

Europe: Creating New Jobs with Renewable Energies

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A look across the Atlantic indicates that the support of renewable energies gives a significant boost to the economy and employment. As the EU aims to increase the share of renewable energies to 20% by 2020, it is estimated several million new jobs will be created. In countries like Germany, already today more people work in renewable energy industries than in the coal and nuclear sectors together. By 2020, more than 500,000 workers will become employed in Germany's renewable energy sector. In addition to creating new jobs, the economic benefits of renewable energies already outweigh the avoided costs for fossil fuels and environmental damages.

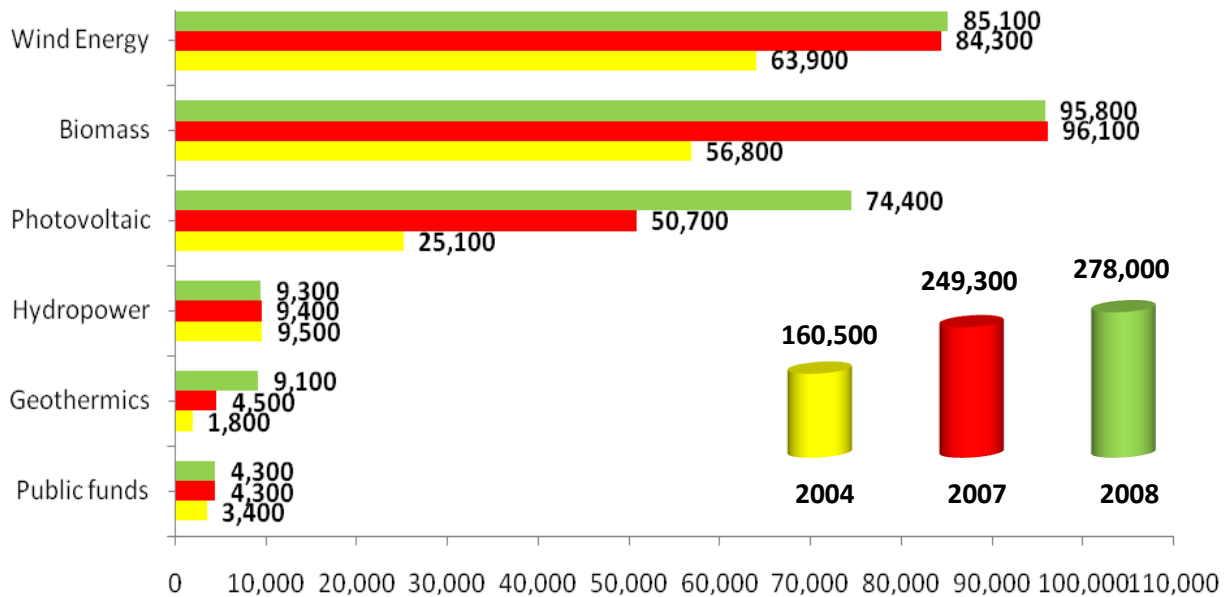
280,000 new jobs in Germany from renewable energies

In 2000, the Renewable Energy Sources Act, the so called feed-in tariff, was enforced in Germany. Since then, the share of renewable energies (see outlook below) and the number of jobs increased overwhelmingly in the renewable energy sector. Particularly the poorest corners of the country are benefiting greatly from the renewable energy boom. In the region between Frankfurt (Oder) and Dresden, which previously was as dreary as the drabest outpost in the American rust belt, a vigorous green energy tech area, marked as a "solar valley" has risen. Thousands of workers found new jobs after years of unemployment due to the collapse of the former East Germany's semiconductor industry. Three major photovoltaic makers, two of them US-based companies, have set up shop in Frankfurt. Thus, in this area, more than a third of Germany's total photovoltaic-production capacity is based with producers and installers who are now the fastest-growing employers in the region.

Moreover, traditional industries like glass, ceramics and steel manufacturing have profited greatly from the fast-growing demand for their products. Particularly craftsmen, technicians, farmers, steel workers and engineers have been able to find new jobs. Some 280,000 people work in the nation's renewable energy sector today. The following chart shows the sectoral job increase in Germany from 2004 to 2008:

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Employed People in Renewable Energies in Germany 2004 - 2008



Source: http://www.erneuerbare-energien.de/files/pdfs/allgemein/application/pdf/ee_in_deutschland_entwicklung_2008_bf.pdf

Avoided energy imports and external costs make renewable energies a high profit investment

In Germany, the mechanism to finance the promotion of renewable energies through the feed-in tariff is a fee on customers' utility bills that adds up to 2.4 billion Euros per year. This amounts to, on average, 3 Euros a month per household. In comparison to the overall benefit for the German economy, this financial support is moderate. For 2007, the avoided external costs through renewable energies – including effects of air and water pollution, CO₂ emissions – adds up to an estimated 5.8 billion Euros. In addition, energy-related savings on imports of hard coal and natural gas totaled 1 billion Euros annually. In 2020, energy imports worth 22.6 billion Euros will be avoided – due to the higher share of renewable energies, but also because of increasingly higher fossil energy prices.

Outlook: Germany will accelerate the deployment of renewable energies for economic and environmental reasons

As mentioned above, the growth of renewable energies was kicked off by the feed-in tariff in 2000. The immense growth of the sector exceeded expectations. The target originally formulated in the year 2000 of a 12.5 percent share of renewable electricity by 2012 had been exceeded by 2007. The most current goal of 20 percent envisaged for 2020 will probably be exceeded in 2011. For 2020, even if energy efficiency gains are only moderate, the renewable energy industry estimates that 47 percent of the power used in Germany will come from renewable energies.

The installed capacity and the power yield would triple to 111 GW or 278 billion kWh compared with today's figures. Wind and solar energy, bio-mass, hydro power and geothermal energy will become distinctive features of the power supply system. In 2020, more than 500,000 workers are expected to be employed in Germany's renewable energy sector.

Ambitious renewable targets will deliver 2.8 million jobs in the sector by 2020 in the EU

A look across Europe confirms the German example. The EU aims to increase the share of renewable energies to 20% by 2020 (not only in electricity, but also for heating & cooling and transportation). Beyond climate protection, the reasons cited are again to lower energy costs for consumers by avoiding fossil fuel imports as well as to reduce environmental damages. Innovative technologies such as photovoltaic, offshore wind, solar thermal electricity and second-generation biofuels are key to achieving the EU's current competitive position in the global market for renewable energy technologies. With the implementation of a set of renewable policies across the EU to reach the 20% share, the total gross employment in this sector is estimated to be 2.8 million by 2020. It may even increase up to 3.4 million employers by 2030 if there is an accelerated deployment policy combined with increasing exports for global growing markets.

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