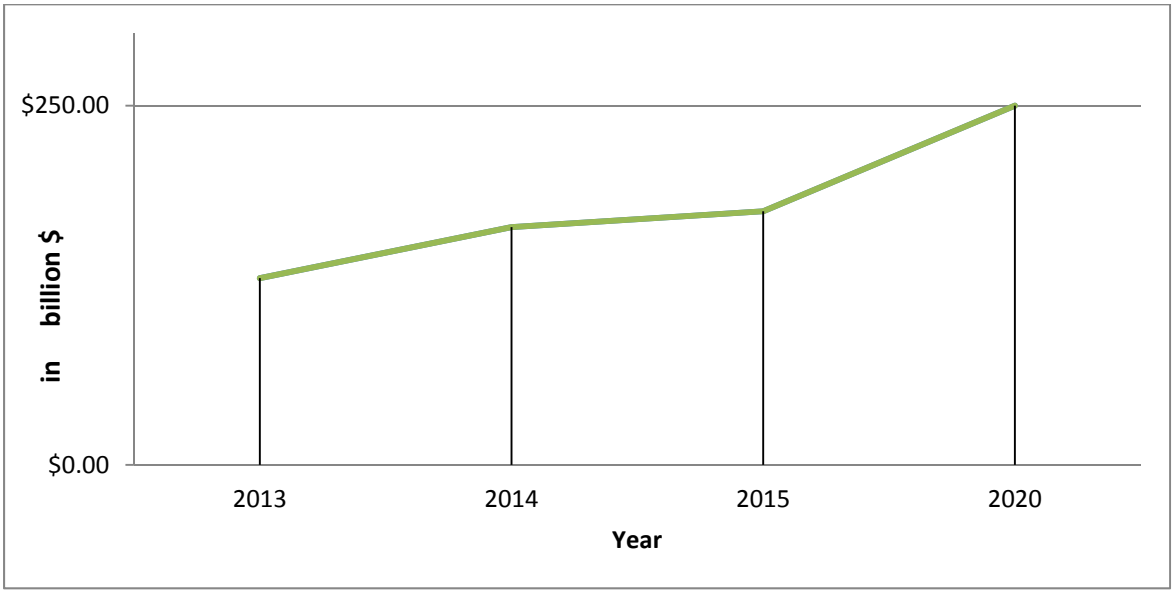
Importance & Scope:

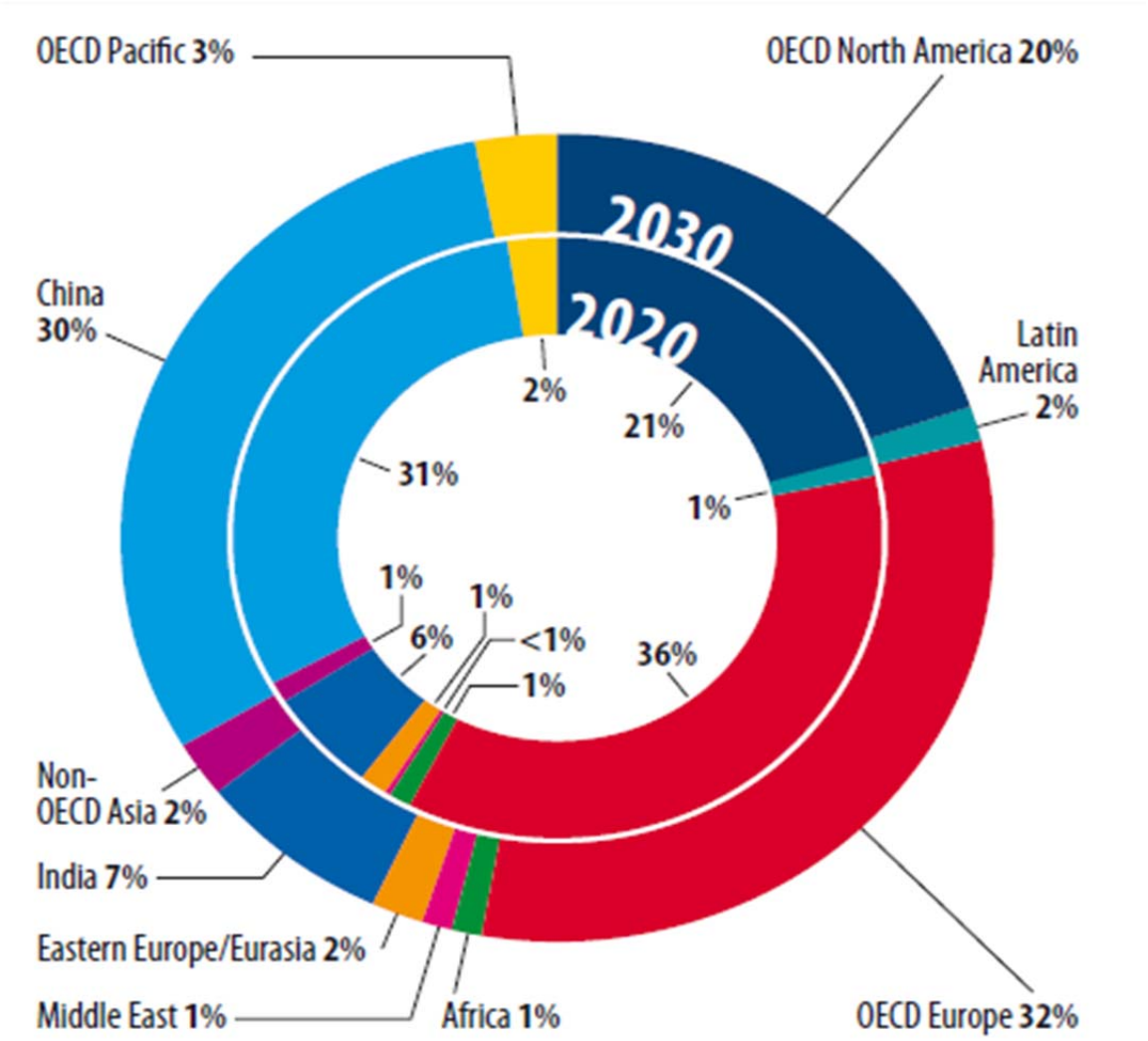
The global wind energy market was worth $130 billion in 2013 and $165.5 billion in 2014. The market is expected to grow at a compound annual growth rate (CAGR) of 7.2% between 2015 and 2020 resulting in $176.2 billion in 2015 and $250 billion in 2020.



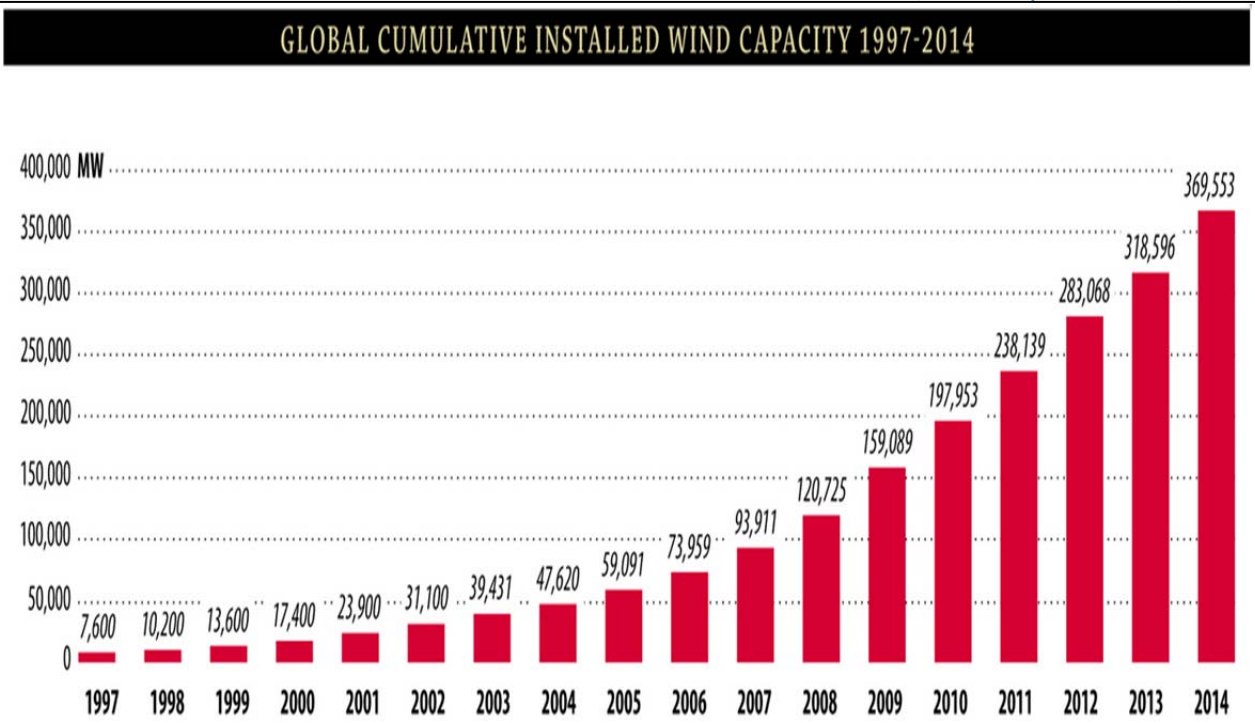
The power sector is responsible for more than 40% of all carbon dioxide emissions from burning fossil fuels, and about 25% of our total greenhouse gas emissions. If we are going to make significant emission reductions in the near to medium term, then we have to look at the power sector. In the period out to 2020, we don't have too many options.

Since the end of 2009, however, we've fallen back towards the Moderate scenario track. The same forces that have put the climate change agenda on the back burner for the past couple of years – recession in most of the OECD, the lack of EU ambition to 'fix' its emission trading system, fickle policy in the US and elsewhere – have contributed to slower growth in the wind energy sector – a flat market in 2010, modest growth in 2011 and again this year; and a very uncertain 2013 market. On the Moderate scenario track out to 2020 we would still see a cumulative capacity of more than 750 GW, and annual CO2 savings on the order of 1 billion

tons/annum. Not insignificant, and better than the old IEA reference scenario upon which the 'gap analysis' is based, but not sufficient for wind energy to play its full part in combating the climate crisis.



Global expected growth in wind power capacity



Why Germany?

Berlin the capital and one of the 16 states of Germany. With a population of 3.5 million people, Berlin is Germany's largest city. It is the second most populous city proper and the seventh most populous urban area in the European Union. Located in north-eastern Germany on the banks of River Spree, it is the center of the Berlin-Brandenburg Metropolitan Region, which has about 6 million residents from over 180 nations. Due to its location in the European Plain, Berlin is influenced by a temperate seasonal climate. Around one third of the city's area is composed of forests, parks, gardens, rivers and lakes.

Germany's renewable energy sector is among the most innovative and successful worldwide. Net-generation from renewable energy sources in the German electricity sector has increased from 6.3% in 2000 to about 30% in 2014. For the first time ever, wind, biogas, and solar combined accounted for a larger portion of net electricity production than brown coal. While peak-generation from combined wind and solar reached a new all-time high of 74% in April 2014, wind power saw its best day ever on December 12, 2014, generating 562 GWh. Germany has been called "the world's first major renewable energy economy".

Conference Highlights

•General Outlook on World Energy Sector
•Emerging Future Market for wind energy
•National/ International Wind Power Capacity, Policies and Obstacles
•Wind Forms planning and Construction
• Design and Manufacturing of Wind Power Equipment's
•Operation and Management Trends
•Grid Integration of Wind Forms
•Amplitude Modulation and Transducers Instrumentation
•Aero Dynamic Noise Generation and Control
•Urban Wind Energy Promoting

Why to attend???

With members from around the world focused on the field of Wind Energy; this is your single best opportunity to reach the largest assemblage of participants from the global energy sector Conduct demonstrations, distribute information, meet with current and potential turbines traders, make a splash with a new product line, and receive name recognition at this 3-days event. World-renowned speakers, the most recent techniques, tactics, and the newest updates in Wind energy fields are hallmarks of this conference. Conference brings together experts, researchers, scholars and students from all areas of Electrical Engineering, Electronics, Control Engineering, Mechanics and other related areas, Wind energy associations, Turbine traders, generating and planning professionals, Developers, Contractors, planning and Design, Consultancy, Turbines and controllers manufacturers.

A Unique Opportunity for Advertisers and Sponsors at this International event:

http://www.omicsgroup.com/conferences/ACS/conference/pdfs/constrution2015_Sponsorship.pdf

Major Societies and Associations around the Globe

- Wind energy - American Wind Energy Association
- Wind energy - Citizen Partnerships for Offshore Wind (CPOW)

- Wind energy - European Wind Energy Association
- Wind energy - Global Wind Energy Council
- Wind energy - World Wind Energy Association

Major Societies and Associations in Germany

- German Wind Energy Association

Top Universities in Germany

- Technische Universität München (TUM) (Technical University of Munich)
- Ludwig Maximilians Universität, Mänchen (University of Munich)
- Universität Heidelberg
- Freie Universität Berlin
- University of Göttingen
- Aachen University of Technology
- Berufsakademie Ravensburg
- Christian-Albrechts-Universität
- Dortmund University
- Dresden Technical University
- Ernst-Moritz-Arndt-University Greifswald

Companies Associated with Wind energy

Top Companies in Germany

- Nordex
- e.n.o. energy
- Wind Technik Nord
- Vensys
- FWT
- W2E

- Adwen
- Nordwind

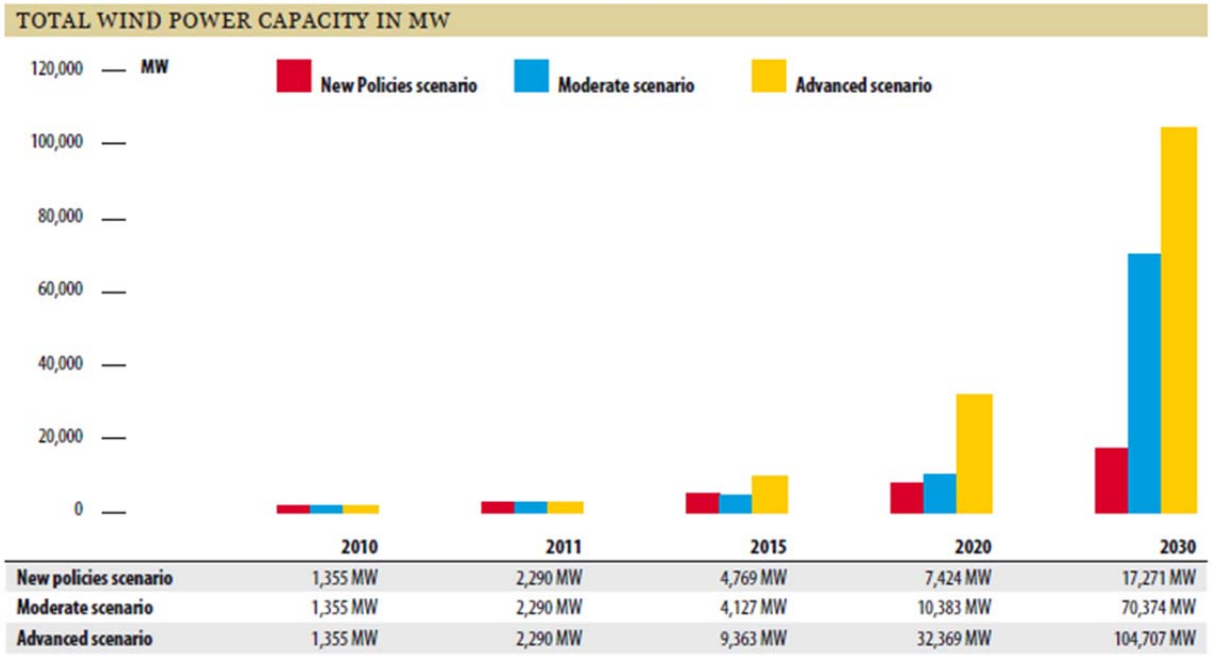
Top Companies Worldwide

1. Acciona Energy (Spain)
2. Alstom Wind (Spain)
3. AREVA (France) Purchased Multibrid (Germany) in June 2010
4. Boeing (USA) Only experimental; dismantled.
5. Clipper Windpower (USA)
6. CSIC (Chongqing) HZ Wind Power (China)
7. DeWind (Germany/USA) - subsidiary of Daewoo Shipbuilding & Marine Engineering (Korea)
8. Doosan (Korea)
9. Ecotècnia (Spain)
10. Elecon Engineering (India)
11. Enercon (Germany/Denmark)

Glance at Market of Wind Energy concerning to Germany:

- Germany is Europe's leading wind energy market with 11% of globally installed capacity in 2013 (GWEC 2014)
- Germany's 9.1% share of global new installations made it the world's second largest market for new installations in 2013. (GWEC 2014)
- The country's wind energy sector employs over 100,000 people. (BMU 2012)
- Total installed capacity increased by 9.5% to 34,250 MW in 2014. (Deutsche Wind guard 2014: On- & Offshore Statistics Fact Sheets 2013)
- 34% increase in newly installed nominal capacity between 2012 and 2013. (Deutsche Windguard 2014: On- & Offshore Statistics Fact Sheets 2013)

Statistics showing growth in Europe:



	2010	2011	2015	2020	2030
New policies scenario	1,355 MW	2,290 MW	4,769 MW	7,424 MW	17,271 MW
Moderate scenario	1,355 MW	2,290 MW	4,127 MW	10,383 MW	70,374 MW
Advanced scenario	1,355 MW	2,290 MW	9,363 MW	32,369 MW	104,707 MW

Figure 4: Growth in wind energy sector of Europe

Glance of global market analysis of Wind Energy in UK:

The UK is one of the best locations for wind power in the world, and is considered to be the best in Europe. Wind power delivers a growing fraction of the energy in the United Kingdom and at the beginning of January 2015, wind power in the United Kingdom consisted of 5,958 wind turbines.

With total installed capacity of just under 12GW.

- 7,950 MW of **onshore capacity**
- 4,049 MW of **offshore capacity**

The United Kingdom is ranked as the world's sixth largest producer of wind power, having overtaken France and Italy in 2012. Polling of public opinion consistently shows strong support for wind power in the UK, with nearly three quarters of the population agreeing with its use, even for people living near onshore wind turbines. In 2015 it was estimated that the use of wind power in the UK added £18 to the average yearly electricity bill.

1.3 GW of new wind power capacity was brought online during 2014, a 12% increase of the total UK installed capacity. The largest wind farms to come on stream in 2014 were Harestanes onshore (136 MW max. capacity) and West of Duddon Sandsoffshore (389 MW).

In 2014, 28.1 TW·h of energy was generated by wind power, which contributed 9.3% of the UK's electricity requirement.

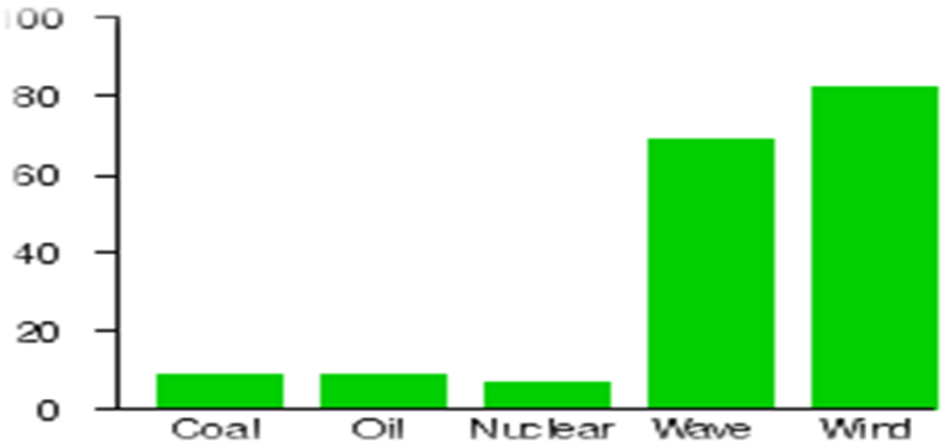
Through the Renewables Obligation, British electricity suppliers are now required by law to provide a proportion of their sales from renewable sources such as wind power or pay a penalty fee. The supplier then receives a Renewables Obligation Certificate (ROC) for each MW·h of electricity they have purchased. Within the United Kingdom, wind power is the largest source of renewable electricity, and the second largest source of renewable energy after biomass.

The number of wind farms in the UK is steadily increasing and as the industry grows, prices of generating electricity in this way should fall. In 2008 the UK became the country with the most offshore wind capacity, overtaking Denmark.

PUBLIC OPINION:

Surveys of public attitudes across Europe and in many other countries show strong public support for wind power. About 80 percent of EU citizens support wind power.

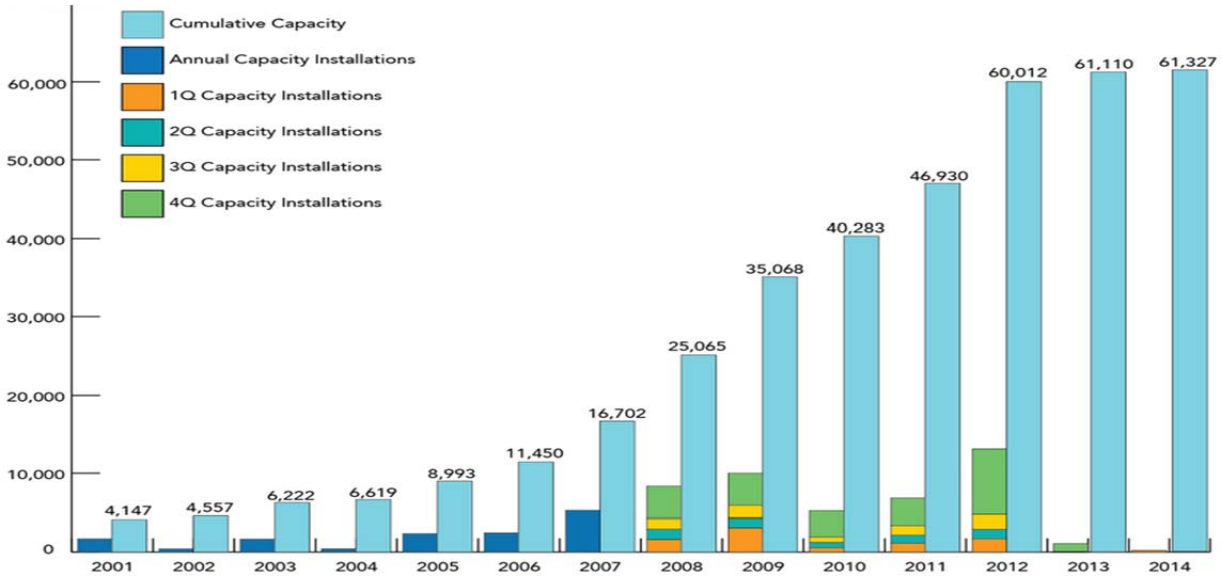
A 2003 survey of residents living around Scotland's 10 existing wind farms found high levels of community acceptance and strong support for wind power, with much support from those who lived closest to the wind farms. The results of this survey support those of an earlier Scottish Executive survey 'Public attitudes to the Environment in Scotland 2002', which found that the Scottish public would prefer the majority of their electricity to come from renewables, and which rated wind power as the cleanest source of renewable energy. A survey conducted in 2005 showed that 74% of people in Scotland agree that wind farms are necessary to meet current and future energy needs. When people were asked the same question in a Scottish renewables study conducted in 2010, 78% agreed. The increase is significant as there were twice as many wind farms in 2010 as there were in 2005. The 2010 survey also showed that 52% disagreed with the statement that wind farms are "ugly and a blot on the landscape". 59% agreed that wind farms were necessary and that how they looked was unimportant. Scotland is planning to obtain 100% of electricity from renewable sources by 2020.



Glance of global market analysis of Wind Energy in USA:

Wind Power in the United States is a branch of the energy industry, expanding quickly over the last several years. As of the end of 2014 the capacity was 65,879 MW. This capacity is exceeded only by China and the European Union 11,895 MW of wind power was installed in 2012 alone, representing 26.5% of new power capacity. The U.S. wind industry has had an average annual growth of 25.6% over the last 10 years (beginning of 2005-end of 2014).Projects totaling 12,000 MW of capacity were under construction at the end of 2013, including 10,900 MW that began construction in the 4th quarter.

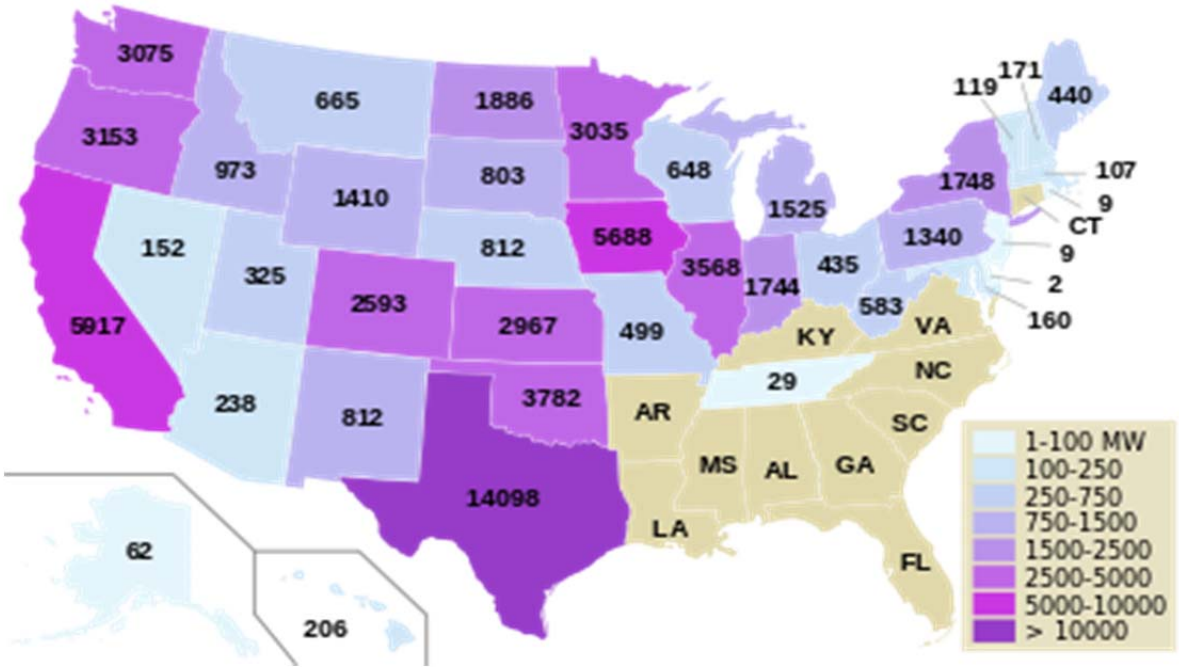
For the 12 months through December 2014, the electricity produced from wind power in the United States amounted to 181.79 terawatt-hours, or 4.44% of all generated electrical energy.



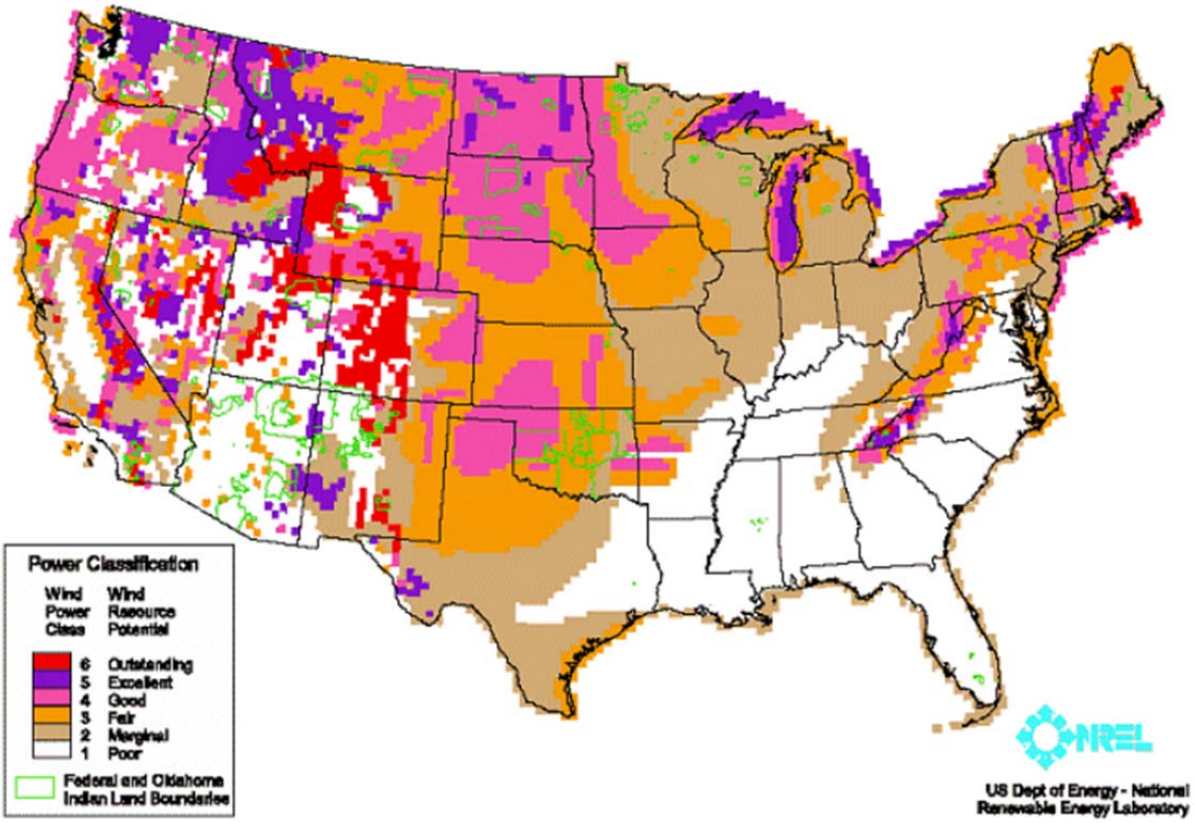
U.S Wind Power Generated in Meggawatthours in each year

Sixteen states have installed over 1,000 MW of wind capacity with Michigan just breaking the mark in the 4th quarter of 2013. Texas, with 14,098 MW of capacity, has the most installed wind power capacity of any U.S. state, and also has more under construction than any other state currently has installed. Second and third are California and Iowa with 5,917 MW and 5,688 MW respectively. The Alta Wind Energy Center in California is the largest wind farm in the United States with a capacity of 1320 MW of power. GE Energy is the largest domestic wind turbine manufacturer.

The U.S. Department of Energy's report 20% Wind Energy by 2030 envisioned that wind power could supply 20% of all U.S. electricity, which included a contribution of 4% from offshore wind power. On January 1, 2013 the production tax credit was extended for another year.



Installed wind generating capacity for U.S



Wind Resource Potential in U.S

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