

<u>Programme</u> Energy Dialogue: Green Hydrogen Virtual, Zoom 20 October 2023, 11:00 – 13:00

Building on the series of energy dialogues that took place from June to November 2022, the Presidential Climate Commission (PCC) is convening a series of public discussions on South Africa's energy mix and electricity access as we continue to plan for mitigation pathways under a low carbon economy. The PCC has identified and prioritised the dialogues based on requests from the initial energy dialogue series and the integrated consultations that took place during the first quarter of this year. These dialogues will form the basis of the PCCs work on the broader energy agenda and planning as we seek to understand the sectorial mitigation pathways under a low carbon economy. As a result, the social partners of the PCC have raised the need for a discussion to address emerging energy transition solutions, such as green hydrogen. In addition to this, PCC stakeholders, in particular civil society have raised concern regarding the need for awareness and information sharing on this emerging technology and the associated trade-offs.

The aim of this energy dialogue is to understand the role of green hydrogen and just industrialisation in South Africa's energy transition. As South Africa moves towards a low carbon future, it faces a challenge of securing low carbon and affordable energy that will support the economy's transition to a low carbon future. For context, the green hydrogen economy provides synthetic green energy with several outcomes and can be considered as an environmentally friendly alternative to current fossil-based fuels (Hamukoshi et al, 2022). According to the Hydrogen Society Roadmap (HSRM) for South Africa, 2022 *"In its pursuit of a hydrogen society, South Africa will leverage its significant natural renewable resources, mineral endowment and capabilities to stimulate local demand for renewable hydrogen and build a viable green-hydrogen <i>export market"*. The HSRM outlines large scale catalytic projects and several on the export market for green Hydrogen and ammonia and the potential socioeconomic benefits. The recently published Green Hydrogen Commercialisation Strategy (GHCS) builds on this work and outlines opportunities and benefits that can be derived for South Africa

Thus, green hydrogen could have a major role to play in the future economy and provide decarbonisation opportunities for the transport and industrial sectors, whilst contributing towards low carbon economic development and improved socio-economic wellbeing by 2050. The exploration of green hydrogen in South Africa is in its nascent stages and the potential benefits to society are yet to be understood. This dialogue aims to unpack the following questions:

- What is green hydrogen.
- What are the socio-economic impacts of green hydrogen energy.
- What are the impacts of the green hydrogen value chain and the need for corresponding investments and policy reforms.



- What is the role of green hydrogen in the production of green steel and green iron.
- What skills training is required to support the development of green hydrogen.

No.	Item	Presenter
1	Welcome and introduction	Ms Simphiwe Ngwenya, Programme Manager Mitigation
2	Framing and contextualisation	 Dr Rebecca Maserumule, Chief Science and Technology Representative, DSI
3	Green Hydrogen Commercialisation Strategy	 Mr Mahandra Rooplall, Industry Development Planner, IDC
4	Inputs from Civil Society	Commissioner Bobby Peek, Director, groundWork
5	Reflections on green hydrogen development in SA	Ms Heather Son, Gamiro Investment group
6	Reflections on the Namibian Project	 Mr Patrick Stein-Kaempfe, Enertrag and Hyphen Hydrogen
7	Closure and way forward	Dr Crispian Olver, ED, PCC
	Ends	

Facilitator: Commissioner Joanne Yawitch, JET-IP PMU