

REMARKS BY DR BE NZIMANDE, SOUTH AFRICAN MINISTER OF HIGHER EDUCATION, SCIENCE AND INNOVATION, AT THE OPENING OF EUROPEAN HYDROGEN WEEK 2023

20 November 2023 (14:00 to 15:00, Brussels time)

President and Executive Vice-President of the European Commission

Colleagues

Ladies and Gentlemen

I am grateful for the opportunity to join you as we gather to deliberate on how we can harness hydrogen to help us address climate change, economic development and energy security, among other global challenges.

South Africa has committed to ambitious emission reduction targets, but taking into account our transitional energy mix. Our estimates indicate that green hydrogen has the potential to reduce 10 to 15% of our domestic emissions and contribute to our nation's long-term energy security.

Sasol, our big chemicals and energy company, is looking into replacing grey hydrogen with green hydrogen to produce sustainable aviation fuels and other products.

Our country embarked on its hydrogen journey in 2007 with the publication of the National Hydrogen and Fuel Cell Technologies Research, Development and Innovation Strategy, intended to help us to begin to develop a globally competitive, inclusive, low-carbon economy using our rich endowment of platinum group metals to stimulate the creation of jobs and new industries.

It is estimated that the hydrogen economy has the potential to add 3,6% to South Africa's GDP by 2050 and create over 370 000 jobs. It is therefore a priority in South Africa's just energy transition.

In 2021, our Cabinet approved the Hydrogen Society Roadmap for South Africa, a comprehensive policy document that articulates the country's aspirations to develop a globally competitive hydrogen economy.

The roadmap has clear targets for the short, medium and long term. It outlines the roles of government, industry, academia and civil society in achieving six high-level outcomes:

- The decarbonisation of transport sectors, such as heavy-duty road vehicles, shipping and aviation;
- The decarbonisation of energy-intensive industries like the iron and steel, chemical production, mining, refinery and cement industries;
- The creation of an export market for green hydrogen and ammonia;

- The greening and stabilisation of the power sector, with a focus on buildings;
- The creation of a manufacturing sector for hydrogen products and components; and,
- The scaling up of the generation, storage and distribution of all forms of hydrogen, enabling a responsible transition from grey to blue to green hydrogen.

A number of catalytic projects have been identified to drive the implementation of the roadmap, including our Platinum Valley Initiative – South Africa's version of a hydrogen valley.

The initiative focuses on hydrogen production, establishing local manufacturing capabilities, developing human capital and supporting a just energy transition through the decarbonisation of various industrial and transport sectors.

The Platinum Valley Initiative is also expected to catalyse large infrastructure development and facilitate large-scale hydrogen trade linked to our ports.

To date, nine catalytic projects, including the Platinum Valley Initiative, have been registered as Strategic Integrated Projects by our Presidential Infrastructure Coordinating Commission. They will be located across the country and will support the development of new net zero industrial sectors based on green hydrogen and renewable energy.

Working towards energy security, Sasol and the Northern Cape Provincial Government have made significant progress with a master plan for a green hydrogen special economic zone.

By 2030, they plan to deploy 10 gigawatts of electrolyser capacity in the Northern Cape and produce about 500 kilotons of hydrogen annually. They also aim to support 40 gigawatts of electrolyser capacity by 2050.

This would require approximately 80 gigawatts of renewable energy – almost double South Africa's currently installed electricity generation capacity.

At a global level, South Africa, through its Department of Science and Innovation, took over as Chair of the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) on 1 December 2022, at the 38th IPHE steering committee meeting.

During its two-year tenure as Chair, South Africa intends to ensure that the great work done by the IPHE continues, and to promote the development of the hydrogen economy across Africa, partnering with other organisations to promote gender equality and social inclusion in the hydrogen economy.

Close cooperation with international players and investors – public and private – will be key to unlocking Africa's green hydrogen potential. This will enable mass-scale domestic and international demand for green hydrogen, and increase cooperation on green hydrogen production, storage and distribution infrastructure.

South Africa has deep capital markets and world-class conditions for generating renewable energy – vast tracts of land and some of the world's best wind and solar resources – which are key drivers in the production of green hydrogen.

Funding green hydrogen projects will require innovative financing structures sourced from multiple stakeholders within the context of a just energy transition.

The development of a green hydrogen economy part of South Africa's Just Energy Transition Investment Plan, which was endorsed last year by the International Partnership Group.

Pledges of \$8,5 billion in concessional funding were made to support South Africa's phased transition from fossil fuel. South Africa would also welcome grant funding from developed countries.

The South African delegation that has come with me includes representatives of industry, research institutions, some provincial governments active in this space and some small and medium enterprises. Please engage with them during this week. I believe that together we can propel hydrogen to the forefront of the global energy transition.

Thank you.