



Renewable Energy for Dummies

Why you don't use renewable energy and why you should!

2006

FIVE BAD EXCUSES FOR NOT USING RENEWABLE ENERGY

1 You think renewable energy technologies are too expensive compared with conventional energy technologies

And they are, sometimes. However, subsidies to conventional technologies can give a wrong picture, and it is sometimes difficult to reflect all the benefits of using renewable energy in the price signals. By making the subsidies visible, internalising the external costs and benefits, and giving more information about the real prices of the different energy technologies, renewable energy would have a more level playing field in the different energy markets.

2 It is too risky to invest in new renewable projects

Financing of new renewable energy projects can be troublesome, because the projects may seem more risky than projects for better-known technologies. But sometimes it is only a matter of giving financiers the right information about the technological stage and market possibilities of renewable energy. There seems to be a need to develop risk-hedging instruments in order to make it easier to establish renewable energy projects.

3 Energy markets are not prepared for renewable energy

Renewable energy technologies should typically be integrated into existing energy infrastructure and in many situations it is not that easy to do. However, a lot of experience has been gained during the past years in for example integrating wind power and biomass into the energy systems. This experience should be utilised by intensifying international cooperation between authorities, transmission system operators and private companies working with renewables.

4 It is difficult to get renewable energy projects approved

You may have decided to use renewable energy and you may even have managed to get the project financed, but don't think your worries are over. Next step would normally be to get the project approved by local or national authorities, and this process can be unreasonably time-consuming and troublesome for many reasons. Lack of standards means that many projects must be approved individually; the authorities are not familiar with the new technologies etc. On the other hand, well-coordinated efforts among central and local authorities, e.g. clever use of spatial planning, could dramatically reduce the time spent on approval processes. Internationally, exchange of experience and learning from "best practice" could therefore contribute to reducing this barrier.

5 You would rather wait until renewable energy gets cheaper

Experience shows that it is possible to increase the competitiveness of renewable energy technologies by an accelerated market introduction. Initially there is a need for support for renewable energy technologies but after a certain period renewable energy is expected to generate a surplus compared to existing technologies. But if everybody is waiting for others to stimulate the market, then you don't get any market deployment at all. Somebody has to make the first move!

FOUR GOOD REASONS FOR ACTION

1 Focus on renewable energy technologies

From a global perspective, the concerns about the global warming, the recent development in fuel prices and the increasing concerns about security of supply have put focus on renewable energy technologies as alternatives to fossil fuels.

2 Support from consumers

Many renewable energy technologies are located at or near to the consumers, and the deployment is often also driven by consumer engagement. Opinion polls show that consumers are generally positive towards supporting renewable energy technologies. High support from consumers is a vital driver and sufficient information on the impact of renewable energy technologies and plants can help maintaining and developing consumer support. Experience shows that consumer support is significantly enhanced where there is community involvement/ownership.

3 Renewable energy market grows rapidly

Business perspectives of renewable energy are becoming an increasingly important driver for national governments, industries and energy companies. The market for renewable energy is growing rapidly. One example is that in the five-year period from 2000 to 2004 grid-connected solar photovoltaics increased by 60 % per year on average, wind power by 28 %, biodiesel by 25 % and solar hot water/heating by 17 %. From an industry point of view, investments in development of renewable energy technologies now could be a sound investment in the future. Such investments would also lead to more jobs in firstmover countries.

4 Need for joint action

It can be difficult to overcome the barriers to the deployment of renewable energy if you are on your own as an industry or as a country. Cooperation between countries at the policy level and cooperation between authorities and private companies would make it easier to identify and carry through solutions which could tackle the bad excuses for not using renewable energy.

Renewable energy covers a wide range of different technologies used for a variety of purposes: solar cells for pocket calculators, fuel wood for food preparation and off-shore wind power facilities for electricity generation etc. Some produce heat, others electricity (or combined heat and power) and some again biofuels for the transport sector. Some are incorporated into existing products such as building-integrated photovoltaic systems whereas others are separate installations.

The various renewable energy technologies go through different technological stages from R&D at the laboratory through niche markets to fully mature technologies which are able to compete with conventional energy technologies. In the context of the RETD implementing agreement, the focus is on market mature or near market mature technologies.

How to speed up RE deployment?

Nine countries (Canada, Denmark, France, Germany, Ireland, Italy, the Netherlands, Norway and the United Kingdom) have decided to launch a new implementing agreement under the framework of the International Energy Agency (IEA). The agreement called Renewable Energy Technology Deployment (RETD) is part of the international action plan from the International Conference on Renewable Energies in Bonn in 2004. It aims at accelerating the deployment of renewable energy by carrying through a number of selected activities in the period 2006 - 2010. The target groups for the activities are policy makers and private companies dealing with energy.

The aim of the implementing agreement is to

- improve cooperation between participating governments in identifying cross-cutting barriers to deployment and providing "best practice" solutions;
- provide guidance to the private sector and policy makers on innovative business strategies and projects that encourage technology deployment by fostering public-private partnership projects;
- facilitate ongoing international dialogue and public awareness of renewable energy deployment by contributing concrete examples of deployment solutions.

Do you want to know more?

The activities in the implementing agreement will be launched in autumn 2006. But you can already now visit the website www.iea-retd.org. Here you can read more about the implementing agreement and the activities to be launched. You can download the report "Renewable Energy Technology Deployment - Barriers, Challenges and Opportunities". The report goes into more detail about the barriers to the deployment of renewable energy and how to overcome them. You can also sign up for an email service that will keep you informed of RETD activities in the future.

www.iea-retd.org

The IEA Implementing Agreement on Renewable Energy Technology Deployment is one of a number of implementing agreements on the development of renewable energy.

See www.iea.org/Textbase/techno/ for more information.

