CLIMATE PROTECTION VISION 2050

cepPolicyBrief No. 2019-05



KEY ISSUES

Objective of the Communication: The Commission presents its vision for a "climate-neutral economy" by 2050.

Affected parties: Whole economy



Pro: Developing a long-term EU strategy for the reduction of green-house gas emissions ("GHG emissions") may increase planning certainty for companies.

Contra: (1) Before the EU establishes the target of a "climate-neutral economy" by 2050, it should be able to estimate what impact the necessary GHG reductions will have in the EU.

(2) The continued fragmentation of EU climate policy is a barrier to discovering the most cost-effective GHG reductions.

(3) The envisaged energy-saving target of 50% by 2050 distorts competition for the most cost-effective GHG-avoidance options.

The most important passages in the text are indicated by a line in the margin.

CONTENT

Title

Communication COM(2018) 773 of 28 November 2018: A Clean Planet for all – a **European** strategic **long-term vision for a** prosperous, modern, competitive and **climate neutral economy**

Brief Summary

Context and objectives

- The UN Convention on Climate Change, agreed in Paris in 2015 ("Paris Agreement"), has the long-term goal of keeping the increase in the global average temperature to well below 2°C if possible 1.5°C as compared with pre-industrial levels ["Paris climate targets", see <u>cepPolicyBrief No. 2016-13</u>].
- The Paris Agreement was ratified by 181 signatories including the EU and its Member States. The signatories
 must submit a long-term strategy by 2020 for achieving the Paris climate objectives. [p. 4]
- Until now, the EU has pursued the aim of becoming a "low carbon economy" and reducing harmful greenhouse gas emissions ("GHG emissions") by between 80% and 95% as compared with 1990 levels [COM(2011) 112; see <u>cepPolicyBrief</u>].
- The Commission presents its "vision" for a "climate-neutral economy by 2050" and aims to encourage debate on the issue. "Climate neutrality" means that, on balance, we do not emit more greenhouse gases (GHGs) than are absorbed by natural "GHG sinks" – such as forests or the sea which remove and absorb GHGs from the atmosphere. [p. 4]
- The subsequent debate should enable the EU to develop an "ambitious strategy" for the long-term reduction of GHG emissions "by early 2020", in line with the Paris Agreement [p. 25].

▶ EU climate policy up to 2030

- The EU Climate and Energy Policy for the period 2021–2030 has already been comprehensively defined. This
 includes, in particular, the EU rules [p. 5]
 - on EU emissions trading [EU ETS, see cepInput 03/2018],
 - on climate protection outside the EU ETS [see cepInput 04/2018],
 - on energy efficiency [see cepInput 05/2018] and
 - on support for renewables.
- The Commission estimates that, without additional changes, the resulting requirements will only result in a reduction of GHG emissions, as compared with 1990 levels, of [p. 7]
 - 45% by 2030 and
 - 60% by 2050.
- The Commission believes that a GHG reduction of 60% by 2050 is not enough to achieve the Paris climate objectives and advocates further GHG reduction measures in all economic sectors [p. 7].



Energy Efficiency

- The Commission calls for a 50% reduction in energy consumption in the EU by 2050 as compared with 2005 [p. 8].
 EU energy efficiency standards for household and electronic products will have an indirect impact on the energy consumption in third countries in that manufacturers will also sell energy efficient products, developed for the
- EU market, in third countries. - As 40% of energy consumption comes from the heating and cooling of buildings, and a large proportion of the
 - existing building stock will still exist in 2050, more buildings will be renovated than was previously the case per year so that they [p. 8 et seq.]
 - are better insulated and
 - are heated by way of GHG-free alternatives to gas and oil such as solar thermal.

GHG-free electricity generation

- The Commission wants the consumption of natural gas and oil to fall and, instead, the share of electricity in final energy demand to at least double to 53% by 2050. This will reduce energy imports, from their current level of 55%, to 20% by 2050, which will in turn reduce import costs by up to € 3 billion between 2031 and 2050. [p. 8]
- Today, over 50% of electricity production in the EU is already GHG-free. This figure will rise to "up to" 100% by 2050, with demand being covered by [p. 9]
 - renewable energy sources as to 80% and
 - nuclear power as to "circa" 15%.

GHG reduction in the transport sector

- 25% of GHG emissions in the EU are currently caused by transport [p. 10].
- The Commission wants GHG emissions to be reduced by 2050 by greater use of electric and GHG-free modes of transport. For this purpose [p. 10]
 - the possibility of electrifying short sea shipping and inland waterways is being considered,
 - more biofuels and fuels produced from water and CO₂ using electricity ("e-fuels") will be used in aircraft and long-distance road haulage.
- By ensuring a higher proportion of electric vehicles, other negative "external effects" such as air pollution and noise – and the corresponding "external costs" borne by other transport users and the community, will be reduced, in addition to harmful GHG emissions [p. 11].
- All modes of transport air, road, rail and water [p. 11]
- will be subject to the regulatory and tax conditions and
- will have "external costs" included in the calculation of their respective transport costs ("internalised"), thus ensuring that polluters "bear the burden" so that citizens and companies opt for low-emission forms of transport more often.
- The Commission wants to increase the attractiveness of rail freight services. For this purpose, technical barriers between national rail networks and other competitive disadvantages relative to road haulage will be removed.
 [p. 11]

GHG reduction in industry

- Most industrial GHG emissions are caused by the manufacture of chemicals, steel and cement. These and other raw materials are nevertheless necessary components in low-emission technologies such as electric cars and renewable energies. [p. 12 et seq.]
- GHG emissions arising in the production of raw materials are difficult to reduce as existing plants would have to be comprehensively modernised or completely replaced [p. 12].
- The Commission wants to reduce GHG emissions in the manufacture of raw materials by way of [p. 12 f.]
 higher recycling rates,
 - the industrial use of GHG-free manufacturing processes that have so far only been tested on a small scale such as hydrogen-based primary steel production.
- By international standards, European industry already has a low GHG intensity. In future, it should also
 - "be at the forefront of climate-friendly technologies" [p. 12],
 - be protected from international "competitive pressure" which can lead to the relocation of production and GHG emissions to third countries ("carbon leakage"; see ceplnput 04/2016) [p. 24].

Need for investment

- In order to achieve the target of a "carbon-neutral economy" by 2050, investment in the energy system and related infrastructure will be increased as a proportion of GDP from the current figure of 2% to 2.8% (p. 16).
- According to the Commission, the annual amount of additional investment of € 175-290 billion could be set off
 against cost savings of over € 200 billion from a reduction in damage to health [p. 19].



Policy Context

The EU wants to reduce its GHG emissions by 40% by 2030, as compared with 1990 levels [Conclusions of the European Council of 23/24 October 2014, see <u>cepInput 02/2015</u>]. This reduction corresponds to its "contribution to climate protection" ("Nationally Determined Contribution" – "NDC") to which it is committed as signatory to the Paris Agreement [COM(2015) 81; see <u>cepPolicyBrief 2015-10</u>]. Member States must submit their respective long-term climate and energy strategy for the next 30 years by 1 January 2020 [Art. 15 Governance Regulation (EU) 2018/1999; see <u>cepPolicyBrief 17/2017</u>].

Options for Influencing the Political Process

Directorates General:

DG Climate (leading)

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

The development and publication of a long-term EU strategy – going beyond 2030 – to reduce GHG emissions may in principle increase planning certainty for companies because, in order to make investment decisions aimed at the distant future, companies need information about the future shape of EU climate policy. Before the EU finally establishes the target for a "climate neutral economy" by 2050, however, it should be able to estimate what concrete impact the necessary GHG reductions will have on citizens and companies in the EU.

The potential for reducing GHGs in the future, depends largely on the technological progress made over the forthcoming decades and that is something which cannot be reliably forecast or implemented by policy. A more ambitious EU climate policy will in any case only make a noticeable contribution to global climate protection if it triggers technological innovations that lead to major GHG reductions outside the EU as well.

Impact on Efficiency and Individual Freedom of Choice

The continued fragmentation of EU climate policy – with its variety of instruments for the different sectors – is a barrier to the systematic discovery of the most cost-effective GHG reductions in the EU across all sectors and national borders. From no later than 2031, therefore, the reduction of GHG emissions should be ensured primarily by way of cross-sectoral and cross-national emissions trading systems which allow for the uniform pricing of GHG emissions.

The envisaged energy savings target of 50% by 2050, as compared with 2005 levels, should serve as no more than a non-binding guideline which does not give rise to any mandatory obligations for the Member States because saving energy is not an end in itself but only a possible method of achieving the long-term EU climate targets. The target distorts competition for the most cost-effective GHG-avoidance options.

The Commission rightly insists that the regulation of road transport should take account not only of GHG output but also additional negative external effects – such as air pollution and congestion – and that differences in the regulation of the individual modes of transport should be removed. For this purpose, the negative external effects produced by the individual modes of transport should be priced in a uniform manner. This may – or may not – mean that logistics companies will more frequently choose to transport freight by rail rather than by road.

Although the Commission rightly points out that the GHG intensity in the manufacture of many raw materials can only be reduced with high levels of investment, it does not explain how manufacturers, who generally have to compete internationally, are going to be able to fund the necessary investment in the future.

The Commission rightly points out that European industry can only be at the "forefront" of climate-friendly technologies as long as this does not put it at a disadvantage with respect to its competitors in third countries. Otherwise, the transition to a "climate-neutral economy" in the EU by 2050 will lead to GHG-intensive industrial production being moved from the EU to third countries ("carbon leakage") as a result of which not an ounce of GHGs will be reduced and an increase in global GHG emissions will be imminent [see <u>cepInput 04/2016</u>].

Contrary to the Commission's findings, neither the amount of investment in infrastructure needed for a climate-neutral economy nor the cost savings from a reduction in damage to health can be, even vaguely, estimated decades in advance. For this reason, the Commission's estimates should have no influence on the concrete shape of long-term EU climate policy.

Impact on Growth and Employment

The macro-economic impact on growth and employment arising from a more ambitious GHG reduction target up to 2050 cannot be reliably forecast at present.



Impact on Europe as a Business Location

Stricter GHG reduction targets tend to give rise to higher production costs, intensify, where there is a lack of compensation, the carbon leakage problem and thereby make Europe less attractive to investors.

Legal Assessment

Legislative Competency

Unproblematic. In the context of its environmental policy, the EU is empowered to take measures to protect the climate (Art. 191 TFEU]. In addition, it is entitled to adopt energy policy measures in order to promote energy efficiency and energy savings as well as the development of new and renewable energy sources [Art. 194 TFEU].

Subsidiarity

Unproblematic. Climate change is not only a cross-border problem but a global one which cannot be solved by individual countries. EU action is therefore justified.

Conclusion

Developing a long-term EU strategy for the reduction of GHG emissions may increase planning certainty for companies. Before the EU establishes the target of a "climate-neutral economy" by 2050, it should be able to estimate what impact the necessary GHG reductions will have in the EU. The continued fragmentation of EU climate policy is a barrier to discovering the most cost-effective GHG reductions in the EU. The envisaged energy-saving target of 50% by 2050 distorts competition for the most cost-effective GHG-avoidance options.