

ICAT Methodologies - Summary of Revisions

*Summary of feedback and revisions from the application of the
ICAT series of guidance documents*

June 2019

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INTRODUCTION AND OVERVIEW OF APPLICATION

The current version of the ICAT series of guidance documents was released in May 2018 for use by ICAT countries and non-state actors. ICAT is working with countries and non-state actors to apply one or more of the guidance documents. ICAT's objectives for the June 2019 revisions are to improve the guidance documents based on practical experience gained during the first application phase and develop case studies to include in the final publications and the ICAT website.

The purpose of this document is to give an overview of the changes that were made to produce the June 2019 version of the guidance documents. For each document in the series, a brief summary of revisions is provided below. Each revision is explained in the context of feedback received from users of the guidance documents.

The June 2019 version of the ICAT series will be posted for a 30-day public consultation from 11 June to 10 July 2019. Any additional comments received during this final consultation will be addressed before the next version is published in September.

Users of the guidance documents were asked to provide feedback on the relevant documents as well as the process of applying the methodologies. We also prompted users to provide their feedback on:

- Whether the guidance documents would help meet their needs
- User-friendliness of the document
- Any missing topics that should be covered
- The usefulness of templates for assessment plans and assessment reports

The users were generally supportive of the work. Their feedback varied from editorial suggestions to improvements in clarity of the text and technical input to strengthen the methods, steps or approaches within the document. Some reviewers provided their insights on our general questions, as follows:

- Some countries are interested in tailor-made methodologies to fit their specific country context.
- More examples and case studies would be helpful to demonstrate how to apply the methodologies using real world examples.
- There was support for developing accompanying templates for assessment plans, monitoring reports and assessment reports, while still maintaining flexibility for users to use their own formats.

CROSS-CUTTING FEEDBACK AND REVISIONS

Some of the feedback received was applicable to the full series of guidance documents, therefore some revisions were made in all documents, as relevant. These cross-cutting comments and revisions are summarized below.

1. **Relationship to the Paris Agreement and ETF:**
 - a. Encourage countries to use ICAT methodologies to help understand and quantify the contribution of policies and actions towards their NDCs in accordance with the MPGs. Highlighted this in the Introductory Guide as well as in certain sections of the individual guidance documents.

- b. Emphasize how ICAT methodological guidance and the results of impact assessment of policies or actions can inform the reformulation of NDCs towards enhanced ambition. Highlighted this in the Introductory Guide as well as in objectives section of the individual guidance documents.
2. **Ensure compatibility with and highlight usefulness for reporting under Chapter III. of the MPGs for the transparency framework:**
 - a. Aligned the reporting chapters of ICAT methodologies with the information on effects of policies and measures (ex-ante and ex-post) required to be reported in BTRs.
 - b. Noted certain input parameters used as part of an impact assessment using ICAT methodologies can also be used for NDC target setting (e.g., GDP growth rate, population growth rate).
 - c. Noted certain indicators suggested for tracking policy or action implementation that can also be used to track progress towards NDC implementation (if chosen by a particular country).
3. **Align relevant aspects of ICAT methodologies with Chapter III.F of the MPGs for the transparency framework:**
 - a. Countries may find it most useful to align their policy assessment period with their target and achievement of NDCs. Highlighted the timeframe requirements in the MPGs for both NDC implementation and projections and include a recommendation that countries aim for consistency in the timeframe of emissions projections and policy assessment periods, but it is not a *key recommendation* to do so.
 - b. Highlighted certain projections conducted for GHG impact assessment of policies that can also be used in projections of sectoral GHG emissions and total national GHG emissions, where applicable.
4. **Use terminology consistent with the MPGs for the transparency framework and with the 2006 IPCC Guidelines:**
 - a. Ensured sectors and gases are discussed in the same terms.
 - b. Recommended use of 2006 IPCC Guidelines in GHG impact assessments.
 - c. Ensured the terminology used in ICAT methodologies is consistent with the terms used in the MPGs and IPCC Guidelines (e.g., BTRs).
5. **Causal chain figure:** It is difficult to format causal chains in Word for assessment reports, especially in horizontal orientation. A downloadable, pre-formatted tool in Excel for developing causal chains will be developed by September 2019.
6. **Sustainable development and transformational change indicators.** Provided examples of sustainable development and transformational change indicators that can be used to track the non-GHG impacts of the policies covered in the GHG methodologies.
7. **Development of supporting templates:** Users commented that it would be helpful for the reporting chapter to also be provided in a template format. Users also noted it is difficult and time-intensive to find and list all of the *key recommendations* in each methodology to ensure they are

followed. Assessment and reporting templates were developed for some of the guidance documents, listing the *key recommendations*, data needs and reporting requirements for each methodology, to help countries apply ICAT methodologies. Templates will be developed for all guidance documents by September 2019.

INTRODUCTORY GUIDE

One non-state actor pilot provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Reporting across multiple assessments:** Users applying more than one ICAT methodology noted that it can be burdensome to develop a separate assessment report for each document used. Provided guidance in this guide, as well as in each document, for how users can streamline the reporting process.
2. **Relationship to the Paris Agreement and the enhanced transparency framework:** This section was expanded and clarified to highlight how the ICAT series of guidance documents relates to the Paris Agreement and its enhanced transparency framework.

RENEWABLE ENERGY METHODOLOGY

Three countries provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Ex-ante estimation of RE addition:** Renewable energy policies can be designed with or without an RE capacity cap and can be targeted at different types of RE technologies. Different RE technologies as well as resource and economic constraints can be taken into account when estimating RE capacity addition potential (either technical or market). Added guidance to clarify the types of potentials that can be estimated and to explain how to account for policy design differences when estimating RE addition. Provided an overview of sources, databases, atlases and tools that can be used to estimate ex-ante RE addition.
2. **Accounting for financial feasibility of RE technologies:** In order to estimate the ex-ante RE addition potential of a policy, users must assess the financial feasibility of different RE technologies by calculating the levelized cost of electricity (LCOE). Clarified the method for conducting these calculations. Added equations and recommended data sources for the parameters needed for such calculations in the main text and in Appendices A and B.
3. **Accounting for barriers:** The effects of different barriers to RE addition should be taken into account when refining the technical potential for RE capacity addition. For example, one barrier is the quality of the grid, which needs to be assessed and, if necessary, addressed by grid expansion. Provided guidance and examples of methods for accounting for barriers.
4. **Ex-ante estimation of GHG impacts:** The document provides two methods for assessing ex-ante GHG impacts of an RE policy: the emission trajectory method and the grid emission factor method. Users should consider the impact the policy will have on the energy system, taking the size of the system and of the intervention into account, when choosing between methods. Provided guidance on selecting the appropriate method for estimating GHG impacts,

substantiated by the IEA classification of energy systems. Provided guidance on linking to the online IRENA emission calculator.

5. **Estimating GHG impacts using the emission trajectory method:** Energy models are used in the emission trajectory method. Different models can be used depending on the data available and the complexity of the energy system. Provided an overview of suitable energy models, including the GACMO model and the Prospects tool, to help users select the most appropriate model for their assessment.
6. **Examples:** Made improvements to existing examples and added new examples to better illustrate how to apply the methodology and conduct individual assessment steps.
7. **Monitoring performance over time:** Improved the method on identifying and monitoring key performance indicators to track policy implementation over time and defining the parameters necessary to estimate ex-post GHG emissions.

TRANSPORT PRICING METHODOLOGY

Two countries and one non-state actor pilot applicant provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Purchase incentives for low-GHG vehicles:** Multiple countries expressed interest in evaluating impacts from policies that introduce price incentives for electric vehicles with an expanded version of the method currently presented in the document. Improved the methodological approach to substantiate the default value used to estimate the change in market share of low-GHG emission vehicles and explained the applicability of the method to account for the synergistic effect of reinforcing policies.

FOREST METHODOLOGY

One non-state actor pilot provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Evaluating significance of GHG sources and carbon pools:** The methodology does not describe how to quantify 'unintended land conversions', but it does provide a reference to the VCS Program REDD guidance for quantification. Included recommendation to users to quantify unintended land conversions where it is considered significant.
2. **Reporting ex-ante impacts over longer time-horizon:** Included guidance in the reporting chapter for reporting based on the applicable time-horizon for achieving a goal or target. Included guidance for reporting actual impacts achieved by a particular date for ex-post assessments. Included guidance for reporting based on the year of expected fully realized GHG impact (noting the policy implementation period may not align with the policy impact period) for ex-ante assessments.
3. **Examples:** Users and reviewers suggested that more examples and case studies would be helpful to demonstrate how to apply the methodology using real world examples. Chapter 8 provides a method for estimating GHG impacts, including selecting emissions factors. Included an example from a pilot case to describe how emissions factors were selected.

SUSTAINABLE DEVELOPMENT METHODOLOGY

Six non-state actor pilots applied this methodology and provided feedback, which is reflected in this document. The major revisions based on feedback received are as follows:

1. **Link to SDG achievement:** Added guidance and case studies on approaches for monitoring progress toward SDGs and connecting the assessment results (i.e., changes in selected sustainable development impact categories) to achievement of SDG targets, with reference to the official SDG indicators.
2. **Case studies:** Developed eight case studies based on the pilot experiences to illustrate key issues encountered during the assessment process to help users apply the document. These can be found in Boxes 5.4, 7.2, 8.1, 9.1, 12.2, 12.3, 12.4, and 13.1.
3. **Assessment template:** Provided an assessment template in Word with tables that can be filled out directly, to help users more easily apply the methodology.
4. **Links to related tools:** Removed Appendix D (tables of tools and resources for quantifying impacts) and moved those resources to searchable online Excel database of tools and resources available on the ICAT Sustainable Development webpage.
5. **Example:** Expanded the solar policy assessment example in Appendix A to include all steps in the guidance to provide a complete worked example, in response to feedback that a step-by-step example would be helpful. This is available on the ICAT Sustainable Development webpage.

TRANSFORMATIONAL CHANGE METHODOLOGY

One country and five non-state actor pilots provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Case studies:** Developed five short case studies based on the pilot assessment results to help explain key concepts and issues such as ‘understanding transformational change’ (Ch. 3). Provided an example of a ‘vision statement’ and ‘how to identify the phase of transformation’ (Ch. 6), illustrated how the final assessment results are based on the previous steps (Ch. 8) and lessons learned for policy making and intervention design (Ch. 12). This is in response to several comments that empirical examples would be helpful to explain theoretical concepts and the associated steps in the methodology.
2. **Communicating results:** Developed a Reporting Template in addition to the Assessment Template (which is mainly for internal use), to better explain assessment results to the public. Feedback indicated that strictly following the Assessment Template would result in a series of tables and that accompanying text would be needed to explain the results.
3. **User-friendliness:** Revised the order of methodological steps (e.g., to help users describe the vision for transformational change based on the Phase Model for sustainability transition). Provided more graphics and templates to help illustrate, how the final assessment result builds on insights from previous assessment steps. One pilot stated that results could be presented in a more graphical way to better connect the results to the relevant characteristics considered. Box 8.1 presents an example of how to do this.

4. **Indicators:** Updated the indicator list in Appendix A to include examples from the pilots. This is in response to feedback that the appendix was useful but limited in scope, focusing on the energy sector.
5. **Methodological clarifications and revisions:** Addressed all comments for minor changes to improve clarity of the methodology such as suggestions to replace 'processes of change' with 'drivers of change', where appropriate. To avoid repetition of information such as in Tables 6.4 and 6.5 (description of characteristics) and Tables 7.2 and 7.3 (description of starting situation), information from previous steps that is built upon in the next steps, is now highlighted in the colour grey. This clarifies that some repetition is necessary, without asking the user to provide the same, or very similar information twice.

NON-STATE AND SUBNATIONAL ACTION GUIDE

Three non-state actor pilots provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Case Studies:** Added several case studies (17 in number) throughout the guide to help clarify and provide examples for individual steps and different kinds of actor groups. For example, new examples were added based on the practical applications to illustrate different types of assessment objectives, baselines, approaches to likelihood determination, treating international collaborative actions, addressing overlaps, etc.
2. **Assessment boundary:** Included additional elements to the assessment boundary including the timeline of the assessment.
3. **Scope of assessment:** Provided further clarification with examples from practical applications to determine whether to include actions. An attempt has been made to provide various criteria and methods to undertake this determination with clearly explained rationale and assumptions.
4. **Assessing likelihood:** Included examples to clarify how users could approach the likelihood assessment. Consolidated guidance on this issue and added more information on what may be practical to achieve with illustrations from practical applications.
5. **Multiple scenarios:** It was noted in one application that the guide could be applied to create multiple scenarios (as opposed to a single assessment) depending on the assumptions and methods used. This option was not fully explained in the guide and has been added.
6. **Assessment template:** Provided an assessment template as a separate Word document (for easy access and download) with tables that can be filled out directly, to help users more easily apply the methodology.

STAKEHOLDER PARTICIPATION GUIDE

One country and one non-state actor pilot provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Assessing stakeholder participation:** Added guidance on conducting an assessment of stakeholder participation in policy and action design and implementation, including guidance on information to include in reporting and consideration of bias introduced by the assessor.

2. **Case studies:** Provided three short case studies in boxes based on the pilot assessment results to help explain key concepts and issues including two different methods for identifying and mapping stakeholders (Chapter 8) and assessing stakeholder participation (Chapter 10).

TECHNICAL REVIEW GUIDE

One non-state actor pilot provided feedback on this document. The major revisions based on this feedback are as follows:

1. **Examples:** Users and reviewers suggested that more examples and case studies would be helpful to demonstrate how to apply the guide using real world examples. Section 6 provides guidance for preparing for technical review, including how to identify the necessary reviewer qualifications given the objectives, scope and type of technical review being pursued. Included an example from a pilot case in Section 6.1 to describe how the technical reviewer was selected in the specific case.

APPLICATIONS OF GUIDANCE DOCUMENTS BY ICAT COUNTIES AND NON-STATE ACTOR PILOTS

Guidance document	ICAT countries	Non-state actor pilots
Introductory Guide		Sierra Gorda
Renewable Energy	India Mozambique Cambodia	
Buildings Efficiency	India Thailand*	
Transport Pricing	Sri Lanka India	Carbonium**
Agriculture		Sierra Gorda
Forest	Tanzania*	Sierra Gorda
Sustainable Development	Costa Rica* Ghana* Kenya* Tanzania*	Aalto University Energy Research Centre, University of Cape Town, South Africa Initiative for Climate Action and

	Mozambique*	Development (ICAD), Malawi Servicios Ambientales S.A., Bolivia UNEP DTU Partnership USAID South Africa Low Emissions Development (SA- LED) Program and ICF
Transformational Change	Costa Rica Colombia Argentina	Sierra Gorda Servicios Ambientales S.A. (SASA) NAMA Facility GIZ NACAG Climate Technology Centre and Network (CTCN)*
Non-State and Subnational Action	Colombia* Mexico*	Sierra Gorda WRI India and Confederation of Indian Industry WRI (America's Pledge team) Examples were also added from two other analyses that are highly relevant –by Data Driven Yale, NewClimate Institute, and PBL, and by GCOM.
Stakeholder Participation	Kenya	Initiative for Climate Action and Development (ICAD)
Technical Review		Sierra Gorda

*Application of the methodology is ongoing; therefore, feedback has not yet been received.

**This non-state actor did not apply the methodology. However, the entity provided feedback on the guidance document during the discussion phase with pilot applicants.