

# Transformational Change Methodology

## PART I: INTRODUCTION, OBJECTIVES, DEFINITION AND STEPS



## 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*

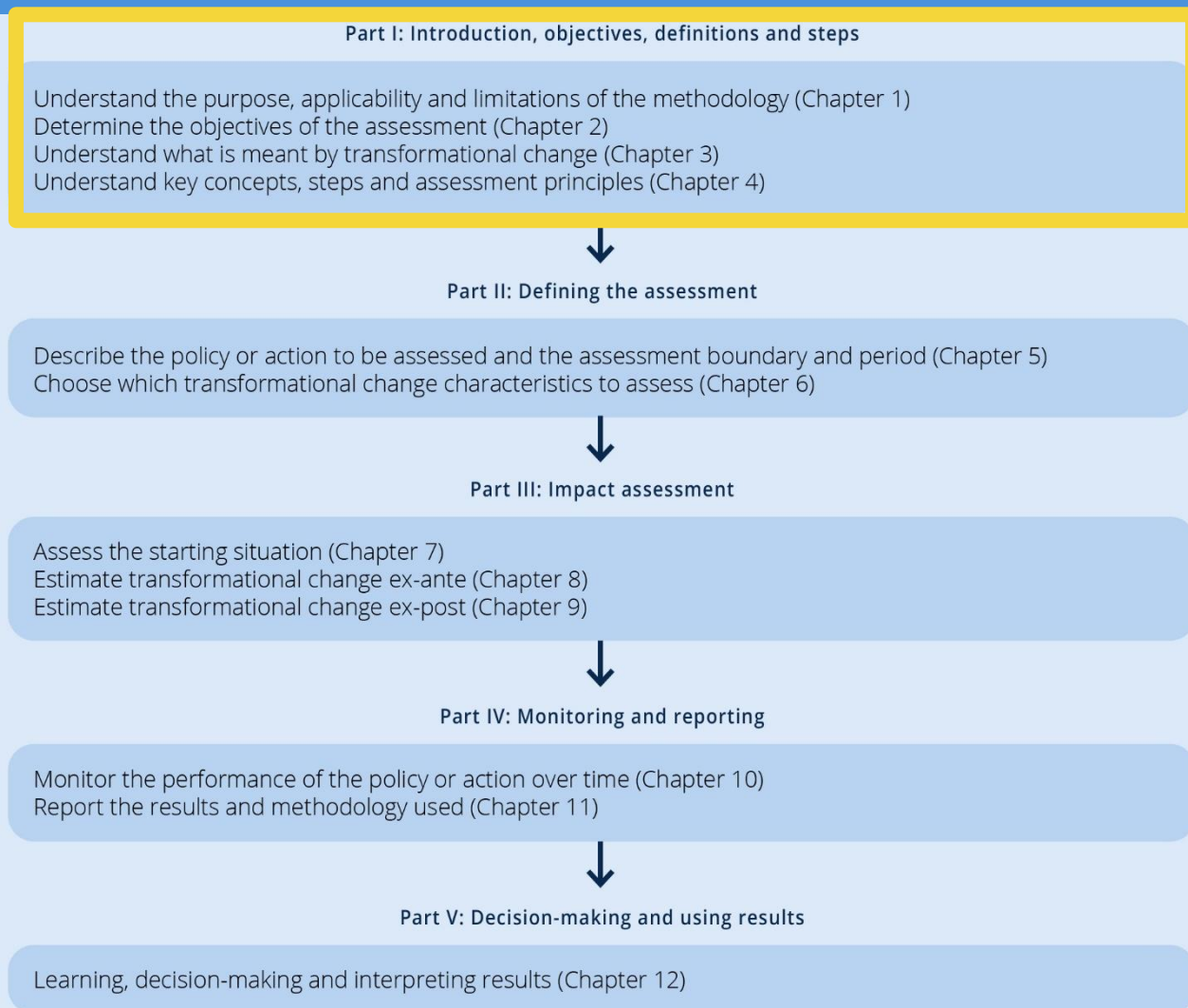


Stakeholder  
Participation



Technical  
Review

# Overview of the methodology



# 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



Chapter 1

Chapter 2

Chapter 3

Chapter 4

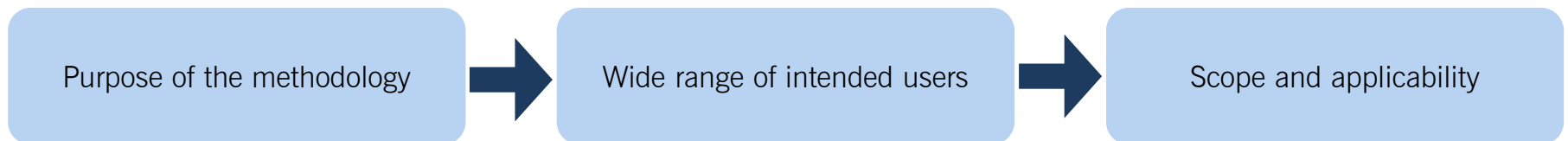
This is an interactive panel: navigate  
by clicking on a particular step

ICAT

INITIATIVE FOR  
Climate Action  
Transparency

# Chapter 1. Introduction

Understand the purpose, applicability and limitations of the methodology



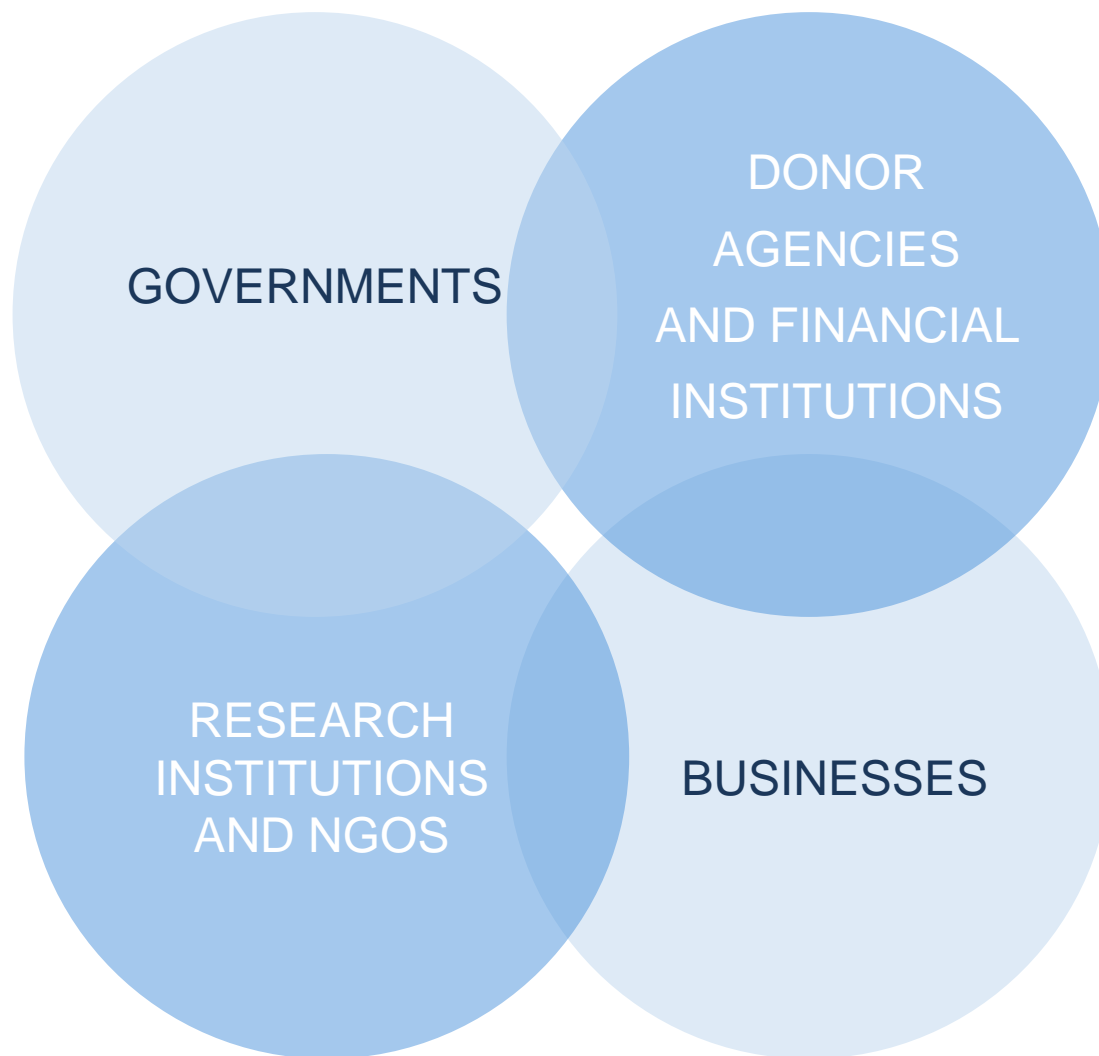
# 1. Purpose of the methodology

**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



# 1. Scope and applicability

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

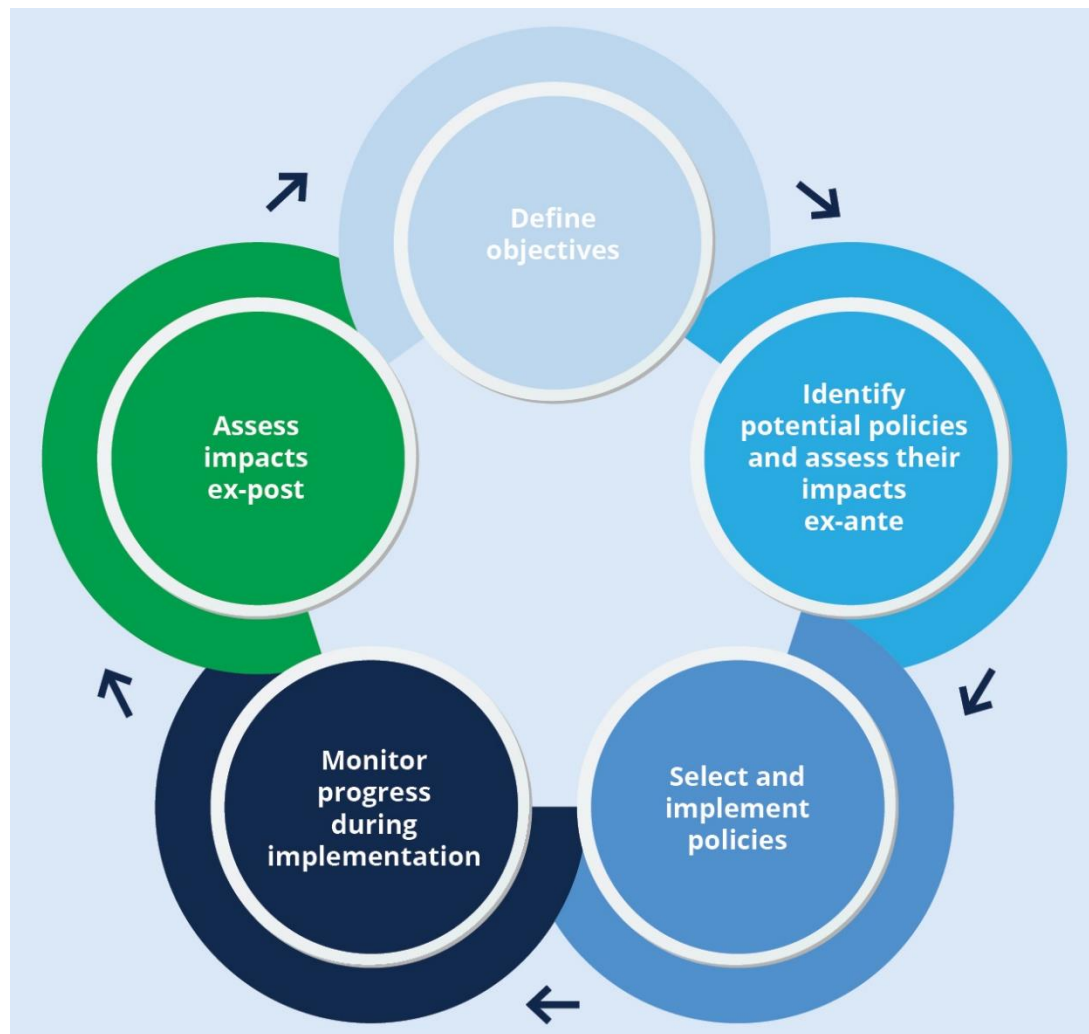
**Ex-ante and Ex-post**

**Hypothetical examples** and case studies **to illustrate**

**Key recommendations**

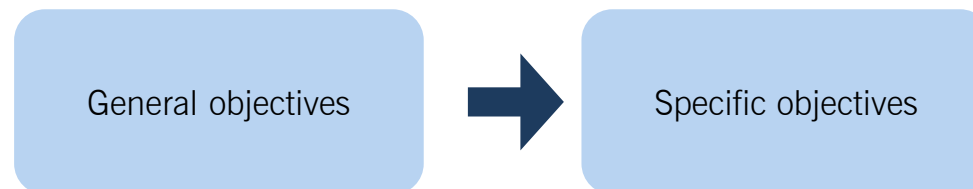


This indicates a key recommendation



# Chapter 2. Objectives

Understand the objectives of assessing Transformational Change



## 2. Objectives

### General objectives:

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

Determine the objectives of the assessment at the beginning of the impact assessment process



Chapter 1

Chapter 2

Chapter 3

Chapter 4

## 2. Objectives

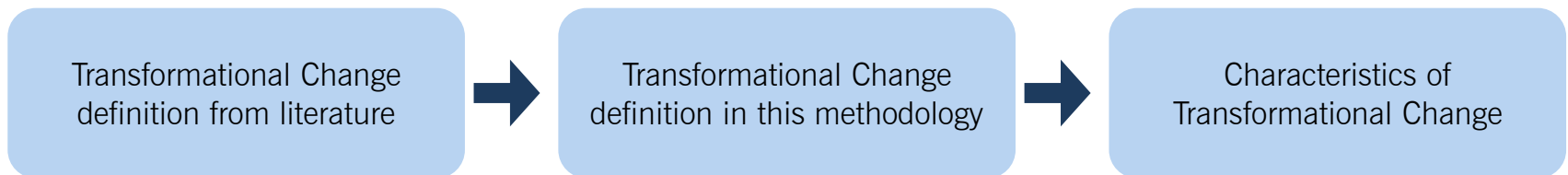
### Specific objectives:

EX-ANTE ASSESSMENT	EX-POST ASSESSMENT
<ul style="list-style-type: none"><li>• Improve policy selection and design</li></ul>	<ul style="list-style-type: none"><li>• Evaluate the transformational impact of a policy or action over time</li><li>• Inform future policy design</li><li>• Learn from experience and ongoing monitoring</li></ul>

Users should also identify the intended audience(s) of the assessment report.

# Chapter 3. Transformational Change

Understand what is meant by transformational change

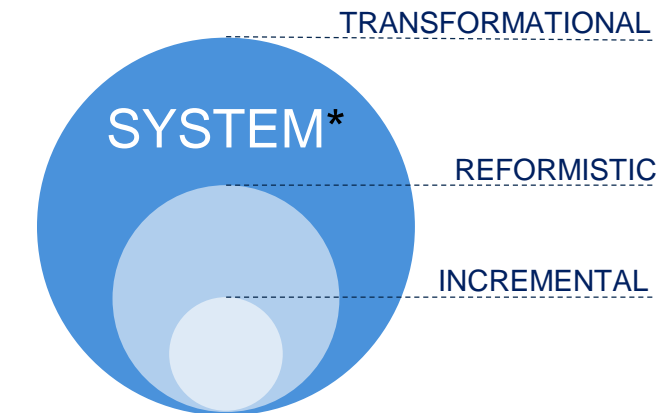


### 3. Transformational Change definition from literature

#### 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

## TRANSFORMATIONAL IMPACT

### OUTCOMES: GHGs AND SDGs

Scale of outcome

Sustained nature  
of outcome

### PROCESSES OF CHANGE

Technology

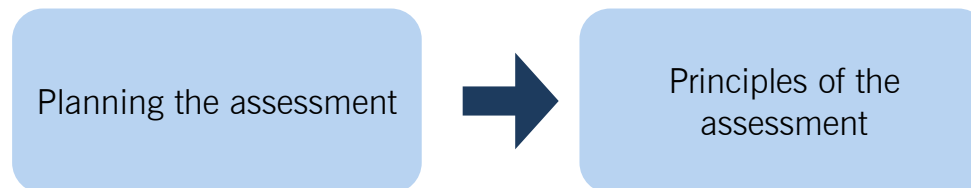
Agents

Incentives

Norms

# Chapter 4. Steps and principles

Understand key concepts, steps and assessment principles



## 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.



GHG impacts  
(sectorial)

Sustainable  
Development

### STAKEHOLDER PARTICIPATION

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



Stakeholder  
Participation

### TECHNICAL REVIEW

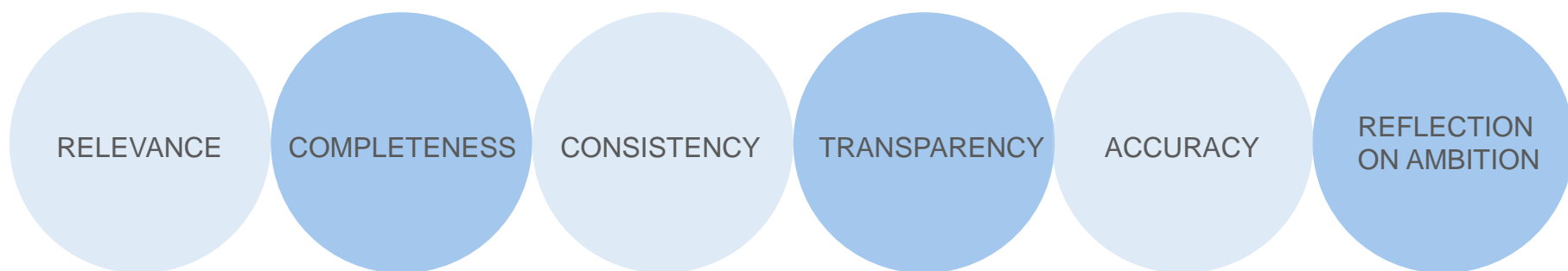
Before beginning the assessment process, consider whether technical review of the assessment report will be pursued.



Technical  
Review

# 4. Principles of the assessment

Base the assessment on the principles of



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.

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



Chapter 1

Chapter 2

Chapter 3

Chapter 4

# 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

A close-up photograph of several hands of different skin tones planting small green seedlings into blue plastic pots filled with reddish-brown soil. The hands are positioned over a grid of many such pots, suggesting a large-scale reforestation or agricultural project. The background is slightly blurred, focusing attention on the planting action.

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# 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. (Diffliiff, Schaerf, Schmidt 2019)

# 3. Examples of Transformational Change

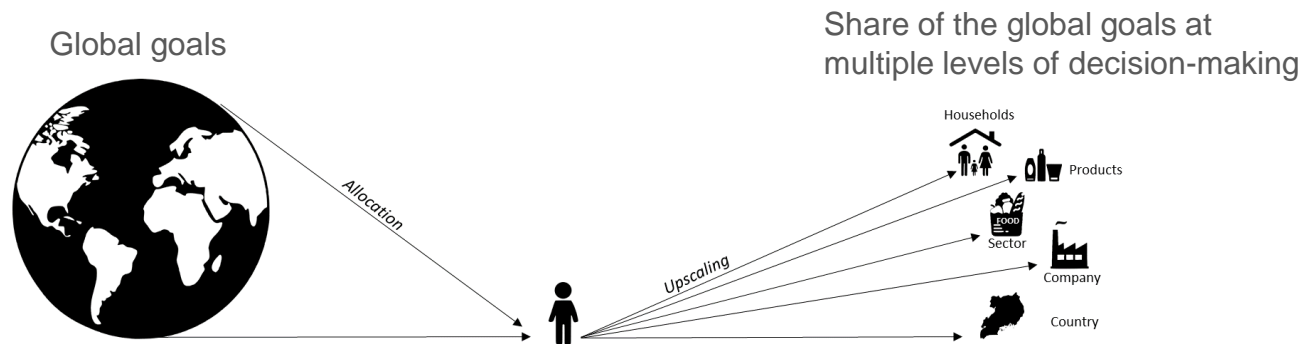
- Brazil  
The reduction in deforestation in Brazil (75% over a decade from 2005 to 2014)
- Columbia  
The transition to a sustainable transport system at city level in Bogotá
- South Africa  
The role of state-owned companies to lead a transition away from high-carbon lock-in
- Germany  
Transformation of the energy system
- Denmark  
The role of wind power in electricity generation

Source: Olsen, K. H., & Fenhann, J. V. (Eds.) (2015). Transformational Change for Low Carbon and Sustainable Development. Copenhagen: UNEP DTU Partnership. Perspectives Series

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



## 2. Example of quantitative assessment in alignment with the goals

