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## Nuclear is a problem not a solution!

Globally about one third of the greenhouse gases are caused by the production of electricity. In 2004 the worldwide 442 nuclear reactors provided only 16% of the electricity, 6% of the commercial primary energy and 2.5% of the final energy in the world. **Nuclear power worldwide generates less electricity than its decentralized no- and low-carbon competitors** (renewables and fossil-fueled combined heat and power). In 2004 these rivals added nearly three times as much output as nuclear power added.

For a considerable contribution to climate protection nuclear power production would have to be extended massively. This would also multiply the problems already associated with nuclear power production:

- **Risk of accidents**: 20 years after the Chernobyl disaster we should not forget the catastrophic consequences for health, ecosystems, social and economic systems of nuclear accidents. And the risk is not getting smaller. Major recent incidents happened for example in Hungary in the Paks power station, in the German reactor Phillipsburg, in the French nuclear reactor Cattenom as well as in Davis-Besse in the U.S. and in the British reprocessing facility in Sellafield. All the world nuclear power plants are getting older. Today approximately three out of four nuclear power plants are still the same that were operating in 1986.
- **Nuclear weapons**: The civilian use of nuclear technology and military application are linked. As nuclear technology spreads around the globe, so does the risk of proliferation.
- **Risk of international terrorism**: None of the nuclear power plants worldwide could resist the aimed attack of a completely fueled passenger plane. In case of such a hit a nuclear inferno would be unavoidable. Apart from suicide attacks there are still other more "conventional" possibilities of destructive terrorist acts against nuclear power stations like attacks with weapons and explosives or the forcible intrusion into the safety area.
- Nuclear waste: Every stage of the nuclear fuel cycle, from uranium mining to the reprocessing of spent fuel produces radioactive waste. Much of this waste will remain hazardous for thousands of years. Despite this, there is still no appropriate programme of dealing with any form of nuclear waste.

Moreover, **production of nuclear electricity is not carbon free,** as often being claimed. While most nuclear reactors do not emit CO2 gas at generation, **large amounts of CO2 gas come from the so-called ''front-end'' of the cycle**: mining, ore milling, uranium hexafluoride conversion; fuel enrichment and fabrication of the fuel rods. The lower the quality of the uranium ore, the higher the amounts of CO2 generated. At the "back-end", radioactive waste managment is energy hungry in treatment, conditioning, transportation and final disposal in some future repository.

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Apart from these risks, nuclear energy is not the cheapest possibility to reduce greenhouse gas emissions nor is it the cleanest. There are much better ways to save CO<sub>2</sub> emissions:

- Enhanced **energy efficiency**;
- **Renewable energies** in both the electricity and heating sector;
- **Fuel switch** from coal to gas in the electricity sector;
- Full internalisation of all external costs.

In order to avoid further catastrophic accidents, nuclear radiation, health impacts and environmental pollution as well as proliferation and terrorism risks, **the Greens want**:

- To phase out nuclear power;
- To **stop and prevent the building of new nuclear power stations,** including prototypes and research reactors;
- To **stop reprocessing** as well as the import and export of nuclear material, nuclear waste and nuclear facilities;
- The **abolition of the Euratom Treaty**, which institutionalises the EU's promotion of nuclear power;
- To halt every form of aid to help nuclear fission (such as the EPR) and fusion (such as ITER) technology survive and expand;
- The **internalisation of the external costs** to reflect the environmental damage done by nuclear generation in comparison with renewable energies;
- The rapid **closure** of the environment-polluting **reprocessing plants** in La Hague and Sellafield
- The end to the transport of nuclear material in Europe.

Nuclear Energy and Climate Change (pdf)

Risks and prospects of nuclear power (pdf)

The World Nuclear Industry Status Report 2004

Leaflet in french on nuclear

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