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International Network for Sustainable Energy - Europe

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PRESS RELEASE DECEMBER 16, 2004:
The enlarged EU can phase out fossil and nuclear energy

Today, International Network for Sustainable Energy (INFORSE)-Europe[1] releases its vision for sustainable development for the 25 EU countries. It shows how the EU countries can change from the polluting fossil and nuclear energy to renewable energy, if there is a will to increase the political support to renewable energy and energy efficiency. With the vision is proposed a phase out of more than 98% of current fossil fuel and nuclear energy use until 2050.

Continued growth of renewable energy (RE) is important to realise the vision, to reach 12% RE in 2010 as proposed by the EU White Paper, 25% RE in 2020 as proposed by a number of NGOs, INFORSE-Europe included, and at least 35% RE in 2030. The proposed renewable energy development follows generally forecasts published by the European Renewable Energy Council(EREC)[2] until 2020. The development is within limits for sustainable development.

Substantial increase in energy efficiency is equally important for the vision as the increase of renewable energy. In general it is possible to increase the efficiency with a factor 4 or most sectors. This factor 4 increase in efficiency is expected to be realised for electrical consumption, for industrial production and for road transport. For space heating is expected a smaller increase in efficiency – 57% from 2000 to 2050 – because of the slower turn-over of houses.
Also efficiency of energy conversion is expected to increase, in particular in the power sector with increase in power plant efficiency and increasing use of the the more efficient CHP[3] plants. Another efficiency increase comes from a proposed change in the transport sector to hydrogene and electricity as fuels.
For the demand for energy services (area of heated floor space, km of transport etc.) is expected:

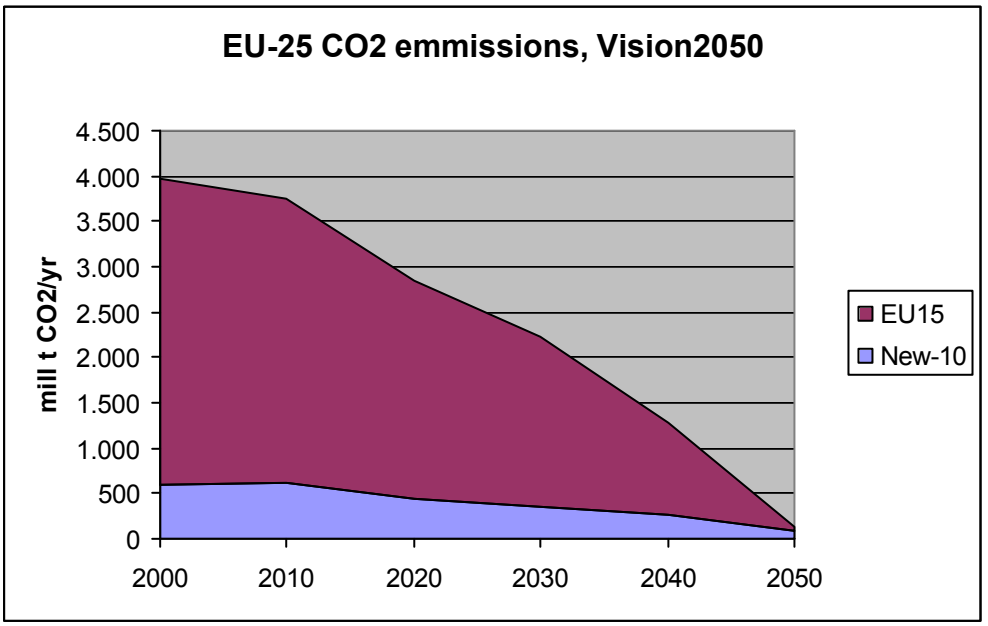
- Increases in housing areas and use of electric appliances, though lower growth than in the "business as usual" forecast from e.g. International Energy Agency
- Reduction in road transport in the 15 "old" EU countries, as recommended by several NGOs
- Increase in road transport in the new EU countries (about 2.5 times increase until 2030) and increase in rail transport in all the countries
- Constant levels of industrial and agricultural production

[1] INFORSE-Europe is a network of 63 national and local NGOs working for a sustainable development in energy. Read more at www.inforse.org/europe.
[2] EREC is a council for the renewable energy industry. Read their forecasts at www.erec.org
[3] CHP is an abbreviation for Combined Heat and Power

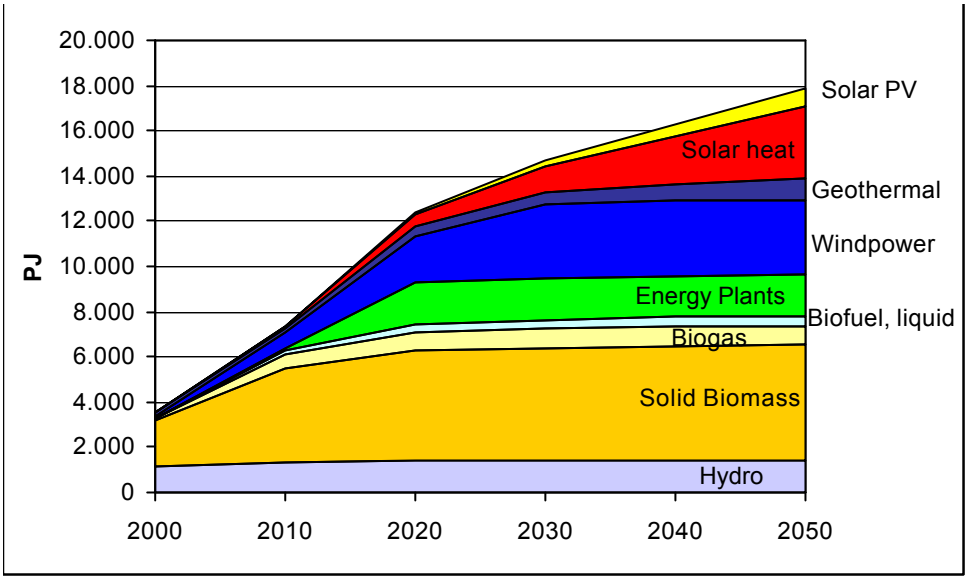
If the vision is realised it is possible to phase out nuclear power and reduce CO_2 emissions by 30% in 2020 and 50% in 2030, compared with 1990-level for the EU-25. See enclosed graphs for further details about the proposed development.

The energy efficiency measures proposed are cost-effective today or will become cost-effective if used on a large scale as proposed in the vision. The renewable energy technologies will become cost-effective if used on large scale. The INFORSE-Europe website includes an example on how windpower will become cost-effective in Europe in general after 2010, if the current growth trend continues. Maybe the largest economic benefit of the vision is that it will reduce dependency of imported fuels, and thus reduce the EU countries' vulnerable to fossil fuel crisis such as this year's oil crisis with prices over 50 US$/barrel.

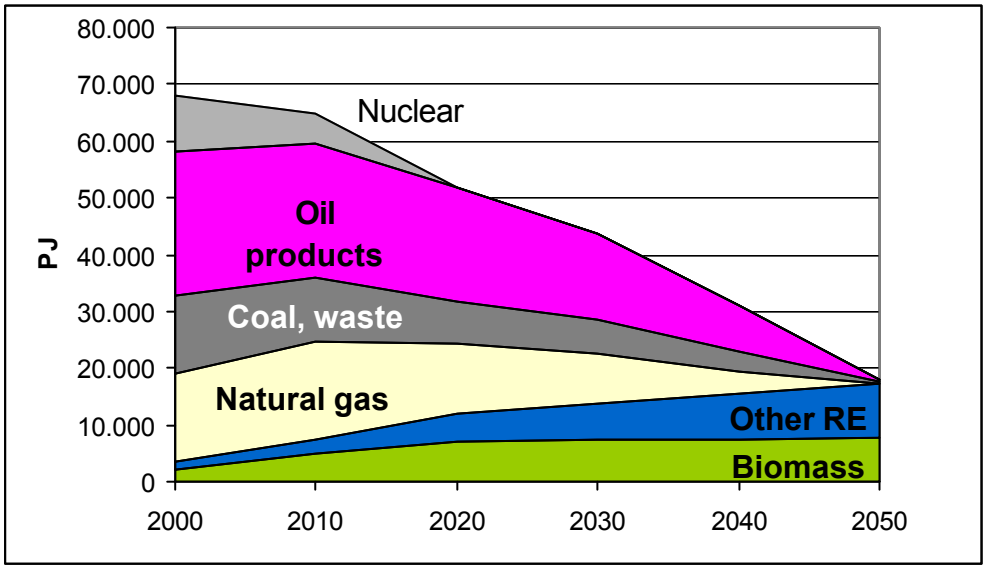
The vision shows that there are other developments possible than the increased use of fossil and nuclear energies as forecasted by the International Energy Agency in its recent World Energy Outlook.
The vision for 25 EU countries build on INFORSE-Europe's similar vision for the 15 "old" EU countries that was published in November.
Read more about the vision and how to realise it at www.inforse.org/europe/vision2050.htm, including background notes with assumptions and sources (word files to download), or phone INFORSE-Europe +45-86227000, ask for Gunnar Boye Olesen.



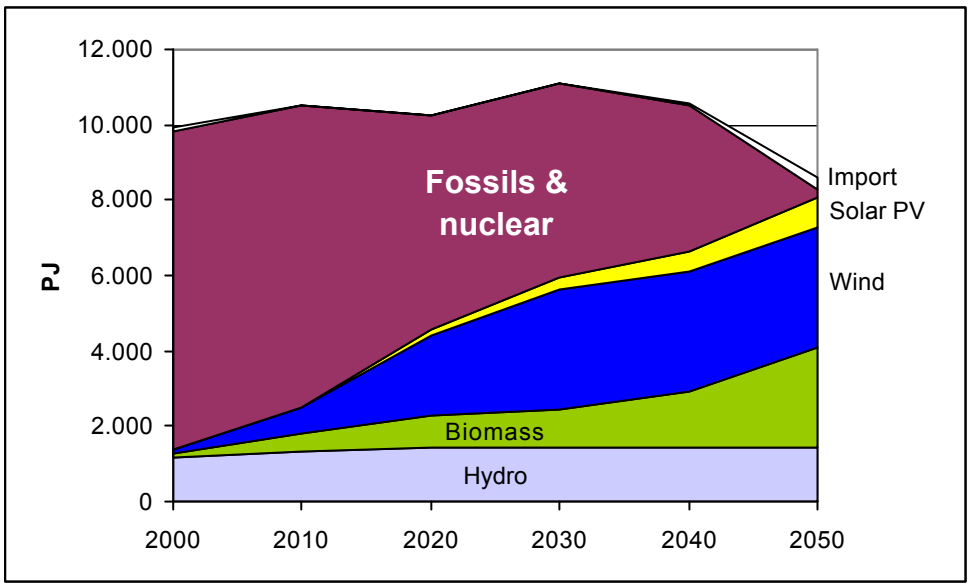
Development of CO2 emissions in EU-25 according to INFORSE-Europe's vision2050.



The proposed development of renewable energy, according to INFORSE-Europe's vision2050



The vision's development of total primary energy supply (TPES), showing the possible large effect of a factor 4 increase in energy efficiency. INFORSE-Europe's vision2050 for EU-25.



The vision's development of electricity supply, including supply for transport and hydrogene production as well as increased use of flexible heat pumps for space heating. INFORSE-Europe's vision2050 for EU-25.