

## Assessment of the Results of the Commission on Structural Change

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### Background

On January 26, 2019, the Commission on Growth, Structural Change and Employment recommended that no more coal-fired power plants would be operated in Germany by 2038 at the latest. In this paper the Wuppertal Institute comments on the results of the Commission and makes recommendations for the current necessary steps for the climate and innovation policy in Europe, Germany and North Rhine-Westphalia.



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### 1. Assessment of the results of the Commission on Structural Change

- The agreement of the Commission on Structural Change represents an important milestone for the implementation of the energy transition goals, but the achievement of these goals is not yet an immediate success. Among other things, it is particularly important to emphasise the following,
  - that a cross-stakeholder consensus has been achieved and that there is thus an opportunity to create a common will to shape the future from the long-standing opposition of positions
  - that a **clear signal of change** will be given
  - that there is now a **planning certainty** for the actors and
  - that a **clear target** exists for an action programme.

The fact that the very heterogeneous Commission was able to reach agreement at all (with only one dissenting vote) is in itself a success and shows that social consensus building is still possible in key areas of action (with the willingness to compromise).

- Over the past eight months, the **Commission on Growth, Structural Change and Employment** has dealt with the entire range of challenges in connection with the gradual **phasing out of the coal-fired power generation in Germany** – taking into account, for example, climate protection, security of supply, competitiveness and employment prospects. Contrary to the expectations of many observers at the beginning of the Commission’s work, this „Herculean task“ was solved well and recommendations for action were submitted for all areas (see list of requirements and whether they were met below). Despite all the weaknesses that the compromise formulas contain almost naturally, it deserves our respect.
- **The results of the Commission must now be integrated into policy**, but they must also be transported across society in order to gain the necessary **acceptance and support**. The Commission’s broad membership gives it an excellent starting position. Now it is essential that **the measures and effects are explained clearly** and, above all, that it is made clear that the potential additional burdens are low compared with the “business-as-usual” effects – for example, electricity price increases even without the coal phase-out timetable. These will be relieved if the external costs avoided by the measures are included.
- With regard to climate protection, the proposals provide a good starting point for ensuring that the targets formulated in the climate protection plan for the energy sector for the year 2030 (reduction of CO<sub>2</sub> emissions by 61 to 62 percent compared to 1990) can be achieved (the measures are not sufficient to close the climate protection gap by 2020). However, this only applies under certain conditions, which still require a (clear) concretisation and flanking with further measures in the upcoming implementation process.
- The compromise negotiated in the Commission on Structural Change provides a **timetable for phasing out of the coal-fired power generation**. The nuclear phaseout shows that the commitment to the alternatives is often even more important than the phaseout. It is, therefore, now important **to push ahead vigorously with the expansion of renewable energies**, to create the necessary framework conditions with the expansion of the electricity grid and to implement a holistic approach to the energy transition which, above all, **takes the potential of energy efficiency into account to a much greater extent than before**.

## 2. Implications for the international and European climate policy:

### Using the possibilities of the emission trading system to achieve a net effect

- The present proposal of the Commission on Structural Change also sets strong signals for the international climate protection debate. Nevertheless, it would have been desirable to have had it available before the 24th Conference of the Parties (COP24) of the UN Framework Convention on Climate Change at the end of 2018. An exit from the risky use of nuclear energy and a targeted phase-out of the coal-fired power generation a short time later shows that a switch to **a 100% renewable energy supply does not have to remain a utopia**, but is concretely possible under today’s conditions for increasingly cost-effective renewable energies. In addition, however, there must be a consistent exploitation of the potential for energy efficiency.
- The option mentioned by the Commission **to quit emission rights under the European Emissions Trading Scheme (ETS)** must, however, be used at all costs. Otherwise, there is the threat of a mere relocation of emissions abroad due to the fixed CO<sub>2</sub> budget throughout Europe.

### 3. Implications for national policies and the need for accompanying measures

- The central challenge at the national level is to **translate the proposals into concrete political action** at the federal and state levels – a massive deviation or delay in the implementation process would cause massive political damage and miss a great opportunity. It would, therefore, no longer be possible to shape the energy transition process on the basis of broad support for years to come and it would be unlikely that the goals set would be achieved. It would appear necessary to **translate these requirements into a treaty** that ensures that the agreements would remain in force beyond legislative periods.
- The Commission has carried out calculations on the utilisation of the coal-fired power stations and estimated the net emission reduction which the successive decommissioning of the power stations could lead to. Whether these developments will occur in this way, must be questioned. It would be better to **flank the decommissioning measure** in order to avoid rebound effects. This could be achieved, for example, by setting a maximum amount of electricity generated per power plant (which can be transferred between power plants) or, even better, by setting a minimum price for CO<sub>2</sub>. Otherwise, there is a risk that power plants will be decommissioned, but that the capacity utilisation of power plants still in operation will be higher, and that the CO<sub>2</sub> reduction intended with the decommissioning will be at least partially compensated.
- The Commission on Structural Change suggests that the agreements reached now should be reviewed over time and, if necessary, adjustments should be proposed. This takes account of the fact that the energy system in particular is subject to dynamic changes both nationally and internationally. This review clause should be understood as a result. It should also be explicitly possible to state that the decommissioning of coal-fired power stations can also take place more quickly than is stated in the Commission's report. This would also be desirable in terms of climate protection and could be done, for example, if the market penetration of renewable energies was to be faster than assumed due to further economies of scale and if **barriers** to the implementation of energy-saving measures **could be overcome** more quickly than assumed.
- The Commission on Structural Change primarily dealt with the energy supply, or more precisely the electricity supply. It is now urgently necessary to take a closer look at the other sectors as well and to formulate concrete measures. The **development of a climate protection law at federal level and the further development of the climate protection plan** provide the right framework for this. In the planned programme of measures 2030, the ministries of the Federal Government are called upon to identify adequate and feasible instruments that will also make it clear for the transport, buildings, industry and agriculture sectors how the sector goals formulated in the climate protection plan 2016 can be achieved.
- An important overarching measure seems to be a **reorganisation of the complex energy levy and tax system**, which is more strongly oriented **towards CO<sub>2</sub> emissions** and which today often leads to a wrong steering effect for climate protection. Due to the large number of obstacles that cannot be overcome by a central measure alone, however, additional sector-specific policy packages of promotion, demand and information as well as other accompanying instruments must be strengthened and further developed. This is particularly true with regard to the high potential of energy efficiency, which, depending on the sector, amounts to more than 50 percent of today's energy requirements and could be largely exploited within the next 20 years under economically attractive conditions. The extensive **use of energy target potentials** appreciates the basis for the fact that electricity from renewable energies can be increasingly used to reduce greenhouse gases in the building, transport and industrial sectors within the framework of sector coupling without structural excessive demands.

- The energy transition can only succeed if it takes all people with it, convinces them of the necessary changes and distributes and supports the social burdens fairly. In addition to **safeguarding employment opportunities** in the coal fields, it is, therefore, absolutely sensible for consumers to compensate for the potential electricity price effects of phasing out coal. The Commission is proposing a **reduction in network charges** to reduce the burden on consumers. However, it does not specify how this is to be done. It makes sense to consider only compensation from the national budget, i.e. a tax-financed solution.
- However, the question arises as to whether relieving all consumers in relation to the electricity price is the right signal. This is particularly true in view of the fact that energy efficiency, the second major pillar of the energy transition- and climate policy – has so far received too little attention. Effective incentives for savings can only be created through higher energy prices for consumers. For them, the decisive factor is not the electricity price, but the electricity bill, i.e. the product of the electricity price and electricity consumption. If it is possible **to implement energy efficiency measures through specific measures and targeted incentives**, the electricity bill and thus the burden on consumers will not have to rise at the end of the day. Proposals have long been on the table, but they must be implemented as a matter of urgency. In addition, forms of relief should be sought to ensure compensation, especially for low-income households. This would enable to make the energy transition and the phasing out of coal-fired power generation socially acceptable.
- Equally important is the **compensation for the energy-intensive industry** in order to avoid migration and carbon leakage. The Commission on Structural Change takes up this aspect with reference to the continuation of the special electricity price compensation for industry.
- Whether and in what form significant electricity price effects will occur at all, depends very much on the design of the compensation measures. On the one hand, the decommissioning of coal-fired power plants has an increasing effect on the market price due to the postponement of the marginal power plant that sets the electricity price. On the other hand, this effect is at least partially (largely) offset by increasing electricity generation from renewable energies. The expansion of **renewable energies** must now **be driven forward on a massive scale**. The 65 percent contribution of renewable energies to the electricity supply in 2030, as stipulated in the coalition agreement, seems adequate for this purpose. At the same time, maintaining security of supply requires sufficient measures to build gas-based backup capacities and provide sufficient flexibility options (including storage, demand side management, power-to-x technologies). Presumably, the establishment of a subsidy system for such flexibilities analogous to the tender model of the Renewable Energy Sources Act (EEG) in connection with further improvements of the framework conditions (e.g. for the allocation of costs for stored electricity or electricity used in Power-to-X or the power prices for systems in demand side management or through a differentiation of grid usage fees for conditional vs. unconditional grid usage) is unavoidable.
- With the coal sector, the Commission takes up one of the central structural change challenges in Germany and makes concrete proposals on how to resolve a field of conflict that has existed for years. However, it is urgently necessary to deal with other structural change challenges in order to avoid **structural breaks or even disruptive developments**. This applies above all to the automotive industry and the controlled switch to new climate-friendly drive forms and Mobility 4.0, but also to the targeted transition to a circular economy.

#### 4. Implications at NRW level

- The Commission's proposals form a good basis for opening up (promising) future prospects for the regions particularly affected by the decline in coal-fired power generation and coal mining. This requires structural aid over a longer period of time, for which firm commitments are required and which offer planning security. It is now central **to bundle the innovative forces** in the regions in a targeted manner with the structural funds and **to create new value-added and employment potentials**.

This includes supporting soft location factors aimed at making the region more attractive for workers. A pure promotion with the watering can is ineffective and leads to a misdirection. It is, therefore, urgently necessary to bundle the wealth of individual measures listed in the Commission's report, to transform them into a consistent narrative and thus to offer the possibility of generating new identification forces for the affected regions. The Commission's final report identifies the starting points for this. This applies not only to the development of energy regions of the future, but also to non-energy-related development opportunities – such as model regions for a circular economy. These must be taken up in a future-oriented way with reference to the concrete, sometimes very different, local potentials.

## 5. Conclusions: Comparison with the requirements of the Wuppertal Institute to the Coal Commission

- What point should the Commission take into account in the coal phase-out timetable to ensure that the coal phase-out is a success – **and what has it done about it?**

- Formulation of a concrete exit time, but at least one exit corridor, which should not last longer than three years (i.e. 203x to 203y) – **implemented**
- Formulation of clear (verifiable) milestones for short and medium-term effective contributions to the climate change targets 2020 and 2030 – **implemented (at least for 2030)**
- Transparency regarding the regulation of whether and how the power plant operators are to be compensated – **partially implemented, concrete regulations only hinted at**
- Guidance on how to close the supply gap (e.g. faster development of renewable energies, increased implementation of energy efficiency measures, better utilisation of gas-fired power plants) and how to ensure security of supply in the context of the implementation of the phase-out roadmap (key aspect to avoid giving industry an excuse to oppose the proposals) – **measures proposed**
- Formulation of a clear perspective for the affected region with regard to the development of alternative employment opportunities (with clear reference to the different conditions in the Lausitz region, Central German region, Rhineland region) – **numerous measures proposed**
- Embedding in a consistent narrative or a transformation story (for example from a brown coal mining area to a model region for a circular economy for the Rhine region) – **developed rudimentarily, but needs to be deepened significantly**
- Formulation of concrete first measures with which the structural change can be initiated proactively and indications over which periods of time the structural change must be supported – **requirements have been outlined concretely**
- Formulation of a revision clause, i.e. proposals after which periods (about 2025 and 2030) a review of the roadmap should take place and adjustments are possible if necessary (attention: revision clause does not mean that nothing has to happen up to this point) – **measures proposed**

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<sup>1</sup> This list has been prepared by the Wuppertal Institute preceding the formulation of the results of the commission's work

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