

An Ambitious EU Climate Target for 2040: Slashing Emissions while Strengthening Energy Security

A fossil fuel phase-out by 2040 would increase peace and democracy while ensuring achievement of the Paris targets

The already palpable climate emergency and the war of the oil- and gas-rich dictatorship Russia against Ukraine show: the continued reliance on fossil fuels is unsustainable. Europe's coal, oil, and gas consumption is a major contributor to the climate emergency and a key enabler of illiberal tendencies in fossil fuel-rich countries. It is thus a central cause of oppression, corruption, and wars. The EU must consider this fact when developing its climate target for 2040.

Our demands for an EU 2040 climate target:

- **Steeper emission reductions:** Germanwatch is calling for the EU to set a climate target that will reduce greenhouse gas emissions by at least 90 per cent and preferably 95 per cent by 2040 (compared to 1990 levels, including sinks). By 2035, the EU should reduce its net emissions by at least 76 per cent and preferably 78 per cent. For each of these targets, a maximum of 3 percentage points should be set as the currently expected contribution from ecosystems and technical sinks.
- **Exit coal, oil and gas:** Germanwatch is calling for an EU target to phase-out of fossil fuels by 2040 at the latest. This phase-out must be implemented in a socially responsible manner.
- **Expand climate partnerships:** To complement domestic emission reductions, the EU and Germany must facilitate additional climate mitigation efforts in other parts of the world through climate partnerships and multilateral financing.
- **Thinking beyond 2040:** The EU should set the course now to ensure that more CO₂ is permanently removed from the atmosphere than is emitted in the member states after 2050.

The EU and Germany must lead by example when it comes to climate protection. Historically, the EU has exerted the greatest influence as a climate leader when its actions have been visible to other countries. Germanwatch is therefore in favour of a **Europe-wide phase-out of fossil fuels by 2040 at the latest, which must be designed from the outset to be socially acceptable.**

The aim is to create a socially responsible economic model for the EU that respects planetary boundaries, that protects human rights in global supply chains, and that is recognised as a success. The recommendation made by the European Science Advisory Board on Climate Change (ESABCC) – namely, to reduce EU greenhouse gas emissions by 90 to 95 per cent by 2040 compared to 1990 levels – is a step in the right direction. While ambitious, this target is feasible. When one considers the emissions reductions necessary for a 1.5°C-compatible transformation of the EU, this target is even too low. Therefore, also according to the ESABCC, **the EU and Germany should work to facilitate additional climate protection efforts in**

other parts of the world. For example, they should help poorer countries in the Global South to ‘leapfrog’ a development phase based on fossil fuels so they can directly enter the renewable energy era.

In addition, policymakers must establish a basis for ensuring that more **CO₂ is permanently removed from the atmosphere than is emitted in the EU after 2050.**

A greenhouse gas budget as the basis for the new 2040 climate target of possibly 95 per cent

Against this backdrop, Germanwatch is calling for the 2040 climate target to be based on a greenhouse gas budget for the EU that considers global fairness and responsibility. At the same time, the proposal should be based on the most ambitious realisable emissions pathway scenarios. Germanwatch therefore supports the proposal of a **greenhouse gas reduction of at least 90 per cent and, if possible, 95 per cent by 2040, of which at least 87 percentage points should be achieved through actual emission cuts.**¹ On this basis, the Commission should also propose an EU greenhouse gas budget for the period up to 2050 as a benchmark. The Commission’s proposal should include corrective measures to be taken if greenhouse gas emissions exceed this path. The ESABCC should receive a supporting role, including a mandate to submit annual reports on EU emission trends helping to guide policy development.

Germanwatch also calls on the European Commission to propose an interim target for 2035, as agreed in negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). This target should not be derived in a linear fashion from the 2040 target, but should be based on a convex path with predetermined annual emission values, and thus lead to faster emission reductions in the first half of the decade. Germanwatch also proposes – in part for consistency with the UN climate process – **an interim 2035 target of at least 76 per cent and preferably 78 per cent, of which at least 73 percentage points should reflect actual emission cuts.**

In Germany and other EU member states, the expansion of renewable energy is accelerating once again and improvements in energy efficiency have also been achieved, partly as a result of the energy crisis. Under these conditions, **emission reductions of 60 per cent by 2030** are possible in the EU, which is 5 percentage points more than the target currently set by the EU Climate Law. This positive momentum must continue for the benefit of Europeans by setting realistic but ambitious targets.

International partnerships for an ambitious climate policy

Even if the EU achieves these reduction targets for 2030, 2035, and 2040, it will emit more in total than would be fair according to a global greenhouse gas budget distributed evenly per capita. Germanwatch is therefore calling for the EU to close this ambition gap through further measures. To this end, it should provide additional support, compared to today’s levels, to so-called developing and poorer emerging countries, in particular through climate partnerships that offer climate finance, technology transfer, and technical co-operation. This will encourage partnering countries to increase their climate ambition. This additional support should not lead to the withdrawal of funds already pledged for adaptation financing or to cope with loss and damage. Overall, funding for climate finance must increase dramatically.²

¹ The reduction target for 2040 of the German Climate Protection Act is split similarly: 88 per cent with additionally just under 3 per cent to be removed from the atmosphere through natural sinks.

² See Songwe, V., Stern, N., Bhattacharya, A., 2022, [Finance for climate action: Scaling up investment for climate and development](#) (last accessed: 15.12.2023).

The EU should also engage in multilateral negotiations to ensure this quantum leap in support to the Global South. In this connection, a particular focus should be placed on increasing the contributions to climate financing made by industrialised countries; on the reform of the International Monetary Fund (IMF), World Bank, and development banks; on new financial instruments such as levies on international air and maritime transport; and the inclusion of wealthy petroleum-exporting and emerging economies in the club of contributors.³

A climate policy framework for an ambitious 2040 target

While developing a post-2030 climate framework for the EU, there are various issues that must receive adequate attention.

A top priority should be assigned to avoiding and reducing greenhouse gas emissions. CO₂ removal from the atmosphere (directly from the air or via the biosphere) can only play a limited and subordinate role. Removals should complement avoidance and reduction efforts, not weaken or replace them. CO₂ removal only makes sense if the aim is to offset narrowly defined, unavoidable residual emissions or to achieve the necessary net negative emissions. Accordingly, separate targets for carbon removal and abatement should be set for 2035, 2040, and 2050. In addition, the permanence of carbon removals must be guaranteed, not least through liability mechanisms. In the face of the ongoing climate crisis, the achievement of the EU's climate targets must not hinge on naively optimistic, unrealistically high carbon removal targets that are subject to uncertainties regarding technical and economic feasibility or the resilience of natural sinks.

Existing effective instruments in the climate policy toolbox should be strengthened and expanded, not weakened. This applies in particular to the European Climate Action Regulation (CARE), the EU Emissions Trading Scheme (ETS), and existing sectoral legislation. CARE promotes climate policy ownership and expertise in all member states and should continue to set binding annual emission reduction targets for EU member states. Emissions trading was recently expanded to include the Emissions Trading System 2 (ETS2), which will start in 2027 or 2028. With the new carbon market, CO₂ pricing will also be extended to emissions from road transport, buildings, and small industrial and energy plants. However, a price corridor with annually increasing minimum and maximum prices is needed to ensure reliable conditions for investment, a steering effect, and social compatibility of the ETS2, while at the same time ensuring that the ambitious reduction targets are achieved. The endowment of the Social Climate Fund should grow in proportion to the CO₂ price in the ETS2, without a cap. At least 35 per cent of ETS2 revenues should flow into this solidarity-based climate fund. The further strengthening and development of the fund should also be considered in the future. In addition, co-financing by member states should continue.

International aviation and maritime transport to and from Europe should be fully integrated into EU climate governance. This can be achieved through a levy based on the starting point and final destination of travel. Emissions from international aviation and shipping should also be included in the overall European climate targets. The European Commission should lobby at UNFCCC level for corresponding regulations to be included in the national climate targets (NDCs).

As part of the review of the EU carbon border adjustment mechanism (CBAM), the Commission should submit a proposal for the accelerated expiration of free emission allocation, possibly coupled with stronger temporary carbon leakage protection for affected parts of the export industry. To ensure that the EU's trading partner countries with low per capita income do not suffer from the negative economic impact of CBAM, a large part of the revenues from the carbon border adjustment should be used for additional climate financing in affected countries, in particular for the green transformation of industry and energy systems.

³ Germanwatch, 2023, [Reform of the international financial architecture](#) (last accessed: 15.12.2023).

The climate targets go hand in hand with the transformation of the economy and society. The EU should further strengthen support for the regions and people particularly affected by this transformation and make it a cornerstone of its *raison d'être*. This should include the development of additional support instruments for member states and regions with below-average opportunities to actively shape this structural change. Without strong European solidarity, the necessary transformation could slow down.

Further explanations regarding the Germanwatch position

The landmark COP28 resolution in Dubai (Global Stocktake, Draft Decision, Paragraph 27) commits the global community to achieving a 43 per cent reduction in greenhouse gas emissions by 2030, a 60 per cent reduction by 2035, and carbon neutrality by 2050 (in relation to 2019 levels). For the EU, the baseline year is 1990, which means achieving a reduction of 59 per cent by 2030 and around 71 per cent by 2035. However, according to the principle of common but differentiated responsibilities, which is also emphasised in the Dubai decision, it would be necessary for the EU to decarbonise faster and become carbon-neutral much earlier than less prosperous countries, in order to achieve a fair distribution of efforts. The EU contribution for 2030 should therefore be above 60 per cent, the contribution for 2035 well above 70 per cent, and carbon neutrality should be achieved well before 2050.

In its report, the European Science Advisory Board on Climate Change (ESABCC) works with a global CO₂ budget that has a 50 per cent probability of complying with the 1.5°C limit by the end of the century if all countries implement their fair share to the same extent, based on calculations by the Intergovernmental Panel on Climate Change (IPCC) with 2020 as the starting point.⁴ Emissions linked to imports into the EU and international aviation and shipping are not included in the emissions.

The ESABCC proposes a net 90 to 95 per cent reduction as a climate target for 2040,⁵ with a greenhouse gas budget of 11 to 14 Gt for the period from 2030 to 2050, and also examines the feasibility of the proposed possible range. The ESABCC concludes that a 90 to 95 per cent reduction is feasible for various technological development paths while avoiding harmful side effects. The 15 researchers analysed the more than 1,000 scenarios submitted to a public call and filtered them in a three-stage process.

The ESABCC states very clearly that, in view of the discrepancy identified between the reductions feasible in the EU and its globally fair emissions budget, the EU has an obligation to engage intensively in climate action in other parts of the world. The ESABCC puts this gap at a minimum of 12 Gt CO₂ equivalents. If historical responsibility is taken as a basis, the discrepancy between what is still possible now and what would be necessary for reasons of fairness would be even greater.

According to the study 'Breaking free from fossil gas' by Agora Energiewende, it would be possible to achieve larger emission cuts in the first half of the 2030s than in the second half (from a 60 per cent total reduction in 2030 to 77 per cent in 2035 and 89 per cent in 2040).⁶ An additional remarkable finding of this study is that the EU can halve the use of fossil gas by 2030 and at the same time reduce the need for comparatively expensive and scarce hydrogen to a fifth of the targets set by the European Commission.⁷

The Brussels-based think tank Strategic Perspectives has recommended a reduction of 92.8 per cent using a model developed by the climate analysis organisation CLIMACT.⁸ This could be achieved through, among

⁴ European Scientific Advisory Board on Climate Change, 2023, [Scientific advice for the determination of an EU-wide 2040 climate target and a greenhouse gas budget for 2030–2050](#) (last accessed: 24.01.2024).

⁵ Heberer, C., Caspar, O., Bals, C., 2023, [Erstes Gutachten des EU-Klimabeirats zum 2040-Ziel: Das Notwendige mit dem Möglichen kombinieren](#) (last accessed: 24.01.2024).

⁶ Graf, A., Gagnebin, M., Buck, M., 2023, [Breaking free from fossil gas: A new path to climate-neutral Europe](#) (last accessed: 24.01.2024).

⁷ Studies by Bruegel, Fraunhofer/RIFS/dena have confirmed that the EU hydrogen targets are unrealistic and have been set too high. See McWilliams, B., Zachmann, G., 2023, [Renewable Hydrogen in Germany, Poland, and Portugal](#); Quitzow, R., et al., 2023, [Mobilizing Europe's Full Hydrogen Potential: Entry-Points for Action by the EU and its Member States](#) (last accessed: 24.01.2024).

⁸ Kalcher, L., Makaroff, N., 2023, [Choices for a more Strategic Europe](#) (last accessed: 24.01.2024).

other things, a complete decarbonisation of electricity generation by 2037, extensive electrification (e.g. of 85 per cent of the car fleet by 2040), and a 50 per cent reduction in industrial emissions (e.g. through reduced gas consumption and the promotion of the circular economy). These goals could go hand in hand with increased energy independence and the strengthening of industry so that it remains internationally competitive.

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The authors would like to thank their colleagues Sylwia Andralojc-Bodych, Christoph Bals, Alexandra Goritz, and Artur Runge-Metzger for their helpful comments.

You can download this paper here: <https://www.germanwatch.org/en/90194>

January 2024

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