

A EUROPEAN GREEN DEAL POSITION PAPER

The GLOBSEC Energy Transition Task Force was launched in the fall of 2019 at the Tatra Summit to focus on the impact of climate change policy on the CEE energy sector and low carbon transition. The Task Force is composed of leading energy companies from the CEE region that recognize the value of collaborative engagement and creative policy solutions.

Executive Summary

The COVID-19 induced lockdown has put national economies on life support, straining public resources and slashing corporate investment budgets. As a result, there are less resources available for long-term policy objectives while the stimulus measures focus on saving companies and those they employ. It has also created an unprecedented disruption in governmental decision-making machinery directly affecting the long-term policy making processes.

Going into 2020, pressure was building for more ambitious mid-term targets in the lead up to COP 26 in November even though Executive VP Franz Timmermans announced in February that the Commission's 2030 Impact Assessment (IA) would not be ready until September. Now that COP 26 has been postponed to 2021, all parties will have more time to prepare their positions based on objective arguments reflecting the Commission's IA. For Central and Eastern European (CEE) stakeholders in particular, this is a window of opportunity to contribute in a more substantive manner to the legislative process and final design.

The Task Force agrees with the objectives of the European Green Deal subject to the Commission's commitment to European economic growth and competitiveness and global climate leadership by emphasizing the following measures:

- Widening the scope of the Emissions Trading Scheme (ETS) and making market-based carbon pricing the key driver of energy transition;
- Developing a robust carbon border adjustment methodology as a key tool for EU global climate leadership;
- Establishing an offset-mechanism supporting European low carbon technologies and solutions in third countries;
- Opening public and expert debate on European Commission carbon abatement methodology to verify impact assessment assumptions and ensure overall value for money;
- A full review of nuclear energy as zero-carbon technology under EU taxonomy including but not limited to nuclear-based hydrogen generation as green or 'yellow' hydrogen;
- Recognizing key role of electricity distribution grids in the energy transition, improving accessibility of EU funding mechanisms and long-term financing for distribution grid projects;
- Recovery programmes and economic stimulus measures should support electrification and prioritize investments in areas such as renewable energy, European battery R&D, EV charging infrastructure, distribution grid reinforcements and electrification of heating systems
- Supporting EU battery recycling and repurposing as part of the circular value chain

Although the Climate Law is the political focal point of the European Green Deal, CEE stakeholders and citizens strongly support local environmental protection and welfare sustainability. Thus, it is important to ensure European Green Deal measures support regions and municipalities in subsidizing end-cost municipal waste management solutions and increasing public awareness of the need to avoid landfills.

Structure

The position paper is divided into three sections:

- European Green Deal Strategic Priorities
 - Carbon pricing
 - Carbon border adjustment and EU global climate leadership
 - Circular Economy
 - Sustainable Finance and Taxonomy
- New Proposal
 - EU Climate Action Scheme and Fund
- Key Challenges
 - Balancing crisis response and long-term priorities

European Green Deal Strategic Priorities

Carbon pricing

With less than half of Europe's CO₂ emissions covered by the EU Emissions Trading Scheme (ETS), carbon pricing is currently not sufficiently widespread to become an effective driver of Europe's climate change ambitions. Agriculture, transport and building sectors remain outside its scope, beholden to the much softer effort sharing regulation (ESR) framework without a firm price signal. Within the power sector ETS has been remarkably successful in shifting coal power production to the back of the merit order curve in recent years. This kind of 'push' needs to be applied across all sectors, and the sooner the better.

The EU ETS should be extended to all remaining sectors of the EU economy with the aim of eventually covering all (or, at least, a vast majority of) European CO₂ emission under a cap that is synchronized with agreed EU carbon targets. This should also include negative CO₂ emissions (capture and/or sequestration). Once this is achieved, EU ETS would become a powerful tool for carbon abatement in sectoral and/or technology neutral way based on a fundamental market driven mechanism that minimizes government interventions.

A leaked draft communication in December 2019 revealed that DG work was underway prior to the Ursula von der Leyen Commission taking office to incorporate maritime, reduce free allowances allocated to airlines, and assess the possibility of including road transport emissions to complement existing and future CO₂ emission performance standards for vehicles.¹ Inclusion of transport under ETS could significantly contribute to its electrification. For now, battery electric vehicles (BEVs) are at a disadvantage to internal combustion vehicles (ICE) with the imbedded CO₂ price in electricity that the latter do not face. The same applies for heating and cooling in the building sector vis-à-vis fossil fuels. Currently feasibility and impact is being investigated by third parties.

Complimentary to a market driven carbon pricing system, the EGD CO₂ abatement methodology should be transparent and credible to ensure value for money. As the cornerstone of the European Commission's impact assessments it plays a significant role in shaping final investment decisions. The cost benefit analysis should incorporate full lifecycle costs and carbon footprint into the cost per tonne of CO₂ abated calculation. This process should be open to public and expert debate to ensure objectivity and consistency across eligible technologies.

Carbon border adjustment and EU global climate change leadership

EU allowances are a necessary feature of the current EU ETS to maintain the global competitiveness of energy intensive European industries but should not be considered a long-term solution. Rather, the carbon border adjustment should become Europe's key policy instrument to level the playing field for its industry and in doing so spur global decarbonization. Ideally this will become a market-based equalizer with the added benefit of sending the carbon price signal to consumers.²

The carbon border adjustment in principle should encourage cleaner and more efficient global manufacturing and production, extending to supply chains and encouraging a race to the top. Countries will be encouraged to adopt carbon markets and use funds to modernize infrastructure and industrial processes with clean technology upgrades. Combined with tightening climate and environmental legislation, this will attract private investment to accelerate the energy transition. Furthermore, the price signal will lower demand for carbon intensive products.

¹ Communication on the European Green Deal, December 2019

² e 'invisible' consumption carbon footprint is not accounted for under agreed international practice.

With some 90% of global CO₂ emissions coming from outside EU borders, it would be irrational and irresponsible for the European Commission to be too inwardly focused on the Climate Law and not divert resources to shaping the world around it in line with the Paris Agreement. In this spirit, the EU should support opportunities for European companies to contribute to cost-effective CO₂ reductions with available low carbon technologies and solutions anywhere and everywhere in the world.

Circular Economy

Circular economy takes on different meaning across overlapping policies and instruments, making it crucial to focus on solutions to specific needs and demands. As referred to in the executive summary, the two strategic technologies being developed and applied in CEE that require additional support are within the battery value chain and end waste management.

Battery, R&D, recycling and repurposing is a key potential value segment for the nascent European battery industry. Discussions about a more holistic life cycle analysis approach to measure the carbon impact of batteries from mining, manufacture, use and end of life management to encourage innovation across the supply chain are moving forward and should be they key to the EU gaining a competitive edge globally.

It is evident that standard guidance for reclaiming batteries from consumers for recycling and material refinement is needed to help the EU reach its battery recycling goals through a decentralized pan-European network. At the moment, while the technology is still incubating and developing, battery recycling requires EU subsidies where logistical costs will inhibit private capital.

While progress in waste management is evident in a few CEE member states that have updated and implemented new legislation, on average it lags far behind Western Europe in key indicators and faces an uphill battle in poorer rural areas. Technological solutions are available and deployable, and although costs are coming down price sensitivity remains a major challenge. In rural areas, this is compounded by lack of environmental education and awareness. The EU can help bridge the technological and awareness gap for poorer rural communities with relatively small and straight forward actions that can have immediate and sustained impact. First, directly subsidizing the per tonne costs for municipalities that are open to new solutions but cannot afford it and, second, developing programmes to raise awareness for the positive environmental impact of newly available technologies.

Sustainable Finance and Taxonomy

By the numbers nuclear technology compares favourably as a sustainable source of energy: 12 g/CO₂ life-cycle emissions is equivalent to wind energy and four times less than solar (approximately 48 g/CO₂). However, it has yet to be included on the list due to concerns over its environmental impact and questions about long term waste management. In the detailed Final Report authored by the Technical Expert Group (TEG) on Sustainable Finance and submitted to the European Commission in mid-March, nuclear was only addressed in the Technical Annex. The Annex contained a few short paragraphs relating to deliberations on nuclear energy, questioning contribution to environmental sustainability and the 'do no significant harm' principle: "with regard to significant potential damage to the environmental objectives, including the circular economy and waste management, biodiversity water systems and pollution, the evidence is more difficult and complex to assess in a taxonomic context."³ TEG recommends more extensive technical work is undertaken with in-depth technical expertise. At the same time, some Member States (FI, SE, FR) have advanced the long-term storage of high activity radioactive waste.

Natural gas is not only transitional but presently an enabling technology for grid integration and balancing of renewable energy sources, potentially even after 2050. Post-2050 natural gas reserves would not contradict climate neutrality taking into account carbon sinks (LUCULF sector). Furthermore, retrofitting of natural gas distribution networks to enable renewable and decarbonized gases such as biomethane, hydrogen, synthetic gas or carbon dioxide is an important part of Europe's long-term climate-neutrality.

Although natural gas infrastructure will be excluded from the EIB's energy lending policy beginning in 2022, it can potentially approve gas infrastructure projects already formally under appraisal until the end of 2021, noting that switching from oil or coal to natural gas reduces GHG emissions in the short term. If CO₂ emissions limits for power production are set at 100g CO₂/kWh as some have proposed, natural gas would effectively be disqualified under the taxonomy.

The European Parliament maintains that natural gas and nuclear based energy can be labelled as 'enabling' or 'transitional' activities in full respect of the 'do no significant harm' principle.

³ Taxonomy: Final Report of the Technical Expert Group on Sustainable Finance, March 2020

New Proposal

EU Climate Action Scheme and Fund⁴

The EU has an opportunity to reduce even more CO₂ than it will generate by focusing attention outside its borders and investing in the export of its low-carbon technology abroad. This would be a boon for EU industry, exports, and GDP and a clear win for ecology. This would envision setting up a European fund investing in carbon reductions, zero-carbon or negative carbon technologies. Considering the state of power generation and emission performance standards beyond the EU, the carbon reduction potential is enormous and on a much greater scale than what is possible in the EU. At the same time, this would support the export of European advanced, low carbon technologies.

This EU Climate Action Fund will be financed from the EU budget to enable the EU Climate Action Scheme following the same eligibility criteria. This allows European climate prevention actions to be extended beyond European borders without the need of new international agreements to establish new benchmarks in respective markets where climate protection is not ambitious.

Key challenges

Balancing crisis response and long-term priorities

The COVID-19 crisis response has severely handicapped the resources and capacities of member states, especially in CEE, to meaningfully participate in the consultation feedback loop for EGD measures. Given the circumstances, extended time and flexibility is important for member states and their constituencies to process information and make informed decisions.

EGD was designed to lay down the criteria for long-term investments in green growth, driving a socially inclusive energy transition to 2050 carbon neutrality. While this legislative process has been interrupted and delayed, EGD and other European Funds will need to be rethought and, in some cases, repurposed for short-term recovery measures. Ideally, this will capture 'shovel ready' projects that contribute to energy savings and long-term decarbonization.

Here it is worth emphasizing the magnitude of investment needs for electrification associated with the Commission's 2050 energy vision. Recovery stimulus measures and funds must explicitly support the energy transition if medium- and long-term climate objectives are to be reached.⁵

⁴ The full detailed proposal for the Climate Action Scheme and Climate Action Fund are in the Annex

⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0773>

Annex

EU Climate Action Scheme

Eligibility Criteria

- ▶ Applies only to projects in non-EU countries with⁶ inadequate CO2 pricing
- ▶ The projects must fulfill the following conditions:
 - Save, reduce, capture or sequester CO2 emissions;⁷
 - Proven to be non-economical without support (e.g. due to competition with CO2 emitting projects without adequate CO2 pricing);
 - Not double counted towards other CO2 emissions offset mechanisms;
 - Minimum [80%] European content of overall capital expenditure;⁸
 - Optional: Open to all investors or if desired European investors only.⁹

The Mechanism

- ▶ Eligible carbon reducing projects would be rewarded for the amount of CO2 provably saved/reduced in a given year;
- ▶ The reward shall be equal to a product of the number of tons of CO2 provably saved/reduced¹⁰ and EUA price in corresponding time;
- ▶ The reward will be provided to projects during the first [15] years after the COD¹¹ of the project in cash or equivalent amount of EUAs;¹²
- ▶ Since projects are made possible by the EU Climate Action Scheme that would otherwise not be realized, the CO2 emissions saved shall be credited to the EU and reflected in EU's carbon neutrality target. Therefore they should not be counted as savings delivered by host countries where the project operates (no double counting).

Notes

- ▶ The Scheme described above remunerates only CO2 reductions achieved in reality (i.e. the system is not based on any projections, assumptions, or estimates);
- ▶ The Scheme has a potentially very broad reach and applied to all types of investors (private, institutional, government finance, etc.).

EU Climate Action Fund

Suggested mechanism

- ▶ The Fund will be financed from the EU budget;
- ▶ The Fund will be seeking projects in non-EU countries where CO2 pricing is inadequate the (i) save, reduce or capture CO2 emissions and which (ii.a) are economically viable but need a lead investor or (ii.b) would be non-economical without support;

⁶ Inadequate CO2 pricing means emissions are either not priced at all or priced at levels materially below the price of CO2 in EU ETS. Materially below means [%] of EU ETS price

⁷ There shall be no limitation on type of technology (negative carbon, zero carbon, or low carbon)

⁸ Competitive pricing must be assured

⁹ European investors/companies can be defined as those who pay >50% of taxes in EU

¹⁰ In electricity and/or heat production the reduction shall be calculated as a difference between carbon intensity of the alternative pushed from the market and the carbon intensity of the given project. Should this be difficult to determine a closest proxy can be used.

¹¹ COD stands for Commercial Operation Date, i.e. the date on which a Qualified Project is substantially complete and commercially operable

¹² EUAs can either be used or sold by the investors

- The Fund's investment Committee will evaluate projects based on the CO₂-Pricing-Modified DCF which includes a standard DCF of the project with an added component of EU ETS price of saved/reduced amounts of CO₂ emissions. Mathematically this is defined as the following:

$$CO_2 - Pricing - Modified DCF = \sum_0^n \frac{CF_n}{(1+r)^n} + \sum_0^n \frac{Q_n * P_n}{(1+r)^n}$$

where

CF_n is project's net cash flow in period n

Q_n is the amount of CO₂ emissions saved or reduced in a given year

P_n is the price of CO₂ emissions in a given year,¹³ and

r_n is a discount factor set by the fund's investment committee¹⁴

- Important: Should CO₂-Pricing-Modified DCF be used for approving projects, individual assets owned or (co-owned) by this Fund must be managed/operated as if the CO₂-pricing-modified-CF is the real cash flow¹⁵. Please note that this is no-trivial requirement as the real financial terms (without reflection of the cost of avoided CO₂ emissions) the decisions made by the assets (e.g. powerplants) might seem uneconomical (although they will be economical should the cost of avoided carbon be reflected).

Notes

- Unlike the EU Climate Action Scheme the EU Climate Action Fund:
 - Assumes EU-owned investments in non-EU countries
 - As the CO₂-pricing-modified-cash-flows will include a virtual component, the Fund will likely have an insufficient profitability in real cash terms, i.e. the Fund will not be interesting for private investors (in order for the Fund to attract private investors the avoided CO₂ would need to be actually compensated in cash form sources outside the Fund, which is the concept of the EU Climate Action Scheme)
 - The Climate Action Fund decision-making is, per definition, based on forward looking figures (requires various assumptions to be made);
 - Should be able to finance both profitable as well as without-using-the-CO₂-modified-DCF unprofitable projects. The Fund would act in both cases as the lead investor.

¹³ As the EU-ETS forwards might not be available for more distant future, the price of the last known EU ETS factoring in expected EU27 inflation shall be used as a proxy

¹⁴ The targeted minimum return can be used as the discount factor

¹⁵ Important, for instance, for daily scheduling decisions for any powerplant owned or co-owned by the Fund