

## Pew report: who's winning the clean energy race?

The clean energy sector now adds US\$250 billion annual value to the world economy. For the past five years, the Pew Charitable Trusts group has been monitoring global investment trends to track the sector's growth. The findings, [just published](#), paint a fascinating picture of leaders and laggards in the 'clean energy race'.



Credit: istock/Brian A Jackson

Although global clean energy investment fell 11 per cent in 2013, according to the report, other factors indicate a promising future for clean energy.

1. The prices of wind and solar have been dropping steadily for decades; they are now increasingly competitive with older, conventional power sources.
2. Investor confidence about the long-term future of renewable energy was reinforced through clean energy stock indexes in 2013, which rose sharply over the year.
3. Markets in fast-growing, developing countries are prospering; these economies see distributed generation as an opportunity to avoid investments in costly transmission systems, comparable to the deployment of cell/mobile phones instead of costly landline infrastructure.

Although investment in non-G20 markets grew by 15 per cent, only three G-20 countries – Japan, Canada, and the United Kingdom – had increased levels of clean energy investment in 2013.

In fact, Japan experienced the fastest investment growth in the world, increasing 80 per cent from the previous year. Canada was the second-fastest growing market in the G20, increasing 45 per cent, to US\$6.5 billion.

China continued to be the leading regional and global market for clean energy, attracting US\$54.2 billion in 2013.

Stock market investors' confidence in the clean energy sector grew in 2013. Stock prices on the WilderHill New Energy Global Innovation Index, or NEX, which tracks leading renewable energy stocks, rose by 54 per cent over the year – outpacing gains in major stock indexes such as the Standard & Poor's 500.

For the first time in more than a decade, solar outpaced all other clean energy technology in terms of new generating capacity installed. All told, a record 40 gigawatts of solar generating capacity was installed in 2013. By comparison, less than 40 GW of solar was installed from 2001 to 2010.

More than a third of Asia's gains in capacity were in the Chinese and Japanese solar sectors, which added a total of 18.8 GW. Japan added 6.7 GW, and China's addition of 12.1 GW of solar far outpaced forecasts – setting a one-year record for solar deployment by any country.

On a global basis, 87 GW of clean power was added in 2013, and cumulative installed capacity now surpasses 735 GW.

China's clean energy sector is reorienting from an exclusive focus on exports toward greater domestic consumption, as evidenced by China's dramatic growth in solar power capacity in recent years. Solar deployment increased almost fourfold in 2013, to an unprecedented 12.1 GW. In addition, for the fifth year in a row, China deployed more than 10 GW of wind power.

Meanwhile, the US clean energy sector is in a 'holding pattern' as the second-largest world market. Japan jumped from fifth to third place among G20 nations for overall clean energy investment, reflecting a priority since the Fukushima nuclear disaster for new energy alternatives.

Although clean energy investment in Germany, Spain, Italy, and France dropped by 40 per cent or more, the United Kingdom experienced 13 per cent growth in 2013. The UK was one of three G20 countries to have investment gains last year, and ranked fourth among G20 nations.

Investment levels in Germany were highly sensitive to clean energy feed-in tariff reductions in 2013, although Germany still has the most installed solar of any country in the world, with 35.5 GW.

Australia ranked 10<sup>th</sup> in the Pew clean energy investment ratings, moving up from 13<sup>th</sup> among G20 nations. From 2008-13, Australia was the third fastest growing clean energy market, behind South Africa and Japan.

Source: Pew Charitable Trusts

From ECOS online <http://www.ecosmagazine.com/?paper=EC14074>