

# Colombia energy sector workshop, 26 April 2024

## Executive summary

The workshop, held by Colombian and UK partners in Bogotá, Colombia, aimed to understand the barriers and opportunities to increasing access to sustainable energy in Colombia, focusing on including marginalised voices and adopting a systems approach to enhance outcomes. The event followed a three-day global Frontiers symposium on systems approaches in a just energy transition and was chaired by Professor Franklin Jaramillo from Universidad de Antioquia.

### Colombia and the just energy transition

**Colombia's energy mix includes 23% renewables, surpassing the global average of 14%. Despite strong political will to mitigate climate change, though energy is not the focus, challenges persist in transitioning to renewable sources due to infrastructure needs, climate variability, and economic dependency on fossil fuel exports.**

Energy access is uneven, with 97% connected to the grid but 20% of the population considered energy poor. This includes the northern region of La Guajira which has high levels of poverty despite high renewable energy potential.

Communities – 50% of which are Indigenous – have historically been marginalised with little or no relationship with the government and have been excluded from economic benefits of development in the region, for example from coal plants.

Colombia has a history of self-organisation, as reflected by the emergence of 'energy communities', a public policy still under construction, in which citizens seek to provide energy for their community and local economic benefits.

### Who was at the workshop?

**The workshop gathered representatives from academia, government, industry, civil society, and financial institutions, who discussed their roles in the energy transition.**

Participants identified key stakeholders in Colombia's energy system, including government, academia, industry, and civil society. However, significant gaps were noted, particularly the exclusion of consumers, Indigenous and Afro-Colombian communities, financial institutions, and miners and fossil fuel companies.

### Systems approaches

**A systems approach\*, which emphasises the interconnections within socio-technical systems, was highlighted as essential for addressing Colombia's energy challenges.**

Such an approach can facilitate better decision-making and innovation by aligning technology, processes, and policy to achieve more effective outcomes.

\* A systems approach is a holistic and interdisciplinary way of understanding and solving complex problems. It views the world as a collection of interconnected and interdependent elements or people and emphasises the relationships and interactions between them.

## Key findings

### **Lack of coordination and shared direction:**

There is significant activity within the energy system, but efforts are often uncoordinated and communication between actors poor, leading to less impactful outcomes. A central connecting mechanism, potentially led by the government, is needed.

**Academia's untapped potential:** Academia's role in knowledge generation and innovation is underutilised, particularly in informing policy. Improved engagement with policymakers is necessary.

**Exclusion of communities:** Marginalised communities, especially in remote areas, are excluded from energy discussions and lack trust in government and industry initiatives. Building trust and involving these communities from the project inception is crucial, whilst ensuring their autonomy. Energy communities could be a solution.

**Passive consumer role:** Consumers currently have a passive role in the energy system. Public education and training are needed to empower consumers and integrate their needs into energy decisions.

**Financial feasibility and innovation:** Understanding the financial feasibility of the

energy transition is critical, requiring greater involvement from financial institutions and innovation in financing mechanisms, including how to derisk initial investments. There is a tension between building cooperation in the system and developing economic competitiveness.

**Inclusion of industry:** Companies are crucial to the transition but often feel excluded from discussions. Their role and contributions must be recognised, and their involvement strengthened, including working with academia on how to connect the 'market pull' and science push' to develop new technologies to support the transition.

**Need for agile regulation:** Current regulation is slow and not context specific. Agile, evidence-based regulation is needed to keep pace with the transition and support decentralisation of the system.

**Systems approach:** A systems approach is vital but challenging to implement. It requires training, time, and resources to deliver and effectively engage all stakeholders. Key questions were asked on who is responsible for resolving tensions in the system? How can it be effectively governed to achieve a shared goal?

## Calls to action

- **Develop a network which prioritises collaboration:** Create a multidisciplinary energy network that fosters collaboration and knowledge exchange, directly influences policy, and drives towards a common goal. Include all sectors, especially industry and fossil fuel companies.
- **Government must set achievable targets with clear pathways:** Government should set achievable targets with clear pathways supported by cross-sector leaders, recognising energy as both a development and environmental issue.
- **Better connect academia with other stakeholders:** Academia must strengthen ties with government and industry, promoting research that informs policy and supports innovation.
- **Include and educate communities:** Ensure consumer and community inclusion in energy projects. Government should enhance public education on energy efficiency.
- **Innovate governance to support the transition:** Develop new governance structures, such as regulatory sandboxes, to support agile and decentralised energy regulation.
- **Map the system and financial resources:** Conduct a comprehensive mapping of the Colombian energy system, including available financial resources.
- **Develop pilot projects:** Implement small-scale, high-impact pilot projects to test systems approaches, share results, and refine transition plans.
- **Identify systems champions:** Support ongoing projects that adopt systems approaches, led by individuals driving systemic change.

## Contact us

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