



2022-2023
Inter-sessional Panel

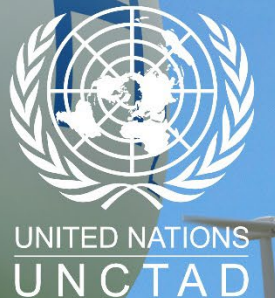
25 October 2022

Room XVIII, Palais des Nations, Geneva

Technology and
innovation for cleaner
and more productive and
competitive production

Hydrogen

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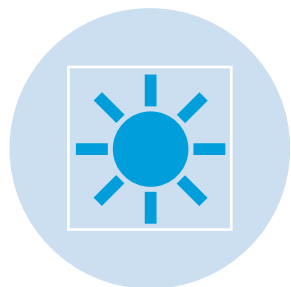
Technology and innovation for more sustainable development pathways



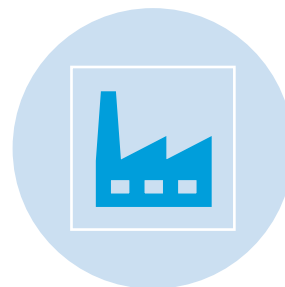
Technological waves



Window of opportunity for catching up



Renewable energy technologies



Frontier technologies for sustainable production and consumption

Trends affecting green technology and innovation

North-South divide in STI is widening

Uneven investment in R&D (% GDP)

Global performers – 5%

EU – 3%

China - 2.4%

Developing countries – 0.5-1%

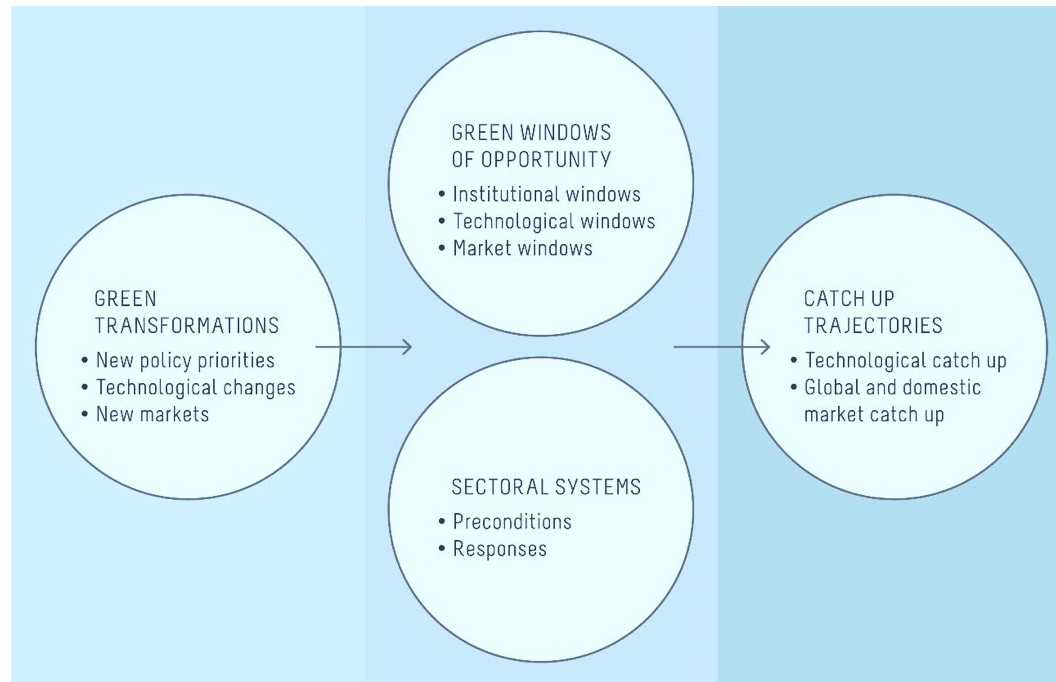
Insufficient cooperation at regional level

Low investment in regional R&D

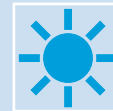
EU Horizon - 13 billion EUR (2017-2021)

Developing regions - low overall levels & lack of incentives

Opportunities for catching up through green technologies and innovation



Source: Lema et al., (2020).



Development, adoption and production of renewable energy technologies



Greening global value chains



Diversifying toward more sustainable economic sectors

Technology transfer for the sustainability and resilience transformation

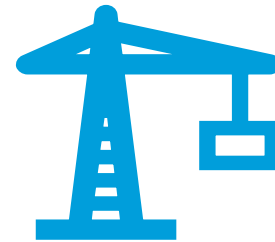


Official Development Assistance

Commitment of at least 40% of ODA to “green” ODA

Alignment of development cooperation with Paris Agreement

Low level of ODA to STI (~US\$ 2.4 billion in 2019)



Trade and Foreign Direct Investment

Technologies & absorptive capacities

Engineering, Procurement and Construction (EPC) companies

United Nations' actions for sustainable technology and innovation

Technical and financial support

Sharing knowledge and information

Policies and strategies

Norms and standards



National action for opening and augmenting green windows of opportunities

01

Establish required policies

02

Strengthen technical and innovation capacity

03

Identify, prioritize and foster new green sector and technology

04

Invest in green innovation

05

Develop digital infrastructure

International cooperation for green innovation collaboration

01

Sustainability-oriented innovation systems

02

Partnership-oriented approach to green technology development

03

Multilateral green innovation research & open innovation

04

Multilateral approach to technological assessment

05

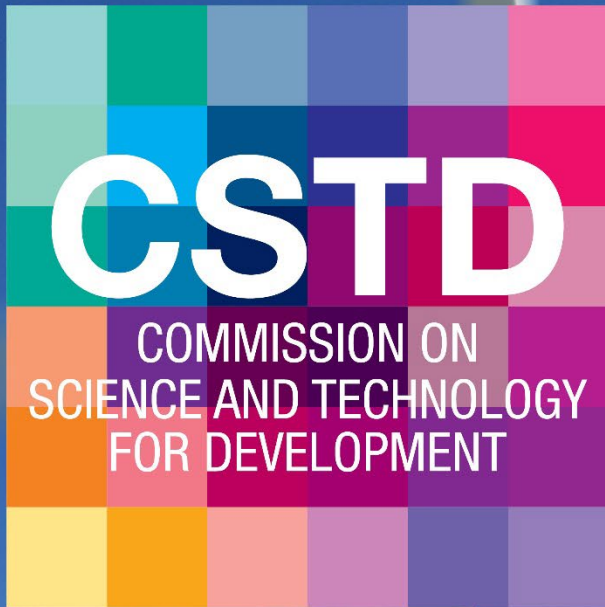
South-south STI cooperation

Conclusions

- Green innovation for people and the planet
- Critical role of policies
- Need to be ready to respond
- Sector-specific strategies
- International community support

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https://unctad.org/system/files/information-document/CSTD2022-2023_Issues01_cleanerproduction_en.pdf

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