COP30 Presidency Roadmap on the Transition Away from Fossil Fuels

Transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, as agreed in paragraph 28 (d) of the Global Stocktake (GST) Decision 1/CMA5, reflects and ambitious goal under the multilateral regime. The broad goal to create steps towards fostering a transition must, necessarily, consider the other goals approved under the GST:

(a) Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030;

(b) Accelerating efforts towards the phase-down of unabated coal power;

(c) Accelerating efforts globally towards net zero emission energy systems, utilizing zero- and low-carbon fuels, well before or by around mid-century;

(e) Accelerating zero and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production;

(f) Accelerating the substantial reduction of non-carbon-dioxide emissions globally, in particular methane emissions by 2030;

(g) Accelerating the reduction of emissions from road transport on a range of pathways, including through development of infrastructure and rapid deployment of zero- and low-emission vehicles;

(h) Phasing out inefficient fossil fuel subsidies that do not address energy poverty or just transitions, as soon as possible.

The roadmap is an immense opportunity to build blocks, through the support of key countries and other stakeholders that aims to engage into the implementation of concrete actions that would enable energy transition strategies and projects, aligned with the view to reduce dependence of fossil fuels.

The uncertainties on how to integrate the building blocks that could emerge from the roadmap into the formal process/agenda of the UNFCCC and the Paris Agreement should not create obstacles for a broad and open debates about the critical aspects that must be in place to support energy transition.

Based on this context, Agroicone, a Brazilian think tank that aims to transform agriculture and renewable energy aligned with climate change goals and, more broadly, with different sustainable development goals, respectively suggests the following topics to the roadmap:

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932

1. The roadmap must be anchored into the two-speed model of multilateralism

In line with the COP30 Presidency's proposal at the letter published in January 2026[1], it is crucial to explore the two-speed multilateralism model. Under this approach, the roadmap could establish regional groupings of countries to facilitate cooperation, technology transfer, climate finance, trade integration, and the promotion of renewable energy sources.

Without the participation of oil-producing countries, efforts to transition away from fossil fuels risk being undermined. It is therefore essential to engage all countries willing to design and implement concrete measures toward energy diversification, thereby ensuring an inclusive and representative dialogue.

Since COP26, in 2021, in Glasgow, the UNFCCC Conferences has taken place in countries that are active producers or investors in oil exploration, production and exports. Simply exclude oil countries from the roadmap will not allow to establish concrete steps towards transforming renewables into profitable investments.

The conflicts in the Middle East strongly underscore the risks of oil dependence and, at first glance, overshadow the goal of a roadmap to move away from fossil fuels. Paradoxically, they reinforce the importance of further developing pathways that not only reduce GHG emissions but also foster an economy based on diverse renewable energy sources that benefit all countries.

In his book "Geography: First and Foremost, a Tool for Waging War", Yves Lacoste argues that the geographical space is fundamentally relevant on the geopolitical chessboard, particularly in the exercise of power and the pursuit of political-military interests. The choking off of oil routes in a region that accounts for nearly 30% of global production poses a threat to the global economy.

This suggests that countries heavily dependent on oil and gas production and exports – accounting for between 30% and 55% of GDP, as it is the case for most Middle Eastern nations – hold significant geopolitical assets, especially when they control international trade routes.

Oil transportation depends on geographic chokepoints, such as the Strait of Hormuz, which accounts for approximately 20% of global oil trade (around 20 to 21 million barrels per day). Current tensions have significant repercussions not only for the oil market but are also already affecting natural gas and fertilizers. These conflicts increase the logistical vulnerability of industrial and consumer goods, especially on routes between Asia and Europa. The Bab el-Mandeb Strait, which connects to the Suez Canal, is also under threat and could severely impact Saudi Arabia's oil exports.

[1] https://cop30.br/en/news-about-cop30/cop30-president-defends-evolution-of-climate-multilateralism-towards-a-two-speed-model-and-accelerated-implementation

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932

This underscores that integrating oil-producing countries into the energy transition is a necessary condition for moving forward with any strategy of energy diversification.

This is a substantial barrier to the success of any roadmap on transitioning away from fossil fuels. Naturally, countries with large oil reserves will not abandon their assets. And this is not limited to the Middle East. Along with the United Arab Emirates, Saudi Arabia, Kuwait, Iraq, and Iran, which hold the region's largest reserves, countries such as Libya, Nigeria, Kazakhstan, Azerbaijan, Norway, the United States, Brazil, and Venezuela hold some of the largest oil reserves in the world.

It is essential to stimulate the production, use, and commercialization of renewable energy sources in every corner of the world; to this end, it is crucial that these energy sources generate sufficient economic returns to make them more attractive than oil.

It is important to emphasize that the energy transition is already underway. The International Energy Agency (IEA) released a report at the end of 2025 indicating that "global renewable energy capacity is expected to double between now and 2030, increasing by 4,600 gigawatts (GW). This is roughly equivalent to adding the combined power generation capacity of China, the European Union, and Japan to the global energy mix. Solar photovoltaic energy accounts for nearly 80% of this global increase, followed by wind, hydropower, bioenergy, and geothermal energy. In more than 80% of countries worldwide, renewable energy capacity is expected to grow faster between 2025 and 2030 than in the previous five-year period".

Expanding funding sources and fostering access to innovative tools that drive innovation and energy diversification is the focus of the climate agenda. The IEA estimates that investment in renewable energy must reach at least US$ 4.8 trillion per year by 2030, rising to more than US$ 5 trillion per year by 2030.

The Baku-Belém Roadmap for the US$ 1.3 trillion goal, which serves as a reference for exploring ways to mobilize resources and facilitate access, highlights that high financing costs are an obstacle that must be overcome. In developing countries, interest payments account for more than 50% of electricity costs, compared to less than 30% in Europe. It is estimated that a reduction of just 1% in financing rates would save US$ 140 billion annually, making capital-intensive projects viable.

Closely linked to this is the substantial barrier posed by public subsidies for the production and/or consumption of fossil fuels, which provide competitive advantages for certain countries and sectors while undermining the potential of alternative sources. In 2022, subsidies for fossil fuel consumption exceeded US$ 1 trillion. International Monetary Fund projections estimate that implicit fossil fuel subsidies, considering the underpricing of environmental externalities, amounted to US$ 6.7 trillion in 2024.

Regulations (including subsidies) play a crucial role in catalyzing renewable energy projects. Without public policies to guide and provide security for investments, it becomes difficult to overcome bottlenecks in grid infrastructure, intermittency and storage, the

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932

creation of charging stations, system integration, the extraction of critical minerals, Bioenergy, Carbon Capture and Storage (BECCS), and Carbon Capture and Storage (CCS) projects, green hydrogen, small nuclear power plants, and other sources.

Alongside financing, carbon markets can play a central role in the roadmap, as carbon projects can act as a catalyst to enable certain type of renewable energy projects. The challenge lies in finding ways to price emissions in the sectors most dependent on fossil fuels, thereby generating demand for carbon credits from renewable projects.

Overcoming the challenge of making fossil fuel investments less attractive requires a combination of economic incentives, assertive public policies, a reduction in fossil fuel subsidies, and increased financing for clean energy. This appears to be the biggest challenge for the roadmap.

Renewable energy is becoming increasingly competitive. According to the International Renewable Energy Agency (IRENA), the cost of solar photovoltaic modules fell by 93% between December 2009 and December 2023, and the average cost on onshore wind energy projects decreased by 70% between 2010 and 2023.

The roadmap for transitioning away from fossil fuels must include oil-producing countries representing all producing regions, with the aim of discussing investment opportunities and actions that will enable the diversification of the energy mix in those countries. A two-tier model would allow multilateralism to move at the pace required to accelerate the deployment of renewable energy. Countries choosing to participate at the implementation level would be better positioned to address the financial barriers associated with clean energy projects, leveraging the roles of Multilateral Development Banks, capital markets, and public finance instruments.

While not all countries may be ready to participate in these discussions at the outset, the implementation-oriented tier holds significant potential to advance a fair and sustainable energy transition, generating demonstrable outcomes while keeping the door open for wider multilateral engagement over time.

2. Belém Pledge and Sustainable Fuels: harmonize key sustainability criteria

Sustainable fuels offer wide-ranging benefits for the energy sector, particularly for hard-to-abate sectors that remain heavily dependent on fuel-based solutions, including aviation, shipping, road transport, and industry. Beyond decarbonization, they can strengthen energy security, promote environmental sustainability, and drive economic development, especially in rural areas.

Building on this potential, the Belém Commitment for Sustainable Fuels (Belém 4x) sets an important target: to quadruple the production and use of sustainable fuels by 2035. The initiative aims to accelerate the global adoption of clean energy sources, contributing

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932

directly to the decarbonization of energy systems worldwide. To date, 24 countries have endorsed the initiative - including Brazil, Japan, India, Canada, Singapore, the United Arab Emirates, among others - alongside key organizations such as ICAO, UNIDO, the Hydrogen Council, Maersk, Toyota, UNICA, and Bayer.

Hoewer, realizing the promise of sustainable fuels requires a solid governance foundation. Robust and mutually agreed carbon accounting methodologies are essential to ensure that these fuels are produced responsibly and deliver genuine climate benefits. In this regard, the roadmap can play a crucial role by establishing harmonized sustainability criteria for biofuel production, aiming to

Despite blending mandates for biofuels into gasoline and biodiesel, that covers more than 70 countries, which integrate renewables into the transportation sector and reduce the use of fossil fuels, there is a growing awareness regarding the use of biofuels to support mitigation on civil aviation, with the approval of the Carbon Offsetting and Reduction Scheme for International Aviation – CORSIA at the International Civil Aviation Organization (ICAO), stating a clear sign that biofuels are a tangible solution.

The process of approving biojet routes under CORSIA follow strict Sustainability criteria, which is key to assure carbon and Sustainability benefits of each biofuel.

The same path happens at the International Maritime Organization (IMO). Despite the postponement of the decision about the IMO Net Zero framework, the debates regarding sustainable criteria to certify biofuels push the agenda forward.

In line with the importance of agreeing key criteria that must be considered to analyze diferent biofuels, and considering the two-speed model of multilateralismo, the roadmap could propose a multilateral process to harmonize approaches towards sustainable biofuels production including, but not limited, to the following criteria:

- Land use change (LUC)
- Indirect land use change (iLUC)
- Approaches towards life cycle analysis (LCA)
- Approaches towards degraded land restoration
- Approaches towards 2nd crop production

The current proliferation of voluntary certification standards risks creating disproportionate costs and trade barriers. Convergence around common and science-based criteria would reduce fragmentation and improve regulatory predictability. Strengthening monitoring, reporting, and verification (MRV) systems is equally important to ensure transparency and to recognize the role of agriculture as a provider of global climate solutions.

The harmonization of sustainability criteria and GHG LCA assessment methodologies would further enable consistency in energy production, transmission, and use across regions, facilitating trade and creating a level playing field for producers and consumers.

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932

Ultimately, achieving the goals of Belém 4x will require coordinated action beyond national governments. Research institutions and the private sector must be active partners in development and disseminating the technological solutions needed for both climate mitigation and adaptation. Fostering multi-stakeholder cooperation will be key to translating the Belém Commitment into concrete and measurable outcomes.

RODRIGO CARVALHO DE ABREU LIMA:01753007984

Assinado de forma digital por RODRIGO CARVALHO DE ABREU LIMA:01753007984

Rodrigo C A Lima

Co-founder-Director of Agroicone

agroicone.com.br
agroicone@agroicone.com.br
Av. Paulista, 2202, 8° andar, Sala 2
São Paulo – SP – 01310-932