

Nuclear power: not the solution to climate change or energy security

- Nuclear power remains the most dangerous form of energy. An accident like the 1986 explosion of the reactor in Chernobyl in the Ukraine could happen any day. And due to the 'limited liability' of plant operators, only a tiny fraction of the damages of a Chernobyl type accident would be covered by the operators insurance. The rest would have to be paid for by society.
- The question of what to do with highly radioactive waste remains unsolved.
- On a level playing field, nuclear power is economically insane. Not a single nuclear power station has ever been built without massive government subsidies. And new nuclear power comes at a high financial cost for society, if the real costs of nuclear power are properly taken into account. These costs include century-long waste treatment and storage, the decommissioning of old plants and the costs of potential accidents.
(The European Commission has recently started investigations concerning illegal state aid for a nuclear power plant currently under construction in Finland.³⁰)
- Uranium is a finite resource that, even if nuclear energy capacity was kept at present levels, would last only 50 years.³¹
- Money invested in energy saving measures and renewable energies can achieve far greater emission reductions than if invested in nuclear power.³²
- Nuclear power emits as much CO₂ as a modern gas-fired co-generation plant. When assessing the overall emissions, the whole lifetime of a nuclear power station need to be part of the equation, including fossil fuels burnt during uranium mining, processing and transportation, building the nuclear power station and decommissioning as well as long-term waste storage and treatment.³³

³⁰ <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/06/1456>

³¹ "Nuclear Power: Myth and Reality - The risks and prospects of nuclear power" - by Gerd Rosenkranz, published by Heinrich Böll Foundation and WISE, Chapter 3: The Nuclear Fuel Cycle, p.22. http://www.boell.de/de/04_thema/4064.html

³² "Nuclear power saves as little as half as much carbon per dollar as wind power and as little as a tenth as much carbon per dollar as end-use efficiency": http://www.rmi.org/images/other/Energy/E05-14_NukePwrEcon.pdf

³³ "If one takes into consideration the mining of resources [uranium], the transportation, the building and maintaining of nuclear power plants, the distribution of the electricity and the necessary additional production of heat, then nuclear power does often look worse for climate protection than other forms of energy production. A modern gas-fired power station in connection with heat production [co-generation] can be more favourable for the climate. Even better for the climate are renewable energies and most of all the efficient use of energy." [own translation] - German Environmental Ministry, in: 'Atomkraft: Ein teurer Irrweg. Die Mythen der Atomwirtschaft', March 2006. See (in German) <http://www.erneuerbare-energien.de/inhalt/2715/4592>