Towards A European Green Deal and Climate Neutrality

Fortum’s views on the future of the EU climate policy
The new European Commission is expected to launch a set of legislative proposals in the framework of an ambitious European Green Deal that would make Europe climate-neutral by 2050. Fortum welcomes the initiative and strongly advocates for the long-term climate neutrality target: setting Europe on a path compliant with the Paris Agreement should be the key priority of the new EU institutions.

However, the European Green Deal is not only about climate ambition, but an extensive growth strategy for Europe bundling up all EU policy areas and all sectors of the European society. Among others it deals with energy supply, circular economy, ecosystems, biodiversity and mainstreaming sustainability in all EU policies. We welcome this comprehensive approach and mainstreaming climate action throughout the European society.

This position outlines Fortum’s views on the Green Deal and, in particular, its expected climate-related initiatives. In Fortum’s view, the Green Deal offers an excellent opportunity to reshape the target-setting and instruments of the EU climate policy as a whole.
Towards A European Green Deal and Climate Neutrality

Fortum’s key messages:

• European Climate Law should set the binding EU target to reach climate neutrality by 2050 and mainstream climate action throughout the European society.

• The climate neutrality target needs to be accompanied by a regulatory framework that ensures a just energy transition, preserves the competitiveness of the European economy and supports the overall decarbonisation objective.

• A cost-efficient emission reduction trajectory towards 2050 and intermediate climate targets for 2030 and 2040 should be based on annual carbon budgets after 2030. Carbon pricing alone would be the most suited and cost-efficient instrument to achieve economy-wide climate neutrality by 2050.

• A more systemic and market-based approach to the EU climate policy is needed after 2030. All sectors should contribute evenly and the additional emission reduction efforts should be split between the EU ETS, non-ETS and LULUCF sectors and increased flexibilities across these sectors should be allowed. After 2030, a full convergence of the sectors is needed to reach climate neutrality by 2050.

• Adjusting the ETS to take into account overlapping national policies (such as national coal phase-outs) is crucial in order to avoid future oversupply of emission allowances. The overlaps should be assessed and corresponding amount of allowances should be cancelled.

• In the ETS sector, there are two main mechanisms to strengthen the system: LRF and MSR. The revision of the LRF should be done in connection with the MSR review in 2021.

• The ETS should be extended to cover the entire heating and cooling sector except energy recovery from waste. This could be realised by setting the ETS compliance obligation to the suppliers of heating fuels and by reviewing the existing taxation of heating fuels.

• CO₂ removal and negative emission technologies are a key complement to EU climate policies and they should be incentivised in legislation.

• The EU should support innovations in all carbon-neutral technologies (including renewable energy, nuclear and decarbonised gas) and provide R&D and investment subsidies especially in first-of-kind pilots.

• International cooperation on climate action should be enhanced, and the EU should promote use of the market mechanisms of the Paris Agreement and carbon pricing globally.

• The EU has to protect European industries from unfair global competition and carbon leakage. Global carbon pricing is key to preventing carbon leakage. In addition, implementation of a WTO-compatible carbon border adjustment should be further investigated.
We call for an ambitious European Climate Law setting the 2050 binding climate neutrality target

European Climate Law as a new element to the EU climate policy framework should be overarching umbrella legislation setting the 2050 binding objective of climate neutrality and including fundamental principles on how the EU would deliver on this objective. Those principles include among others cost-efficiency of emission abatement and flexibility in implementation over time, across sectors and between member states.

The Climate Law should also encourage integration of climate policy across all other sectoral policies. In addition, the Climate Law should mainstream climate action and ensure a clear climate proofing of the EU budget.

The key building blocks of the Climate Law should be the planning, reporting and monitoring processes of the EU climate policy. The Climate Law should build as much as possible on the existing EU climate acquis.

We call for setting the EU on a path compliant with the Paris Agreement and for regulatory framework supporting the overall decarbonisation objective

The EU should set targets and implement policies to limit the global average temperature increase to 1.5 °C in line with the Paris Agreement. Fortum strongly advocates the climate neutrality target for 2050 and calls for the EU to adopt it as soon as possible in order to increase long-term predictability of climate policy and to provide a signal for low-carbon investments.

Higher long-term climate ambition is necessary to limit future costs of both climate change and the further adaptation to it. A stable, forward-looking and long-term political framework is a prerequisite for European business investing in low-carbon technologies to remain competitive in the global market.

The climate neutrality target needs to be accompanied by an enabling regulatory framework that ensures an orderly and just energy transition and preserves the competitiveness of the European economy.

Among other legal instruments, also the EU energy tax directive and the EU environmental state aid guidelines should be revised so that they support the overall decarbonisation objective and the large-scale electrification that plays a big role in decarbonisation – especially in sectors currently outside the EU ETS. Financing, e.g. in the framework of sustainable finance, should be directed to investments that genuinely support an energy transition towards decarbonisation. The definition of a sustainable investment should be aligned with the EU long-term climate strategy, recognising all carbon neutral or carbon negative technologies as sustainable investments.
We call for a cost-efficient emission reduction trajectory towards 2050 and intermediate climate targets for 2030 and 2040 based on annual carbon budgets.

Subsequent to the adoption of the 2050 target, a cost-efficient emission trajectory towards 2050 should be established based on annual carbon budgets’ post-2030 and taking into account both emissions and carbon sinks.

Cost-effective intermediate climate targets for 2030 and 2040 should be aligned with the carbon budget taking into account cost-efficiency, effectiveness and fairness of GHG emissions reduction. In the interest of cost-efficient decarbonisation, a focus should be on early action. This may necessitate higher intermediate emission reduction targets for 2030-2040 than the linear pathway from today until 2050 would otherwise assume.

We recognise the current high political ambition to increase the 2030 target to 50-55%, although this is likely to be slightly overshooting on the pathway to 2050. We fully support this ambition, but highlight the fact that the intermediate targets need to be reasonably achievable and provide clarity on the necessary direction. The transition should be just and fair, meaning that costs should not be too high and EU financial instruments should be used to allow affordable energy transition to all.

The current 2030 three-target approach needs to be carefully reconsidered and revised in this context. In our view, there is no need for separate renewable energy or energy-efficiency targets after 2030. Carbon pricing alone would be the most cost-efficient tool to drive the low-carbon investments needed to achieve economy-wide carbon neutrality by 2050.

The EU climate targets

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1 A carbon budget is defined as a tolerable quantity of greenhouse gas emissions that can be emitted in total over a specified time. The budget needs to be in line with what is scientifically required to keep global warming less than 1.5°C. Over 80% of this 1.5°C carbon budget has already been spent (IPCC 2018).
We call for a more systemic and market-based approach in the EU climate policy after 2030 with a full convergence of the ETS, non-ETS and LULUCF sectors in order to reach climate neutrality by 2050.

The new Commission has an important task to set out the policy framework and instruments needed to achieve climate neutrality by 2050. Most important is to ensure that all sectors will contribute evenly to emissions abatement, deliver towards the 2030 targets and are on the right track to reach climate neutrality by 2050. Industrial policies and developing clear emission reduction roadmaps for the most polluting industries (steel, cement, ammonia) are key instruments in decarbonisation of the industry.

In the context of an increased climate target for 2030, a decisive issue is to allocate the additional emission reduction efforts between the three sectors (ETS, non-ETS and LULUCF) and to allow increased flexibilities across sectors. The EU should take a more systemic market-based approach in its climate policy after 2030, aiming at a full convergence of the ETS, non-ETS and LULUCF sectors and other legislations in order to reach climate neutrality by 2050. Such a systemic policy framework post-2030 should have extended carbon pricing and stimulating negative emission technologies as key complements to the existing climate policy.

Fortum prefers carbon pricing for all sectors as the leading instrument supporting the EU’s economy-wide carbon neutrality by 2050. Carbon pricing is key both for cost-efficient emissions abatement and climate financing. Carbon pricing combined with increased cross-sectoral flexibility\(^2\) allows for decarbonisation of the European economy in a most cost-efficient way.

In addition, carbon pricing plays an important role in generating public revenues in the EU. These revenues can be used to, e.g., strengthen R&D activities and to compensate for the most affected regions and consumers.

A meaningful carbon price should be established for all sectors, by strengthening the EU ETS and by pushing EU member states to increase the price for emissions not covered by the ETS. A key question regarding the pricing of greenhouse gas emissions is whether each unit of emissions should have the same price or whether prices in different sectors and/or various countries should be allowed to vary. The European Commission should strive to converge towards a single carbon price over time.

In non-ETS sectors, we support a mix of policy measures with carbon price as the centrepiece and complemented with taxation and relevant standards (e.g. \(\text{CO}_2\) performance standards in the transport sector).

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\(^2\) Cross-sectoral flexibility refers to sector integration or sector coupling, the concept of interconnecting the energy consuming sectors - buildings (heating and cooling), transport, and industry - with the power producing sector. Electrification of other sectors is an example of cross-sectoral flexibility.
We call for adjusting the ETS to take into account overlapping national policies (such as national coal phase-outs) and to avoid creating future oversupply of emission allowances.

The multiple overlapping policy instruments, both at the national and EU level directed towards the EU ETS sectors have lowered the demand for emission allowances and consequently have weakened the ETS in the past. The establishment of the Market Stability Reserve has rectified the situation and revitalised the carbon market. However, the European Commission should regularly monitor the impact of other legislation on the demand of emission allowances and if necessary take measures to strengthen the EU ETS.

Adjusting the ETS to overlapping policies is especially important in national coal phase-outs, in renewable energy policies affecting the ETS sectors, as well as in energy taxation. In our view, the provisions of the Governance Regulation to assess policy overlap, combined with the provisions on voluntary cancellation of allowances in the ETS Directive, constitute an appropriate mechanism for mitigating the policy overlaps. Later on, cancellation of allowances should be made mandatory.

The EU ETS should remain as a volume-based system where the price of allowances is set by the supply and demand of allowances. Any direct price intervention in the form of carbon price floors or corridors needs to be thoroughly assessed against predefined criteria and taking into account the impact on both carbon and power markets. Strengthening the allowance price using the existing in-built mechanisms (LRF and MSR) of the ETS is significantly faster and simpler than using any kind of price intervention.
We call for a prompt strengthening the EU ETS by revising the LRF and MSR in 2021

Fortum continues to support emissions trading as the main tool for decarbonisation as it is cost efficient, technology neutral and flexible. The cost-efficiency aspect is becoming even more important with the tightening of the climate targets and with the urgency of implementing a major transition to a low-carbon economy. A well-functioning EU ETS should deliver a carbon price signal to spur investments on the pathway towards carbon neutrality in 2050. For this purpose, the EU ETS needs to be further strengthened and extended.

The LRF needs to be aligned in accordance with the 2050 climate-neutrality target as soon as possible. Preferably this could be done in connection with the MSR review in 2021, or at the latest, in connection with the global stock-take in 2023. The sooner LRF is changed, the smaller the annual emission reductions needed. An early increase of the LRF could provide certainty and predictability for the private sector, as the ETS would become aligned with the Paris Agreement from an early stage. Assuming the current scope of the ETS and the existing split of the emission reduction target between the ETS and non-ETS, the LRF needs to be at the level of 3% in 2030-2050 to meet the net-zero emission in the ETS by 2050.

An increase of the EU’s 2030 emission reduction target implies an increase of the LRF. In case the 2030 is increased to 55% in 2021, the LRF should be at the level of 3.7% until 2030. If the 2030 increase is realised in 2026, the LRF should be at the level of 5.2% during 2026-2030.

The MSR review in 2021 has to take into account any changes to the EU level of ambition to 2030 and be an opportunity to revise also other ETS parameters, especially the LRF. Strengthening the design parameters of the MSR will be essential to manage the short- and medium-term excess supply of allowances in the ETS. We support continuing the 24% intake rate until the end of 2030 and continuing the annual cancellation of allowances from the reserve.

The thresholds in the MSR hedging band (400 and 833 Mt/a) have a significant influence on the effectiveness of the MSR. The MSR review should consider reviewing the thresholds in line with gradually declining hedged holdings.
We call for an extension of the EU ETS to cover the entire heating and cooling sector, except energy recovery from waste, by setting the ETS compliance obligation to the suppliers of heating fuels.

Currently the ETS covers about 45% of the EU GHG emissions, but this share is expected to decrease to 35% by 2030 as the emissions from the emissions trading sector decline. In order to maintain the key role of the ETS, it is important to have more sectors under the ETS cap. At the same time, non-ETS sectors have an increasingly important role in decarbonisation of society, but in many member states non-ETS sectors are costly to decarbonise, which highlights the importance of cost-effectiveness. As the EU ETS is the most cost-effective policy instrument at the EU’s disposal, the priority should be given to extending the ETS instead of relying on less-efficient national policies.

A potential ETS extension would be to bring the entire heating and cooling sector, except energy recovery from waste, into the ETS. Currently, a minority of this sector’s emissions are included in the system through the inclusion of large combustion installations with a capacity of over 20 MW, namely plants supplying district heating and cooling. However, significant emissions from heating of individual residential, service sector and industrial buildings, responsible for approximately 600 million tonnes of CO₂ emissions annually, fall outside the scope of the ETS. An ETS extension to all heating and cooling, except energy recovery from waste, would increase the volume of emissions covered by trading by one third.

Including energy recovery from waste in the EU ETS is not justified, because it is part of the waste management and its primary purpose is the treatment of contaminated or otherwise non-recyclable waste, and residues from recycling processes. There are limited possibilities to impact the fossil carbon content of such waste and to switch to other fuels in energy recovery from waste. An alternative to energy recovery from waste would be landfills or poor-quality recycling of waste, which would have a higher negative environmental impact. Therefore, the ETS would not incentivise emission reduction in this sector and might even result in more unsustainable treatment of waste.

Decarbonisation of heating and cooling is one of the biggest challenges ahead: around 80% of heat is still produced from fossil fuels (gas and coal). Inclusion of heating and cooling in the ETS would further level the playing field between different energy carriers, and enable a market-driven instrument towards decarbonised gas, a crucial element of a climate-neutral energy system. It would also solidify the role of the EU ETS as the EU’s flagship climate policy and provide the certainty that climate investments require.

An ETS extension requires an amendment of the EU ETS Directive and its Annex I. In practice, the extension to all heating and cooling could be implemented by using an upstream approach and setting the ETS compliance obligation to the suppliers of heating fuels. Moving the compliance obligation upstream also requires adoption of a new monitoring, reporting and verification (MRV) regulation, as the MRV of emissions at the source differ from MRV performed upstream, e.g. by the fuel suppliers.

An extension should, however, take into account overlapping policies, e.g. taxation of heating fuels. An ETS extension would also require adjusting the target of the effort-sharing sector.
We call for the EU to incentivise CO₂ removal and negative emissions technologies in legislation

Fortum believes that CO₂ removal and negative emission technologies are a key complement to EU climate policies. Both the IPCC scenarios and the EU’s “Clean Planet for All” strategy highlight their role in achieving carbon neutrality. Multiple technologies to remove carbon dioxide are required: carbon capture and storage (CCS), carbon capture and utilisation (CCU), direct air capture (DAC) and natural capture (removing emissions directly from the atmosphere through natural carbon sinks, e.g. land management and forestry).

However, in order to make CO₂ removal and negative emissions technologies commercially viable and to upscale them, they should be incentivised. They should be better recognised in legislation and, preferably, promoted by market-based tools. The EU should dedicate an integrated part of its EU research and innovation programme to these technologies.

As the first step, harmonisation of the definition for the verified, captured and stored tonne of CO₂ is needed to ensure technology neutrality and positive climate impact based on the permanence of the stored CO₂.

We call for EU support for innovations and demonstration of new technologies

Although the EU climate policy and the EU ETS as its main tool play a central role in decarbonisation, we want to highlight the need to support innovations in all carbon-neutral technologies, including renewable energy, nuclear and decarbonised gas. The goal should be to decouple emissions and economic growth. This requires well-designed EU policies facilitating decarbonisation of society in parallel with economic growth and improved global competitiveness.

For this to happen, we need a massive increase of CO₂-free electricity production as well as development of green gas and hydrogen. Gas will be needed in the European energy transition during the next couple of decades for security of supply reasons. The step-by-step greening of gas, e.g. with hydrogen through electrolysis should be addressed through the right policy measures, but taking into account the experiences from the greening of electricity.

While a strong CO₂ price and investments in electricity transmission and distribution grids are key in facilitating this development, R&D and investment subsidies especially in first-of-kind pilots will be needed instead of operation subsidies for mature technologies.
We call for enhanced international cooperation on climate action and for the EU to promote market mechanisms and carbon pricing globally

The EU currently represents less than 10% of global greenhouse gas emissions. All parts of the world have to contribute to climate action. In the international climate negotiations, we call for the EU to promote the market mechanisms of the Paris Agreement to deploy effective carbon pricing. Effective market solutions and tradable emission allowances could motivate other countries to also step up their climate ambitions.

The EU should actively enhance carbon pricing globally. As the first step, regional carbon pricing mechanisms should be linked with the EU ETS, and the ultimate goal should be for the most comprehensive global carbon pricing and emissions trading. This could prevent carbon leakage and ensure the equal competitive position of European industry. Currently, carbon pricing initiatives cover about 20% of global greenhouse gas emissions.

We call for the EU to protect European industries from unfair global competition and carbon leakage

The EU has to ensure the competitiveness of European companies exposed to global competition. Until now, carbon leakage has mostly been identified as a risk for industry, but recently it has been increasingly related also to cross-border power trading between EU member states and third countries (e.g. Russia-Baltics, Russia-Finland and Morocco-Spain). Various measures can be used to mitigate carbon leakage, but the primary solution is to promote global regulation that guarantees fair and equitable competition for businesses. Above all, a more global carbon pricing is key to preventing carbon leakage.

The introduction of carbon border adjustments requires thorough consideration of their costs and benefits as well as of compliance with the WTO rules. However, we support the further investigation of this instrument. In particular, a properly designed carbon border adjustment for power imports from non-EU countries without any carbon pricing mechanism could be an interesting complementary instrument to the EU climate policy.
Abbreviations

CCS  carbon capture and storage
CCU  carbon capture and utilisation
DAC  direct air capture (CO₂ removal from the atmosphere)
ETS  emissions trading system
EU ETS the EU emissions trading system
GHG  greenhouse gas
IPCC Intergovernmental Panel on Climate Change
non-ETS sectors not included in the EU ETS
LRF  linear reduction factor (annual reduction target of the EU ETS)
LULUCF land use, land use change and deforestation
MRV  monitoring, reporting and verification of emissions
MSR  market stability reserve (in-built mechanism of the EU ETS to balance the supply and demand of allowances)
WTO World Trade Organisation

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Fortum is a leading clean-energy company that provides its customers with electricity, heating and cooling as well as smart solutions to improve resource efficiency. We want to engage our customers and society to join the change for a cleaner world. We employ some 8,000 professionals in the Nordic and Baltic countries, Russia, Poland and India. In 2018, our sales were EUR 5.2 billion and 57% of our electricity generation was CO₂ free. Fortum’s share is listed on Nasdaq Helsinki. www.fortum.com