Green Hydrogen and Industrialization Nexus

Driving net zero industrial development and wealth generation in developing countries
Green Hydrogen value chain

Renewable Energy Generation → Transmission → Electrolyzer → Desalination → GH₂ Storage Transportation

Ammonia, Methanol → Fertilizers

Steel → Glass

Cement

E-fuels → GH₂ station

Fuel Cells

Mobility
Hydrogen: Opportunities for developing countries

Renewable hydrogen or green hydrogen (produced from renewable energy) creates unique opportunities for a net zero industrial development in the Global South.


Opportunities:

- Jobs creation
- Skills upgrading
- Investment mobilisation
- Wealth generation
- Energy security
- Resilience
- Diversified economy
Challenges hindering the potential of Green Hydrogen

1. **Conducive policies and regulations** for promoting a hydrogen ecosystem to underpin investor and market confidence and accelerate hydrogen projects;

2. **Appropriate standards** to facilitate global trade and drive the offtake of green hydrogen;

3. **Financial instruments** to incentivize investments in hydrogen projects;

4. **Skills and know-how** to boost resilient and sustainable industrialization based on hydrogen;

5. **Accessible and affordable innovation** of hydrogen technology, systems, equipment and infrastructure;

6. **Co-ordination** among key stakeholders at the national, regional and global level to effectively resolve the bottlenecks identified.
UNIDO launched its Global Programme to help developing countries overcome identified barriers and to support a just hydrogen transition that puts social and environmental aspects in focus.

WHAT ARE OUR KEY AREAS OF INTERVENTION?

- Policies
- Standards
- Financial instruments
- Skills
- Innovation
- Coordination
THANK YOU FOR YOUR ATTENTION!

@UNIDO_hydrogen