



User booklet

Acknowledgements

I4CE – Institute for Climate Economics, is a non-profit association with expertise in economics and finance. I4CE contributes to the fight against climate change by informing the public policy debate and supporting public and private decision-makers



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Link to the dashboard

- The dashboard template is available as an Excel file on I4CE's website
- A report presenting insights from the research underlying the dashboard is available <u>here</u>
- We will release updated versions of the template as we receive feedback from countries and practitioners.
- We are hoping to launch a pilot study to put this dashboard into practice in the coming year. In the meantime, please do not hesitate to get in touch with us.

User booklet contents

- Context and objective
- Key interview takeaways
- Dashboard overview
- Tab details:
 - LTS overview
 - Climate investments
 - Policies & financing
 - Macroeconomic implications
- How to fill the dashboard template in practice

Context and objectives

Context

- Long-Term Strategies (LTS) are key documents for countries to fulfil their climate objectives
 - As of November 2022, 55 countries had submitted their LTS to the UNFCCC
- LTS implementation remains challenging:
 - Need for large-scale yet targeted actions
 - Whole of government approach
 - Multiple time horizons
- The involvement of Finance Ministries in the implementation of LTS is key to ensure:
 - Climate investments are unlocked
 - Public funding is available to support effective climate action
 - The economic implications of the transition are anticipated, managed, and benefits are maximised
- For more details on the context, please see the report available <u>here</u>

Dashboard objective and requirements

Objective of the dashboard:

To provide Finance Ministers with a dashboard to contextualize national long-term low-emission strategies (LTS) to be used by Finance Ministries in developing and developed countries

Dashboard requirements

- Indicators in the dashboard should be relevant, robust, and realistically fillable
- The dashboard should highlight key indicators and insights
- Focus on the financial aspects of the transition
- The dashboard should be user-friendly
- Indicators should be modulable by users to adjust for different national contexts
- Indicators should be modulable over different timeframes

Methodology

The dashboard template was developed following these steps:

1. Literature review:

- Set the scope of the project
- Identify existing indicators linking public finance management and climate strategies
- Take stock of missing elements in existing studies and tools

2. Interviews with key stakeholders:

- Semi-guided interviews with representatives from the Ministries of Finance of 6 countries
- Interviews with representatives from civil society organizations

3. Internal and external reviews:

- Presentation of the final tool to a set of interviewees from phase 2
- Presentation of the tool to representatives from 8 international organizations

Dashboard overview

Dashboard structure

Investment needs assessment:

how projected 'real economy' changes translate into sectoral climate investment needs

Key macroeconomic implications of the LTS: growth, income, prices, debt, employment, trade balance, foreign exchange, etc.

LTS overview

Climate investments

Policies & Financing

Macro implications

Salient elements from the LTS:

- LTS objectives and milestones
- Projected real economy changes
- Key challenges and levers for the transition

Implications of the LTS for the national budget:

- Overview of policies in place to trigger climate investments
- Estimates of the volumes of public funding which support / go against LTS objectives
- Available & potential resources which can be mobilized to support LTS implementation

Tab – LTS overview

LTS overview

LTS overview

Climate investments

Policies & Financing

- LTS are not always well-known to officials working in Ministries of Finance. This tab presents, in a succinct manner, LTS elements that are key to Ministries of Finance's work.
- The purpose of this tab is to highlight where efforts will be most needed according to the LTS:
 - <u>Mitigation</u>: the country's current and projected contribution to climate change, GHG emission reductions targets, expected mitigation challenges and levers
 - Adaptation: current and projected socio-economic impacts of climate change, adaptation objectives, expected challenges and levers
 - Development objectives
- This tab could also serve to highlight where the LTS may not provide sufficient information; it also prepares the translation of LTS targets and objectives into investment needs

LTS overview Key charts and indicators

LTS overview

Climate investments

Policies & Financing

Macro implications

Key development objectives from the LTS:

- XXX
- XXX
- XXX

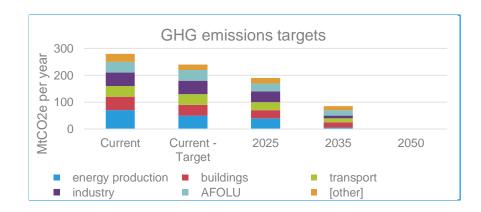
Key adaptation objectives from the LTS:

- XXX
- XXX
- XXX

Key mitigation objectives

- Including objectives regarding climate-harmful activities
- XXX
- XXX

XXX



Tab – *Climate investments*

Climate investments

LTS overview

Climate investments

Policies & Financing

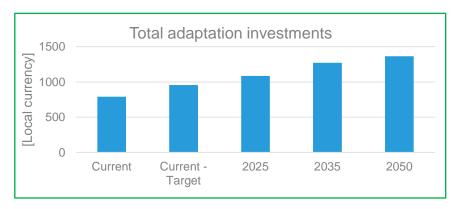
- A country's GHG emissions are directly linked to the type of equipment and infrastructure on the ground.
- The transition to a low-carbon economy will materialize in visible, real economy investments: energy-efficient renovations, renewable energy power plants, electric vehicles replacing ICE vehicles on roads, new low-carbon urban transport networks, etc.
- Only a fraction of this equipment / infrastructure is replaced every year, making the timing of climate investments crucial to **avoid the risk of carbon lock-in**.
- This tab proposes to track investments consistent with LTS climate goals (climate investments) and counterproductive investments e.g. in fossil fuels (harmful investments).

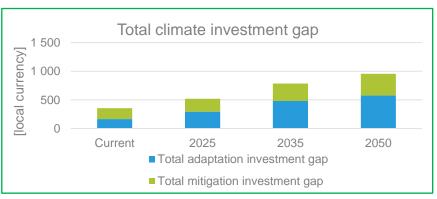
Climate investments Key charts and indicators

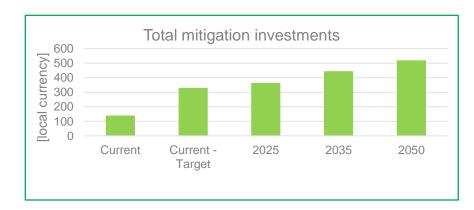
LTS overview

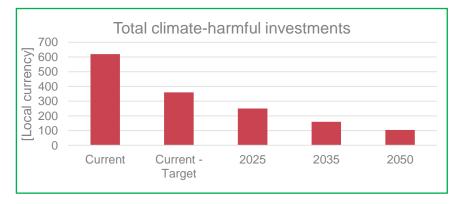
Climate investments

Policies & Financing









Climate investments Expected challenges

- Detailed information on the sectoral transformations needed in the real economy
 - The current LTS may not provide sufficient levels of detail
- The computation of investment needs relies on methodological choices:
 - Definitions: what qualifies as climate mitigation, 'climate adaptation' and 'climate-harmful'
 - Costs hypotheses: could be based on current costs and projections of how these will evolve over time (technological progress, economies of scale, etc.)
- It is possible to obtain order of magnitude estimates with rough or partial data, and loose definitions, and to revisit these elements at a later stage
- The focus should be on the key sectors / activities identified in the LTS

Tab – Policies and financing

Policies & financing

LTS overview

Climate investments

Policies & Financing

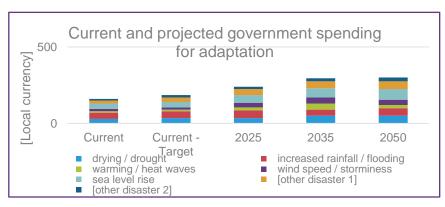
- This tab details the means and implications of implementing LTS for public finances.
- It covers current, planned, and proposed policies to trigger climate investments and real economy changes required for the implementation of the LTS, as well as the corresponding projected volumes of public spending.
- The tab also proposes to track climate-harmful public spending to highlight areas for reform, or suggest complementary, reparative policies.
- Current, projected and potential sources of revenue for the transition are laid out and split between fiscal revenues, debt instruments (e.g. bonds), and international loans and aid.

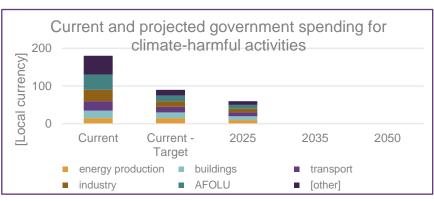
Policies & financing Key charts and indicators

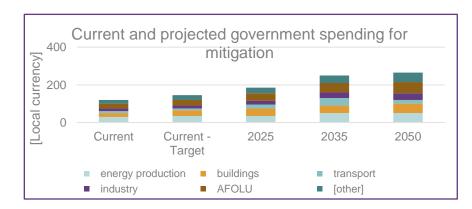
LTS overview

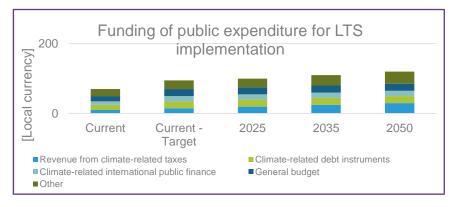
Climate investments

Policies & Financing









Policies & financing Expected challenges

Recording all LTS relevant policies

- National policies and policy options to trigger climate investments are multiple and vary significantly in scope (nation-wide, sectoral, project based..) and intent (directly / indirectly trigger investments)
- Start by recording the most significant policies
- Tracking public spending associated with LTS implementation and goals
 - Easier if a taxonomy or common baseline have been developed by the country
 - Alternatively, for countries who have not engaged in green budgeting, the types of public policies could be used as an entry point to retrieve the order of magnitude of public funding supporting LTS implementation
- Identifying climate-harmful public spending
 - Will require definitions, baselines and political support

Tab – Macroeconomic implications of the LTS

Macroeconomic implications Purpose and overview

LTS overview

Climate investments

Policies & Financing

- The real economy changes needed to achieve LTS targets are likely to positively or negatively – impact the structure of the economy: growth, income levels, key sectors, jobs, imports, exports, debt, foreign exchange, etc.
- The purpose of this tab is to compare the macroeconomic implications of implementing the LTS to the business-as-usual (BAU) scenario (i.e., assuming no LTS implementation)
- For countries already engaged in modelling, this tab will provide a synthesis of **key indicators** to monitor the macroeconomic impacts of LTS implementation.
- This tab comprises:
 - A list of main indicators derived from the existing literature on the macroeconomic implications of the low-carbon transition
 - Additional indicators based on the country's development priorities as laid out in the LTS.

Macro implications Key indicators

LTS overview

Climate investments

Policies & Financing

Macro implications

OUTPUT

Chart / numbers BAU vs. LTS:

National output, growth, key sectors, energy intensity, carbon intensity of energy

PRICES

Chart / numbers BAU vs. LTS:

Food and energy prices, inflation, price volatility

TRADE

Chart / numbers BAU vs. LTS:

Key imports, key exports, trade balance, energy trade balance

SOCIOECONOMIC INDICATORS

Chart / numbers BAU vs. LTS:

Income levels, poverty, inequality employment, labour productivity

DEBT

Chart / numbers BALL vs. LTS:

Debt

CURRENCY

Chart / numbers BAU vs. LTS:

Foreign exchange

Macro implications Expected challenges

- Coming up with macroeconomic indicators for the BAU and the LTS scenarios could require significant modelling
 - We assume that the macroeconomic modelling is done outside the dashboard
 - The tab will therefore be easier to fill for countries already engaged in macroeconomic modelling
- For countries without running macroeconomic models:
 - The tab provides information on existing evidence regarding the impacts of the transition on macroeconomic variables
 - The dashboard can be used to select which macroeconomic indicators to track



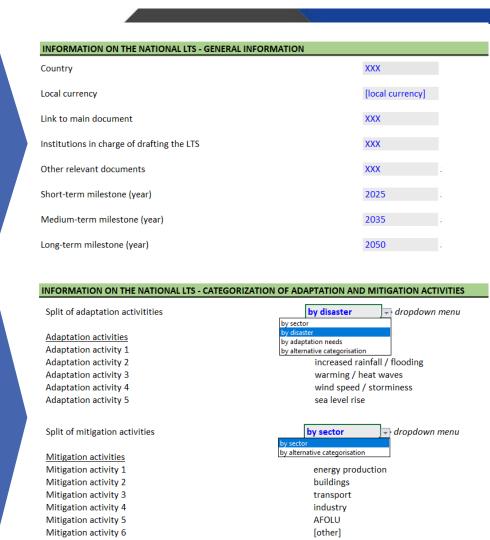
How to fill the dashboard in practice Guidelines

- The dashboard is **easily fillable**, no macros are used in the file
- Graphs are automatically generated
- It is possible to leave indicators blank with no effect on the structure of the dashboard

For each indicator	Difficulty level: b How to fill it	Priority level: low, medium, high Difficulty level: basic, intermediate, advanced How to fill it Available resources		
Colour coding	XXX \$\$\$ %	Text inputs to be provided by the country Value inputs to be provided by the country		
	0.0 XXX 30	Automatic calculations Dummy numbers Linked to chosen breakdown in 'LTS_Overview'		

How to fill the dashboard template in practice Tailoring the template to the national context

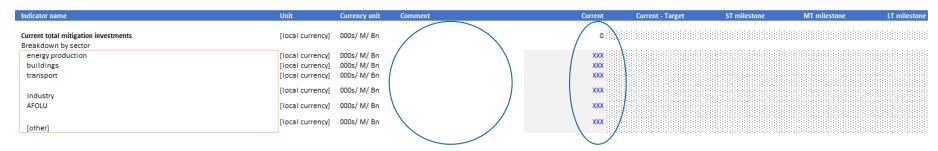
- The tab "LTS_Overview" allows users to input key elements including currency, units, key LTS targets
- Filling this tab is essential before proceeding to filling the other tabs
- The breakdown of mitigation and adaptation activities can be tailored to reflect the national context and existing categories used in national documents
- Dropdown menus allow to choose the format



How to fill the dashboard template in practice Filling in indicators

For tabs 3_Climate_investments, 4_Policies & Financing, and 5_Macro implications

- Time horizons are linked to the 'LTS overview' tab
 - 'Current', 'Current Target' + short-, medium- and long-term milestones from the LTS
 - Currency units are linked to the 'LTS overview' sheet
- Cells to be filled in are shaded in grey with a blue font (for inputs); results of automatic calculations are in black
- Comments can be added by users in column G



How to fill the dashboard template in practice Additional information on indicators

For tabs 3_Climate_investments, 4_Policies & Financing, and 5_Macro implications

- The levels of priority and difficulty associated with each indicator are provided in columns M and O. This information should help users decide upon which indicators to fill first, in consideration of their national context.
- Columns P, Q to R provide information that can help users fill in indicators, and list resources which can be helpful.
- Example:

N	0	P	Q	R
Priority level	Difficulty level	How to fill it ?	Available resources	Links to available resources
High	Intermediate		World Bank, 2020. Developing a National Green Taxonomy : A World Bank Guide	See section on adaptation above
		of a taxonomy of activities and strong definitions of what constitutes climate	OECD, 2020. Developing Sustainable Finance Definitions and Taxonomies	
Medium	Intermediate	mitigation. The taxonomy can be developped at the national level based on a	EU Commission , 2020. EU Taxonomy for sustainable activities	
Medium	Intermediate	handful of principles, as starting point, or can be based on international taxonomies	I4CE, 2021, Landscape of climate finance in France	https://www.i4ce.org/en/publication/landscape-climate-finance-france-2021-edition/
Medium	Intermediate	(e.g., EU Taxonomy Regulation, CBI taxonomy, OECD Rio Markers). Ideally, the	ClimateBonds Initiative, 2021, Climate Bonds Taxonomy	
Medium	Intermediate	taxonomy would be fully sketched out for the country based on national objectives and priorities, and in consideration of international standards. I4CE publishes yearly	Classifications of environmental activities: environmental protection activities (CEPA) and resource management activities (CReMA) available on Eurostat website	
Medium	Intermediate	an estimation of mitigation-related investments in France, which can be used as a	OECD DAC Rio Markers for Climate	
Medium	Intermediate	resource to develop a national methodology.		



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Questions?
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