



TRANSPARENCY: TRACKING PROGRESS TOWARDS NDCS

 INDC Submitted
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TRACKING PROGRESS TOWARDS NDCS

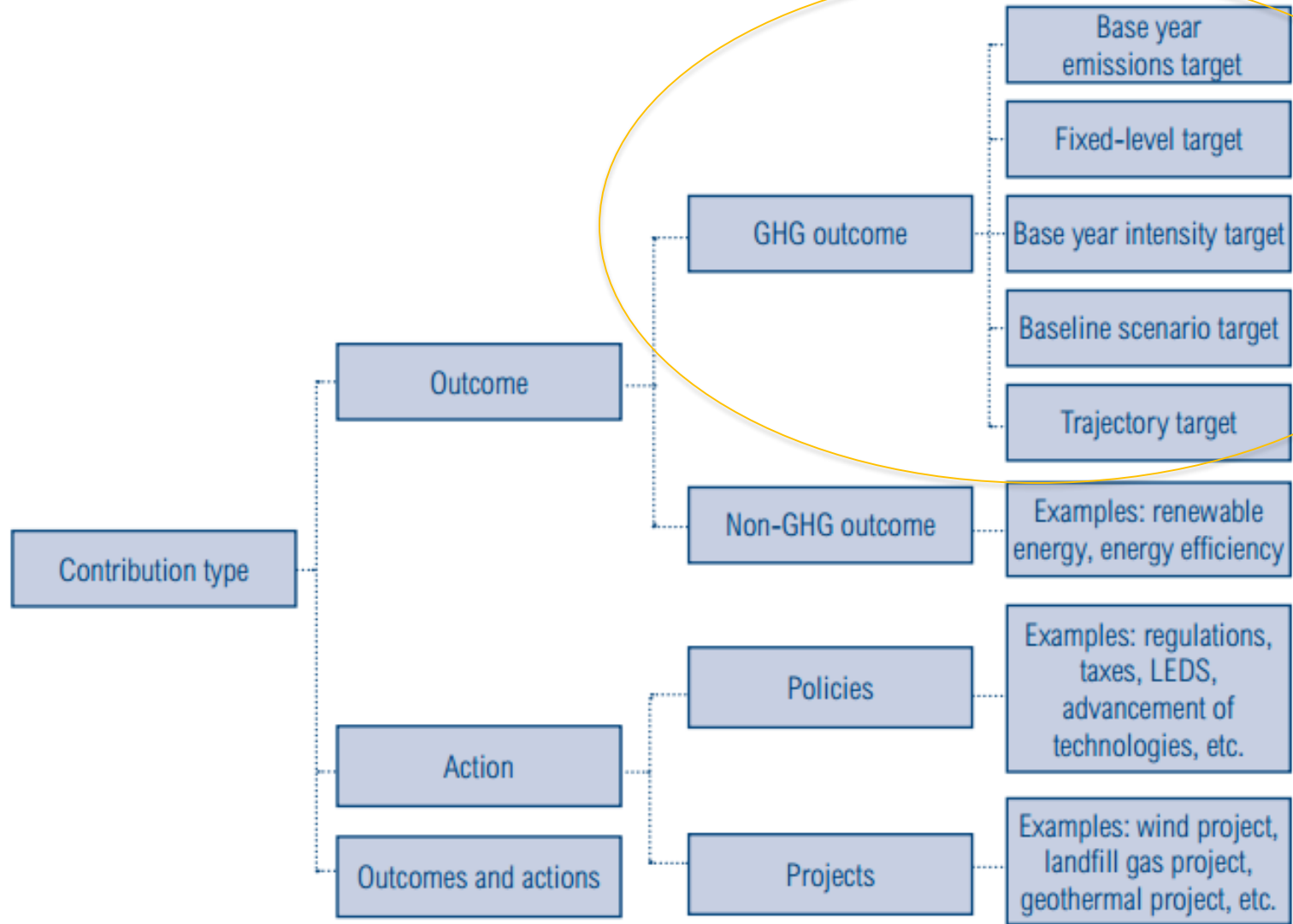
- Assist in tracking progress towards domestic goals and actions
- Build mutual trust and confidence
- Promote effective implementation
- Understand whether further action is needed to achieve goals
- Provide clarity on the extent to which individual actions are being achieved to inform the assessment of progress towards the Paris Agreement's goals
- Identify and communicate good practices, priorities, needs and gaps

PARIS AGREEMENT, ARTICLE 13, PARA 7

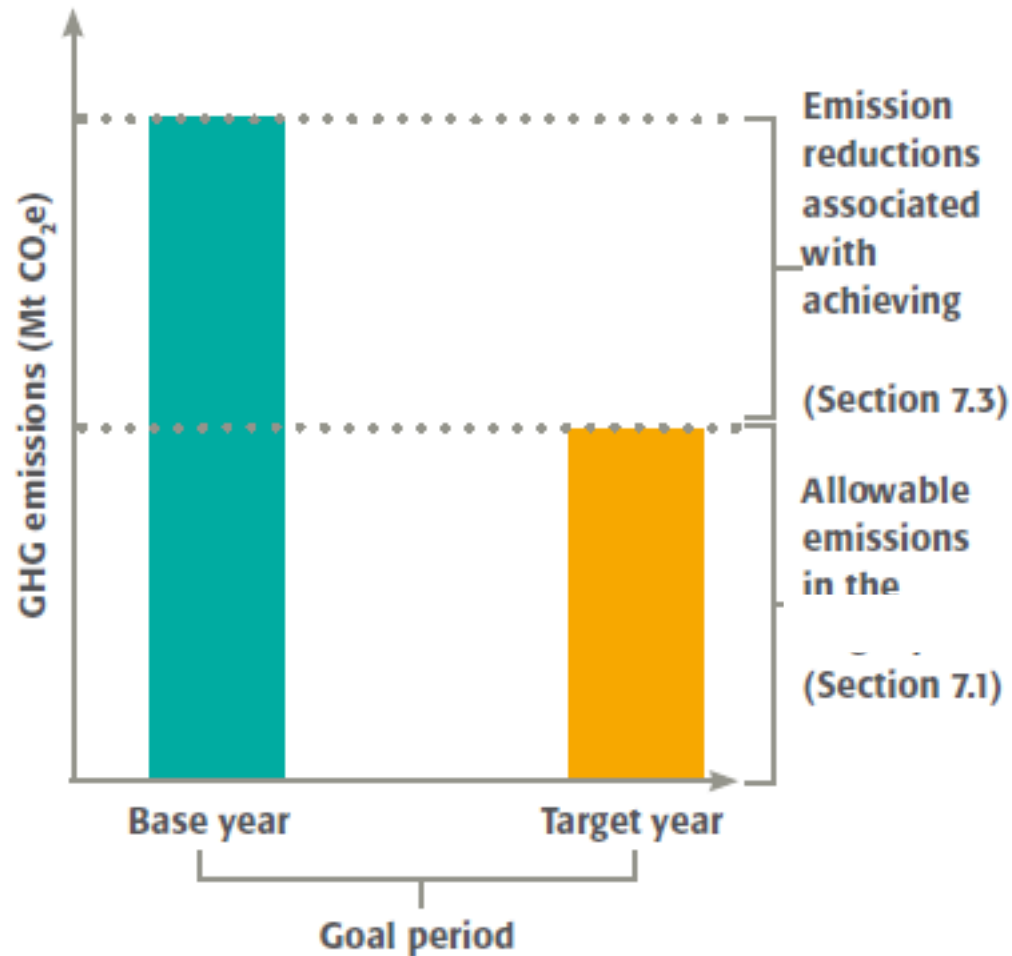
7. Each Party shall regularly provide the following information:

(b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

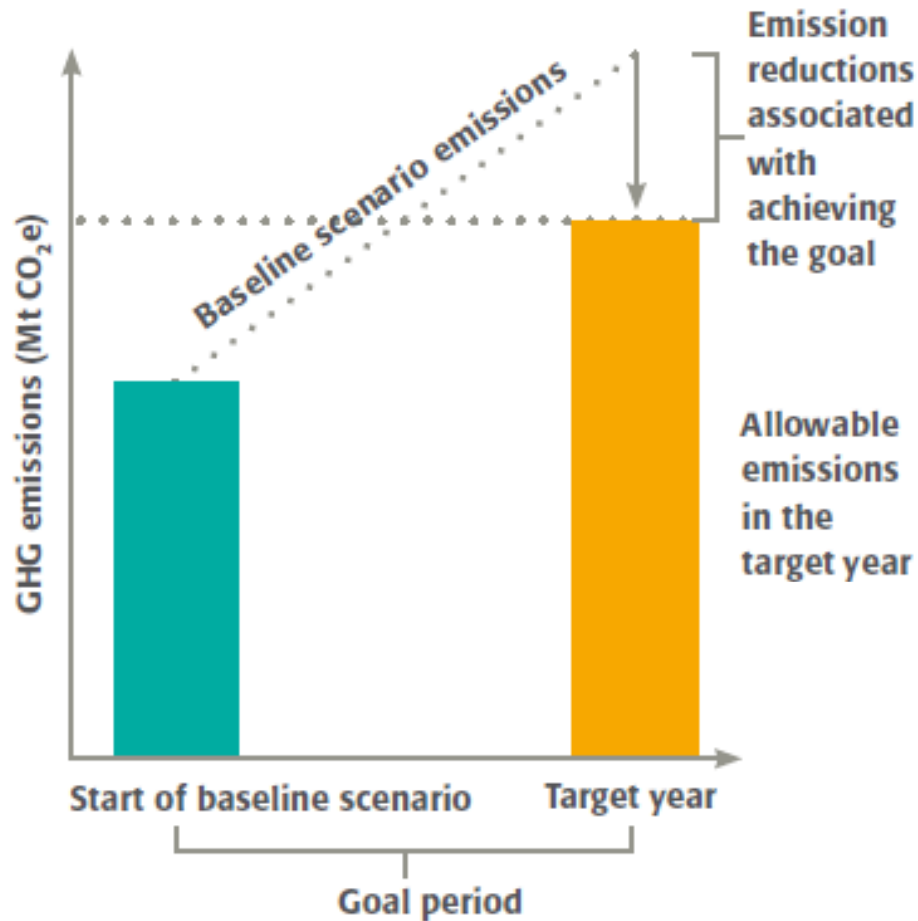
MEASURING GHG IMPACTS DEPENDS ON NDC TYPE



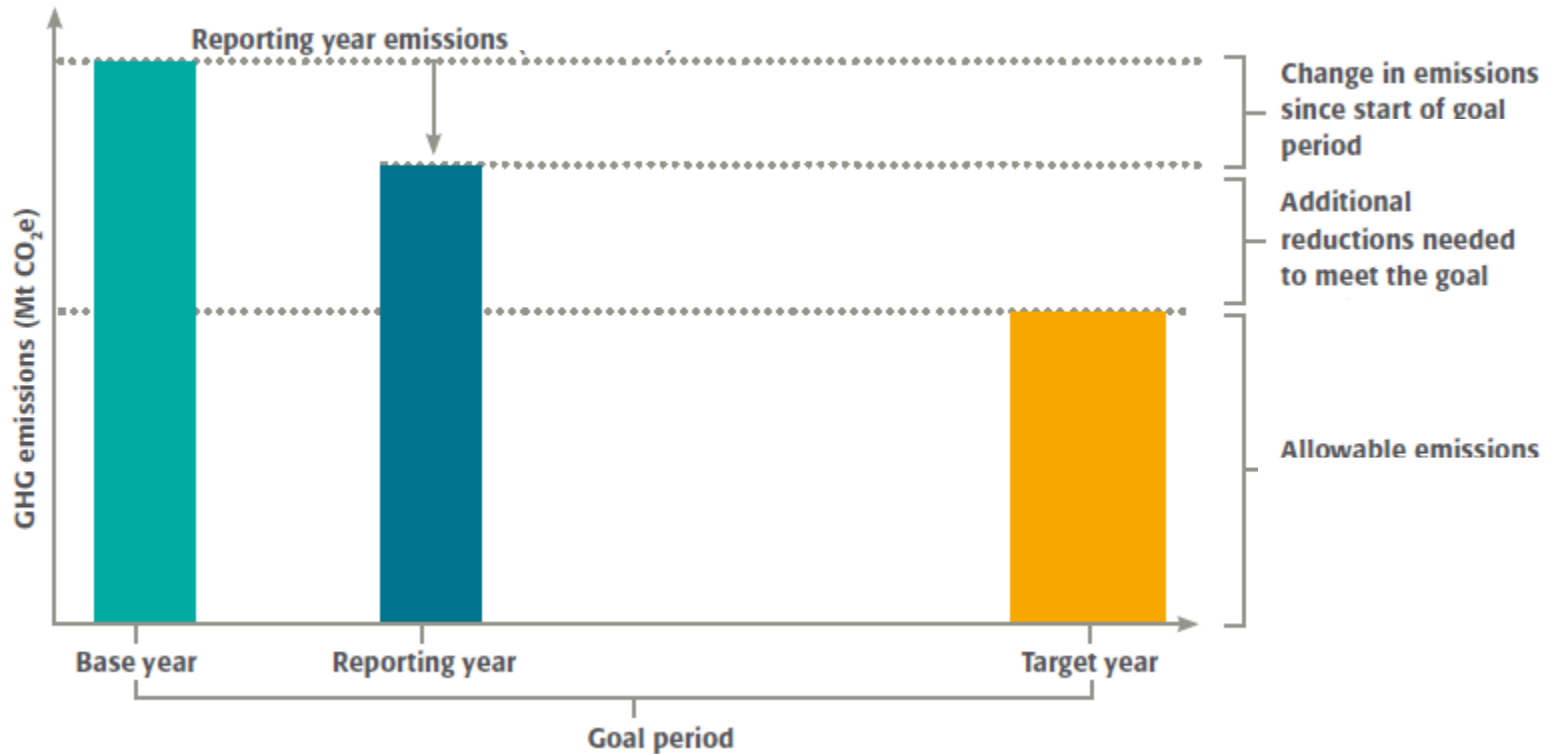
BEFORE IMPLEMENTATION: CALCULATE ALLOWABLE EMISSIONS EXAMPLE FOR A BASE YEAR GOAL



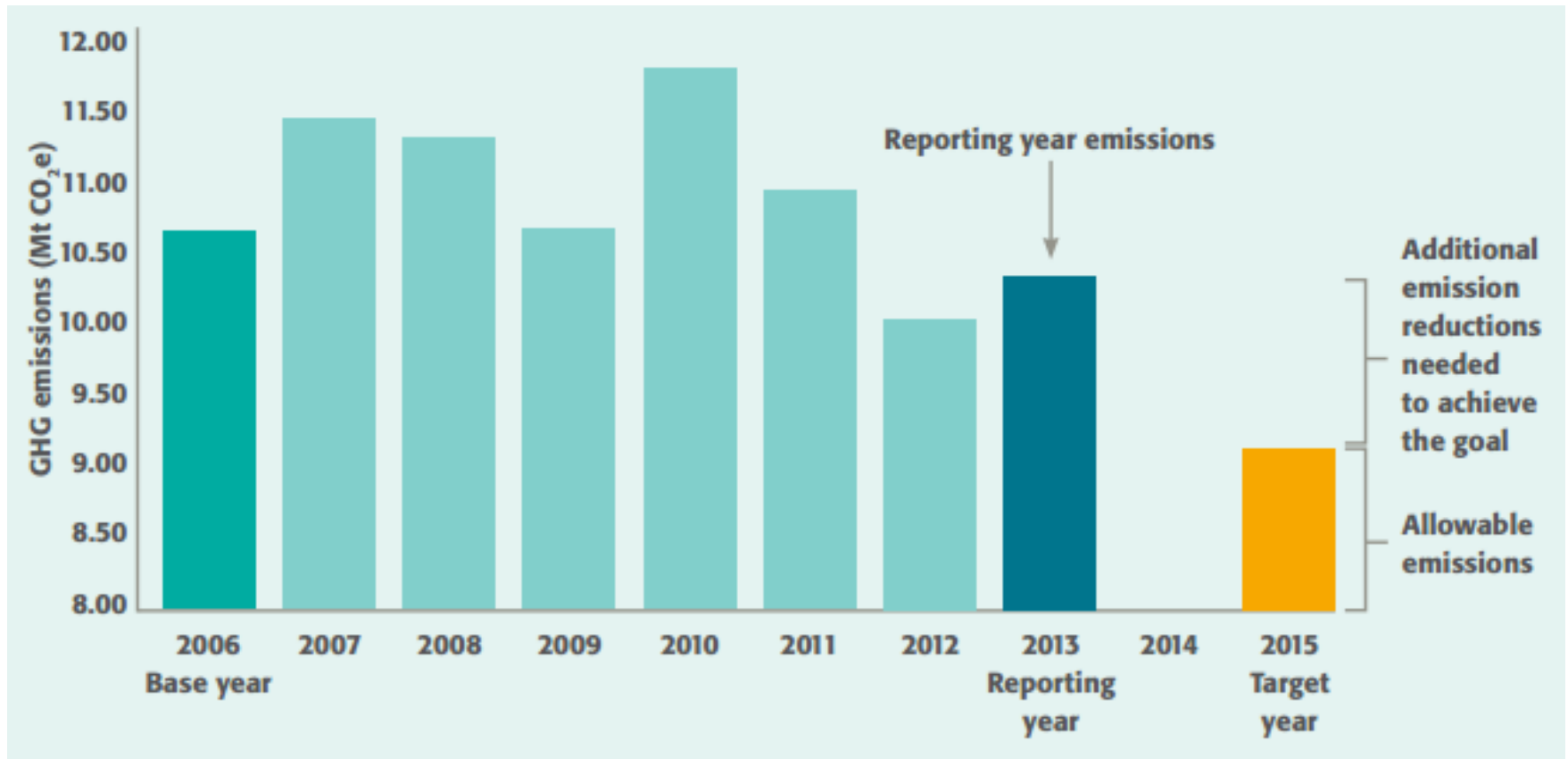
EXAMPLE OF ALLOWABLE EMISSIONS FOR A BASELINE GOAL



DURING IMPLEMENTATION: ASSESS PROGRESS



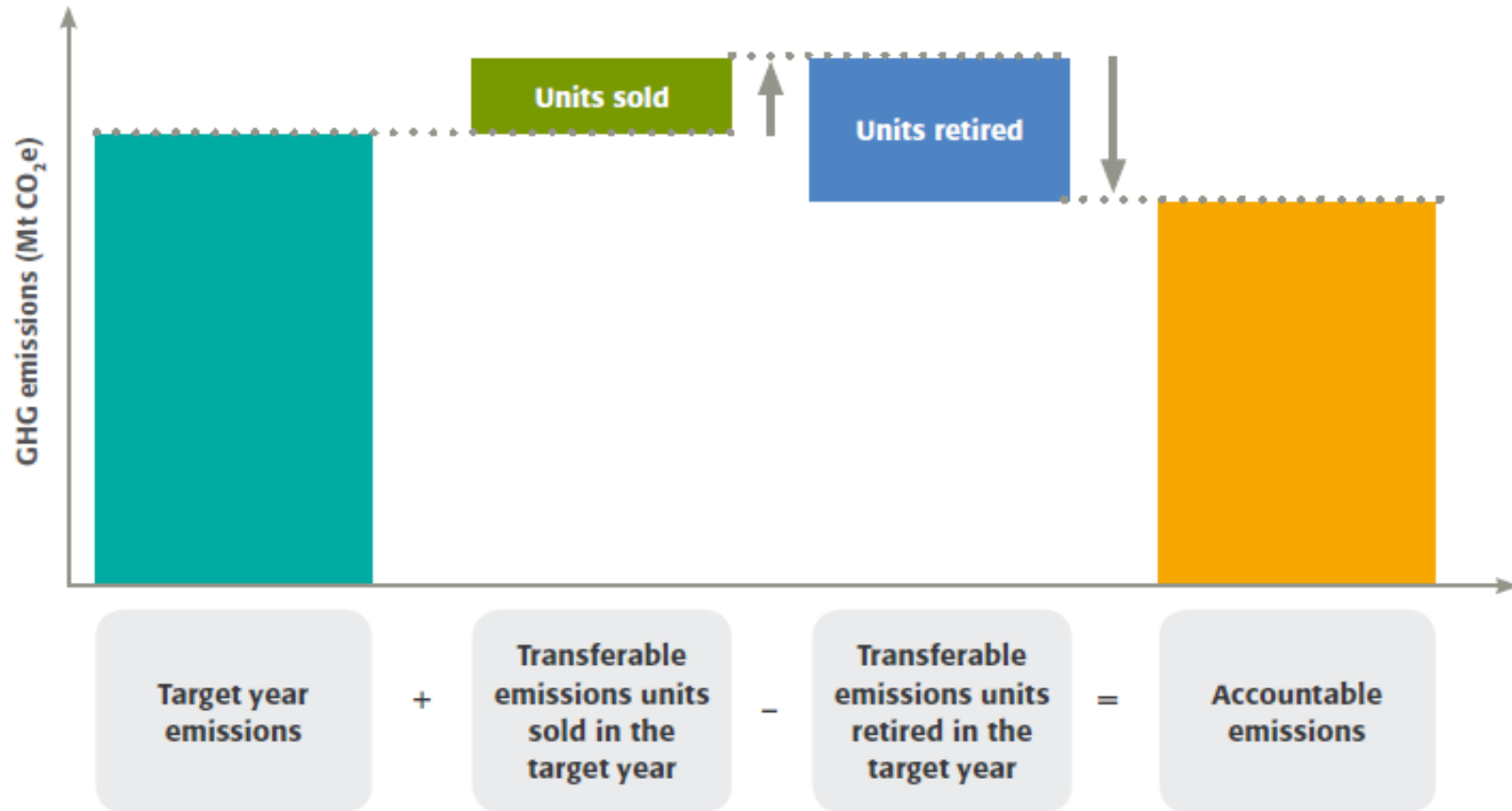
EXAMPLE FROM SOUTH AFRICA'S MINING SECTOR



AT THE END OF THE TARGET PERIOD: CALCULATE ACCOUNTABLE EMISSIONS

Accountable emissions are the quantity of emissions and removals that users apply toward achieving the goal, and may take into account sales and retirement of ITMOs and change in net land sector emissions, depending on goal design.

CALCULATE ACCOUNTABLE EMISSIONS

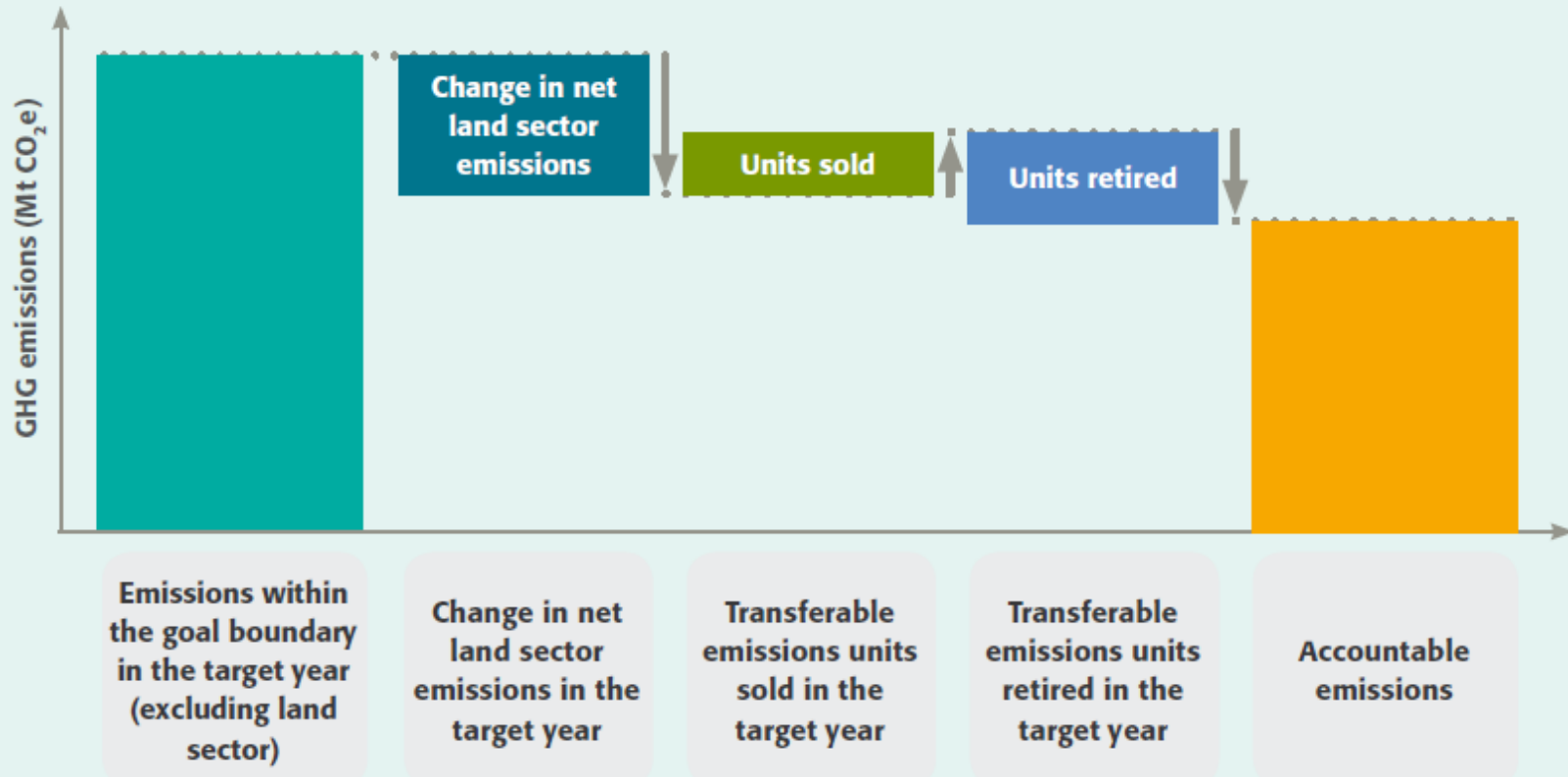


CALCULATE ACCOUNTABLE EMISSIONS (NET LAND SECTOR CHANGE CALCULATED SEPARATELY)

Accountable emissions (Mt CO₂e) =

Target year emissions* (Mt CO₂e) + Transferable emissions units sold in the target year (Mt CO₂e) – Transferable emissions units retired in the target year (Mt CO₂e) + Change in net land sector emissions (Mt CO₂e)

* Excluding the land sector.



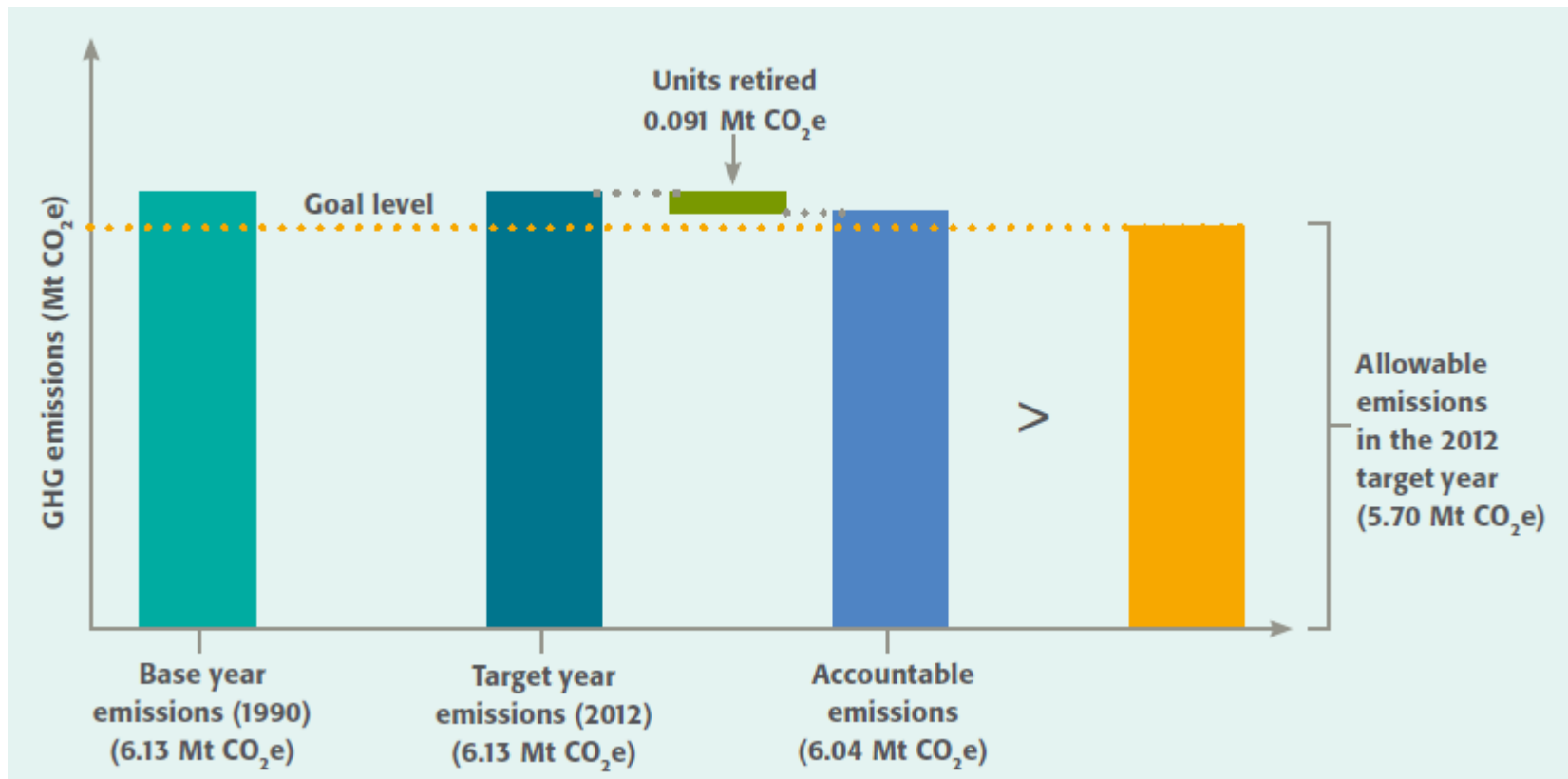
ASSESS GOAL ACHIEVEMENT

Goal achievement is determined by comparing accountable emissions / intensity to allowable emissions / intensity in the target year or period

If ...	Then ...
Accountable emissions \leq Allowable emissions	<i>Goal is achieved</i>
Accountable emissions $>$ Allowable emissions	<i>Goal is not achieved</i>

EXAMPLE: THE CITY OF SEATTLE

- Accountable emissions exceeded allowable emissions by 0.34 Mt CO₂e, and, thus Seattle's goal was not achieved.



EXERCISE

ANSWERS

Q 2 CALCULATE ALLOWABLE EMISSIONS FOR YOUR RESPECTIVE GOAL

- **Base year emissions goal:** $1000 - (1000 \times 25\%) = 750 \text{ Mt CO}_2\text{e}$
- **Baseline scenario goal:** $2000 - (2000 \times 30\%) = 1400 \text{ Mt CO}_2\text{e}$
- **Base year intensity goal:** $1000/1000 - [(1000/1000) \times 40\%] = 0.6 \text{ tCO}_2\text{e/GDP}$
- **Non-GHG goal:** Allowable solar generation in the target year = 20GW

Q 3 TRACK PROGRESS IN REPORTING YEAR 2020

Goal type	Allowable emissions (input from Step 2)	Reporting year (2020)
Base year emissions goal	750 Mt CO ₂ e	Emissions = 900 MtCO ₂ e
Baseline scenario goal	1400 Mt CO ₂ e	Emissions = 900 MtCO ₂ e
Base year intensity goal	0.6 tCO ₂ e/GDP	Emissions intensity = 900/2000 = 0.45 MtCO ₂ e/GDP
Non-GHG goal	20GW	Solar generated = 10 GW

Q 3 (CONTD.) HOW MUCH REDUCTIONS HAVE BEEN ACHIEVED SO FAR?

- **Base year emissions goal:** $1000 - 900 = 100 \text{ Mt CO}_2\text{e}$
- **Baseline scenario goal:** $1000 - 900 = 100 \text{ Mt CO}_2\text{e}$
- **Base year intensity goal:** $0.6 - 0.45 = 0.15 \text{ tCO}_2\text{e/GDP}$
- **Non-GHG goal:** $20 - 10 = 10\text{GW}$

Q 3 (CONTD.) HOW MANY ADDITIONAL REDUCTIONS SHOULD BE ACHIEVED IF YOU ARE TO MEET THE GOAL?

- **Base year emissions goal:** (allowable emissions – reporting year emissions) = $750 - 900 = -150$ Mt CO₂e , i.e., need a reduction of 150Mt CO₂e
- **Baseline scenario goal:** $1400 - 900 = +500$ Mt CO₂e i.e., reporting year emissions (2020) are lower than baseline scenario emissions in 2025
- **Base year intensity goal:** $0.45 - 0.60 = -0.15$ tCO₂e/GDP i.e., emissions intensity needs to be lowered further
- **Non-GHG goal:** $20 - 10 = 10$ GW i.e., solar power generation needs to rise (another 10GW) by the target year

Q 4 CALCULATE ACCOUNTABLE EMISSIONS FOR YOUR RESPECTIVE GOAL

Goal type	Allowable emissions (input from Step 2)	Reporting year (2020) (input from Step 3)	Accountable emissions/intensity or solar in Target year (2025)
Base year emissions goal	750 Mt CO ₂ e	Emissions = 900 MtCO ₂ e	Emissions = 750 + 100 – 50 = 800 Mt CO ₂ e
Baseline scenario goal	1400 Mt CO ₂ e	Emissions = 900 MtCO ₂ e	Emissions = 750 + 100 – 50 = 800 Mt CO ₂ e
Base year intensity goal	0.6 tCO ₂ e/ GDP	Emissions intensity = 0.45 MtCO ₂ e/GDP	Emissions intensity = 800/2400 = 0.33 MtCO ₂ e/ GDP
Non-GHG goal	20GW	Solar generated = 10 GW	Solar generated = 15 GW

Q 5 IS THE GOAL ACHIEVED?

Goal type	Allowable emissions (input from Step 2)	Accountable emissions/intensity or solar in Target year (2025) (Input from Step 4)	Goal achieved
Base year emissions goal	750 Mt CO _{2e}	Emissions = 800 Mt CO _{2e}	No 750 > 800
Baseline scenario goal	1400 Mt CO _{2e}	Emissions = 800 Mt CO _{2e}	Yes 800 < 1400
Base year intensity goal	0.6 tCO _{2e} /GDP	Emissions intensity = 0.33 MtCO _{2e} / GDP	Yes 0.33 < 0.6
Non-GHG goal	20GW	Solar generated = 15 GW	No Solar generated in target year is less than the generation set for the goal

RESOURCES AND OTHER TRACKING ISSUES

Mitigation Goal Standard

*An accounting and reporting standard
for national and subnational
greenhouse gas reduction goals*



RESOURCES

How to track progress toward
national or subnational GHG
reduction goals

Policy and Action Standard

*An accounting and reporting standard
for estimating the greenhouse gas effects
of policies and actions*

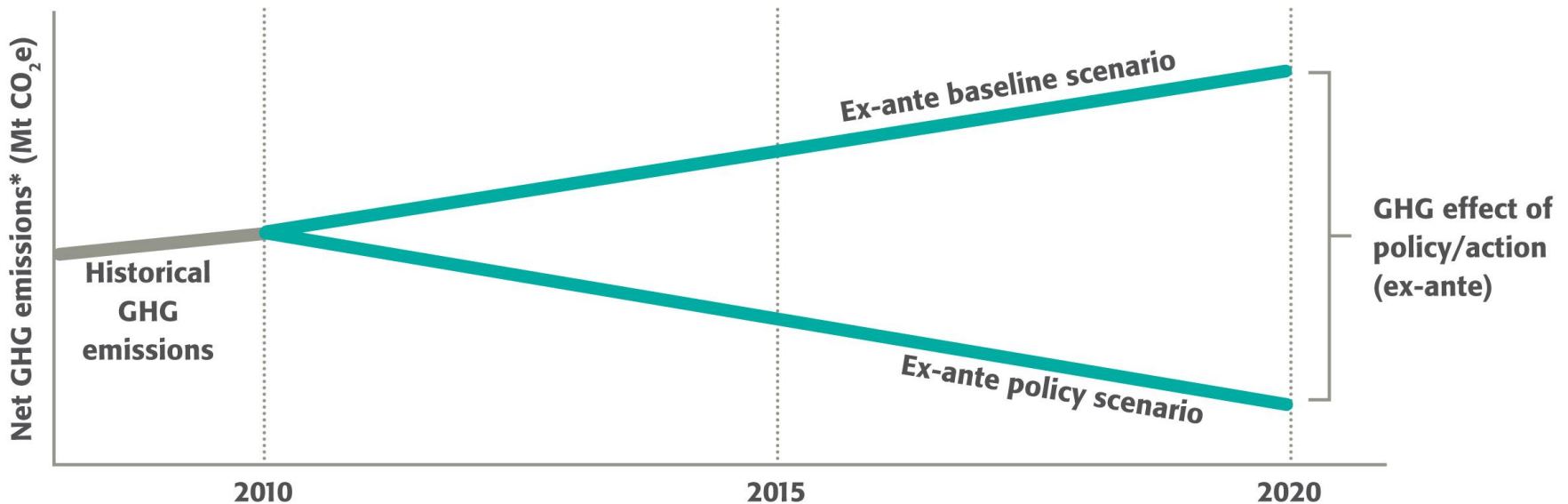


RESOURCES

How to estimate the greenhouse
gas effects of policies and actions

ESTIMATING THE GHG EFFECT OF A POLICY/ACTION

Total change in GHG emissions resulting from the policy or action (t CO₂e) = Total policy scenario emissions (t CO₂e) – Total baseline scenario emissions (t CO₂e)



Note: * Net GHG emissions from sources and sinks in the GHG assessment boundary.

RESOURCES: CALCULATION TOOLS

Welcome to the Policy and Action Standard Tool
An accounting and reporting standard for estimating the greenhouse gas effects of policies and actions

The objective of the tool is to help a user estimate the greenhouse gas effect of a policy or action in line with the Policy and Action Standard. The tabs across the top are organized by chapter to help you with the accounting steps. The reporting requirements are compiled on the final tab.

[Go to GHG Protocol website](#)

This tool uses macros. These must be enabled in Excel before this tool will function properly.

Although this tool caters for many different uses of the standard, it may still be necessary to undertake more complex calculations outside of the tool. In these cases, summary results can still be used within this tool.

How to use this tool:
The navigation tabs at the top of each page align with Chapters 5 to 14 in the standard. Navigate through the tabs from left to right filling in the relevant information as you progress. There is the option to print out each page. A summary is provided on the reporting page.

Start by clicking on the 'Define Policy or Action' tab.

Data entry fields are color-coded as follows to guide you:

Overall steps	Detailed steps	Chapter
Define policy/action	Define the policy or action to be assessed; choose ex-ante or ex-post assessment	5
Identify effects	Identify all potential GHG effects of the policy or action; include them in a map of the causal chain	6
	Define the GHG assessment boundary around significant effects; identify the sources/sinks in the boundary	7
Estimate baseline emissions	Estimate baseline emissions for all affected sources/sinks included in the boundary	8
	Ex-ante assessment: Estimate policy scenario emissions for affected	9

Welcome to the Mitigation Goal Standard Tool
An accounting and reporting standard for national and subnational greenhouse gas reduction goals

The objective of this tool is to help the user through the steps required to design and assess a mitigation goal, including accounting and reporting. The tabs across the top are organized by chapter to help you work through the steps detailed within the Mitigation Goal Standard.

[Go to GHG Protocol website](#)

This tool uses macros. These must be enabled within Excel for this tool to function properly. Performance will be improved if no other Excel workbooks are open when using this tool.

Although this tool caters for many different uses of the standard, it may still be necessary to undertake more complex calculations outside of the tool. In these cases, summary results can still be used within the tool.

How to use this tool:
The navigation tabs at the top of each page approximately align with Chapters 4 to 11 in the standard. Navigate through the tabs from left to right filling in the relevant information as you progress. There is option to print out each page. A summary is provided on the reporting page.

Start by clicking on the 'Define Goal Boundaries' page.

Overarching steps	Detailed steps	Chapter
Define goal/methods	Design a mitigation goal	
	Estimate base year or baseline scenario emissions	
	Account for the land sector	
Calculate allowable emissions	Calculate allowable emissions in the target year(\$)	
Assess progress /	Assess progress during the goal period	

<http://ghgprotocol.org/policy-and-action-standard>

<http://ghgprotocol.org/mitigation-goal-standard>

RESOURCES: E-LEARNING COURSES - MITIGATION GOAL & POLICY AND ACTION STANDARDS

<http://www.ghgprotocol.org/training-capacity-building>

Transcript

GREENHOUSE GAS PROTOCOL

WELCOME

Mitigation Goal Standard
Course Introduction

This module takes about 3 minutes to complete.

WORLD RESOURCES INSTITUTE

The screenshot shows the introductory slide for the 'Mitigation Goal Standard' course. It features a background image of a dirt road winding through a green field with several wind turbines in the distance and a flock of sheep in the foreground. The interface includes a 'Transcript' button in the top right, the 'GREENHOUSE GAS PROTOCOL' logo in the top left, and a yellow 'WELCOME' banner. The course title is prominently displayed in the center, and a progress indicator at the bottom shows two out of three circles filled.

Transcript

GREENHOUSE GAS PROTOCOL

WELCOME

Policy and Action Standard
Introduction

This module takes about 6 minutes to complete.

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Next

The screenshot shows the introductory slide for the 'Policy and Action Standard' course. It features a background image of a small green seedling growing out of dark brown soil. The interface includes a 'Transcript' button in the top right, the 'GREENHOUSE GAS PROTOCOL' logo in the top left, and a teal 'WELCOME' banner. The course title is prominently displayed in the center, and a progress indicator at the bottom shows one out of three circles filled. A 'Next' button is visible in the bottom right corner.

RESOURCES: ICAT GUIDANCE FOR ASSESSING IMPACTS OF POLICIES AND ACTIONS

(1ST DRAFT – JUNE 2017)

- Sector guidance for assessing greenhouse gas impacts of policies and actions
 - Agriculture
 - Forestry
 - Energy
 - Transport
- Sustainable development impacts guidance
- Transformational change guidance
- Non-state action guidance
- Stakeholder participation guidance
- Finance guidance
- Verification guidance

SUMMARY: DATA COLLECTION

Targets:

- GHG inventory
- Land sector, transferable emissions units (if applicable)
- Baseline scenarios in case of baseline scenario goals

Policies/actions

- Results: GHG effects
 - Defined by GHG quantification method and the policy type
 - Baseline scenario and policy scenario
 - Activity data, emission factors, and socioeconomic data
- Results: Non-GHG effects
 - Defined by type of non-GHG effect under consideration
 - Typically include socioeconomic related to employment, health, and air quality
- Progress towards implementation
 - Policy administration, finance, compliance and enforcement

TRACKING ADAPTATION COMPONENTS

Around 89% of the INDCs include adaptation

Most INDC adaptation component contain language about what the country hopes to achieve in adaptation and framed in three different ways;

- 27 INDCs includes outcome goals
- 47 INDCs includes Process goals
- 31 INDCs includes Vision Statements

DEFINING AND TRACKING SUCCESS: ADAPTATION CHALLENGES

- No standard indicators, metric, or measure
- Enormous diversity of interventions
- Long time horizons
- Complexity of vulnerability drivers
- Moving from pilot projects to transformational change (goals of various types)
- Success across scales: citizen, city, district, country, region, the globe
- Data gaps

ONE CRITICAL FIRST STEP: ADAPTATION

- Make goals more “SMART” (Specific, Measurable, Achievable, Realistic, and Time-bound) and break them down into discrete objectives or benchmarks.
- Link goals to existing programs/policies that are “SMART”

SYNERGIES WITH OTHER OBJECTIVES

- Tracking progress towards NDCs can help track progress towards other goals (e.g. SDGs)
- Opportunity to show progress is made towards multiple objectives and build support
- Beneficial to build a system that tracks both GHG and SD effects of climate action
- Tracking of implementation can enhance efficiency of implementation of policies unrelated to climate

Supported by:



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

based on a decision of the Parliament
of the Federal Republic of Germany

THANK YOU

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