

GOVERNING THE GLOBAL JUST TRANSITION FROM FOSSIL FUELS TO CLEAN ENERGY

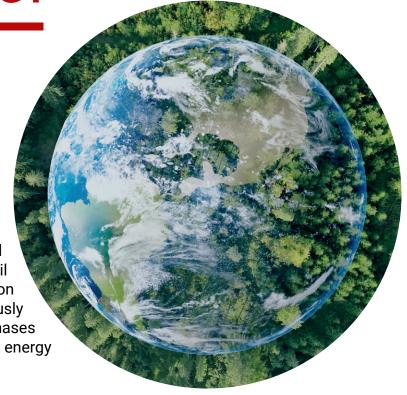
LITMUS TESTS AND PROPOSALS FOR COP30

ABSTRACT

As part of a global just transition, there is an urgent need for equity-based parameters for the gradual phase-out of fossil fuels and the accompanying phase-in of renewable energy. COP30 must convert the broad mandate to "transition away from fossil fuels" into a concrete, equitable just transition governance framework that simultaneously phases out fossil supply and demand and phases in renewable, nature-positive, people-centred energy systems in a fair and equitable manner.

We propose **two equity "litmus tests" to assess outcomes in Belém:** (1) Are COP30 outcomes based on a common understanding of just transition corridors? (2) Do COP30 outcomes include an actionable plan for the phasing out of fossil fuels and phasing in of renewables, based on distributive, procedural and restorative justice? The first litmus test emphasises that just transition cannot dilute science-based end-dates for fossil fuels or license new expansion, but must respect some scientific, legal and social limits. The second litmus test emphasises that the global just transition must distribute benefits and burdens fairly and guarantee inclusive decision-making, with transparent monitoring and grievance redress, as well as repair historic harms.

These litmus tests lead us to propose seven corresponding policy proposals that the EU and the COP30 presidency should champion to break the deadlock, rebuild trust and accelerate delivery. For example, the COP30 outcomes should include the launch of a Just Transition Match-Making Facility under the UNFCCC Just Transition Work Programme, modelled on the platform of the Global Alliance Against Hunger and Poverty and the EU's Just Transition Platform.



AUTHORS

CELINE CHARVERIAT Director of Pro(to)topia

PIERRE LETURCQ Independent think tanker

IN PARTNERSHIP WITH





THE FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS)

European Political Foundation - N° 4 BE 896.230.213 Avenue des Arts 46 1000 Brussels (Belgium) www.feps-europe.eu @FEPS_Europe



FRIEDRICH-EBERT-STIFTUNG Climate and Social Justice

Cours Saint Michel 30e, 1040 Brussels (Belgium) www.justclimate.fes.de



This Policy Brief was produced with the financial support of the European Parliament. It does not represent the view of the European Parliament.

Copyright 2025 by FEPS and FES

Front Page Photo (source): shutterstock.com/g/newafrica

Copy Editing: Rosalyne Cowie Graphic Design: Agencia Downtown

KBR Legal deposit number: D/2025/15396./36

ISBN: 978-2-39076-041-2

ACKNOWLEDGEMENT OF CONTRIBUTORS

FEPS would like to thank Plataforma CIPÓ and the members of its Science-Policy Board for the opportunity to discuss the paper and their comments.

TABLE OF CONTENTS

1. INTRODUCTION	5
Falling short of climate targets? Justice, what justice?	
2. TWO LITMUS TESTS OF AN EQUITABLE OUTCOME AT COP30 AND BEYOND	7
Litmus test 1: A common understanding of just transition corridors Litmus test 2: An actionable delivery-oriented plan for the phasing out of fossil fuels and phasing in of renewables based on distributive, procedural and restorative justice	
3. RISING TO THE CHALLENGE: WHAT MUST THE EU DELIVER?	
4. CONCLUSION	18
Endnotes	19
About the authors	21
About FEPS and partners	22

1. INTRODUCTION

66

As a non-state actor disposing of limited means of coercion, whose global ambitions were facilitated by the development of the rules-based liberal international order [...], [the] EU's (continued) relevance as a global actor will be linked to its ability to advocate a global order which others can support [...].



Helene Sjursen¹

In the lead-up to COP30 in Belém, Brazil, the EU is navigating a far more complex geopolitical and political landscape than the one that shaped the Paris Agreement. The relatively stable, cooperative world order of 2015 has given way to sharper competition, fragmentation and uncertainty. Major powers including the USA, Russia and China - are now centring their strategies on securing energy, critical minerals and clean technologies, with climate policy emerging as a lever of geopolitical influence and industrial strength. Recent developments, from US-Russia security talks to China's curbs on rare-earth exports, have underscored the EU's vulnerability and limited agency in an era of intensifying rivalry. **Increasing the EU's actorness*** in this new context is creating unprecedented challenges.2

These external pressures are compounded by shifting domestic politics. Economic concerns over industrial competitiveness, energy affordability and strategic autonomy have fuelled a green backlash among public opinion, eroding the previous political consensus over the 2019 European Green Deal. The rise of far-right parties in member states and in the European Parliament, challenging the pace and fairness of the transition³ while seeking control over

the most crucial files (i.e., obtaining rapporteurship of the 2040 climate target), has **deepened divisions**, making it harder to forge a unified, credible negotiating mandate for COP30.

Internationally, the EU faces calls from partners to raise its ambition, while responding to the economic concerns of developing nations regarding its set of unilateral measures with extraterritorial reach and amid a global trend of trade "transactionalism". At the same time, its credibility is under scrutiny – both in delivering climate finance and in meeting its forthcoming 2035 Nationally Determined Contribution (NDC) and finalising the proposed 2040 target. The task is to sustain green leadership while managing economic headwinds, political fragmentation and the need to work more constructively with emerging economies and climate-vulnerable nations, so a new international order or a new global deal can emerge.⁴

Falling short of climate targets?

The 30th meeting of the UNFCCC Conference of the Parties (COP30 – Belém, Brazil) is taking place a decade after the landmark Paris Agreement, which aimed to limit warming to 1.5°C. As more nations experience the consequences of climate change, COP30 faces heightened pressure to deliver results on the following targets:



Align countries' national targets with the Paris Agreement

Six months before COP30, only 21 countries had submitted a revised NDC for 2035, representing less than 20% of global greenhouse gas (GHG) emissions. Of the new 2035 targets submitted by the major economies, only one country's target (Norway) is currently rated as "1.5°C compatible" and almost none have significantly strengthened 2030 ambitions – critical for actually halving emissions this decade. The current trajectory (taking into account submitted NDCs) sets us on a pathway to 2.6-3.1°C of global warming, well off the Paris objective.

*Actorness refers to the capacity of an entity to actively and deliberately behave in relation to other actors in the international system, measured through core dimensions such as authority, autonomy, cohesion, and recognition (see TRIGGER "TRends in Global Governance and Europe's Role" European project (2019) "The trigger model for evaluating actorness: Testing EU actorness and influence in domestic and global governance").



Halt and reverse deforestation by 2030

COP28's UAE Consensus emphasised (for the first time) "that halting and reversing deforestation and forest degradation by 2030 is crucial to achieving the Paris Agreement goals [...]". Deforestation continues at a high rate - 2022 saw a 4% global increase, putting the world 21% off track from meeting the 2030 halt-and-reverse goal. Efforts to preserve oldgrowth forests are 33% off track.6 While forests feature more strongly in official climate planning, action and finance remain insufficient to meet the 2030 commitments.



Triple global renewable energy capacity by 2030 "to at least 11 TW", as specified in the **COP28 outcome document**

Global renewable energy capacity reached a record increase in 2024, with over 700 GW added - the largest annual growth to date. However, current national pledges and deployment trajectories would only deliver about 70% of the 11 TW target by 2030. To meet the target, installation rates must further accelerate. Solar and wind are now the cheapest energy sources almost everywhere⁷, and renewables have supplied around 49% of global electricity in 2025, up from 40% last year. Emerging and developing countries' economies (EMDE) only represent 15-18% in clean-energy investments, despite representing two thirds of the global population8. This is due to the high cost of capital in EMDE, upfront costs of grid extensions and modernisation, supply-chain bottlenecks, and lagging regulatory reforms. Legitimate concerns over the environmental integrity and social fairness of renewable energy projects currently in the pipeline are also causing delays and tensions.9



Double annual average rate of global energy efficiency improvements, from "approximately 2% to over 4% by 2030"

Most recent analyses place the global rate of energyintensity improvement in 2024-2025 at around 2% per year, much below the >4% target. 10 Some regions (EU, China) have stronger efficiency gains, driven by electrification, heat pumps and vehicle transitions¹¹, but globally, structural economic headwinds, policy delays and the rise of energy-intensive artificial intelligence/data services slow progress.



Transition away from fossil fuels "in a just, orderly and equitable manner, accelerating action in this critical decade to achieve net zero by 2050"

COP28 ended with the first direct reference to "transition away from fossil fuels" in a COP outcome document. Half of the world's economies are already five years past their peak fossil-fuel power generation¹². Coal is declining rapidly in OECD economies; a third are now coal-free. While global fossil-fuel emissions hit another record high in 2024, some analyses suggest that emissions may peak and begin to fall in 2025, as China's fossil demand stabilises and clean energy soars. Big gaps in oil and gas phase-out plans persist, and investment in new fossil infrastructure continues, especially outside the power sector (e.g., industry, transport). Almost no major fossil-fuel-producing country has concrete, fully funded plans for a just transition for workers and regions, nor sufficient climate finance for developing country transitions, as called for in the outcome document. The OECD and IEA estimate that fossil-fuel support remained at approximately \$1.1 trillion in 2023.13

Key tasks ahead on means of implementation under the UNFCCC include the full operationalisation and adequate resourcing of the Loss and Damage Fund, alongside a significant scaling up of the provision and mobilisation of climate finance - from the current level of around \$300 billion annually to at least \$1.3 trillion per year by 2035, as agreed under the New Collectively Quantified Goal (NCQG) adopted in Baku (COP29). This must be achieved in a manner that ensures accessibility, predictability and concessionality of financial flows, including through addressing unsustainable debt burdens and avoiding onerous conditionalities that undermine the capacity of developing countries to implement their climate actions.

Justice, what justice?

From an ideational perspective, the concept of a just transition originates from trade union campaigns in the late 1980s (mostly in the UK and the USA), emphasising that environmental and industrial policies must protect workers, their communities and those dependent on carbon-intensive sectors. Centred around people's right to decent jobs, the concept was further developed in 2015 under the framework of the International Labour Organization (ILO). The 2015 Guidelines published by the ILO¹⁴, developed together by governments, workers and employers, have become a form of global standard on the matter. The 2023 ILO International Labour Conference reinforced and expanded these principles, emphasising gender equality; poverty eradication; enterprise creation and a human-centred, inclusive approach to sustainable development. Since then, the concept of a just transition, included in the preamble of the Paris Agreement, has become a central piece of climate negotiations and expectations are high for Belém to deliver a concrete outcome, building on two years of discussions on the Just Transition Work Programme (JTWP). The Brazilian presidency, which managed to get the G20 to adopt Principles for Just and Inclusive Energy Transitions in 2024, is expected to make a just transition one of the signature issues of COP30.

Transitioning away from fossil fuels in a just, orderly and equitable manner requires taking into consideration the different dimensions of justice:

- Distributive justice, which focuses on how the benefits and burdens of climate actions are shared, aiming for fair allocation across populations, countries or generations through inter-country equity, intra-country equity and inter-generational equity.¹⁵
- Procedural justice, which ensures fair and inclusive processes in the design, implementation and evaluation of climate policies.

- Restorative justice, which focuses on repairing harms and addressing past injustices from climate impacts or policy implementation.
- Recognitional justice, which focuses on the recognition and respect of differences, identities and experiences among various social groups, especially those that are marginalised or disadvantaged due to socio-economic, cultural or historical structures.

We will therefore present two "litmus tests" that ensure an equitable outcome in Belém and beyond, and actionable proposals that the EU should champion, grounded in this definition of justice.

2. TWO LITMUS TESTS OF AN EQUITABLE OUTCOME AT COP30 AND BEYOND

Litmus test 1: A common understanding of just transition corridors

COP30 outcomes should reflect a common understanding of what we call here just transition corridors. The notion of just transition corridors allows us to bring together the two key dimensions of justice and planetary boundaries and sets nonnegotiable limits to the just transition discourse. Indeed, just transition corridors emphasise that just transition processes should effectively bring societies within the safety thresholds of the two critical planetary boundaries, climate change and biodiversity loss* Doing so allows us to prevent irreversible harm that would be incompatible with the principles of intergenerational equity, but also interspecies equity, which promotes the equitable distribution of resources, opportunities and the reduction of harm across all species. To deliver for the people, now and for future generations, the JTWP must anchor itself in just transition corridors that are delineated by four non-negotiable limits: (1) scientific thresholds; (2) legal compliance; (3) respect of social floors; and (4) rigour on first-best policies (see Figure 1).

^{*}Just transition corridors are inspired by the concept of a "safe and just corridor" developed by the scientists of the Earth Commission (Rockström et al., 2021). They define a safe and just corridor as a "clearly defined space in which pathways of future human development are both safe and just over time, and that acknowledges that the Earth's natural resources (including carbon, nutrients, water, and land) are finite and have to be justly shared between people and nature" (Gupta et al. 2024).

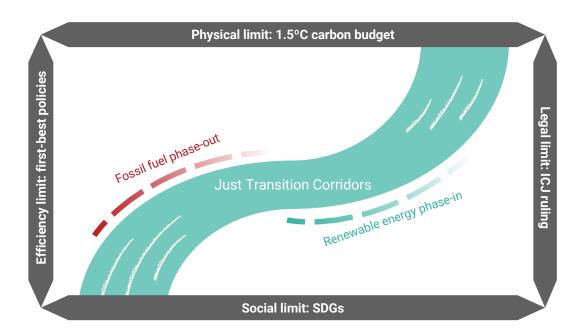


Figure 1: The four non-negotiable limits of just transition corridors

1) Scientific thresholds

Scientific thresholds, grounded in IEA and IPCC carbon budgets, must define the maximum permissible emissions to stay within a 1.5°C pathway and respect other planetary boundaries.

Justice in the energy transition can only be conceived of as the simultaneous governance of an equitable phase-out of fossil fuels and an equitable phasein of renewables. As Fressoz demonstrates, past "transitions" were cumulative expansions rather than substitutions - coal rising with wood, oil adding to coal - producing ever-growing energy use rather than replacement.¹⁶ Relying on substitution rhetoric risks repeating this pattern, layering "green" systems onto fossil ones, without reducing emissions. A just transition therefore requires intentional policies that manage both decline and renewal, ensuring that the costs of fossil-fuel contraction do not fall on the vulnerable and that access to clean infrastructures is fairly distributed. Equity, redistribution and sufficiency must anchor this dual process if the transition is to remain within social and ecological boundaries.

There is an inherent risk, when addressing climate justice, linked with using the framework of the "just transition". This framing can be used to shift the conversation away from the outcome itself (achieving emission reductions that are compatible with a 1.5°C scenario). Any just transition pathway which puts into question the destination (i.e., the size of the carbon budget and the timeline) by putting in place processes or principles that are incompatible with possible transition pathways must be called into question, as it will not keep human beings and other species within safe planetary boundaries.

This risk of losing sight of the Paris Agreement spirit and target is not merely academic. The oil and gas industry, supported by some members of the OPEC, see a continuing and major role for oil and gas as part of the just transition, in contradiction with the best available science on mitigation pathways and viable carbon-negative technologies. In contrast with the net zero scenario of the IEA, which foresees 25 million barrels per day as the remaining oil production by 2050, the OPEC's World Oil Outlook 2025 presents three possible futures in which oil demand ranges from 96 million to 127 million barrels per day¹⁷. This risk is currently materialising

Table 1. Evolution of fossil-fuel language at the COP level.

COP26 (Glasgow, 2021)	 Initially aimed to "phase out" unabated coal but was weakened to "phase down" after late interventions by high-emitting countries, such as India and China.
COP28 (Dubai, 2023)	 Introduced the phrase "transitioning away from fossil fuels", yet stopped short of endorsing a clear "phase-out" or "phase-down". This ambiguity reflects a compromise between ambition and fossil-fuel-dependent interests.
COP29 (Baku, 2024)	Efforts emerged to remove even this modest fossil-fuel language entirely, signalling a worrying regression and raising concerns about erosion of prior commitments.

in efforts to move away from the 1.5°C target and to water down the language around the phasing out of fossil fuels at the COP level, as exemplified in Table 1.

2) Legal compliance

The outcomes of COPs must comply with the conclusions provided by the International Court of Justice (ICJ), which can interpret international obligations – especially regarding intergenerational equity – to prevent dilution or backsliding.

According to the ICJ's recent Advisory Opinion on the obligations of States in respect of Climate Change, intergenerational equity must serve as a guiding principle in the interpretation and implementation of all climate-related obligations¹⁸. This clarification is critical, as it reinforces that just transition processes cannot be decoupled from the overarching imperative of safeguarding planetary boundaries. The ICJ has underlined that states have not only a moral but also a **legal duty to act on behalf of both present and future generations**, thereby narrowing the political space for the dilution of ambition. In practical terms, the Opinion suggests that continued production, licensing and subsidisation of fossil

fuels may constitute internationally wrongful acts, insofar as they undermine agreed climate targets and expose populations – both human and non-human – to irreversible harm. This Opinion strengthens the argument that just transition processes cannot be used to delay or weaken mitigation pathways but must be consistent with the scientific thresholds defined by the IPCC and the IEA, as stated above. By establishing legal clarity alongside scientific imperatives, the ICJ ruling has added a normative boundary to global climate governance: any transition strategy that legitimises fossil-fuel expansion or entrenches dependency is not only unjust but unlawful.

3) Respect for social floors

A genuine just transition must establish a credible pathway for each country, and the world as a whole, towards the realisation of *social floors*, in line with human rights conventions and targets set by the sustainable development goals (SDGs), not just SDG7 on energy access but also SDGs related to multidimensional inequality (SDG5 on gender equality and SDG10 on reduced inequalities for instance).

The Doughnut model, created by Kate Raworth, 19 frames sustainable development as residing in a "safe and just operating space for humanity" - the area between a set of planetary boundaries (ecological ceiling) and a social foundation (floor) comprising minimum thresholds for human wellbeing, such as access to food, water, education, health, housing, gender equality and decent work.20 By explicitly aligning social floors with the quantifiable targets of the SDGs, the just transition debate would gain both precision and authority, making it possible to track progress, address intra-country and intercountry equity, and effectively operationalise the commitment to "leave no one behind". The Doughnut model's holistic approach can help mitigate inequalities - including gender and income gaps - which persist, despite economic growth, and can support the creation of multi-stakeholder platforms for collaboration and knowledge-sharing, especially vital for developing nations.

A recent FEPS report on "A new global deal: Reforming world governance"21 has added the notion of egalitarian sufficiency to this model, advocating a global deal that elevates the social foundation above mere subsistence and aims for a fair distribution of resources within and between countries. The authors have emphasised that wellbeing for all is attainable only if sufficiency is pursued for everyone, not just the minimal escape from poverty. The "Giant Leap" scenario modelled by Earth4All,22 for instance, demonstrates that transformative leaps in poverty reduction, income equality and gender equity require sufficiency for all as the guiding ambition - a concept that not only rebuilds trust but also anchors just transition within genuinely progressive, deeply egalitarian sustainability.

4) Rigour on first-best policies

In economic and policy theory, a first-best policy directly targets the root cause of a problem with optimal efficiency. So, climate policy should be considered "first-best" for poverty and inequality when it does so more effectively than alternative policies by directly addressing the roots and remediating the causes of social inequality. A prominent example can be found in Indonesia's

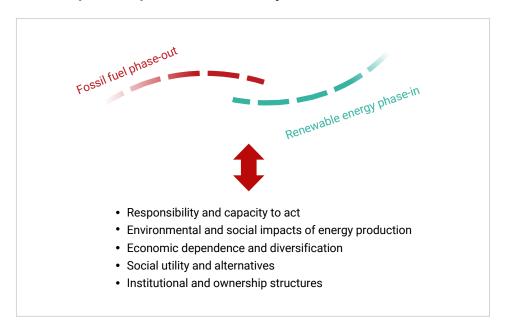
fossil-fuel subsidy reform. Rather than maintaining generalised subsidies, the government gradually phased them out and reallocated the fiscal savings toward targeted social protection schemes for low-income and vulnerable households, including transfers, subsidised food programs, healthcare and education support.23 This policy shift simultaneously advanced emissions reduction objectives (mitigation) and enhanced poverty alleviation outcomes more effectively than blanket subsidies, thereby illustrating how climate action can operate as a "first-best" policy instrument for poverty reduction. Equally, policies simply aimed at alleviating the fiscal or financial burden stemming from the implementation of environmental measures cannot be deemed "just transition policies" if they lead to a nullification of environmental benefits. This is why low-income households or small and medium enterprises should be compensated for rather than exempted from implementing measures so the reduction of the consumption of GHG-intensive goods and services can be achieved in a socially just way.

To operationalise just transition corridors within COP30 negotiations, countries must commit to adopt a common template to define national "just transition corridors" that set end-dates for different fossil fuels, paired with renewable and efficiency milestones. In addition, the JTWP must integrate social floors (jobs, reskilling, social protection) and nature safeguards (Free Prior and Informed Consent, no-go biodiversity areas).

Litmus test 2: An actionable deliveryoriented plan for the phasing out of fossil fuels and phasing in of renewables based on distributive, procedural and restorative justice

Based on a common understanding of just transition corridors, COP30 and subsequent climate negotiations must attempt to design an actionable plan for the phasing out of fossil fuels and phasing in of renewables. To be just, such a plan must be based on the careful consideration of the distribution of efforts and benefits, as well as restorative justice

Figure 2: A phase-out and phase-in process anchored in justice



for people and ecosystems, while translating into a delivery-oriented package of measures.

1) Effort and benefit sharing

To achieve an equitable fossil-fuel phase-out, we need to establish principles that allow us to define who will need to do what, who will need to start doing it first and with whose support. Currently, too many countries are shying away from this foundational discussion. Without credible pathways for each country that define end-dates and critical milestones for the production and use of fossil fuels, the world will not remain within planetary boundaries. To unlock progress on this discussion, five dimensions are key, as shown in Figure 2.

Responsibility and capacity to act

Responsibility is based on a country's cumulative contributions to GHG emissions driving climate change, often called *historic emissions*. **Nations that have contributed the most to the climate problem are expected to move first and fastest** in phasing out fossil-fuel extraction. Responsibility also considers a country's **financial and institutional capacity** to act – essentially, wealthy states with ample resources must take on a greater share of the cost and effort in

phasing out fossil fuels.24 Likewise, the deployment of renewable energy should be expected to be quickest in countries with the highest renewable energy potential, especially those in which such deployment is the most cost effective and where fiscal constraints are the lowest. First-mover countries that are making a genuine effort by curbing fossil-fuel subsidies and committing budgetary resources towards renewable energy should be rewarded, instead of those countries which have proved to be laggards, due to the unwillingness of governments to confront their fossil-fuel sector or to address systemic barriers to renewable energy. This should, for instance, be reflected in country risk ratings with consequences for their ability to borrow on international markets.

Direct and indirect environmental and social impacts of energy production

Fossil-fuel production should be curtailed in ways consistent with environmental integrity. All barrels are not equal.²⁵ The carbon footprint associated with oil production varies significantly, depending on the physical and geological characteristics of deposits and extraction methods, such as flaring, leading to major differences in GHG emissions per barrel. For example, Canada's tar sands produce

more than double the emissions of lighter oils from Norway or Saudi Arabia.26 Between 1992 and 2018, re-allocating oil production to prioritise lowercarbon fields could have avoided nearly 10 billion tons of CO2 equivalents, equating to \$2 trillion in climate damages. Despite this opportunity, the lack of accurate, transparent and publicly verifiable emissions data - compounded by underreported figures from industry sources - continues to hamper effective regulation. Combining demandreduction measures with careful selection of oil sources, improved carbon pricing frameworks and stronger monitoring - such as satellite observations - can deliver substantial climate gains during the energy transition. From a justice perspective, priority should be given to halting extraction where local communities and ecosystems disproportionately bear the costs of pollution, dispossession or environmental degradation, yet receive limited benefits. This includes contexts where operations violate the principle of FPIC. The exact same requirements should apply to renewable energy.27

National economic dependence and diversification capacity

The phasing out of fossil fuels should proceed most rapidly in countries where the transition entails the **lowest socio-economic costs**. In practice, this often points to wealthier, diversified economies with relatively low dependence on fossil revenues, and with greater fiscal and institutional capacity to manage transition pathways. In contrast, wealthy nations that are less dependent on fossil-fuel revenues (like the USA, Norway, Australia and the UK) are called to phase out extraction earliest, by the early 2030s, because they have greater capacity to diversify and absorb the transition. Operationalising this framework could entail directly tying timelines and financial conditions for phase-out to both economic dependence on fossil fuels and national capacity for diversification.²⁸

Social utility and alternatives

Consideration must also be given to the social utility of fossil-fuel-based goods and services in different contexts, and the extent to which **affordable**, **accessible alternatives** are available. Where such

alternatives exist at scale, fossil-fuel phase-out becomes both more feasible and equitable. Amongst the wicked issues that the international community has been incapable of solving so far is that of plastics: the petrochemicals sector is projected to be the dominant source of oil demand growth from 2026 onward. By 2030, global production of polymers and synthetic fibres will require 18.4 million barrels of oil per day - more than one in every six barrels. This means that petrochemicals will account for over 16% of global oil demand by 2030, and they are expected to continue driving growth through 2050 as transport demand plateaus and declines.²⁹ The notion of social utility also applies to the nature of consumption in terms of achieving decent living standards. All forms of luxury and frivolous consumption of energy, whether brown or green, as well as associated investments into such business models, must be curtailed if a genuine equitable outcome in terms of energy demand is to be achieved.30 Creating this hierarchy of societal values to guide energy consumption would need to be defined through democratic means. perhaps through a citizen assembly.

Institutional and ownership structures

Finally, the feasibility of phasing out fossil-fuel production depends, in part, on ownership models. While private companies can, in principle, be regulated or held accountable through divestment and liability mechanisms, **state-owned enterprises raise politically sensitive questions** about sovereignty and development. Both cases confront the complex issue of potential investor claims and compensation. In terms of renewable energy deployment, similar questions apply as to which type of institutional and ownership structures of renewable energy must be incentivised to achieve optimal environmental and social outcomes.³¹

2) Concrete steps towards restorative justice for people and ecosystems

It has become increasingly crucial that the just transition does not focus narrowly on emissions cuts alone - but also equally prioritises restorative justice, compensating for historical and structural inequalities that climate change exacerbates. Copenhagen Accord (2009) recognised that developing countries - especially the most - required "adequate, predictable vulnerable and sustainable financial resources, technology and capacity-building" to implement adaptation, reflecting a principle of compensation rooted in climate justice. In 2021, the COP26 Glasgow Climate Pact reaffirmed the need to scale up finance and capacity building specifically tailored to developing nations' vulnerabilities.32 COP28 introduced the Loss and Damage Fund, an institutional step toward restorative justice - intended to assist countries already suffering irreversible impacts. However, scholars note that, for such mechanisms to embody justice rather than charity, they must be designed with inclusive governance, direct access for impacted communities, new and additional finance, and burden-sharing aligned with the "polluter pays" principle.33

COP29 in Baku brought transformational adaptation into the limelight, pushing adaptation beyond isolated projects toward systemic, integrated reform in areas like urban planning, land use and ecosystem-based solutions. Importantly, COP29 emphasised that adaptation must focus on frontline communities, particularly those economically and socially marginalised, and scale up towards genuine sufficiency and resilience. As See et al. demonstrate through case studies in the Philippines,34 adaptation can go hand in hand with justice when it shifts power, respects local knowledge and enables meaningful participation by historically marginalised communities. However, more efforts are needed to equally include recognitional, distributive and procedural justice in adaptation. For example, procedural iustice, which involves inclusive decision-making and implementation clarity, is weakly addressed in US municipal adaptation plans, according to Brousseau and colleagues.35

3) A delivery-oriented package of measures for COP30

One of the worst possible outcomes of Belém would consist of a vague series of just transition principles that are not operational enough to change realities on the ground. Instead, concrete solutions must be found, as exemplified in Table 2. International climate governance should also better integrate equity dimensions in its various institutionalised reported processes. For example, equity benchmarks could be integrated into the global stocktake (GST) follow-up, requiring parties to report not only on emissions progress but also on distributive and procedural justice (who benefits, who bears the costs, progress on social floors).

Table 2. Justice-based means of implementation for international climate targets.

Tripling global renewable energy capacity by 2030	Equitable access and financing: establish dedicated finance windows (e.g., under the Green Climate Fund) to support least-developed countries and vulnerable communities in scaling renewable energy, including for locally led, prosumerist and decentralised RE provision for adaptation and resilience. Technology transfer: mandate open access to key renewable technologies, supported by South-North partnerships, to avoid reinforcing dependency. Inclusive governance: ensure that renewable expansion respects land rights, Indigenous peoples and local communities, embedding FPIC into implementation.
Doubling average annual rate of energy efficiency by 2030	Targeting the poor: prioritise efficiency investments in low-income households, public housing and essential services (schools, hospitals), so benefits reduce energy poverty rather than only lowering costs for industry. Fair distribution of costs: introduce international mechanisms to support developing countries in accessing affordable finance for efficiency retrofits, appliances and transport systems. Just labour outcomes: link efficiency investments to job creation programs and reskilling of workers at risk of displacement.
Phasing out fossil fuels in energy systems in line with 1.5°C	Equitable timelines: recognise differentiated capacities through faster phase-outs in advanced economies and longer but conditional pathways in developing countries with strong support. Just transition mechanisms: strengthen the role of the UNFCCC's JTWP by requiring national plans that include social protection, reskilling and community transition funds. Avoiding false solutions: guard against phasing out being offset by excessive reliance on carbon capture and storage or carbon markets, ensuring real reductions and prioritising sufficiency.

3. RISING TO THE CHALLENGE: WHAT MUST THE EU DELIVER?

To advance the just transition globally, the EU must help deliver a *new global deal*³⁶ combining ambition on fossil-fuel phase-out with equity and sufficiency. At the **multilateral level**, this means advocating for clear exit timelines, subsidy reform, and scaled-up just transition support. On the **bilateral front**, Just Energy Transition Partnerships (JETPs) offer a promising model, but the EU must champion stronger governance, inclusiveness and social investment. Finally, **closing the renewable finance gap in EMDE and Africa** is equally urgent: the EU should de-risk investment, expand concessional finance and back African-led initiatives.

Set clear and ambitious fossil-fuel phase-out timelines: Coal by 2030, fossil gas by 2035, oil by 2040

As argued in our litmus tests above, phase-out plans need to be based on science and respective responsibility and capacity. These dates presented here are widely considered necessary to stay within a 1.5°C global warming limit. Similarly to IPCC and IEA reports, Climate Analytics³⁷ calls for OECD countries to end coal use by 2030, a global coal phase-out by 2040, and highlights that fossil gas should be phased out by 2035 in developed countries and by early 2040s globally. Global Witness and other climate groups actively advocate these targets within the EU, emphasising that credible climate plans must include a clear path to phase out all fossil fuels by these dates. Overall, the EU must continue to support high ambition internationally.

2 Phase out all forms of fossil-fuel subsidies earlier than current targets and reallocate funds to the just transition

Whether direct budgetary support and tax breaks, financial resources used to subsidise fossil fuels must be reoriented towards renewable energy,

energy efficiency, social protection and job creation in green sectors.

- The EU and all its member states should join and resource the Coalition on Phasing Out Fossil Fuel Incentives Including Subsidies (COFFIS) and push for time-bound national phase-out roadmaps under COP and SDG pledges. COFFIS, launched at COP28 and chaired by the Netherlands, now counts 17 countries and explicitly targets both producer and consumer subsidies. As developed below, the EU should support a matchmaking platform for a just transition.³⁸
- The EU should promote the use of existing peerreview tools, for example, scaling up and making publicly available the G20/APEC voluntary peer reviews of fossil-fuel subsidies. The EU should offer technical assistance to partners to run inventories and design social-protection-first reforms.³⁹
- Make the money visible. The EU should require all partners to publish annual subsidy accounts using OECD-IEA-IMF methods (and feed them to the Fossil Fuel Subsidy Tracker) to underpin reform and track reallocation to just transition priorities.

Support the creation of an Integrated Forum on Climate Change and Trade

The EU should support this initiative of the Brazilian COP presidency, provided that it seeks to foster a positive, neutral and technical dialogue on the role of trade policies for climate action. Trade-impacting unilateral measures (mainly the EU's CBAM and the EU Deforestation Regulation) have been a source of concern for developing states and a recurring topic of contention in the COP context. The creation of the forum could help ease tensions by anticipating the distributive impacts of trade-related measures.

Support the creation of a global Just Transition Match-Making Facility

The EU should share best practices from the Just Transition Mechanism, the Just Transition Fund⁴⁰ and the Social Climate Fund. Building on the EU's Just Transition Platform model and the Platform for Coal Regions in Transition, a global "Just Transition Match-Making Facility" should be created: a onestop platform that matches country transition needs (finance, skills, tech, reskilling, community plans) with public/private solutions. The process of designing and implementing national just transition plans should be inclusive and involve broad stakeholder consultations, including workers, affected communities and civil society. The facility could be hosted jointly with the UNFCCC Technology Mechanism (TEC/CTCN), be linked to the PCCB Network for capacity-building and plug into existing tech exchange hubs - like WIPO GREEN - for practical technology match-making. The new UNFCCC JTWP would create the policy mandate and annual dialogues for the facility - this could be used to turn dialogue into funded country pipelines and to surface best practice. The facility should also ensure transparency and accountability for the selected actions and fund distribution.

5 Scale concessional windows

The EU should help expand access to international funds like the IMF's Resilience and Sustainability Trust, but with conditions that link money directly to just transition milestones - for example, closing coal plants and ensuring workers get support and retraining. Countries also need options like debt-forclimate swaps, where part of their debt is cancelled in exchange for investing in clean energy or nature protection. To bring in more funding, the EU can work with development banks and philanthropic organisations through programs such as the Climate Investment Funds' Accelerating Coal Transition (ACT) initiative, which already helps countries retire coal, clean up old mining sites and invest in renewables. Crucially, part of every transition finance package - whether from JETPs (see below), ACT or bilateral EU deals - should be set aside for **people and communities**. This means earmarking money for income support, job retraining, small-business development and community services, with progress tracked against clear indicators, such as gender equality and decent work.

6 Improve and expand Just Energy Transition Partnerships (JETPs)

JETPs originated as an innovative model of international cooperation to support emerging economies in phasing out fossil fuels - primarily coal - while ensuring a just transition for workers, communities and vulnerable groups. The concept of a JETP was first announced and put into practice at COP26 in 2021, where an inaugural agreement was struck between South Africa and an International Partners Group comprising France, Germany, the UK, the USA and the EU. JETPs represent a significant breakthrough by combining donor finance, political leverage and high-level government commitments to accelerate power-sector decarbonisation. JETPs have emphasised a "country-owned" approach, tailoring investment and reform plans to national contexts and priorities, rather than imposing donordriven blueprints. They have also prompted the creation of new national coordinating bodies (e.g., South Africa's Presidential Climate Commission), improving cross-government and cross-society engagement. The finance pledged in JETPs is significant (e.g., \$8.5 billion for South Africa), but remains a fraction of what is needed for the full power sector and a just transition (e.g., South Africa estimates \$60 billion is needed by 2030 for power alone).41

However, most JETP finance is in the form of loans rather than grants, raising debt concerns. The political and technical complexity of the transition – illustrated by South Africa's electricity crisis, entrenched interests and legacy utility debt – has delayed implementation and, in some cases, forced a reconsideration of coal phase-out timelines. Essential reforms to enable the effective absorption and deployment of JETP finance – such as regulatory changes, market redesign and anti-corruption measures – have progressed more slowly and been

more contested than anticipated. Progress is further hindered by strong domestic resistance from coal industry actors, trade unions and political figures concerned about foreign influence,⁴² all of whom must be engaged and negotiated with throughout the process.

On the "just" dimension of JETPs, many investment packages remain heavily weighted towards infrastructure and technological upgrades. with insufficient funding for social protection, worker reskilling and community development.43 Decentralised, community-led renewable energy projects that ensure energy sovereignty and participation of workers, marginalised the communities, and those historically impacted by the fossil economy, should be a priority.44 Regarding transparency and inclusiveness, a recurrent criticism of JETPs is that civil society consultation was limited during deal-making and rollout, especially in Vietnam and Indonesia, undermining stakeholder buy-in and legitimacy. 45 Sustained and broad-based consultation and communications are essential for overcoming distrust, ensuring "process legitimacy" and achieving durable reforms. Reporting and monitoring of finance, impacts and progress are also still insufficiently transparent.46

- The EU should ensure that social justice is at the core of JETPs by earmarking significant portions of finance for worker reskilling, social protection and community development – not just infrastructure and technology upgrades. Outcomes should be tracked against clear social indicators (e.g., gender equality, decent work, access to services).
- Shift the finance mix. The EU should promote expanding grants and concessional finance to reduce debt risks, and scaling up resources well beyond current pledges to match actual investment needs. In the JETPs, finance should be directly linked to just transition milestones, such as plant closures and new community energy projects.

- The EU should advance governance and inclusiveness. By requiring broad consultation with workers, civil society and affected communities during JETP design and implementation. JETPs should include transparent monitoring and reporting finance, progress and impacts to build trust and legitimacy.
- The EU should support enabling reforms in JETPs. Providing technical and political support for essential measures – such as regulatory changes, electricity market redesign and anticorruption safeguards – is key for the effective absorption of JETP finance.
- Foster country ownership. The EU should back the development of national coordinating bodies (e.g., South Africa's Presidential Climate Commission) and strengthen domestic institutions to drive reforms sustainably and inclusively.

Filling the renewable finance gap for EMDE, especially Africa and SIDS

EMDE - Africa and SIDS in particular - are falling behind in renewable energy finance. Africa receives less than 3% of global renewable investment, despite vast resource potential and acute energy needs.⁴⁷ SIDS face a similarly stark gap: they are among the most energy-import-dependent economies in the world, with fossil fuels accounting for over 80% of their energy supply. 48 Yet, their renewable potential solar, wind, geothermal and marine energy – remains largely untapped due to small market size, high capital costs and climate-related vulnerabilities. Financing gaps are driven by high perceived risk, weak enabling environments and limited international support. Therefore, the EU should champion a transformative scale-up of renewable energy finance. By aligning fossil-fuel phase-out commitments with scaled-up renewable investment in EMDE and SIDS, the EU can embed equity and justice into global climate action, strengthen resilience in the most vulnerable regions and help close the renewable energy finance gap.

- The EU should contribute to de-risking investments through guarantees, blended finance, and partnerships with local banks and infrastructure providers. In SIDS, this includes supporting regional risk-pooling facilities and using export credit agencies to reduce currency and sovereign risks.
- Prioritise decentralised, affordable renewables such as solar mini-grids and off-grid storage, which can enhance resilience, lower electricity costs (now among the highest globally in Caribbean and Pacific SIDS) and reduce reliance on imported fuels.
- Again, the EU should expand concessional and grant-based finance, aligning climate finance, development aid and private capital. This should include debt-for-climate swaps tailored to SIDS' high-debt burdens, as already piloted in Belize and Seychelles.
- Support African- and SIDS-led initiatives, such as the Africa Renewable Energy Initiative and the SIDS Lighthouses Initiative, while collaborating with UNECA on strategic investment, capacity building and technology transfer.
- The EU should contribute to backing micro, small and medium enterprises as key drivers of innovation in clean energy, including SIDS-based entrepreneurs deploying solar desalination, waste to energy and battery technologies, while promoting regulatory and market reforms that unlock private capital.

4. CONCLUSION

The credibility of COP30, and of the international climate regime more broadly, depends on the capacity of parties to operationalise the principle of a just transition within scientifically defined planetary boundaries. The two proposed litmus tests - a common understanding of just transition corridors and an actionable plan for the phase-out of fossil fuels and phase-in of renewables based on distributive, procedural and restorative justice provide a benchmark against which the adequacy of outcomes in Belém should be assessed. Equity, understood across inter-country, intra-country, intergenerational and interspecies dimensions, is not an adjunct to ambition but a condition for its realisation. The seven actionable proposals outlined above demonstrate that embedding justice into the means of implementation is feasible. Tripling renewable energy capacity, doubling energy efficiency and phasing out fossil fuels in a socially equitable manner can be achieved through adequate finance, inclusive governance and rigorous accountability mechanisms. In this regard, the EU has a particular responsibility, both to maintain its own credibility as a climate leader and to act as a catalyst for a coalition of the willing capable of advancing ambition while addressing structural inequities. A just transition will ultimately be evaluated by its outcomes: whether it reduces global inequalities. restores ecosystems and secures a viable future within planetary boundaries. COP30 offers a critical opportunity to re-anchor global climate governance in principles of sufficiency, fairness and restorative justice. Failure to do so would not only compromise the Paris Agreement's 1.5°C objective but also further erode the legitimacy of multilateral climate cooperation.

Endnotes

- 1 Sjursen, H. (2023) "Rethinking liberal order: the EU and the guest for global justice". International Affairs 99(6):2203-2220.
- 2 "EU's role in the pursuit of global justice", Proto(to)pia, 2024.
- 3 Bertelli, M., B. Binctin, B. Grugeon et al. (2025) "From denial to delay: How the far-right is orchestrating a climate backlash in European Parliament". DeSmog, 30 July.
- 4 Rodrigues, M. J. (ed.) (2024) A New Global Deal. FEPS, Brussels.
- 5 Climate Action Tracker (2025) "Mid-year check on 2035 climate plans".
- 6 Goldman, E., Reytar, K., Carter, S. et al. (2025) "Deforestattion and Restoration Targets Tracker (Beta)". World Resources Institute.
- 7 IRENA (2025) Renewable power generation costs in 2024. International Renewable Energy Agency, Abu Dhabi.
- 8 Ibid.
- 9 Ibid.
- 10 World Economic Forum (2025) "Fostering effective energy transition 2025: Insight Report".
- 11 DG Energy (2025) "In focus: Reaching the EU's energy efficiency target". European Commission, 15 July.
- 12 Jones, D. (2024) "Insights Progress since COP28 on transitioning away from fossil fuels", EMBER, 20 November.
- 13 OECD (2024) OECD inventory of support measures for fossil fuels 2024: Policy trends up to 2023. OECD Publishing, Paris.
- 14 ILO (2025) Guidelines for a just transition towards environmentally sustainable economies and societies for all. International Labour Organization, Geneva.
- 15 Rodrigues, M. J. (ed.) (2024) A New Global Deal. FEPS, Brussels.
- 16 Fressoz, J-B. (2024) Sans transition: Une nouvelle histoire de l'énergie. Seuil, Écocène.
- 17 Energy Connects (2025) "OPEC World Oil Outlook 2025 forecasts 123m bpd oil demand by 2050".
- 18 "Advisory Opinion on the Obligations of States in respect of Climate Change", 23 July 2025, International Court of Justice.
- 19 Raworth, K. (2017) Doughnut economics: Seven ways to think like a 21st-century economist. Random House, London.
- 20 Recordon, J., Gilloots, C., Brunner, D., Fragnière, A. (2025) "The Doughnut framework: From theory to local applications in Switzerland—literature review & practical lessons". Journal of Cleaner Production, Volume 505, 10 May 2025, 145440.
- 21 Rodrigues, M. J. (ed.) (2024) A New Global Deal. FEPS, Brussels.
- 22 Earth4All (2025).
- 23 World Bank (2015) "Climate Change Complicates Efforts to End Poverty".
- 24 Bois von Kursk, O., Culbert, V., Darby, M. et al. "Transitioning away from oil and gas: A production phase-out primer". International Institute for Sustainable Development (IISD), May 2024.
- 25 Alzaabi, M. (2025) "Decarbonizing the Barrel: Global Trends in Oil's Carbon Intensity". The Way Ahead, 12 May.
- 26 Coulomb, R., Henriet, F., Reitzmann, L. (2025) "Carbon footprint: not all barrels of oil are created equal, and that matters for the energy transition". Mines Paris PSL, 5 July.
- 27 Friends of the Earth International, Global Justice Now, and Asian Peoples' Movement on Debt and Development (2024) "Submission: Views on Work to Be Undertaken Under, as Well as Possible Topics for the Dialogues Under the UAE Just Transition Work Programme". UNFCCC, February 2024.
- 28 Civil Society Equity Review (2023) "An equitable phaseout of fossil fuel extraction: Towards a reference framework for a fair and rapid global phaseout". Civil Society Equity Review Coalition, December 2023.
- 29 Lopez, J. (2025) "Global oil demand to plateau by 2030 on EVs, but petrochemicals growth relentless IEA". ICIS, 1 July.
- 30 Uri, I., Robinson, S.-A., Roberts, J.T. et al. (2024) "Equity and justice in loss and damage finance: A narrative review of catalysts and obstacles". Current Climate Change Reports, 10: 33-45. DOI: 10.1007/s40641-024-00196-6
- 31 Shen, L. and J. Zhou (2024) "The role of biodiversity and energy transition in shaping the next Sustainability Agenda". *Technological Forecasting and Social Change*, 208: 123700. DOI: 10.1016/j.techfore.2024.123700
- 32 UNFCCC (2025) "The Glasgow Climate Pact Key Outcomes from COP26".
- 33 Uri, I., Robinson, S.-A., Roberts, J.T. et al. (2024) "Equity and justice in loss and damage finance: A narrative review of catalysts and obstacles".

Current Climate Change Reports, 10: 33-45. DOI: 10.1007/s40641-024-00196-6

- 34 See, J., Wilmsen, B. (2022). "A multidimensional framework for assessing adaptative justice: a case study of a small island community in the Philippines". Climatic Change, 170(1), 1-21. DOI: 10.1007/s10584-021-03266-y
- 35 Brousseau, J.J., Stern, M.J., Pownall, M., Hansen L.J. (2024) "Understanding how justice is considered in climate adaptation approaches: a qualitative review of climate adaptation plans". The International Journal of Justice and Sustainability, Volume 29, Issue 12, DOI: 10.1080/13549839.2024.2386964
- 36 Rodrigues, M. J. (ed.) (2024) A New Global Deal. FEPS, Brussels.
- 37 Forner, C. (2015) "Coal phase-out". Climate Analytics, December 2015.
- 38 "Position: The world needs a fair, fast, full and funded fossil fuel phase out". Climate Action Network, November 2023.
- 39 OECD (2022) "Lessons learnt and good practice from APEC-economy fossil-fuel subsidy peer reviews". Contribution by the Organisation for Economic Co-operation and Development (OECD) to the APEC Energy Working Group (EWG), July 2021.
- 40 Official Journal of the European Union, L 231/1, 30.6.2021.
- 41 Burton, J. (2022) "Coal in 2022: South Africa's Just Energy Transition Partnership". E3G, 13 January.
- 42 Vanheukelom, J. (2023) "Two years into South Africa's Just Energy Transition Partnership: How real is the deal?" ECDPM, Briefing note 174, November 2023.
- 43 Ibid.
- 44 IRENA, ILO (2024) Renewable energy and jobs: Annual review 2024. International Renewable Energy Agency, Abu Dhabi, and International Labour Organization, Geneva.
- 45 Jain, G., Bustami, G. (2025) "Realizing the potential of Just Energy Transition Partnerships in the current geopolitical environment". Center on Global Energy Policy, Columbia SIPA, 3 March.
- 46 Jakob, M., Martini, L. (2023) "How can the G7 and G20 improve Just Energy Transition Partnerships? Taking stock of Just Energy Transition Partnerships (JETP)". Ecologic, Briefing, June 2023.
- 47 ECA (2025) "Africa Leads in Energy Potential but trails in investment". United Nations Economic Commission for Africa, 16 July.
- 48 UNDP (2024) "Advancing a Just Energy Transition in SIDS". United Nations Development Progamme, Policy paper, December 2024.

About the authors



CÉLINE CHARVERIAT

Céline Charveriat is currently the founder and director of Pro(to) topia Consulting, as well as an adjunct professor at the Paris School of International Affairs (PSIA) and part-time program director of the Vaerekraft Foundation (Norway). Her extensive career includes both research and civil society advocacy, from the Inter-American Development Bank in Washington D.C. to Oxfam and the Institute of European Environmental Policy (IEEP). Her rich and diverse expertise encompasses climate change, inequality, humanitarian crises and the European Green Deal. Céline Charveriat is now chair of the board of Climate Catalyst and advises several EU institutions on sustainability issues. Her current research focuses on new economics, including beyond-GDP indicators, and the concept of green, caring societies.



PIERRE LETURCO

Pierre Leturcq is a Brussels-based independent think tanker with nearly a decade of experience at the intersection of EU public affairs, climate diplomacy, trade and sustainability. He advises leading research organisations on strategy and outreach, is a senior associate with the Institute for European Environmental Policy and E3G. He is the founder and coordinator of the Green Trade Network, a global community of experts working on the trade and environmental sustainability nexus. Pierre is an associate lecturer at Sciences Po Paris (Paris School of International Affairs) and an advisor at the Centre for International Sustainable Development Law (Montréal, Québec).

About FEPS

The Foundation for European Progressive Studies (FEPS) is the think tank of the progressive political family at EU level. Its mission is to develop innovative research, policy advice, training and debates to inspire and inform progressive politics and policies across Europe.

FEPS works in close partnership with its 76 members and other partners -including renowned universities, scholars, policymakers and activists-, forging connections among stakeholders from the world of politics, academia and civil society at local, regional, national, European and global levels.

www.feps-europe.eu | Twitter/Instagram: @FEPS_Europe | Facebook: @FEPSEurope

About FES Just Climate

In 2021 the Friedrich-Ebert-Stiftung launched its competence center for Climate and Social Justice, based in Brussels. Climate and social policies must be two sides of the same European coin in the future. We need to develop climate-neutral energy systems and industries. Simultaneously, we need to safeguard and strengthen the welfare state, local participation and workers' rights.

FES Just Climate acts as a think tank about current and coming trends, and a policy advisor in ongoing debates. We support FES offices and their partners in shaping the industrial revolution of our times. We focus on energy, industrial, structural and labor policies, and the European Green Deal.

www.justclimate.fes.de

ON SIMILAR TOPICS

FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES

AUTHORS



