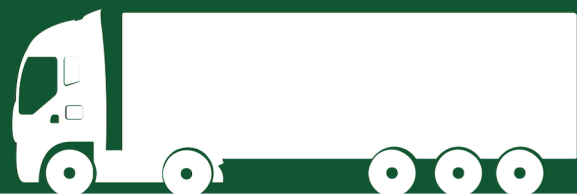


CONCITO CATALOGUE OF IDEAS FOR IMPROVED CLIMATE ACTION IN THE EU



CONCITO

DENMARK'S GREEN THINK TANK

CONCITO Catalogue of Ideas for Improved Climate Action in the EU

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Introduction

The European Union is not currently on track to deliver on its ambition to become climate neutral by 2050 at the latest. Despite several sets of climate and energy proposals from the European Commission for 2030, including *Fitfor55* and *REPowerEU*, new policies and perhaps even a revamp of the climate architecture at large is needed to get the EU all the way to net-zero.

With this catalogue, CONCITO presents concrete ideas that aim to inspire the European Commission and other relevant actors to further increase the EU's ambitions. The list of ideas is not exhaustive and varies in both scope and detail but should be seen as points of direction for how the next European Commission can accelerate the green transition across sectors.

Time is of the essence. Not only is the next European Commission the last one with the ability to launch the timely policies and reforms needed to bring the EU on a credible track to climate

neutrality and comply with the Paris Agreement. It will also have to quickly present proposals that accelerate the EU's efforts to reach 90-95 percent emission reductions by 2040, as proposed by the EU's Scientific Advisory Board on Climate Change.

With the US and China investing heavily in key technologies, the EU's imperative to gear up not only reflects a historic responsibility to lead on climate action, and a promising opportunity. It also represents a necessity if the EU is to win the global race to the top for industrial leadership, improved sustainable competitiveness and job creation. An accelerated green transition will also provide much improved energy security and avoid new risky dependencies.

CONCITO welcomes dialogue with the European Commission, the European Parliament, and Member States to develop new policies and measures that can support and speed up the green transition of the EU.

Food and agriculture

Emissions trading for agriculture

Agriculture is currently the only sector in the EU not subject to the 'polluter pays principle'. On the contrary, the EU heavily subsidizes some of the most emitting agricultural activities like the production of red meat and dairy products as well as the production on peatlands. Based on the Member States' current national policies and measures, greenhouse gas emissions from agriculture are only expected to decrease by approx. 1.5 percent between 2020 and 2040. Emissions trading in the sector would provide better economic incentives to develop and implement effective reduction measures. Furthermore, it would ensure a level playing field and equal competition between farmers across the EU.

The European Commission should propose to introduce emissions trading for agriculture to provide a clear economic incentive to bring about the necessary changes in agricultural production. Naturally, the system should take into account farmers' opportunities to reduce emissions, administration (e.g. by introducing threshold values), and the risk of carbon leakage to countries outside the EU (e.g. by considering a carbon border adjustment mechanism and mechanisms in trade agreements).

Ambitious and systemic reform of the Common Agricultural Policy (CAP)

The current CAP came into force on 1 January 2023, but it only creates limited opportunities for reducing agriculture's negative impact on climate and biodiversity. While European agriculture has achieved significant productivity improvements, greenhouse gas emissions in the sector have hardly decreased at the EU level in the past 15 years. The next CAP after 2027 should focus on an overall systemic transformation that at the same time reduces agricultural emissions, protects and improves biodiversity, and maintains efficient food production.

The CAP must be reformed to effectively contribute to the EU's climate and biodiversity objectives. The next reform should 1) phase out coupled support for ruminant animals, 2) end the support for agricultural activities cultivating carbon-rich peatlands, and 3) introduce the 'public good for public money' principle while phasing out the direct payments to farmers. Public goods should include measures to reduce greenhouse gas emissions, improve biodiversity, protect drinking water as well as improve animal welfare and maintains efficient food production.

Effective deforestation legislation

The EU is responsible for at least 10 % of global deforestation. The EU has adopted a new law on deforestation which strives to guarantee that the products EU citizens consume do not contribute to deforestation or forest degradation worldwide through mandatory due diligence rules. Although a step in the right direction, it is far from sufficient to reduce global deforestation. Global demand for all agricultural products is expected to significantly increase towards 2050, and as long as the EU do not both substantially reduce EU demand for these types of products and considerably contribute to the increase in productivity of the production, it will not have a significant global effect.

The EU should consider introducing further mechanisms to reduce the demand for the type of products with the highest risk of deforestation. The new law on deforestation should protect more types of ecosystems than just forests, including natural savannas and carbon-rich soils. The covered products in the law should be expanded to include corn, chickens, and pork to make sure that producing countries cannot just grow e.g. soy on newly deforested areas, feed it to pork and chickens and then legally export them to the EU.

Proper regulation of carbon farming

EU regulation must take into account that carbon farming (e.g. storing carbon in soils and forests) has significant issues with permanence (including risk of reversals through e.g. changes in land-use, droughts, pests, and forest fires), additionality, and monitoring (such as lack of quality data and great uncertainties establishing trustworthy baselines) as well risks of carbon leakage and impairment of biodiversity.

The EU should restrict developing methodologies for certification of carbon farming activities (e.g. storage of CO₂ through modified/reduced tillage) until it is ensured that the climate impact is significant, additional and long-lasting. Furthermore, emissions trading for agricultural emissions and carbon removals from carbon farming must be disconnected (e.g. by only using revenues from emissions trading for carbon farming activities), as it is far too risky to include carbon farming directly in an emissions trading system (e.g. due to the decreasing incentives for emissions reductions as well as permanence, additionality, and monitoring issues of carbon farming).

Fast and safe development of alternative proteins

Alternative proteins such as plant-based meat alternatives, cell-based meat, and precision fermented milk proteins are good alternatives to traditional livestock products with a lower climate and environmental impact. The Intergovernmental Panel on Climate Change (IPCC) has highlighted the role of plant-based and cultivated meat in helping to feed a growing population on a heating planet. Dietary change in regions with excess consumption of calories and animal-sourced foods to a higher share of plant-based foods with greater dietary diversity and reduced consumption of animal-sourced

foods and unhealthy foods has both mitigation and adaptation benefits along with health, biodiversity and other environmental co-benefits.

A more streamlined and efficient novel food regulation in the EU, including shorter and more simple permitting processes, would facilitate the development of alternatives to traditional animal products. The EU must at the same time guarantee food safety and consumer rights while applying the principles of nondiscrimination and proportionality.

Consumer shift to more sustainable and healthy diets

The current European Commission is working on a proposal for a legislative framework for sustainable food systems (FSFS) with the objective to accelerate and make the transition to sustainable food systems easier. The policy measures considered are initiatives such as sustainability labelling of food products, minimum criteria for sustainable public procurement of food as well as a governance structure and monitoring. The negotiations will most likely not be completed before the elections and will therefore be one of the first pieces of legislation the new European Commission and European Parliament will work on.

The EU regulation must focus on initiatives that support consumers' shift toward more healthy and sustainable diets and reduce the carbon footprint of their food consumption. This could e.g. be done through 1) providing independent data and documentation that assists consumers in making the right climate and health choices through a transparent, science-based, and ambitious sustainability labelling framework, 2) ending all public support for the promotion of traditional red meat and dairy products, and 3) enabling the school milk subsidy scheme to also include plant-based drinks.

Energy, industry and buildings

Prioritized use of biomass in the EU

The use of biomass in the EU is forecasted to more than double towards 2050, if regulation remains unchanged, putting severe pressure on carbon sinks and stocks, biodiversity, and food security. Biomass must be prioritized for high-value purposes such as hard-to-abate industry, materials in buildings and food production. Biomass should be drastically reduced for electricity, heating and transport. This can be done in several ways and will need to focus on constraining both the supply and demand for biomass for energy.

The EU must ensure that biomass will play a limited role e.g. through the Renewable Energy Directive. For instance, a ceiling could be introduced for how much biomass can be counted towards the renewable energy targets, including relevant sub-targets such as for transport. Furthermore, regulation could be introduced to phase-out biomass boilers in residential and district heating (e.g., through Ecodesign requirements) and a full phase-out of all subsidies for biomass.

Carbon pricing of the net-emissions of burning biomass

In practice, burning biomass is not carbon neutral, as the biomass would alternatively not have been converted into CO₂ immediately. The principle of accounting emissions from biomass in the country where the biomass is harvested has provided a strong incentive for companies to increase their consumption of bioenergy, because it is perceived as carbon neutral if sustainability requirements are met and therefore not subject to carbon pricing. In principle, countries inside and outside the EU pick up the bill in terms of lower

carbon stocks and net-removals in their LULUCF accounts, but this has so far not translated into effective incentive structures in the EU.

The EU should introduce more accurate incentives on the use of biomass. This could be done by including the net-emissions from burning biomass in the EU Emissions Trading System, taking into account the climate impact of different biomass feedstock.

Integrated European electricity market

The EU's electricity consumption will double en route to climate neutrality, requiring large investments in the European transmission and distribution grid. To make matters more pertinent, the share of renewables in the mix will almost triple already by 2030, as solar and wind become the primary sources of electricity. This requires even more flexibility and better usage of the energy infrastructure. As the internal market for electricity remains incomplete, according to its monitoring agency ACER, reforms are needed to integrate the markets further.

If the electricity sector is to reach full decarbonization, the EU's electricity market must allow for an unrestricted, fully integrated flow of electricity to secure a high security of supply and competitive prices. This requires an ambitious and carefully considered reform of the Electricity Market Regulation, including higher targets for flows on interconnectors and improved capabilities of ACER overseeing the market. In addition, a larger share of EU funds should be allocated to grid investments, reflecting the need to double interconnection capacity and investment to the tune of 500 billion EUR by 2030 according to the European Commission's forecast.

Climate requirements for buildings in the EU

Current EU legislation focuses largely on the climate impact of the use of buildings, but the many stages of building construction are extremely climate-impacting and need to be addressed.

The EU should focus on lowering the overall climate footprint of buildings in the Union. To reduce climate impact, several efforts should be pursued, including bio-based materials, material-optimized buildings, recycling, more climate-friendly production of traditional building materials, etc. which together can reduce the climate impact of the built environment. To this end, it is important to introduce a harmonized approach to life cycle assessments at a European level to avoid regulative fragmentation between Member States. The next revision of the Energy Performance of Buildings Directive (EPBD) should introduce a requirement of a new building's WLC (Whole Life Carbon), as well as minimum requirements for low climate impact.

The European Commission should prepare a common European approach to a harmonized life cycle assessments for buildings as soon as possible. This will serve as basis for common minimum requirements for maximum climate impact. This applies to both new construction and renovation of existing buildings.

Direct electrification and prioritized use of green hydrogen

European industry must decarbonize, and this must be done through the direct electrification of processes to the extent possible. Switching to green hydrogen should only be a solution in those processes where direct electrification is not possible (e.g. to some extent steel, chemicals etc.). Electrification solutions that are technically feasible must be disseminated through specific (supported) projects and experience must be exhibited and shared. The use of hydrogen in road and rail transport and for heating buildings risks wasting significant amounts of energy and unnecessarily driving up the price of a scarce resource.

The European Commission must define clear priority sectors that are not easily electrified for the end use of green hydrogen to ensure a cost-effective transition away from fossil fuels. For process heat at temperatures up to about 150 degrees, high-temperature heat pumps can be used far more energy efficiently than green hydrogen. This can be regulated via a separate requirement in a future revision of the Energy Efficiency Directive (EED). Planning green hydrogen infrastructures, especially production capacities, transport, and storage infrastructures, allows to ensure that limited domestic production and import capacities match the real needs for the European economy.

Mobility

All flights into the EU Emissions Trading System (ETS)

The scope of the ETS is currently limited to flights within the European Economic Area, even though long flights are the most damaging for the climate. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is not and does not seem likely to become an effective regulation of international flights.

Include flights in and out of the EU in 2027 by making an ambitious interpretation of the current ETS regulation (e.g. article 28a).

Effectively regulating non-CO₂-emissions from aviation

Non-CO₂-emissions are currently not effectively regulated by the ETS and other policies such as ReFuelEU Aviation. This includes water vapour (H₂O), oxides of nitrogen (NO_x), sulphur dioxide (SO₂) and soot particles. From a climate perspective, this is critical since non-CO₂-emissions are estimated to have significant warming effects.

The European Commission should follow up on current plans to cover the non-CO₂ emissions in the ETS regulation and pursue fast implementation. Member States can use the monitoring, reporting and verification to start reducing the non-CO₂-emissions, before it is introduced into the ETS. The European Commission could also include strict requirements in the ReFuelEU Aviation regulating the quality of the fuel to ensure it has lower aromatic concentrations.

Design for disassembly-requirements for electric vehicle batteries

Recycling batteries will become increasingly necessary. This is a challenge as the current battery design focus mostly on energy density, meaning that battery cells and battery packs are being assembled (glued, welded etc.) in more compact ways which make high quality recycling with assembling of materials difficult technologically and/or economically. As a result, valuable materials will go to waste leading to down cycling and need for further virgin raw materials.

The European Commission should consider principles or specific design standards which demand “design for disassembly” of electric vehicle batteries. The principles could be generic as to not limit innovation and progressively get more specific as the technology matures. One option is to require battery makers to take back batteries (producer responsibility for recycling) even after second and third uses.

Phasing out biofuels for road transport

The climate benefit of 1st generation biofuels is highly doubtful, and they should be phased out. CONCITO has estimated that the energy content in the food crops used as feedstock for biofuels consumed in the EU is equivalent to the energy content in food that could feed approximately 150 million people. To support climate friendly road transport, direct electrification should be prioritized, while 2nd generation biofuels should only be used for limited purposes, where electrification is impossible.

Moving forward, the EU should exclude the use of 1st generation biofuels in all legislation and limit the use of 2nd generation biofuels as much as possible e.g. in the Renewable Energy Directive.

Member State ban of sale of new internal combustion engine cars before 2035

The current regulation on CO₂ emission performance standards sets 2035 as the phaseout date for the sale of new combustion engine passenger cars. However, given the long life of passenger cars, for some Member States with earlier national targets of climate neutrality, this deadline is too late. To support frontrunner Member States, the European Commission should allow individual Member States to set an earlier phaseout date.

Member States should be allowed to introduce bans for sales of internal combustion engine cars before 2035. This could be done by changing the EU type-approval requirements.

Weight requirements for passenger cars

In light of the increasing size and weight of new passenger cars (e.g., due to the increasing sale of SUVs), auto makers could be encouraged through EU regulation to make more affordable and less material-intensive electric vehicles.

The European Commission should consider proposing regulation to ensure a decreasing maximum average weight per manufacturer for new passenger cars.

Phasing out sales of new fossil fuel heavy-duty vehicles by 2035

The decision to phase out combustion engine passenger cars sends a clear signal to manufacturers, retailers, customers, and authorities planning the expansion of the grid infrastructure. It is important to extend the phaseout to heavy-duty vehicles, as they constitute a quarter of all road transport emissions in the EU.

The European Commission should propose a revision of the CO₂ emission standards for heavy-duty vehicles, including a phase-out date in 2035, if the current negotiation does not result in sufficiently accurate and high ambitions.

Export of combustion engine cars to third countries

EU Member States are currently exporting a high number of fossil cars to lower and middle-income countries both within and outside Europe. The export of fossil cars displaces CO₂-emissions and could lock in fossil fuel use outside the EU. This trend could possibly increase with the phase-out of combustion engine cars in the EU by 2035.

The European Commission should set in motion an investigation into this issue to support balanced policy measures. An investigation could include the potential of vehicle maintenance/retrofit programs in importing countries and a Europe-wide scrappage scheme to improve the life cycle footprint of the existing car fleet.



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CONCITO - Denmark's green think tank is an independent knowledge partner for decision-makers across society - politicians, business, academia and civil society. We aim to help reduce greenhouse gas emissions and limit the damaging effects of global warming.

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