

Draft paper on  
**Mapping barriers and enabling environments in Technology Needs Assessments,  
Nationally Determined Contributions, and Technical Assistance of the Climate  
Technology Centre and Network**

**Technology Executive Committee  
17th Meeting  
Bonn, Germany, 25-28 September 2018**

## Background

The Technology Executive Committee (TEC) agreed to include in its rolling work plan 2016-2018, work stream 1, **a task to map technology needs assessments (TNAs), Nationally Determined Contributions (NDCs), and technical assistance (TA) of the Climate Technology Centre and Network (CTCN) regarding enabling environments and barriers.**

At the TEC-16 meeting, the TEC requested its task force on TNAs to take on the work on mapping of enabling environment and barriers by **mapping barriers and enablers in NDCs, TNAs and CTCN TA requests, presenting a concept note on a possible event on this mapping to TEC-17** for its consideration, with a view to preparing and delivering recommendations and TEC brief on this issue to COP 25.

### The Technology Executive Committee is invited to

- a) consider the draft paper on mapping,
- b) agree on the concept note on mapping event, and
- c) agree on next steps from this work.

## Objectives

The objectives of the paper are to:

- a) Map barriers and enablers to climate technology development and transfer in TNAs, NDCs and CTCN technical assistance;
- b) Based on the mapping, identify policies and strategies to improve enabling environments and address barriers;
- c) Assist the TEC in delivering relevant key messages and recommendations to Parties through the COP24 and the COP25.

## Approach

- Barriers and enablers identified based on existing TNA methodology previously utilized by the TEC.
- NDCs, TNAs, CTCN TAs report on barriers and enablers through different approaches and with varying details.

### NDCs

- identify barriers and enablers for 'technology transfer' at a general, sector or technology level
- no uniform approach

### TNAs

- identify barriers and enablers at technology level
- standard approach

### CTCN TAs

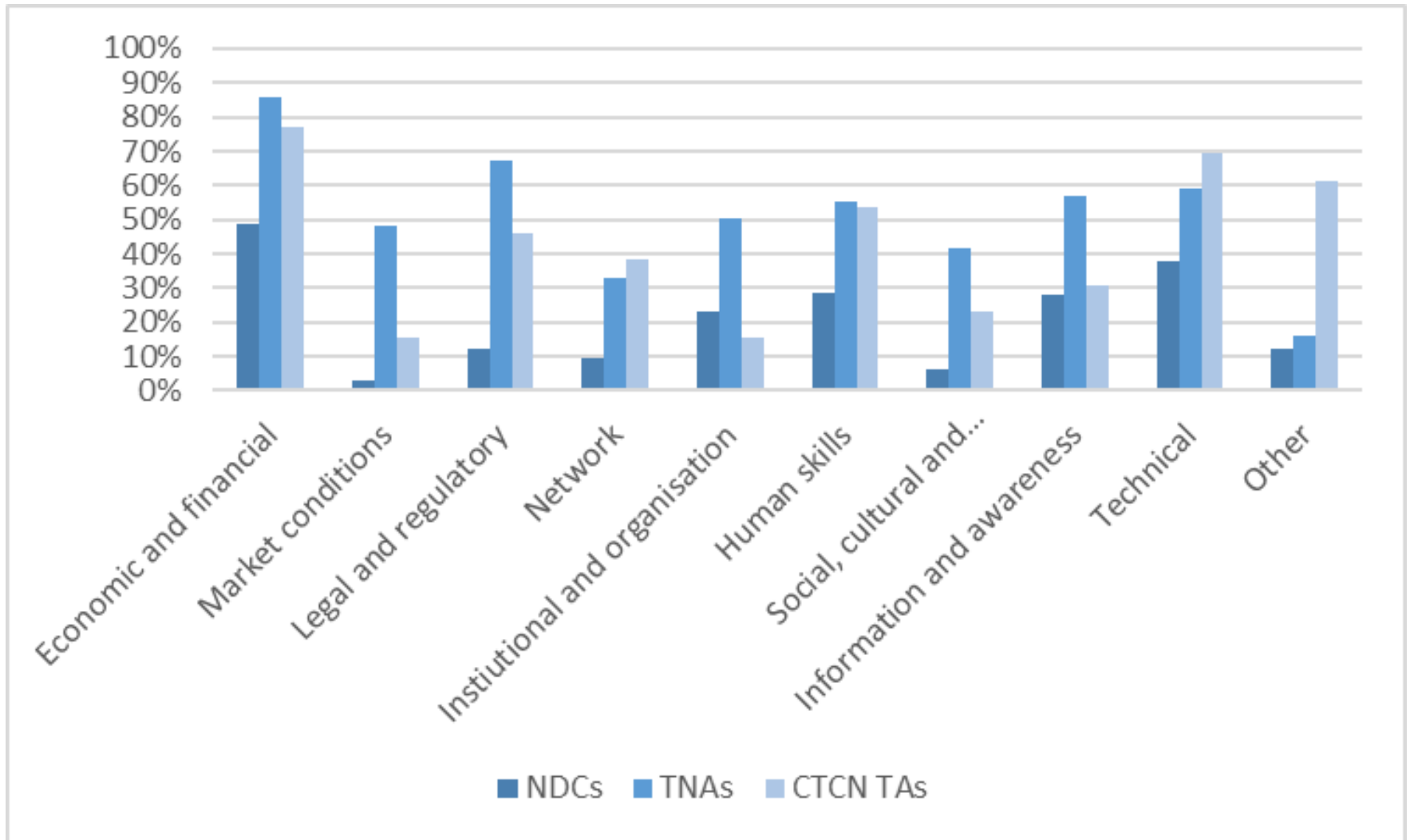
- identify barriers and enablers at sector level or technology level
- no uniform approach

## Data

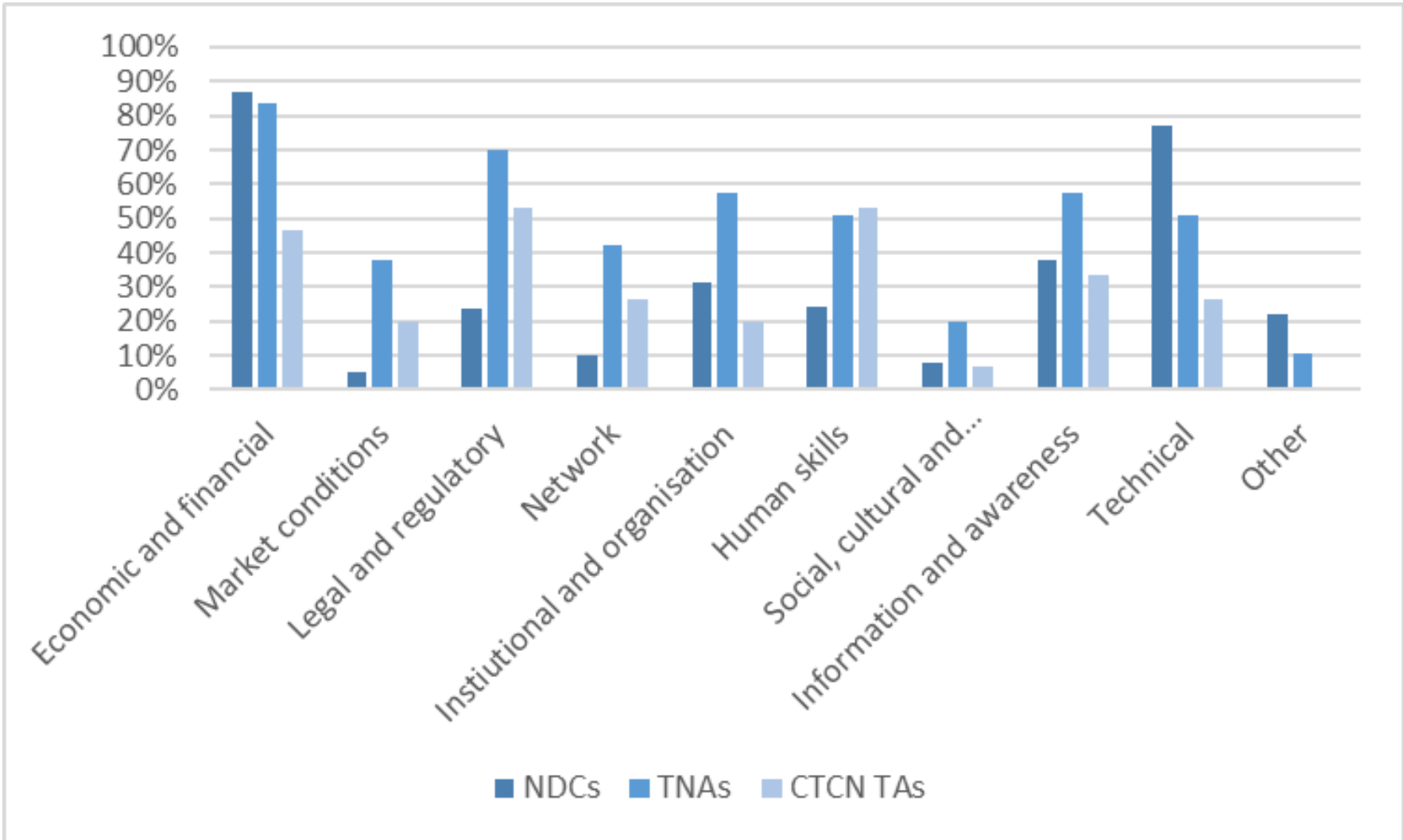
- 133 NDCs submitted by developing country Parties to the UNFCCC, available at the UNFCCC NDC registry
  - a) 57 out of 133 NDCs list barriers
  - b) 118 out of 133 NDCs list enablers
  
- 51 TNAs, including 590 technologies with identified barriers and enablers, available at the TNA project website
  - a) all 51 TNAs (590 technologies) list barriers and enablers
  
- 50 CTCN TAs, information available at the CTCN website and supplemented with information from CTCN Secretariat staff
  - a) 13 out of 50 TAs identify barriers and enablers
  - b) some TAs list both barriers and enablers, some list either barriers or enablers

	<b>NDCs</b>	<b>TNAs</b>	<b>CTCN TAs</b>	<b>Total</b>
<b>Barriers</b>	278	3020	56	<b>3354</b>
<b>Enablers</b>	869	2831	43	<b>3743</b>

# Barriers across NDCs, TNAs and CTCN TAs



# Enablers across NDCs, TNAs and CTCN TAs



## Key findings, barriers

In summary, the data on barriers showed that:

- a) The most commonly listed barriers are in the categories of economic and financial, legal and regulatory, human skills, information and awareness, and technical barriers;
- b) Economic and financial barriers feature more predominantly for adaptation technologies than for mitigation technologies;
- c) A larger share of LDCs lists barriers for technology development and transfer than is the case for developing country Parties and SIDS. This is even more pronounced for adaptation technologies than for mitigation technologies;
- d) Inadequate human skills are more commonly listed as a barrier for LDCs than for developing country Parties and SIDS.



## Key findings, enablers

In summary, the data on enablers showed that:

- a) In NDCs, the majority of enablers for overcoming the barriers for technology development and transfer are identified in the economic and financial category, as well as in the technical category, which includes capacity building;
- b) In TNAs and CTCN TAs, the distribution of enablers is more widespread than in NDCs and includes the categories of economic and financial, legal and regulatory, human skills, information and awareness, and technical enablers;
- c) A larger share of LDCs lists enablers for technology development and transfer than is the case for developing country Parties and SIDS.

## Policies, strategies and programmes to improve enabling environments and address barriers for technology transfer

### Role of Governments

There is a clearly identified need for strengthening of legal and regulatory frameworks for international technology transfer and foreign financial flows, including introducing market based instruments for market development.

### Examples, as reported by countries

- Reform tariff regulations and remove cross subsidies;
- Establish incentives for the rational use of resources and good production practices;
- Strengthen existing institutions to promote and enhance implementation of climate technologies;
- Promote research and development programmes.

Policies, strategies and programmes  
to improve enabling environments and address barriers for technology  
transfer

### **Role of the Operating Entities of the Financial Mechanism**

Strategic interventions to strengthen collaboration between operating entities of Financial Mechanism, private sector entities and local and national governments needs to be further strengthened.

Support to programmes for strengthening of institutional and scientific capacities of developing country Parties, in particular for LDCs, is critical for creation of the long-term enabling frameworks required for technology transfer

#### **Examples, as reported by countries**

- Adapt finance conditions to local context (lower interest rates, less restrictive warranty, etc.);
- Improve access to international funds for technology pilot implementation;
- Simplify the procedures for accessing investments in the technology;
- Develop specific subsidy mechanisms to promote technology applications.

## Policies, strategies and programmes to improve enabling environments and address barriers for technology transfer

### Role of the Non-state actors

Stakeholders including the private sector, NGOs, academia and other community actors are equally important in providing financial resources, increasing technical capacities and disseminating information

### Examples, as reported by countries

- Participation of local people in the planning and design of projects and programmes;
- Establish research collaboration between organizations, especially at the regional and international level
- Research on background information relating to local cultural, and socio-economic dimensions;
- Establish what the local needs of communities are with regards to the technology;
- Engage community development specialists.

## Concept note on mapping

### **Suggested event title: Strengthening enabling environments for technology development and transfer for implementation of the Paris Agreement**

- focus on discussing experiences and identifying future activities to accelerate enablers for technology development and transfer.

### **Opening and rationale**

#### **Session I: Support**

Presentations by the operating entities of the Financial Mechanism, donors, the Technology Bank for LDCs, other development banks.

#### **Session II: Experience sharing**

Presentations by Country representatives; Private sector representatives; Civil society, NGOs.

#### **Session III: Break out groups, incl. reporting back**

Participants gathered in small groups will share experiences, discuss and consider how to accelerate enablers for climate technology development and transfer.

### **Closing**

## Suggested key messages

From the findings presented in this paper, following key messages are suggested:

1. Support to capacity building programmes for strengthening institutional and scientific capacities of developing country Parties, in particular for LDCs, are critical for creation of the long-term enabling frameworks required for technology transfer.
2. Strategic interventions to strengthen collaboration between operating entities of the Financial Mechanism, private sector entities and local and national governments should to be further strengthened.
3. The TEC, the CTCN, the GEF, the GCF and other stakeholders to collaborate in identifying effective policies, instruments and collaboration forms that support Parties, particularly developing country Parties, and other partners in their efforts to create enabling frameworks for technology development and transfer.
4. The operating entities of the Financial Mechanism to consider how to more effectively support enabling activities as identified by developing country parties in their NDCs, TNAs and CTCN TAs.

## Issues for further consideration

- The TEC may develop a comprehensive understanding of common barriers to and enabling environments for climate technology development and transfer as identified by developing countries. This may help the TEC to identify key work areas for its future workplan.
- The TEC may further follow up on its work on barriers and enablers as needed in order to provide inputs for implementation of climate technologies to support the Paris Agreement.

Thank you

