



WEBINAR: Development of Reporting
Framework for the private sector with the
focus on Sustainable Development
Assessment

20 August, 2020
Online,

Recording of the webinar and slides will be
uploaded to:

<https://www.youtube.com/watch?v=Wlpc142p198&feature=youtu.be>



GDPR Principles:

- Lawfulness
- Fairness
- Transparency
- Data minimization
- Storage limitation
- Accuracy
- Integrity and Confidentiality



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Today's webinar



Introducing the project objectives "Increased transparency and documentation of private sector contributions to NDCs".

Dr. Maria Paz, Libélula CEO.

(Speaker)



Importance of sustainable Development (SD) assessment and reporting for private sectors transparency and introducing ICAT SD reporting tool

**Dr. Fatemeh Bakhtiari,
Senior Researcher, UNEPDTU Partnership**

(Speaker and moderator)



Overview of other existing tools for private sectors to assess their SD benefits resulted from their climate change mitigation actions.

**Dr. Yan Dong. DTU Management Alumni,
Consultant and CEO of WERD Consulting Firm**

(Speaker)

Questions & Answers session

Recording of the webinar with Spanish subtitle for slides will be uploaded to

<https://www.youtube.com/watch?v=Wlpc142p198&feature=youtu.be>



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20 August, 2020
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UNEP DTU Partnership
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Outline:

- Webinar objectives
- Putting Nationally Determined Contributions in Context
- Why transparency and reporting on SD matters?
- Alignment of NDC implementation and Private sectors actions with Sustainable Development Goals
- How to communicate SD impacts? Existing tools?
- Four existing SD assessment tools
- Introduction to ICAT framework

Project: Increased transparency and documentation of private sector

The Project aims

- to support the private sector and other non-state **actions** to be fully reflected in national or international efforts.
- Transparency systems-Reporting Framework- will be developed to ensure that the many private-sector and other non-state actor actions are appropriately **Measured, Reported and Verified (MRV)**,

Project has funded by **DANIDA** (Ministry of Foreign Affairs of Denmark)

Partners: **UNEPDTU** and **Libélula**



Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

- The webinar will introduce Private Sector Representatives with the steps required for Measuring, Reporting of Sustainable Development benefits of their mitigation actions in common and agreed formats
=> which will give the private sector **enhanced credibility** from both the national and international points of view, including in the context of UNFCCC negotiations.
- The application of the ICAT Sustainable Development Methodology will be presented, which helps users such as private sectors systematically assess multiple impacts of their actions.

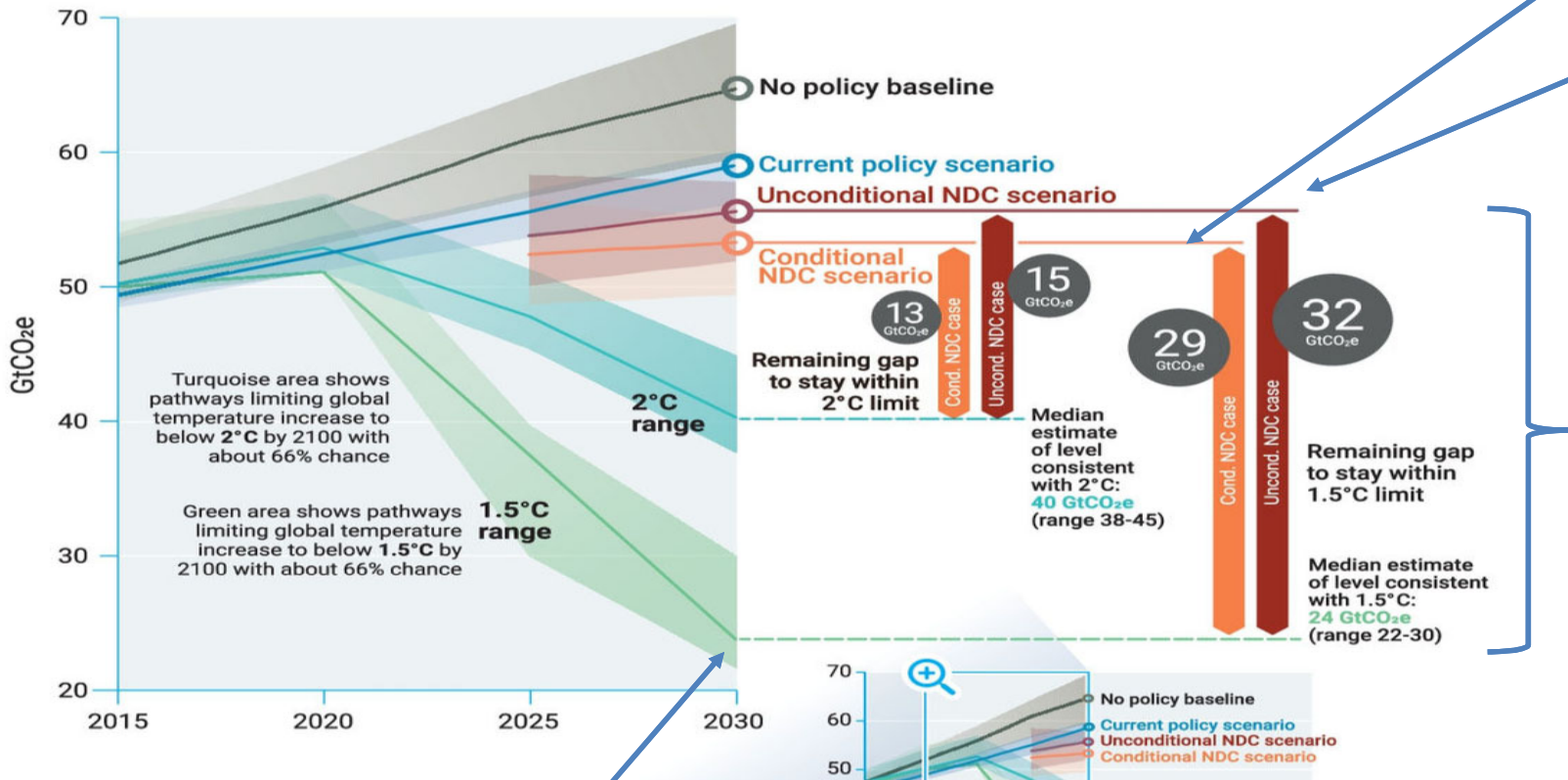
Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

**Background:
Putting Nationally Determined Contributions in Context for private sectors**

Achieving the long-term temperature goal of the Paris Agreement requires that countries undergo a transformation toward low-emissions, climate resilient development across all sectors: both at public and private sectors.

While the NDCs submitted to date represent an improvement in the global emissions pathway relative to a business as usual scenario, the collective ambition they reflect is still far from consistent with the Paris Agreement’s long-term goal of limiting warming to 1.5 C–2C.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
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Source: UNEP 2018: *Emission Gap Report 2018*

private sector and other non-state actions are not well reflected in national or international efforts.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
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Rational and the content

- Even though the enhanced transparency framework will enter into full implementation phase by 2024, many developing countries still **lack** the tools, institutional and human capacity to comprehensively assess the impacts of national policies and actions.
- Hence, transparency efforts need to be developed to ensure that the private sector and other non-state actor actions are appropriately Measured, Reported and Verified (MRV).

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

Why transparency and reporting on SD matters?

"Lessons learned from sustainable development assessment in the context of compliance and voluntary carbon markets show that a lack of transparency on SD contributions and safeguard principles of project activities can be harmful. E.g. Negative impacts have to be addressed". (Sven et al. 2018)

=>Therefore, documenting how the private sector and other non-state actors have contributed to the SD goals and targets will be instrumental in advancing their engagement in the necessary enhanced ambition required to meet the goals of the Paris Agreement and the 2030 Agenda.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

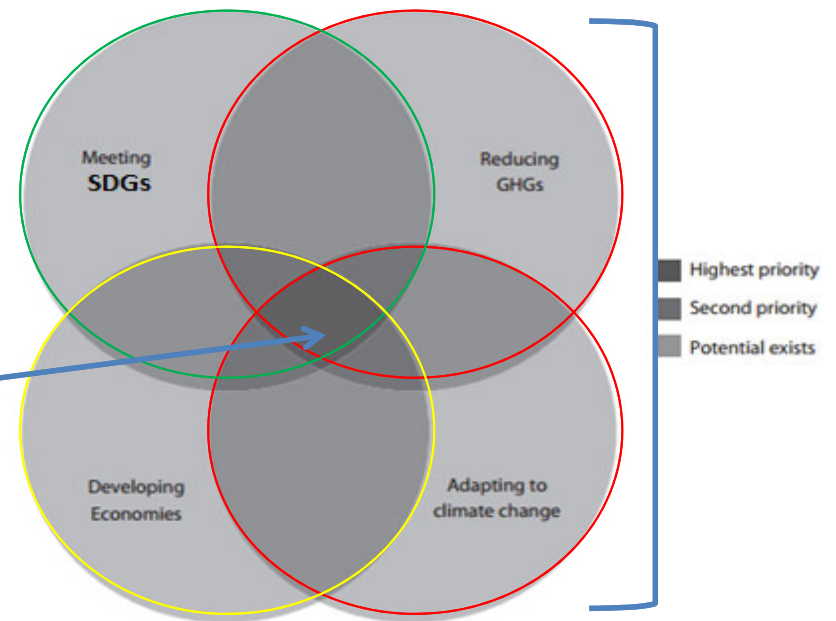
Alignment of NDC implementation and Private sectors actions with Sustainable Development Goals

- Alignment of NDC implementation and private sectors actions with Sustainable Development Goals will be crucial to achieving and sustaining the level of economic and social transformation required by the goals of the Paris Agreement.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

How to prioritise the actions?

- ✓ A subset of possible actions can contribute to
 - more than one goal, and some actions can
 - contribute to all, if properly designed. Such actions should get priority.
- In the figure, the darker the area, the more synergy between the goals.



Source: Kuzma and Dobrovolny (2004)

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
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How to communicate SD impacts? Existing tools?

Four existing SD assessment tools

	Gold Standard for the Global Goals	ICAT SD frame work	UNDP CLIP Tool	CDM SD Tool
Type of SD approach	Voluntary standard	Procedural, technical guide	Calculation and visualisation tool	Voluntary tool specifically developed for CDM projects
Owner	Independent non-profit organisation (Gold Standard Foundation)	Consortium of ICAT organisations (incl. UNOPS, WRI and UNEP-DTU)	International UN agency (UNDP)	CDM Executive Board
Scope	Activities (projects and programmes)	Activities and policies	Activities and policies	CDM Activities

Sven, Olsen and Verles (2019)

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
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Sustainable Development Methodology

PART I : INTRODUCTION, OBJECTIVES AND KEY CONCEPTS



Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

Purpose of the methodology

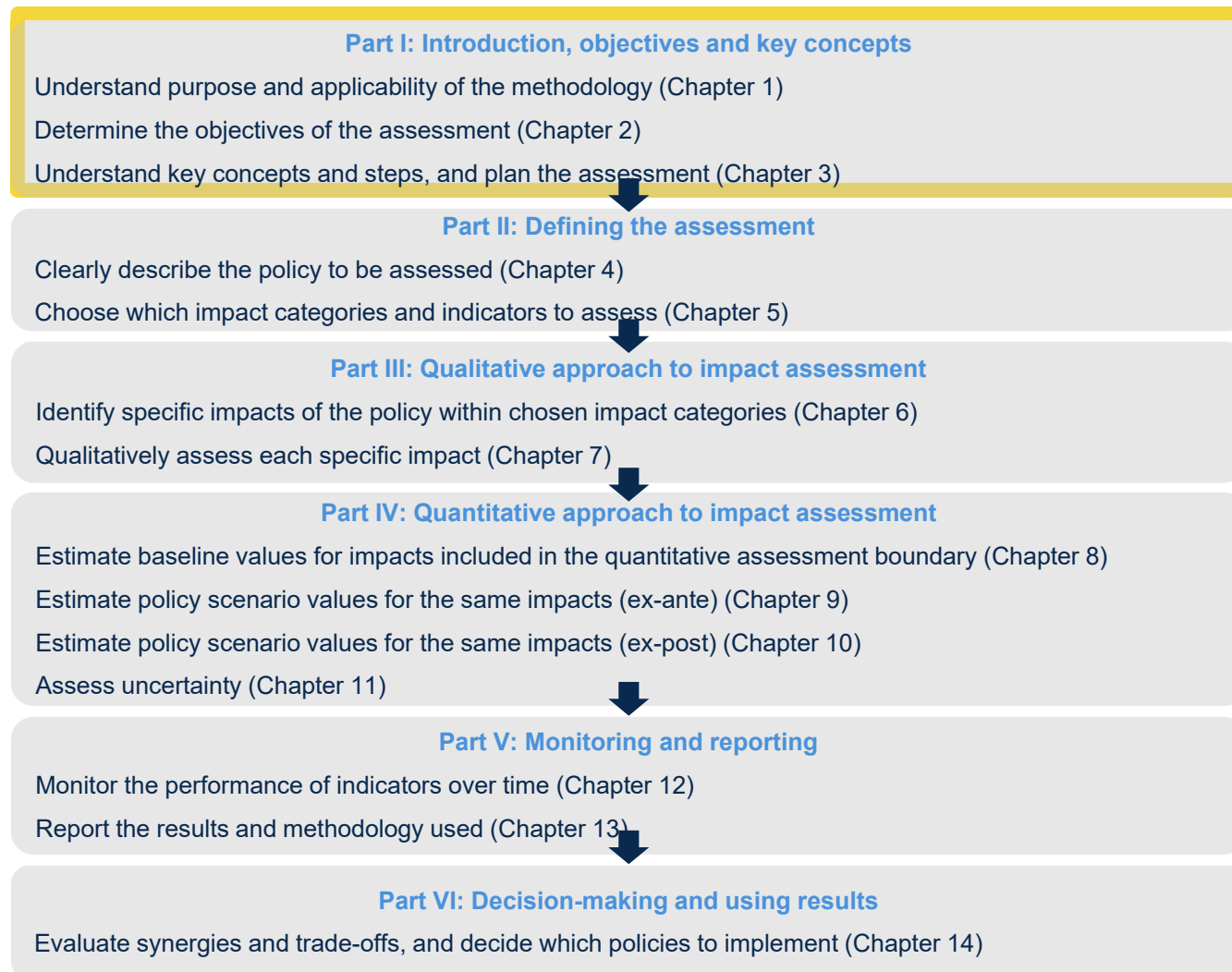
Help users assess all relevant sustainable development impacts of policies and actions in an integrated way, across three dimensions: **environmental, social and economic impacts.**

Help decision makers **develop effective strategies** for achieving sustainable development objectives through a **better understanding** of the impacts associated to policies and actions.

Support **consistent and transparent reporting** of sustainable development impacts and policy effectiveness.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

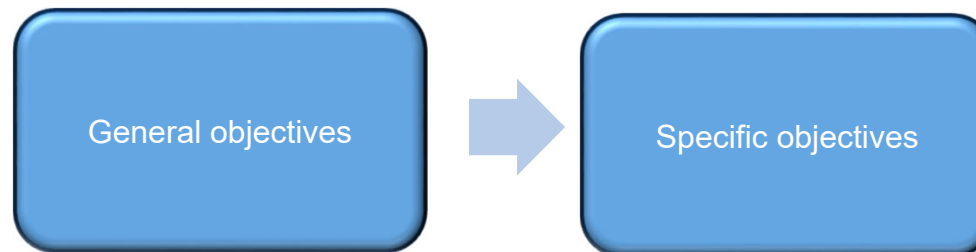
Overview of the SD methodology



Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

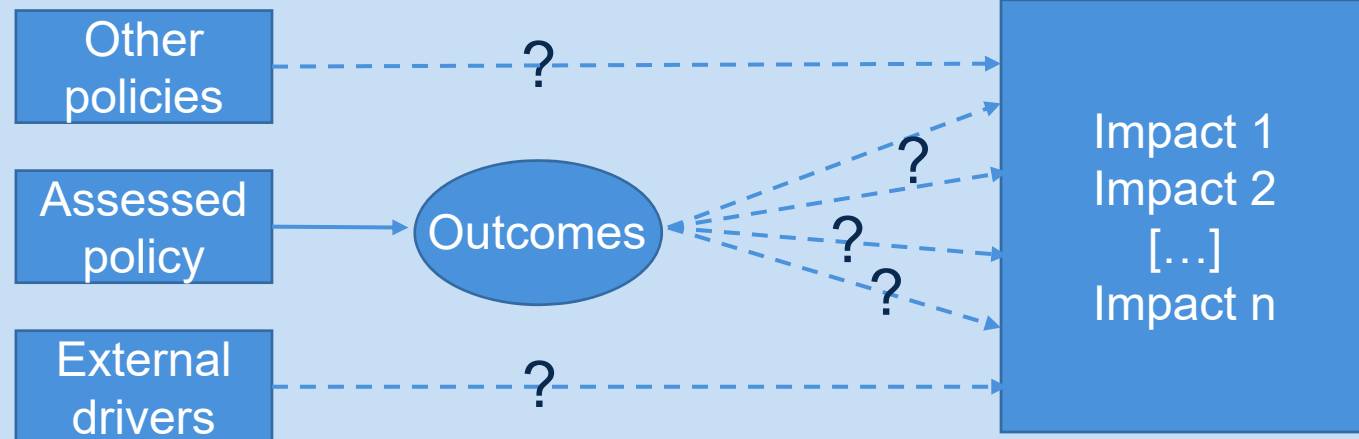
Chapter 1. Determine the objectives of the assessment

Understand the objectives of assessing Sustainable Development impacts



Attributing impacts to policies and actions

GLOBAL CONTEXT

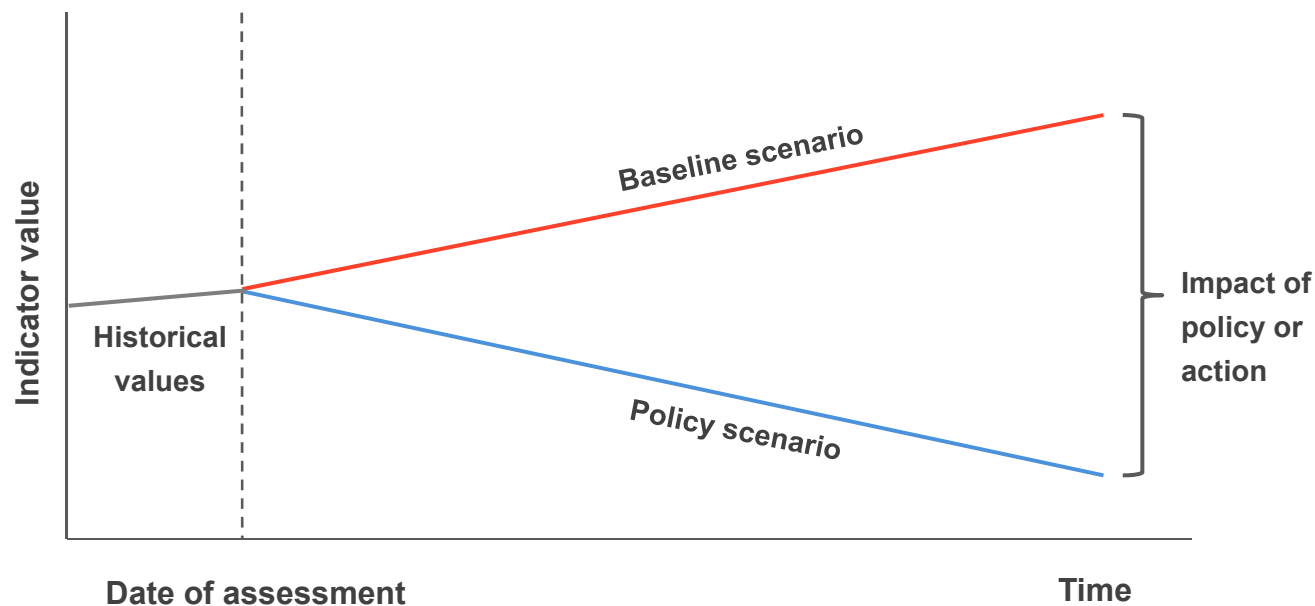


To estimate an impact resulting from a policy:

1. Define the **baseline scenario** and estimate baseline scenario conditions (Chapter 8)
2. Define the **policy scenario** and estimate policy scenario conditions (Chapter 9 and 10)
3. **Subtract** the baseline scenario value from the policy scenario value to **estimate the impact of policy** or action (Chapter 9 and 10)

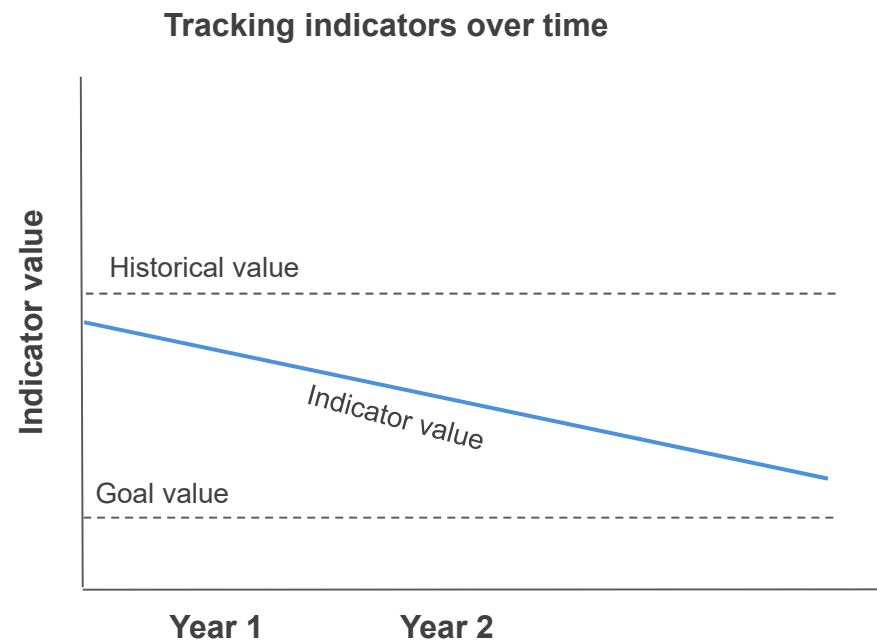
Baseline and policy scenarios

- **Baseline scenario:** Reference case, that represents the events or conditions most likely to occur in the absence of the policy or **in your case the action**.
- **Policy scenario:** Represents the events or conditions most likely to occur in the presence of the policy being assessed.



Tracking progress of indicators over time

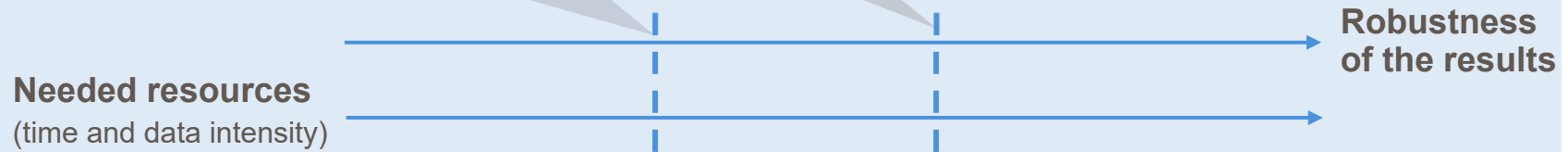
Monitoring trends in indicators highlights changes in the targeted outcomes of a policy or action.



Tracking indicators is helpful to understand if the policy or action is on track, but does not explain why changes have occurred.

Choosing a desired level of accuracy

CHOICE BASED ON THE OBJECTIVES OF THE ASSESSMENT



Methodological options	Less robust results; fewer resources required	Intermediate results; intermediate resources required	More robust results; more resources required
Number of impacts categories to assess	Relatively few impact categories are assessed	Multiple impact categories are assessed, but not all relevant and significant impact categories are assessed	All relevant and significant impact categories are assessed
Qualitative vs quantitative impact assessment	Most or all impact categories are assessed qualitatively, only the most significant impacts are assessed quantitatively, or no impact categories are quantified	Some impact categories are assessed qualitatively, some impact categories are quantified	Most impacts are quantified; impacts where quantification is not feasible are assessed qualitatively
Data	Data is largely sourced from international defaults or proxy data from other regions; data quality is relatively low	Mix of data sources with varying quality are used	Data is locally-specific; new values are estimated specific to the local context; data quality is relatively high
Methods	Simplified calculation methods and assumptions are used	Mix of methods are used	More sophisticated calculation methods and assumptions are used

Planning the assessment

DATA COLLECTION

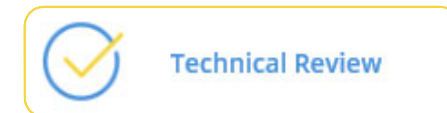
- Identify **data needs**.
- Collect data **as early as possible** in the assessment process.
- Different options to apply the methodology **depending on data availability**.

STAKEHOLDER PARTICIPATION

- Consider how it can **support the objectives** and include relevant activities.
- Ensure **conformity** with national legal requirements and norms for stakeholder participation.
- Identify stakeholders groups **influencing** or **affected** by the policy.

TECHNICAL REVIEW

- If relevant.



Overarching approaches

The choice of the approach based on the objectives and available resources needs to be reported.

- **Qualitative impact assessment**
 - Description and characterisation of the expected/achieved impacts of a policy on selected impact categories using qualitative classifications of likelihood, magnitude and the nature of change (positive or negative).
- **Quantitative impact assessment**
 - Estimation of the quantitative impacts of a policy on selected impact categories relative to a baseline scenario. Quantification includes qualitative impact assessment as a preliminary step.
- **Tracking progress of Indicators over time**
 - Monitoring trends in key indicators over time relative to historical values, goal values and values at the start of policy implementation to track progress in selected indicators over time.

Introduction to qualitative and quantitative assessments

	QUALITATIVE ASSESSMENT	QUANTITATIVE ASSESSMENT
WHAT	Describes the impacts of a policy or action on selected impact categories in qualitative terms	Estimates the impacts of a policy or action on selected impact categories in quantitative terms
PROS	<ul style="list-style-type: none"> • Simpler, requires less resources • Sometimes sufficient to meet the objectives of the assessment • Can use both quantitative and qualitative data (stakeholders engagement) with additional insights 	<ul style="list-style-type: none"> • Produces more reliable and robust results • Can meet a wider range of assessment objectives
CONS	<ul style="list-style-type: none"> • Does not enable an accurate or quantified estimate of the impacts of a policy or action to meet a wider set of objectives. • Can be subjective and uncertain → less reliable results • Can be limited in coverage and thus non-representative of broader conditions or impacts 	<ul style="list-style-type: none"> • Only use of quantitative data is possible → restrictive • Requires more time and resources • Data intensive

Helpful to use a combination of qualitative and quantitative data and approaches

Characterize each specific impact: Step 1



- Assessment of the **likelihood** the impact will occur

Likelihood	Description
Very likely	Reason to believe the impact will happen (or did happen) as a result of the policy or action.
Likely	Reason to believe the impact will probably happen (or probably happened) as a result of the policy or action.
Possibly	Reason to believe the impact may or may not happen (or may or may not have happened) as a result of the policy or action. About as likely as not. Cases where the likelihood is unknown or cannot be determined should be considered possible.
Unlikely	Reason to believe the impact probably will not happen (or probably did not happen) as a result of the policy or action.
Very unlikely	Reason to believe the impact will not happen (or did not happen) as a result of the policy or action.

- Likelihood classification
 - be based on **evidence**
 - solicit **multiple viewpoints** and consult stakeholders with reference to the *ICAT Stakeholder Participation Guide*

Characterize each identified impact based on the likelihood that each impact will occur, the magnitude of each impact, and the nature of the change (positive or negative)



Chapter 6

Chapter 7

What is evidence ?

Rule of thumb for likelihood classification

Characterize each specific impact: Step 2

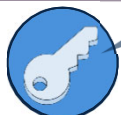


- Assessment of the **magnitude** of the impact based on evidence

Likelihood	Description
Major	The change in the impact category is (or is expected to be) <u>substantial in size</u> (either positive or negative).* The impact significantly influences the effectiveness of the policy or action with respect to that impact category.
Moderate	The change in the impact category is (or is expected to be) <u>moderate in size</u> (either positive or negative).* The impact somewhat influences the effectiveness of the policy or action with respect to that impact category.
Minor	The change in the impact category is (or is expected to be) <u>insignificant in size</u> (either positive or negative).* The impact is inconsequential to the effectiveness of the policy or action with respect to that impact category.

- Useful to consider:
 - Extent of the area affected (single site, local, regional, national or international impacts)
 - Duration of the change (short-, medium- or long-term)
 - Size of the groups affected

Characterize each identified impact based on the likelihood that each impact will occur, the magnitude of each impact, and the nature of the change (positive or negative).



Characterize each specific impact: Step 3



- Combination of likelihood and magnitude to **determine significance**

Likelihood	Magnitude		
	Minor	Moderate	Major
Very likely	INSIGNIFICANT	SIGNIFICANT	
Likely			
Possible			
Unlikely	INSIGNIFICANT	INSIGNIFICANT	
Very unlikely			

Based on the assessment of likelihood and magnitude, determine which identified impacts are significant, in consultation with stakeholders.



Chapter 6

Chapter 7

Example of qualitative assessment of impacts

Characterize each specific impact



- Step 4: Determine the nature of change
 - Impacts are either positive, neutral or negative.
- Step 5: Report the results
 - Use of the reporting template
- Refining the assessment

Summarize the qualitative assessment results for each impact category, taking into account all significant impacts.



Recommended information to report

GENERAL INFORMATION	The name of the policy/action assessed.
	The person(s)/organization(s) that did the assessment
	The date of the assessment
	Whether the assessment is an update of a previous assessment, and if so, links to any previous assessments
2. OBJECTIVES	Describe the objective(s) and intended audience(s) of the assessment
3. KEY CONCEPTS AND, STEPS	Whether the assessment consists of a qualitative assessment, quantitative impact assessment and/or tracking progress of indicators over time.
	Opportunities for stakeholders to participate in the assessment
4. DESCRIBING THE POLICY OR ACTION	State whether the assessment applies to an individual policy/action or a package of related policies
	Provide a description of the policy or action included recommended information
	State whether the assessment is ex-ante, ex-post , or a combination
5. CHOOSING WHICH IMPACT CATEGORIES AND INDICATORS TO ASSESS	A list of impact categories included and excluded from the assessment boundary, with justification for exclusions of impact categories that may be relevant, significant or identified by stakeholders
	Indicator(s) selected for each impact category included in the assessment boundary.
6. STARTING SITUATION	A list of all sustainable development impacts identified, using a causal chain and/or table format
7. QUALITATIVELY ASSESSING IMPACTS	The assessment period
	A description of each specific impact
	The outcomes of the qualitative assessment for each impact (including likelihood, magnitude and whether it is positive or negative), including which identified impacts are significant, and the methods and sources used
	A summary of the qualitative assessment results for each impact category, including impacts of the policy on different groups in society, where relevant

Report information about the assessment process and the sustainable development impacts resulting from the policy or action



Recommended information to report

8. ESTIMATING THE BASELINE (quantitative approach)

- A list of **impacts** and **indicators** included in the quantitative assessment boundary and a list of any impacts that are not quantified, with justification
- A **description** of the **baseline scenario** for each indicator being estimated and a justification for why it is considered to be the most likely scenario
- The **methods, assumptions** and **data** used to **estimate the baseline scenario** for each indicator being estimated, including the source of the baseline scenario if adapted from a previous analysis
- The **baseline values** for each indicator being estimated over defined time periods, such as annually over the assessment period, if feasible
- The **methods, assumptions** and **data sources** used to calculate baseline values
- A list of **policies, actions** and **projects included in each baseline scenario**, with justification for any implemented or adopted policies, actions or projects with a potentially significant impact that are excluded from a baseline scenario
- A list of non-policy drivers included in each baseline scenario, with justification for any relevant non-policy drivers excluded from a baseline scenario
- Which **planned policies** are included in the baseline scenario, if any
- Justification for the choice** of whether to **estimate new baseline values** and assumptions or to **use published baseline values** and assumptions
- If it is not possible to report a data source, justification for why a source is not reported

9. ESTIMATING IMPACTS EX-ANTE

- The **estimated net impact of the policy**, for each indicator, over defined time periods, such as annually and cumulatively over the assessment period, if feasible
- The **total in-jurisdiction impact** and, separately, the **total out-of-jurisdiction impact**, for each indicator, if relevant and feasible
- Justification** for why any impacts in the assessment boundary have not been estimated, with a qualitative description of the impacts
- The **assessment methods** used
- A **description** of the **policy scenario** for each indicator being estimated
- The **policy scenario values** for **each indicator** being estimated, and the methods, assumptions and data sources used to calculate policy scenario values
- Distributional impacts** on different groups in society

Report information about the assessment process and the sustainable development impacts resulting from the policy .



Chapter 12

Chapter 13

Recommended information to report

10. ESTIMATING IMPACTS EX-POST	The estimated net impact of the policy , for each indicator, over defined time periods, such as annually and cumulatively over the assessment period, if feasible
	The total in-jurisdiction impact and, separately, the total out-of-jurisdiction impact , for each indicator, if relevant and feasible
	Justification for why any impacts in the assessment boundary have not been estimated , with a qualitative description of the impacts
	The assessment methods used
	The policy scenario values for each indicator being estimated, and the methods, assumptions and data sources used to calculate policy scenario values
	Distributional impacts on different groups in society
11. ASSESSING UNCERTAINTY	The method or approach used to assess uncertainty
	A quantitative estimate or qualitative description of the uncertainty and sensitivity of the results, to help users of the information properly interpret the results
12. MONITORING PERFORMANCE OVER TIME	A list of indicators used to track progress over time and the rationale for their selection
	Sources of indicator data and monitoring frequency
	The performance of the policy over time , as measured by the indicators, and whether the performance of the policy is on track relative to expectations
	Whether the assumptions on key indicators within the ex-ante assessment remain valid , if applicable
	Trends in indicators for different groups in society

Report information about the assessment process and the sustainable development impacts resulting from the policy .

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		

Tracking progress towards SDGs

- Tracking overall progress towards SDGs should be aligned with existing and emerging national frameworks, targets and indicators
- Establishment of MRV system for data collection to individual policies and actions



Thanks for your attention

Sources:



**Sustainable Development Assessment
Template [here](#)**



Sustainable Development Assessment guide [here](#)



**Webinar: ICAT Sustainable Development Assessment
methodology [here](#)**

Questions & Answers session

- Recording of the webinar and slides will be uploaded to
- <https://unepdtu.org/webinars/>

Sesión de preguntas y respuestas

- La grabación del seminario web y las diapositivas se subirán en: <https://unepdtu.org/webinars/>

Q1:

What are the tools for collecting data in SD assessments?

P1:

¿Cuáles son las herramientas para recopilar datos en las evaluaciones de DS?

Q2:

During the presentation you talked about dimensions and impact categories for assessment. Please give examples

P2:

Durante la presentación hablaste de dimensiones y categorías de impacto para la evaluación. Por favor, dad ejemplos

Term	Definition	Examples
<p>Dimension</p> <p>↓</p>	<p>An overarching category of sustainable development impacts</p>	<p>Environmental Social Economic</p>
<p>Impact category</p> <p>↓</p>	<p>A type of sustainable development impact affected by a policy or action</p>	<p>Jobs Gender equality Air quality Poverty Energy access Health</p>
<p>Specific impact</p> <p>↓</p>	<p>A specific change that results from a policy or action (within a given impact category)</p>	<p>An increase in jobs in the solar PV manufacturing industry resulting from a solar PV incentive policy (specific impact within the jobs impact category)</p>
<p>Indicator</p> <p>↓</p>	<p>A metric that can be estimated to indicate the impact of a policy or action on a given impact category, or monitored over time to enable tracking of changes toward targeted outcomes</p>	<p>Number of people employed Emissions of PM_{2.5} % of energy from domestic sources</p>
<p>Parameter</p>	<p>Data needed to calculate the value of an indicator, in cases where the indicator value cannot be directly measured</p>	<p>Installed capacity of solar PV Emission factor for PM_{2.5} Electricity price</p>

Dimension	Groups of impact categories	Impact categories
Environmental impacts	Air	<ul style="list-style-type: none"> • Climate change mitigation (SDG 13) • Ozone depletion • Air quality and health impacts of air pollution • Visibility • Odors
	Water	<ul style="list-style-type: none"> • Availability of freshwater (SDG 6) • Water quality (SDG 6, SDG 14) • Biodiversity of freshwater and coastal ecosystems (SDG 6, SDG 14) • Fish stocks sustainability (SDG 14)
	Land	<ul style="list-style-type: none"> • Biodiversity of terrestrial ecosystems (SDG 15) • Land use change, including deforestation, forest degradation, and desertification (SDG 15) • Soil quality (SDG 2)
	Waste	<ul style="list-style-type: none"> • Waste generation and disposal (SDG 12) • Treatment of solid waste and wastewater (SDG 6)
Social impacts	Health and well-being	<ul style="list-style-type: none"> • Accessibility and quality of health care (SDG 3) • Hunger, nutrition, and food security (SDG 2) • Illness and death (SDG 3) • Access to safe drinking water (SDG 6) • Access to adequate sanitation (SDG 6) • Access to clean, reliable and affordable energy (SDG 7) • Access to land (SDG 2) • Livability and adequate standard of living • Quality of life and well-being (SDG 3)
	Education and culture	<ul style="list-style-type: none"> • Accessibility and quality of education (SDG 4) • Capacity, skills, and knowledge development (SDG 4, SDG 12) • Climate change education, public awareness, capacity-building and research • Preservation of local and indigenous culture and heritage (SDG 11)

Economic impacts	Overall economic activity	<ul style="list-style-type: none"> • Economic activity (SDG 8) • Economic productivity (SDG 8, SDG 2) • Economic diversification (SDG 8) • Decoupling economic growth from environmental degradation (SDG 8)
	Employment	<ul style="list-style-type: none"> • Jobs (SDG 8) • Wages (SDG 8) • Worker productivity
		<ul style="list-style-type: none"> • New business opportunities (SDG 8)
	Business and technology	<ul style="list-style-type: none"> • Growth of new sustainable industries (SDG 7, SDG 17) • Innovation (SDG 8, SDG 9) • Competitiveness of domestic industry in global markets • Agricultural productivity and sustainability (SDG 2) • Economic development from tourism and ecotourism (SDG 8) • Transportation supply chains • Infrastructure creation, improvement and depreciation
	Income, prices and costs	<ul style="list-style-type: none"> • Income (SDG 10) • Prices of goods and services • Costs and cost savings • Inflation • Market distortions (SDG 12) • Internalization of environmental costs/externalities • Loss and damage associated with environmental impacts (SDG 11) • Cost of policy implementation and cost-effectiveness of policies



For Maria Paz

1- In the NDC update process that countries are undertaking, how actively is being the private sector involvement.

2-And, compared with the first or initial NDC, what is the main difference of the participation of private sectors to establish the new NDC objectives.



Para Maria Paz

1- En el proceso de actualización de NDC que se están llevando a cabo en los países, qué tan activa está siendo la participación del sector privado.

2-Y, en comparación con el primero o inicial NDC, cuál es la principal diferencia de participación de los sectores privados para establecer los nuevos objetivos de NDC?

Q3:

How to decide which impact categories to choose to assess SD and report on it

=> • Significance • Relevance • Comprehensiveness

P3:

Cómo decidir qué categorías de impacto elegir para evaluar DS e informar sobre ello?

=> • Importancia • Relevancia • Exhaustividad



Thank you



2. Objectives of the assessment

General objectives

- Identify and promote policies and actions that address multiple priorities, contribute to multiple goals and **lead to multiple benefits**
- **Integrate** climate policy into **broader national development policy** and broaden support for climate actions
- Maximise **positive impacts**
- **Minimise** and **mitigate** negative impacts
- Ensure that policies and actions are **cost-effective**
- **Align** policies and actions with **national and international laws** and principles on sustainable development

Determine the objectives of the assessment at the beginning of the impact assessment progress.



Chapter 1

Chapter 2

Chapter 3

2. Objectives of the assessment

Specific objectives

EX-ANTE ASSESSMENT	EX-POST ASSESSMENT
<ul style="list-style-type: none">• Improve policy selection, design and implementation• Inform goal setting• Report• Access financing	<ul style="list-style-type: none">• Assess policy effectiveness and improve implementation• Inform adjustments to policy design and implementation• Learn from experience and share best-practices• Track progress• Report• Meet funder requirements

Users should also identify the intended audience(s) of the assessment report.

Determine the objectives of the assessment at the beginning of the impact assessment progress.



Chapter 1

Chapter 2

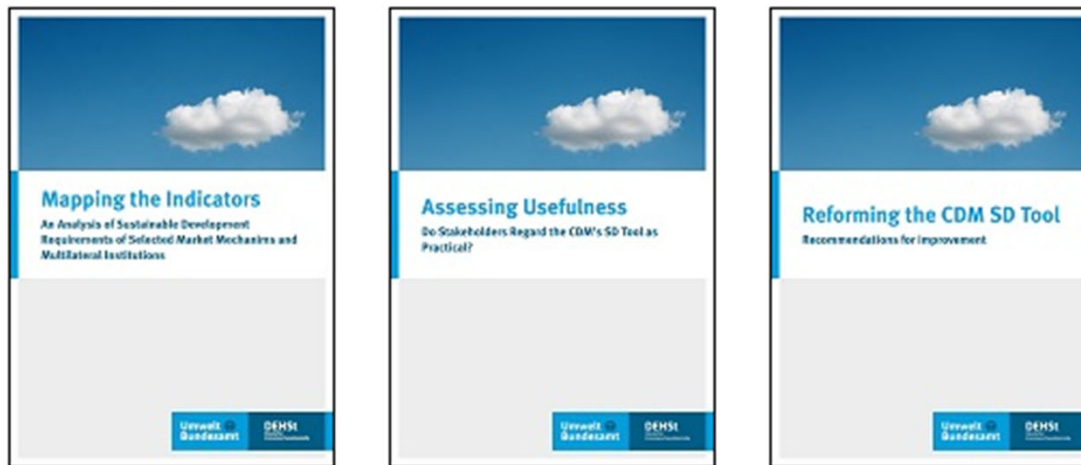
Chapter 3

Reporting template, for the example of the solar PV incentive policy

Chapter 5	Chapter 6	Chapter 8 : Defining the quantitative assessment boundary		
Impact categories included in the assessment	Specific impacts included in the quantitative assessment boundary	Indicators to quantify	Feasible to quantify ?	Included in the quantitative assessment boundary ?
Climate change mitigation	Reduced GHG emissions from grid-connected fossil fuel-based power plants	GHG emissions (tCO ₂ e/year)	Yes	Yes
Air quality / health impacts of air pollution	Reduced air pollution from grid-connected fossil fuel-based power plants	Emissions of PM _{2.5} , PM ₁₀ , SO ₂ , and NO _x (t/year); number of deaths due to air pollution	Yes	Yes
Energy	Increased renewable energy generation from more solar generation	Solar installed capacity (MW); % solar of total installed capacity; % solar of total installed capacity of renewable energy sources	Yes	Yes
Access to clean, affordable, and reliable energy	Increased access to clean, affordable, and reliable electricity	Number of houses/buildings/facilities with access to clean energy resulting from the policy	Yes	Yes
Capacity, skills, and knowledge development	Increase in training for skilled workers in solar relevant sectors	Number of new skilled trainees and workers on the ground	Yes	Yes
Jobs	Increased jobs in the solar installation, operations maintenance sectors;	Number of new jobs resulting from the policy	Yes	Yes
	Increased jobs in the solar panel manufacturing sector	Number of new jobs resulting from the policy	Yes	Yes
	Decreased jobs in fossil fuel sectors	Number of new jobs resulting from the policy	Yes	Yes
Income	Increased income for households, institutions and other organizations due to reduction in energy costs	Savings in annual electric bill (USD/year)	Yes	Yes
Energy Independence	Increased energy independence from reduced imports of fossil fuel	Reduction in coal imports from the policy (t/year)	Yes	Yes

Research on CDM Sustainable Development Tool

- The CDM Executive Board's Sustainable Development Tool has been evaluated in a nine month research project implemented by Wuppertal Institute and UNEP DTU Partnership for the German Federal Environment Agency.



Access [here](#)

CLIMATE POLICY, 2018
VOL. 18, NO. 4, 383-395
<https://doi.org/10.1080/14693062.2016.1277686>

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RESEARCH ARTICLE

OPEN ACCESS [Check for updates](#)

Learning from CDM SD tool experience for Article 6.4 of the Paris Agreement

Karen Holm Olsen^a, Christof Arens^b and Florian Mersmann^c

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ABSTRACT

The Paris Agreement (PA) emphasizes the intrinsic relationship between climate change and sustainable development (SD) and welcomes the 2030 agenda for the global Sustainable Development Goals (SDGs). Yet, there is a lack of assessment approaches to ensure that climate and development goals are achieved in an integrated fashion and trade-offs avoided. Article 6.4 of the PA introduces a new Sustainable Mitigation Mechanism (SMM) with the dual aim to contribute to the mitigation of greenhouse gas emissions and foster SD. The Kyoto Protocol's Clean Development Mechanism (CDM) has a similar objective and in 2014, the CDM SD tool was launched by the Executive Board of the CDM to highlight the SD benefits of CDM activities. This article analyses the usefulness of the CDM SD tool for stakeholders and compares the SD tool's SD reporting requirements against other flexible mechanisms and multilateral standards to provide recommendations for improvement. A key conclusion is that the Paris Agreement's SMM has a stronger political mandate than the CDM to measure that SD impacts are 'real, measurable and long-term'. Recommendations for an improved CDM SD tool are a relevant starting point to develop rules, modalities, and procedures for SD assessment in Article 6.4 as well as for other cooperative mitigation approaches.

POLICY RELEVANCE

Research findings are relevant for developing the rulebook of modalities and procedures for Article 6.4 of the Paris Agreement, which introduces a new mechanism for mitigation of greenhouse gas emissions and sustainable development. Lessons learnt from the CDM SD tool and recommendations for enhanced SD assessment are discussed in context of Article 6 cooperative approaches, and make a timely contribution to inform negotiations on the rulebook agreed by the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement.

ARTICLE HISTORY

Received 23 August 2016
Accepted 12 December 2016

KEYWORDS

Article 6; CDM SD tool; Clean Development Mechanism (CDM); Paris Agreement; Sustainable Development Goals (SDG); Sustainable Mitigation Mechanism (SMM)

- The first** working paper reports on the assessment and comparison of SD provisions of selected flexible mechanisms and multilateral standards.
- The second** working paper presents a literature review and interviews with selected host country governments, project developers and a buyer perspective on the usability of the EB's SD tool.
- And **the third** working paper offers recommendations for the revision, improvement and enhancement of the CDM's SD Tool applicable to mitigation actions more broadly.

Objective of the Research Project ‘Measuring SD in NAMAs’,

research project implemented by UNEP DTU Partnership and IISD.

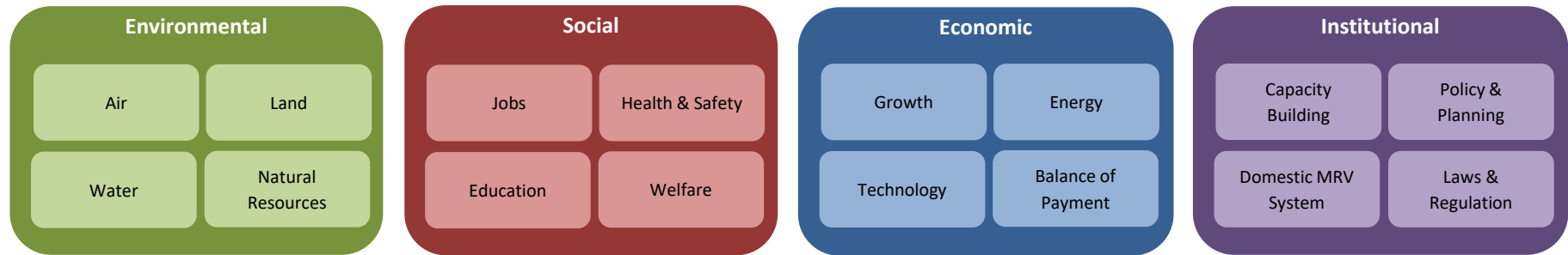
Aim: To improve quantitative and qualitative measurement of the SD outcomes of NAMAs - enhancing understanding of how NAMAs can contribute to meeting national development goals.

Outcomes: Enhanced understanding of the expectations and needs of stakeholders in measuring SD in NAMAs; improved knowledge of early action and lessons learned on measurement of SD in NAMAs through an examination of tools, frameworks and indicators and of how these actions/tools meet the needs of various stakeholders.

Outputs: Literature review, interviews, criteria for NAMA SD Framework, final report



NAMA Sustainable Development Taxonomy



■ Air

- SOx, NOx, GHG
- Odor, Dust, SPM, Fly ash
- Noise

■ Land

- Compost
- Manure nutrient and other fertilizer
- Soil erosion, Salinization, Acidification
- Minimum tillage
- End of life pollution
- Change access/lost access to land
- Other

■ Water

- Waste water
- Leaks & diesel dumping
- Drinking water quality
- Water extraction rate
- Conservation
- Supply, water access
- Ecological state
- Purification
- Other

■ Natural Resources

- Minerals
- Species diversity
- Plant life
- Land cover change
- Other

■ Jobs

- Long term jobs
- Short term jobs
- Sources of income
- Other

■ Health and Safety

- Accidents
- Crime
- Diseases
- Number of hospital visits
- Sanitation
- Food safety
- Indoor air pollution
- No child labour
- Other

■ Education

- Green development related training
- Educational services for different groups
- Project related knowledge circulation
- Other

■ Welfare

- Traffic congestion
- Commuting times
- Income/asset distribution
- Women empowerment
- Municipal revenue
- Rural upliftment
- Energy security
- Other

■ Growth

- Investment
- Industrial/commercial activities
- Economic growth/higher income
- Quality of life
- Increased tax base
- Infrastructure
- Production cost
- Productivity
- Other

■ Energy

- Coverage/availability of supply
- Access
- Reliability, affordability
- Other

■ Technology

- Imported technology
- Local technology
- Adaptation and viability in local area
- Other

■ Balance of payments

- Dependency on foreign sources of energy
- Amount of energy produced from clean renewable sources
- Decrease in risk of political conflicts
- Economic savings for the government
- Reduction in energy subsidies
- Other

■ Capacity Building

- Land titling processes
- Mapping of natural resources and renewable energy potential
- Development of competitive procedures
- Workshops and trainings
- A technical help desk for project developers and other stakeholders
- Other

■ Policy & Planning

- Policy Framework for Sustainable, Low-carbon Urban Transport
- Comprehensive Urban Low carbon Mobility Plans
- Other

■ Domestic MRV System

- Sub-national reference levels and MRV systems
- Platform for the Generation and Trading of Forest Carbon Credits
- Other

■ Laws & Regulation

- Tariff reform
- Compliance with laws and regulation on
- Promoting and regulating production, sale and use of biofuels and biomass
- Decrees for tax benefits for renewable energy projects
- Conditions for competitive process for incorporation of new plants
- Other

Quantitative methods for measuring SD benefits



Valuation of climate change mitigation co-benefits

A non-technical guide written by Fatemeh Bakhtiari (UNEP DTU Partnership)

About this document

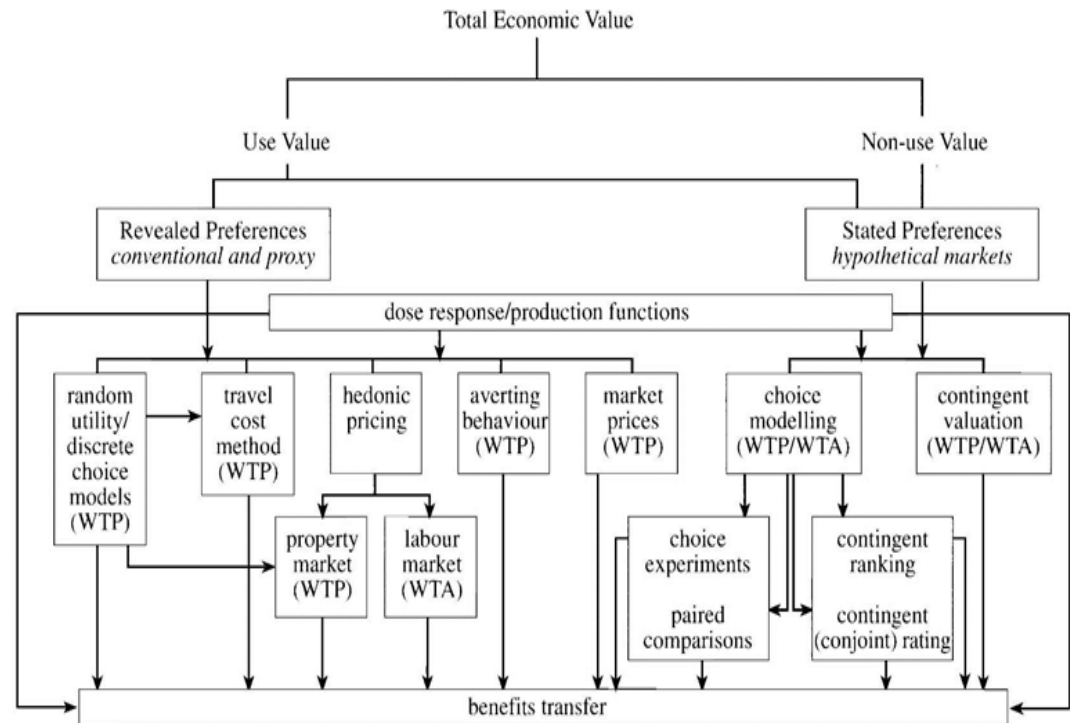
This document describes tools for valuating in monetary terms the co-benefits associated with climate change mitigation actions. The term co-benefits refers to outcomes of those actions other than their primary outcome (reducing greenhouse-gas emissions). Such non-primary outcomes can fall under a broad range of economic or, more likely, environmental and social issues. Examples of positive environmental impacts that may not be the primary outcome of a climate change mitigation policy include reduced local air pollution or restored ecosystem health. Examples of positive social impacts include improved human health or increased access to clean energy.

Consider, for example, a climate change mitigation action aimed at increasing the fuel efficiency of private motor vehicles. It is likely that such measure, in addition to limiting greenhouse-gas emissions, would reduce emissions of particulate matter from motor vehicle exhausts. This benefit, which can be seen as ancillary to the main goal of the policy, would have positive impacts on human health, as fine particulate matter is hazardous to humans. Similarly, a climate change mitigation action aimed at expanding forest cover in a certain area will most likely have multiple ancillary benefits, ranging from increase in the amenity value of the area, the level of flood protection offered, or the income generation opportunities.

The rationale for valuating this kind of benefits is twofold: firstly, valuation helps decision-makers justify the climate change mitigation action, the implementation of which results in the aforementioned benefits; secondly, understanding the nature and size of these co-benefits gives decision-makers valuable additional information, which allows them to fine-tune the mitigation action, with a view to increasing the impact of the action's ancillary impacts.

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- Fiche 2: Stated-preference methods page 09
- Fiche 3: Revealed-preference methods page 12
- Fiche 4: Benefit-transfer methods page 16



Sustainability labelling of climate mitigation actions relevant to Article 6 of the Paris Agreement

- The paper builds on Article 6.4.
- It draws on an application of the CDM SD tool to analyse 2098 Component Programme Activities (CPAs) in the CDM Pipeline by January 2017.
- The paper suggests that assessment of sustainable development benefits of climate actions can be graded and labelled based on analysis of qualitative data, which is less costly than applying a quantitative approach.

Int Environ Agreements
<https://doi.org/10.1007/s10784-018-09428-1>

ORIGINAL PAPER



Sustainability labelling as a tool for reporting the sustainable development impacts of climate actions relevant to Article 6 of the Paris Agreement

Karen Holm Olsen¹ · Fatemeh Bakhtiari¹ · Virender Kumar Duggal² · Jorge Villy Fenhann¹

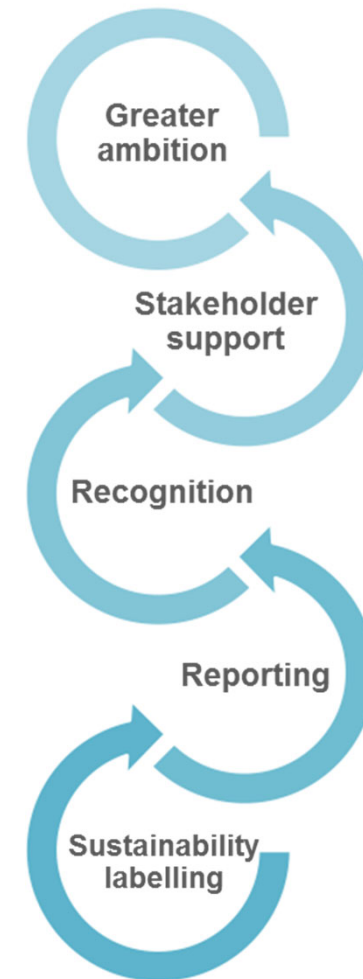
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Abstract

The architecture of global carbon markets has changed significantly since the Paris Agreement and the 2030 Agenda for Sustainable Development Goals were both agreed in 2015. Voluntary, international cooperative approaches established in Article 6 of the Paris Agreement allow Parties to work together to achieve the targets set out in their respective Nationally Determined Contributions to limit global warming to an increase below 1.5–2 °C. In Article 6.4, a sustainable mitigation mechanism is established for which rules, modalities and procedures will be developed internationally considering the experience and lessons learned from existing mechanisms, such as the Clean Development Mechanism (CDM) and its Sustainable Development (SD) Tool. Historically the issue of making integrated assessments of sustainable development and mitigation actions has been politically and methodologically controversial for many reasons: developing countries fear that an international definition of SD will interfere with their sovereignty and therefore their ability to define their own development pathways; players in the carbon market fear that markets can only handle one objective, namely mitigation outcomes; and sustainable development is regarded as too complex and costly to be measured and quantified. In an effort to address these concerns, the article proposes a new methodology for the sustainability labelling of climate mitigation actions relevant to Article 6 approaches. The article draws on an application of the CDM SD tool to analyse 2098 Component Programme Activities that had entered the CDM Pipeline by January 2017. The article demonstrates that assessment of the sustainable development benefits of climate actions can be graded and labelled based on the analysis of qualitative data, which is less costly than applying a quantitative approach.

Conclusion

- Mitigation activities can be scored and graded according to their contribution to SD
- Sustainability labelling can identify mitigation actions with the highest contribution to SD and support the overall objective of Article 6 mechanisms to promote SD goals



Valuation of climate change mitigation co-benefits

A non-technical guide written by Fatemeh Bakhtiari (UNEP DTU Partnership)

About this document

This document describes tools for valuating in monetary terms the co-benefits associated with climate change mitigation actions. The term co-benefits refers to outcomes of those actions other than their primary outcome (reducing greenhouse-gas emissions). Such non-primary outcomes can fall under a broad range of economic, or, more likely, environmental and social issues. Examples of positive environmental impacts that may not be the primary outcome of a climate change mitigation policy include reduced local air pollution or restored ecosystem health. Examples of positive social impacts include improved human health or increased access to clean energy.

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Reforming the CDM SD Tool

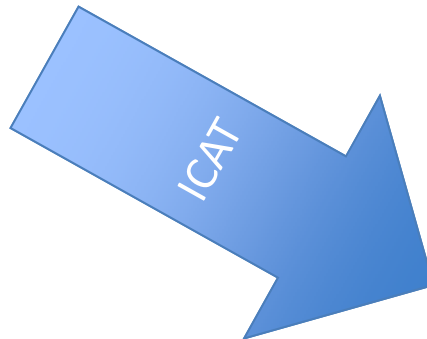
Recommendations for improvement

FRAMEWORK FOR MEASURING SUSTAINABLE DEVELOPMENT IN NAMAs

More info [here](#)

More info [here](#)

More info [here](#)



INITIATIVE FOR Climate Action Transparency

World Resources Institute, UNEP DTU Partnership

Sustainable Development Guidance

Guidance for assessing the environmental, social and economic impacts of policies and actions

First Draft, 26 July 2017

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More info [here](#)

Part I: Introduction, objectives and key concepts

Understand purpose and applicability of the guidance (Chapter 1)

Determine the objectives of the assessment (Chapter 2)

Understand key concepts, steps and assessment principles (Chapter 3)



Part II: Defining the assessment

Clearly describe the policy or action to be assessed (Chapter 4)

Choose which impact categories to assess (Chapter 5)



Part III: Qualitative approach to impact assessment

Identify specific impacts of the policy or action within chosen impact categories (Chapter 6)

Qualitatively assess each specific impact (Chapter 7)



Part IV: Quantitative approach to impact assessment

Estimate baseline values for impacts included in the quantitative assessment boundary (Chapter 8)

Estimate policy scenario values for the same impacts (ex-ante) (Chapter 9)

Estimate policy scenario values for the same impacts (ex-post) (Chapter 10)

Assess uncertainty (Chapter 11)



Part V: Monitoring and reporting

Monitor the performance of indicators over time (Chapter 12)

Report the results and methodology used (Chapter 13)



Part VI: Decision making and using results

Interpret results, evaluate tradeoffs and decide which policies and actions to implement (Chapter 14)



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Master theses on SD impact assessment using ICAT sustainable development Guideline.



Sustainability Impact Assessment of Climate Change Mitigation Policies –
A Case Study in Mexico

Master's Thesis
Department of Built Environment
School of Engineering
Aalto University

Espoo, 30th July 2018

B.Eng. Andrea Cecilia Cuesta Claros

Supervisor: Professor Kauko Viitanen
Advisor(s): M.Sc Anahita Rashidfarokhi,
PhD Yan Dong, PhD Fatemeh Bakhtiari



Master's Thesis:

AN ASSESSMENT OF THE SUSTAINABLE DEVELOPMENT IMPACT OF SOLAR PV MINI-GRIDS IN KENYA THROUGH THE ICAT SD GUIDANCE

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MSc. in Environmental Engineering
Technical University of Denmark

19/06/2018



Thanks For your attention



In the coming years, countries will move toward implementation of the agreement in the following ways:

Now that countries have put forward their first NDCs, they are embarking on implementation. How the NDCs are implemented and improved upon over time will determine whether the goals of the Paris Agreement, as well as Sustainable Development Goals, are achieved.

-**In 2023**, a **global stocktake** is to take place, with a **preparatory stage** beginning **in 2021**, assessing collective progress toward achieving the agreement. The outcome of the stocktake will inform the updating and enhancing of Parties' climate actions and support.

-A **stocktake** will take place every 5 years, in time to inform the **next round of NDCs**.

- **The enhanced transparency framework** will enter into **full implementation** phase, at the latest by December **2024**, when the **first biennial transparency** reports are submitted.

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		 

General objectives

Identify and promote actions that address multiple priorities, contribute to multiple goals and **lead to multiple benefits**

Maximise **positive impacts**

Minimise and **mitigate** negative impacts

Ensure that actions are **cost-effective**

Align actions with **national and international laws** and principles on sustainable development



Determine the objectives of the assessment at the beginning of the impact assessment progress.



Chapter 1

Chapter 2

Chapter 3

Objectives	Background	Rational /link with NDCs	Existing SD assessment tools
ICAT framework	Tracking progress on SDGs		 

Specific objectives

EX-ANTE ASSESSMENT	EX-POST ASSESSMENT
<ul style="list-style-type: none"> • Improve policy or action selection, design and implementation • Inform goal setting • Report • Access financing 	<ul style="list-style-type: none"> • Assess effectiveness of the action and improve implementation • Inform adjustments to policy design and implementation • Learn from experience and share best-practices • Track progress • Report • Meet funder requirements

Users should also identify the intended audience(s) of the assessment report.

Determine the objectives of the assessment at the beginning of the impact assessment progress.



Chapter 1

Chapter 2

Chapter 3