



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



GLOBAL PROGRAMME
GREEN HYDROGEN IN INDUSTRY
Innovative | Decarbonized | Inclusive



DEVELOPMENT DIALOGUE

Second Session

UNIDO's Global Partnership for Hydrogen in Industry



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



UNIDO's Global Programme for Green Hydrogen in Industry

- Launched in July 2021
- Aims to foster the application of green hydrogen in industry **in developing countries and transition economies.**
- Supported by **Austria, Germany, Italy and the International Hydrogen Energy Centre in China**



GLOBAL PROGRAMME
GREEN HYDROGEN **IN** INDUSTRY

Innovative | Decarbonized | Inclusive





UNIDO's Global Programme for Green Hydrogen in Industry

New pathways for industrial and economic development in line with climate goals

Overcome challenges



- Policies
- Costs
- Investment
- Local skills

Develop local industries

through domestic GH₂ production & application



- Enhance national energy **security**
- Stimulate **innovation** and **grow markets** for hydrogen technologies and exports
- Drive the **increase of renewable energy**
- Create **new jobs**



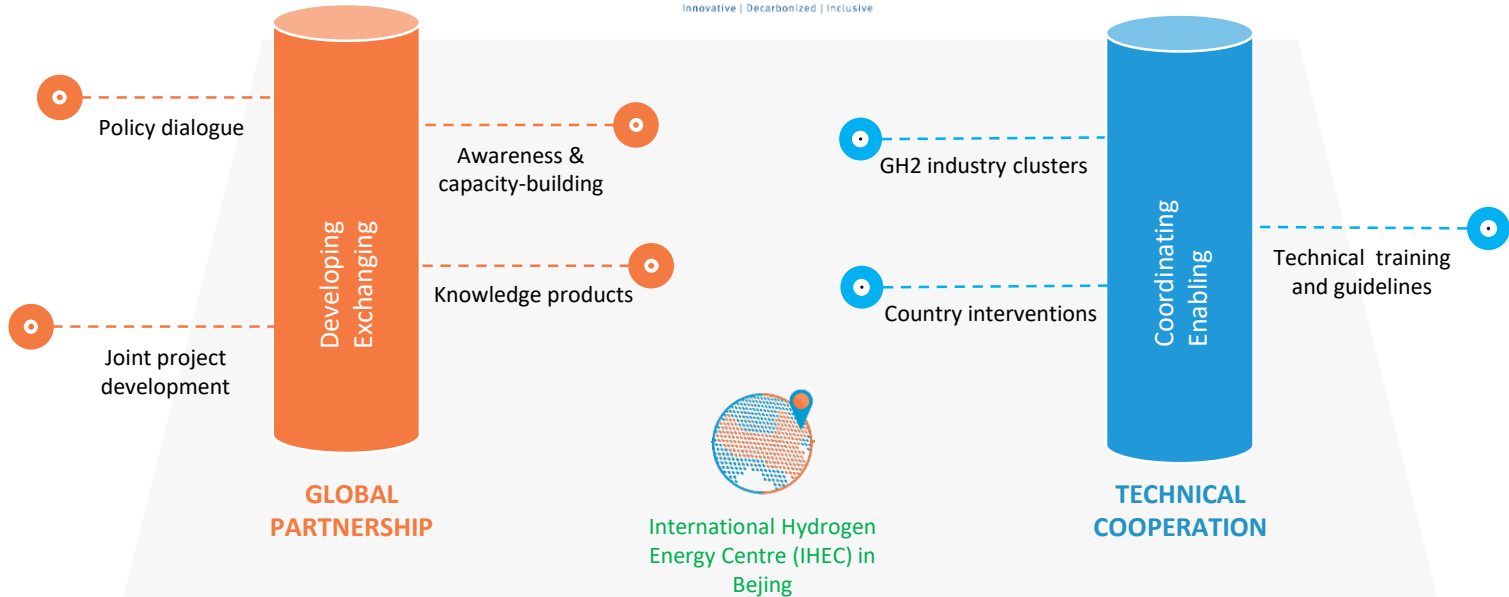


Programme Structure



GLOBAL PROGRAMME GREEN HYDROGEN IN INDUSTRY

Innovative | Decarbonized | Inclusive





Global Partnership

WHAT IS THE GLOBAL PARTNERSHIP?

Platform for Member States, industries, private sector, investors, research and academic institutions.

It provides opportunities for policy dialogue, awareness-raising, knowledge sharing and supports TC cooperation.





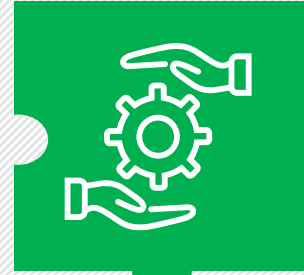
Global Partnership

Key activities

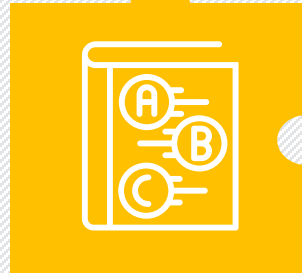
1. Policy dialogue



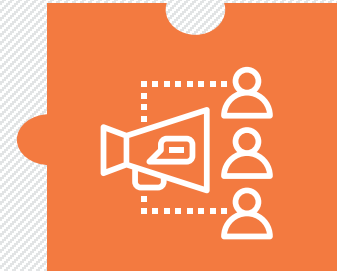
2. Joint project development



3. Creation of knowledge products



4. Awareness raising & capacity building

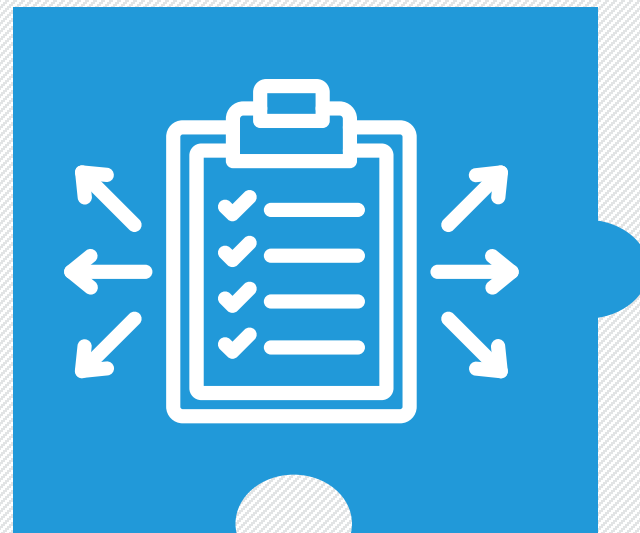




1. Policy Dialogue

The Policy dialogue aims to support the scale-up of production and application of GH2 in industry by:

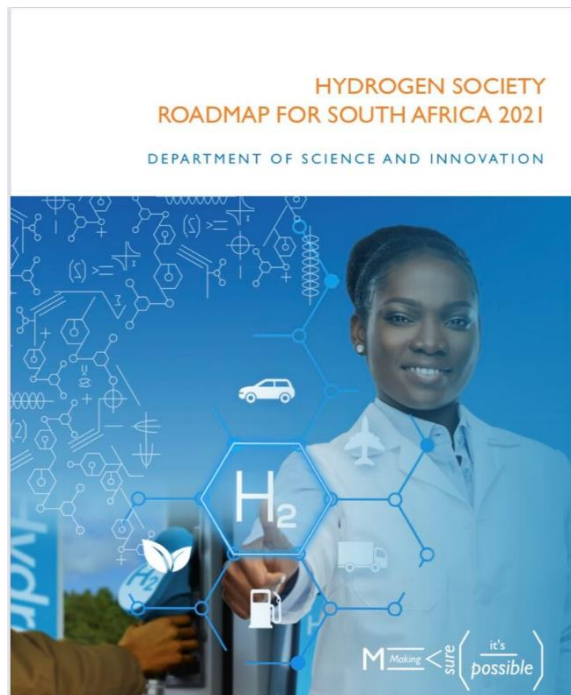
- **Aligning** climate and industrial policy development targets
- **Promoting collaboration**, e.g. on regional GH2 roadmaps
- **Exchange of best policy practices** for creating conducive frameworks for GH2 in industry





1. Policy Dialogue

Facilitating coordination - South Africa



”

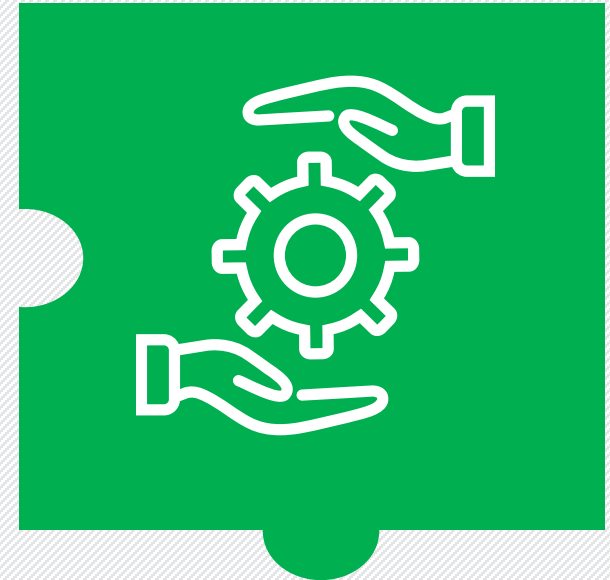
We have established a partnership with UNIDO. It will assist with creating an agile, effective and relevant **National Hydrogen Energy Centre** that will institutionalise the implementation of the Hydrogen Society Roadmap.

Dr. Blade Nzimande
Minister of Higher Education, Science and
Innovation



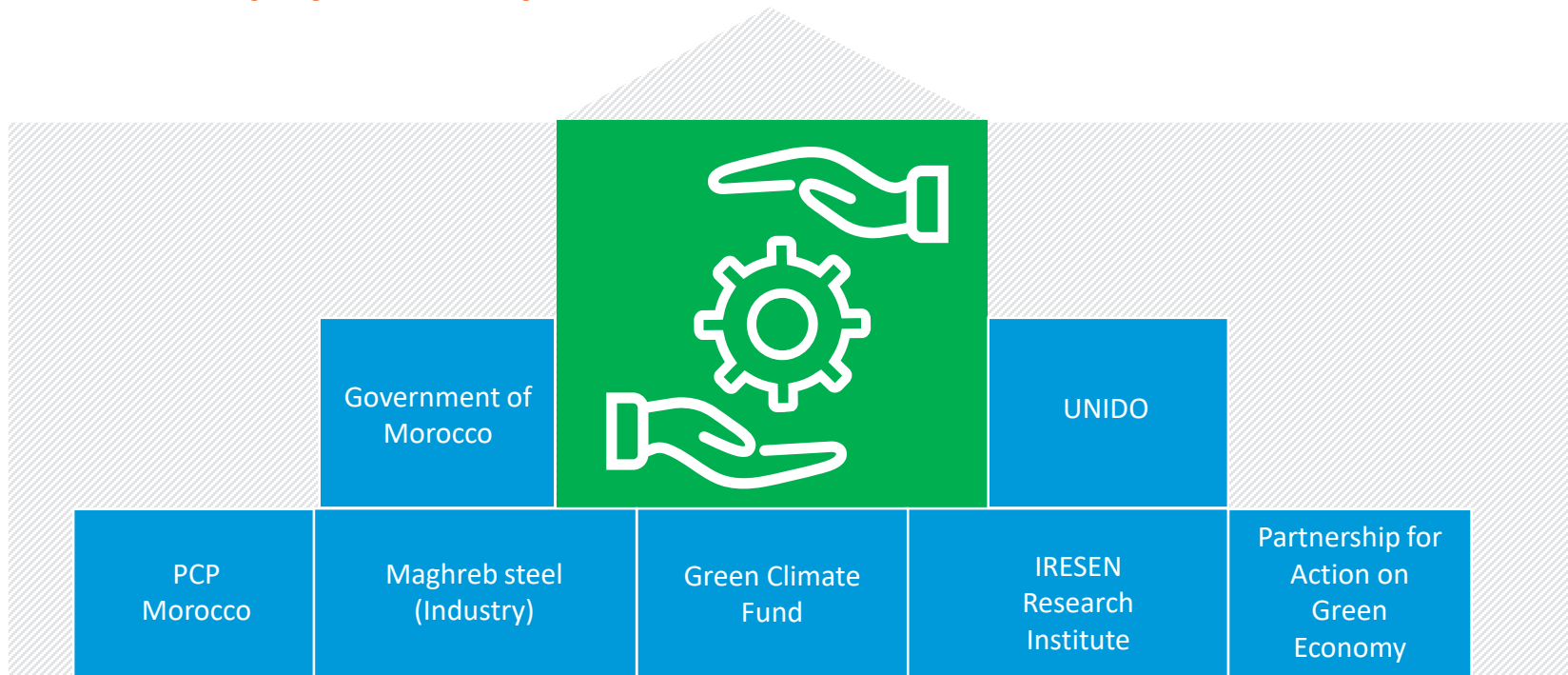
2. Joint project development

- **Assisting countries in partnering for GH2 projects**, industrial clusters and value chains
- **Mobilizing funds and investments** for activities at the country level
- **Pooling expertise**, knowledge and resources by connecting stakeholders



2. Joint project development

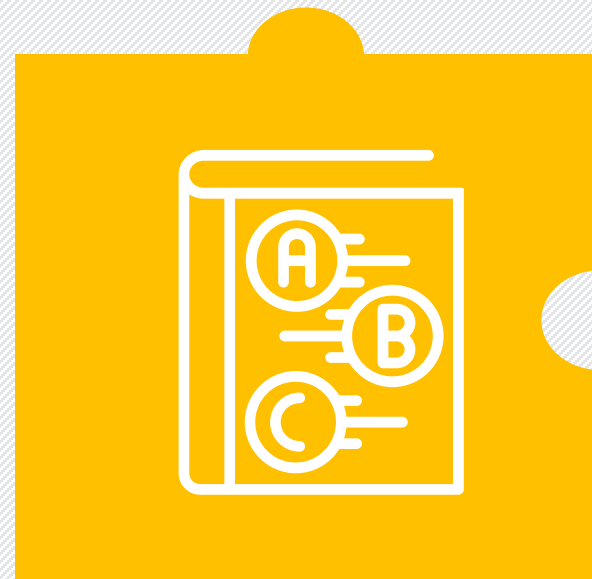
Partners for project development in Morocco





3. Creation of knowledge products

- **Developing** knowledge products in form of **guidelines, training manuals and best practices**, etc.
- **Addressing topics:** “hard-to-abate sectors, sector coupling, technical and safety standards, business models and enabling policies”.

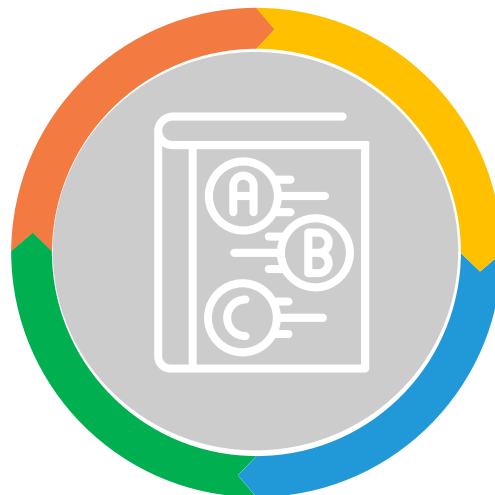




3. Creation of knowledge products

Development of Technical Guidelines for UNIDO GH2 Cluster Model

UNIDO collaborates
with the following institutions





3. Creation of knowledge products

A Global Affair: International standards to facilitate global trade

CHALLENGE

Lack of international standards as a major institutional barrier to deploying H2 technologies

RESPONSE

Facilitate development of standards to enable commercialization of H2 and establish markets





4. Awareness raising & capacity building

- Global awareness and capacity building for **different stakeholders** on social, economic and climate impacts of GH2 in industry
- **International workshops, events** and skills development and trainings



Member States Dialogue – First Session 1st April 2022

170

Participants of Member States

Donors remarks:



Countries remarks:



Presented cooperation initiatives:

- **Facilitating coordination among policy makers and private sector** to implement the South African Hydrogen Society Roadmap – H2 Centre establishment
- Preparing a **GH2 industrial cluster** for iron and steel industry with Morocco
- Engaging with ENI in developing **joint projects** and **knowledge products**
- Coordinating with the International Hydrogen Energy Centre (Beijing) on **H2 standards**
- Cooperating with World Energy Council Austria for **awareness raising events and youth engagement**



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



WORLD
ENERGY
COUNCIL



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



Global Partnership:
together we can
do more!

Thank you!

PETRA SCHWAGER

*Programme Coordinator, Chief
Energy Technologies and Industrial
Applications Division (ETI)
UNIDO*

P.Schwager@unido.org



<https://www.unido.org/green-hydrogen>