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# Eurogas Response to the European Commission's 2030 Energy and Climate Package

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**Eurogas** is the association representing the European gas wholesale, retail and distribution sectors. Founded in 1990, its members are 45 companies and associations.

Eurogas represents the sectors towards the EU institutions and, as such, participates in the Madrid Gas Regulatory Forum, the Gas Coordination Group, the London 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 EU stakeholders.

The association also provides statistics and forecasts on gas consumption, as well as information on energy taxation in Europe. For this, the association can draw on data supplied by its member companies and associations.

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## Key messages

1. **A single binding target.** The European Commission's approach of using a greenhouse gas (GHG) reduction target as the cornerstone of the 2030 policy framework is a positive step and reflects the learnings from the implementation of the current 2020 climate and energy policy framework. Furthermore, a binding target of 40% is the minimum level needed in order to maintain Europe's transition to a low-carbon economy by 2050.

A single target allows the emphasis to be on making the most cost-efficient choices. The 2020 framework has shown that action needed in order to achieve additional targets at the national level is likely to: require large subsidies; distort competition; delay any incentives to develop more cost-efficient technologies; inhibit the completion of the internal market; and have a negative impact on the effectiveness of the carbon market.

2. **Market integration of renewable energy.** The main priority for the long-term future of mature renewables is the integration of renewable energy sources into the internal market. This means, for example, exposure to competition and responsibility for balancing the electricity grid. The European Commission's Guidelines on Environmental and Energy State Aid for 2014–2020 provide a welcome step in this direction.
3. **Research and development (R&D) programmes to be technology-neutral.** Support should be stepped up for all promising, non-mature technologies that help reduce GHG emissions, while being generally sustainable with respect to energy and environmental goals.
4. **Energy efficiency review welcomed.** The review of energy efficiency on a holistic level rather than establishing a new target is welcomed. The ambitious GHG emissions reduction target set by the Commission will require that all available technologies are treated equally in order to take full advantage of the quick, cost-efficient and meaningful gains in energy efficiency that gas provides.
5. **ETS reform.** The legislative proposal on the stability reserve mechanism of the emissions trading system (ETS), which sets aside surplus allowances, is a step in the right direction, as is the proposed increase in the annual linear reduction factor from 2021 to 2.2% per annum. However, a more comprehensive package of ETS reforms and an earlier implementation date are still needed. The current surplus of ETS allowances is considerable and waiting until 2021 for any further meaningful action could be too late. Of course, any action should also protect those European industries adversely affected when compared with their international competitors.
6. **Climate and competitiveness.** For the EU greenhouse gas emissions reduction target and effort to be successful it should be part of a global effort. The 2030 framework should determine the negotiating position of the EU for a 2015 Global Climate Change

Agreement. Until an equitable global agreement has been reached, the competitiveness of the EU economy should be appropriately addressed.

7. **Continued recognition of indigenous gas.** The Commission rightly recognises the important role that indigenous gas can play in Europe's energy mix, as it contributes to diversity and security of supply, provides healthy competition with imports, and adds to growth and employment within the European Union. All production should, of course, be subject to the highest health, safety and environmental standards.
8. **Security of electricity supply to be addressed.** The 2030 framework should address concerns regarding the security of electricity supply given the impact that the large influx of electricity from subsidised variable renewable energy sources is having on the market. The practice of price caps in some Member States also has a detrimental effect on the market and should be removed as a matter of priority. If relevant market distortions cannot be removed or if their removal will take too long, non-discriminating and technology-neutral capacity remuneration mechanisms can be an effective measure to address security of supply.

Decisions on the 2030 framework need to be taken as soon as possible to encourage the urgent and much-needed investment in the energy sector to secure sustainable, future energy supply. For reasons related to both climate and energy, Europe cannot afford to wait much longer.

## Eurogas Response to the European Commission's 2030 Energy and Climate Package

To achieve a secure and competitive low-carbon energy system, the use of gas in electricity generation, heating, industrial processes and transport is indispensable. In power generation, gas emits some 50% less carbon dioxide (CO<sub>2</sub>) than coal and provides the most flexibly available power plants to back up electricity from variable renewable sources, mainly solar and wind. Modern gas heating appliances are among the best performing in terms of efficiency and emissions. In the transport sector, cars and trucks running on compressed natural gas (CNG) and liquefied natural gas (LNG) deliver significant carbon emissions reductions and can also reduce particulate matter and nitrogen oxide (NO<sub>x</sub>) emissions considerably. Furthermore, extending the use of LNG to shipping is being widely considered as a means for the maritime sector to achieve the mandated reductions in sulphur emissions.

The 2020 framework and the Commission's Energy Roadmap 2050 have widely neglected these aspects. As a result, coal-fired electricity generation has increased together with electricity production from renewable energy sources. This, in turn, has resulted in a rise in CO<sub>2</sub> emissions in some countries. Gas-fired power plants have become uneconomic and are either being closed down or mothballed, although they are particularly needed to back up supply from variable renewables. Governments are addressing the resulting risk to security of electricity supply by intervening in the closure of such power plants or by running or introducing capacity remuneration mechanisms.

The policy positions set out in this paper are supported by the Eurogas Roadmap 2050 study<sup>1</sup> published in October 2011. This study demonstrates that the 40% GHG reduction target can be met through an increased role of gas in a low-carbon economy. Specifically it envisages an increase of the share of gas in primary energy consumption from around 26% in 2010 to 30% in 2030. In this timeframe, the Eurogas Roadmap foresees the sectoral evolution of gas in the EU27 as follows:

- In the residential and services sector, the market share of gas could decrease from around 40% to 35% because of the replacement of existing gas technologies with improved appliances, such as condensing boilers, gas heat pumps, micro-cogeneration and ultimately fuel cells.
- For the industrial sector, the market share of gas should remain stable at close to 30%.
- While gas today has currently only minor use in transport, in 2030, gas should reach a market share of 5% for passenger transport and 13% for freight.
- Under a well-working ETS gas should see its share in the electricity generation mix increasing from 20% to 25% between 2010 and 2030, contributing to the quickest emissions reductions thanks to the displacement of conventional coal-fired generation.

It is against this background that Eurogas proposes the following considerations and advice.

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<sup>1</sup> [http://www.eurogas.org/uploads/media/Eurogas\\_Roadmap\\_2050\\_-\\_Explanatory\\_Note\\_13.10.11\\_01.pdf](http://www.eurogas.org/uploads/media/Eurogas_Roadmap_2050_-_Explanatory_Note_13.10.11_01.pdf)

## Greenhouse gas (GHG) emissions reduction target

***The Commission proposes to set a GHG emissions reduction target for domestic EU emissions of 40% by 2030, compared with emissions levels of 1990.***

The proposed target of a 40% GHG emissions reduction by 2030 is welcomed as the minimum level required in order for Europe to be in line with the agreed target of an 80–95% GHG emissions reduction by 2050.

It is important that the EU confirms this target soon and in such a way that investors can rely on it, as low-carbon investment urgently requires encouragement and reassurance. The 2030 framework should determine the negotiating position of the EU for a 2015 global climate agreement, and for EU action to be successful it should be part of a global effort. Until an equitable global agreement has been reached, action should be taken to protect those European industries adversely affected when compared with their international competitors.

A fundamental issue in developing a package of measures in a prompt manner will be to define the level of each Member State's contribution to the overall GHG reduction target, and we ask the Commission to put forward proposals as soon as possible. The burden should be shared appropriately and transparently among Member States, among the ETS and non-ETS sectors and within the various non-ETS sectors.

Eurogas favours a technology-neutral approach without additional targets to enable governments, industry and households to make the most cost-efficient choices to reduce emissions, benefiting gas as well as renewables and energy efficiency.

The 2020 framework has shown that action needed to achieve additional targets at the Member State level is likely to require large subsidies. Moreover, the current national subsidy schemes have not been coordinated. Such action, in turn, distorts competition with low-carbon options that are not subsidised, or not to the same extent. They also delay an incentive for technologies to become more cost-efficient through exposure to fair competition. Moreover, these subsidies inhibit the completion of the internal energy market as they only apply on a national level. In some cases subsidies even result in the different treatment of industry sectors, depending on whether or not they benefit from exemptions to renewables charges. Finally, overlapping targets and uncoordinated subsidies will have a negative impact on the effectiveness of the carbon market.

The technology-neutral approach of one target for GHG emissions reduction provides the best solution to enable each low-carbon option to be used where it is most cost-effective. This approach allows all technologies to compete on a level playing field and/or team up with others for example, gas/renewable hybrid solutions.

Support schemes for mature renewable technologies should gradually be phased out although this should not be done retroactively in order to maintain investment security.

R&D support for all promising, non-mature or yet-to-be-demonstrated technologies should be stepped up. The approach should be technology-neutral enabling renewables and all other low-carbon options (for example, carbon capture and storage (CCS), biomethane or power-to-

gas applications) to benefit. It would also ensure that no potential breakthrough solution is missed.

## Energy efficiency

### ***The Commission proposes a review of the implementation of the Energy Efficiency Directive.***

Given that the Energy Efficiency Directive, approved in 2012, is only being implemented this year, anything other than a review would be premature, although the review itself may be somewhat early. Also, special attention should be given to a technology-neutral and, hence, cost-efficient approach in the review of the implementation of the Energy Efficiency Directive.

Given that reaching the existing 2020 target for energy efficiency is proving very challenging, it is imperative that all energy-reducing options are considered in a consistent manner. In particular, when large, expedient gains can be made, these opportunities should be seized. Some examples where gas can play a role are:

- **Gas for electricity production** – CCGTs also reach fuel efficiencies of over 60% and, when adapted for cogeneration or combined heat and power (CHP), – a process in which waste heat is recycled into electricity - the power plant can run at around 90% efficiency. The necessary infrastructure and various installations are already in place to ensure quick, easy and low-cost ramp up. Combined-cycle gas turbine (CCGT) power plants emit 50% less CO<sub>2</sub> than of those from coal-fired plants.
- **Gas for heating** – In many cases, heating houses with modern gas appliances is the most cost-efficient way of reducing energy consumption and emissions in buildings. Residential and commercial customers, in particular, should be made more aware of the choices available, thereby empowering them to make better informed decisions.
- **Gas in transport** – Gas vehicles can be as efficient as diesel vehicles while at the same time offering immediate benefits in reducing emissions. The rate of improvement in gas vehicle efficiency means they are likely to be more efficient than petrol vehicles in the near future, when engines are modified to run exclusively on gas.

## Reform of the Emissions Trading System (ETS)

### ***The Commission proposes an increase in the linear reduction factor (the annual rate of reduction in ETS allowances auctioned to the market) and legislation for a market stability reserve to commence from 2021.***

The new proposed linear factor of 2.2% for the ETS sectors from 2021 is necessary to put Europe on track towards a 40% GHG emissions reduction target. In addition, the Commission's proposal for a market stability reserve, allowing surplus ETS allowances to be set aside until needed, is welcomed and Eurogas supports the structure of the mechanism. We look forward to further discussion on the exact design features within the mechanism.

However, given that the ETS is the cornerstone of the EU's policy to fight against climate change, further reform is necessary for the ETS to play its full role in reducing GHG emissions cost-efficiently. As the Commission's own analysis shows, these proposals do not have a material impact on the ETS surplus until well into the middle of the next decade.

Eurogas seeks earlier measures that might address this oversupply issue. Such measures could include, for example, the cancellation of allowances in Phase 3 or the earlier implementation of the market stability reserve. Different options should be tabled for consideration.

The addition of new sectors to the ETS should be considered to the extent that their current emissions and emissions reductions are fully verifiable and their inclusion is practically feasible. Consideration should be given to how auction revenues are used to support low-carbon investment, including that of CCS.

Limiting the use of new international credits is a sensible course of action and shows that a lesson from the 2020 policy framework has been taken on board. The proposed approach of using international credits if going beyond a 40% reduction, in the event that other international partners provide meaningful ambitions is also a sound proposal. Were this to be the case, the current system for using international credits would require an overhaul to prevent a repeat of undesirable experiences.

## Competition in integrated markets

***The Commission is revising the state aid guidelines for environment and energy for the period up to 2020.***

National actions or inaction can lead to fragmentation, which in turn has a negative impact on the single market, is inefficient and can lead to higher energy costs. While there appears to be general consensus that the implementation of the internal energy market and market-based investment in energy infrastructure should be rigorously pursued in Europe, this ambition must be achieved by incorporating specific measures. The following measures would be a good start:

- The full and fast implementation of the internal energy market rules, including phasing out market distortions, such as subsidies for mature technologies or price regulation.
- The gradual integration of renewable energy sources into the internal market, towards which the Guidelines on Environmental and Energy State Aid for 2014–2020 provide a welcome step as they mandate renewables for the use of feed-in premiums instead of feed-in tariffs, and competitive bidding processes.
- Electricity from variable renewable energy sources should assume the same responsibilities towards the system (scheduling, nomination and balancing) as electricity from other sources. The costs of grid connection, use, balancing and backup should be made transparent to the consumer.

## Promoting security of supply

***The Commission proposes a three-pronged approach via exploitation of sustainable energy sources, diversification of supply and the improvement of the energy intensity of the economy.***

The Commission is right to recognise that the indigenous production of energy, including conventional and unconventional gas, is desirable because it contributes to diversity and security of supply, provides healthy competition with imports, and leads to growth and employment within the EU. All production should of course, be subject to the highest health, safety and environmental standards.

The 2030 framework should take account of concerns regarding the security of electricity supply and the impact that a large influx of electricity from subsidised, variable renewable energy sources is having on the market. The practice of price caps in some Member States also has a detrimental effect on the market. These and other market distortions need to be removed as a priority, since they inhibit the completion of the internal energy market and have led to thermal power plants becoming uneconomic, even if they are needed to ensure that electricity demand can be met at all times. Highly flexible and efficient gas-fired power plants are particularly affected.

If relevant market distortions cannot be removed, or if their removal will take too long, non-discriminating and technology-neutral capacity remuneration mechanisms can be an effective measure to address security of electricity supply. On the other hand, regulatory requirements stipulating that plants must remain available, in spite of the market signals to mothball or decommission them, interfere with entrepreneurial freedom.

## Economic and energy indicators

Energy indicators are a useful monitoring instrument, but they need to be complemented by other indicators, the identification of the drivers behind them and policy adaptations when necessary. Eurogas therefore agrees with the Commission that indicators on GHG emissions reduction, renewables share and energy efficiency alone are not enough to ensure sufficient progress towards all aspects of the objectives for 2030 perspective.

## Complementary policies

### Transport

The Commission's proposal for Member States to consider how fuel and vehicle taxation can be used to support GHG reductions in the transport sector is very pertinent.

Major savings in costs and emissions could be achieved by using gas in transport. For example:

- fuel substitution in heavy-duty vehicles and maritime shipping is the quickest and least costly way to reduce GHG emissions in this sector; and

- improved fuel efficiency can be further gained by using hybrid technologies, including gas-electric hybrids; and the penetration of biomethane enables a further and immediate decrease in the net emissions of vehicles fuelled with gas.

Furthermore, natural gas and biomethane do not emit particulates and have extremely low emissions of NO<sub>x</sub> and other pollutants, and can therefore contribute to improving air quality as well as significantly reducing CO<sub>2</sub> emissions, and even noise. For example, a gas vehicle makes approximately 50% less noise than a diesel vehicle.

There are no technology constraints and the existing European gas grid can be used.

It is imperative that the Commission:

- Promotes the use of alternative car fuels such as natural gas, biogas and hydrogen, along with electricity by introducing targeted measures and extending the infrastructure for filling stations.
- Promotes public transport and car sharing.

The decision whether growth in different transport modes is in electricity, gas or both should be driven by cost-efficiency and emissions reduction capability. Once again, a technology-neutral approach facilitates this.

### **Carbon capture and storage (CCS), innovation and finance**

It will be extremely difficult to meet the EU's target of reducing GHG emissions by 80–95% by 2050 without CCS. The 2030 framework for climate and energy policies should, therefore, fully support the development of CCS. The NER 300 facility, a financing instrument managed jointly by the European Commission, European Investment Bank and Member States, could be extended. Additional supportive measures that are well targeted and limited in time and expenditure could also be introduced to promote the development of demonstration projects. If CCS is to be developed successfully, supportive measures should aim to decarbonise power generation at the lowest cost per megawatt hour produced, and not, as is currently the case under the NER300 facility, the largest possible amount of CO<sub>2</sub> that can be captured.