Submission by Cyprus and the European Commission on behalf of the European Union and its Member States

Nicosia, 13 April 2026

Subject: EU submission in response to the invitation of the Brazilian COP Presidency for contributions to the COP 30 Presidency Roadmap on the Transition Away from Fossil Fuels in a Just, Orderly and Equitable Manner

The European Union welcomes the opportunity to submit its views on the COP30 Presidency Roadmap on the Transition Away from Fossil Fuels in a Just, Orderly and Equitable Manner. At COP30, over 80 Parties supported a roadmap to transition away from fossil fuels. The EU publicly supported to launch a Mutirao Roadmap to operationalise the whole of §28 and §33 of GST-1, inter alia transition away from fossil fuels in a just, orderly and equitable manner. Whilst agreement on a roadmap was not reached in Belém, the EU welcomes the work undertaken by the Brazilian COP30 presidency to develop a roadmap on transitioning away from fossil fuels in a just, orderly and equitable manner (TAFF roadmap) and in parallel another roadmap for halting and reversing deforestation and forest degradation by 2030.

It is important to underline that, while the EU is fully aware of the importance of parallel processes and initiatives such as the TAFF roadmap, the UNFCCC and the Paris Agreement remain the irreplaceable framework for global climate action. Importantly, Nationally Determined Contributions (NDCs) are the main vehicle to set domestic ambition. Their full implementation as well as linking them to ambitious Long-Term Low Emission Development Strategies (LT-LEDS) is central for the transition away from fossil fuels.

The roadmap should support and complement, not undermine, the mandates already agreed, in particular the outcome of COP28 on transitioning away from fossil fuels, which must remain our common reference point. The Roadmap should encourage all Parties to accelerate the implementation of the global efforts in a nationally determined manner, reflecting different national circumstances, pathways and approaches,, in order to limit the global temperature increase to 1.5°C above pre-industrial levels.

General reasoning and scientific evidence

The Sixth Assessment Report of IPCC (AR6) clearly stated that rapid, deep and immediate reductions in GHG emissions in all sectors are needed to limit global warming to 1.5°C. This includes a major energy system transition: realising an energy sector predominantly free of fossil fuels well ahead of 2050 entails a substantial reduction in overall fossil fuel use and a minimal use of unabated fossil fuels. Successive COP commitments speak to these findings, e.g. to phase down unabated coal power, phase out inefficient fossil fuel subsidies that do not address energy poverty or just transitions as soon as possible, reduce non-CO_2 emissions and increase the use of renewable energy and improve energy efficiency. Parties to the Paris Agreement at COP28 agreed on global efforts that include the "transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner" in the outcome of the first global stocktake (GST). They also agreed to "accelerating efforts globally towards net zero emission energy systems", step towards stabilising global warming and doing so by mid-century is needed in order to limit warming to 1.5°C.

Creating an implementable, clear and robust TAFF roadmap, based on the best available science grounded in observational evidence, is a timely and important effort considering that energy supply, distribution, and use contribute around 75% of total global GHG emissions, directly linked to the current global dependence on fossil fuel energy sources. The more recent Production Gap Reports continue to confirm findings of the IPCC AR6 that governments, in aggregate, still plan to produce far more fossil fuels than would be consistent with limiting global warming to 1.5ºC or even 2ºC.

Transitioning away from fossil energy production and consumption must go hand in hand with energy savings, energy efficiency and deploying renewable energy capacity. The EU, guided by science assessed in the IPCC AR6 Synthesis Report and recent analysis by the IEA and other expert organisations, is of the view that the biggest opportunity for scaling up mitigation lies in the rapid phase in of renewable electricity and other net-zero technologies, including related upgrades of auxiliary infrastructure such as transmission lines and storage capacity, improving energy efficiency and the electrification of end-use.

Increased deployment of renewable electricity generation, primarily wind and solar, can save more than 6 $GtCO_2eq/y$ already by 2030 for net-lifetime costs of less than USD 20 per tCO_2eq. In most economies, renewables are the most competitive choice for new capacity.

The roadmap should highlight the need for these low hanging fruits to be finally taken advantage of and global efforts to transition away from fossil fuels undertaken in this decade be further accelerated post 2030. The roadmap should lay out the path to net-zero CO_2 by mid-century and be designed to limit and minimise the warming contributions of emissions along the way. It should include differentiated pathways for each fossil fuel, in line with IPCC and IEA analysis regarding the transition away from fossil fuels.

At the European Council of 19th March 2026, European Leaders concluded that "the recent spikes in the prices of imported fossil fuels demonstrate that the energy transition remains the most effective strategy for achieving Europe's strategic autonomy, strengthening resilience, structurally lowering energy prices, and delivering the clean, abundant and homegrown energy needed to power the economy of the future and that accelerating the deployment and integration of renewable and low-carbon energy sources and energy storage is essential to reduce dependence on volatile fossil fuel markets and enhance security of supply".

Transitioning away from fossil fuels implemented in a just and inclusive manner is, over time, increasingly providing significant socioeconomic opportunities on a national, regional, and global scale. Accelerating renewable energy generation comes with various benefits, such as increased energy independence and sovereignty, increased price stability and predictability, the creation of new local jobs and businesses in the renewable energy generation ecosystem, and health improvement due to less air pollution. Contrary to this, delayed mitigation action would lock in high-emissions infrastructure, raises risks of stranded assets and cost-escalation including additional pressure on fiscal budgets related to the volatility of fossil fuel prices, reduces the feasibility of keeping 1.5°C within reach, and increases loss and damage and the need for adaptation actions. The volatility of fossil fuel prices exposes vulnerable populations to greater uncertainty. Therefore, reducing dependence on fossil fuels in a just and inclusive manner is, over time, decreasing energy poverty and improving access to energy, ensuring that no one is left behind.

EU views on the process and outcome

The EU is of the view that the roadmap should identify and enable measurable, near-medium- and long-term steps and actions that support transitioning away from fossil fuels in line with GST-1. The roadmap should identify indicators of these and other key features of the transition, barriers and opportunities of such a transition, and needs to be based on best available science. Rapid action along these lines comes with significant benefits for human health, wellbeing, and sustainable socio-economic developments.

The EU strongly promotes consultation and active engagement of expert organisations in the work on the roadmap, such as UNEP, the IEA, IRENA, the OECD, the World Bank, the IMF, regional development banks, etc. as well as relevant academic and research institutions, including the Joint Research Centre of the European Commission.

The dialogue over the roadmap should engage both Parties and non-party stakeholders. This may include alliances that have been bringing together relevant actors – such as the Global Energy Transition Forum, the Powering Past Coal Alliance, the Beyond Oil and Gas Alliance, the Coalition on Phasing Out Fossil Fuel Incentives Including Subsidies, the Clean Energy Transition Partnership - and promoting transition initiatives – such as the Global Methane Pledge. The TAFF roadmap should support implementation of accelerated, concrete action by coalitions under the Action Agenda., as reshaped by COP30 presidency in Belém.

To progress swiftly, the TAFF roadmap should be discussed and refined throughout the year using relevant technical and ministerial meetings already planned to lay out the conditions for progress on this topic. The EU therefore strongly promotes the use of the upcoming sessions, meetings and conferences of parties under the UNFCCC, IEA, IRENA etc.. this year to contribute to the development of the roadmap in the run up to COP31 In this context, the COP30 presidency is encouraged to explore ways to facilitate continuity of this work, including in consultation with the COP31 and COP32 presidencies, as this work is an important input in the second Global Stocktake. It is crucial to ensure a sound follow-up of the roadmap. We further consider the TAFF conference hosted by Colombia and the Netherlands an important event that can usefully inform the TAFF process under the authority of the COP 30 Presidency.

The TAFF roadmap can create significant momentum, namely by:

1. setting out science-based action points for the transition away from fossil fuels;
2. supporting the exchanges on and implementation of robust domestic policy frameworks that support the transition away from fossil fuels.

Regarding the first point, the TAFF roadmap should build on existing Global Stocktake commitments, including doubling energy efficiency and tripling renewables by 2030. It should also link to other action points, in keeping with 1.5°C, to be further specified with the support of expert organisations, such as:

- the Global Methane Pledge targets;
- Supply chain emissions reduction including post-2030 methane mitigation action with a view to achieve a deep reduction towards net zero in methane emissions intensity from fossil fuels;

- Decarbonize final energy uses, with a view of reducing the use of fossil fuels;
- Increasing electrification;
- Expanding grids and storage capacity;
- Introducing carbon pricing;
- Supply chain emissions reduction;
- Ending new fossil fuel drilling;
- Introducing extended producer responsibility;
- No new coal power;
- Phase out fossil fuels subsidies that do not address energy poverty and just transition;
- Effectively and rapidly decarbonise the transport sector as soon as possible;
- Uptake of cost-efficient and at scale zero-emission fuels in aviation and shipping.

For these action points to be effective, parties would benefit from a common understanding to frame an effective, efficient and just transition to a net zero economy, taking into account national circumstances. This includes approaches to diversify energy supply, avoid and overcome as soon as possible fossil fuel lock in, and foster renewable energy cooperation.

The roadmap should also consider the role of women and girls, in all their diversity, for more effective fossil fuel phase-out; and would benefit from linking its work to that of the Enhanced Lima Work Programme and the Belém Gender Action Plan; to strengthen gender mainstreaming, support implementation, and encourage gender-responsive climate policies, plans, strategies and actions, including by mapping key sectors, and strengthening coherence and cooperation both nationally and internationally.

Similarly, promoting non-fossil business cases matching the fossil fuel industry's expertise can incentivise existing energy players to transform. Highlighting the social aspects of transitioning away from fossil fuels, with the aim of minimizing impacts and harnessing the socioeconomic benefits of reducing dependence on fossil fuels, is vital. Additionally, establishing strategic regulatory frameworks is a central element to achieve a comprehensive and economy-wide net zero pathway, to be reflected in ambitious NDCs and LT-LEDS.

Regarding supporting the exchanges on and implementation of robust domestic policy frameworks that support the transition away from fossil fuels, it has been a longstanding view and experience of the EU that designing and adopting comprehensive legislative frameworks, consisting of policies and regulation, as well as domestic investments schemes, are central drivers to accelerate climate ambition and implementation towards a transition away from fossil fuels in this critical decade and beyond, while recognising that pace and modalities of such transitions might differ across Parties depending on their national circumstances. The TAFF roadmap should encourage the design of policies and regulation based on the common understanding that mitigation actions in the energy sector, for instance by deploying renewables, are technically and promptly available and economically competitive over the project lifespan to deliver the necessary mitigation needed in line with 1.5°C, and therefore the most economic choice when adding new generation capacity and to replace fossil fuel-based capacity. They should aim at catalysing positive tipping points and breakthroughs by building critical mass and accelerating the economies of scale.

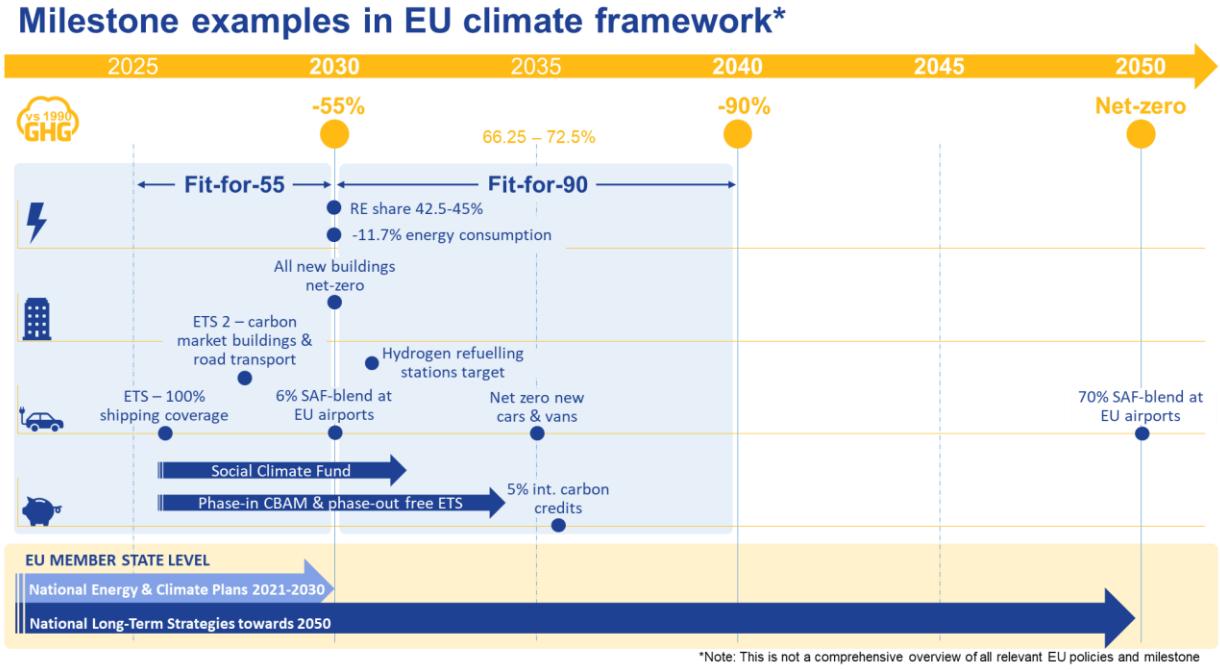
To accelerate the transitioning away from fossil fuels, policies and regulation could focus on the consumption of fossil fuels (e.g. by providing a clear schedule towards the phase-out of fossil fuels in electricity generation), as well as being based on a commitment to a managed phase-out of the production of fossil fuels (e.g. by setting production end-dates). Phasing out fossil fuel subsidies that do not address energy poverty or just transition, as soon as possible, is also central.

Transitioning away from fossil fuels requires addressing its impacts on consumers, employees, employers, and communities, and guiding a socially just and inclusive transformation across different areas of life, sectors and industries while reaping the many benefits provided by more affordable clean energy technologies and renewables, such as green jobs, sustainable local electricity generation, access to clean and affordable energy, improvement of human and environmental health through reduced air pollution. The TAFF roadmap should therefore identify human rights and gender-responsive, just transition approaches that maximize benefits and minimize negative impacts of phasing out fossil fuels on people, workers and households.

Work in the EU on transitioning away from fossil fuels

As outlined in successive conclusions adopted by the European Council, the EU and its Member States support and are determined to engage with partner countries to support the global transition away from fossil fuels in a just, orderly and equitable manner, in line with the outcomes of the first Global Stocktake under the Paris Agreement.

At the EU level, climate and energy policy has been leading the reduction of domestic fossil fuel consumption, and the EU Global and Climate Energy Vision confirms that the EU is staying the course on its climate and environmental goals. This is reflected in the legally binding EU targets of reaching climate neutrality by 2050 and a net GHG reduction in 2030 by at least 55% and in 2040 by 90% compared to 1990 levels, with an adequate contribution towards this 2040 target of high-quality international credits of up to 5%. The updated EU Nationally Determined Contribution (NDC) is based on these targets.



Under the current policy framework, EU countries need to establish 10-year integrated national energy and climate plans (NECPs) for the period from 2021 to 2030, submit a progress report every two years and develop consistent national long-term strategies to meet the agreed climate and energy targets and the goals of the Paris Agreement.

The current EU energy policy agenda is driven by the comprehensive integrated climate and competitiveness policy, which sets out to achieve the following energy targets by 2030:

- The revised Renewable Energy Directive introduced targets to almost double the existing share of renewable energy in the EU. An increase in the share of renewable energy sources in final energy consumption to 42.5%, with the aim of achieving 45%;
- The EU also revised the Energy Efficiency Directive, with a reduction in primary and final energy consumption of 11.7%, compared to 2020 projections.

The current European regulatory framework for energy was initially based on the 'Fit for 55' package, which was then updated by the REPowerEU plan, while speeding up the green transition and promoting massive investment in renewable energy. The European Union has further set in place key legislation addressing the domestic transition away from fossil fuels, e.g.:

- The European Emission Trading System, aiming to bring emissions in covered sectors down by 62% by 2030, compared to 2005 levels.
- The EU Methane Regulation which establishes clear obligations for monitoring, reporting, and reducing emissions in natural gas, as well as oil and coal sectors – and is also the first in the world to regulate emissions from imports.
- At the start of 2025, the Commission adopted the Clean Industrial Deal. It outlines concrete actions to turn decarbonisation into a driver of growth for EU industries, by creating demand for low-carbon products – notably with the proposal for an Industrial Accelerator Act published on 4 March. The Clean Industrial Deal also aims at lowering energy prices, creating quality jobs and the right conditions for companies to thrive.
- A new Energy Efficiency Roadmap presented in June 2025, aiming to create new markets for energy efficiency solutions and drive innovation in the sector.
- The proposal of a European Grids Package published in December 2025, aiming to modernise the EU's power network and foster the uptake of innovative digital solutions.
- The EU's Sustainable Finance Framework, including through the EU Taxonomy Regulation, supports the channeling of private investment into the transition to a climate-neutral, climate-resilient, resource-efficient and just economy, as a complement to public money.
- As part of the 'Fit for 55' legislative package, the emission standards set by Regulation (EU) 2019/631 were revised by Regulation (EU) 2023/851, which introduced a 100% emission reduction target for new passenger cars and vans from 2035 onwards. The European Commission in December 2025 presented the Automotive Package to support the sector's efforts in the transition to clean mobility.
- The Renewable Energy Directive (RED) as well as the sectoral Regulations Refuel EU Aviation, and Fuel EU Maritime refer to electrification, advanced biofuels, and RFNBOs (Renewable Fuels of Non-Biological Origin) that meet specific, regulated sustainability criteria (like for the Methane regulation mentioned above) to ensure significant greenhouse gas emission reductions with no unintended negative indirect impacts. They further provide targets for the power sector, industry, transport, and buildings.
- The EU Just Transition Mechanism is a tool to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. It provides targeted support in the most affected EU regions, to alleviate the socio-economic impact of the transition.

- Digital solutions, including AI, will be further promoted in the upcoming Strategic Roadmap on Digitalisation and AI in the energy sector.

International cooperation under the roadmap

Progressing and accelerating the phase-out of fossil fuels needs to be based on efficient international cooperation and guided by the best available science. The IPCC AR6 clearly points to some of the least-cost and high mitigation potential solutions for the energy sector: renewable energy including solar and wind, energy efficiency, and reduction of methane emissions. At the same time, it points to some important challenges, in particular mobilising the significant upfront investments needed. It also states that there is sufficient global capital to close the global investment gaps, but there are barriers to redirect capital to climate action.

The EU is actively promoting cooperation in bilateral, plurilateral and multilateral settings, e.g.:

- The EU is actively leading the global momentum on reducing methane emissions as co-convener of the Global Methane Pledge together with Canada. Its 159 participating countries agree to take voluntary actions to contribute to a collective effort to reduce global methane emissions by at least 30% from 2020 levels by 2030.
- Global Energy Transitions Forum - launched by the President of the European Commission von der Leyen in 2025 - to follow up on the tripling of renewable energy capacity and doubling of energy efficiency.
- Global Gateway is the EU's key vehicle to support the clean and resilient transition in emerging and developing economies. Under the Team Europe approach, it combines resources from the EU and its Member States, development agencies, banks and businesses to mobilise over EUR 400 billions of leveraged investment until 2027, with half of the flagship projects targeting climate and energy. For example, cooperation on a sustainable energy transition that is fair, just and equitable in Africa has advanced considerably through the Team Europe Initiative (TEI) on the Africa-EU Green Energy Initiative (AEGEI), part of the Global Gateway Africa Europe Investment Package. The AEGEI is Africa-wide: it includes actions at continental, regional and national level, and accompanies the development, by the AU, of the Continental Power Systems Master Plan at the core of Africa's Green Vision and ambition of creating one grid for one continent. By 2030, AEGEI's expected main result is to support the deployment of at least 50 GW of additional renewable energy generation capacity, providing at least 100 million people with access to electricity. To reach these objectives, AEGEI supports investments in renewable energy, energy efficiency, and access to energy. Over EUR 20 billion for the 2021-2027 period has been pledged so far by Team Europe.

- The Global Gateway Green Shipping Corridors (GGGSC) flagship project aims to connect European ports with ports all around the world that have a strategic value to ensure the availability of sustainable and renewable maritime fuels. The GGGSC follows a Team Europe approach and aims to support partner countries on ensuring the availability of sustainable renewable and low carbon fuels.
- At COP28, the COFFIS coalition was established by the Netherlands to close the gap between implementation and international commitments on phasing out fossil fuel subsidies by translating them into real reforms. COFFIS is an active coalition that builds a community among policymakers, fostering exchange of best practices and approaches. Members are delivering their promises through concrete outputs such as national subsidy inventories and national phase-out strategies. The initiative counts Austria, Belgium, Denmark, Finland, France, Ireland, Luxembourg, Netherlands, Spain as current EU members.
- The Directorate General for Climate Action of the European Commission set up a Task Force on International carbon pricing and markets diplomacy. The unit leads the work on enhancing the geographic scope and effectiveness of carbon pricing as part of an international decarbonisation strategy. The unit engages with interested third countries and assists them as they move towards the development of robust carbon pricing instruments and robust approaches to international carbon markets. It helps develop and set up an international capacity building facility or network for carbon pricing as part of a structured cooperation with EU Member States and international partners with selected countries.
- The Powering Past Coal Alliance (PPCA) and the Coal Transition Accelerator (CTA): these organisations have demonstrated the real value of bringing together countries and relevant stakeholders to overcome the challenges of the coal-to-clean transition, by sharing learnings, supporting each other and building the right international environment. The PPCA, launched at COP23, has more than 180 members, including 19 EU Member States. The CTA, chaired by France and Indonesia, is a technical body whose mission consists of identifying the barriers (political, legal, financial, social) that make coal transitions more difficult, and the actions required to overcome them. CTA published its key recommendations in a report at COP29, which formed the basis for the Plan to Accelerate Solutions on Coal Transitions, launched at COP30.
- The Beyond Oil and Gas Alliance (BOGA), an international coalition which was launched at COP26 and focuses its action on the progressive phase-out of oil and gas, in line with the Paris Agreement. It has created a facility, the BOGA Fund ($20M), to mobilize grants and technical assistance on fossil transition modelling. The first two beneficiary countries were Kenya and Colombia, and a programme has also been launched with Nigeria in February 2026. BOGA currently includes 6 EU Member States.
- Several EU Member States are also supporting the Just Energy Transition Partnerships (JETP), which together have brought more than €45 billion in pledges to accelerate the energy transition in South Africa, Senegal, Indonesia, and Vietnam.

- At COP26, many EU Member States joined 34 countries in the Clean Energy Transition Partnership (CETP), thereby committing to cease by the end of 2022 all international public financing for activities related to the exploration, production, storage, transport and refining of oil and gas, as well as for thermal power plant projects that are not equipped with greenhouse gas emissions mitigation measures.

ANNEX

EU progress in transitioning away from fossil fuels

The European Commission has published the State of the Energy Union Report 2025 and the accompanying Climate Action Progress Report 2025, highlighting the progress the EU has made in its domestic transition away from fossil fuels, e.g. that:

- The EU is on track to meet its 2030 climate target with a 2.5% decrease of GHG emissions in 2024 compared to 2023.
- In 2025, wind and solar generated a record 30% of EU electricity, higher than fossil power for the first time on record.
- Most of the electricity produced in the EU now comes from clean energy sources and the EU electricity mix counted 47% renewables already in 2024.
- The newly installed renewable energy capacity in 2024 is estimated at around 77 GW.
- Final energy consumption keeps going down, with a 3% decrease in 2024 compared to 2022 mainly in the residential sector, followed by industry and services.
- EU fossil fuel demand is already decreasing – natural gas demand has gone from 500 bcm in 2019, to 300 bcm in 2024, and this is projected to further decrease by 35-50% in 2030 and 50-70% in 2040.

EU Member State experience on transitioning away from fossil fuels

European Union Member States have been engaged in both planning and implementing aspects of a transition away from fossil fuels for some time and the following examples illustrate some of the experience that the EU considers may be relevant and useful other countries. The examples provided are:

- Roadmap to phase out fossil fuels in France
- Preparing the electricity grid for renewable generation in Ireland
- Fossil free roadmaps, climate law framework and carbon taxation in Sweden
- Transitioning away from coal in Italy
- Market approaches as drivers of coal phase-out in Portugal
- A Just Transition towards a renewable energy system in Spain
- Green shipping corridors Belgium
- Transitioning away from fossil fuels in Germany

Roadmap to phase out fossil fuels in France

France is committed to tacking climate change and has embarked on a whole-of-government and all-of-society approach to ecological planning. Ten years ago in 2017, the "Plan Climat" was designed to phase out fossil fuels in view of reaching climate neutrality, and contained key measures such as the progressive phase out of thermal combustion engine for cars; a gradual phase-out of hydrocarbon production in France; and massive subsidies to exit fuel oil in the residential sector. Green Budgeting was introduced in 2017 and helps to measure progress on public spending for the transition, including with an annual assessment of green and fossil fuel public expenditures.

The French Strategy for Energy and Climate (SFEC) is laid out by the National Low-Carbon Strategy (SNBC), France's long-term Strategy, and the Multiannual Energy Planning (PPE)1.

On top of being the primary driver of climate change, fossil fuels are for the vast majority imported, subject to market price fluctuation and threaten our national sovereignty. France's energy and climate policies aim to provide an energy that is 1) low-carbon, to tackle climate change, 2) produced within our territory, to guarantee our security of supply, 3) accessible to citizens and companies at reasonable, competitive and affordable prices.

France is the first country to have put forward differentiated phase-out dates for fossil fuel consumption via our National Low-Carbon Strategy. We aim to:

- Phase out of coal consumption by 2030;

- Phase out of oil consumption by 2040-2045 for energy purposes;
- Phase out of fossil gas consumption by 2050.

To achieve such targets, our Strategy plans for the gradual phase-out of fossil fuel, with the deployment of low-carbon energies, and the overall reduction of our final energy consumption:

- Fossil fuels account for 60 % of our final energy consumption, France's PPE aims for this share to drop to 40 % by 2030 and to 30 % by 2035.
- Our final energy consumption will be halved by 2050 from 2012 levels, through a rational use of energy and energy efficiency improvements
- This strategy builds on developing power production, via a program to build new nuclear reactor units and improve the availability of the existing fleet (380TWh/year); the deployment of offshore wind (15GW installed capacity by 2035), onshore wind (+1,3GW/year) and solar (x3 by 2035), while developing our hydropower capacity (+2,8GW).
- The PPE aims to produce low-carbon energies such as hydrogen (8GW by 2035); biomethane (x6 by 2035); deploying heat recovery and its production from renewables (x2 by 2035); developing district heating networks (X2-3 by 2035).
- The success of this strategy will rely on a massive electrification of end-uses. Hence, a national electrification plan is under preparation to support industry, buildings, mobility, and digital sectors.
- Drastically reducing oil and gas imports could bring back to the French economy about €20 Bn to €40bn per year in 2030, based on analysis presented to the French National Ecological Planning Council.

The energy transition also bears cross-cutting effects. It should drive competitiveness and the decarbonization of industry. The energy transition also calls for anticipating its impact on the job market and skills, while leaving no one behind.

Finally, and in addition to the Green Budget, which assesses the environmental impact of government spending each year, France has published since 2024 a multi-year Strategy for Financing the Green Transition and National Energy Policy (SPAFTE), which offers guidelines aimed at strengthening our financial commitment to addressing our environmental and climate challenges.

Preparing the electricity grid for renewable generation in Ireland

Operating a power system with electricity generated from high levels of variable renewables, such as wind and solar, is complex and technically very challenging. There's a need to overcome the limitations of many established technological and operational practices, while making sure the grid remains stable and secure.

Ireland' Transmission System Operator (TSO), EirGrid, has put in place an Operational Policy Roadmap which charts a pathway for the evolution of operational policy to facilitate these radical transformations, while maintaining and enhancing security of supply, reliability and resiliency. Currently, Ireland's electricity grid can accommodate up to 75% of electricity from renewable sources at any one time. This is known as the system non-synchronous penetration (SNSP) limit and is very high by international standards.

Work on system stability is critical for bringing more renewables onto the system and some of the steps necessary to ensure this included:

- EirGrid balances electricity supply to customer demand in real time from the National Control Centre. The complexity of this task is compounded greatly as more renewables are brought onto the system.
- When operating an electricity system, ensuring a sufficient level of inertia is critical for maintaining grid stability. Traditionally, inertia could only be provided by large fossil-fuel burning conventional generators, through the presence of heavy rotating equipment.
- To help move away from this reliance, last year, EirGrid awarded four contracts for renewable energy integration technologies, called synchronous condensers, which will provide 'low carbon inertia services' (LCIS) when delivered over the coming years. This technology is vital for maintaining stability on the electricity grid while operating with higher levels of renewable energy.
- In April 2024, EirGrid also reduced the minimum number of large conventional fossil-fuelled generators that must operate on Ireland's electricity grid at any one time. A minimum number of large conventional fossil-fuelled generators are required to run to ensure the stability of the power system. The LCIS technology will enable the minimum number of units to be further reduced over time.
- EirGrid also has to manage disturbances on the power system, which can cause the frequency to change. The technical term for the rate of this change is known as rate of change of frequency (RoCoF). Higher levels of renewables replacing conventional fossil fuel generation leads to reduced system inertia and potentially increases this rate. EirGrid has worked with its partners and stakeholders to increase this RoCoF limit, to help bring more renewables onto the grid.

EirGrid led a project, along with a consortium from around Europe, a number of years ago called EU-SysFlex - Pan-European system with an efficient coordinated use of flexibilities for the integration of a large share of RES | H2020 | CORDIS | European Commission

This was a Horizon 2020 funded project and ultimately looked at how the successes in, and learnings from, the Irish system in this area could be transferred to the wider European grid.

Fossil free roadmaps, climate law framework and carbon taxation in Sweden

1. Fossil Free Sweden was started at the initiative of the Swedish Government in 2015 ahead of COP21 in Paris. It brings together actors in the form of companies, municipalities, regions, and organizations with the goal to build a strong industrial sector and to create more jobs and export opportunities by going fossil free. 23 business sectors have produced roadmaps for fossil-free competitiveness within the framework of Fossil Free Sweden. The roadmaps contain both commitments and political proposals. Fossil Free Sweden works to make the implementation of the roadmaps possible and are also developing strategies around different areas to speed up the transition.

2. In June 2017 the Swedish Parliament agreed upon a climate policy framework for Sweden. The framework encompasses climate goals, a Climate Act and the Swedish Climate Policy Council. The target set includes that Sweden by 2045 at the latest shall have no net greenhouse gas emissions, and negative emissions thereafter. The climate policy framework contains three parts:

- The long-term goals for Swedish climate policy
- A planning and follow-up system in which the Government in the context of the Budget process reports annually to the Parliament on the progress of the transition
- The Swedish Climate Policy Council, an independent, interdisciplinary expert body tasked with evaluating how well the Government's overall policy is aligned with the climate goals established by the Parliament and the Government.

3. Sweden introduced carbon pricing in 1991, alongside an already existing energy tax. The carbon tax has provided incentives to reduce energy consumption, improve energy efficiency, and increase the use of renewable energy alternatives. Since 2005 the main principle for carbon pricing in Sweden is that emissions are priced through either the carbon tax or the EU ETS. The carbon tax introduced in 1991 was at a rate corresponding to SEK 250 (EUR 23) per tonne fossil carbon dioxide emitted. It has gradually increased since then. In 2026, the tax rate amounts to SEK 1 520 (EUR 138) for natural gas and coal (currency conversion based on an exchange rate of SEK 11.04 per EUR). For other fuels, the rate varies in terms of SEK per tonne fossil carbon dioxide. By increasing the tax gradually and in a stepwise manner households and businesses have been given time to adapt, which has improved the political feasibility of tax increases.

Transitioning away from coal in Italy

Italy achieved the objective of phasing out coal generation by 2025 for the mainland only, in line with the National Integrated Energy and Climate Plan 2030 targets. Today, coal plants on the mainland are not generating power and they represent just a cold reserve option. Within 10 years, Italy has drastically reduced coal power use from 15% of mainland energy generation to 0% by the end of 2025. Regarding Sardinia, the upcoming Tyrrhenian link project expected to be concluded by 2028 will also enable the phase out of coal.

The coal phasing-out requires public and private investments and enables the fast growth of renewable plants (solar and wind). To ensure energy security and affordability implemented measures include new permitting procedures, auctions, fixed tariffs and premiums for renewable energy supplies, incentives for PV self-consumption and local energy communities.

As regards the JETPs, Italy focuses on Southeast Asian countries by working with Indonesia (500 MLN Euros) and Vietnam (250 MLN), two countries where coal stands for an important quota of their energy mix (Indonesia 60%, Vietnam 50%) to promote clean energy through new projects in line with SDGs, potentially reducing the role of coal in their future energy mix.

Market approaches as drivers of coal phase-out in Portugal

Portugal's experience with the accelerated phase-out of coal-fired electricity generation provides a concrete example of how the transition away from fossil fuels can be achieved ahead of schedule. Although the country had committed to ending coal-based electricity generation by 2030, the last coal-fired power plants (Sines and Pego) were permanently closed in 2021. This early phase-out was enabled by a combination of strong policy signals, market developments and careful technical planning.

Economic drivers were central to this process. In particular, the strengthening of carbon pricing under the EU Emissions Trading System (EU ETS) reflected in the cost of coal-based electricity generation and the removal of national tax exemptions for coal use, sent a clear market signal, progressively reducing the economic viability to produce electricity based on coal.

Technical assessments were carried out to ensure that the phase-out would not compromise security of supply, allowing the transition to be managed alongside the rapid expansion of renewable electricity generation.

Ensuring a just transition was also an important component of the process. The Government adopted measures to support affected workers, including retraining initiatives and income support mechanisms financed through the Environmental Fund and promote economic diversification in the regions concerned.

At the same time, the former coal power plant sites are undergoing decommissioning and redevelopment processes, with projects under development that include renewable electricity generation, energy storage and renewable hydrogen production, illustrating how the phase-out of fossil fuels can support broader strategies for industrial transformation and regional development.

A Just Transition towards a renewable energy system in Spain

Since 2018, Spain has made remarkable progress in transitioning away from fossil fuels with a strong commitment to integrating renewable energy into its electricity system, benefiting both from the low cost of these energy sources and from enhanced energy security, as they are domestic resources. It has also represented a commitment to improving people's quality of life and has become a tool to strengthen Spain's energy security, reduce exposure to external energy market shocks, and enhance resilience while improving competitiveness.

In fact, installed renewable capacity of solar and wind has grown by 150% comparing 2024 to 2018, diversifying the energy mix and strengthening security of supply. Furthermore, these renewable resources are also vital for the production of green hydrogen and biogas, enabling decarbonization in "hard-to-abate" sectors.

This progress has generated significant positive economic impacts. For example, Spain has experiences savings **on fossil fuel imports** of around **€14 billion over five years** (according to Ember data). In addition, the **OECD recognizes Spain as an attractive destination for industry** due to its energy prices.

Furthermore, Spain has reduced the share of coal in electricity generation from 17% in 2017 to less than 1%, achieving an almost complete phase-out without generating significant social conflict.

All of this has been done with a clear idea: nobody could be left behind. In this context, Spain has implemented a highly structured and comprehensive approach to promoting a just transition away from coal, building a multi-layered governance framework that combines legislation, national strategy, and detailed territorial planning. At the legislative level, the Climate Change and Energy Transition Law establishes the overarching legal mandate for phasing out coal while ensuring social and economic cohesion across affected communities. This is complemented by a dedicated **National Just Transition Strategy**, which sets out the guiding principles, governance mechanisms, and instruments for supporting workers, companies, and regions affected by decarbonization.

Spain's Just Transition model rests on a coordinated territorial approach led by the **Institute for Just Transition (ITJ)**, which works with regional and local authorities to design **Territorial Just Transition Plans**. These plans analyse each area's economic structure, define viable pathways for diversification, and include strong worker-support programmes such as reskilling, upskilling and labour-market reintegration.

The ITJ, created in 2020, also oversees several key instruments. The **Urgent Action Plan** provided immediate measures for regions affected by coal and nuclear closures, building on the **Framework Agreement for Coal Mining** (2019–2027), which guarantees social protection for miners and support for mining municipalities. Complementing this, **the Agreement for a Just Transition for Coal Power Plants** (2020) ensures worker relocation, training opportunities and company commitments to promote new industrial and renewable-energy projects in the territories where plants shut down.

Central to implementation are the **Just Transition Agreements (JTAs),** a co-governance tool that aligns national, regional and local administrations and incorporates extensive public participation. Across 15 JTA areas, thousands of contributions have shaped local action plans and support schemes. These include job banks for affected workers, vocational training in green sectors, and programmes addressing gender gaps in the energy transition.

Finally, Spain embedded Just Transition into its national Recovery, Transformation and Resilience Plan, dedicating €300 million from NextGenerationEU to environmental restoration, municipal infrastructure, innovation in clean energy, and further worker-training initiatives—reinforcing a comprehensive and socially inclusive transition strategy.

Together, this integrated legislative, strategic, and territorial architecture has enabled Spain to build one of Europe's most advanced and socially inclusive coal transition frameworks - mobilizing investment, supporting workers, guiding local diversification, and ensuring that the shift to a climate-neutral economy is fair, participatory, and place-based.

Green Shipping Corridors Belgium

Belgium's strategic position along the North Sea—one of the world's busiest maritime corridors—creates a unique opportunity to accelerate regional decarbonisation. By joining the Clydebank Declaration at COP26, Belgium committed to developing Green Shipping Corridors: zero-emission maritime routes connecting Belgian ports with key regional and global partners. These corridors act as practical pilots for substituting fossil marine fuels with scalable clean alternatives such as green hydrogen-derived fuels. The initiative mobilises the entire maritime value chain—ports, shipowners, fuel suppliers, and logistics actors—to redesign the regional energy matrix and demonstrate viable pathways away from fossil fuel dependency. Several corridor projects are already in development, enabling real-world deployment, building technical experience, and accelerating the transition of this hard-to-abate sector.

Effective implementation relies on IMO's international regulatory framework. Belgian ports coordinate the full value chain together with partner ports and they are defining routes and green fuels and technologies. The maritime administration facilitates alignment, while companies, operators, and shipowners execute deployment.

Effective implementation requires strong international regulation, notably the IMO Net Zero Framework, which provides a global, long-term pathway with the necessary incentives to decarbonise maritime transport in line with the IMO 2023 GHG Strategy. Industry is waiting for this signal for the transition to happen.

Transitioning Away From Fossil Fuels in Germany

Germany has committed with its Climate Change Act to achieving greenhouse gas neutrality by 2045. Emissions must fall by at least 65 % by 2030, and at least 88 % by 2040, with respect to 1990 levels.

Beyond the EU Emissions Trading System (ETS 1), Germany has introduced a national Fuel Emissions Trading System. This system covers all fuel-related emissions that are not included in EU ETS 1. Between 2021 and 2025, the price per ton of CO_2 increased from €25 to €55. As of 1 January 2026, the system has entered its trading phase, in which allowances are auctioned within a price corridor of €55 to €65 per ton of CO_2. A transition to an EU-wide system (ETS 2) is planned from 2028 onwards.

In its Renewable Energy Sources Act, the Federal Government aims to rise the proportion of renewables in gross electricity consumption to at least 80% by the end of 2030. In the electricity sector in 2025, renewables covered nearly 56% of gross electricity consumption.

Germany's phase out of coal-fired power generation by 2038 at the latest is mainly regulated by the Coal-fired Power Generation Termination Act. In October 2022, the Federal Government concluded an agreement with North Rhine-Westphalia and RWE on the end of the generation of electricity from lignite in the Rhenish mining district by 2030. The Law on Structural Transition of Coal Regions also includes a EUR 40 billion financial support package until 2038 to help coal mining regions restructure their economies.

With the Power Plant Strategy, Germany is aiming to guarantee security of electricity supply in Germany and at the same time achieve the German carbon neutrality target by 2045. The measure supplements the coal phase out. Any new power plants to be constructed under the framework of the power plant strategy will completely decarbonize latest by 2045.

In 2025, almost one in five new cars sold in Germany was purely electric (45 % increase compared to 2024). In 2025, Germany launched a €3 billion funding programme for e-mobility.

The Building Energy Act regulates the heat transition. In 2025, heat pumps were in first place for the first time among all heating systems sold, ahead of gas heating systems (55% increase compared to 2024).

The Energy Efficiency Act, adopted in 2023, sets the cross-sectoral legal framework for energy efficiency in Germany and implements key EED-requirements at national level.

Germany supports countries in their transition, including through the international climate initiative, JETPs and the PPCA and a wide range of other German development cooperation projects.