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Eurogas views on the Energy Efficiency Directive and the Energy Performance of Buildings Directive

Eurogas is the association representing the European gas wholesale, retail and distribution sectors. Founded in 1990, its members are 43 companies and associations from 22 countries.

Eurogas represents the sectors towards the EU institutions and, as such, participates in the Madrid Gas Regulatory Forum, the Gas Coordination Group, the Citizens Energy Forum and other stakeholder groups.

Its members work together, analysing the impact of EU political and legislative initiatives on their business and communicating their findings and suggestions to the EU stakeholders.

The association also provides statistics and forecasts on gas consumption. For this, the association can draw on national data supplied by its member companies and associations.

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Summary of Policy Asks

Energy Efficiency Directive

- A. Energy Efficiency measures are an effective endeavour to achieve well-designed gains toward the principal aim of lowering greenhouse gas emissions – a direction toward which Eurogas asks for continued focus.
- B. Further analysis is needed to undergird any target proposal. Sensitivity analyses with clearly explained assumptions on key factors, including discount rates, and thereby greater understanding of effects on the ETS and the power mix are critical. Encouraging more coal in the power mix via energy efficiency measures, as the impact assessment shows, would be counter-productive.
- C. Costs and funding, i. e. the impact on the consumer, also need to be made clear.
- D. Due to the negative impacts on the ETS, the uptake of renewable energy sources, gas demand, and consumer prices, which the impact assessment shows, Eurogas advocates a non-binding target that does not undermine the overall aim of the Union to reduce greenhouse gas emissions in a cost-effective way.
- E. The 2020 target based on either primary energy consumption (PEC) or final energy consumption (FEC) should be maintained, to avoid retroactive changes to law that could affect investment.
- F. The 2030 target should be based on PEC in order to account for true system-wide energy savings.
- G. While Member State choice and decision making is welcomed for article 7, some caution and change is needed. The current proposal limits the possibility to use onsite renewables and to count energy savings made before 2020 which have an impact beyond 2020. As this group already includes the possible exclusion of the ETS sector, this is a strong and unnecessary limitation and should be removed. This limitation also discourages long-term measures.
- H. It is not appropriate to continue Article 7 beyond 2030 at this point, as the EU is establishing a package to deliver the 2030 targets. A separate impact analysis should be done to assess this in the future.
- I. Savings under pre-2020 measures which go beyond the year 2020 shall also be taken into account in the period 2021 to 2030. A transition between the two periods is thus needed, and not a sharp division.
- J. Eurogas supports the targeted use of energy efficiency measures to combat energy poverty. Gas-fired technologies are well placed to contribute to this objective. However,

the adoption of such energy efficiency measures should be determined by Member States, on a cost-benefit basis, and should not be mandatory.

- K. Clarification of Article 7a is needed. If an obligation of widespread installation of smart metering is implied, costs and benefits should first be considered.
- L. An approach to accommodate the landlord-tenant relationship will need to be addressed very accurately.
- M. Any obligation to install remotely readable meters and cost allocators from 2020 should be subject to cost-benefit analyses.
- N. Clarity is needed in defining billing and billing information for gas, for electricity, and for heating and cooling, accepting that remote reading will not be technically possible or cost-efficient in all cases.
- O. While the opportunity to have a comparison with an average, normalised or benchmarked user can bring added-value, this can be supplied to customers by different channels and need not be prescribed for bills.
- P. Eurogas supports the use of primary energy factors (PEFs), but care is needed in their calculation. This is and should remain a reflection of the conversion of final energy to primary energy. It should not be turned into a tool to promote the use of electricity because this could compromise the EU's targets for greenhouse gas emissions reductions and energy efficiency. The PEF should therefore be based on the existing fuel mix, not on what that fuel mix could be in 2020, and then updated every five years. Against this background, it should be at least 2.2 for electricity.

Energy Performance of Buildings Directive

- Q. Alternative refuelling points for gaseous energy, such as CNG, should be encouraged (not just e-mobility refuelling points).
- R. The definition of 'energy from renewable sources' should include renewable synthetic gas, e.g. from power-to-gas processes.

Introduction

Eurogas members are strong supporters of energy efficiency. It contributes to the competitiveness of Europe, has a key role to play in responding to the challenge of climate change and in the transition to a resource efficient economy and a sustainable energy mix. Measures to promote energy efficiency should be coherent, proportionate and essentially market-driven, while also avoiding policy overlap which can carry unintended consequence in terms of undermining cost-effective decarbonisation. Energy efficiency measures should also give adequate attention to the whole spectrum of the energy system, and not target specific energy carriers.

Gas continues to offer major affordable gains in both energy efficiency and greenhouse gas emissions reductions. Gas-based appliances can also induce greater renewable heating and cooling for the sector, as well as sustainable mobility solutions.

Eurogas supports the Commission's approach of limiting the review to specific Articles. The 2012 Energy Efficiency Directive only came into force in 2014 and has not yet been completely transposed by all Member States.

The actual delivery of energy efficiency gains is even more complex. Given that it is often based on individual circumstances, tailored solutions are necessary. Legislation which is overly prescriptive or limiting can make it very difficult to deliver projects. The over-arching objective as stated by the European Council¹ is the reduction of greenhouse gas emissions. This should not be lost out of sight.

The proposal appears to favour energy efficiency measures via energy sources, such as electricity over natural gas, through a lower Primary Energy Factor, which is the means to compare the two. At the same time, no safeguards are proposed to counter the risk of perverse effects, i.e. that highly inefficient direct heating (e.g. electric radiators) is used or gas as a heating fuel is replaced with electricity based on coal, which is already the case. The result could very well be a decrease in efficiency and an increase in greenhouse gas emissions.

This paper sets out how the proposals can be amended to prevent undesired effects, to increase the range of options and to make the achievement of greenhouse gas emissions reductions through energy efficiency more cost-efficient.

¹ REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 for a resilient Energy Union and to meet commitments under the Paris Agreement and amending Regulation No 525/2013 of the European Parliament and the Council on a mechanism for monitoring and reporting greenhouse gas emissions and other information relevant to climate change. July 20, 2016.
<https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-482-EN-F1-1.PDF>

Energy Efficiency Directive

Article 3 - Energy Efficiency Targets

Key elements in the Impact Assessment resulting in the proposed 30% target require reflection

1. Eurogas supports the achievement of the agreed 27% target. Consideration of the proposal to increase this target to 30% is very much contingent on the inputs, outcomes, and sensitivities of the impact assessment. There are several key elements within the impact assessment that require further reflection:
 - a. It would be greatly enhanced by including a sensitivity analysis to key factors, such as economic growth², cost of capital and fuel prices. The sensitivity of the impact of these parameters is demonstrated by looking to the past, where, as stated in the impact assessment, 35% of energy savings (2008-2012) were due to the economic downturn.
 - b. The higher target has a very negative impact on the EU's power generation mix. According to the Impact Assessment (IA), the percentage of coal in Europe's energy mix actually increases, while all other energy sources including natural gas and renewables reduce. (The ETS price is projected to fall by 35% (from 42 – 27 EUR/tonne³), showing the impact of overlapping policies).

Gross Inland consumption	Solid Fuels	Oil	Nat Gas	Nuclear	Renewables
% change from EU 27%	+4	-2	-10	-1	-3

Based on Table 6, Energy Efficiency Impact Assessment

- c. It is often not very clear what the key input parameters and indicators in the IA are. For example, what is the renovation rate that delivers the target, and how does it compare with Europe's current rate of approximately 1%?
- d. A better explanation of the significant reduction in discount rates for energy investment decisions is needed. For example, the discount rate for the energy-intensive industry is now on par with that of a regulated monopoly grid operator. Household discount rates have dropped from 17.5% in the 2013 reference scenario to a range between 10-12% in this Impact Assessment.
- e. A factual assessment of the costs and implications of energy efficiency for consumers is needed. This assessment should be the basis for the definition of concrete targets.

² Impact assessment assumes the average EU GDP growth rate is projected to remain relatively low at 1.2% per year for 2010-2020, down from 1.9% per year during 1995-2010. In the medium to long-term, higher expected growth rates (1.4% per year for 2020-2030 and 1.5% per year for 2030-2050).

³ Table 10 EED Impact Assessment

- f. Greater consideration is needed of the extent to which funding required to support the proposals will become available. The investment expenditure needed to deliver a 30% target compared with a 27% target is approximately EUR 190⁴ for every European citizen for the ten-year period (2020 – 2030). Financing such capital expenditures presents a unique challenge.

The overall objective of reducing GHG emissions cost-effectively is affected as a binding energy efficiency target impacts other objectives and tools.

2. The European Council decision in October 2014 was to make the reduction of greenhouse gas emissions the cornerstone of EU policy. The proposal to make the target for energy efficiency binding undermines this decision. Europe is on track to reach its energy efficiency target of 20% by 2020 without it being binding. It would be more beneficial to focus on addressing barriers and obstacles to increase energy efficiency further since a binding target will not remove these. Due to the negative impacts on the ETS, the uptake of renewable energy sources, gas demand, and consumer prices, Eurogas advocates a non-binding target that does not undermine the overall aim of the Union to reduce greenhouse gas emissions in a cost-effective way.
3. The proposals change the nature of the 2020 target considerably by basing it on both final and primary energy consumption and not either of them. This tightening of the target is a major change of direction at a late point, rather than a “clarification”. The current target, which is enshrined in law (option for Member States to address primary or final energy consumption), should not be amended, as retroactive changes reduce investor certainty.

For 2030, Eurogas supports one target solely based on primary energy consumption

4. The new target should be limited to primary energy consumption as this captures all forms of energy. Two targets not only cause unnecessary complexity, but are particularly challenging for cogeneration. This is a highly efficient means to deliver savings in primary energy, but this is not recognisable from the perspective of final energy consumption. The use of a final energy target also neglects the marginal supply principle, where additional electricity needed in the colder winter periods will most likely be provided from coal rather than gas or renewables, according to the impact assessment.

Article 7 – End Use Savings

End use savings must be achieved cost-efficiently and with flexibility as the guiding principles

5. The key strength of Article 7 lies in its flexibility, which allows Member States to address ambitiously their individual challenges and opportunities in order to achieve the necessary savings cost-efficiently. The least costly measures, or so called low-hanging fruit, can be used first. The more is achieved, the more flexibility will be needed to reach the remainder of the target, especially if this is also to happen in a cost-efficient way.

⁴ Based on investment expenditure costs of EUR 98 billion in Table 22 of IA, divided by EU population of 508m. System costs increase of EUR 9bn from Table 24.

Member States need to keep all options such as obligation schemes or national measures, or both.

6. We fully support that Member States can continue to have the choice to use obligation schemes or national measures or a combination of both. This is essential, given the different starting points for Member States to deliver energy efficiency gains. Member State decisions in energy sectors, including transport, should also thereby be able to consider the effects of interactions with other regulations in their respective contexts. Furthermore, the continued ability to vary reductions between years must be maintained. In Article 7, paragraph 2 (part d & e), the proposal limits the possibility to use onsite renewables and to count energy savings made before 2020 which have an impact beyond 2020. They are limited because they are included in the group which can only reach 25% of the savings. As this group already includes the possible exclusion of the ETS sector, this is a strong and unnecessary limitation and should be removed. This limitation also discourages long-term measures.
7. It is not appropriate to continue Article 7 beyond 2030 at this point, as the EU is establishing a package to deliver the 2030 targets. A separate impact analysis should be done to assess this in the future. It is not possible to know today what the circumstances will be in over a decade. Furthermore, the governance proposal covers the process for the development of long-term strategies by Member States.
8. It is also inadequate that for the period 2021 – 2030 Member States may not count energy savings from long-term measures set before the end of 2020. This will lead to such measures being postponed because their long-term energy savings will not be counted beyond the end of 2020. Therefore, savings going beyond the year 2020 shall also be taken into account in the period 2021 to 2030. A transition between the two periods is thus needed, and not a sharp division.

Article 7a. Energy Efficiency Obligation Schemes

Energy efficiency measures as a means for addressing poverty should not be imposed solutions if they are not economically effective, and they should not be imposed on energy companies

9. The proposed provision links with savings obligations requirements to address energy poverty and social housing. The Gas Directive 2009/73 EC Article 3 underlines the importance of consumer protection. Consumer vulnerability (of which energy poverty is arguably one category) is a broad concept, which can be addressed by a variety of means, including general consumer (non-energy specific) law, self-regulation, and social policy. Eurogas supports the targeted use of energy efficiency measures to combat energy poverty. Gas-fired technologies are well placed to contribute to this objective. However, the adoption of such energy efficiency measures should be determined by Member States, on a cost-benefit basis, and should not be mandatory.

Verification of savings are important but the systems for counting them need to be cost-efficient

10. Eurogas supports the need for sound systems to verify the savings that count towards the meeting of obligations at Member State level as well as alternative measures. As currently drafted, however, the requirements of Article 7a would seem to presuppose the availability of, at the very least, remote reading, which is not technically possible in all cases with the existing housing stock. This should be clarified. Furthermore, if this implies an obligation of widespread installation of smart metering, costs and benefits should first be considered.
11. Another concern is that Article 7a5a refers to measures to be implemented as a priority in households affected by energy poverty. These will be very challenging since households will generally not be owner-occupiers, but shifting populations of tenants. An approach to accommodate the landlord-tenant relationship will need to be addressed very accurately.

Article 9a. Metering, sub-metering and cost-allocation for heating and cooling and domestic hot water

Any obligation to install remotely readable meters and cost allocators from 2020 should be subject to cost-benefit analyses

12. The requirements of this Article would apply to gas heating in dwellings in multi-purpose buildings heated from a central source, not using individual gas boilers. Similar to the requirements in Article 9, any obligation to install remotely readable meters and cost allocators from 2020 should be subject to cost-benefit analyses as foreseen for the obligation in 9a4. In some cases, it could be technically impossible to refit all installations for remote reading. Other options exist to ensure fair allocation of costs, including cost allocators mentioned in Annex VII a.

Annex VIIa

Remote reading will not be technically possible or cost-efficient in all cases

13. It is not clear why, if remotely readable meters are in place, the proposal requires that “billing or consumption information” has to be made available at least monthly as the consumption information is always available to the customer.
14. Moreover, for the sake of consistency, the distinction between billing and billing information contained in the current Energy Efficiency Directive (EED), and maintained in the proposed Article 18 of the Recast Electricity Market Directive, as well as in the EED in relation to gas (Article 10 and Annex VII), should be kept for heating and cooling and domestic hot water. Clarity is needed, accepting that remote reading will not be technically possible or cost-efficient in all cases.

15. It should be clear that the reference to billing is in fact to billing information, and should not imply that the customer has to pay monthly for actual consumption.
16. In para. 3, the requirements, notably 3b and d, are unduly onerous. It is not understood why the information on the fuel mix is extended to include final users supplied by district heating and district cooling. If it is to be a requirement on district heating and district cooling suppliers, that should be clear. Also, while the opportunity to have a comparison with an average, normalised or benchmarked user can bring added-value, this can be supplied to customers by different channels and need not be prescribed for bills.

Primary Energy Factor (PEF)

Eurogas supports the use of PEFs, but care is needed in its calculation

17. We support the use of a PEF, as it is necessary to compare the use of electricity with energies such as natural gas, in a fair manner. Also, the flexibility to allow Member States to choose their own PEF based on their own fuel mix is needed.
18. However, the PEF should be based on the existing fuel mix and not on a potential forward looking scenario of 2020, as the future energy mix of Europe is very uncertain and impacted by many different factors. Given that the fuel mix is continually changing, the PEF should be updated every five years, thereby providing stability, while evolving over time.

PEF should not be used as a tool to achieve policy objectives

19. Fundamentally, the PEF should reflect reality and should not make the use of electricity artificially more attractive than the use of other energy. The PEF should thus not be used as a tool to achieve policy objectives, but remain a derived calculation to reflect the conversion of final energy to primary energy. Therefore, the PEF for electricity should be at least 2.2 if the points above are considered. (This is in contrast to the reduction of the PEF from 2.5 to 2.0 that is currently sought by the European Commission.) A PEF taking account of the marginal use of electricity would give a much higher number, i.e. if more electricity is needed in winter months due to a cold spell, baseload coal-fired electricity would sharply increase the real PEF in many countries.
20. The PEF in this Directive should not be used for energy labelling and eco-design. Energy for heating is mainly used in the winter and does not represent an average over the year. Furthermore, the reduction of the PEF for electricity should not result in highly inefficient electric appliances, which are currently forbidden under the Ecodesign rules, appearing to be more efficient and becoming available for sale again.

Additional Point

21. The definition of an SME used for the EED places an undue burden on small energy suppliers, which may not be intended and should be amended.

Energy Performance of Buildings Directive

Buildings are not the only means to decarbonise the EU energy system

22. The Member States' Roadmaps are required to deliver complete decarbonisation of the buildings sector by 2050. While this is one means to decarbonise the energy system to meet global climate goals, it is not the only one and reduces the likelihood of emissions reductions in other sectors, such as transport or agriculture.

Keep the option open for a gas vehicle refuelling point

23. The proposal contains a requirement for Member States to ensure that newly built residential buildings and those undergoing major renovations, with more than ten parking spaces, include the pre-cabling to enable the installation of recharging points for electric vehicles for every parking space. This should be broadened to alternative low-carbon fuel and should not be limited to electro-mobility. The installation of a gas refuelling point in the same building should be an alternative option to electricity. The potential to reduce emissions through gas is also significant and existing infrastructures can be used rather than having to invest heavily in new infrastructures. This is demonstrated in Annex I, which shows the potential reductions through gas and electricity are comparable and depend on the specific energy mix employed throughout automobile use.
24. Deeper consideration of Europe's renovation rate is warranted in order to focus on the barriers that Member States are facing, as also indicated in point 1c.

Renewable gas can also be produced from power-to-gas

25. The definition of 'energy from renewable sources' should include renewable synthetic gas, e.g. from power-to-gas processes.