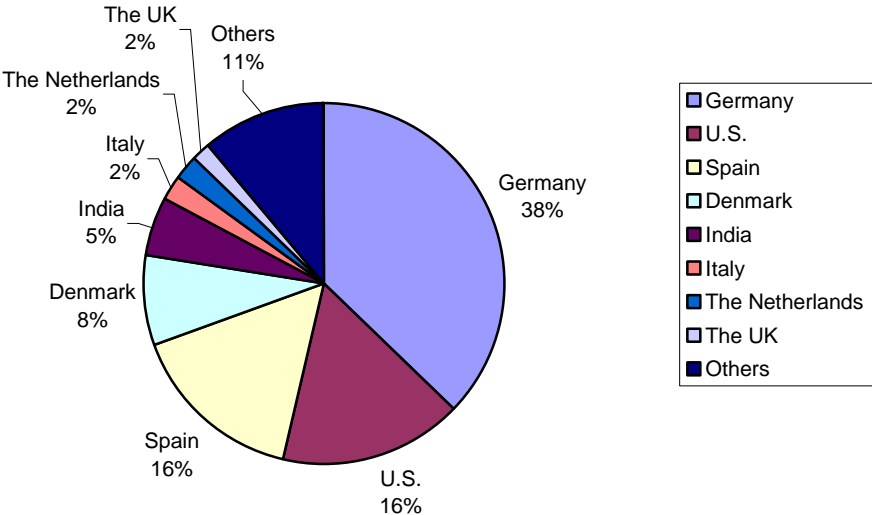


# Renewable Energies Workshop in Madrid

## First intensive exchange between Spain and Germany on the two countries' successful regulations on feeding of renewable energies into the grid

On 27 January 2005, representatives of governments and agencies from six EU countries met in Madrid for a first workshop on co-operation in the area of feed-in regulations aimed at intensifying use of renewable energies in electricity generation (International Feed-in Cooperation). Co-operation in this area was initiated by Germany and Spain at the "renewables 2004" International Conference for Renewable Energies that was held in Bonn in June. The aims of the co-operation include promoting exchanges of experience between the two countries, supporting other countries in improving and developing feed-in systems, and presenting relevant experience in international forums, especially in the European Union's political debates. Over half of all EU Member States now have feed-in regulations that are comparable to the German and Spanish systems.

Capacity installed world-wide for electricity generation from wind energy, in MW as of the end of 2003



### Results of the workshop

In his remarks at the end of the workshop, Antonio Fernandez Segura, Vice-Minister for Energy in Spain's Ministry for Industry, Tourism and Trade, asserted that Germany and Spain should assume a leading role in defending such successful systems in Europe. Germany and Spain are the EU's and the world's most successful countries in efforts to increase the role of renewable energies – especially wind energy – in their energy supply systems (see Figures 1-3). At the same time, the feed-in systems used by both countries to increase use of renewable energies in their electricity markets have proven to be economically efficient; the pertinent per-kilowatt-hour prices are lower in these countries than they are in countries with other support systems, such as quota systems.

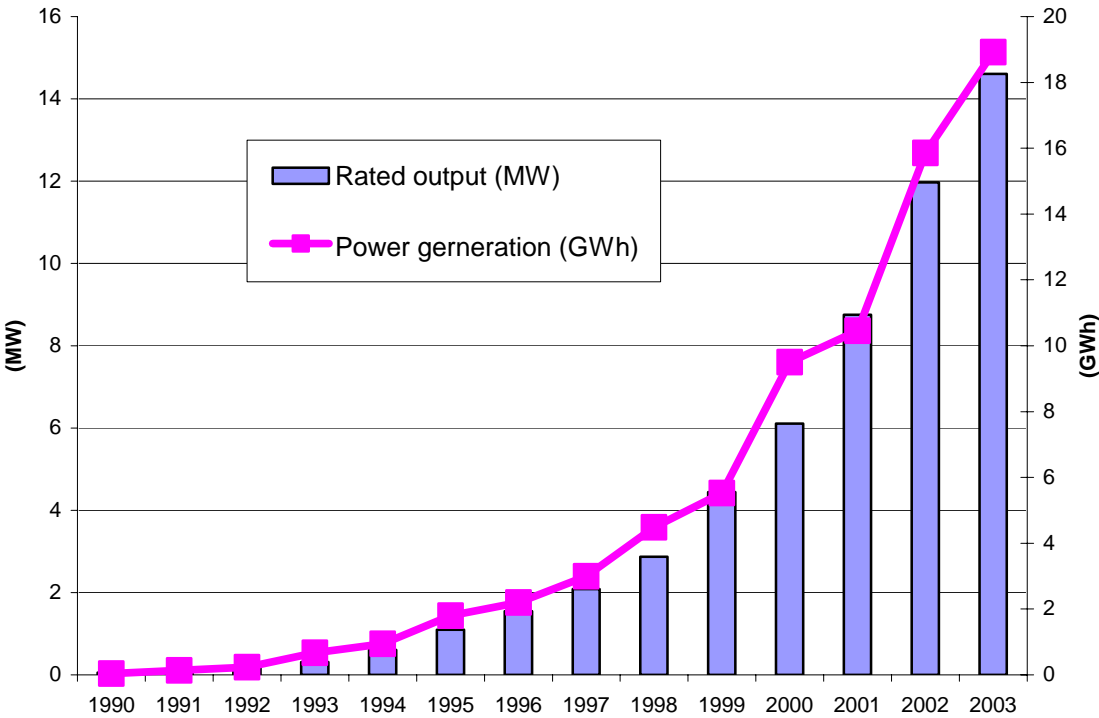
One key reason for the comparatively low costs in Germany and Spain is that Germany's and Spain's feed-in systems provide an especially large measure of investment security. High levels of investment security keep banks' interest rates for loans, and the profit margins

planned by investors, low. Higher investment risks tend to drive up profit expectations, on the other hand, thereby also increasing the relevant costs.

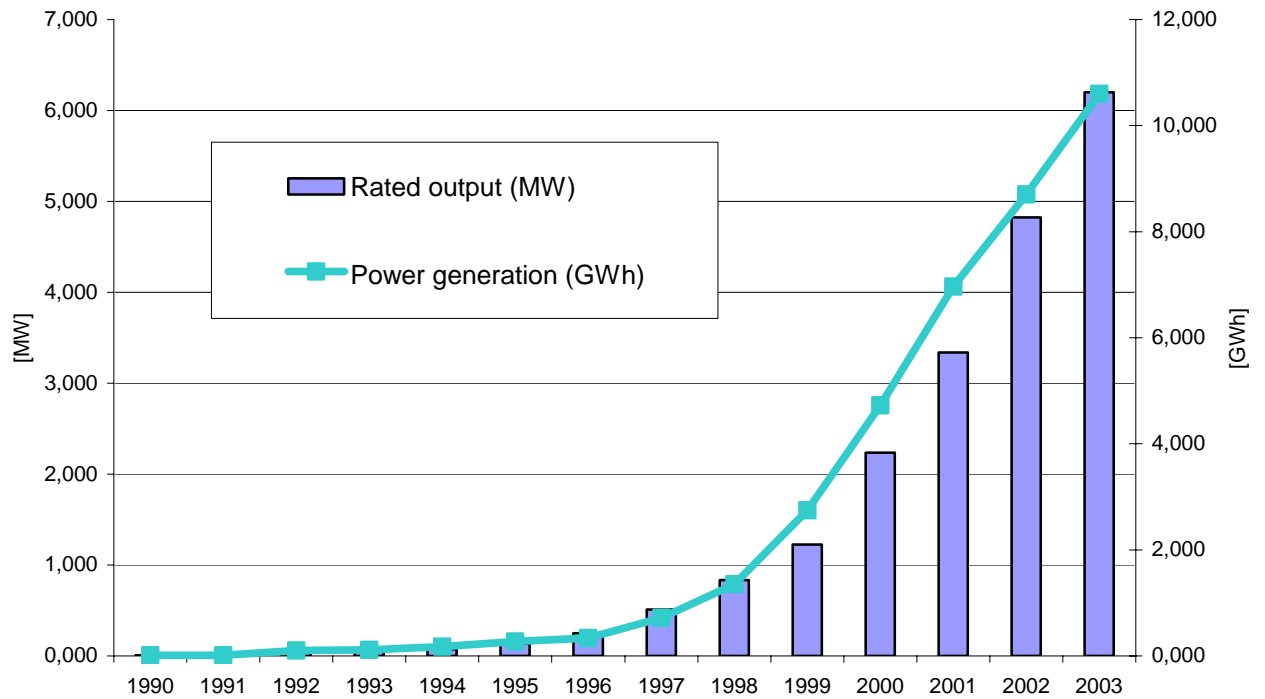
Germany's and Spain's policies in the area of renewable energies have a range of features in common, although they also exhibit differences. In both countries, feed-in regulations guarantee grid access for electricity from renewable energies, and they provide long-term compensation arrangements and special rates for the various categories of renewable energies. Furthermore, producers of electricity from renewable energies do not have to bear the costs of compensating for any fluctuations in electricity feed-in. Both systems also distribute burdens equally among all electricity consumers. What is more, both countries have supplemented their feed-in systems with a range of additional measures aimed at promoting growth in renewable energies.

On the other hand, the Spanish compensation system for feed-in lacks the German system's degression arrangements, under which compensation rates depend on when systems come on stream: the later a generation system is connected to the grid, the lower the compensation rate for it. In addition, Germany's feed-in regulations are more differentiated than Spain's with regard to different categories of renewable energies, different types of biomass and different plant sizes. On the other hand, the Spanish system, unlike the German system, allows plant operators to choose, each year, whether they prefer to receive feed-in compensation at a fixed rate or a defined bonus in addition to payment at regular electricity rates.

Development of wind-energy use in Germany, source: ZSW 2004



Development of wind-energy use in Spain, source: ZSW 2004



### Outlook

Representatives from Spain and Germany have emphasised their political intentions to also apply their feed-in systems to long-term efforts to enhance EU legislation. The countries that participated in the workshop showed interest in continuing the relevant co-operation and in expanding joint analysis of the advantages of the various feed-in arrangements and their pertinent economic contexts. Germany plans to hold a second workshop on this topic during the course of the year.