The price of the energy revolution

There is much talk in the climate debate about the price that we and future generations will have to „pay“ financially and in the form of quality of life if we simply continue as before.
There is much less talk about the price we pay for the alternatives that are currently being politically propagated as a „solution“ to „climate change as a result of the greenhouse effect“.
This contribution is focussed on Germany, but the arguments apply to other countries as well.

Implementation of the energy revolution

What is currently understood by energy system transformation? It is a bundle of measures that have already begun or are planned with the ultimate goal of making our entire energy supply „sustainable“:

- Switch-off of coal and nuclear power plants, ultimately also gas-fired power plants
- Energy generation by wind and solar energy
- Fuel generation by biofuels
- Electromobility
- Saving of heating costs by insulation and more efficient gas heatings

Feasibility of the energy revolution

The question must be asked – it should have been asked long before implementation – to what extent this concept can be implemented under the given boundary conditions. In late 2017, the long-standing director of the Munich IFO Institute, Prof. Hans-Werner Sinn, gave a trend-setting lecture on this subject, which is still topical.

One of the central problems of wind and solar energy is the storage of electrical energy due to unreliable generation. The main problem here is not short-term storage, which can take place with a „smart grid“ and/or batteries, but long-term, seasonal storage . This can only be done with known technology in storage power plants or with hydrogen or methane. Both concepts have their own problems, with the result that even under very optimistic assumptions a **maximum share of 50% of wind and solar energy can be sensibly realised** . The different possibilities are discussed in the film (in German), alternatively as a publication (in English).

Side effects of the energy system transformation

The public is widely given the impression that the „new“ technologies of energy system transformation also mean environmental compatibility. However, the introduction of these technologies has shown that there are sometimes foreseeable, serious „collisions“ with the protection of the environment and the preservation of creation.
The renowned German biologist Dr. Wolfgang Epple, who has been committed to environmental issues for more than 40 years, has dealt very intensively with the side effects of wind energy generation and biofuels, two major pillars of the energy system transformation:

- land consumption (in forests e.g. 600 trees per wind turbine, or about 1 ha area, of which 0.5 ha permanent). However, the question of land consumption does not adequately reflect the problems of displacing wild animals and disturbing the ecological balance.
- Wind plants as deadly traps for birds and insects
- Health impairment by infrasound of wind plants
- Impairment of biodiversity by monocultures for biofuel

At an Interview Dr. Epple summarizes the problems of these concepts (in German). In 2017 he wrote a groundbreaking

memorandum **On the compatibility of wind energy and biofuels with nature conservation** (in German). Due to the fact that the energy turnaround has come to a standstill as a result of declining subsidies, **the protection of nature and the preservation of creation is more and more obviously ignored in current policy** (in German), according to the motto: „If we notice that we are going in the wrong direction, we will double the speed" (E.F. Schumacher).

This film from England shows that this is not just a subjective assessment or a regional problem:

Michael Shellenberger, who for many years propagated regenerative energies in California as the „energy model country", comes to similar conclusions with the result: **„Now, after we have established that renewable energies cannot save the planet, we should not allow them to destroy the planet „**:

The poorest of the poor pay the bulk of the price

The German government plans to spend 40 billion over the next 4 years to reduce CO2 emissions. This is expected to reduce the global average temperature increase by 0.00018 degrees C in a hundred years – an immeasurably small success at such gigantic costs. Facing the fact that a given amount of investment can be spent only once – if the same amount were used to prevent tuberculosis in developing countries, more than 10 million people could be saved from death.