Transformational Change Methodology

PART I: INTRODUCTION, OBJECTIVES, DEFINITION AND STEPS
Overview of ICAT

Introductory Guide

Impact Assessment Methodologies

Greenhouse gas impacts
- Renewable Energy
- Buildings Efficiency
- Transport Pricing
- Agriculture
- Forestry

Sustainable Development
Transformational Change
Non-State and Subnational Action

Process Guidance Documents

Stakeholder Participation
Technical Review
Overview of the methodology

**Part I: Introduction, objectives, definitions and steps**

Understand the purpose, applicability and limitations of the methodology (Chapter 1)
Determine the objectives of the assessment (Chapter 2)
Understand what is meant by transformational change (Chapter 3)
Understand key concepts, steps and assessment principles (Chapter 4)

**Part II: Defining the assessment**

Describe the policy or action to be assessed and the assessment boundary and period (Chapter 5)
Choose which transformational change characteristics to assess (Chapter 6)

**Part III: Impact assessment**

Assess the starting situation (Chapter 7)
Estimate transformational change ex-ante (Chapter 8)
Estimate transformational change ex-post (Chapter 9)

**Part IV: Monitoring and reporting**

Monitor the performance of the policy or action over time (Chapter 10)
Report the results and methodology used (Chapter 11)

**Part V: Decision-making and using results**

Learning, decision-making and interpreting results (Chapter 12)
Overview of the methodology

Part I: Introduction, objectives, definition and steps

| Understand the purpose, applicability and limitations of the methodology (Chapter 1) |
| Determine the objectives of the assessment (Chapter 2) |
| Understand what is meant by transformational change (Chapter 3) |
| Understand key concepts, steps and assessment principles (Chapter 4) |

This indicates a key recommendation

This is an interactive panel: navigate by clicking on a particular step
Chapter 1. Introduction

Understand the purpose, applicability and limitations of the methodology

Purpose of the methodology → Wide range of intended users → Scope and applicability
1. Purpose of the methodology

Climate change requires that society undergoes a fundamental change away from carbon-intensive and unsustainable models of development.

Increasing need to assess the transformational impacts of policies and actions.
1. Wide range of intended users

- GOVERNMENTS
- DONOR AGENCIES AND FINANCIAL INSTITUTIONS
- RESEARCH INSTITUTIONS AND NGOS
- BUSINESSES
1. Scope and applicability

**General approach** (principles, concepts and procedures) to understand

**Ex-ante** and **Ex-post**

**Hypothetical examples** and case studies to illustrate

**Key recommendations**

This indicates a key recommendation
Chapter 2. Objectives

Understand the objectives of assessing Transformational Change

General objectives  →  Specific objectives
2. Objectives

General objectives:

- Understand how policy or action helps achieve multiple goals
- Attract finance
- Report and communicate
2. Objectives

Specific objectives:

<table>
<thead>
<tr>
<th>EX-ANTE ASSESSMENT</th>
<th>EX-POST ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve policy selection and design</td>
<td>• Evaluate the transformational impact of a policy or action over time</td>
</tr>
<tr>
<td></td>
<td>• Inform future policy design</td>
</tr>
<tr>
<td></td>
<td>• Learn from experience and ongoing monitoring</td>
</tr>
</tbody>
</table>

Users should also identify the intended audience(s) of the assessment report.
Chapter 3. Transformational Change

Understand what is meant by transformational change

Transformational Change definition from literature → Transformational Change definition in this methodology → Characteristics of Transformational Change
3. Transformational Change definition from literature

Attributes of Transformational Change

- At multiple levels
- **Fundamental** change that **disrupts** the status quo
- No normative connotation: need a **transformational goal**

Type of change

* Part of society that is targeted by a particular policy or action
3. Transformational Change definition in this methodology

A fundamental, sustained change of a system that disrupts established high-carbon practices and contributes to a zero-carbon society in line with the Paris Agreement goals to limit global warming to 1.5 - 2°C and the UN Sustainable Development Goals.

**OUTCOMES**

- Large scale
- Sustained and long term

** PROCESSES **

- Technology change
- Incentives for change
- Agents of change
- Norms and behavioural change
3. Characteristics of Transformational Change
Chapter 4. Steps and principles

Understand key concepts, steps and assessment principles

Planning the assessment → Principles of the assessment
4. Planning the assessment

**QUANTIFYING IMPACTS**

Necessary to first understand the impacts of a policy or action in terms of its GHG and sustainable development impacts.

**STAKEHOLDER PARTICIPATION**

During the planning phase, it is recommended to identify stakeholder groups that may be affected by or may influence the policy.

**TECHNICAL REVIEW**

Before beginning the assessment process, consider whether technical review of the assessment report will be pursued.

- GHG impacts (sectorial)
- Sustainable Development
- Stakeholder Participation
- Technical Review
4. Principles of the assessment

Base the assessment on the principles of relevance, completeness, consistency, transparency, accuracy and reflection on ambition.

Users should balance trade-offs between principles depending on their assessment objectives. Over time, as the accuracy and completeness of data increases, the trade-off between these principles will likely diminish.
Pilot Case Studies using this Methodology

• Development of a Tonga Energy Efficiency Master Plan
• Assessment of the Transformational Change Potential for the Citizens of the Future Initiative in Bolivia
• Geothermal Energy Development Policy in Uganda
• Assessment of the Transformational Potential of the NACAG Initiative
Thank You

Contacts:
Karen Holm Olsen, UNEP DTU
kaol@dtu.dk

Neelam Singh, WRI
nsigh@wri.org

www.climateactiontransparency.org
1. Wide range of intended users: details

- **Governments**: Assess the expected impacts of policies or actions to inform the design of transformational policies, and monitor progress and evaluate impacts of implemented policies or actions to learn from experience.

- **Donor agencies and financial institutions**: Assess the impacts of financial support provided, such as grants or loans, to support transformational policies or actions.

- **Businesses**: Assess impacts of private sector actions such as voluntary commitments and implementation of new technologies, private sector financing, or the impacts of government policies or actions on businesses and the economy.

- **Research institutions and NGOs**: Assess the extent to which policies or actions are transformational to generate new information to increase stakeholder awareness and support decision makers.
Insights from the NACAG Initiative

• While the Methodology is geared primarily towards the national level, the case study of transformational potential of the Nitric Acid Climate Action Group as an international initiative shows the adaptability of the methodology.

• NACAG’s vision is to incentivize the installation of appropriate abatement technologies in all nitric acid production plants worldwide in the long-run.

• NACAG’s transformational potential could be determined with no major alterations with the ICAT methodology.

See: Assessment of the Transformational Potential of the NACAG Initiative. (Diffiff, Schaerf, Schmidt 2019)
3. Examples of Transformational Change

- **Brazil**
  The reduction in deforestation in Brazil (75% over a decade from 2005 to 2014)

- **Columbia**
  The transition to a sustainable transport system at city level in Bogotá

- **South Africa**
  The role of state-owned companies to lead a transition away from high-carbon lock-in

- **Germany**
  Transformation of the energy system

- **Denmark**
  The role of wind power in electricity generation


Available at: https://unepdtu.org/publications/transformational-change-for-low-carbon-and-sustainable-development/
3. Example of alignment with global goals

1. Downscale global goals to the relevant level

Global goals

Share of the global goals at multiple levels of decision-making

2. Example of quantitative assessment in alignment with the goals