

## South Africa G20 Presidency: Energy Transition Working Group

43<sup>rd</sup> IPHE Steering Committee Meeting 10-11 June 2025 Santiago, Chile

### **South African G20 Presidency**



#### **South Africa's embraced theme:**

- Solidarity
- Equality
- Sustainability

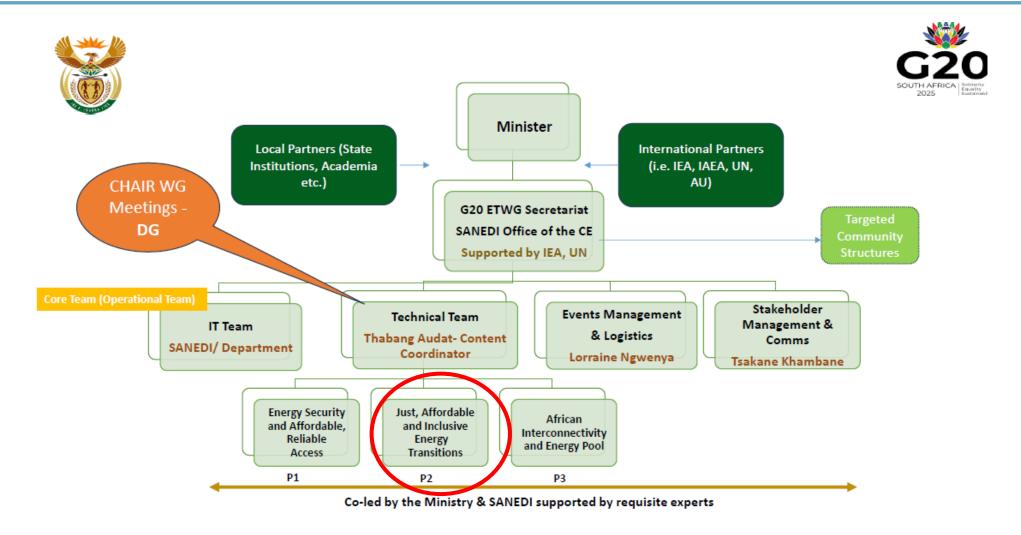
#### **Priorities that South Africa aims to elevate as part of its G20 hosting:**

- ✓ Take action to strengthen disaster resilience and response
- ✓ Take action to ensure debt sustainability for low-income countries
- ✓ Mobilise finance for a just energy transition
- ✓ Work together to harness critical minerals for inclusive growth and sustainable development



## **G20 Energy Transition Working Group Structure**





## **G20 Energy Transitions Working Group Priorities**



#### **Priority Area 1: Energy Security and Affordable, Reliable Access**

#### **Outcomes:**

- Energy Security: Develop a framework on how to address energy security risks, considering diversification of energy sources such as natural gas, nuclear (small modular reactors), solar, wind and hydrogeneration.
- Develop a roadmap for financing energy access with an Africa-focused action plan for deploying technologies, such as microgrids, to un-serviced communities.
- Clean cooking gap: accelerate the deployment of cleaning cooking solutions in the next two years to reach universal access to clean cooking by 2030, notably in Africa.
- Infrastructure Resilience: Develop an action plan for developing and/or upgrading energy infrastructure, particularly in under-serviced communities,
- Affordability Frameworks: Work towards a global energy poverty compact based on a compendium of policies and funding schemes to reduce energy cost, energy poverty and support vulnerable consumers.



### **G20 Energy Transitions Working Group Priorities**



## Priority Area 3: African Interconnectivity and Energy Pool. Outcomes:

- Exchange best practices on regional interconnectivity with an action plan for achieving regional interconnectivity in Africa based on the three pillars:
- Ten-year infrastructure investment plan for Africa's Cross-Border Projects: Guided by the African Union, identify a minimum of three significant cross border energy projects and develop project financing mechanisms. African Continental Master Plan to be used as a guide.
- Policy Harmonization to support cross border trade: Align regulations in 50% of AU member states by 2025 to foster a unified energy market.
- Renewable Energy Corridors: Establish two corridors by 2030, supplying 15% of regional needs.



# Priority Area 2: Just, Affordable and Inclusive Energy Transitions

#### **G20 Negotiated Outcomes**

Outcome 1a: Sustainable/Clean Industrialization Hubs, this also includes outcome 5 with a focus on Clean Hydrogen for hard to abate sectors. Any sustainable fuel derived from Hydrogen will be incorporated.

Outcome 3: A G20 action agenda for affordable and inclusive transitions

#### Presidency G20 documents

Outcome 2<sup>b</sup>: Socio-economic Safeguards for Coal-Dependent Regions. This also includes outcome 4 on Local Content Requirements

Outcome 4: Sustainable Fuels: with a focus on the biofuel's continuation from Brazil and India and the nascent biofuel market in SA and Africa in particular

a\* includes Outcome 5 on clean hydrogen for the hard-to-abate sectors
b\* Outcome 2 and 4 combined to form one outcome
Total outcomes for Priority 2 have been reduced from six to four with two planned for negotiated outcomes and 2 planned for the Presidency

















## **G20 Negotiated Outcomes**



#### Sustainable Industrialisation Hubs

#### A G20 Action Agenda

#### **Expected Outcome:**

Develop a roadmap and action plan for establishing sustainable industrial frontier hubs in Africa, focusing on long-term sustainable jobs and low-carbon industries.

## The G20 initiative for industries in transition will focus on identifying opportunities in three critical areas:

- ✓ Beneficiation of critical minerals
- ✓ Beneficiation of heavy industry inputs
- ✓ Production of hydrogen and its derivatives

#### **Expected Outcome:**

Deepening Brazil's G20 principles and engaging the Global Commission for People-Centred Transitions.

Global commission 2024: Analysis for the blueprint will be grouped under three themes, based on the G20 Principles:

- ✓ Jobs and Skills: focusing on social protection, workforce development, and inclusive economic growth
- ✓ Fair distribution, affordability and access: addressing energy poverty, affordable solutions and distributional effects.
- ✓ Social inclusion and participation: covering stakeholder engagement, gender equity, Indigenous rights and youth participation.



















## **Presidency G20 Documents**



#### Socio-economic safeguards

#### **Expected Outcome:**

- ✓ Develop a framework for inclusive energy transition policies and practices that mitigate job losses in fossil fuel dependent regions, while promoting clean energy job creation and meaningful participation of impacted regions.
- Develop a roadmap and action plan for local and social compacting (government, business, and labour), to implement domestic sourcing policy for renewable projects to mitigate job losses incurred as a result of the transition.

#### Sustainable fuels

#### **Expected Outcome:**

✓ Develop a roadmap for sustainable fuels building on the latest global analysis and related collaboration initiatives with a focus on the biofuel's continuation from Brazil and India and the nascent biofuel market in SA and Africa in particular.



















## Preliminary mapping of report, IO and Outcome



List of Report	Implementing Organisation	Outcome	1 <sup>st</sup> Draft	Final Draft
A roadmap on green industrial frontier hubs	UNIDO	1	16 May	28 May
Policy brief on green energy zones	UNIDO	1	16 May	28 May
Green hub development in Africa, including hydrogen, heavy-industry and critical minerals	IEA	1	16 May	28 May
nvestment opportunities and financial models for Renewable energy	IRENA	1	16 May	28 May O
Roadmap and action plan for establishing green industrial frontier hubs n Africa by 2027	SEforAll	1	16 May	28 May
Green hydrogen and ammonia technologies, providing data-driven nsights	CSIR with MI and RD20	1	16 May	28 May
Principles into Action: Leverage Resources, Trade, and Finance, including policy recommendations on the objectives and priorities of G20 presidency	IRENA	2	16 May	28 May





















## Preliminary mapping of report, IO and Outcome



List of Report	Implementing Organisation	Outcome	1st Draft	Final Draft
Advancing green hydrogen integration into emerging economies' energy future	CSIR with MI and RD20	1	16 May	28 May
Innovative ammonia production as a sustainable energy transition solution	CSIR with MI and RD20	1	16 May	28 May
Strengthening energy security through green hydrogen and ammonia	CSIR with MI and RD20	1	16 May	28 May
Development of a roadmap for off-takers in hard to abate sectors for green hydrogen investment	UNIDO	1	16 May	28 May
Industrial Deep Decarbonisation Initiative (IDDI)	SEforAll	1	16 May	28 May
Recommendation and guidelines for green hydrogen and derivatives	CSIR with MI and RD20	1	16 May	28 May
Energy Security, notably gas security, in the African context, low- emission hydrogen and related sustainable fuels	IEA	4	16 May	28 May



# Thank you



International Partnership for Hydrogen and Fuel Cells in the Economy