

Future of energy production

You certainly know that the Greens have recently won 7 % of the vote, so we have to reduce pollution and find new sources of energy instead of nuclear. As a consultant for Energy Solutions, I will try to answer to this question in this report. Firstly, we will explain why we need new sources of energy ; secondly, some realistic solutions will be proposed to implement this new policy ; at last we will have a timetable set for this implementation.

Some reasons leads us to think about a clean and efficient source of energy, because there is more and more energy consumption in the world. First, recent studies have shown that about 94 percents of the world consumption of energy are delivered by non-renewable energy, which causes a problem of ressources. Indeed the lifespan of these is generally about 60-70 years, except for coal for which the reserves are expected to last 250-300 years. Second, these ressources are not equally shared out. For instance most oil is hold by Middle East and the United States, which leads to conflicts to control this most used ressource in the world, particularly in cars, planes, boats, etc. Third, these sources of energy entail important damages on our environment. Their exploitation leads to massive deforestation (fuelwood), global warming (coal), air pollution (oil or natural gas) and meltdown (nuclear), like Chernobyl in 1986.

That's why we have to develop our renewable sources of energy. They are six on Earth : solar, wind, geothermal, biomass, hydroelectric and tidal energy. We have to develop these kinds of energy not to destroy our environment and be in lack of ressources like oil or uranium. In terms of costs, wind power appears as the best solution, because other sources are expensive to develop and install. For example geothermal and tidal energies require a high investment for development and installation. But wind energy is not adequate for large production because winds are unpredictable ; in addition it brings visual and noise pollution to the places equiped with many turbines. For heating we think that the best solution is solar power, because it brings unlimited supplies. It is very easy to install it on each new house built, and it is efficient. The only drawback is about its use in countries with low sunniness ; for these, we recommend other sources of heating, like electricity or geothermy. For electricity, wind and hydroelectric power would be the more adequate solution in terms of efficiency and feasability, although their installation sites are specific (moutain rivers and large plains) and their visual pollution.

To develop these new sources of energy, we do not have to waste time, because oil and natural gas will be depleted in 50 and 60 years. We think that the part of renewable energy in global consumption must be more than 75 % in 2050. To reach this objective, this part will have to double every 12 years.