# 1 Introduction

The challenge of climate change requires a concerted effort by national governments and a diverse range of non-state and subnational actors, such as states and cities, businesses and civil society. Non-state and subnational climate action is needed to achieve national mitigation targets, but can go beyond these targets to raise ambitions. Non-state and subnational actors therefore need to be fully integrated into the national vision to maximize synergies, ensure buy-in and fully realize the mitigation potential of a country.

# 1.1 Context for non-state and subnational action

The Paris Agreement recognizes the importance of non-state and subnational actions, and explicitly encourages non-state and subnational actors (see <u>Box 1.1</u>) to scale up their climate actions.<sup>1</sup> Globally, non-state (e.g. companies or investors) and subnational (e.g. cities, states and regions) action is accelerating, with a growing number of commitments and initiatives being announced and implemented. This action can have a direct impact on national emissions trajectories, national policy implementation and the achievement of national targets.<sup>2,3</sup> At the same time, national governments often do not yet fully consider the impacts of mitigation activities of these actors when determining national climate policies and implementing nationally determined contributions (NDCs).<sup>4</sup> Increased climate action is required globally: with the mitigation targets put forward so far, the world is heading towards a 3°C temperature rise, rather than a 1.5–2°C rise.<sup>5</sup> A better understanding of climate actions at different scales and by different actors in a country can help countries to develop

#### **BOX 1.1**

#### Non-state and subnational (state) actors

Non-state actors are all actors that are not government (including at the national, state and city levels). Examples are companies, investors, civil society organizations, trade unions, research institutions and universities, financial institutions, activist groups, tribes, indigenous peoples, youth or women's groups, and faith-based communities.

Subnational actors include any form of government that is not at the national level, such as cities, states, provinces and regions.

The term "cooperative initiative" describes a joint undertaking of various actors, and can involve government bodies, including from the national level. International cooperative initiatives involve actors from different countries. For example, the Climate and Clean Air Coalition<sup>6</sup> is an international cooperative initiative with several national governments, finance institutions, non-governmental organizations (NGOs) and many others as partners.

Refer to <u>Section 3.1</u> for further explanation of non-state and subnational actors.

realistic and comprehensive targets, and support effective policy planning to achieve these targets.

National governments may not be fully aware of the various mitigation actions undertaken by companies, investors, cities, states and regions. They may be unsure about the extent to which these actions help achieve national targets, such as those in the NDCs, or go beyond them. They may also be unable to reflect the impact of these actions in national greenhouse gas (GHG) projections, target setting and planning. Monitoring of historical GHG emissions at the national level automatically reflects all emissions reduction efforts undertaken within a country, including those not driven by national

<sup>&</sup>lt;sup>1</sup> UNFCCC (2015), par. 135.

<sup>&</sup>lt;sup>2</sup> For example, Global Covenant of Mayors for Climate & Energy (2018); Hsu et al. (2018).

<sup>&</sup>lt;sup>3</sup> See <u>Section 3.1</u> for more details on the key concepts used in this guide.

<sup>&</sup>lt;sup>4</sup> Some national governments (e.g. Canada and the United States) include state-level action in their national projections.

<sup>&</sup>lt;sup>5</sup> UNEP (2018).

<sup>&</sup>lt;sup>6</sup> www.ccacoalition.org/en

4

governments.<sup>7</sup> Explicit consideration of non-state and subnational mitigation actions can lead to accurate and comprehensive projections, and better inform effective planning and policies at the local scale. It can also help countries identify promising subnational and non-state approaches that can be scaled up or supported by the national government or other partners.

Climate mitigation projections play an important role in identifying national and sectoral pathways, devising policies, and understanding whether countries will be able to reach their NDC targets. Under the Enhanced Transparency Framework of the Paris Agreement, all parties are required to report on progress made in implementing and achieving NDCs.<sup>8</sup> However, current policy projections that help estimate future emissions pathways often focus on national policies and do not explicitly account for other actions.

National targets are often realized through implementation by non-state and subnational actors. Non-state and subnational actions can also lead to ambitious emissions reductions, beyond those achieved by national policies alone; these actions mutually reinforce each other. There is thus a compelling rationale for including the impact of non-state and subnational actions in national climate analysis to increase the accuracy of projections and enhance ambition. A comprehensive understanding of how non-state and subnational actions fit within, and contribute to, overall national targets and policies can help build realistic emissions projections.

However, policymakers face many challenges when attempting to identify and quantify the impact of non-state and subnational actions, and integrate them into their own models, and GHG emissions projections and planning. These include data availability and data gaps, lack of harmonized data and common indicators, uncertainty about the attainment of targets, and the need to use common metrics for non-state and subnational actions and national policies. This document aims to offer solutions to these challenges by providing a series of steps to determine the potential impact of non-state and subnational actions, while addressing overlaps and avoiding double counting.

# 1.2 Purpose of the guide

The purpose of this guide is to help national policymakers and analysts assess the impact of non-state and subnational actions. This knowledge can inform and improve the development of future national GHG trajectories and climate-relevant policies and targets, such as those in the NDCs. The methodology contained in this guide provides steps for users to identify, quantify and aggregate the impact of non-state and subnational actions, and integrate them into mitigation targets, projections and scenarios, which may support policy development, policy evaluation and target-setting.

The assessment may provide additional benefits. Developing an understanding of potential emissions reductions from non-state and subnational actions may boost national governments' confidence that current targets can be met or, alternatively, provide an insight into the emissions gap that needs to be bridged. It may support development of more ambitious national mitigation targets. The guide may also improve awareness about non-state and subnational actions, and facilitate coordination and communication between national, non-state and subnational actors for efficient implementation and aligned decision-making. This will help national governments set targets and put in place the right policies to enable action and ambition by non-state and subnational actors. The guide can also be used to assess the impact of non-state and subnational actions on specific policy targets - for example, a national energy efficiency scheme, renewable energy targets or penetration of electric vehicles. It may offer insights into whether non-state and subnational actions are effective or are likely to enjoy a broad mandate if enacted at the national level. As well, detailed analysis using this guide of innovative policies implemented at subnational level can improve understanding of such policies, which could potentially be translated to, or replicated at, the national level.

This forward-looking guide is fundamentally different from existing national guidance on GHG emissions accounting in the context of reporting under the United Nations Framework Convention on Climate Change (UNFCCC),<sup>10</sup> which covers past and current emissions by all actors within a country's jurisdiction, including non-state and subnational actors. The guide is not intended as a means to

 $<sup>^{7}\,</sup>$  Although not attributing changes in emissions to individual actions.

https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-paris-agreement/reporting-and-review-under-the-paris-agreement

<sup>9</sup> UNEP (2016, 2018).

<sup>&</sup>lt;sup>10</sup> See, for example, reporting requirements for Annex I countries: https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/reporting-requirements.

attribute achieved emissions reductions to specific non-state or subnational actors, or to apportion the national or sectoral target to subnational actors. Instead, the guide helps to determine the potential impact of existing (and pledged) non-state and subnational actions, which, if realized, will be reflected as reductions in emissions in the national GHG inventory.

Application of the guide to the national or sectoral context can help policymakers answer the following questions, among others:

- What non-state and subnational climate actions are occurring in the country?
- Which of these actions, or sums of actions of various stakeholders, will have a climate mitigation impact in the country or a specific sector?
- · How big is their impact for a national or sectoral mitigation pathway?
- How can non-state and subnational actions contribute to meeting or overachieving NDC mitigation targets?
- · Which actions reflect ambition and go beyond existing policies, and by how much?
- How can non-state and subnational actions enable new, more ambitious NDC mitigation targets to be set?
- What insights can the analysis of potential impacts from non-state and subnational actions provide for future national and international policies?

# 1.3 Intended users

This guide is intended primarily for national government ministries and agencies, research institutions and NGOs. It can also be used by non-state and subnational actors to inform their own actions and understand the relationship with national action. Throughout this guide, the term "user" refers to the person applying the methodology.

The following examples demonstrate how different types of users can apply the guide:

- National government ministries and **agencies.** Identify and quantify the impact of non-state and subnational mitigation actions, and integrate them into national and/or sectoral mitigation assessments and scenarios, policy development and targetsetting.
- **Research institutions and NGOs.** Identify and assess the mitigation potential of nonstate and subnational mitigation actions in comparison with national policies or NDCs, and provide support to decision makers.
- Non-state and subnational actors. Identify and assess the mitigation potential of nonstate and subnational mitigation actions towards meeting and/or supplementing sectoral, national and international targets.

This guide can accommodate a variety of objectives from a range of users (see Chapter 2). For example, a national government may want to use the guide to improve its understanding of actions being taken by non-state and subnational actors, and identify sectors where a greater degree of action is occurring. A university undertaking national emissions projections may want to use this guide to improve emissions scenarios by incorporating the impact of subnational and non-state actions.

# 1.4 Scope, applicability and limitations of the guide

The guide provides principles, concepts and procedures applicable to all types of non-state and subnational climate mitigation actions. It is organized into five parts (Figure 1.1). Part I introduces the guide, and provides objectives, principles and an overview of steps for conducting an assessment. It also introduces some common challenges around such an assessment. Part II discusses how to define the assessment, including selecting non-state and subnational actions for inclusion in the assessment. Part III provides impact assessment steps, including assessing overlaps, aggregating impacts, and comparing ambition across non-state/subnational and national/sectoral policies and targets. Part IV covers reporting of results, and Part V discusses the use of assessment results for decision-making. The guide details a general process for users to follow when conducting an assessment. It includes

#### FIGURE 1.1

#### Overview of the methodology

#### Part I: Introduction, objectives and key concepts

Understand the purpose and applicability of the guide (Chapter 1) Determine the objectives of the assessment (Chapter 2) Understand key concepts and assessment principles (Chapter 3)



#### Part II: Defining the assessment

Define the assessment boundary (Chapter 4)
Create a list of all relevant non-state and subnational actions (Chapter 5)
Select non-state and subnational actions for inclusion in the assessment (Chapter 6)
List of relevant national climate mitigation policies and actions (Chapter 7)



#### Part III: Impact assessment

Harmonize non-state and subnational actions and national policies for comparison (Chapter 8) Assess overlaps, aggregate and estimate potential impacts (Chapter 9)



#### Part IV: Reporting results

Document the results and methodology used (Chapter 10)



Part V: Decision-making and using results

Use results for decision-making and planning (Chapter 11)

illustrative examples, but does not prescribe specific calculation methodologies, tools or data sources.

The guide can be applied to address various objectives, and users may skip parts that are not relevant for their objectives. Further, some of the steps can be undertaken simultaneously or applied in a different order rather than sequentially; this has been highlighted, where relevant. The guide focuses on non-state and subnational activities that mitigate climate change, such as increasing renewable energy generation or improving energy efficiency. These could be activities with an explicit mitigation objective or with broader sustainable development benefits, including emissions reductions (see Box 1.2). For

example, cooperative international initiatives to improve air quality also reduce GHG emissions.

Adaptation is recognized as equally important to mitigation. However, because of significant differences in metrics and approaches, and since adaptation is not currently considered in GHG emissions projections, the guide does not consider specific adaptation-related impacts of actions. These could potentially be explored in the future.

Given the wide range of non-state and subnational actions, with varying levels of available information, users will need to make several assumptions in aggregating their impacts – for example,

#### BOX **1.2**

# Sustainable development impacts of non-state and subnational actions

Sustainable development impacts are wider economic, social and environmental national development impacts or outcomes, beyond climate change mitigation. For example, a state government initiative targeting emissions reductions or energy savings may have multiple benefits, including climate change mitigation, improved air quality, positive impacts on health and increased crop yields. These, in turn, can lead to reduced public spending on health or rural job creation, and increased agriculture exports, which can further help with poverty reduction. For more information on how to assess these broader impacts, refer to the Initiative for Climate Action Transparency (ICAT) Sustainable Development Methodology.

assumptions about the likelihood of a company achieving its stated target. There is often no single, correct approach underlying such assumptions. The guide walks users through possible situations and related conservative assumption choices, but it is not feasible to discuss every situation for every set of actions and actors. Users should use their judgment, based on knowledge gathered about the actions during the assessment process, stakeholder inputs and/or expert consultations. The guide stresses that users should be conservative in their approach, to avoid overestimating impacts and manage accompanying uncertainty, and that all assumptions and methods should be clearly stated, with their underlying rationale. Assumptions should be revisited and updated in subsequent assessments as new information becomes available.

The guide is intended for ex-ante (forward-looking) assessments to understand the expected future impacts of non-state and subnational actions. Ex-post (backward-looking) assessments are not included in this guide. Ex-post assessments can, however, be used to check the results of ex-ante assessments by monitoring the performance of actions over time, verify baselines and underlying assumptions, and guide future strategies. Ex-post assessment can be applied separately on an ongoing basis as new non-state and subnational actions are implemented and/or more information becomes available.

The guide is framed by the global context, which increasingly recognizes and promotes interaction between national governments and non-state and subnational actors. For example, the Paris Agreement explicitly encourages governments to work more closely with these actors. 11 The guide

aims to support and inform these discussions without specifically addressing them. The following topics are therefore not included in the scope of this guide:

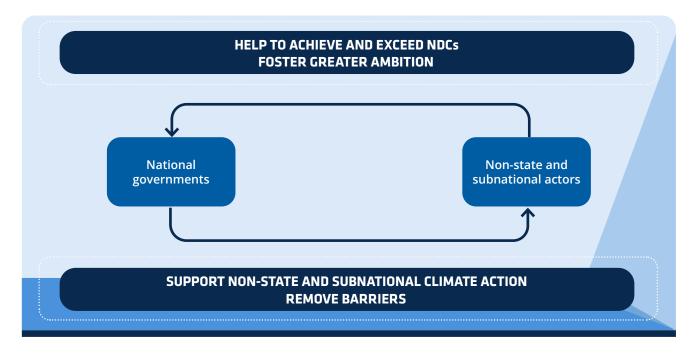
- What can governments do to promote nonstate and subnational actions within their country?
- What options exist to engage non-state and subnational actors in the country?
- How can national governments and non-state and subnational actors work together more effectively?
- How can policies related to non-state and subnational actions be better integrated into national policies, and vice versa?
- How can national governments and non-state and subnational actors work towards using comparable GHG accounting methodologies, assumptions, reporting formats and target metrics?

When applying the methodology, users should bear in mind that national government and non-state and subnational action can mutually reinforce each other, as shown in Figure 1.2. However, in many cases, it is impossible or unnecessary to determine which comes first. In fact, non-state and subnational actors and national governments operate in a single system, where governments set the rules and regulations of the economic activity within their jurisdiction. When national governments set climate targets or adopt new policies, they send signals to, and influence, nonstate and subnational actors. At the same time, when non-state and subnational actors adopt targets and policies, they contribute to meeting goals adopted by national governments.

<sup>&</sup>lt;sup>11</sup> UNFCCC (2015), par. 119.

FIGURE 1.2

## Relationship between national and non-state and subnational climate action



# 1.5 Key recommendations

This guide includes key recommendations, which are recommended steps to follow when assessing and reporting impacts. Key recommendations are intended to help users to produce credible impact assessments that are based on the principles of relevance, completeness, consistency, transparency, comparability, accuracy and conservativeness.

Key recommendations are indicated in subsequent chapters by the phrase "It is a *key recommendation* to ...". All key recommendations are also compiled in a checklist at the beginning of each chapter.

The Introduction to the ICAT Assessment Guides provides more information on how and why key recommendations are used within the ICAT series of assessment guides.

# 1.6 Relationship with other aggregation studies

A number of studies have aggregated emissions reductions from non-state and subnational actions in individual countries or even globally. <u>Appendix A</u> lists several of these studies that quantify impacts of

actions from a range of actors. There is considerable confusion about the different methodologies available to practitioners, whether there is one "right" methodology for any given situation, and where the ICAT Non-State and Subnational Action Guide fits in.

Drawing from these individual studies, this guide has compiled a comprehensive set of steps to provide a framework for users to assess the impacts of different kinds of mitigation actions, implemented by a range of actors within a sector or nation. The guide differs from other studies in that it does not aggregate actions for any country or other region; instead, it sets out the steps necessary to perform such an impact assessment (Box 1.3). Broadly speaking, the various quantification studies use similar steps to aggregate emissions reductions. The ICAT *Non-State and Subnational Action Guide* complements these studies, rather than competing with them or contradicting them.

Given the nature of this exercise, considerable flexibility is built into each step in the guide to allow quantification of a range of actions from disparate actor groups across multiple sectors. Based on their objectives, users can choose distinct options (e.g. focus on subnational actors and the forestry sector only), follow different approaches (e.g. for assessing overlaps) and make different assumptions

#### BOX **1.3**

# ICAT Non-State and Subnational Action Guide and aggregation studies

The relationship between this guide and the individual aggregation studies listed in Appendix A is similar to the relationship between individual GHG emissions inventories and the Greenhouse Gas Protocol Corporate Standard,12 or between individual city GHG inventories and the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories. 13 Similar to the Greenhouse Gas Protocol standards, this guide focuses on identifying steps to develop GHG inventories and provides guidance for users to make appropriate choices in each step. However, unlike the Greenhouse Gas Protocol standards, this guide is not a standard with specific requirements. Users can select an option in each step and make assumptions - based on data availability, resources and their objectives. They transparently record their assumptions and choices; different choices made between options can lead to significant differences among various assessments of non-state and subnational actions.

(e.g. regarding baselines) while following the recommended steps. The choices made at each step will lead to unique results. For example, the studies listed in Appendix A are different from each other in their objectives, assessment boundaries and assumptions made, even if they follow the same broad steps. 1213

Therefore, users should not necessarily search for the "right" methodology; instead, they should use the steps outlined in this guide, choosing options and assumptions at each step that are appropriate to their objectives and data constraints.

# 1.7 Relationship to other methodologies and resources

This guide is part of the ICAT series of guides for assessing impacts of policies and actions.14 lt is intended to be used in combination with any other ICAT documents that users choose to apply, including:

- sector-level methodologies for assessing GHG impacts of policies and actions in the energy, transport, agriculture and forestry sectors
- Sustainable Development Methodology for assessing the environmental, social and economic impacts of policies and actions

- *Transformational Change Methodology* for assessing the transformational impacts of policies and actions
- Stakeholder Participation Guide on how to carry out effective stakeholder participation when designing, implementing and assessing policies and actions, as well as non-state and subnational actions
- Technical Review Guide on how to review assessment reports, covering the impact of non-state and subnational actions, and GHG, sustainable development and transformational impacts.

The ICAT series of assessment guides is intended to enable users who choose to assess the GHG impacts, sustainable development impacts and transformational impacts of a policy or action to do so in an integrated and consistent way within a single impact assessment process. Users should refer to the Introduction to the ICAT Assessment Guides for more information about the ICAT assessment guides and how to apply them in combination.

This methodology builds on existing resources such as the Greenhouse Gas Protocol Policy and Action Standard (© WRI 2014; all rights reserved)<sup>15</sup> the Greenhouse Gas Protocol Mitigation Goal Standard, 16 the Global Climate Action report<sup>17</sup> and the Fulfilling

<sup>&</sup>lt;sup>12</sup> Available at: <a href="http://ghgprotocol.org/corporate-standard">http://ghgprotocol.org/corporate-standard</a>.

<sup>&</sup>lt;sup>13</sup> Available at: https://ghgprotocol.org/greenhouse-gas-protocolaccounting-reporting-standard-cities.

<sup>14</sup> https://climateactiontransparency.org/icat-toolbox

<sup>&</sup>lt;sup>15</sup> Available at: <u>www.ghgprotocol.org/policy-and-action-standard</u>.

<sup>&</sup>lt;sup>16</sup> Available at: <a href="https://ghgprotocol.org/mitigation-goal-standard">https://ghgprotocol.org/mitigation-goal-standard</a>.

<sup>&</sup>lt;sup>17</sup> Data-Driven Yale, NewClimate Institute and PBL (2018a).

America's Pledge report.<sup>18</sup> It adapts the structure, and some of the tables, figures and text from these resources, where relevant, to assessing non-state and subnational impacts. Figures and tables adapted from these resources are cited, but for readability not all text taken directly or adapted from these resources (primarily the *Policy and Action Standard* and the Global Climate Action report) is cited.

# 1.8 Process for developing the guide

The guide was developed through an inclusive, multi-stakeholder process convened by ICAT. The development of this document was led by a project team composed of the NewClimate Institute (lead), the World Resources Institute (WRI), The Climate Group and CDP. One of the appendices (Appendix C) was led by CDP, with contributions from WRI, the NewClimate Institute and The Climate Group.

The first draft was developed by the project team with inputs from a Technical Working Group (TWG). The TWG consisted of experts and stakeholders<sup>19</sup> from a range of countries identified through a public call for expressions of interest. The TWG contributed to the development of the technical content of the guide through participation in regular meetings and written comments. A Review Group provided written feedback on the first draft, which was taken into account to produce a second version of the guide in July 2018. The July 2018 version was applied by various organizations in three countries – India, Mexico and the United States – to ensure that it can be practically implemented.

The following three pilot assessments were part of the practical application of this guide:

Assessment of corporate actions in India. WRI India and the Confederation of Indian Industry analysed voluntary targets of 53 companies, representing 28% of India's industrial sector emissions in 2014, to understand how they relate to India's national GHG emissions projections for 2020 and 2030. This assessment of the GHG emissions reduction impact of voluntary business commitments in India's industrial sector is referred to as the "India corporate actions assessment" in this guide.

- Assessment of non-state and subnational actions in the United States. The initiative America's Pledge used the guide to aggregate mitigation efforts from cities, states, companies and various coalitions in the United States to understand their impact on national emissions projections. The comprehensive assessment of how cities, states and businesses are driving the United States towards a low-carbon future is referred to as the "Fulfilling America's Pledge report" in this guide.
- Assessment of subnational actions in Mexico. Grupo Ecológico Sierra Gorda applied the methodology in Mexico to understand how a state-based nationally appropriate mitigation action (NAMA) in the agriculture and forestry sector (called "Subnational mitigation actions for forest regeneration and the implementation of planned grazing mitigation action") compares with the country's NDC and sectoral goals. The assessment is referred to as the "Mexico subnational actions assessment" in this guide.

This version of the guide was informed by the feedback gathered from these assessments and includes case studies from these applications.

Parallel work that has also informed this version includes the Global Covenant of Mayors 2018 Global Aggregation report;<sup>20</sup> and the Data-Driven Yale,

NewClimate Institute and Netherlands Environmental Assessment Agency (PBL) *Global Climate Action from Cities, Regions and Businesses* report<sup>21</sup> (referred to as the "Global Climate Action report" in this guide).

ICAT's Advisory Committee, which provides strategic advice to ICAT, reviewed the second draft. More information about the development process, including governance of the initiative and the participating countries, is available on the ICAT website.

All contributors are listed in the Contributors section.

<sup>&</sup>lt;sup>18</sup> America's Pledge (2018a).

<sup>&</sup>lt;sup>19</sup> Listed at: https://climateactiontransparency.org/icat-toolbox/non-state-subnational-action/technical-working-group.

<sup>&</sup>lt;sup>20</sup> For more information, see: https://www.globalcovenantofmayors.org/impact2018.

<sup>&</sup>lt;sup>21</sup> Available at: <a href="http://bit.ly/yale-nci-pbl-global-climate-action">http://bit.ly/yale-nci-pbl-global-climate-action</a>.

# 2 Objectives of assessing the impact of non-state and subnational actions

This chapter provides an overview of objectives users may have when assessing the impacts of non-state and subnational climate actions. Defining the assessment objectives is an important first step because decisions made in later chapters are guided by the stated objectives.

## **Checklist of key recommendations**

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

Recognizing that governments have limited resources and that these can vary significantly across countries, this guide offers an approach that can be tailored, depending on users' objectives for undertaking the assessment. It is a *key recommendation* to determine the assessment objectives at the beginning of the impact assessment process. The chosen objectives inform how users apply various steps in the guide (see Section 3.2). Further, analyses can be narrowly targeted (focusing on a subset of actions or sectors, such as the impact of cement companies' voluntary targets on industrial sector emissions) or broader (such as assessing the impact on national emissions of all non-state and subnational actions across the economy). Examples of possible objectives for assessing the impacts of non-state and subnational actions are discussed below. Box 2.1 provides objectives used in some assessments.

Users can assess the impacts to pursue different objectives, such as the following:

 Understand the landscape of non-state and subnational effort – for example, by analysing the types of actions being undertaken and the types of actors that are involved. This information can be used in a variety of ways, such as to determine opportunities for engagement with non-state and subnational actors; promote new actions; or determine the extent of adoption of a policy or action among regional public and private non-state and subnational actors (e.g. cities, businesses), which can indicate the implicit mandate or consensus around different types of actions.

- Determine the combined expected impact
   of all non-state and subnational actions in a
   country or sector. The impact of non-state
   and subnational actions is not an additional
   impact because it does not consider potential
   overlaps with national policies, but it can
   nevertheless demonstrate the contribution
   that non-state and subnational actors may
   make, and inform efforts to encourage or
   strengthen such actions. Users can tailor
   their assessments to focus on the collective
   impact of specific types of actions or actors;
   for example, the guide can be used to assess
   the collective impact of actions by local
   governments in the transport sector.
- Determine the contribution of non-state and subnational actions towards achieving national or sectoral climate change targets (e.g. NDC targets). Economy-wide or sectoral targets are achieved through policies and actions at multiple levels and through the involvement of multiple actors. Users may want to assess the specific contribution of non-state and subnational actions in realizing these targets.
- Determine the level of additional effort needed to achieve an NDC target, considering existing national policies and the contribution of non-state and subnational actions. Users can assess the gap between the impact of existing climate policies and actions, and the targets. Policymakers and others can use this understanding to inform strategies and initiatives to bridge the gap. Where the sum of non-state and subnational actions goes beyond the national target, such results should not provide a perverse incentive to slow down climate action by the national government. The assessment results can instead be used to inform future policy design, including enhancement of national mitigation targets and reformulation of NDCs towards enhanced ambition (also mentioned below).
- Understand the potential of non-state and subnational actions to enable the country or sector to achieve a more ambitious target.

For instance, users can assess the mitigation potential of non-state and subnational actions to raise ambition and adjust the national or sectoral targets upwards.

- Improve emissions projections or inform realistic economy/sector-wide emissions reduction targets. For example, users may want to incorporate the impact of subnational renewable energy goals as they revise the national renewable energy target. Others may be interested in determining how publicprivate partnerships to promote electric mobility affect the transport sector emissions pathway.
- Determine how non-state and subnational actions impact the ambition set out in specific policies. For example, users can assess the extent to which non-state and subnational actions contribute to a national policy to phase out hydrofluorocarbons (HFCs).

Users should also identify the intended audience(s) of their assessment. Possible audiences include policymakers, funders, non-state and subnational actors, analysts and research institutions. Depending on the type and depth of analysis chosen, it may be helpful for the user to consult with other stakeholders (including actors included in the scope of the analysis) to ensure the highest possible accuracy and completeness of the information used for the analysis, and to check results for sense.

# **BOX 2.1**

## **Examples of assessment objectives**

**Fulfilling America's Pledge report** was developed to estimate the aggregate impact of a growing stream of non-state and subnational actions on economy-wide emissions to 2025. It provides a comprehensive assessment of how existing commitments by cities, states and businesses influence the overall national emissions trajectory.

**India corporate actions assessment** aggregates the emissions reduction impact of voluntary climate initiatives undertaken by Indian businesses by 2020 and 2030, and compares it with the national emissions trajectory.

**Global Climate Action report** assesses the impact of cities, regions and businesses on global GHG emissions by 2030, including national analysis for 10 key countries.

**Mexico subnational actions assessment** compares the impacts of a state-based NAMA in the agriculture and forestry sector with national targets.