

# Analysis of the German Federal Government's Draft **Energy Concept**

## Potentials thwarted by nuclear power and coal

### **Executive Summary**

The German government has presented the draft of its energy concept.<sup>1</sup> It is marked by a striking contradiction: life-span extensions for nuclear power plants massively impede investments in renewable energies, the revenues from written-off nuclear power plants further strengthen the market power of the large electricity supply companies. On the other hand, the federal government has announced far-reaching objectives for the expansion of renewable energies, for energy efficiency and the required extension of the power grids, as well as instruments designed to bring about the breakthrough into the regenerative era. It tries to bridge the contradiction by announcing that the operators of nuclear power plants to a certain extent shall contribute to financing the new start into the direction of energy efficiency and renewable energies.

In view of the traditional large energy utilities' financially strengthened role, it is doubtful whether this approach will be successful. It is difficult to see how massive investments in energy efficiency (in the electricity sector) and in the expansion of renewable energies can be reconciled with their interests, as long as they negatively affect their profits; and following the life-span extensions, this is the case more than ever. Besides, it is doubtful whether and how the announced measures will be implemented. Hans-Peter Keitel, president of the Federation of German Industry (BDI) has already mobilised against guidelines for the energetic modernisation of buildings and electricity saving: "We will in the near term explain to the government what is feasible. There will certainly be some rework done in the parliamentary process."<sup>2</sup> Previous experience does not suggest that the ministries and parliamentary groups concerned will coherently pull together - towards the renewable era. Last not least, it remains unclear whether the measures announced in the energy concept, if they are implemented, will be sufficient to reach the targets, the self-imposed ones or the necessary ones which partly go even further.

	2020	2030	2040	2050
change in GHG emissions compared to 1990	-40	-55	-70	-80
share of RE in gross final energy		30	45	60
share of RE in gross electricity consumption	35	50	65	80
change in primary energy use compared to. 2008	-20			-50
change in electricity consumption compared to 2008	-10			-25
change in final energy use in transport sector compared to 2005	-10			-40

Table 1: Targets in the energy concept (all figures in percent)

Neun Punkte für eine umweltschonende, zuverlässige und bezahlbare Energieversorgung. draft BMWi/BMU of 7 September 2010. http://www.bmwi.de/BMWi/Navigation/Service/publikationen,did=357316.html <sup>2</sup> Hans-Peter Keitel (Interview), "Mit Umweltminister Röttgen war nicht zu reden", SZ, 13.09.2010, p. 18,

Table 1 gives an overview of these objectives. Further objectives have been established as follows:

- Energy productivity shall increase by 2.1% per year on average.
- The ratio of energetic refurbishment of buildings shall be doubled from presently less than 1% annually to 2% of the total building stock.

The reduction of primary energy use by 50% and electricity consumption by 25% are very ambitious targets. This also applies to the announcement to reduce final energy demand in the transport sector by 40% by 2050. The announced long-term reduction targets for greenhouse gas emissions (80%) on the other hand are not sufficient to contribute to a worldwide course which limits global warming to less than two degrees with adequate probability. To this end, greenhouse gas emissions would have to be reduced by 95%. The expansion targets for renewable energies (80% by 2050) likewise do not go as far as the objective announced e.g. by the German Minister for the Environment, Dr. Norbert Röttgen, i.e. to transform energy supply to 100 percent renewable energies.

The targets are not binding, but shall be subject to a monitoring process in intervals of three years. Much more investment security would be ensured by summarising the targets and measures in a climate protection law.

Especially with regard to the energetic refurbishment of buildings, and expansion of both offshore wind energy and electricity power grid, the German government has presented remarkable packages of measures. The initiative for an energy efficiency fund likewise has potential.

The intended expansion of biomass utilisation could cause considerable conflicts with international food security. Besides, the German government has not seized the opportunity to couple its announcement of life-span extensions with an abolition of old inefficient coal-fired power plants with and a stop for new coal-fired power plants.

The energy efficiency package underestimates the need for regulatory measures. The transport sector fortunately aims at energy efficiency, but otherwise strongly focuses on electric mobility. The potentials of expanding railway traffic on the other hand are completely left unconsidered. In the interesting package regarding expansion of the power grid, the aspect of creating social acceptance remains underexposed.

On the whole, many of the government's announcements are too vague to allow at this stage for an assessment of whether the measures are suitable to achieve the objectives which the Federal Government has set itself. No doubt: There is a time slot ahead of us during which fundamental decisions for the decades ahead until the politically important date 2050 will be taken.

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### Full briefing paper:

#### www.germanwatch.org/klima/ek-e.htm

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