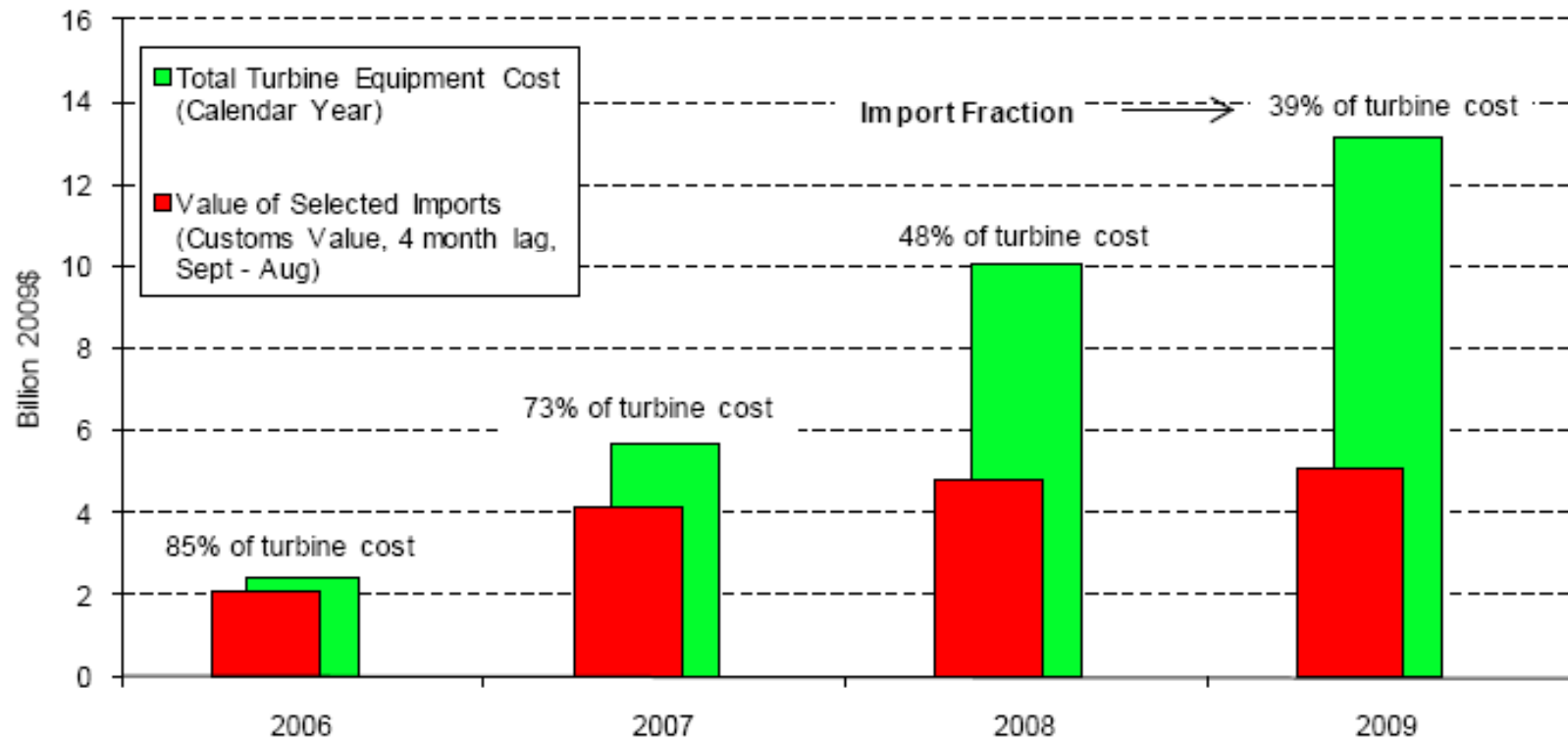


Source: Compiled from official statistics of the U.S. Department of Commerce.

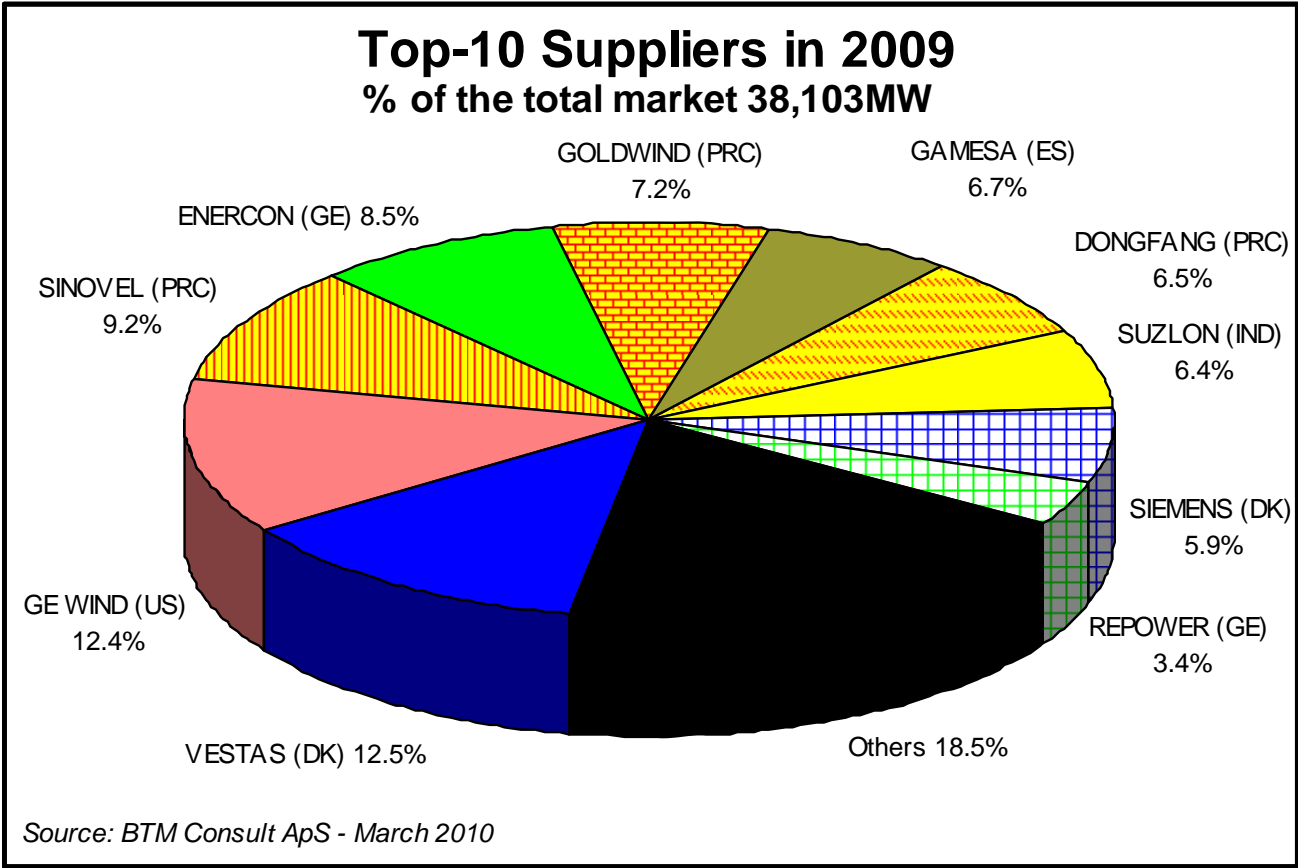
U.S. Manufacturers (G.E. & Clipper) – 53.3% U.S. Market Share



Recent Improvement – Roughly 40% U.S. Imported Wind Turbine Content



Top Ten Global Wind Turbine Suppliers



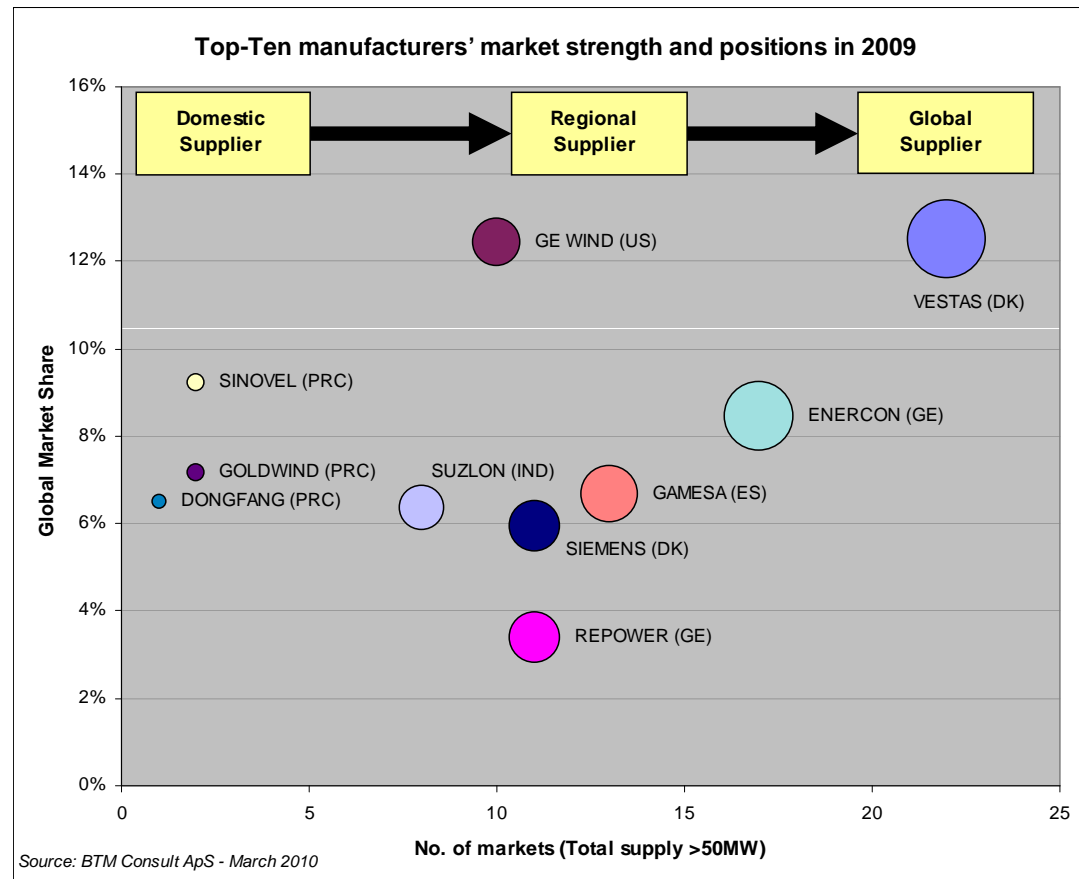
Relative To Other Global Markets – U.S. Manufacturers Lag Behind

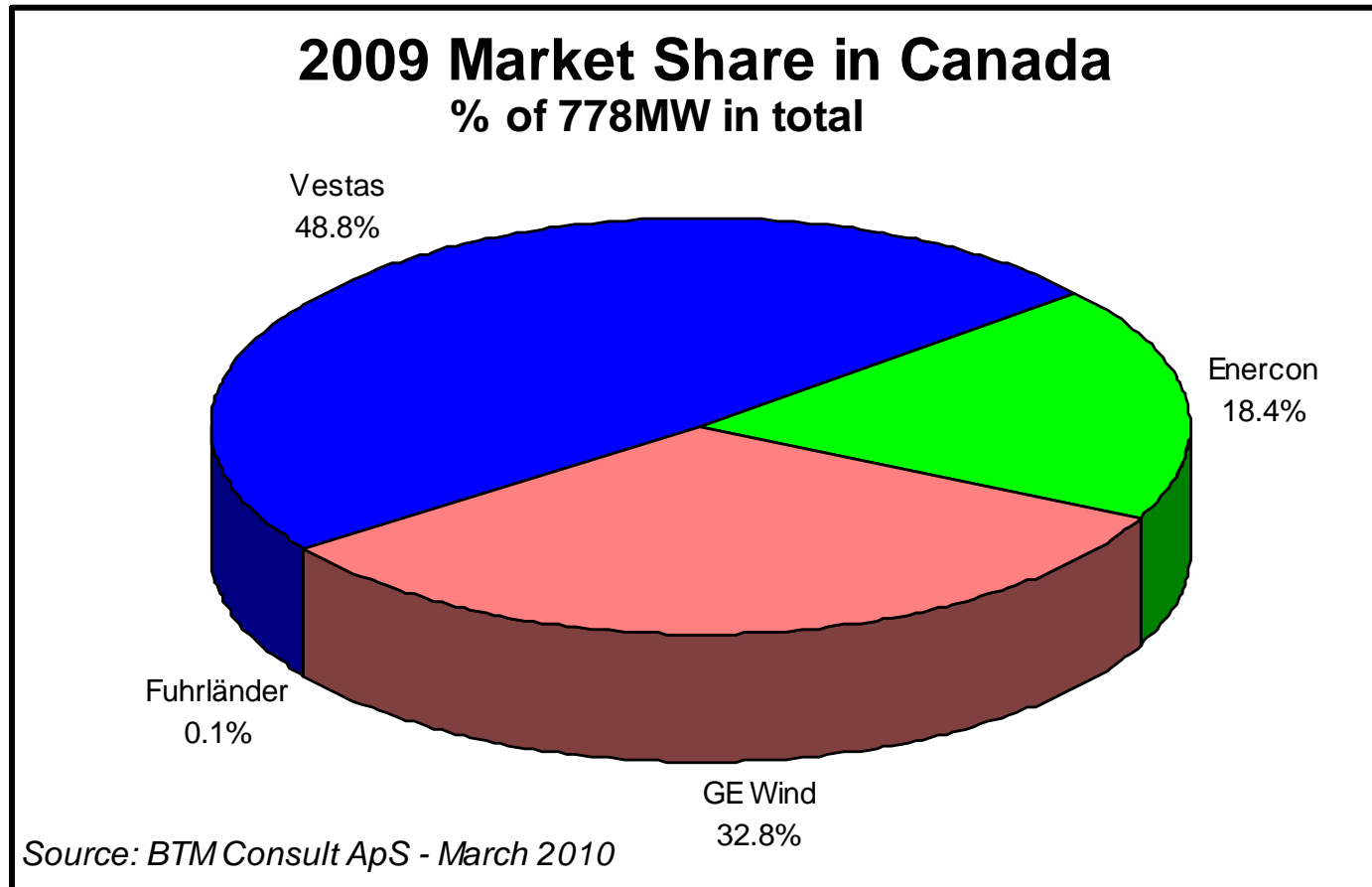
Leading suppliers in the Top-10 markets in 2009

Positions in the Top-Ten markets Market/Country	Suppliers in the leading markets			
	Total MW 2009	No. 1	No. 2	No. 3
1. P.R. China	13,750	Sinovel	Goldwind	Dongfang
2. USA	9,922	GE Wind	Siemens	Vestas
3. Spain	2,331	Gamesa	Vestas	Alstom Wind
4. Germany	1,917	Enercon	Vestas	REpower
5. India	1,172	Suzlon	Vestas RRB	Vestas
6. Italy	1,114	Vestas	Gamesa	Enercon
7. France	1,104	Enercon	REpower	Vestas
8. UK	1,077	Siemens	REpower	Vestas
9. Canada	950	Vestas	GE Wind	Enercon
10. Portugal	645	Enercon	Nordex	Vestas
Total MW in Top-Ten	33,982	<i>The Top-Ten markets counts for 89% of the total world market in 2009</i>		

Source: BTM Consult ApS - March 2010

G.E. Wind – A North American Regional Player





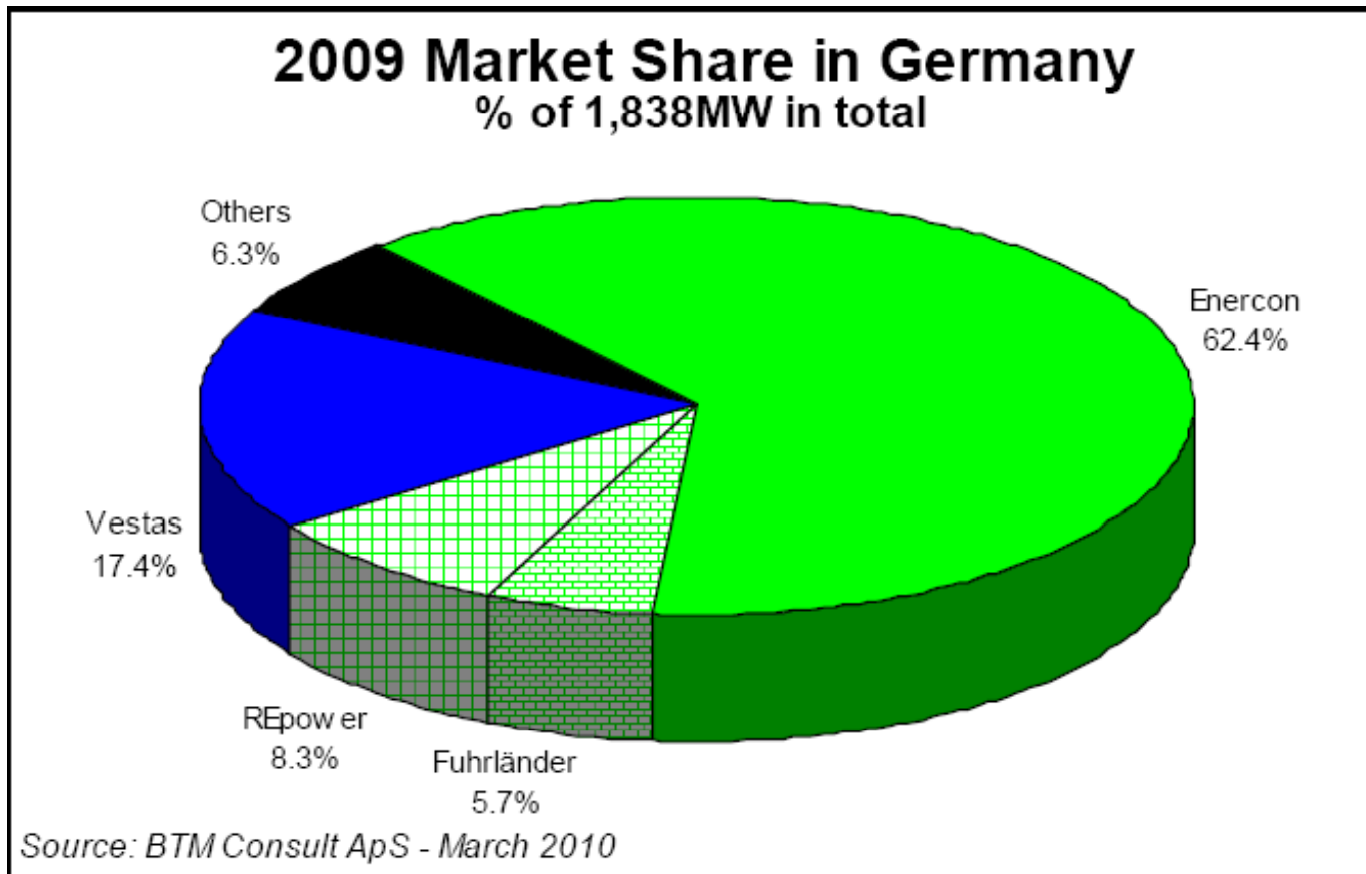
G.E. Wind – Less Than 2% of Remaining Global Market

2009 GE Wind Supplied MW

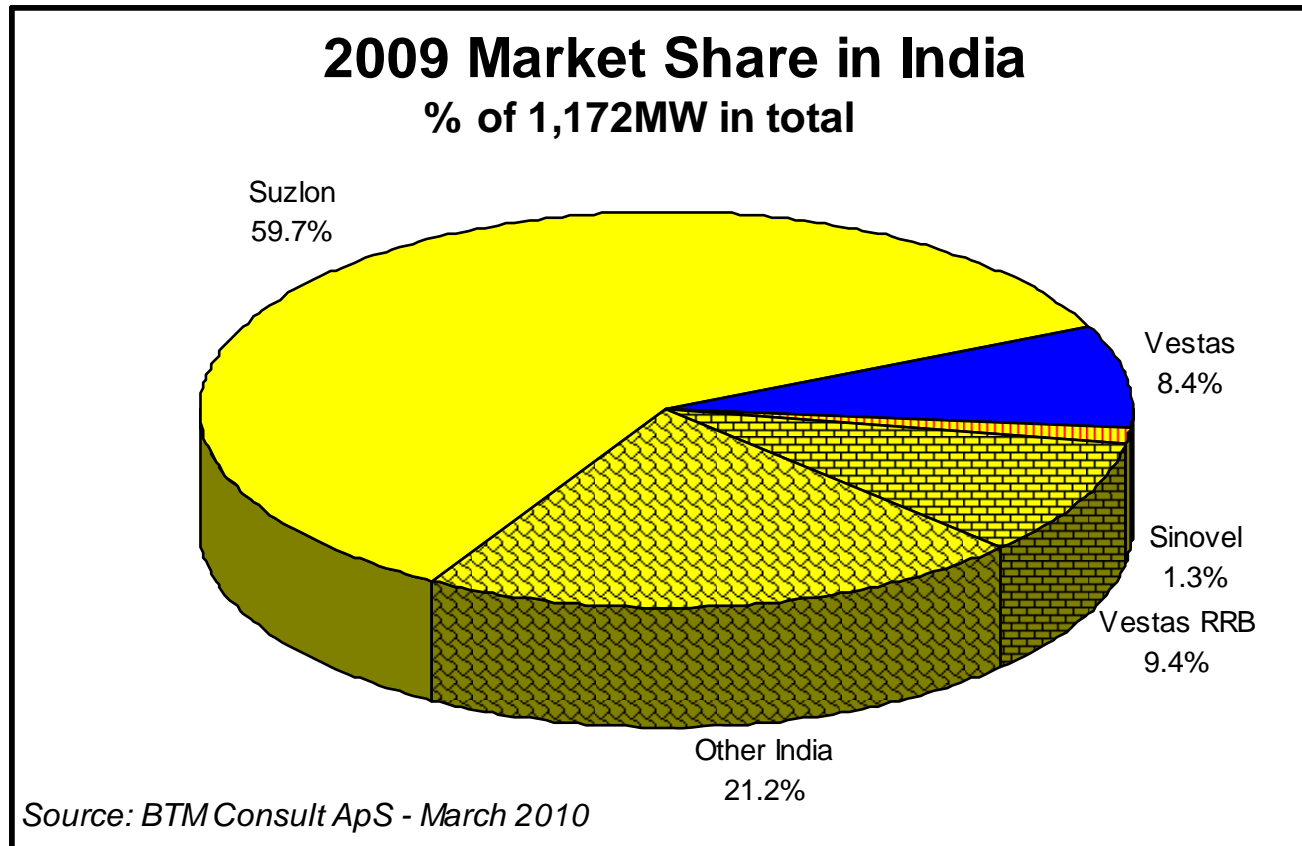
	<u>Supplied MW</u>	<u>Percentage</u>
Total:	4,741	100%
United States:	3,995	84.26%
Outside U.S.:	746	15.74%
Canada:	312	6.58%
Outside U.S. & Canada:	434	9.15%
G.E. Wind Percentage of Global Market Excluding U.S. & Canada:		1.59%
Global Market Excluding U.S. & Canada:	27,331	

Note: G.E. Wind had a 17.6% (86 MW) Market Share in Turkey in 2009.

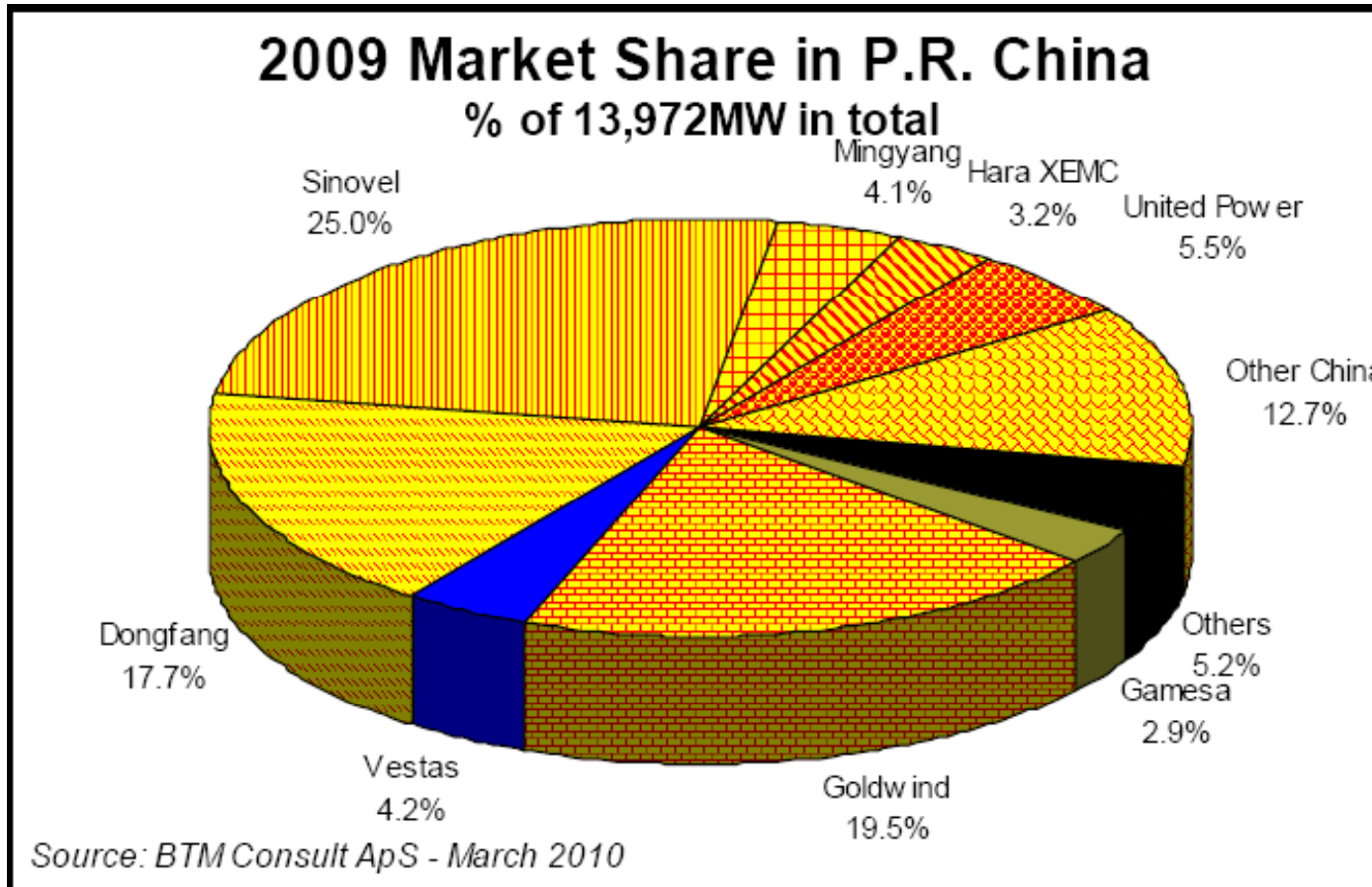
Germany – Over 76% Are German Manufacturers



India – Over 80% Are Indian Manufacturers




China – Over 87% Are Chinese Manufacturers



Announced Global Manufacturing Capability by Region

Forecast global demand and manufacturing capability by region 2009-13 (MW)

	2009	2010	2011	2012	2013
Forecast new installed capacity (BTM assessment)	30,625	36,640	43,820	51,394	58,520
Announced turbine manufacturing capability	48,792	74,689	85,894	98,194	n.a
Announced manufacturing capability by European OEMs	21,228	31,465	36,225	38,825	n.a
Announced manufacturing capability by American OEMs	7,729	8,529	8,829	10,329	n.a
Announced manufacturing capability by South & East Asian OEMs	18,410	32,370	37,420	43,770	n.a
Announced manufacturing capability by Chinese OEMs	13,660	24,230	28,880	34,980	n.a
Announced manufacturing capability by Indian OEMs	4,750	8,140	8,540	8,790	n.a
Announced manufacturing capability by OECD-Pacific OEMs	1,425	2,325	3,420	5,270	n.a

Source: BTM-C internal file – September 2009

The Complete Picture – Global Manufacturing Capability Comparison Percentages

<u>2009 Actual</u>	<u>Installed MW</u>	<u>Announced Turbine O.E.M. Manufacturing Capability</u>	<u>Manufacturing Capability As a Percentage of <u>Installed MW</u></u>
Europe	10,738	21,228	197.69%
Americas (U.S.: 87.73%)	11,433	7,729	67.76%
China	13,750	13,660	99.35%
India	1,172	4,750	405.29%

<u>2012 Forecast</u>	<u>Installed MW</u>	<u>Announced Turbine O.E.M. Manufacturing Capability</u>	<u>Manufacturing Capability As a Percentage of <u>Installed MW</u></u>
Europe	18,025	38,825	215.40%
Americas	18,400	10,329	56.14%
China	15,400	34,980	227.71%
India	3,500	8,790	251.14%

1603 Grant Program Modification – Tie Incentives To Supply Chain Job Creation Policy! Policy! Policy!

We need to consider implementing:

- Competitive Capped Allocation Application Process For Individual Allocations Over \$20 million Per Year.
- Performance Based Selection Process Awarding those Developers who commit to Cause Their Supply Chain to Create the Greatest Number of Jobs and Make the Largest Capital Investment in the United States.
- Accountability with Annual Reporting Confirming Job Creation and Capital Investment Commitment Performance.
- Transparency With All Reports and Related Data Readily Available on the Internet.