



GHG Protocol Mitigation Goals Standard

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Purpose of *Mitigation Goals Standard*

- Provide standardized approaches and guidance
- How to quantify GHG reductions and track progress toward national and sub-national GHG mitigation goals
- Guide users in answering the following questions:
 - For jurisdictions that do not have a mitigation goal: Which factors to consider when developing a mitigation goal
 - Before the goal period: How to estimate future emission levels and GHG reductions associated with meeting the goal
 - During the goal period: How to track and report progress toward meeting the goal
 - After the goal period: How to evaluate and report whether the goal has been achieved

Scope

- Internationally applicable
- Applicable to all levels of government (municipal, subnational, national)
- Four types of mitigation goals
 - Reductions from a base year
 - Reductions from a baseline scenario
 - Reductions in emissions intensity
 - Reductions to a fixed level
- Economy-wide and sectoral goals

Regardless of pledge type, following steps need to take place to design a pledge

1. Develop a GHG inventory
2. Define geographic boundary
3. Choose sectors included
4. Decide on the treatment of the land use sector
5. Choose direct/indirect emissions included
6. Choose GHGs included
7. Choose mitigation goal type
8. Choose single or multi-year goal
9. Choose and estimate base year/baseline scenario emissions
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11. Consider use of transferable emissions units
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Develop a GHG inventory

- Critical first step
- IPCC methodologies for national governments

$$\text{Emissions} = \text{Activity data} \times \text{Emissions factor}$$

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Define the geographic boundary

- For example, the United Kingdom:
 - domestic goal includes the UK and the Crown Dependencies of Jersey, Guernsey and the Isle of Man
 - Kyoto Protocol commitment includes the Crown Dependencies of Jersey, Guernsey, and the Isle of Man, and the Overseas Territories of Cayman Islands, Falkland Islands, Bermuda, Montserrat and Gibraltar.
 - UK's contribution to the EU emissions 37 reduction goal includes only the UK and Gibraltar.

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Choose sectors included

- IPCC 2006 Guidelines has 5 main sectors
- In the absence of accounting rules, some governments may choose their own sector definitions.
 - If so, to promote transparency and comparability, these should be mapped to the IPCC sector definitions

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Decide on treatment of the land use sector

- Determine how the sector is to be treated within the goal boundary (versus as an offset)
- Choose land-based or activity-based
- Choose land uses or activities, carbon pools and fluxes
- Choose accounting methodology (net-net, gross-net, forward looking baseline) depending on goal type
- Decide on treatment of natural disturbances
- Minimize risks with the accounting approach (e.g. caps)

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Decide which direct/indirect emissions covered

- Little precedent for national governments to include anything beyond direct emissions and could lead to goal overlap (as one jurisdiction's indirect emissions are another's direct emissions)

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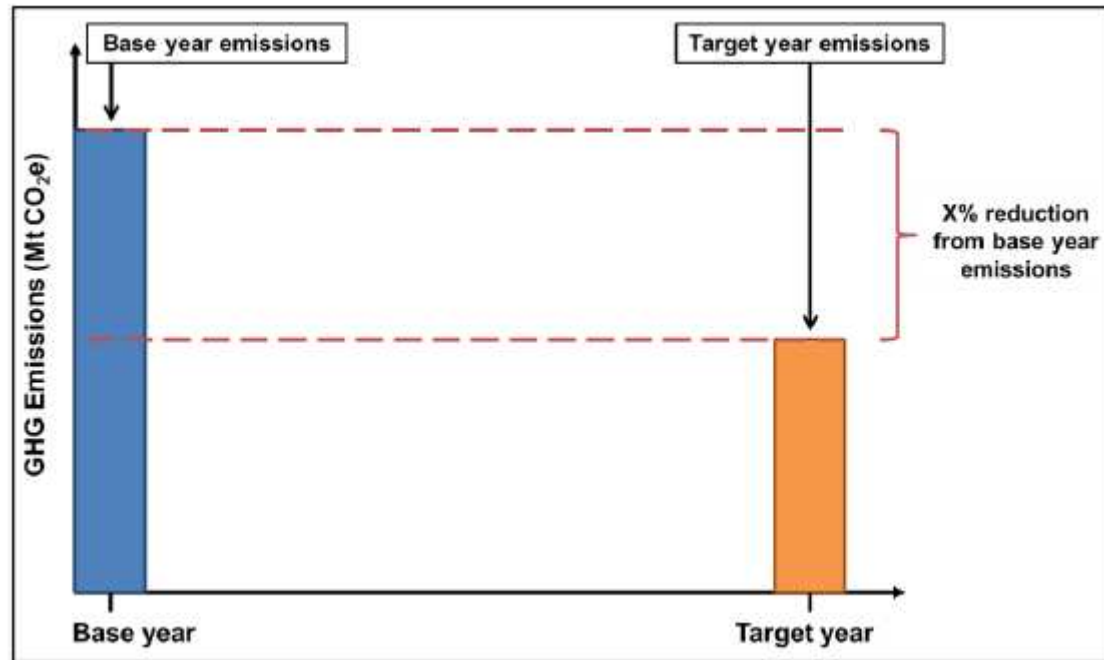
Choose with greenhouse gases covered

- Seven greenhouse gases covered under the Kyoto Protocol : carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃)

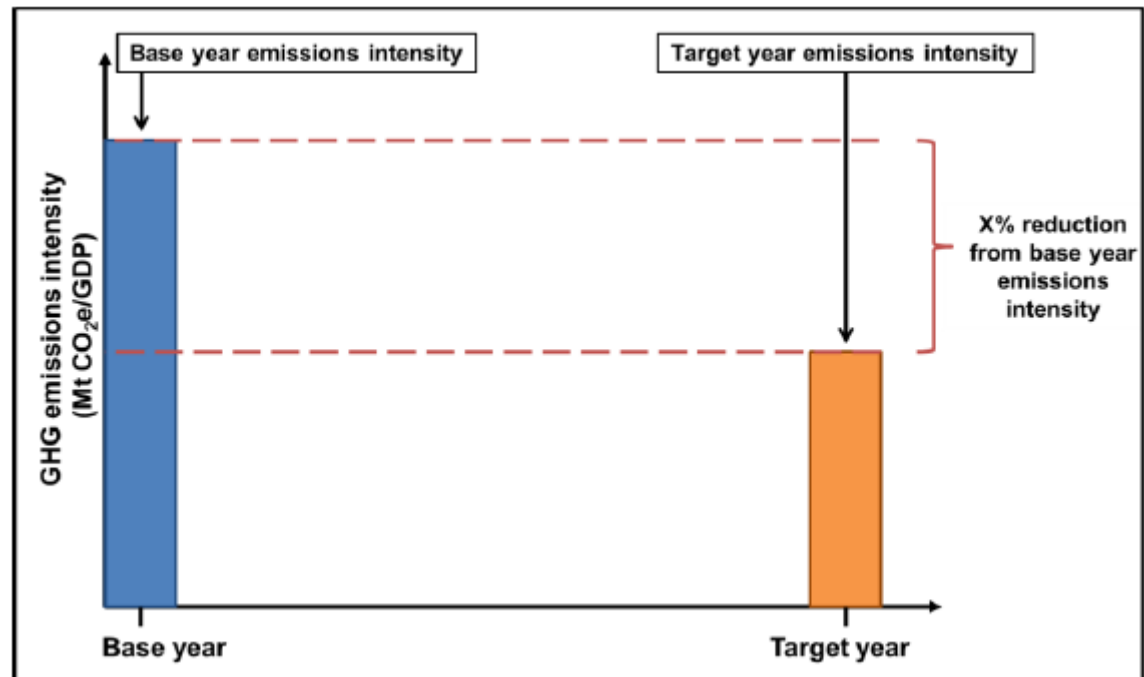
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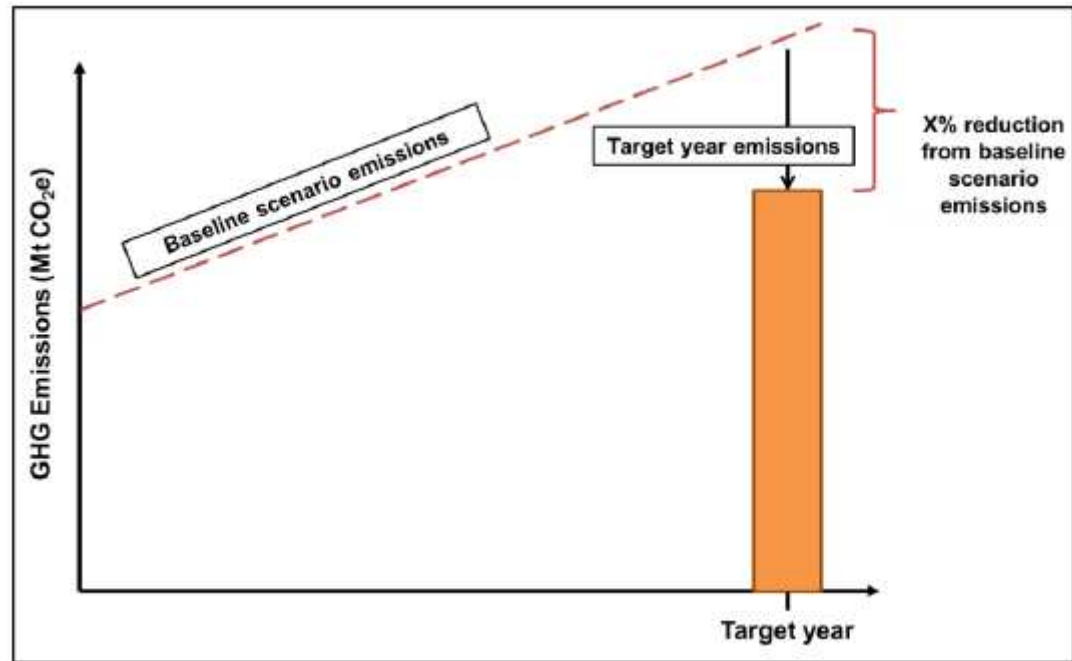
Example of a base year goal



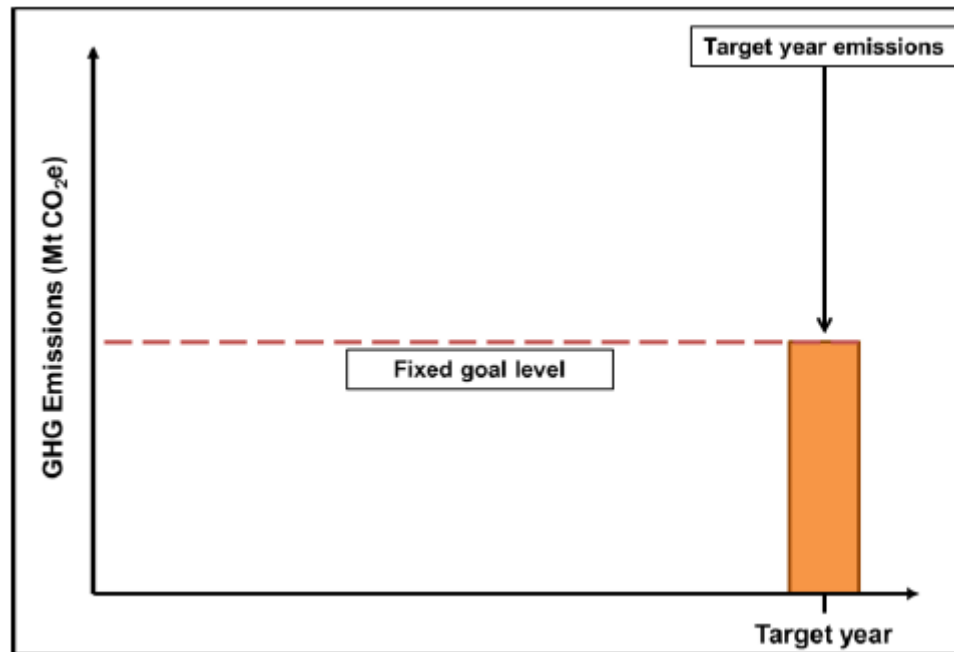
Example of intensity goal



Example of a baseline goal



Example of fixed level goal



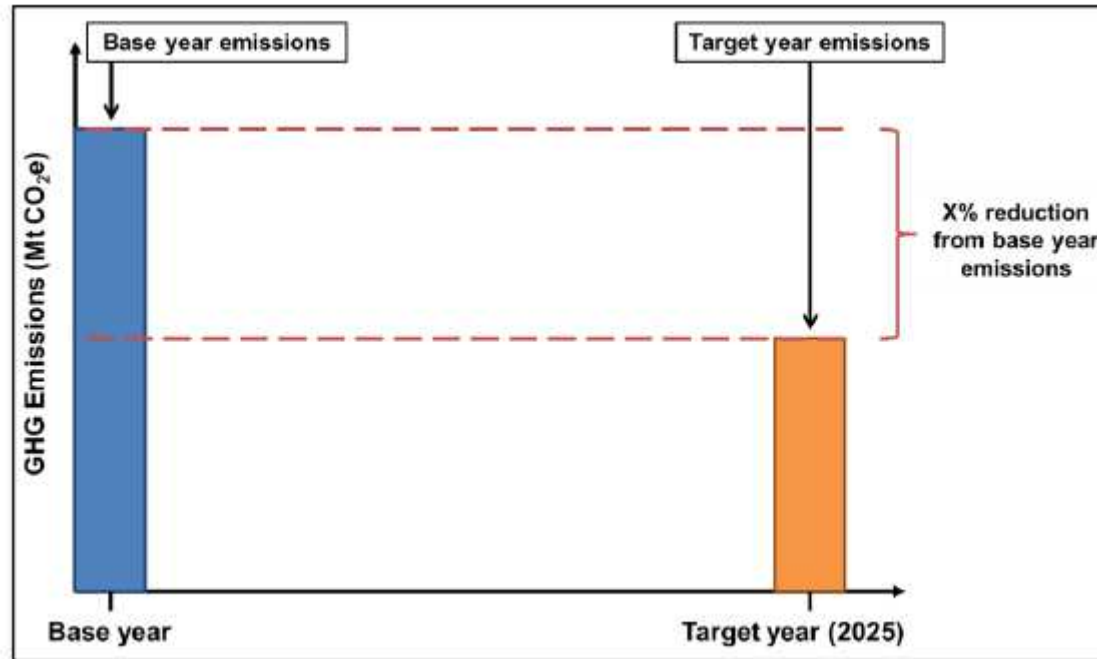
Considerations for type of pledge chosen

- When choosing a goal type, users should consider:
 - Their objectives
 - The level of ambition required by climate science to avoid dangerous anthropogenic climate change
 - Feasibility of emissions reductions based on mitigation assessment, cost, and national/subnational circumstances

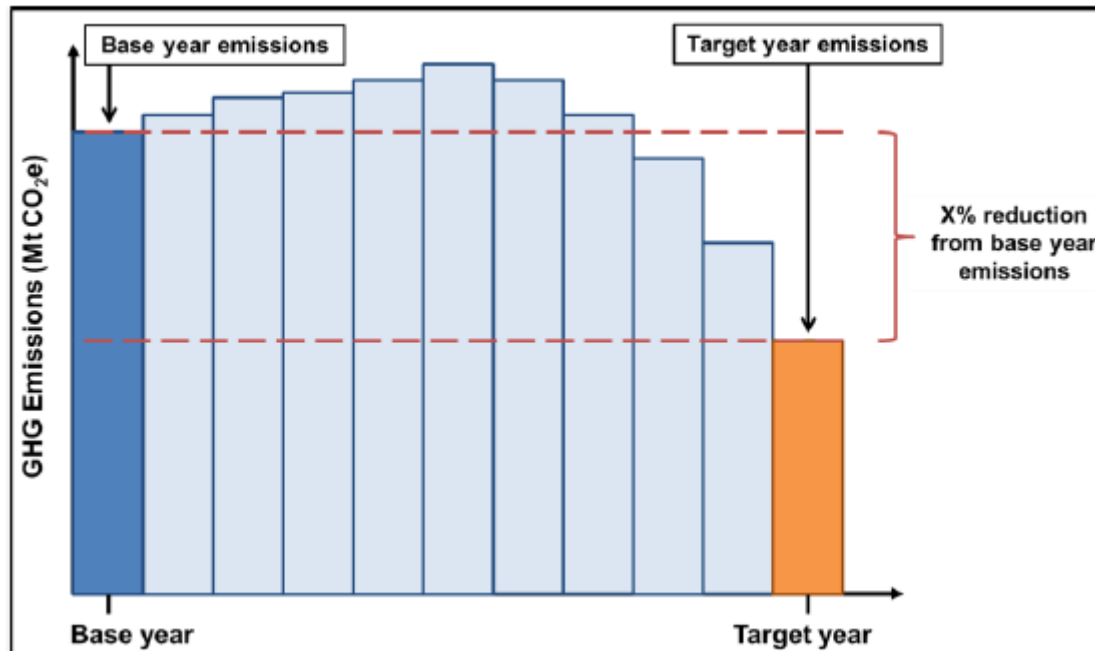
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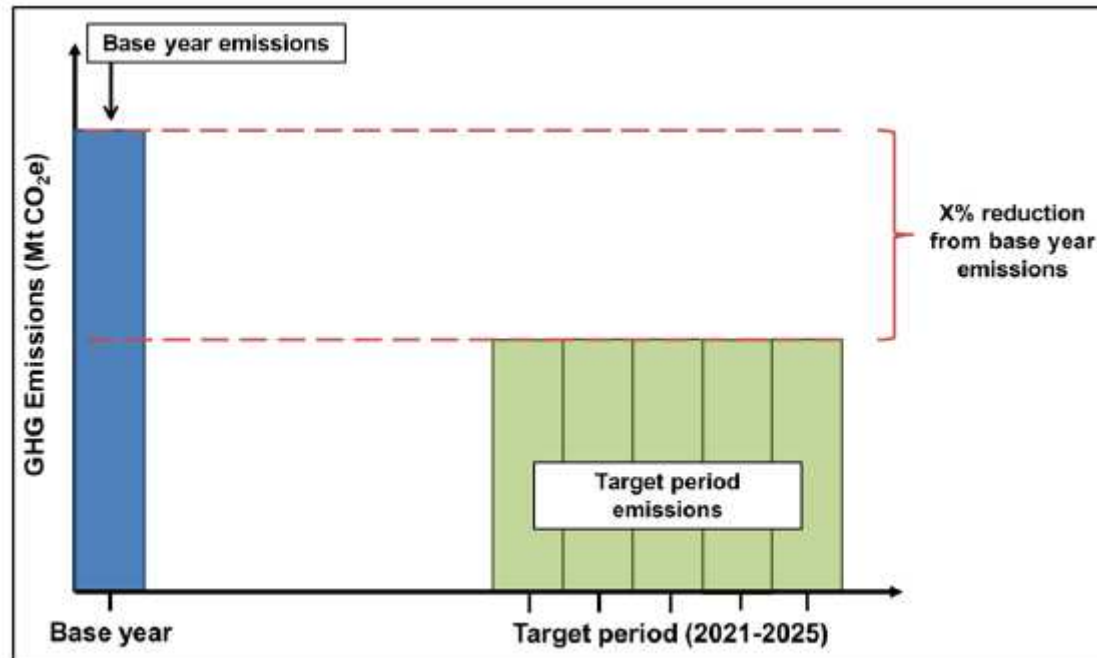
Example of single year goal



Disadvantage of single year goal



Example of multi-year goal



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Choose and estimate base year/baseline scenario emissions

- Base year emissions for base year and intensity goals
 - Choose a base year/base period
 - Calculate base year emissions by scope with inventory method
- Baseline scenario for baseline goals
 - Choose projection methodology
 - Choose timeframe
 - Identify emissions drivers and define assumptions
 - Include policies and actions
- Guidance discusses baseline updates and base year and baseline recalculation

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Choose the target year/period

- Longer goal periods:
 - facilitate long-term planning
 - provide more certainty and flexibility for decision makers and stakeholders
 - moderate the risk of unpredictable events that may temporarily increase emissions.
- Short-term goal periods:
 - can mobilize investment and planning for emission reductions more quickly and encourage quicker phase-out of inefficient practices and technologies.

Given the advantages, should adopt both short- and long-term goals, which can help ensure a decreasing emissions pathway that leads to significant cumulative reductions.

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Consider use of transferable emissions units

- Quantity
- Quality criteria
- How to avoid double counting, e.g. through:
 - Legal mandates
 - Registries
 - Transaction log
 - Agreements between buyers and sellers

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Define the goal level

- When choosing a goal level users should consider: their objectives; the level of ambition required by climate science to avoid dangerous anthropogenic climate change; and the feasibility of emissions reductions based on mitigation assessment, cost, and national/subnational circumstances.

After design of target

For each goal type, the GHG Protocol Mitigation Goals Standard provides calculations for:

- Ex ante estimation
- Tracking progress during the period
- Ex post evaluation

To download the draft standard:

www.ghgprotocol.org/mitigation-accounting

- For more information contact Kelly Levin (klevin@wri.org)

Questions for world café exercise

- Should all pledge types (base year, baseline, intensity, and fixed level) be on the table for the post-2015 commitments?
- What processes can be adopted to ratchet up ambition of pledges over time?
- If a national, economy-wide pledge is not taken (e.g. a NAMA or sectoral goal), how can it be adopted over time? How can NAMAs and sectoral goals be designed with the most ambition?