
Reporting on Technology Transfer under National Communications from non-Annex I Parties

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UN Framework Convention on Climate Change

Commitment of all Parties to the Convention

“Develop, periodically update, publish and make available to the Conference of the Parties national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies”

Article 4.1(a)

National Communications beyond inventories

- Steps taken or envisaged in the country
 - Measures related to climate change mitigation
 - Measures to facilitate adequate adaptation to climate change
- Other information considered relevant to the achievement of the objective of the Convention:
 - Transfer of technologies
 - Research and systematic observation
 - Education, training and public awareness
 - National and regional capacity building
 - Information and networking

Decision 17/CP.8: Guidelines for the Preparation of NC from Non Annex I Parties

A. Transfer of technologies

42. Pursuant to decision 4/CP.7, its annex, and the implementation of Article 4, paragraph 5, of the Convention, non-Annex I Parties **are encouraged, in the light of their social and economic conditions, to provide** information on activities relating to the **transfer of, and access to, environmentally sound technologies and know-how, the development and enhancement of endogenous capacities, technologies and know-how,** and measures relating to enhancing the enabling environment for development and transfer of technologies.

CGE Template on Cross-Cutting Themes: Activities relating to TT

Key considerations:

- Brief description of **existing or planned national policies, legal and institutional framework(s)** to facilitate the implementation of decision 4/CP.7 in areas such as: technology needs and needs assessments; technology information; enabling environments; capacity-building; and mechanisms for technology transfer.
- Brief description of identified **priority activities related to capacity-building, enabling environments, investment, technology assessments** and any other relevant information to advance the implementation of Article 4, paragraph 5, of the Convention **at the local, national and regional levels**.
- Brief summary of the process, key outcomes and funding of the **technology needs assessment conducted**.
- Brief description of **pilot programmes**, if any, on technology transfer relating to climate change, including an estimation of required external funding, and modalities to obtain such funds. What are the lessons learned in implementing these pilot programmes?

CGE Template on Cross-Cutting Themes: Activities relating to TT (Part II)

Key considerations:

- Brief description of **existing and planned climate-related technology transfer programmes/projects** supported by bilateral and multilateral agencies, and international organizations.
- Brief description of the **role of the various stakeholders**, particularly the private sector and research and development institutions, in the process of technology transfer.
- Brief description of the **success/failure of technology transfer**, including possible hindrances that limit such transfer, citing examples and lessons learned.
- Brief description of the **technology and technology enabling activities** that have been **identified through** the national adaptation programmes of action - **NAPA process** as necessary to facilitate immediate adaptation.
- Briefly describe **linkages** between technology transfer activities, programmes and projects **with national development planning processes**.

Second National Communications of Brazil (Example)

- Part 4. Other information considered relevant to the achievement of the objective of the Convention:
 - Chap. 1 Transfer of technologies
- Energy-Related Technological Needs: Table on opportunities for the transfer of technologies for energy generation from/to Brazil and developing countries (South-South) and from/to Brazil and developed countries (South-North/North/South).
- This table was replicated in capacity building trainings in Angola, Cape Verde, and Sao Tome and Principe.

	Transfer of Technology from Brazil		Transfer of Technology to Brazil	
	South-South	North-South	South-South	North-South
Electricity Generation Technologies				
Natural gas				
<i>Large turbines</i>	No	No	No	Yes
<i>Microturbines</i>	No	No	No	Yes
Coal				
<i>Powdered (critical, super critical, ultra super critical)</i>	No	No	Yes	Yes
<i>Gasification (IGCC)</i>	No	No	No	Yes
<i>Circulating atmospheric fluidized-bed</i>	No	No	Yes	Yes
Nuclear Fission (generation III e IV)				
<i>Fuel production</i>	Yes	Sim	No	Yes
<i>Reactors</i>	No	No	No	Yes

	Transfer of Technology from Brazil		Transfer of Technology to Brazil	
	South-South	North-South	South-South	North-South
Solar energy				
<i>Photovoltaics (Si)</i>	No	No	No	Yes
<i>High temperature thermal solar energy</i>	No	No	No	Yes
Wind power	Yes	No	No	Yes
Biomass gasification	Yes	No	No	Yes
Hydroelectricity				
<i>Small Hydropower Plants</i>	Yes	No	No	Yes
<i>Medium and large</i>	Yes	No	No	Yes
Hydrogen				
<i>Fuel cells</i>	Yes	Yes	Yes	Yes
<i>Production and storage</i>	Yes	Yes	Yes	Yes

	Transfer of Technology from Brazil		Transfer of Technology to Brazil	
	South-South	North-South	South-South	North-South
Fuel and Heat				
Natural Gas				
<i>LNG (liquefaction and regasification)</i>	No	No	No	Yes
<i>GTL (Gas to liquid)</i>	No	No	Yes	Yes
Coal				
<i>CTL (Coal to liquid)</i>	No	No	Yes	Yes
Etanol				
<i>First generation</i>	Yes	Yes	No	No
<i>Second genetation</i>	Yes	Yes	No	Yes
Solar energy	Yes	No	Yes	Yes
Charcoal	Yes	No	No	Yes
Biodiesel	Yes	Yes	Yes	Yes

	Transfer of Technology from Brazil		Transfer of Technology to Brazil	
	South-South	North-South	South-South	North-South
Interface Technologies				
CCS	No	No	No	Yes
Smart Grid	No	No	No	Yes
Storage (batteries)	No	No	No	Yes
Social Technologies				
Stoves, clean fuels - LPG/etanol cooking	Yes	No	Yes	Yes
Energy efficiency for low-income consumers	Yes	No	Yes	Yes
Thermal solar energy for low-income consumers	Yes	No	Yes	Yes

Key Lessons Learnt and New Ideas

- Technology-related needs should be nationally determined, based on national circumstances and priorities;
- Few Non-Annex I countries have reported on technology transfer under their national communications in an structured manner;
- Lack of strategic view regarding this section of the NC;
- Countries have not explored National Communications as a “showcase” for South-South cooperation on transfer of technologies – but there are windows of opportunity;
- New reporting requirements under the multilateral climate change regime

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Thank you!

Obrigado!

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