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FORESTS AS PART OF INTENDED NATIONAL DETERMINED CONTRIBUTION (INDC)

Design options, data and analysis, and transparent communication

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JUNE 7 2015

ORIGIN OF INDCS -1

- **Intended National Determined Contribution - INDC-**

Created At UN- Framework Convention On Climate Change In Warsaw As Part Of COP-19 Decisions and Reiterated at Lima (Decision 1/CP.20) inviting all Parties to develop and communicate INDCs

ORIGIN OF INDC - 2

- **Two types of pledges**
 - the current pre-2020 actions
 - the post 2020 action – **the INDC**

TIMELINE FOR INDC

- Current around 13 INDC's submitted
 1. EU
 2. USA
 3. Norway
 4. Switzerland
 5. Morocco
 6. Gabon
 7. Mexico
 8. Peru
 9. Russia
 10. Ethiopia
 11. CanadaOthers
- Expected all INDC Submitted to UNFCCC in September

WHAT IS A INDC, WHAT SHOULD BE IN IT - 1

- This presentation will look at guidance on what can constitute a “good” INDC
- “Good” seen from the countries and Climate
 - achievable for country,
 - **linked to countries goals** in:
 - climate change
 - Land use plans
 - Development goals

WHAT IS A INDC, WHAT SHOULD BE IN IT - 2

- INDC is **a plan** of how to achieve GHG reduction goals linked to countries own development goals
- INDC in general should indicate
 - What are the **targets**
 - How plan to achieve them – **actions**, policies, projects
 - How to **measure the progress** and target
- This presentation will go deeper into guidance what INDC **can** contain (there is **no** fixed format-these are all guidelines)

OVERVIEW OF PRESENTATION

- Background on Guidance Document
- Data and Analysis
- Design Options
- Transparent Communication

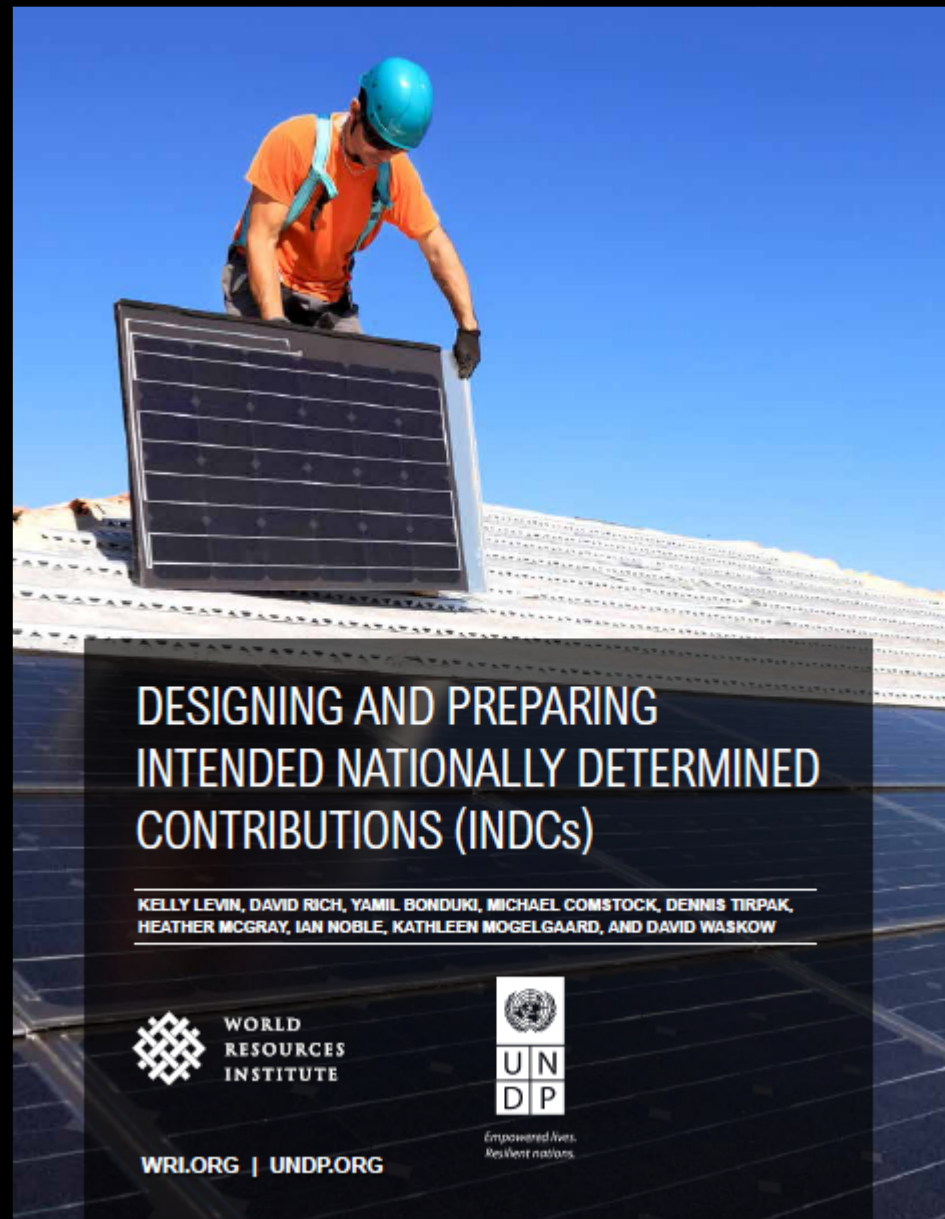
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**WORLD
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UNITED NATIONS
DEVELOPMENT
PROGRAM**

**INDC GUIDANCE
DOCUMENT**

[http://www.wri.org/publication/
designing-and-preparing-indcs](http://www.wri.org/publication/designing-and-preparing-indcs)



OTHER DOCUMENTS - 1

- Guidance on the preparation of and sources of support for INDCs - www.unfccc.int/focus/indc_portal/items/8766.php
- United Nation Convention to Combat Desertification, UNCCD – **INDCs for the land-use sector**
- A Guide to INDCs- CDKN - <http://cdkn.org/wp-content/uploads/2015/04/CDKN-Guide-to-INDCs-Revised-May2015.pdf>

OTHER DOCUMENTS - 2

- **International Partnership on Mitigation and MRV** provides links to guidance produced by other organisations -
www.mitigationpartnership.net/indcs-related-documents
- **GACMO Model** to make an analysis of the GHG mitigation options for a country to be used in the INDCs. The outcome of the use of the GACMO Model is a table providing an overview of the cost and impact of different mitigation initiatives, outputted in the format of a table and an Abatement Revenue Curve -
www.cdmpipeline.org

OTHER DOCUMENTS - 3

- General way of how to measure removals the IPCC (2006) guidelines on AFOLU GHG inventories (<http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html>), comprehensive guidance and a range of default values and stock change factors for estimating emissions/removals resulting from land use changes.



DESIGNING AND PREPARING INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDCs)

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DEVELOPMENT OF THE GUIDANCE

- 6 dialogues (500+ participants, 110+ developing countries, others)
- Objectives:
 - Discuss technical elements, institutional context, and consultative processes for preparing the INDCs
 - Exchange experiences about relevant themes in INDCs
 - Practical exercises to identify key aspects and decisions of INDC design

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TABLE OF CONTENTS

OVERALL STEPS	CHAPTER TITLE	CHAPTER
PART I	OVERVIEW OF INDC PREPARATION AND DESIGN	1-5
Identify objectives	Background on INDCs	1
Prepare and initiate process	How can Parties organize a national process to prepare an INDC?	2
	What data and analysis can inform an INDC?	3
Choose INDC form	What form can the INDC take?	4
Communicate	How can Parties communicate their INDC transparently?	5
PART II	TECHNICAL GUIDANCE	6-8
Choose design: mitigation	What options exist for the design of the INDC for mitigation?	6
Choose design: adaptation	What options exist for the design of the INDC for adaptation?	7
Identify resource needs	What means can Parties use to implement the INDC?	8

INDC PLANNING - PURPOSE

- Identify sectors and greenhouse gases that should be prioritized

This includes Forestry and Land use.

- Reduced Deforestation and Restoration important in Congo Basin. Likely the biggest contribution to Mitigation is the Forest sector

UNFCCC – 5 SECTORS - 1

• 1. Energy

- Fuel Combustion
 - Energy industries
 - Manufacturing industries and construction
 - Transport
 - Other sectors
- Fugitive emissions from fuels
 - Solid fuels
 - Oil and natural gas and other emissions from energy production
 - CO2 transport and storage

• 2. Industrial processes and product use

- Mineral industry
- Chemical and Iron&Steel industry
- Non-energy products from fuels/solvent use
- Electronic industry
- Product uses as substitutes for ODS
- Other product manufacture and use
- Other

• 3. Agriculture

- Enteric fermentation
- Manure management
- Rice cultivation
- Agricultural soils
- Field burning of agricultural residues
- Other

UNFCCC – 5 SECTORS – 2

- 4. Waste
 - Solid waste disposal
 - Biological treatment of solid waste
 - Incineration and open burning of waste
 - Wastewater treatment and discharge
 - Other

- 5. Land Use, Land-Use Change and Forestry
 - Afforestation
 - Reforestation
 - **Restoration**
 - Deforestation
 - Forest management
 - Cropland management
 - Grazing land management
 - Or equivalent land-based accounting using UNFCCC reporting categories
 - Other categories

ETHIOPIA'S EXAMPLE OF FOREST IN INDC

The plan to mitigate GHG emissions is built on the following four pillars:

1. Improving crop and livestock production practices for greater food security and higher farmer incomes while reducing emissions;
2. Protecting and re-establishing forests for their economic and ecosystem services, while Sequestering significant amounts of carbon dioxide and increasing the carbon stocks in landscapes;
3. Expanding electric power generation from renewable energy;
4. Leapfrogging to modern and energy efficient technologies in transport, industry and building sectors

INDC PLANNING – DATA

- Ensure INDC is:
 - Realistic and achievable
 - Ambitious
 - Aligned with the objective of the Convention
 - Aligned with national priorities

REALISTIC – ACHIEVABLE - DATA AVAILABILITY

- Start with the data you have: the data and analysis needed may already be available
- Collecting significant amounts of new data or conducting new analysis may not be necessary
- If there are data gaps, use whatever information does exist, and use proxy data to fill data gaps where necessary

CAMEROON FOREST ATLAS

Atlas Forestier du Cameroun Ministère des Forêts et de la Faune

search... Au sujet de | Télécharger de données | Sources | Imprimer | English | Français

Couches | Fond de carte

Tout sélectionner | Tout effacer

- Permis miniers
- Zones agricoles
- Zones de chasse
- Assiettes annuelles de coupe
- Unités forestières d'aménagement
+ Transparence [slider]
- Aires protégées
+ Transparence [slider]
- Forêts communales

WRI Forest atlases is a good first step to understand what data exist, what projects and policies can contribute to mitigation

WRI-Climate – coming soon: developed from UMD annual data and new Carbon emission data (Woodshole) 30 m global emission profiles

Malabo

0 100 200km

WORLD RESOURCES INSTITUTE

Esri, DeLorme

- Classée
- En cours de création
- Forêts communales
- Classée
- En cours

NORWEGIAN MINISTRY OF THE ENVIRONMENT | USAID FROM THE AMERICAN PEOPLE

TYPES OF INFORMATION (1 OF 2)

TYPE OF INFORMATION	PURPOSE OF INFORMATION	EXAMPLES OF DATA SOURCES
Internationally communicated pre-2020 GHG emissions reduction plans	Provide a starting point for the post-2020 contribution	Submissions to the UNFCCC under the Copenhagen Accord, Cancun Agreements, Kyoto Protocol ^a
National objectives and priorities	Ground the contribution in the broader national context, understand how it can help achieve non-climate benefits, and ensure that the contribution is “nationally determined”	Laws, climate change strategy, economic development strategies and plans, energy planning and policies, transportation plans, water plans, coastal zone plans, agriculture plans, forest protection and management plans, electricity plans, green growth plans, five-year budget documents
Current GHG emissions profile of the country	Identify which sectors and gases contribute most to national emissions	Latest national GHG inventory (based on IPCC <i>Guidelines for National Greenhouse Gas Inventories</i>). If not available, proxies for estimating current GHG emissions profiles, governmental annual estimates. Sources may include inventory reports, Biennial Reports and Biennial Update Reports, and National Communications, sector specific analyses
Current mitigation activities	Identify current efforts that an INDC can build upon	Clean Development Mechanism (CDM) projects, nationally a t e l c g P Sources may include: National Communications, Biennial Reports or Biennial Update Reports

REDD + Activities from UN-REDD, FCPF and others

TYPES OF INFORMATION (2 OF 2)

TYPE OF INFORMATION	PURPOSE OF INFORMATION	EXAMPLES OF DATA SOURCES
<p>Projected future emissions under a business-as-usual scenario (or other scenarios)</p>	<p>Understand expected growth in emissions by sector in the future, taking into account current mitigation activities</p>	<p>National Communications, Biennial Reports or Biennial Update Reports, national energy or environmental reports, economic projections, International Energy Agency (IEA),^b U.S. Energy Information Administration (EIA),^c Climate Action Tracker^d</p>
<p>Assessment of mitigation potential</p>	<p>Identify additional mitigation technologies, opportunities, policies, and actions that are technically and economically feasible, as a basis for determining the scale of GHG reductions that could be feasibly achieved; identify barriers that are preventing realization of mitigation potential</p>	<p>National mitigation assessment studies, abatement cost curves, IEA reports,^e Climate Action Tracker,^f UNFCCC mitigation assessment resources,^g The Integrated Climate Modeling and Capacity Building Project in Latin America (CLIMACAP),^h MAPS (Mitigation Action Plans and Scenarios) Programme,ⁱ UNEP Climate Technology Centre and Network,^j LEDS Global Partnership remote expert assistance on LEDS service and list of resources and tools,^k MARKAL,^l TIMES modeling tools,^m McKinsey & Company GHG abatement cost curvesⁿ</p>
<p>Relationship to global 2°C goal</p>	<p>Understand the scale of GHG reductions needed to limit warming and avoid the most dangerous climate change impacts</p>	<p>IPCC Fifth Assessment Report,^o IPCC Fourth Assessment Report, fairness indicators and principles^p</p>
<p>Resource mobilization strategies</p>	<p>Facilitate the assessment of the feasibility of mitigation scenarios, taking into account resource requirements (including budgetary, technological and human resources), and strategies to mobilize public and private, national and international investments in support of the implementation of actions, communicate resource needs</p>	<p>An estimation of financing needs to mitigate at different levels; domestic budgetary expenditures for business-as-usual (brown) projects and programs in key sectors and estimated investments for mitigation (green) options; current and planned investments by the private sector in key sectors; data on bilateral and multilateral financial support provided to the country; types of capacity needs, including human, technical, institutional, and financial capacity</p>

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KEY DESIGN OPTIONS

- Choose sectors and gases
- Choose actions and/or outcomes
- Choose timeframe
- For actions, choose actions
- For outcomes, choose type of outcome and way of expressing target
- Choose level of reductions

CHOOSE SECTORS AND GASES

Five IPCC sectors

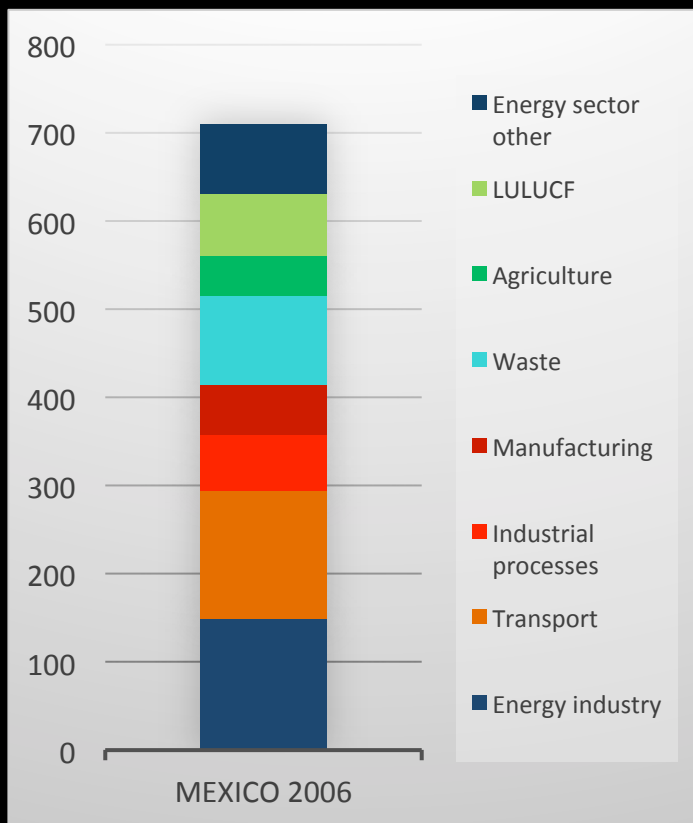
- Energy
 - Subsectors
- Industrial processes and product use (IPPU)
- **Agriculture, forestry and other land use (AFOLU)**
- Waste
- Other

Seven gases

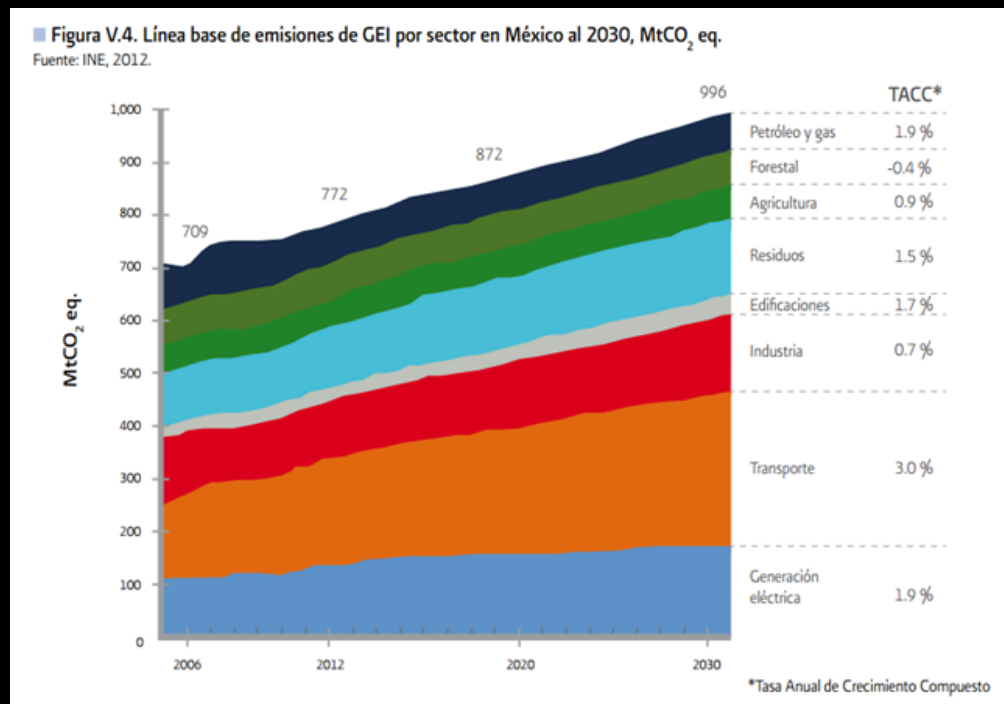
- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)
- Nitrogen trifluoride (NF₃)

- In general should prioritize sectors and gases that contribute most to national emissions (based on the inventory) and/or are projected to contribute most in the future – **In this region FOREST , RESTORATION and LAND USE is likely the most important- Focus on most important issues**

EXAMPLE OF MEXICO



Largest source of emissions is the energy industry sector



Largest growth of emissions is expected in the transport sector

CHOOSE ACTIONS AND/OR OUTCOMES

- **Action:** An intent to implement specific means of achieving GHG reductions, such as **Policies, Projects (e.g. REDD+)** or other mitigation actions
- **Outcome:** An intent to achieve a specific result (for example, reduce GHG emissions to a specific level)
 - Greenhouse gas outcomes
 - Non-GHG outcomes (such as renewable energy outcomes)
- A combination of action(s) and outcome(s)

ADVANTAGES AND DISADVANTAGES: ACTIONS VS OUTCOMES

ACTIONS:

Advantages	Disadvantages
<ul style="list-style-type: none">• <u>Provides clarity on specific means</u> of achieving GHG reductions• <u>Can offer implementing Parties more certainty that the contribution will be achieved</u>, since it is a commitment to implement an action rather than obtain a certain outcome	<ul style="list-style-type: none">• <u>Poses challenges to aggregate GHG reductions</u> across Parties' contributions since the contribution is not stated in terms of GHG emissions• Where possible Parties should communicate an estimate of the GHG and/or non-GHG outcomes associated with the actions (which is <u>more resource-intensive</u> than tracking progress toward outcomes)



ADVANTAGES AND DISADVANTAGES: ACTIONS VS OUTCOMES

OUTCOMES (NON-GHG):

Advantages	Disadvantages
<ul style="list-style-type: none">• <u>Provides flexibility</u> in how to achieve the outcome (as opposed to actions)• <u>Relatively simple to track progress</u> by tracking key performance indicators (e.g., energy efficiency of sectors, renewable energy generation)	<ul style="list-style-type: none">• <u>Poses challenges to aggregate</u> GHG reductions across Parties' contributions, since not stated in terms of GHG emissions reductions• <u>Can restrict flexibility to a certain sector</u> (such as energy efficiency or renewable energy generation) (as opposed to GHG outcomes)• <u>May offer less certainty that the contribution will be achieved</u> because underlying policies/actions may not be identified/communicated

Advantages and disadvantages: Actions vs outcomes

Outcomes (GHG):

Advantages	Disadvantages
<ul style="list-style-type: none">• <u>Offers the most flexibility</u> on how to achieve GHG reductions, through any policies/actions in any sectors, to be decided based on domestic circumstances, which may change over time, rather than committing to specific policies or actions internationally• Depending on target type, <u>easier to track progress</u> toward than actions, since may only require national GHG inventory as the basis, rather than more detailed sector-level data• <u>Enables aggregation</u> of GHG reductions across Parties' contributions	<ul style="list-style-type: none">• <u>May not offer clarify on specific means</u> of achieving GHG reductions, if underlying actions are not also communicated and as a result may offer less certainty of implementation

CHOOSE TIMEFRAME

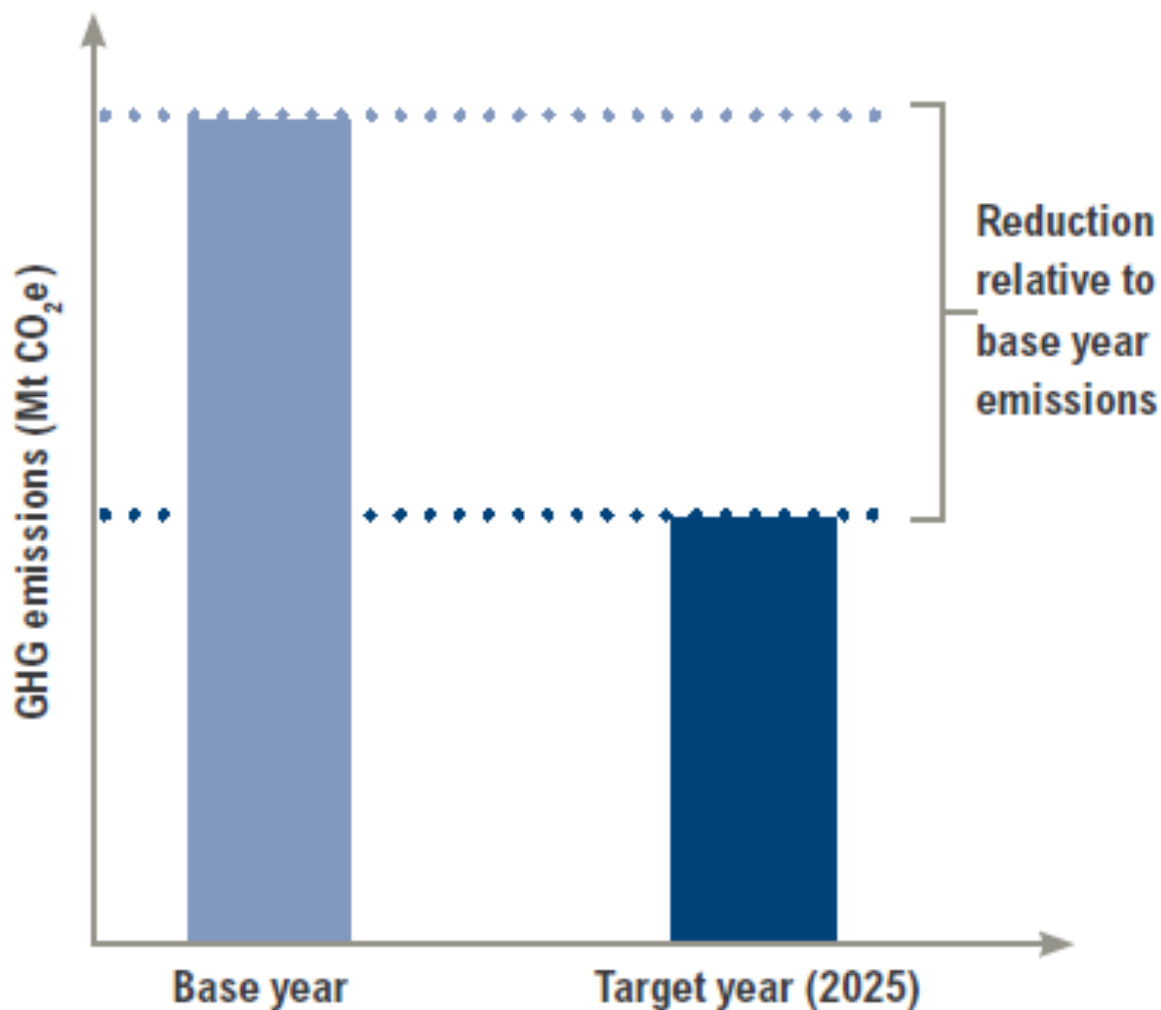
- For actions



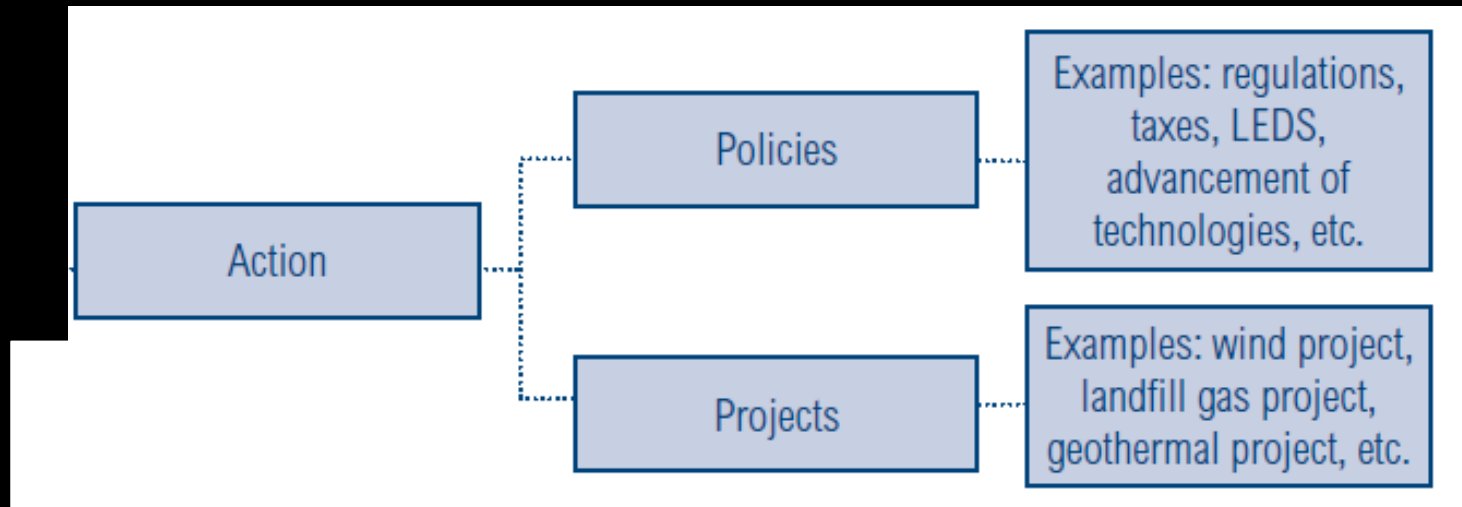
CHOOSE TIMEFRAME

- For outcomes:
 - Base year (if relevant)
 - Single or multi-year target
 - Target year(s)
 - Whether to set a long-term target

Base year and target year for a single-year target

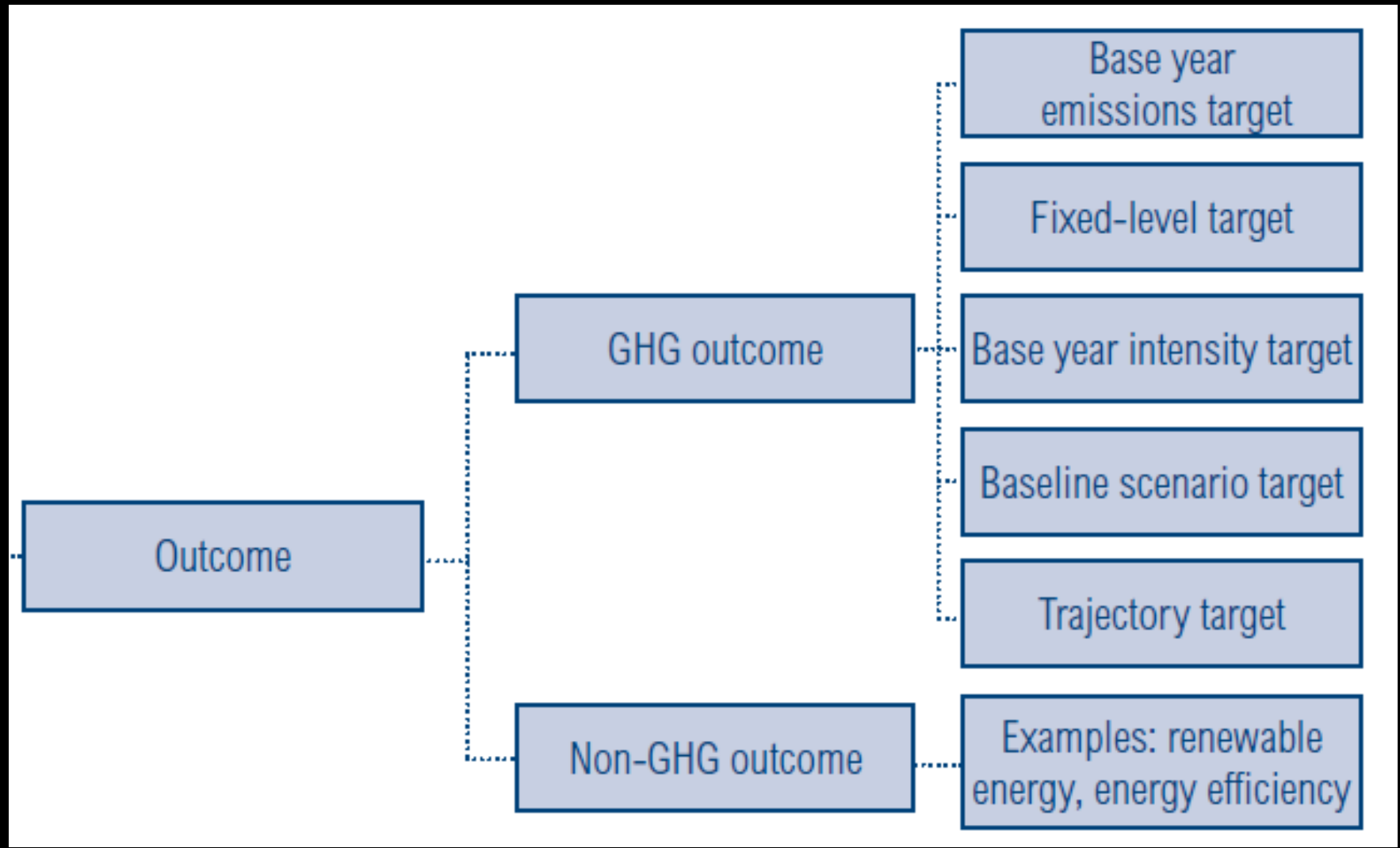


FOR ACTIONS, CHOOSE MITIGATION ACTIONS



- Possible criteria for selecting actions
 - Deliver multiple benefits
 - Aligned with development priorities
 - Feasible and cost-effective
 - Achieve significant GHG reductions

FOR OUTCOMES, CHOOSE TYPE OF OUTCOME

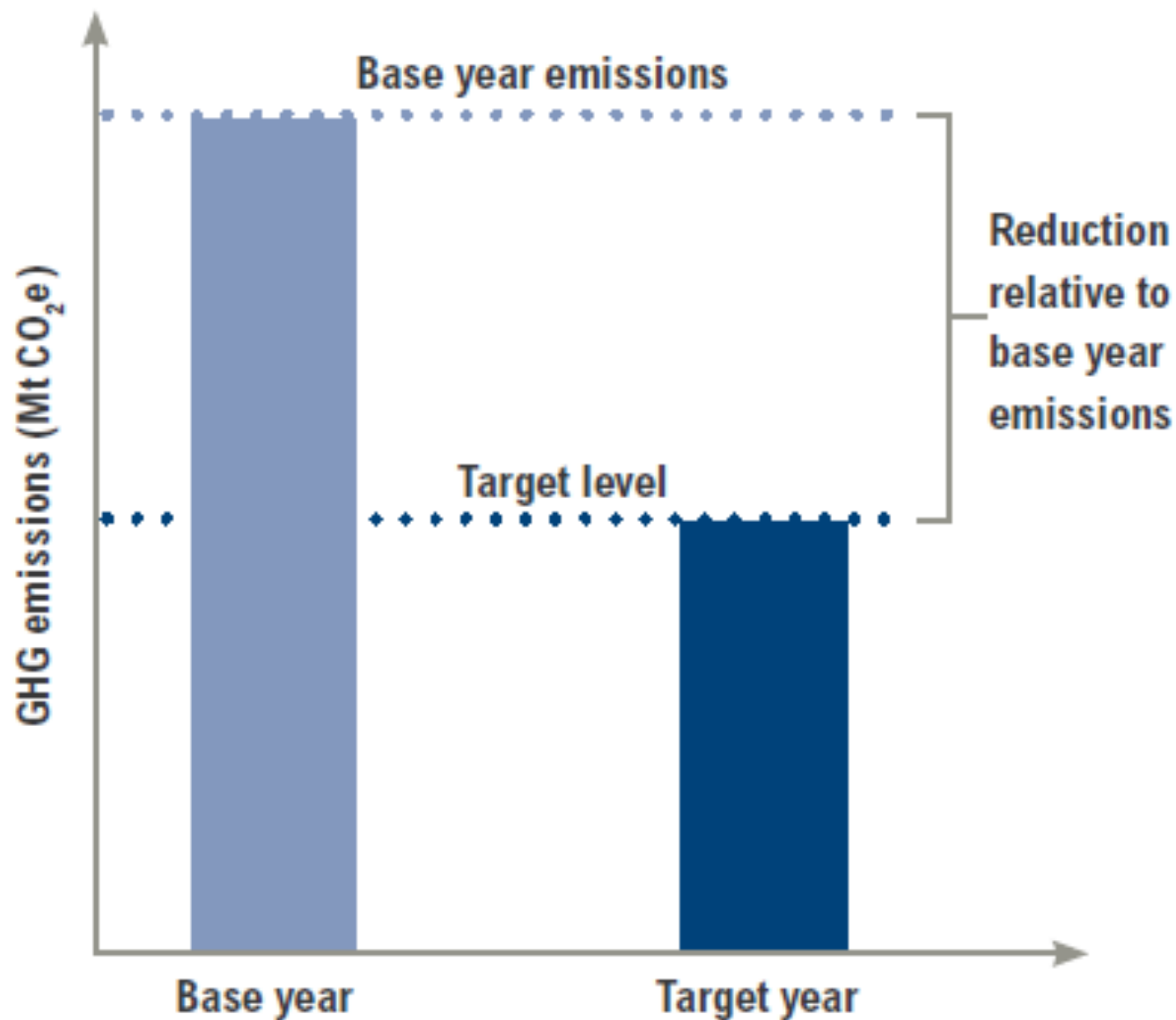


COMPARISON OF TARGET TYPES

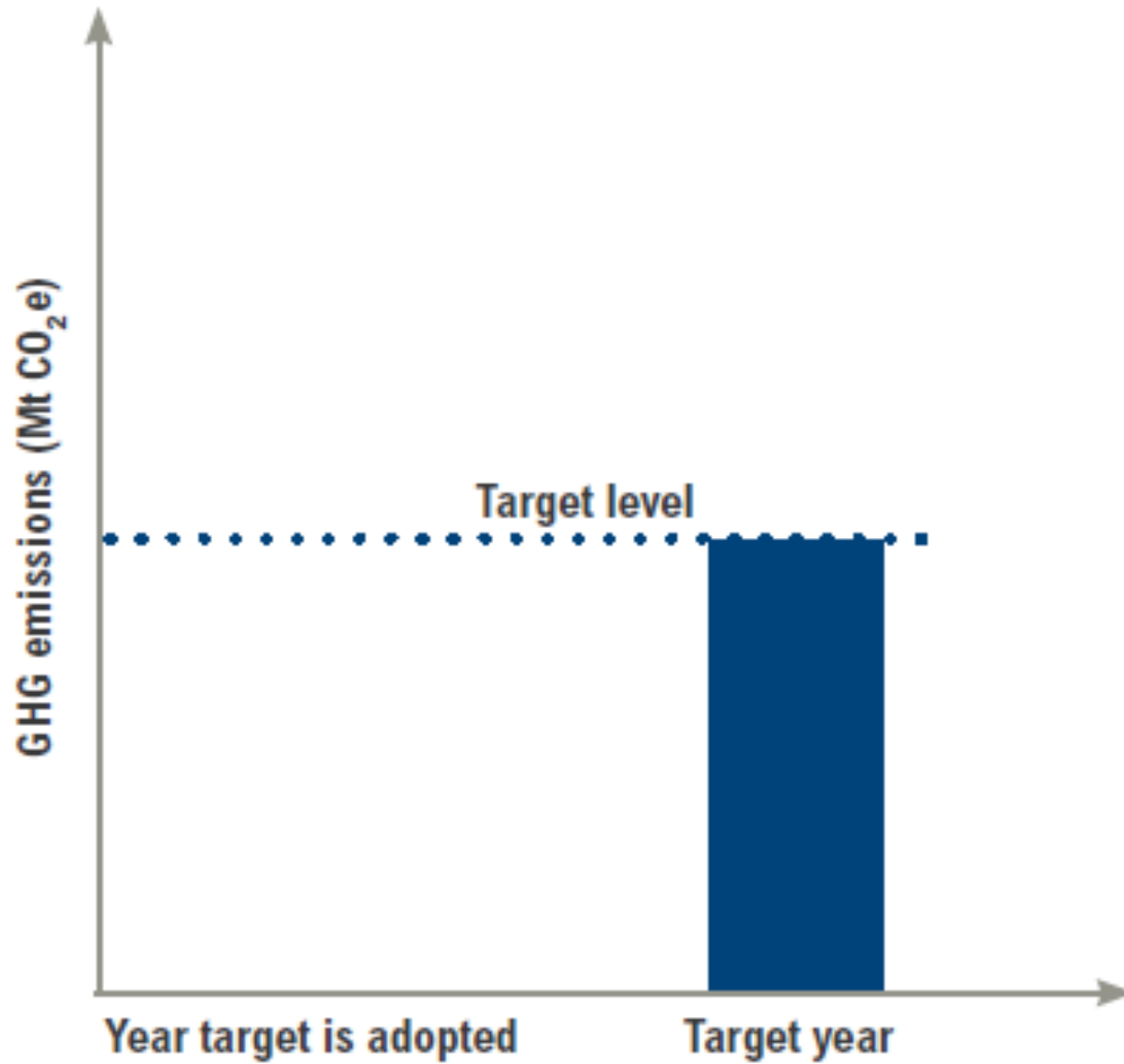
TYPE OF TARGET	REDUCTIONS IN WHAT?	REDUCTIONS RELATIVE TO WHAT?
Base year emissions target	Emissions	Historical base year
Fixed-level target	Emissions	No reference level
Base year intensity target	Emissions intensity	Historical base year

TYPE OF TARGET	REDUCTIONS IN WHAT?	REDUCTIONS RELATIVE TO WHAT?
Baseline scenario target	Emissions	Projected baseline scenario
Trajectory target^b	Emissions	No reference level

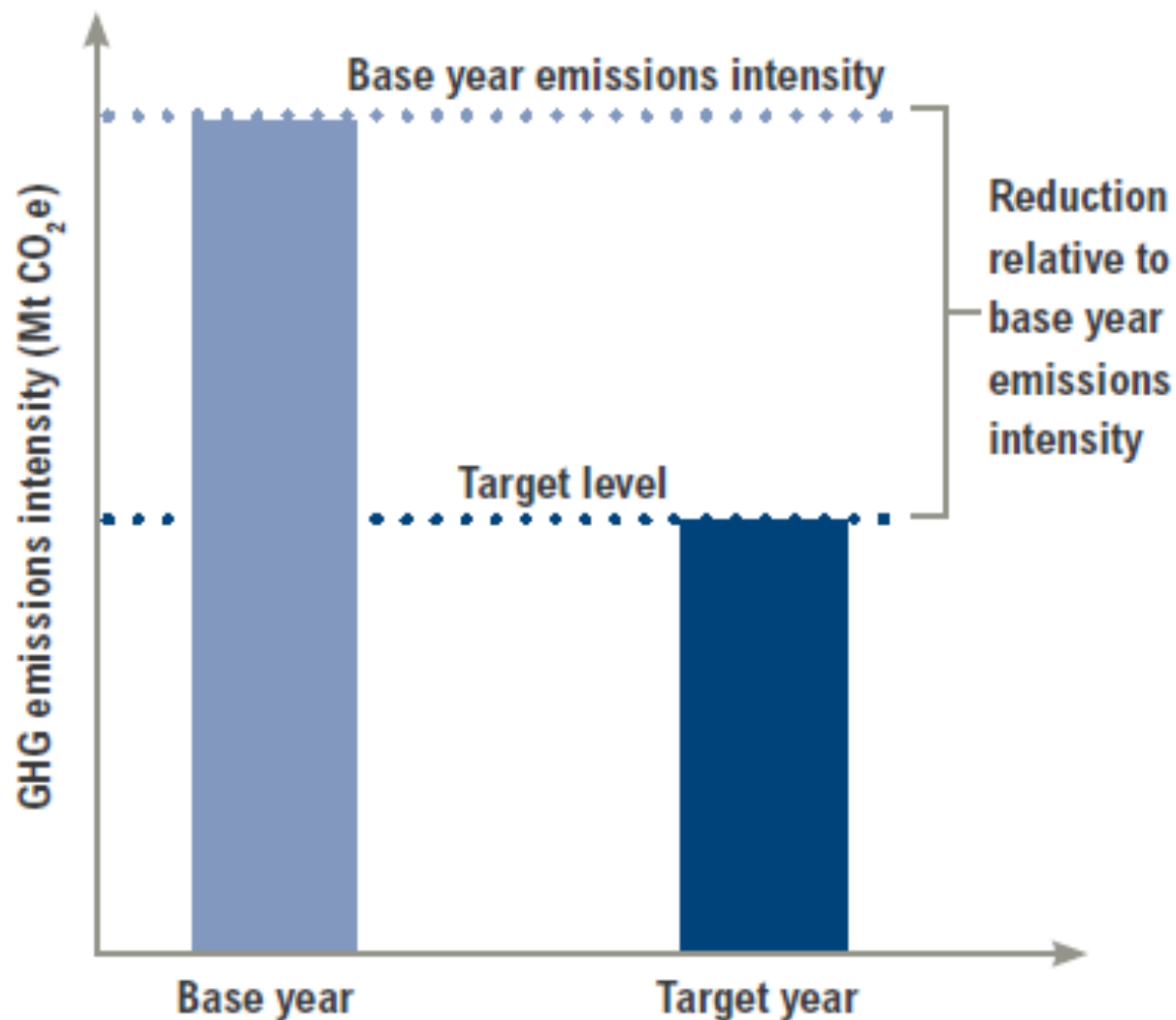
Base year emissions target



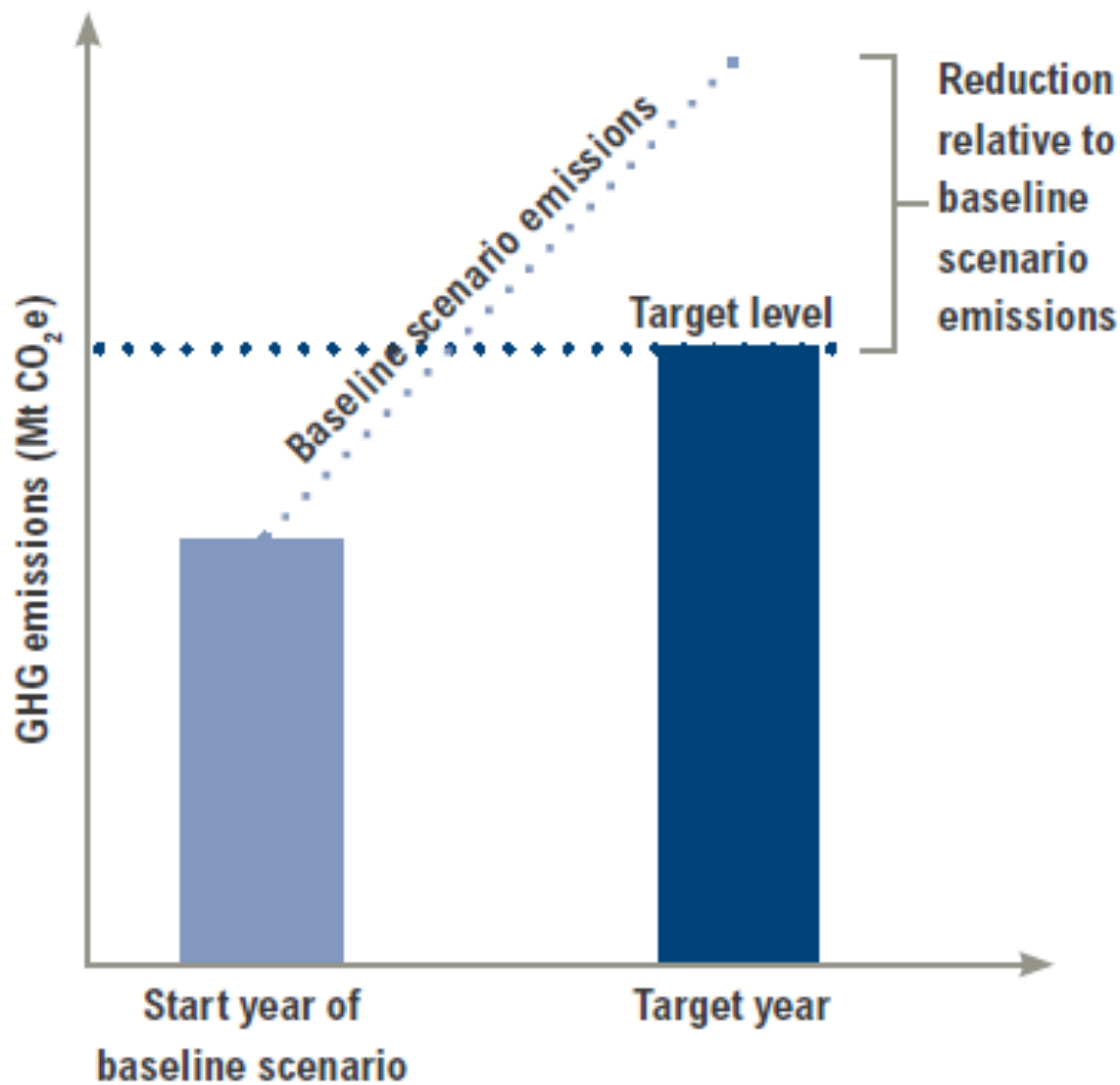
Fixed level target



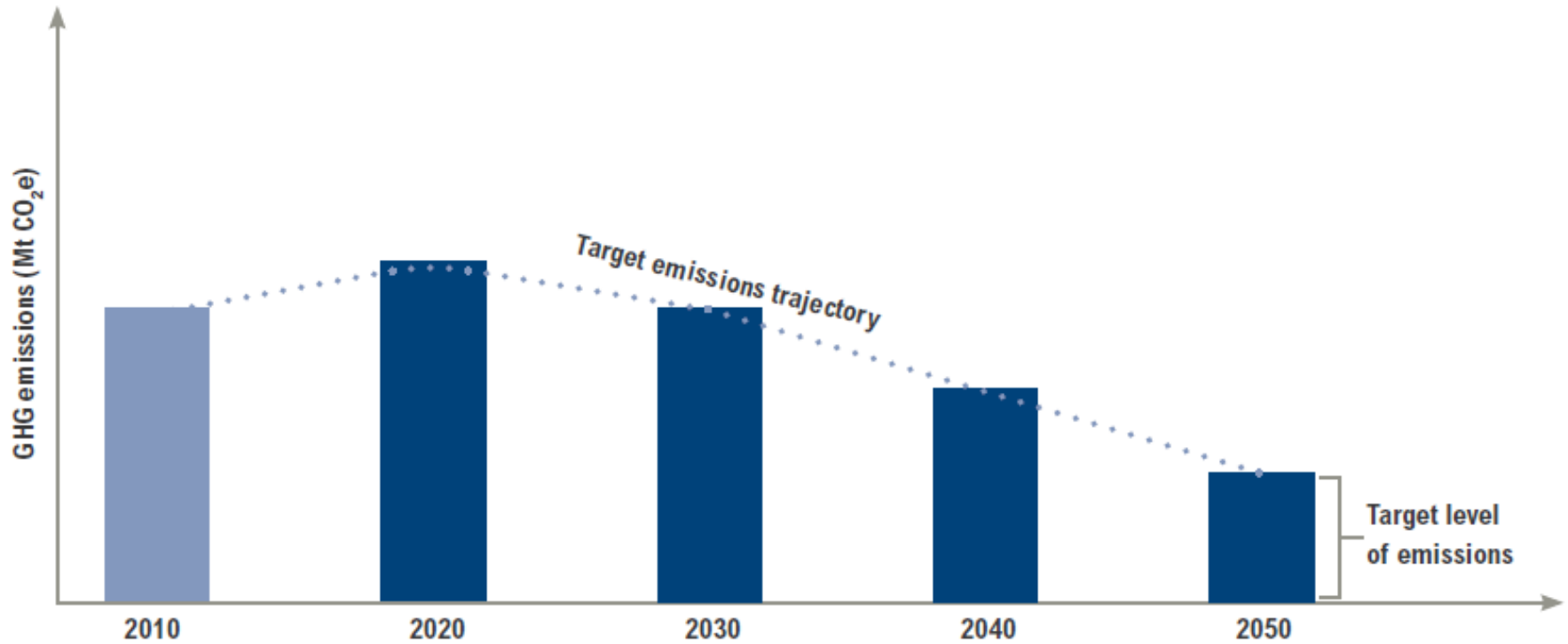
Base year intensity target



Baseline scenario target



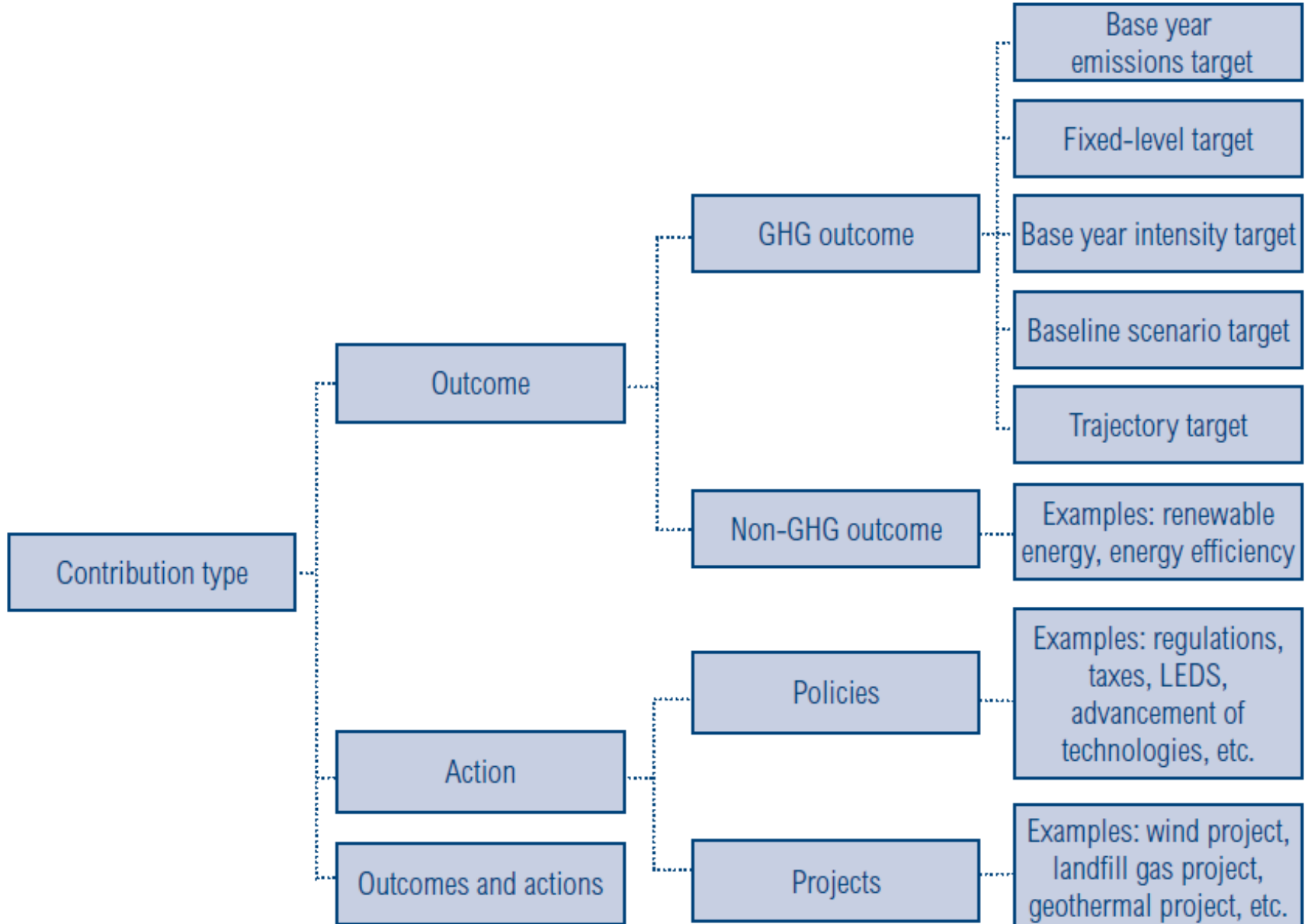
Trajectory target



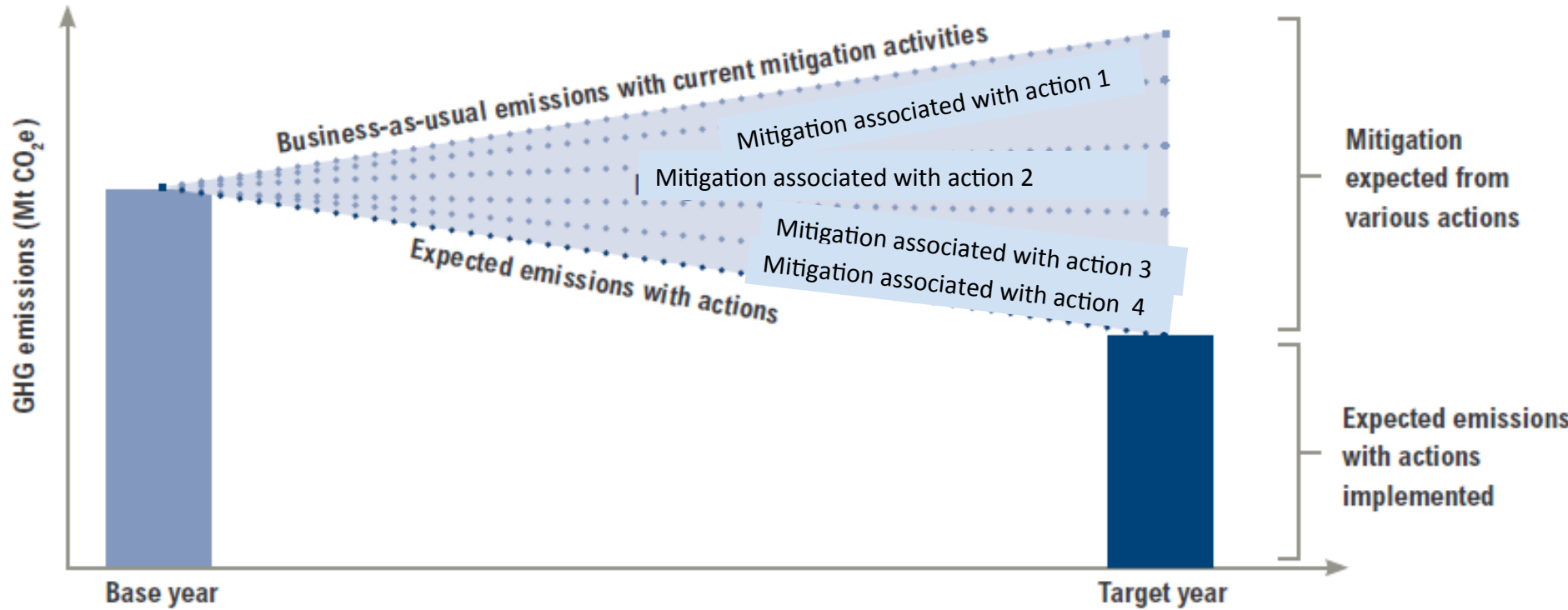
CONSIDERATIONS FOR CHOOSING WAY OF EXPRESSING TARGET

- Practicality and data needs
- Transparency and uncertainty
- Any type of target can lead to emissions increases or decreases

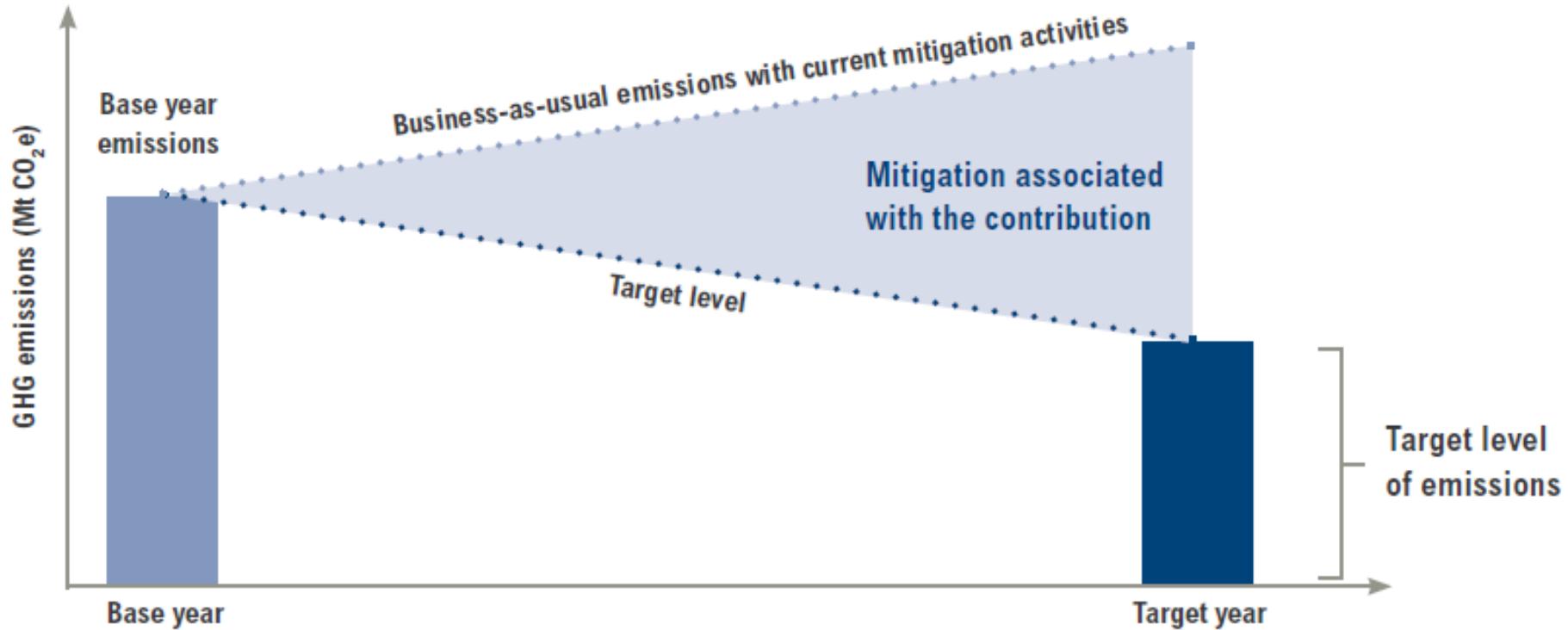
TYPES OF CONTRIBUTIONS



FOR ACTIONS, CHOOSE EXTENT OF ACTIONS

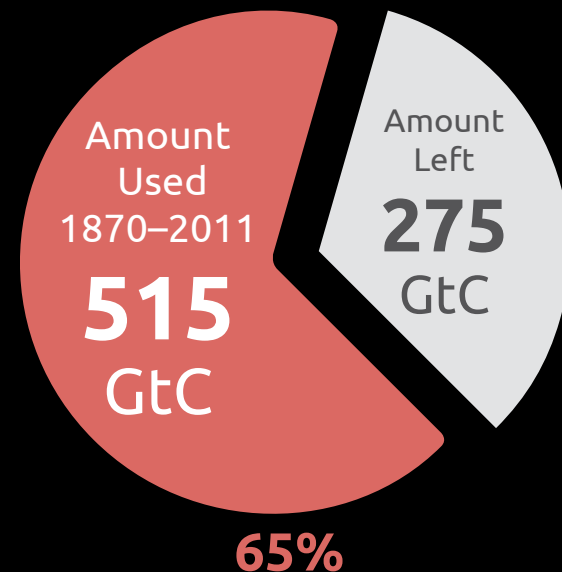
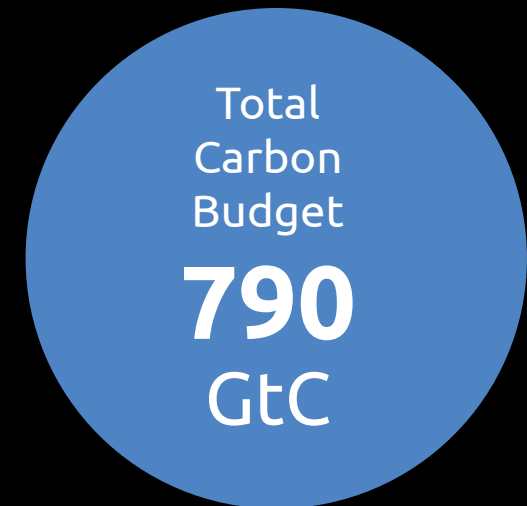


FOR OUTCOMES, CHOOSE TARGET LEVEL



CHOOSING LEVEL OF REDUCTIONS

- Factors to consider:
 - Realistic and achievable
 - Pursue mitigation opportunities that are technically and economically feasible (can be determined through mitigation assessment)
 - Ambitious
 - Below current BAU trajectory
 - Aligned with the objective of the Convention and the 2°C goal
 - Consider global GHG reduction needs



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WHY DOES TRANSPARENCY MATTER?

- Main purpose:
 - Facilitate the clarity, transparency and understanding of the intended contributions
 - Enable assessment of whether all INDCs are collectively sufficient to meet the global 2°C goal – if not, by how much
- Can also be useful to:
 - Enable comparison across diverse INDCs (type, scope, ambition, equity, etc.)
 - Enhance domestic implementation

UNFCCC DECISIONS

- COP 19 Warsaw, decision 1/CP.19
 - INDCs should be put forward in a manner that facilitates the **clarity, transparency and understanding** of the intended contributions
- COP 20 in Lima (paragraph 14)
 - *Agrees* that the information to be provided by Parties communicating their intended nationally determined contributions, in order to facilitate **clarity, transparency and understanding**, may include, as appropriate, inter alia, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2

CATEGORIES OF INFORMATION FROM PARA 14

1. The reference point (including, as appropriate, a base year)
2. Time frames and/or periods for implementation
3. Scope and coverage
4. Planning processes
5. Assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals
6. How the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2

EXAMPLE – GABON - 1



République Gabonaise

Contribution prévue déterminée au niveau national – Conférence des Parties 21
31 mars 2015

Contribution de la République Gabonaise

Conformément aux décisions 1/CP.19 et 1/CP.20 et à son plan stratégique de développement le Gabon communique, à travers ce document, sa contribution définie au niveau national (INDC) pour lutter contre les changements climatiques et l'ensemble des informations relatives.

Les éléments repris dans la Contribution Nationale du Gabon sont la synthèse des ambitions et des politiques publiques du Gabon qui, au moment d'opérer un tournant dans son développement, fait le choix de s'engager résolument dans un développement durable, basé notamment sur des émissions de GES maîtrisées.

Cette soumission revêt un caractère doublement important pour le Gabon, en raison d'une part, de l'engagement du Président de la République à mener une politique de développement durable et d'autre part, pour contribuer à l'effort mondial de réduction de la hausse de la température.

General
opening
statement

Goal that
contributes to
sustainability,
development
and climate
mitigation

EXAMPLE GABON -2

Type d'engagement	Réduction par rapport à un scénario de développement non maîtrisé
Périmètre	Ensemble des émissions de GES hors stockage de carbone dans la biomasse forestière
GES	CO ₂ , CH ₄ , N ₂ O (HFC, PFC, SF ₆ et NF ₃ seront couverts ultérieurement)
Année de référence	2000
Période	2010-2025 (période du Plan Stratégique Gabon Emergent) Ces analyses seront prolongées sur 2030, voire 2050 dans le cadre des études complémentaires qui seront menées avant la COP21
Niveau de réduction	Au moins 50% de réduction des émissions par rapport au scénario de développement non maîtrisé en 2025
Crédits carbone	Pas de réduction à partir d'achats de crédits carbone hors Gabon

scenario
development

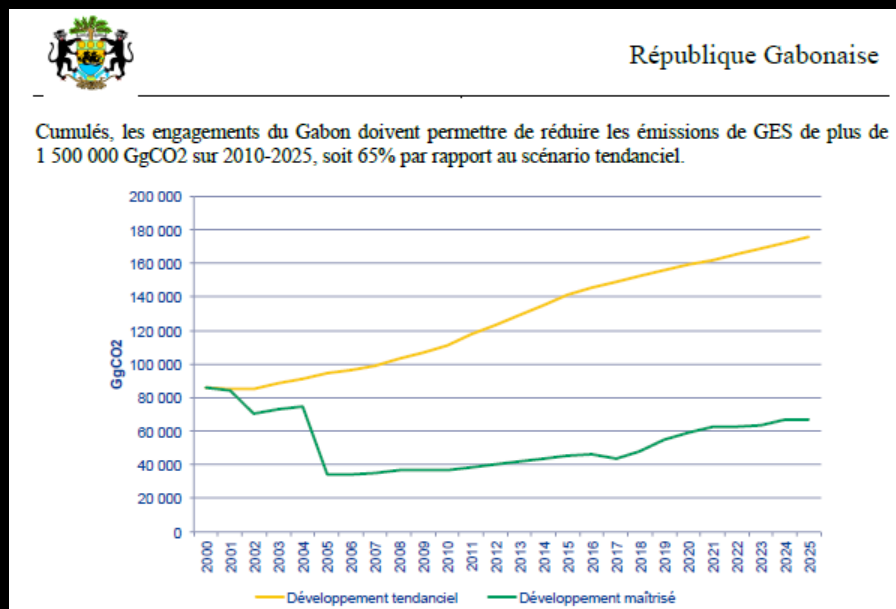
Which gasses
will be
measured

Reference year

Planning and implementing period

Ambition 50% !! And Target year

EXAMPLE GABON - 3

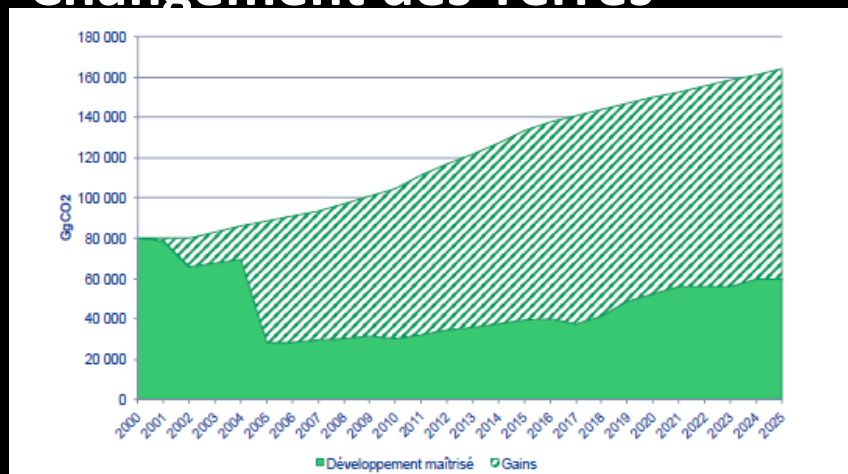


Modeled Business as usual

Modeled reduced emissions

EXAMPLE GABON – SPLIT GHG PER SECTOR

Changement des Terres -



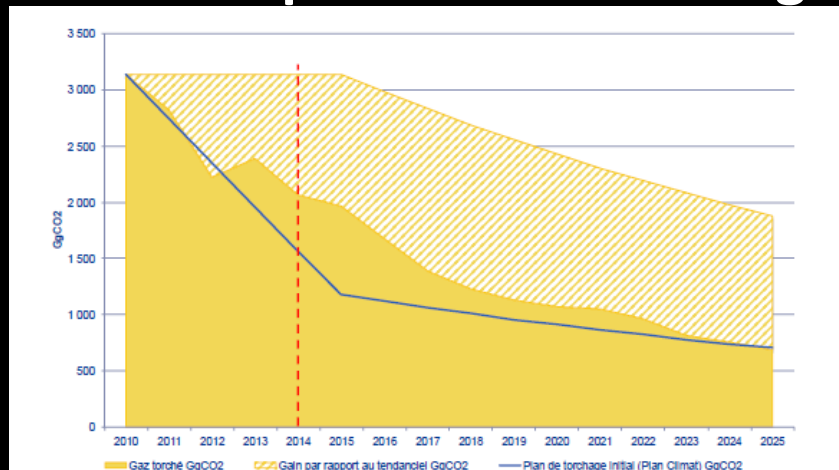
Par rapport à cette évolution, le scénario de développement maîtrisé repose sur :

- l'adoption d'un Code Forestier qui pousse les forestiers à étendre leurs rotations de 15 ans à 25 ans, avec des taux de dégâts inférieurs ;
- la création de 13 parcs nationaux en 2002 qui interdit l'exploitation forestière dans de vastes zones du territoire, suivie en 2012 par des restrictions sur de vastes zones de la province de l'Estuaire ;
- l'adoption d'un Plan National d'Affectation de Terre (PNAT) permettant d'allouer de manière optimale les zones aux différents usages, en excluant les forêts intactes, les forêts à haute valeur de conservation et les forêts particulièrement riches en carbone.



EXAMPLE GABON – SPLIT GHG PER SECTOR

Industrie pétrolière - Torchage -



l'adhésion en 2007 à l'initiative « Global Gas Flaring Reduction » (GGFR) de la Banque Mondiale, la promulgation en 2014 de la loi N° 011/2014 portant réglementation du secteur des hydrocarbures en République Gabonaise interdisant le torchage en continu au Gabon et ce, cadrant avec la participation du Gabon dès cette année à l'initiative « Zéro Torchage de Routine d'ici 2030 » lancée par le GGFR

GABON

- Gabon for every sector graphs with Business as usual and mitigation line. The GHG mitigation per sector is calculated as a combination policies that will or are implemented.
- Added a section on Adaptation and Finance

INDC TEMPLATE GUIDANCE

- Gabon is a good example, like several others of INDC
- Next slides are a possible template to guide countries in making a “good” INDC

WRI – TEMPLATE – REFERENCE - TIME

Introduction and national context (optional)

Elaboration on national circumstances (for example, emissions profile, mitigation potential) or other information/context

Summary of the INDC

For outcomes: type of target and target level

For actions: name or title of actions, legal status, implementing entity(ies), or other relevant information

The reference point (including, as appropriate, a base year)

Base year(s)/period, if relevant (for example, 2005)

Base year/period emissions, base year/period emissions intensity, or projected baseline scenario emissions, as relevant (for example, base year emissions of 500,000 MtCO_{2e} in 2005)

Time frames and/or periods for implementation

For targets/outcomes: target year(s)/period and peaking year (if applicable) (for example, 2025 or 2030 for a single year target; 2021-2030 for a multi-year target)

For actions: date actions comes into effect and date of completion (if applicable) (for example, 2020 with no end date)

Description of Party's long-term target(s), if applicable



EXAMPLE- GENERAL DESCRIPTION OF COUNTRY

Introduction and national context (optional)

Elaboration on national circumstances (for example, emissions profile, mitigation potential) or other information/context

CANADA

- As a vast Northern nation, Canada faces unique challenges in addressing climate change: a growing population, extreme temperatures, a large landmass, and a diversified growing economy with significant natural resources are some of the circumstances influencing Canadian greenhouse gas emissions. Despite these challenges, Canada has one of the cleanest electricity systems among G-7 and G-20 nations and one of the cleanest in the world, with almost 80% of our electricity supply already emitting no greenhouse gases. Since 2011, Canada's per capita greenhouse gas emissions have been at their lowest levels since tracking began in 1990 while the economy has continued to grow.

EXAMPLE- SUMMARY

Summary of the INDC

For outcomes: type of target and target level

For actions: name or title of actions, legal status, implementing entity(ies), or other relevant information

- Morocco's commitment is to reduce its GHG emissions by **32 % by 2030** compared to "business as usual" **projected emissions**.
- This commitment is contingent upon gaining access to New sources of finance and enhanced support, compared to that received over the past years, within the context of a new legally---binding agreement under the auspices of the UNFCCC.
- This target translates into a cumulative reduction of **401 Mt CO2eq over the period 2020---2030**. Meeting this target will require an **overall investment in the order of USD 45 billion**, of which USD 35 billion is conditional upon
- international support through new climate finance mechanisms, such as the Green Climate Fund



WRI – TEMPLATE – REFERENCE

The reference point (including, as appropriate, a base year)

Base year(s)/period, if relevant (for example, 2005)

Base year/period emissions, base year/period emissions intensity, or projected baseline scenario emissions, as relevant (for example, base year emissions of 500,000 MtCO_{2e} in 2005)

Base Year : 1990. XX Mt CO_{2e}

Target year: 2030

Period implementation: 1 January 2021- 31 December 2030.

Reduction Level: At least XX % domestic reduction in greenhouse gas emissions by 2030

Type: Absolute reduction from base-year emissions

WRI – TIME FRAMES

Time frames and/or periods for implementation

For targets/outcomes: target year(s)/period and peaking year (if applicable) (for example, 2025 or 2030 for a single year target; 2021-2030 for a multi-year target)

For actions: date actions comes into effect and date of completion (if applicable) (for example, 2020 with no end date)

Description of Party's long-term target(s), if applicable

Morocco

Table 2. Key sectorial strategies and targets for the implementation of Morocco's INDC

Strategies and action plans	Targets
National Energy Strategy	<ul style="list-style-type: none"> • Provide 42 % of the installed electrical power from renewable sources, of which 14 % is from solar energy, 14 % is from wind energy and 14 % is from hydraulic energy by 2020. • Achieve 12 % energy savings by 2020 and 15 % by 2030, compared to current trends. • Reduce energy consumption in buildings, industry and transport by 12 % by 2020 and 15 % by 2030. The breakdown of expected savings per sector is 48 % for industry, 23 % for transport, 19 % for residential and 10 % for services. • Install by 2030 an additional capacity of 3,900 MW of combined-cycle technology running on imported natural gas. • Supply major industries with imported and regasified natural gas by pipelines.

Target

Date

WRI – TEMPLATE – SCOPE (GASSES, GEOGRAPHIC COVERAGE ETC) AND PLANNING

Scope and coverage

Sectors covered (for example, all IPCC sectors covered in national GHG inventory, or all economic sectors as defined by national sector classification)

Greenhouse gases covered (for example, CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃)

Geographical coverage (for example, 100 percent, consistent with the national GHG inventory)

Percentage of national emissions covered, as reflected in the most recent national greenhouse gas inventory (for example, 100 percent)

Planning processes

Planning processes for preparation of the INDC³

If known, planning processes for implementation of the INDC⁴

If known, planning processes for tracking implementation of the INDC⁵



EXAMPLE – PLANNING PROCESS

Planning processes

Planning processes for preparation of the INDC³

If known, planning processes for implementation of the INDC⁴

If known, planning processes for tracking implementation of the INDC⁵

Morocco

- Morocco's Intended Nationally Determined Contribution (INDC) has its institutional roots in the National Strategy for Sustainable Development (NSSD). Morocco has developed its INDC with the conviction that global ambition to counter the effects of climate change calls for a commitment from all parties with regard to mitigation, adaptation and implementation. In developing its INDC, Morocco undertook a broad stakeholder consultation process. This process
- Allowed for the review of policies and programs that are being implemented by Morocco to combat global warming, and for the determination of the level of ambition to which the country wants to commit within its INDC. This process culminated in a national conference
- Held on June 2, 2015 in Rabat, chaired by the head of government, to officially present
- The draft INDC to all stakeholders and to ensure their full support for the implementation of the commitments included in the present document.



WRI – TEMPLATE – METHODS OF ACCOUNTING

Assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals

Assumed IPCC inventory methodologies and GWP values to be used to track progress (for example, 2006 IPCC *Guidelines for National Greenhouse Gas Inventories*; AR4 GWP values)

Related to international market mechanisms:

- Whether the Party intends to use or sell/transfer units from international market mechanisms
- If units are to be used, any limit on the percentage of emission reductions that may be achieved through the use of units from international market mechanisms
- If units are to be used, the assumed types and years of units to be applied, if known
- Whether and how any units purchased/acquired or sold/transferred abroad will ensure environmental integrity (for example, through specific quality principles) and avoid double counting

Related to accounting assumptions for emissions and removals from the land sector:

- Treatment of land sector (included as part of the broader target; treated as a separate sectoral target; used to offset emissions within the target boundary; or not included in a target)
- If the land sector is included, coverage of the land sector (net emissions and removals from land-use activities and/or categories) as compared to total net emissions from the land sector, as a percentage if known
- If the land sector is included, assumed accounting approach (activity-based or land-based) and accounting method⁶ for the land sector and the level against which emissions and removals from the land sector are accounted, if known, including policy assumptions and methodologies employed
- Any assumed use of methodologies to quantify and account for natural disturbances and legacy effects
- Any other relevant accounting approaches, assumptions or methodologies⁷



WRI – TEMPLATE – METHODS OF ACCOUNTIN

For GHG reduction targets relative to a projected baseline scenario:

- Whether the baseline scenario is static (will be fixed over the period) or dynamic (will change over the period)
- The cut-off year for policies included in the baseline scenario, and any significant policies excluded from the baseline scenario
- Projection method (for example, name and type of models)
- Emissions drivers included and assumptions and data sources for key drivers
- For dynamic baseline scenario targets, under what conditions will the baseline be recalculated and if applicable, any significance threshold used to determine whether changes in emissions drivers are significant enough to warrant recalculation of the scenario
- Total emissions projected in baseline scenario in the target year(s)

For GHG reduction targets relative to emissions intensity:

- Level of output (for example, GDP) in the base year, projected level of output in the target year/period (and an uncertainty range, if available), and units and data sources used

For INDCs that include actions:

- Estimated impact on GHG emissions and/or non-GHG indicators
- Methodologies used to estimate impacts, including the baseline scenario and other assumptions
- Uncertainty of estimated impacts (estimate or description)
- Information on potential interactions with other policies/actions



WRI – TEMPLATE – GOVERNANCE ISSUES RELATED TO LONG TERM CHANGE

Adaptation
<p>Climate change trends, impacts, and vulnerabilities</p> <ul style="list-style-type: none">• Summary of the current and projected climate change threats and impacts and their effects on vulnerable groups and sectors within the country. Depending on preferences, this could be included in the body of the INDC, or as an Annex.
<p>Statement of long-term goals or vision</p> <ul style="list-style-type: none">• An outline and justification of the national ambition to reduce the identified threats and impacts.• Nationally determined needs, options, and priorities for increasing the resilience of vulnerable communities, regions, or sectors.
<p>Statement of current and near-term action</p> <ul style="list-style-type: none">• A description of recently completed, ongoing, and planned domestic adaptation efforts (changes in institutions, modified policies and measures, major projects/programs, planning processes, and financial investments) and national investments, as well as other contributions to their implementation, as quantified as possible.
<p>Statement of gaps, barriers and needs</p> <ul style="list-style-type: none">• Any gaps in information or access to technology, barriers to adaptation action, and needs for capacity support required to execute near-term action or planning, including support needed to expedite the preparation of a NAP or equivalent.
<p>Description of monitoring plans, or other information</p> <ul style="list-style-type: none">• How the process identified will be nationally monitored, reviewed, updated, and reported

WRI – TEMPLATE – INFORMATION ON POSSIBLE COMPLICATIONS, CONTRIBUTION TO NON-GHG GOALS

How the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2

Comparison of the contribution to multiple indicators related to fairness. Factors that Parties may want to consider include: emissions (for example, past, current, or projected future emissions, emissions per capita, emissions intensity, or emissions as a percentage of global emissions), economic and development indicators (for example, GDP, GDP per capita, indicators related to health, energy access, energy prices, education, housing, etc.), national circumstances, vulnerability and capacity to adapt to climate change impacts, costs or relative costs of action, mitigation potential (for example, renewable energy potential), benefits of action (for example, co-benefits), or other factors

Comparison of the contribution to multiple indicators related to ambition. Factors that Parties may want to consider include: projected business-as-usual emissions, recent historical emission trends, total mitigation potential based on mitigation opportunities determined to be technically and economically feasible, benchmarks for the annual rate of emissions reductions, or other factors

Comparison of the contribution to multiple indicators related to achieving the objective of the Convention as set out in its Article 2. Factors that Parties may want to consider include: anticipated national emissions in the target year/period if the contribution is achieved, the quantified GHG impact of the contribution, the intended peaking year and peaking emissions level (if known), the annual rate of emissions reductions and/or expected emissions trajectory over time, deviation from business-as-usual emissions, any long-term mitigation goals, plans to limit cumulative emissions over time, or other factors

WRI – TEMPLATE – ADDED IF EXTRA FINANCE OR TECHNOLOGY WAS PROVIDED

Additional action and support needs

Additional action that could be achieved if certain conditions were met, such as action by other Parties, the receipt of support, or other factors, if applicable

TO REMEMBER

- Realistic
 - Look at what data exist (Forest atlases)
 - Focus on important sectors (Forests?)
 - Restoration Sequesters Carbon
- Planning
 - Base year
 - Implementation years
 - Target year
- Outcome or Action
 - Every Action/Policy/Outcome quantify emission reduction compared to base year

QUESTIONS?

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[http://www.wri.org/publication/
designing-and-preparing-indcs](http://www.wri.org/publication/designing-and-preparing-indcs)

