

# Press Release

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## **Smart Grid estimated to reduce CO<sub>2</sub> emissions by up to 2.2 gigatonnes by 2050\***

NRG Expert's latest energy market research report on Smart Grids, reveals how the introduction of smart grids has the ability to reduce CO<sub>2</sub> emissions worldwide.

Current power generation causes 25.9% of global carbon emissions. However if the current inefficient grids are replaced with more efficient smart grids, then unnecessary CO<sub>2</sub> emissions could be dramatically reduced.

Smart grids have been proven to reduce energy losses, and integrate renewable energy more effectively. Increasing the use of smart grids in our energy infrastructure, can therefore play a significant role in helping to reach carbon reduction targets. The IEA estimates that the deployment of a smart grid can result in a 0.9 to 2.2 gigatonne reduction in CO<sub>2</sub> emissions by 2050.

Free Smart Grid Data is available on the Annual demand for Smart Meters and Smart Grid Systems for Europe at [www.nrgexpert.com](http://www.nrgexpert.com) until 15 December 2012.

### **Key Smart Grid Factors which reduce CO<sub>2</sub> emissions**

- > Introducing renewable energy capacities of 20% by 2020, will inevitably reduce carbon dioxide emissions.
- > Replacing inefficient grids with smart grids can reduce energy losses.
- > Smart grids enable two-way communication between the customer and utility company which enables optimal energy use and less wastage.

With a smart grid, **energy usage** can be relayed back to the utility company, in real time. This can help the utility companies to manage energy demands at peak times. Currently these energy peaks require high carbon dioxide polluting fossil fuels to meet demand. If the energy supply could be evened out and use energy stored previously, then less polluting fossil fuels will be needed and more renewable energy can be used.

Renewable energy sources can then be balanced with the more stable sources of energy such as coal, gas, oil and nuclear. Increased use of renewable energy can then help **reduce** overall emissions.

## Top Smart Grid Companies

- > Landis+Gyr
- > Elster
- > Sensus
- > GE
- > Cisco

These companies have formed important strategic agreements with other players in the smart grid network. Most of the major players are involved in projects to reduce CO2 emissions.

## Top Smart Grid Countries to Watch

- > USA - Reducing energy consumption, CO<sub>2</sub> emissions and peak energy demand are key drivers for large-scale smart meter deployment. No company has yet to take dominance in the market.
- > Japan - Manufacturers in Japan are developing local and overseas projects to gain a foothold on the smart grid market.
- > China - GE and IBM are early runners in this market, however China favours local suppliers and manufacturers.

The smart grid has been put forward as the panacea for solving all problems with the current electricity grid system. Many countries have high omission targets to reach and smart grids provide them with a tool to reduce their carbon emissions and significantly reduce penalties under carbon emission reduction schemes. Many countries are therefore investing heavily in smart grid technology. To obtain key data on smart meters and grid systems visit NRG Expert.

**Free Sample Smart Grid Data: on the Annual demand for Smart Meters and Smart Grid Systems for Europe currently available at [www.nrgexpert.com](http://www.nrgexpert.com)**

**until 15 December 2012**

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**Background information**

NRG Expert is a London and Toronto based energy intelligence and market research publisher. NRG Expert provides up to date information and analysis on worldwide energy markets, including smart grids, electricity transmission and distribution, electricity power generation, natural gas, water, oil, coal, nuclear, renewable energy, biofuels, water and waste, and all elements of energy infrastructure. Providing energy data on over 200 countries as well as important energy investment information.