USER GUIDE

Climate Action Aggregation Tool *for Non-State and Subnational Action (CAAT)*

Climate Action Aggregation Tool for Non-State and Subnational Action - User Guide

Accompanying documents: *Available at www.climateactiontransparency.org/icat-toolbox/CAAT*

Climate Action Aggregation Tool (CAAT) [LINK]

Template for data collection [LINK]

Methodology note [LINK]

ICAT Non-State and Subnational Action Guide [LINK]

Video training [LINK]

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Usage rights:

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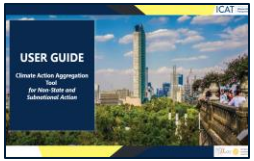
What to read first



Users should start here, with the User Guide: It provides an introduction to the Climate Action Aggregation Tool, including its set-up, functionalities and possible outputs.

Users should then move to the Microsoft Excel tool: There, users can perform their assessment of non-state and/or subnational actions (NSAs).

Methodology Note: This is an accompanying note to the Excel tool where users can find detailed information on the methodology around each assessment, if desired.

Non-State and Subnational Action Guide: This is the underlying guidance upon which the Excel tool is built. Users can find detailed guidance on each assessment step there, including potential data sources.

All documents are available at www.climateactiontransparency.org/icat-toolbox/CAAT

Introducing the Climate Action Aggregation Tool

OVERVIEW

The Climate Action Aggregation Tool (CAAT) is an easily accessible, Excel-based tool that enables users to identify, quantify and aggregate the impact of non-state and/or subnational actions and integrate the estimated impact into mitigation targets, projections and scenarios. It builds on the ICAT *Non-State and Subnational Assessment Guide*.

INPUTS

The analysis, which CAAT implements, is based on the following:

- Definition of assessment objective and assessment boundary
- Non-state and subnational action–specific data including action types, targets and emissions scopes
- National and sectoral emissions scenarios
- Overlap assumptions, which address the potential for and degree of overlapping impact among non-state and subnational actions

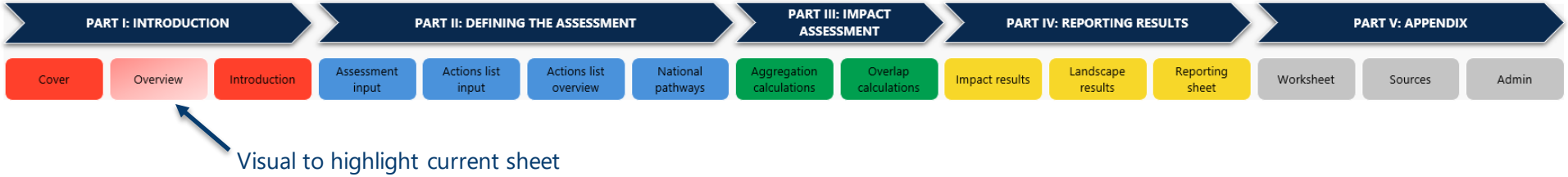
RESULTS

CAAT can aggregate results at the sectoral and national levels. They show emission pathways for different user-defined scenarios and emission reductions (both aggregated and over time), and calculate the emissions gap between scenarios. The tool also performs a landscape analysis to summarize the extent of non-state and subnational action. Results can be used in support of policy development, policy evaluation and target-setting.

This document provides a step-by-step guide to setting up and using the tool.

Opening and navigating the CAAT tool

- The tool opens on the cover sheet
- Each sheet has a navigation toolbar



IMPORTANT NOTE:

1. Please click "Enable Macros" when opening the file to enable all functions in the tool.
2. All calculations in this tool are set to "Manual" by default. Users may activate the calculations by clicking on the tool-provided buttons or change the default setting: File --> Options --> Formulas --> Workbook Calculations "Automatic".

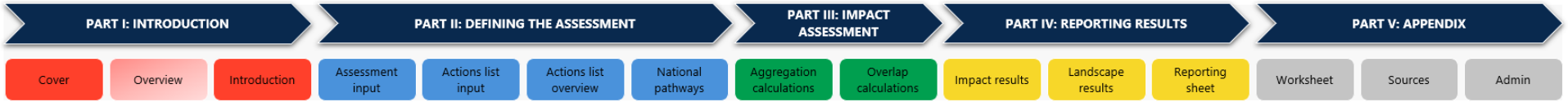
Overview of the main sections of the CAAT tool

INTRODUCTION	Overview of the components of the tool, the purpose of the tool, its key principles and guidelines for using it are provided
DEFINING THE ASSESSMENT	Users can set up the assessment objective and boundary, and collect and input non-state and subnational actions and national policies as well as national and/or sectoral scenarios
IMPACT ASSESSMENT	Impact and overlap analysis are calculated
REPORTING RESULTS	Results are reported and user assumptions documented. Results can be set up and presented at national and sector levels
APPENDIX	Users can perform additional calculations and refer to recommended sources

IMPORTANT NOTE: Yellow cells throughout the file are input cells where users need to include either text or data. Cells shaded in other colours typically denote where formulas are used to perform calculations or link to other cells. In addition, input sheets contain text boxes, buttons, check marks, and drop-down menus that require user input.

Introducing the Climate Action Aggregation Tool (4/4)

Overview of sheets



Introduction
This sheet provides the tool's purpose and key principles, and guidelines for using it.

Assessment input
Users define the assessment boundary in terms of sectors, actor groups, action types and emission types to be included in the analysis.

Actions list input
Users can input individual non-state and subnational actions (NSAs).

Actions list overview
Users can see an overview of the inserted NSAs, filter and edit data, or copy and paste larger datasets in the correct format.

National pathways
Users can input scenario, sector and growth rate information, and document all relevant climate mitigation policies and actions embedded within their scenarios.

Aggregation and Overlap calculations
These sheets display locked calculations for processing the impact aggregation and overlap components of the NSA analysis.

Impact results, Landscape results and Reporting sheet
These sheets provide the results of the assessment depending on the chosen assessment objective and offer a platform for reporting those results.

Worksheet
Users can use this blank sheet to perform calculations that might be useful for other parts of the assessment.

Sources
This sheet provides recommended sources of information extracted from the ICAT Non-State and Subnational Action Guide.

Admin
This sheet contains lists that are used in the tool's calculations.

Defining the assessment: overview

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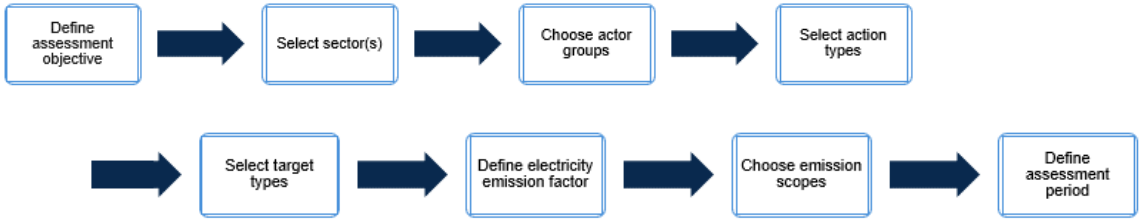
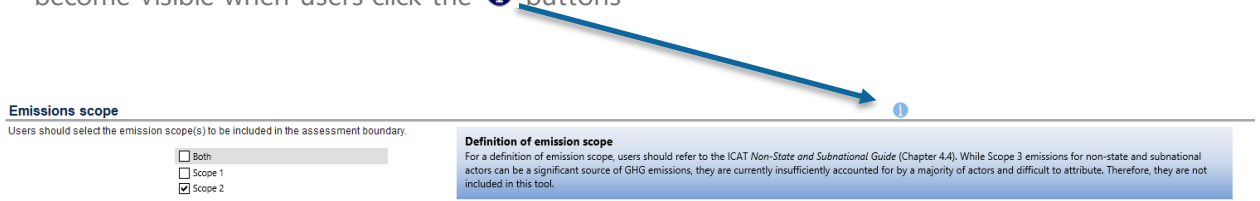
- **Visual guide** for setting the assessment boundary (steps)



- **Informational boxes** are available throughout the tool for further guidance and explanations; they become visible when users click the ℹ buttons



- Users are pointed to specific sections of the ICAT *Non-State and Subnational Guide* where they can find **additional guidance**

Defining the assessment objective(s) (1/2)

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- Users should choose one of the **predefined assessment objectives**, noting that the assessment objectives build on each other, e.g., Objective 2 automatically includes Objective 1 and Objective 3 includes Objectives 1 and 2 (more information on this is included on the next slide).
- The assessment objective will directly impact the input requirements for the assessment boundary for which users will see results.
- Users can find instructions for selecting an assessment objective by clicking the ℹ button.

Defining assessment objective

Users need to determine their assessment objective of using the tool before populating the tool and analyzing results (see table below). Users should note that objectives build on each other, e.g., Obje
The choice of objective will also restrict or expand future input requirements and outputs. For example, if users would like to input additional mitigation scenarios for comparison, only Objective 3 will en
For more information on assessment objectives, users should read Chapter 2 of the ICAT Non-State and Subnational Action Guide.

Objectives (please choose one)	Objectives	Assessment	Data requirements
1. Landscape analysis ☐	1. Understand the **landscape** of non-state and subnational effort.	The tool assesses the types and magnitudes of non-state and subnational actions in a given country, region or city ("landscape analysis"). It does not quantify any impact on greenhouse gas (GHG) emissions.	At a minimum, data on non-state and subnational action occurring in the country, region or city are required, including their GHG or electricity-related targets. No emissions data are needed.
2. Bottom-up assessment ☐	2. **Determine the combined expected impact of all non-state and subnational actions** in a country, region, city or sector.	The tool performs a landscape analysis (Objective 1). *In addition*, it quantifies the combined potential impact of all entered non-state and subnational actions in a given country, region or city ("bottom-up assessment"). This assessment also accounts for overlaps among actions.	In addition to the above, some emissions-related data on non-state and subnational actors are needed (baseline, inventory year emissions). Emissions data for a reference scenario are also needed, in addition to a share of emissions per sector in the starting and final years of assessment.
3. Top-down assessment ☐	3. Determine the **contribution of non-state and subnational actions** toward achieving short-, medium-, and long-term **climate change targets**.	The tool performs a landscape and bottom-up aggregation analysis (see Objectives 1 and 2). *In addition*, it determines the combined potential impact of non-state and subnational action on national climate pathways (nationally determined contribution or other scenario) ("top down assessment"). This assessment also accounts for overlaps among actions.	In addition to the above, emissions-related data for at least one other scenario are needed.

Defining the assessment objective(s) (2/2)

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- The below table provides an overview of the type of assessment that will be conducted based on the objective chosen as well as the respective data requirements.

Objectives	Assessment	Data requirements
1. Understand the **landscape** of non-state and subnational effort.	The tool assesses the types and magnitudes of non-state and subnational actions in a given country, region or city ("landscape analysis"). It does not quantify any impact on greenhouse gas (GHG) emissions.	At a minimum, data on non-state and subnational action occurring in the country, region or city are required, including their GHG or electricity-related targets. No emissions data are needed.
2. **Determine the combined expected impact of all non-state and subnational actions** in a country, region, city or sector.	The tool performs a landscape analysis (Objective 1). *In addition*, it quantifies the combined potential impact of all entered non-state and subnational actions in a given country, region or city ("bottom-up assessment"). This assessment also accounts for overlaps among actions.	In addition to the above, some emissions-related data on non-state and subnational actors are needed (baseline, inventory year emissions). Emissions data for a reference scenario are also needed, in addition to a share of emissions per sector in the starting and final years of assessment.
3. Determine the **contribution of non-state and subnational actions** toward achieving short-, medium-, and long-term **climate change targets**.	The tool performs a landscape and bottom-up aggregation analysis (see Objectives 1 and 2). *In addition*, it determines the combined potential impact of non-state and subnational action on national climate pathways (nationally determined contribution or other scenario) ("top down assessment"). This assessment also accounts for overlaps among actions.	In addition to the above, emissions-related data for at least one other scenario are needed.

Defining the assessment boundary

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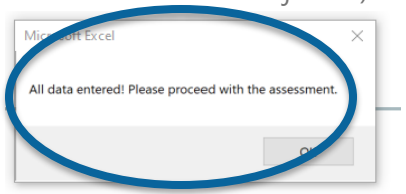
- To determine the **assessment boundary**, in the Assessment_input sheet, users should consider the following, as applicable:
  - Sector choice: Users should select the sectors to be analyzed; sectors are as per the Intergovernmental Panel on Climate Change definitions.
  - Action type(s) and actor group(s): Users should select the action types (i.e., individual actions, international initiatives) and actor groups (e.g., regions, cities, companies) considered.
  - Type(s) of targets: GHG and/or electricity-related targets. Other targets (e.g., intensity targets) should be converted into absolute emissions reduction targets. Scope 3 emissions are excluded.
  - Period of assessment: The tool is built to run analyses from 2015 to 2050.
  - Electricity emission factor in assessment start and end year: This can be a national or sector-specific emission factor.

For more information on the definitions of terms, users should refer to Chapter 3 of the *Non-State and Subnational Action Guide*. For information on data sources, they should see Appendix D.

- Users should click "**Data check/Save**" once they have made a selection. The tool will run a check on whether all required fields have been completed (dependent on the assessment objective).



IMPORTANT NOTE: Once users have entered the assessment boundary for this analysis and clicked "Data check/Save", users should refrain from making changes on this sheet as this will affect other sheet processes. For example, if users have already filled in sector information later on in the tool and remove the sectors here, some data recordings could be lost.

Collecting information on non-state and subnational actions (1/3)

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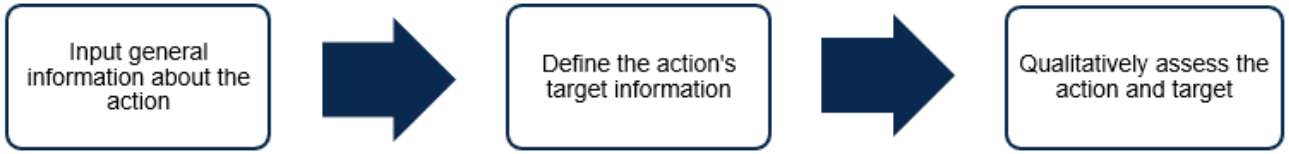

- **Choose method of inputting non-state and subnational actions:**
- Option 1: Users can input actions one by one using the form included in the tool (Actionslist_input).
- Option 2: Users can input large datasets directly into ActionsList_overview, where all actions are recorded and used in calculations.

Using both methods in parallel is also possible. For example, action inputs from Option 1 can be later updated or added to the ActionsList_overview sheet.

IMPORTANT NOTE: While a climate "action" does not need to have a "target", the terms are used interchangeably throughout the tool as the tool specifically aggregates targets resulting from non-state and subnational actions. The tool is built for GHG emission reduction targets as well as for targets for electricity reduction (consumption and/or production) or renewable energy, and thus actions for aggregation must be recorded as reductions in tonnes of carbon dioxide equivalent (tCO_2e) or kilowatt-hours (kWh), respectively, relative to the base year of the target. If users wish to aggregate the impacts from other action types, these must be quantified outside this tool and converted to these units.

Collecting information on non-state and subnational actions (2/3)

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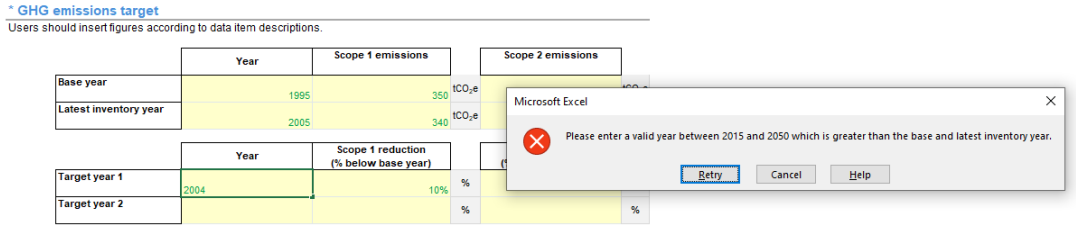
Option 1 is recommended for first-time analysts/users who prefer in-depth guidance and are entering a small amount of data.

Input general information about the action → Define the action's target information → Qualitatively assess the action and target

- Option 1 (ActionsList_input):
  - The form will take users through the required data points and also validate their entries. Users should complete the form to the best of their knowledge and click "Data check" to see if more data inputs or edits are needed.
  - Clicking "Insert data" then inserts all information for the action entered in the ActionsList_overview sheet, as the latest entry in the table.
  - Once an action has been inserted, users should repeat this step for other actions. Actions can then be edited or deleted in ActionsList_overview.



Collecting information on non-state and subnational actions (3/3)

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Assessment input

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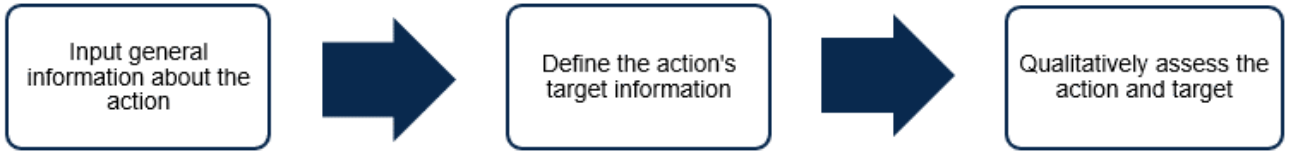

- Option 2:
  - In ActionsList_overview, users may insert/paste relevant data directly into the tool.
  - If users copy data, they should make sure to paste only values (i.e., using the "Paste Special" function, rather than standard "Paste" function) to avoid overwriting formatting or data validation issues.
  - Additional information on how to collect and organize data can be found in the accompanying *Non-State and Subnational Action Guide*.
  - A data collection template is also available on the website for users who prefer to collect data outside of the tool.

Option 2 is recommended for experienced analysts/users who are entering large amounts of data.

Actor name	Action description	Should this action be included in the aggregation?	Have sufficient data been inserted for the aggregation?	Actor type	Target type	Action or initiative	Sector targeted	Subsector	Subsector 2	Does the action encompass actions of smaller actor types?	Geographic coverage	Action status
Paris	Reduce transport emissions	Yes	✓	Cities	GHG emissions target	Individual action	Transport (energy)	Road Transportation		Unknown	City	Non-binding commitment

GHG emissions scenarios (1/5)

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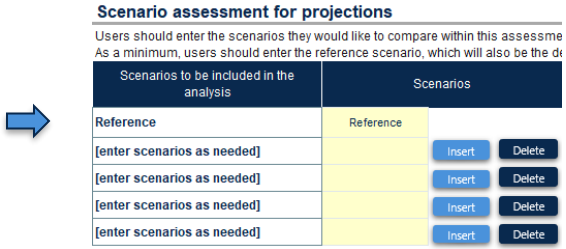
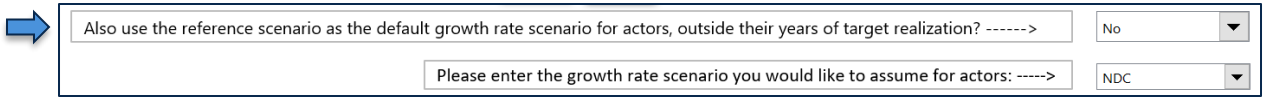
For assessment Objectives 2 and 3:

- **Users must add a reference scenario** of their choice for their assessment. NSA impacts will be compared with this scenario.



- Users must decide whether they wish to use the emissions growth rates of their reference scenario to define the growth rates of actors (before base year and after target year), or if they would like to use growth rates from a different scenario.



IMPORTANT NOTE: The input requirements for this sheet depend on the assessment objective determined in a previous step. No inputs are required for a landscape analysis.

GHG emissions scenarios (2/5)

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In the tool, users need to fill in only yellow cells. Cells in other colors are automatically updated using the "Update" button.

- **Users should estimate each sector's share of emissions for their scenario(s)** in the start year (historical data) and end year (for each scenario) of assessment.
  This is needed to integrate the assumed emissions growth rates per sector and calculate overlaps between actions in different sectors.

Sectoral emissions split

Estimated shares of sector in total emissions

Scenario:	Historical (2015)	Reference
Sector	Year: 2015	Year: 2050
Total emissions	100%	100%
Electricity and heating (energy supply)	35%	25%
Transport (energy)	7%	11%
Industry (energy and processes)	5%	7%
Waste	5%	3%

- **Users then input national historical emissions data**. Users should select the latest inventory year and include emission values (in kilotonnes [kt] of CO_2e) starting from this year. If the latest year is before 2015, users should estimate 2015 values and click "Update" to calculate sector emissions, based on the emission shares entered above.

GHG emissions data input

Historical data

Users should enter the latest inventory year and the total emission values (in kilotonnes of carbon dioxide equivalent, $ktCO_2e$) in the first row recorded up to that year, sta

	Year
Latest inventory year	2017

Update

Sectors	Units	2015	2016	2017	2018	2019	2020
Total emissions	$ktCO_2e$	388,250.00	388,200.00	388,100.00			
Electricity and heating (energy supply)	$ktCO_2e$	135,888	135,870	135,835.00			
Transport (energy)	$ktCO_2e$	27,178	27,174	27,167.00			
Industry (energy and processes)	$ktCO_2e$	19,413	19,410	19,405.00			
Waste	$ktCO_2e$	19,413	19,410	19,405.00			

GHG emissions scenarios (3/5)

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- For assessment Objective 3, users should include **additional scenarios** in Step 1 to compare them with the reference scenario. Up to four additional scenarios can be included. Users should input the name of their reference scenario and click "Insert". Scenarios can be deleted and names updated by clicking the respective buttons.

1) Scenario assessment for projections

Users should enter the scenarios they would like to compare within this assessme
As a minimum, users should enter the reference scenario, which will also be the d

Scenarios to be included in the analysis	Scenarios		
Reference	CPS		
Scenario	NDC	Insert	Delete
[enter scenarios as needed]		Insert	Delete
[enter scenarios as needed]		Insert	Delete
[enter scenarios as needed]		Insert	Delete

- A new, blank table will be created at the bottom of the sheet. Users should repeat this step for all scenarios that they wish to include in their assessment.

NDC

Users should insert the total emission values (in $ktCO_2e$) of their assessment boundary for this scenario in the first row. They should then click "Update" to fill in the sector emissions. To check for errors, users can use the "Data check" button at the top and bottom of the page.

Update

Sectors	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total emissions	$ktCO_2e$												
Electricity and heating (energy supply)	$ktCO_2e$												
Transport (energy)	$ktCO_2e$												
Industry (energy and processes)	$ktCO_2e$												
Waste	$ktCO_2e$												
	$ktCO_2e$												
	$ktCO_2e$												
	$ktCO_2e$												
	$ktCO_2e$												

GHG emissions scenarios (4/5)

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National pathways

- Users should input total national-level emissions for the reference and all additional scenarios, then click "Update".

CPS

Users should insert the total emission values (in $ktCO_2e$) of their assessment boundary for this scenario in the first row. They should then click "Update" to fill in the sector emissions. To checl

Update

Sectors	Units	2015	2016	2017	2018	2019	2020	2021
Total emissions	$ktCO_2e$				388,100	388,101	388,102	388,103
Electricity and heating (energy supply)	$ktCO_2e$				132,508	131,400	130,291	129,183
Transport (energy)	$ktCO_2e$				28,498	28,941	29,385	29,828
Industry (energy and processes)	$ktCO_2e$				20,070	20,292	20,514	20,736
Waste	$ktCO_2e$				18,740	18,518	18,296	18,075
	$ktCO_2e$							
	$ktCO_2e$							
	$ktCO_2e$							
	$ktCO_2e$							

- Sector-specific emission growth rates are automatically calculated.

Reference emissions growth rate

Sectors	Units	2015	2016	2017	2018	2019	2020	2021
Total emissions	n/a	n/a	1.00	1.00	1.00	1.00	1.00	1.00
Electricity and heating (energy supply)	n/a	n/a	1.00	1.00	0.98	0.99	0.99	0.99
Transport (energy)	n/a	n/a	1.00	1.00	1.05	1.02	1.02	1.02
Industry (energy and processes)	n/a	n/a	1.00	1.00	1.03	1.01	1.01	1.01
Waste	n/a	n/a	1.00	1.00	0.97	0.99	0.99	0.99

GHG emissions scenarios (5/5)

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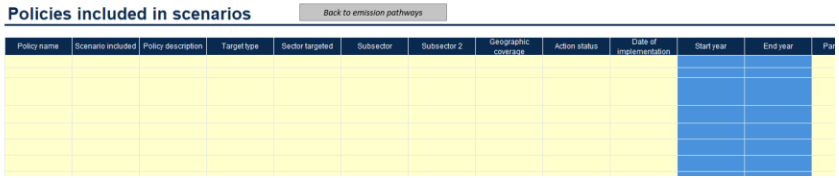
- Optionally, users can document the scenario mitigation policies underlying their emissions scenarios. This is done for bookkeeping purposes only and does not affect the calculations.

---> *Click to document scenario mitigation policies*



- Once users have inserted all data, they should click on "Assessment_input check" to check whether they have inserted all of the required data points for the assessment objective. Then they can click on "Data check/Save" and the tool will run and update calculations.

Assessment_input check

Data Check / Save

Running the aggregation

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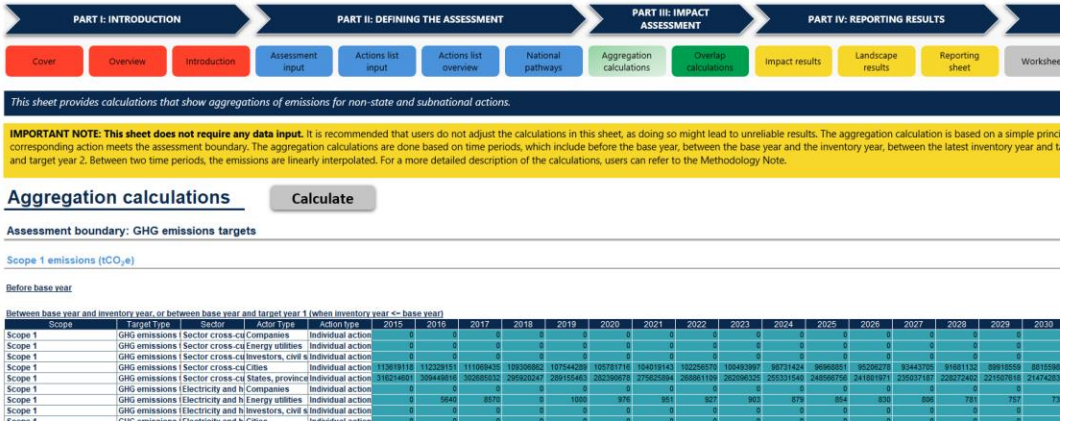
Overlaps

APPENDIX >>

- This sheet **does not require** any input; **it is recommended that users do not adjust the calculations. Any changes might lead to unreliable results.**
- The aggregation is based on a simple principle: Emissions are included if they satisfy the criteria outlined in the defined assessment boundary.
  - Initially, the tool checks each action against the assessment boundary.
  - The tool then runs the aggregation according to the specified assessment period.
- For more details on the aggregation, users can refer to the accompanying Methodology Note.



PART I: INTRODUCTION | PART II: DEFINING THE ASSESSMENT | PART III: IMPACT ASSESSMENT | PART IV: REPORTING RESULTS

Cover | Overview | Introduction | Assessment input | Actions list input | Actions list overview | National pathways | Aggregation calculations | Overlap calculations | Impact results | Landscape results | Reporting sheet | Worksheet

This sheet provides calculations that show aggregations of emissions for non-state and subnational actions.

IMPORTANT NOTE: This sheet does not require any data input. It is recommended that users do not adjust the calculations in this sheet, as doing so might lead to unreliable results. The aggregation calculation is based on a simple princi
corresponding action meets the assessment boundary. The aggregation calculations are done based on time periods, which include before the base year, between the base year and the inventory year, between the latest inventory year and t
and target year 2. Between two time periods, the emissions are linearly interpolated. For a more detailed description of the calculations, users can refer to the Methodology Note.

Aggregation calculations Calculate

Assessment boundary: GHG emissions targets

Scope 1 emissions (tCO_2e)

Before base year

Between base year and inventory year, or between base year and target year 1 (when inventory year <= base year)

Scope	Target Type	Sector	Actor Type	Action type	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Scope 1	GHG emissions	Sector cross-cu	Companies	Individual action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scope 1	GHG emissions	Sector cross-cu	Energy utilities	Individual action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scope 1	GHG emissions	Sector cross-cu	Investors, civil s	Individual action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scope 1	GHG emissions	Sector cross-cu	Cities	Individual action	113619118	112329151	111069435	109306862	107544289	105781716	104019143	102256570	100493997	98731424	96968851	95206278	93443705	91681132	89919559	8815598
Scope 1	GHG emissions	Sector cross-cu	States, province	Individual action	316214601	309449816	302685032	295920247	289155463	282390678	275625894	268861109	262096325	255331540	248566756	241801971	235037187	228272402	221507618	21474283
Scope 1	GHG emissions	Electricity and h	Companies	Individual action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scope 1	GHG emissions	Electricity and h	Energy utilities	Individual action	0	5640	8570	0	1000	976	951	927	903	879	854	830	806	781	757	73
Scope 1	GHG emissions	Electricity and h	Investors, civil s	Individual action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculating overlaps

DEFINING THE ASSESSMENT >>

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Aggregation

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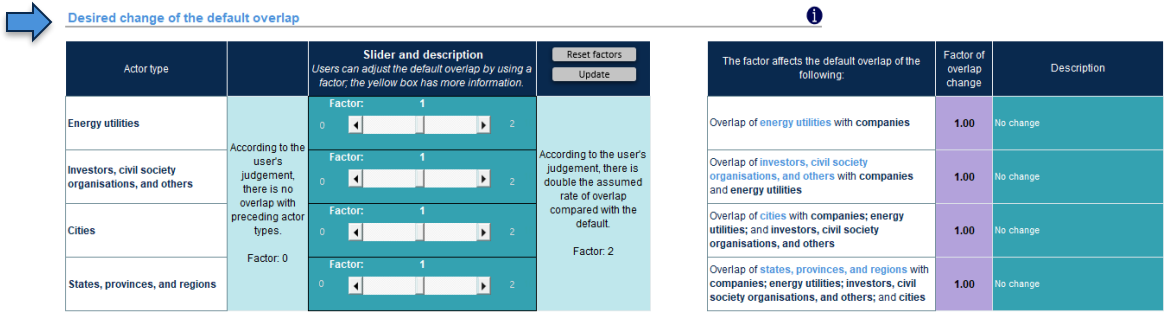
Overlaps

APPENDIX >>

- **This sheet does not require any input.** Therefore, it is recommended that users do not adjust any calculations. Any changes might lead to unreliable results.
- Experienced analysts can choose to manually adjust desired overlaps between actor types, although this is not required. For more details, users can refer to the in-tool guidance and accompanying Methodology Note.



Desired change of the default overlap

Actor type		Slider and description *Users can adjust the default overlap by using a factor; the yellow box has more information.*	Reset factors / Update
Energy utilities	According to the user's judgement, there is no overlap with preceding actor types. Factor: 0	Factor: 1 (0 — 2)	According to the user's judgement, there is double the assumed rate of overlap compared with the default. Factor: 2
Investors, civil society organisations, and others		Factor: 1 (0 — 2)	
Cities		Factor: 1 (0 — 2)	
States, provinces, and regions		Factor: 1 (0 — 2)	

The factor affects the default overlap of the following:	Factor of overlap change	Description
Overlap of energy utilities with **companies**	1.00	No change
Overlap of investors, civil society organisations, and others with **companies** and **energy utilities**	1.00	No change
Overlap of cities with **companies; energy utilities;** and **investors, civil society organisations, and others**	1.00	No change
Overlap of states, provinces, and regions with **companies; energy utilities; investors, civil society organisations, and others;** and **cities**	1.00	No change

Showing quantitative impacts (1/3)

DEFINING THE ASSESSMENT >>

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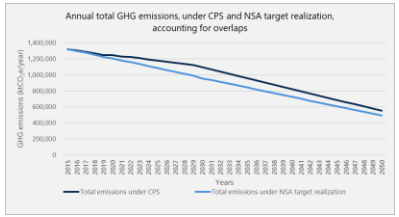
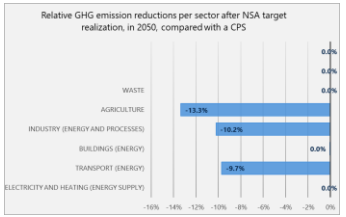
- After users click "Calculate", the quantitative impacts of the actions will be shown in the tables and graphs depicted below, according to the earlier selected assessment objective. These include the following:

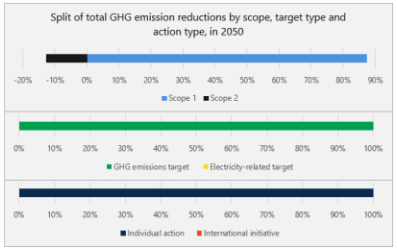
  For Objective 2

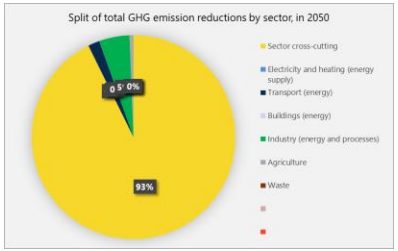
  - Results are in comparison to the "total emissions" from the national pathways:





  - Breakdown of results (e.g., by target type, emissions scope):





Showing quantitative impacts (2/3)

DEFINING THE ASSESSMENT >>

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REPORTING RESULTS >>

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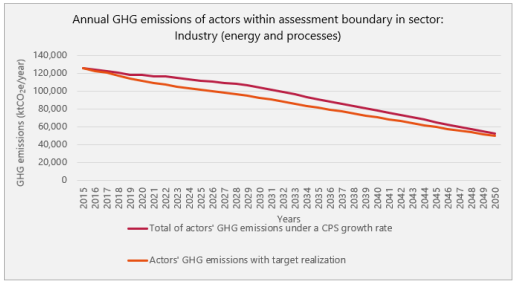
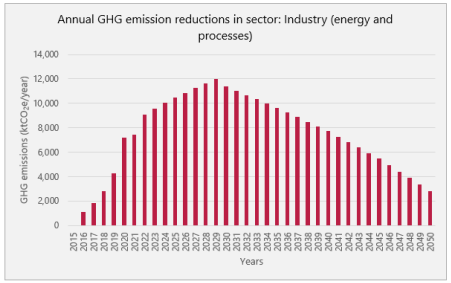
Impacts

Landscape

Reporting

- Results at the sector level (a drop-down menu allows users to choose and see the results for each of the sectors within their assessment boundary).





- Users should note that all results are also available in table format (at the bottom of the Impact_results sheet).

Numerical results

Potential impact in absolute GHG emission reductions, compared with a CPS pathway, accounting for overlaps

The absolute potential GHG emission reductions (or, avoided emissions) are presented here.

	Unit	2015	2016	2017	2018	2
Total GHG emission reductions	$ktCO_2e$	0	5,743	9,466	17,659	2

GHG emission reductions by emissions scope	Unit	2015	2016	2017	2018	2
Scope 1	$ktCO_2e$	0	6,289	12,296	18,123	2
Scope 2	$ktCO_2e$	0	-547	-2,830	-463	

GHG emission reductions by sector	Unit	2015	2016	2017	2018	2
Sector cross-cutting	$ktCO_2e$	0	5,089	10,060	14,237	1
Electricity and heating (energy supply)	$ktCO_2e$	0	0	0	0	
Transport (energy)	$ktCO_2e$	0	-507	-2,464	625	
Buildings (energy)	$ktCO_2e$	0	36	48	56	
Industry (energy and processes)	$ktCO_2e$	0	1,138	1,846	2,784	
Agriculture	$ktCO_2e$	0	-14	-23	-42	
Waste	$ktCO_2e$	0	0	0	0	
	$ktCO_2e$					
	$ktCO_2e$					

Showing quantitative impacts (3/3)

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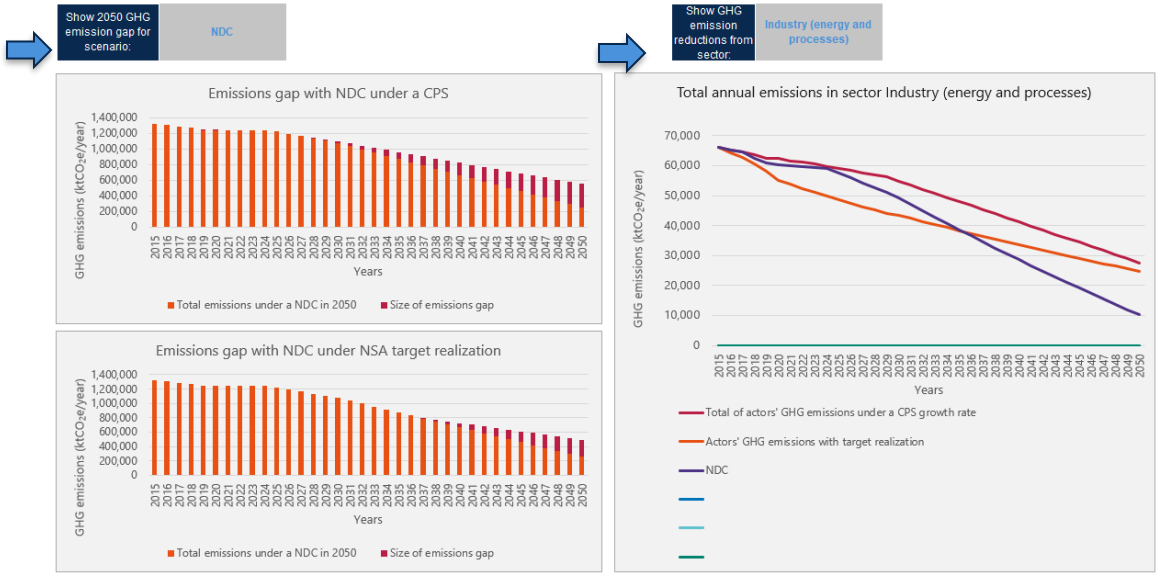
Reporting

For Objective 3

- In addition to the earlier graphs, quantitative impacts are also shown for NSA contributions to (national/regional) climate policies (a drop-down menu allows users to choose and see the results for each of the scenarios and sectors within their assessment boundary).



IMPORTANT NOTE: Data in all figures and graphs account for overlaps (except for a number of tables in the "Numerical section" where the exceptions are clearly indicated in the tables' titles).

Showing impacts – Landscape (1/2)

DEFINING THE ASSESSMENT >>

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REPORTING RESULTS >>

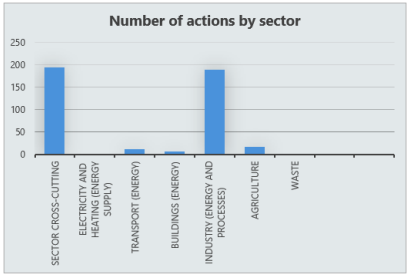
APPENDIX >>

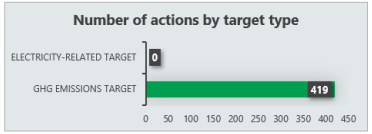
Impacts

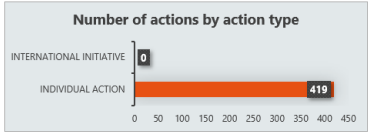
Landscape

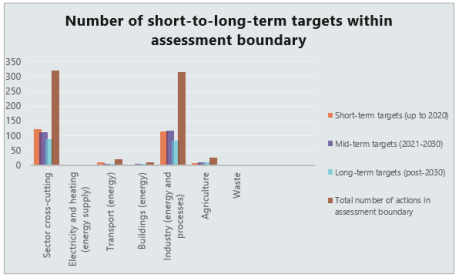
Reporting

- The tool reports a landscape analysis according to users' selected assessment boundary.
- Available results include the following:
  - Summary/coverage of non-state and subnational actions included in the assessment
    - Number of actions within the assessment boundary
    - Potential GHG impact (if applicable)
    - Total emissions coverage of reference scenario for actions within assessment boundary in final assessment year (if applicable)
  - Key statistics of actions within assessment boundary (e.g., number and share of actions per actor type, number of actions per sector, number of actions per target type)









Showing impacts – Landscape (2/2)

DEFINING THE ASSESSMENT >>

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REPORTING RESULTS >>

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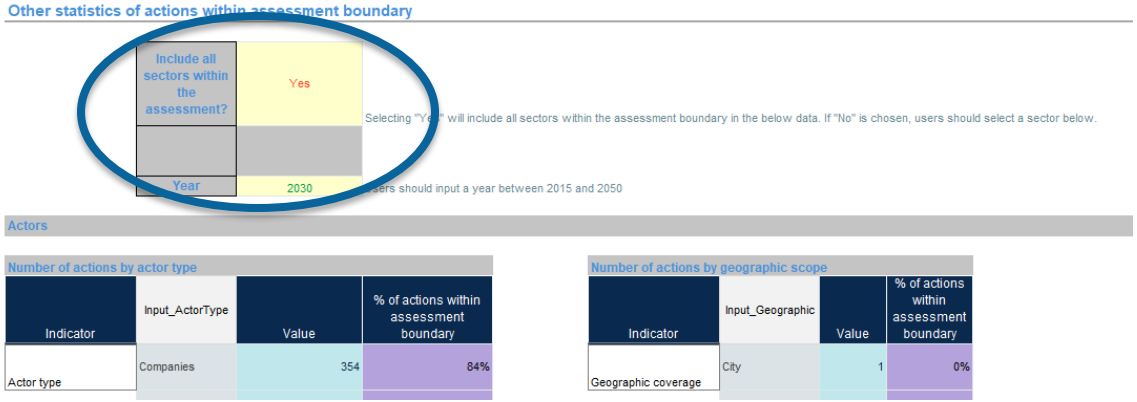
Impacts

Landscape

Reporting

- Other statistics of the actions in the ActionsList (drop-down menu to zoom in on specific results in different years within the assessment period).
  - Users should choose whether they want to see the results for all sectors within the assessment boundary or a specific sector
  - Users can then choose a year to analyze



Reporting results

DEFINING THE ASSESSMENT >>

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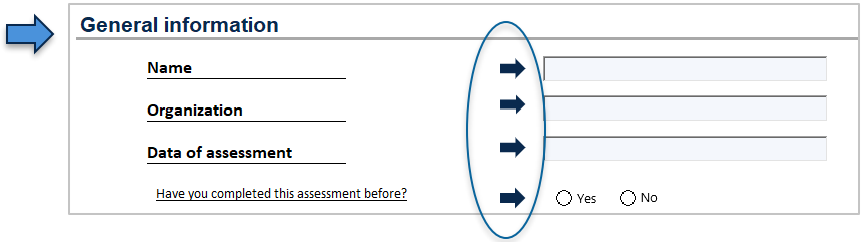
Impacts

Landscape

Reporting

- A reporting sheet is included in the tool which automatically summarizes key data and results of the assessment.
- Cells that require additional input are highlighted by arrows. Cells without arrows will be updated automatically.



- Users should also use this sheet to document their assumptions.
- Once updated, an overview of users' non-state and subnational actions as well as national policies and actions is saved automatically in an annex to this sheet.
- Once users have filled in the additional information, they can download and print the summary in Excel or PDF format (short or long PDF versions, the latter of which includes the annex).
- For more information on reporting and how to use the results, users can refer to the ICAT *Non-State and Subnational Action Guide* (Parts IV and V).

IMPORTANT NOTE: Users can click "Update" to populate data in this sheet. Where blanks remain (indicated by arrows), users must manually input information.

Appendix (1/2)

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Impacts

Landscape

Reporting

- **Worksheet:** An empty worksheet is provided for the user to perform any necessary calculations or collate data to supplement their analysis. Examples include but are not limited to the conversion of actions into appropriate units or the building of scenario pathways.
- **Sources:**
  - Relevant recommended references are listed here based on and updated from the ICAT Non-state and Subnational Action Guide. Users can also add sources referenced in the formulation of their analysis.

America's Pledge	Fulfilling America's pledge: How states, cities, and businesses are leading the United States to a low-carbon future	2018	Literature
ARUP and C40 Cities	Global aggregation of city climate commitments	2014	Literature
Blanco, G., et al.	Chapter 5: Drivers, trends and mitigation. In: Climate change 2014: Mitigation of climate change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change	2014	Literature
C40 Cities	C40		Data source
CDP	CDP		Data source
CDP and ICLEI	Carbonn climate registry		Data source
CDP and We Mean Business	The business end of climate change	2016	Literature
Chan, S., et al.	Strengthening non-state climate action: A progress assessment of commitments launched at the 2014 UN Climate Summit	2016	Literature

Appendix (2/2)

DEFINING THE ASSESSMENT >>

IMPACT ASSESSMENT >>

REPORTING RESULTS >>

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Impacts

Landscape

Reporting

- **Sources:**
  - Latest available data projections (from version update) are provided for GDP and population statistics by country for the period 1990 to 2050, which can be referenced for the users' analysis as desired. The sections can be navigated to with the corresponding buttons:

Population (thousands): countries

Source: World Population Prospects: The 2019 Revision | United Nations Population Division (Medium)

Country name	Region	1990	1991
Afghanistan	Asia Pacific	12412	13299
Albania	Europe	3286	3280
Algeria	Africa	25759	26400
American Samoa	Asia Pacific	47	49
Andorra	Europe	55	57
Angola	Africa	11848	12249
Antigua and Barbuda	Central and South America	63	63
Argentina	Central and South America	32619	33
Armenia	Eurasia	3538	3505
Aruba	Central and South America	62	65
Australia	Asia Pacific	16961	17189
Austria	European Union	7724	7773
Azerbaijan	Eurasia	7243	7358
Bahamas, The	Central and South America	256	261
Bahrain	Middle East	496	510
Bangladesh	Asia Pacific	103172	105599

- **Admin:** This sheet consists of dropdown lists for admin purposes and does not require any action from the user.

CONTACT:

For general info, ICAT policy guides, ICAT Toolbox, and country support opportunities:

Initiative for Climate Action Transparency

- ICAT@UNOPS.org

For purposes related to the tool and its implementation, feedback, and technical support:

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World Resources Institute

- cynthia.elliott@wri.org
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