PHASING OUT FOSSIL FUELS

WWF envisages a **rapid phase out of all fossil fuels, improved energy efficiency, and scaling up sustainable renewable energy, especially from wind and solar, as highlighted in the Global Stocktake (GST) outcome**. The global **energy transition that we need** must provide energy access for all and ensure that affected workers and communities are supported in the transition away from fossil fuels. A Just Energy Transition[1] (JET) requires developed countries to support developing countries, including through financial assistance, to make their energy transitions fair, and achieve universal renewable energy access.

WHY WE NEED TO ACT FAST

Production and use of fossil fuels has contributed to **around 75% of the emissions driving climate change.** Currently, the world is on track to **produce more fossil fuels towards 2030 than is consistent with a 1.5ºC pathway,** and new oil and gas fields are incompatible with this vital temperature limit. **Coal needs to be phased out of the energy matrix by 2030, in developing countries by 2040, oil and gas in developed countries by 2040 at the latest and by 2050 in developing countries.**

Increasing the deployment of renewable energy does **not automatically displace fossil fuels**, given that global energy demand is rising and **renewables often supplement rather than replace** fossil-based energy. Without robust policies, such as mandates and timelines to phase out fossil fuels, redirecting fossil subsidies and aligning financial flows to support renewables over fossil fuels, **fossil fuels will remain economically and structurally embedded in energy systems**. Effective decarbonization requires deliberate policies to retire fossil infrastructure and align market incentives with climate goals.

In 2023 the outcome from the first Global Stocktake (GST) at COP28 provided clear guidance to transform the way we power our economies and lives. Paragraph 28 of the GST decision provides guidance on how to achieve the deep and rapid reductions in greenhouse gas emissions that are needed.**Global renewable energy capacity must triple, the average annual rate of energy efficiency improvements must double by 2030 (compared to the levels in 2022) and the world needs to transition away from fossil fuels.** A key development in global environmental politics this year is the International Court of Justice issued an Advisory Opinion that clarified states' obligations under international law: to reduce emissions, to cooperate, and to prevent serious environmental harm. The Judges emphasized that the **obligation to prevent significant harm to the climate system necessarily extends to fossil fuel production, consumption, and**

1 The just energy transition applies specifically to a shift from fossil fuels to a sustainable, sufficient, and efficient renewables-based energy system that has an impact across all sectors, companies, and in a particular locality (community, region, country).

infrastructure, therefore reinforcing the commitments under the first GST.

However, last year at COP29 in Baku, **parties failed to demonstrate progress on implementing GST outcomes** and follow up on a just energy transition. And there remains a shortfall in the submission of new NDCs and a persistent ambition gap that parties must address with greater urgency and adequacy. As we head to COP30, we must **ensure that discussions on an equitable and just fossil fuel phase out are part of negotiations and build upon the GST outcome**.

2025 is a critical year for advancing the energy transition. According to the Intergovernmental Panel on Climate Change (IPCC), **global greenhouse gas emissions must peak in 2025** to limit global warming to 1.5°C above pre-industrial levels. The IPCC reports emphasize that rapid and deep emission reductions must follow immediately after the peak, with global CO_2 emissions almost halved (43%) by 2030 and reaching net-zero by 2050. Any **delay increases the risk of passing critical climate tipping points, leading to more severe and irreversible impacts**. Peaking is impossible to achieve without steep and fast reductions in fossil fuel emissions. Negative emissions and carbon capture technologies have not been proven at scale and have significant costs, both in terms of energy required to capture the carbon and the costs of the technologies to do so. Carbon Capture and Storage[2] (CCS) is not 100% efficient in carbon capture and if public money is used to finance it, it diverts resources away from the needed transition to renewable energy.

A just energy transition offers **substantial economic and social benefits** by moving toward sustainable and inclusive energy systems. Economically, renewable energy sources such as wind and solar have become **more cost-effective** than fossil fuels over the long term. In 2023, 62% of newly installed renewables were cheaper than the cheapest fossil fuel option (IRENA, 2024). This shift is also **fuelling job creation**: the number of jobs in the renewable energy sector grew to 16.2 million in 2023, reflecting rising global demand (IRENA & ILO, 2023). While these jobs are not yet evenly distributed, the trend underscores renewables' critical economic role.

At the same time, in 2023, **750 million people worldwide still lacked access to electricity**, 80% of them in sub-Saharan Africa. Renewable energy also **improves access in underserved regions and reduces air pollution**. According to the International Energy Agency (IEA), achieving universal access to renewable energy by 2030 could halve major air pollutant emissions, leading to a reduction of 3.6 million premature deaths.

Reducing dependence on imported fossil fuels **enhances energy security and resilience** against global market shocks. Furthermore, investment in renewable infrastructure stimulates local economies, increases property values, and mitigates climate-related risks, laying the **groundwork for more stable and inclusive long-term growth**. Clearly, the energy sector is of the **highest priority in efforts to limit climate change, mitigate energy poverty and gains in economic development** and avoid further damage to nature.

While we are making positive progress in scaling up renewables, there is **very little progress in concrete measures such as timelines and milestones for transitioning away from fossil fuels or ending fossil fuel subsidies**. This distorts the market and steals away economic gains from a just energy transition.

WHAT NEEDS TO HAPPEN

Fossil Fuel Phase Out

- We need a complete phase-out of **all fossil fuels before 2050, with developed countries taking the lead and supporting the transition in developing countries.**
- **COP30 should define a timeline for phasing out fossil fuels with the following milestones:**
  - **Coal should be phased-out by 2030** in developed countries, and **by 2040 in developing countries**.
  - **Oil and gas should be phased-out before 2040** in developed countries and **latest by 2050 in developing countries**.
  - **No new coal, oil, and gas exploration** should take place. No new exploration and production licences should be awarded.
- **CCS is a limited solution with niche applications** which should be reserved only for development-critical industries with unavoidable process emissions (such as cement) and should not compromise innovation or divert public and private investment in renewables.

2 WWF's working definition of Carbon Capture and Storage (CCS) focuses exclusively on the capture and permanent sequestration of point source CO_2 emissions in underground geological storage.

Renewable Energy

- Implement measures to reach the **tripling of current renewable energy capacity by 2030**.
- **Define benchmarks on renewable energy to replace fossil fuels** in the energy matrix.
- Reach **100% sustainable renewable energy well before 2050**, focusing on wind and solar.

Energy Efficiency and Electrification

- Parties should set **actions to double energy efficiency**, particularly of four key globally traded products - air conditioners, lighting, industrial motor systems, and refrigerator-freezers - by 2030.
- Efficiency measures need to be accompanied by action to ensure an equitable **reduction in overall energy demand, particularly in developed countries**.
- **Electrification should be one of the key energy transition strategies** to cut emissions in the energy sector, enabling renewable sources to replace fossil fuels in the energy matrix. **It is also** essential to guarantee developing countries have energy access and **leapfrog to renewable energy without fossil gas as a transitional fuel**.

Finance for a just energy transition

- We need to **redirect all fossil fuel subsidies** to renewable energy and just transition policies**.**
- Developed countries should support developing countries to achieve their energy transitions by **encouraging the uptake of renewables**; they should also invest in **energy access**, including through the use of **public finance**. This must be integrated in the Baku to Belém roadmap.
- As required by Art. 2.1 c of the Paris Agreement, **public and private financial flows** should shift away from fossil fuels to **support the energy transition**, noting estimates of need range from US$ 830 billion to US$ 1300 billion by 2030. A 6:1 sustainable power supply to fossil fuel financing ratio should be achieved by 2030 latest.
- Country budgets should be **explicit in their resource allocation** to climate change policies and define strategies for private sector investments and regulatory measures.

Crosscutting Principles: Fairness, Equity and Sustainability

We need to ensure:

- Safe, reliable, and affordable **access to renewable energy services for all**.
- The urgent rollout of renewables that causes the **least possible damage to nature**.
- A **Just Energy Transformation**[3] between and within countries, embedded in **Just Transition measures** which are equitable, inclusive, rights-based and aligned with the Paris Agreement goals
- That **social and environmental safeguards** are in place.

WHAT WE NEED COP 30 TO DELIVER

COP30 must play a pivotal role in addressing the ambition gap and demonstrating progress through a just energy transition.While the reformed Action Agenda can be one stepping stone to unlock blockages, it is just one piece and needs to be aligned with the formal process. However, SB62 demonstrated deep divisions among parties on advancing an accelerated implementation of the GST and in particular para 28. To move forward, the COP30 Presidency and parties need to use other political spaces and possible vehicles to progress. Next to the formal negotiations and mandated events, the leaders's segment

- **Accelerated implementation of the GST outcome** is of utmost importance. Parties at COP30 need to reaffirm commitment and accelerate

3 The just energy transformation captures the overall, global systemic transformation of the energy sector. The term is based on the recognition that existing systems are not just, that social and economic progress is reliant on nature, and that the protection of nature is reliant on social and economic well-being.

implementation, with a particular emphasis on the just energy transition in paragraph 28 alongside enhanced efforts towards halting and reversing deforestation and forest degradation by 2030 to achieve a comprehensive approach. Parties need to have **dedicated spaces** in the UNFCCC before and at COP to talk about progress, challenges and support needed.

- For an equitable fossil fuel phase out, we need specific **timelines, benchmarks and milestones**. Parties need to **include measures related to phasing out all fossil fuels in their new NDCs**. Besides sending positive signals in terms of global climate policy, this would also trigger a dynamic that appeals to the market and provides reliability in decision-making.

While progress of scaling up RE and energy efficiency is assessed and accounted for, (e.g. by IRENA, IEA), a **tracking system on measures to phase out fossil fuels is urgently needed**.

RESOURCES

The Transition Away From Oil & Gas: A WWF Network Policy Position (May 2021)

WWF Proposal for an Energy Transition Package at COP28 (December 2023)

INTEGRATING JUST ENERGY TRANSITIONS INTO NDCs (October 2024)

WWF Policy Briefing on Climate Finance at COP29 (November 2024)

Phasing Out Fossil Fuels through NDCs 3.0: Guidance for Policy-Makers (April 2025)

WWF COP30 Expectations (September 2025)

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