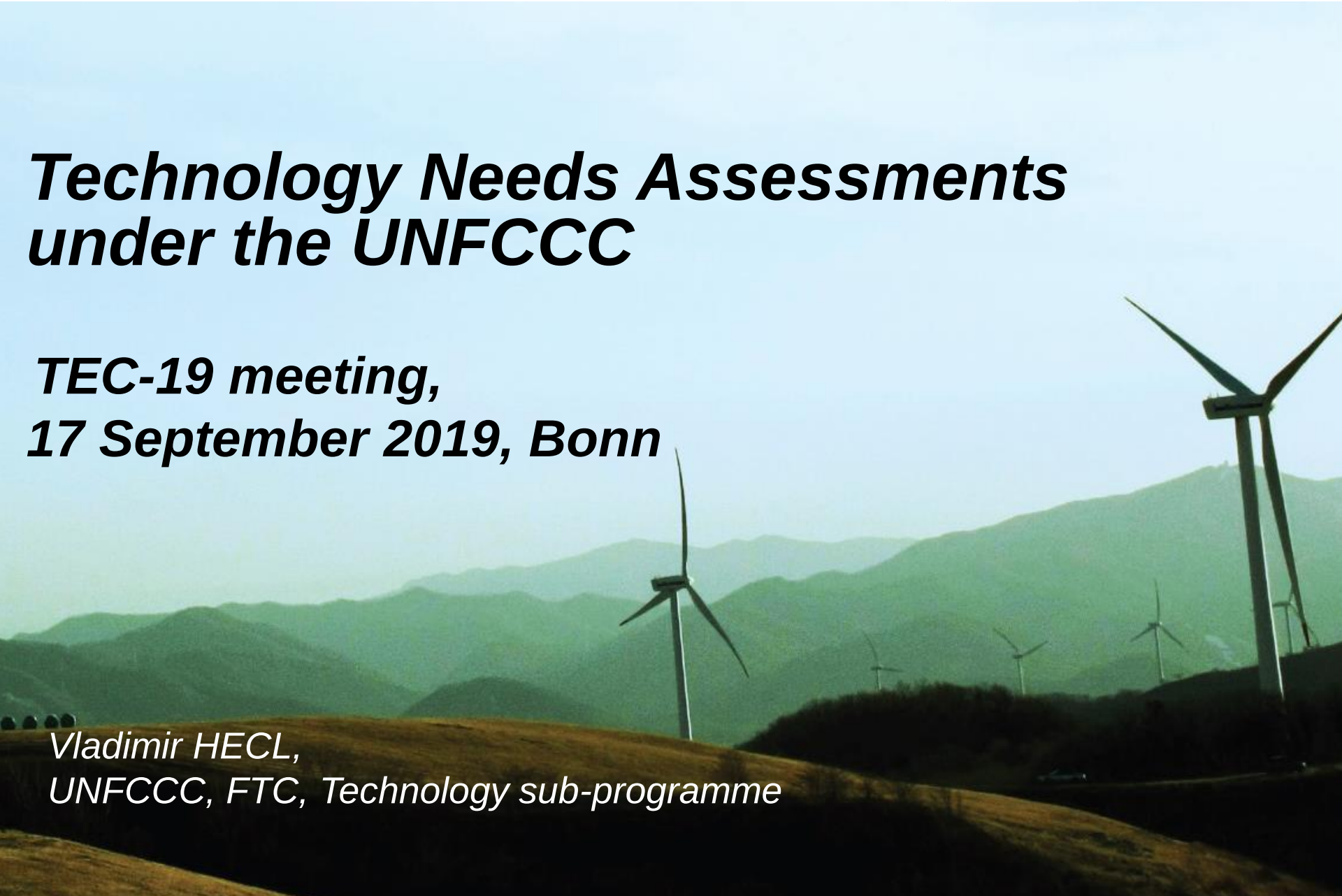
United Nations Framework Convention on Climate Change



Technology Needs Assessments under the UNFCCC

TEC-19 meeting,
17 September 2019, Bonn

Vladimir HECL,
UNFCCC, FTC, Technology sub-programme

TNAs – what they are?

- TNAs are set of **country-driven activities** that identify mitigation and adaptation technology priorities of developing countries

- TNAs track **evolving needs for new equipment, techniques, practical knowledge and skills** to mitigate greenhouse gases and adapt to adverse impacts of climate change

- TNAs aim to assist developing countries in **identifying priority technology needs** which can form basis of environmentally sound technology projects and programmes (ESTs).

Looking back

- TNA was introduced under the Convention at **COP-7 (2001)**, which encouraged "…developing countries …to undertake assessments of country-specific technology needs, subject to the provision of resources, as appropriate to country-specific circumstances."

- **In 1999**, the GEF Council agreed that "some of the immediate capacity building priorities of non-Annex I Countries, identified in the COP decision 2/CP.4, may initially be met through additional funding under expedited procedures for enabling activities. Based on the above COP Decision, the **GEF identified a list of eligible activities for the top-up projects**, including identification and submission of technology needs, and capacity building to assess the technology needs. Consequently, **the GEF funded the development of the first 69 TNAs reports since 1999 until 2008**.

- **In 2008**, TNA development was included in the **Poznan Strategic Programme on Technology Transfer (PSP)** as a key component for "scaling up the level of investment in technology transfer in order to help developing countries address their needs for ESTs." **Three Phases of the TNA process funded under the PSP in 2013-2019).**

Looking back

- The COP-21 initiated the elaboration of the Technology Framework (PA, Article 10, para 4), the framework should facilitate:

  - Undertaking and updating of TNAs, as well as the enhanced implementation of their results, **particularly TAPs and project ideas, through the preparation of bankable projects**;
  - Provision of enhanced **financial and technical support for the implementation of the results of the TNAs**;
  - **Assessment of technologies** that are ready for transfer;
  - **Enhancement of enabling environments** for and the addressing of barriers to the development and transfer of socially and ESTs.

The Technology Transfer Framework (2001 – 2015)

- To develop meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention by increasing and improving the transfer of and access to environmentally sound technologies (ESTs) and know-how.

- The framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention was established in COP 7 by Decision 4/CP.7.

- Five key themes and areas were identified:
  - **Technology needs and needs assessments**
  - Technology information
  - Enabling environments
  - Capacity-building
  - Mechanisms for technology transfer

First generation

- **1999-2008**
- GEF provided funding
- UNDP, UNEP, and regional organizations provided technical support

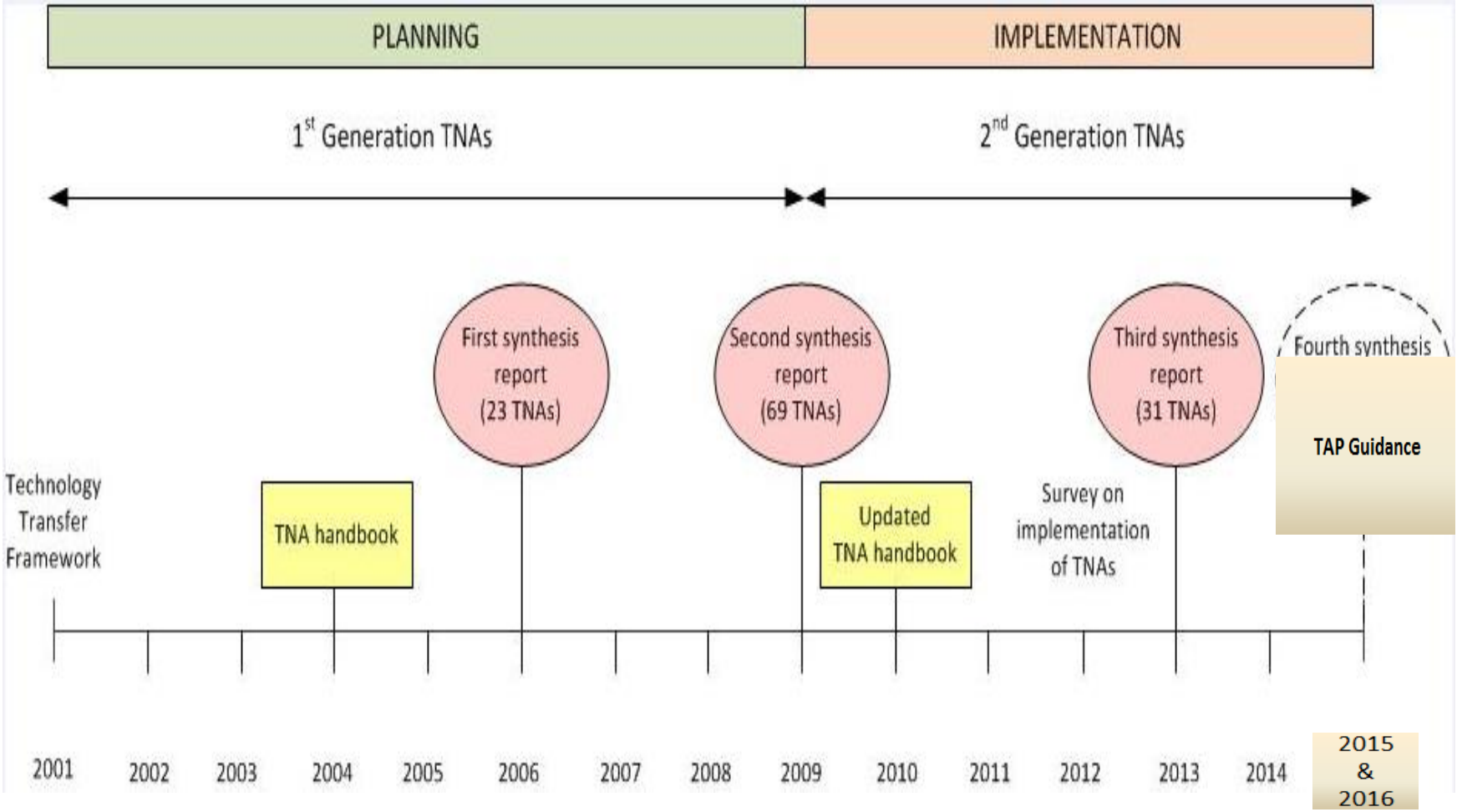
Second generation

2009-2013 - TNA Global Project, phase I
GEF provided support to 36 developing countries
UNP managed the project

2014-2017 - TNA Global Project, phase II
GEF providing support to 26 developing countries
UNP managing the project

2017- TNA Global Project, phase III
GEF to provide support for more than 20 LDCs and SIDs
UDP to manage the project

A brief evolution of technology needs assessments



Guidance

2004: First TNA handbook

2010: Revised and updated TNA handbook

2010–2014: UNEP DTU guidebooks

2015: Lima mandated TAP guidance

Deliverable I: TNA report

Main elements:
- Sector identification and prioritization
- Technology identification and prioritization in each prioritized sector

→

Deliverable II: Barrier analysis and enabling framework report

Main elements:
- Barrier analysis for each technology and enablers addressing the barriers
- Enabling framework technologies

→

Deliverable III: Technology Action Plans

Main elements:
- Action plan for prioritized technologies per sector
- Action plan for each prioritized technology
- Cross-cutting issues

→

Deliverable IV: Project Ideas

Main elements:
- Specific project ideas for each prioritized sector

TNA compilation and synthesis

Deliverable I: TNA report

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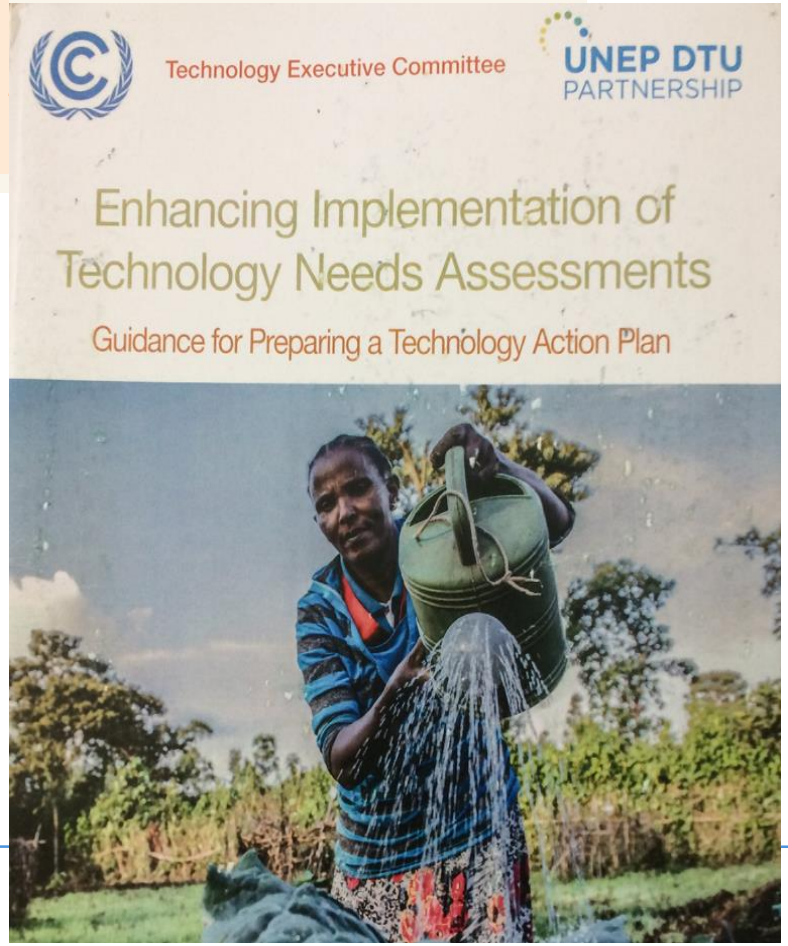
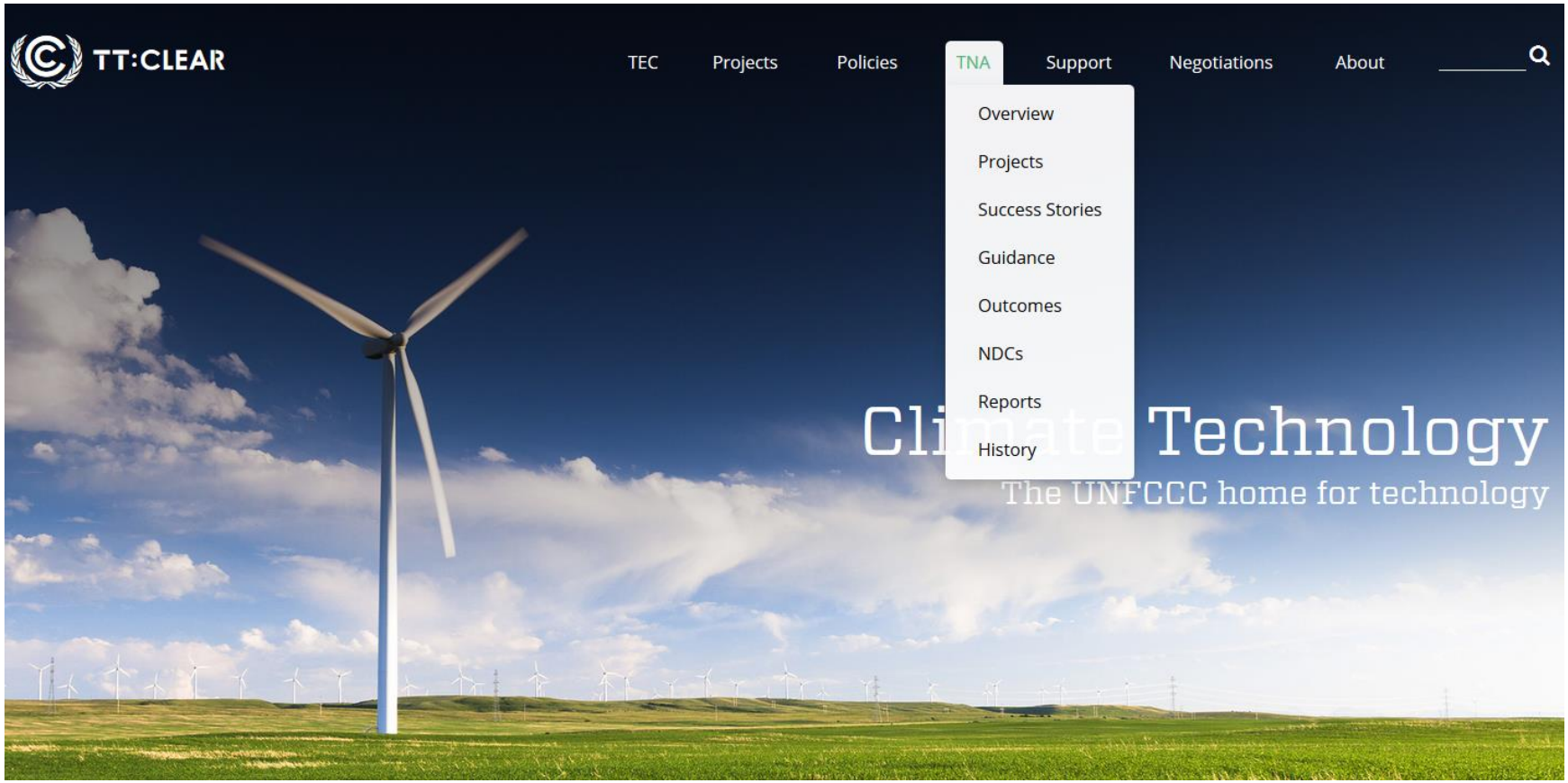
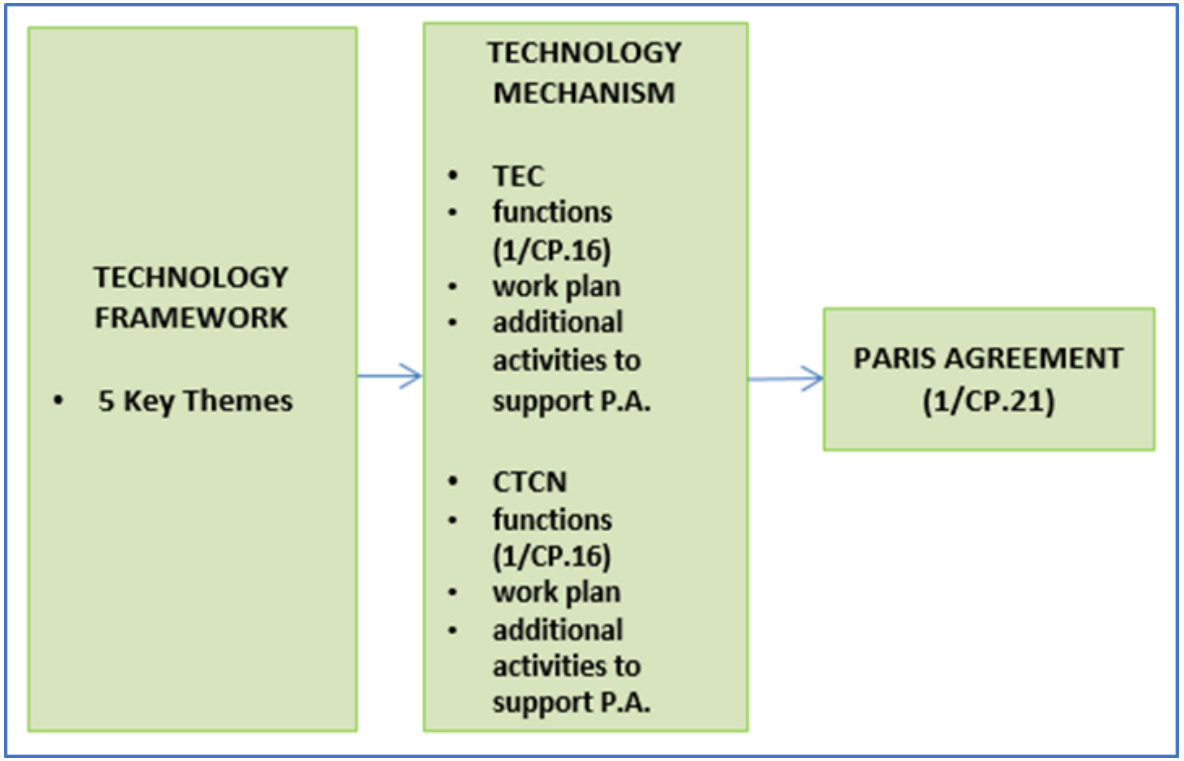


http://unfccc.int/ttclear/




TECHNOLOGY FRAMEWORK
• 5 Key Themes
TECHNOLOGY MECHANISM
• TEC
• functions (1/CP.16)
• work plan
• additional activities to support P.A.
• CTCN
• functions (1/CP.16)
• work plan
• additional activities to support P.A.
PARIS AGREEMENT (1/CP.21)

Key themes of the Technology Framework:

- Innovation
- Implementation (TNAs)
- Enabling environments and capacity building
- Collaboration and stakeholder engagement
- Support

Implementation:

- Actions and activities under this key theme should also facilitate the implementation of mitigation and adaptation action identified using planning tools and processes such as:

- nationally determined contributions,
- long-term low greenhouse gas emission development strategies,
- technology needs assessments,
- national adaptation plans,
- technology road maps and
- other relevant policies,

and facilitate overcoming challenges by implementing such action.

Implementation:

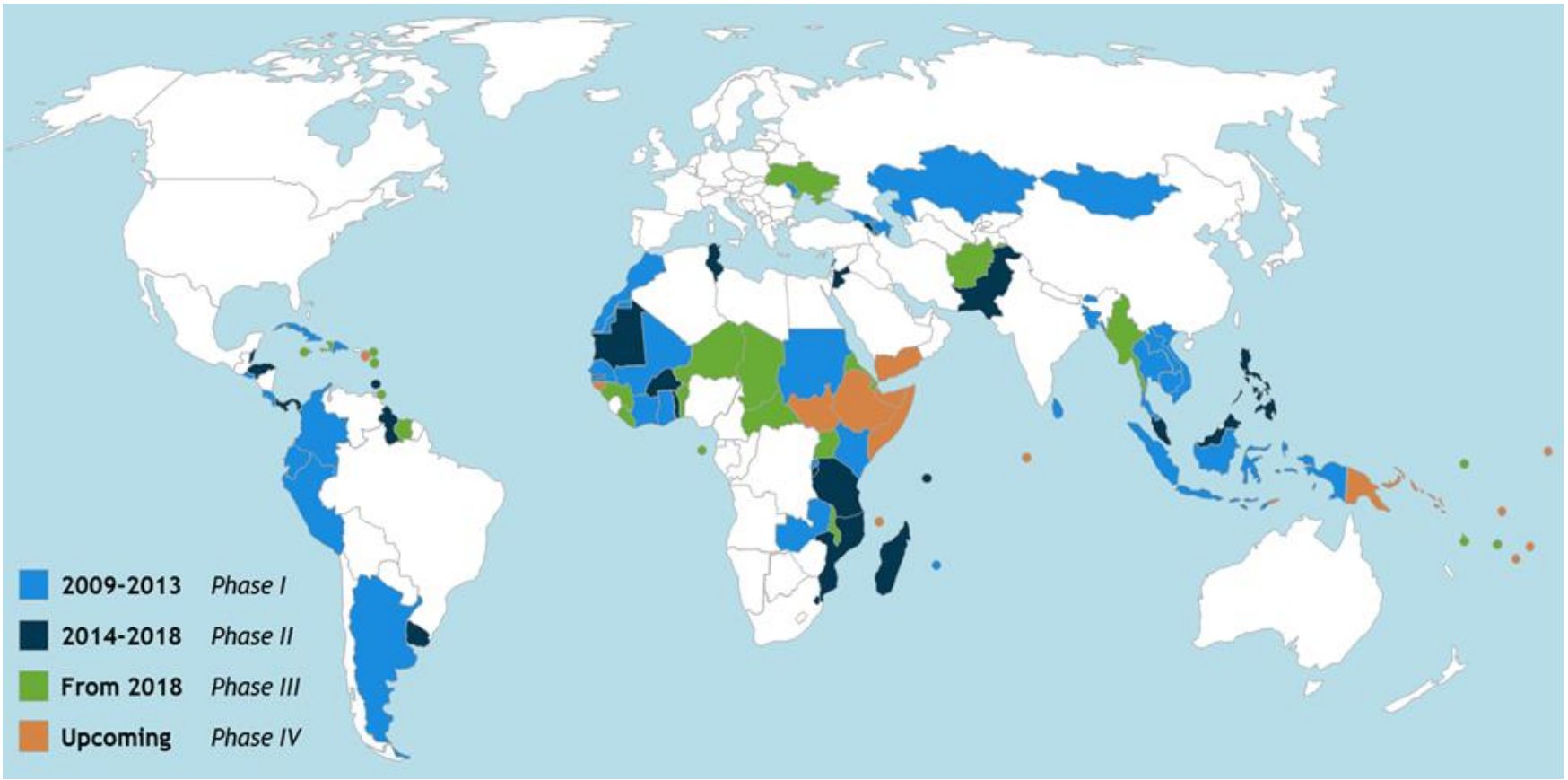
TNA discussed workstreams:

- **Facilitating the undertaking and updating of TNAs**, as well as enhancing the implementation of their results, particularly technology action plans and project ideas, and capacity building related to TNAs.

- **Promoting the alignment of TNAs with NDCs and NAPs** in order to increase coherence between the implementation of those national plans with national strategies to achieve climate-resilient and low-emission development.

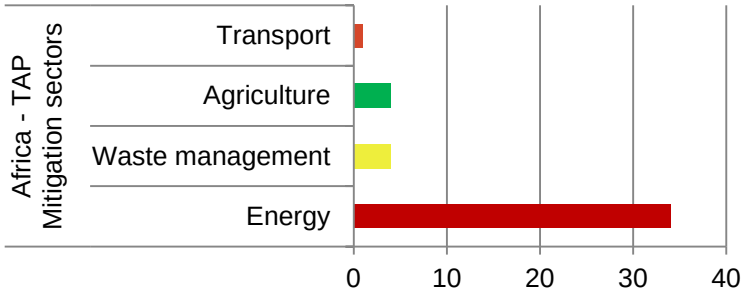
- **Reviewing the TNA guidelines** and updating them as necessary with a view to TNAs leading to plans and implementation that are aligned with the transformational changes envisioned in the Paris Agreement.

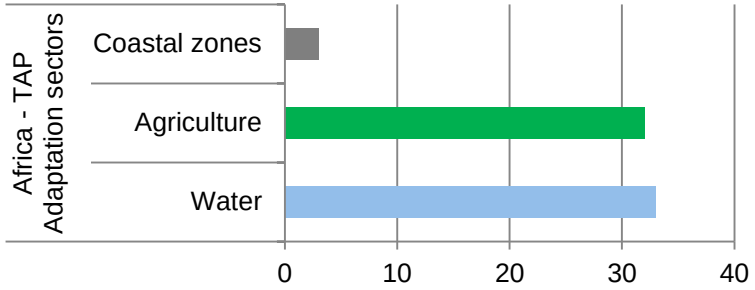
TNA of developing countries (2019)

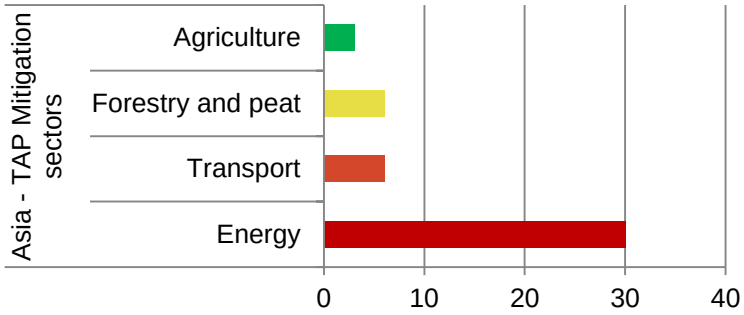


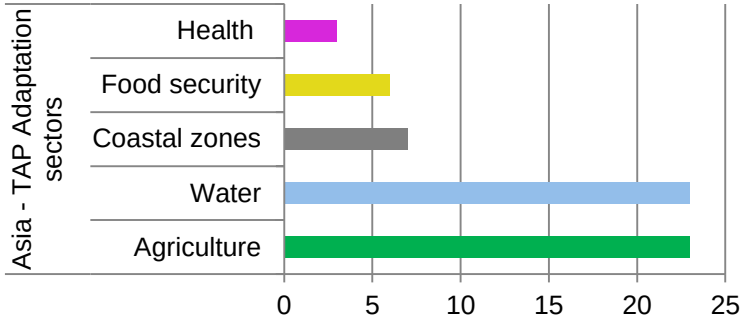
Background paper on the implementation of TAPs of developing countries

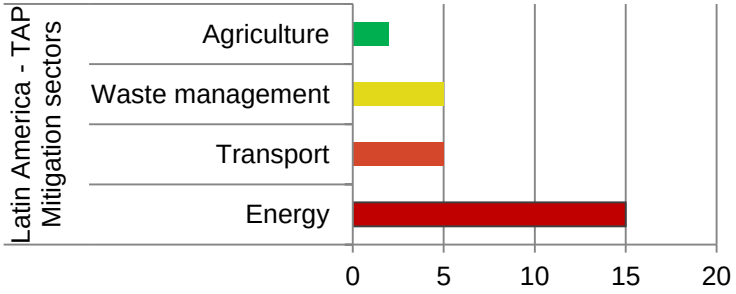
Mitigation and adaptation sectors identified and prioritized in TAPs

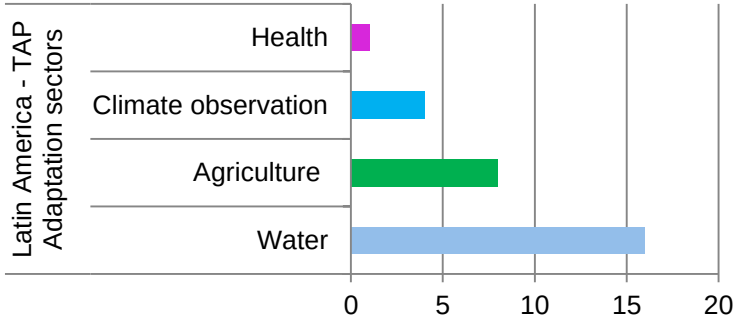












Thank you

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