

MaxiMiseR Project

Submission of a Final Tool Concept for the Assessment of Low-Carbon Development Strategies



15 July 2016

MaxiMiseR



MaxiMiseR has been funded with the contribution of the LIFE financial instrument of the European Community and the MAVA Foundation.

More information about the project can be found at www.maximiser.eu

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1 Background

This standalone document serves as Ecologic Institute's submission of a "final tool concept" to the WWF European Policy Office for the MaxiMiseR LIFE project and was used to guide implementation of an Excel-based tool at a technical level. The tool facilitates the quantitative and qualitative analysis and comparison of EU Member States' Low-Carbon Development Strategies (LCDS), which are required as per the Monitoring Mechanism Regulation (MMR) adopted in 2013.

The following provides a thorough description of the tool concept as well as some indication of how the tool operates at a technical level. More specifically, this document:

- comprehensively outlines a three-tiered structure of indicators, criteria and indices to measure LCDS *quality* as well as a system of assessing the *status* of Member States' strategies using an supplementary index;
- explains a method of valuing individual indicators, aggregating scores at the criteria and index level and delineates a modified procedure for scoring LCDS status; and
- offers a basic description of the functionality of the tool at a technical level.

A full list of indicators, descriptions and scoring scales is provided in an Annex to this document.

2 Methodology

First, we conducted desk research and concept-mapping sessions to ascertain the best way to assess an LCDS. We also compiled previously used methodologies. This initial step entailed a cursory review of literature to date as well as an in depth examination of the LCDS repository on the European Environmental Agency (EEA) website. With this background we were able to assemble a list of crucial variables to include in the tool, determine whether or not they lend themselves to measurement and how they may be aggregated or clustered to provide for a more concrete analysis based on pre-determined indices. Thus, the early development of the tool structure took a **bottom-up approach**—we began by identifying variables of interest and then explored different ways to cluster them. However, later stages of tool development, in particular related to attaching scores to indices and criteria as well as the creation of the LCDS status index followed a **top-down approach**. For instance, the proposed scoring was determined so as to refer to all indices equally (not giving too much weight to any one element). However, the weighting was later tweaked to incorporate input from a multiple consultation processes (see Section 6 on scoring).

In order to account for the level of nuance it was important to obtain a more detailed understanding of what the variation in Member State LCDS reporting looks like. While we looked at many of the countries' reported strategies, we streamlined this process by focusing in depth on six countries in particular—Germany (DE), Belgium (BE), Poland (PL), the Netherlands (NL), Czech Republic (CZ) and Denmark (DK)—which we felt adequately represent regional differences within the EU. This approach provided us with insights into the state of the field

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but was not as resource intensive as surveying all EU Member State reporting.

Additionally, we consulted past literature in order to identify the essential elements that qualify a strategy as a LCDS. It is important to note that the overall approach taken here is **normative**, insofar as the tool is designed to measure elements that *should* be included in a LCDS, acknowledging that for some Member States data will be scarce or unavailable. At all steps in developing the tool, i.e., the identification of indicators, clustering, formulation of the indicator scales we oriented our approach around the notion of an “ideal” LCDS.

At each step of development, feedback from WWF was incorporated and used as guidance for furthering work in general.

3 Overview of tool structure

The tool is designed to assess and score LCDS *quality* and *status* separately. It has a three-tiered structure comprised of indices, criteria and indicators—which allow for the calculation of aggregated scores for various dimensions at each level.

At the onset the tool first asks four questions, which do not factor into the scoring on either index:

- When was the strategy adopted/published?
- Is the strategy an update/does it build off of a previous strategy? If so, name the older strategy.
- Briefly describe the reporting documentation. Did the country provide just the template with a link, one document or multiple documents?
- What does the process look like going forward? Does the reporting mention political developments that have hindered progress? If so, describe briefly?

The answers to these questions should provide information on the format of reporting, the age of the strategy and some indication of political factors helping or hindering the LCDS adoption process in each Member State.

There are three indices aimed at LCDS quality plus one index tailored specifically to measure LCDS status. The three quality indices can be further broken down into ten criteria and 48 indicators and sub-indicators (see Table 1). Figure 1 depicts this conceptual hierarchy visually, showing how indicators and criteria cluster into scores at the index level and eventually into two independent LCDS scores for quality and status.

Section 4 describes the three LCDS quality indices and Section 5 provides an in-depth explanation of the status index.

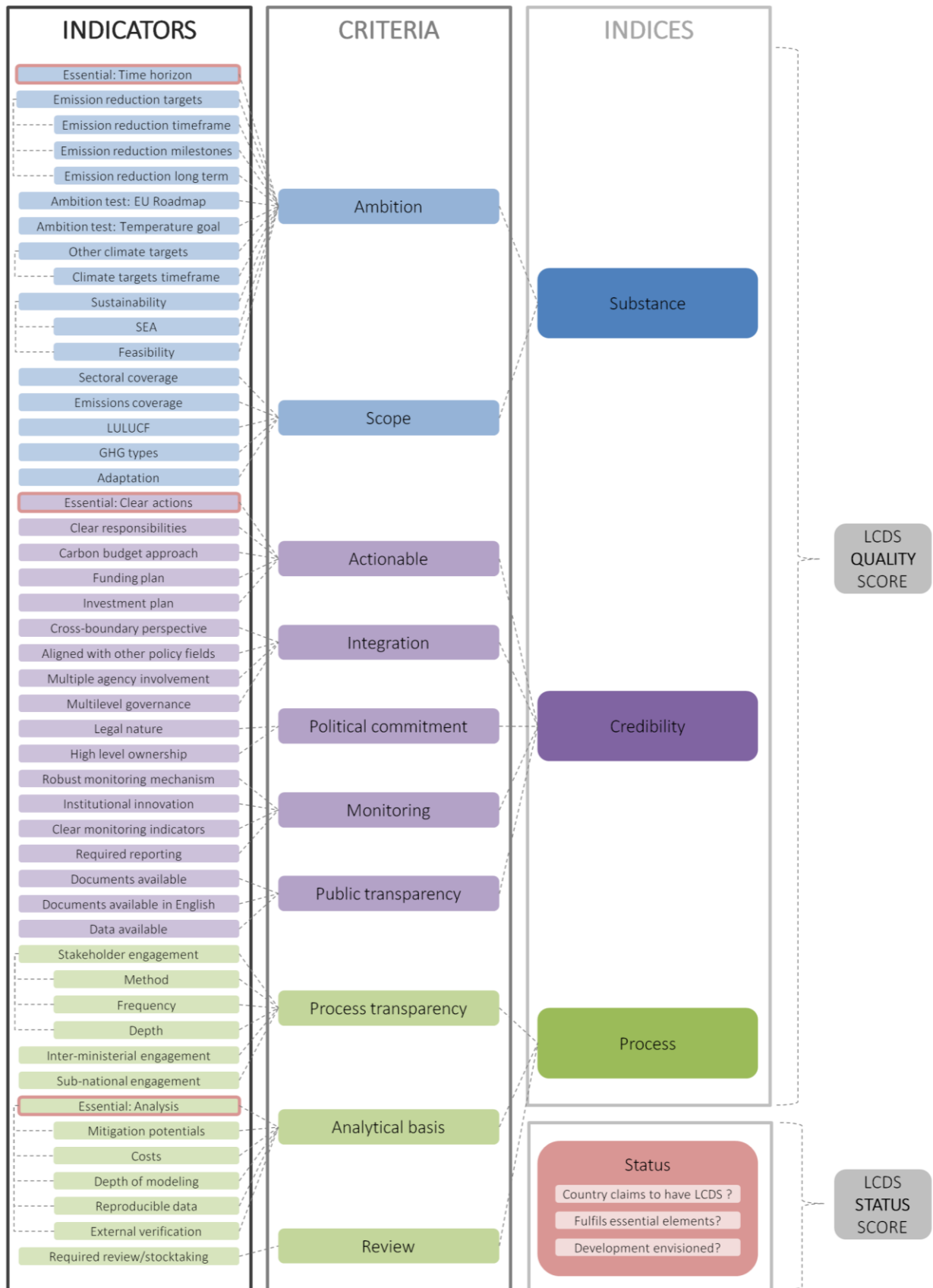
Table 1: Number of indices, related criteria and (sub)indicators

Indices	Criteria	Indicators	+ Sub-indicators
---------	----------	------------	------------------

QUALITY	Substance	2	11	3 (= 14)
	Credibility	5	17	0 (= 17)
	Process	3	5	8 (= 13)
	3	10	34	14 (=48)
STATUS	Status	-	-	-

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Figure 1: Visualisation of tool structure



4 Assessing LCDS quality

4.1 Indicators

Forty-eight indicators, comprising the first tier of the tool, are used to measure the quality of Member States' LCDSs (see the Annex for a full list and Figure 1 above). Some indicators are broken down into sub-indicators to facilitate a more detailed assessment (e.g. the *analysis* indicator is further evaluated in terms of 1) the depth of the modelling, 2) the reproducibility of data and 3) whether or not an outside review was conducted). Strategies are evaluated on each indicator using either a range with multiple anchored scale degrees—for, e.g., *time horizon* we use yearly ranges (2021-2030, 2031-2040, etc.)—or a yes/no/partially answer—

Note on technical implementation: Some indicators use a scale of options and others a more dichotomized yes/no response format, but the default (prefilled) option is always “0 – information not available/cannot be evaluated.”

Additionally, all indicators have an optional free response area for comments and an “info button” that pulls up clarifying notes. This is needed in particular for indicators that require the evaluator work with a list (e.g. indicator 2.1.5).

The tool uses visual filtering (i.e. conditional colouring) to account for interdependencies in the data input window (Data Input Mask) of the tool (e.g. between the indicators and sub-indicators). The order and logic is presented intuitively to the evaluator in the indicator list.

for, e.g., *stakeholder engagement*.

Best practice and innovative strategies

One important component of the quality assessment involves the recognition of specific best practice and innovative elements within strategies. The following list identifies twelve best practice items and which indicators reveal them (see also Annex):

1. **mention of 1.5°C target** – Indicator 2.1.4: *temperature goal*, response: “reference to the 1.5 degree Celsius target”
2. **incorporation of LULUCF emissions** – Indicator 2.2.3: *LULUCF*, response: “yes and it is explicitly included in emissions reduction target”
3. **incorporation of climate adaptation measures** – Indicator 2.2.5: *adaptation*, response: “yes, strategy incorporates highly detailed plan for domestic climate adaptation measures with a sound analytical basis”
4. **use of a carbon budget approach** – Indicator 3.1.3: *carbon budget approach*, response: “yes, national budget and expressed in periodic (<10 years) budget instalments”
5. **accounting for international impact** – Indicator 3.2.1: *cross-boundary perspective*,

response: “clear understanding of the interactions or impacts on neighbouring countries and consultation with those countries”

6. **providing a legal basis** – Indicator 3.3.1: *legal nature*, response: “high (legally binding target framework (with policies connected to it))”
7. **independent review** – Indicator 3.4.1: *robust monitoring mechanism*, response: “strong: external review is explicitly mentioned and laid out in some amount of detail (incl. e.g. timing, actors involved, link to official reporting)”
8. **institutional innovation** – Indicator 3.4.2: *institutional innovation*, response: “yes, a new institutional body has been created and is given distinct powers that have the ability to impact decision making”
9. **reporting in English** – Indicator 3.5.2: *documents available in English*, response: “yes”
10. **frequent stakeholder consultation** – Indicator 4.1.1: *stakeholder engagement*, Sub-indicator 4.1.1.2: *frequency*, response: “often (at least on three occasions)”
11. **comprehensive stakeholder consultation** – Indicator 4.1.1: *stakeholder engagement*, Sub-indicator 4.1.1.3: *depth*, response: “all relevant stakeholder groups”
12. **triggered stocktaking** – Indicator 4.3.1: *required review/stocktaking*, response: “high: yes, regular review mentioned AND possibility for triggered review”

Countries that incorporate these items into their strategies are highlighted qualitatively in the tool output. However, no additional points are awarded.

Note on technical implementation: When a country fulfils the requirements for best practice on a particular indicator, this is represented in the country-specific tool output in a list under the overview graphics. Naturally, the list will appear blank for countries that do not receive any best practice distinction.

4.2 Criteria

The forty-eight indicators combine to inform a set of ten criteria. These criteria were developed based on intuitive groupings of the indicators and represent the second tier in the tool’s structure. While a text description is given in Table 2, two specific elements should be highlighted.

Table 2: Description of criteria

Criteria	Description
Ambition	The level of ambition of the LCDS operationalised as the explicit inclusion of temperature goals, emissions reduction targets and/or other climate relevant objectives as well as the strength of these targets to achieve mitigation aims.
Scope	The comprehensiveness and coverage of the LCDS in terms of economic sectors, domestic GHG emissions and types as well as the inclusion of adaptation concerns.
Actionable	The extent to which the LCDS can be put into action. Are there clear actions defined and implemented? Is there a scheduled plan for these actions? Does the LCDS explicitly name the responsible agencies? What funding and investment approaches

	exist?
Integration	The degree to which the LCDS is integrated into other policy fields, governance levels and national planning strategies. Whether the LCDS is aligned with broader economic, social and environmental objectives.
Political commitment	Whether the LCDS is legally binding and the level of political 'buy in' from high level officials and across the political spectrum.
Monitoring	Whether the LCDS incorporates a robust monitoring mechanism with clear indicators of progress and requires reporting.
Public transparency	Extent to which LCDS documentation and underlying data are available to the public.
Process transparency	Degree to which the LCDS was developed in close and open consultation with government and private stakeholders, whose views are reflected in the final strategy.
Analytical basis	Degree to which the LCDS is based on analysis of domestic mitigation potentials and abatement costs using robust modelling and reproducible data.
Review	Whether stocktaking/review process is required by the LCDS.

First, we distinguish between *process* and *public transparency*, the former being stakeholder and public engagement during the development of the LCDS and the latter being access to and availability of the underlying LCDS documentation and analysis. This approach delineates two very different forms of transparency. A country can score high on public transparency by uploading all of the required documents but if there is little evidence of public engagement in the creation of the strategy then the overall transparency of the LCDS should receive a lower score. Aggregating across the two criteria will give a final transparency score for the LCDS.

Second, the *ambition* criterion is comprised of indicators for the timeframe of the LCDS (i.e. the time horizon of the strategy in general and of specific targets) as well as indicators for the use of emission reduction and other climate-relevant targets (i.e. renewable energy or energy efficiency objectives). In addition, the tool uses both the long-term emission reduction goals set forth in the EU Roadmap and any reference to temperature goals as two forms of a litmus test by which to measure the ambition of a LCDS.

1.1 Indices

The ten criteria are grouped again into three main indices—*substance*, *credibility* and *process*. Scores on these three indices are aggregated to determine an overall *quality* score for each Member State's strategy. The separate status index is explained in depth in the following section.

5 Assessing LCDS status

5.1 Status index

The status index evaluates the current and likely future *state* of each Member States' LCDS. The status index uses a modified procedure that draws from information provided on the forty-four indicators AND asks specific, binary questions. In terms of placement within the existing tool structure, it will be presented to the evaluator first. The index is designed to serve as a **foundation** of sorts for the rest of the tool, determining whether or not the Member State claims to have a strategy and, if so, whether the submitted strategy should qualify as a LCDS based on a predetermined set of essential elements (see Section 5.2). It also probes for ongoing or future updates to the declared strategy and thus incorporates an outlook component by taking foreseen updates or developments into account, and scoring accordingly. As such, the *status* index receives a standalone score and does not factor into the LCDS quality score.

The *status* index should be understood as a separate general assessment of what stage a Member State is on in the process of developing, implementing or updating its LCDS. Hence, it operates in conjunction with the remaining indices but does not ask for specific details about the contents of the LCDS (aside from whether the strategy is likely to qualify given the set essential elements as preconditions). The inclusion of the index is therefore vital to the presentation and synthesis of results as an explanation for why some countries fare poorly or lack data for the remaining three quality indices.

Table 3: Twelve plausible cases for LCDS status

Case	Strategy declared?	Qualify as LCDS?*	Further development foreseen?	Further info provided?	Further development likely to qualify as LCDS?	Likely current MS status (examples)
1	Yes	Yes/Partially	Yes	Yes	Yes/Partially	
2	Yes	Yes/Partially	Yes	Yes	No	
3	Yes	Yes/Partially	Yes	No	-	DE
4	Yes	Yes/Partially	No	-	-	DK/NL
5	Yes	No	Yes	Yes	Yes/Partially	
6	Yes	No	Yes	Yes	No	
7	Yes	No	Yes	No	-	CZ
8	Yes	No	No	-	-	
9	No	-	Yes	Yes	Yes/Partially	BE
10	No	-	Yes	Yes	No	
11	No	-	Yes	No	-	PL
12	No	-	No	-	-	

*as measured against essential elements defined below

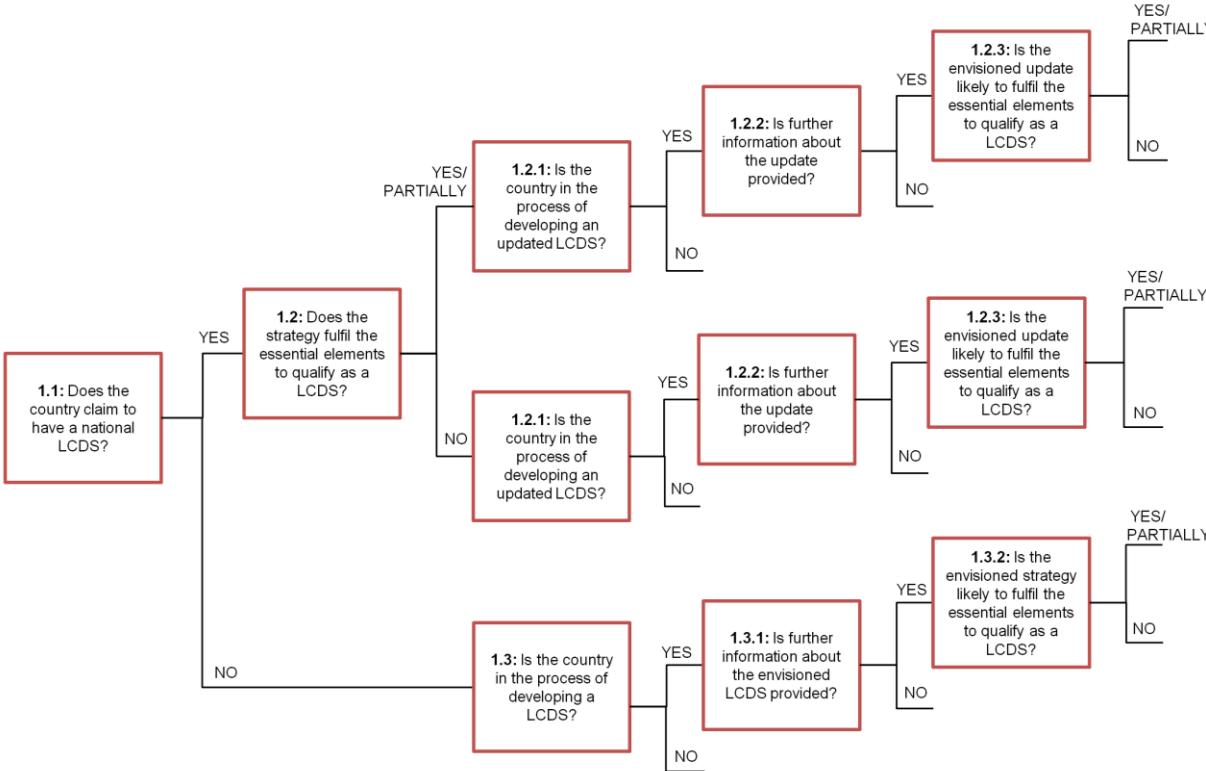
The index was developed to account for all the foreseeable situations that an evaluator may encounter. Based on a review of 2015 reporting, we determined there to be up to twelve *theoretical* scenarios for the status of a country's LCDS; these are depicted in Table 3. While some of the cases—e.g. 2, 10, 6 and 12—are unlikely to occur in reality, there are clear examples for many of the others. For instance, BE (likely Case 9) does not claim a national LCDS but is in the process of developing one and provides a comprehensive progress re-

port. PL also does not claim a national LCDS but fails to give any comprehensive information on progress in developing a one (Case 11). CZ (likely Case 7) is an interesting case, as it claims to have a strategy, but we contend that due to its age, it would not qualify as a viable LCDS. Moreover, further information on a new envisioned strategy is not provided in the reporting. On the other end of the scale, both NL and DK (Case 4) claim a LCDS but presently do not intend to update or develop it further. DE (likely Case 3) claims a LCDS and also mentions foreseen developments; however, as the process is ongoing, there is not enough information provided to ascertain whether the new strategy will fulfil the essential elements.

The status index is designed to group countries into one of these twelve categories. To achieve this, it poses a series of eight basic forced-choice questions. Crucially, some questions are conditional, i.e., depend on how previous items are answered. Figure 2 depicts the structure of the eight questions that comprise the status index.

Questions on whether a strategy qualifies as a LCDS—i.e. 1.2, 1.2.3 and 1.3.2—require that a country fulfil three essential elements. Countries can also “partially” fulfil the essential elements as described in Section 5.2 on scoring below.

Figure 2: Status index structure



5.2 Essential elements that determine LCDS validity

A crucial component of the status index is the initial judgement of whether a country’s declared strategy qualifies as a LCDS. Likewise, envisioned strategies and/or updates are also



assessed to determine whether they are likely to meet the requirements once adopted. Drawing from past literature we determined that a valid LCDS must include three “essential elements.” These we call: demonstrating *vision*, containing *planned actions* and a having been built on a *sound analytical foundation*.

The procedure is slightly different for existing versus envisioned strategies/updates.

For **existing strategies**, the tool will automatically determine if the preconditions are met by drawing on information from three relevant indicators (one from each of the three main indices): *time horizon*, *clear actions* and *analysis*. As per our definition of a valid strategy, if certain thresholds are met on these three indicators (marked in the Annex table as “essential element threshold”), then the strategy qualifies as a LCDS:

- Index: Substance / Criterion: Ambition / Indicator 2.1.1: **Time horizon**
 - the claimed LCDS must cover at least the period until 2050
- Index: Credibility / Criterion: Actionable / Indicator 3.1.1: **Clear actions**
 - the claimed LCDS must include reference to individual policies and measures (PAMs)
- Index: Process / Criterion: Analytical basis / Indicator 4.2.1: **Analysis**
 - the claimed LCDS includes a clear analytical basis and justification
- For **envisioned strategies** or foreseen updates to already existing strategies, the assessment cannot take place on such the evaluator will have to judge the documentation subjectively using the same three measurements. In many cases there will not be enough information to adequately evaluate whether envisioned strategies/updates meet the preconditions in which case a lack of data will have to be indicated (leading to a “negative” answer).

Note on technical implementation: For existing strategies the answer to the status question (1.2) is automatically filled in following a particular logic based on the input for three “essential element” indicators (2.1.1, 3.1.1 and 4.2.1). Specifically, if a certain scale degree threshold is met on these indicators, then the essential item is marked as “met.” Item 1.2 then follows a logic depicted in Table 5 to assign a “yes”, “no” or “partially” score depending on how the essential element indicators are answered.

6 Scoring a LCDS

6.1 Quality

The system for attaching scores on the quality indices initially took a top-down approach: we started by giving relative weights to the three indices, which then feed into a final score for each LCDS. Each index accounts for roughly a third of the final score. There should be a relatively even distribution of weight at the indicator level—with each individual (sub)indicator comprising between two and three percent of the final score. See Table 4 for an overview of the breakout of scores for the three-tiered tool structure.

The consultation process with the wider WWF network and an Expert Reference Group (ERG) included a “prioritization task” in which participants were asked to rate the *criteria* of

the tool in terms of importance for a Member State's LCDS. The results of this exercise were taken into account in final changes to the scoring system and concept. This was done by tweaking the weighting of individual criteria as well as indicators. Two indicators in particular (i.e. 2.1.2 and 3.5.2) were contested and thus do not factor into the final score. Instead these simply recorded qualitatively.

Depending on the scale applied to measure each indicator, answers either amount to a fraction of the maximum percentage points available—in the case of scales that have multiple anchored degrees—or use an all-or-nothing approach—in the case of dichotomous choice, yes/no indicators. For instance, for the *time horizon* indicator, the highest degree of the six point scale (“2051 and longer”) gets 3 percentage points towards the final score while the middle of the scale (“2031-2040”) only gets 2 percentage points (two thirds of the total maximum).

Table 4: Scoring breakout for quality indices

Index	% of Score	Criteria	% of Score	ID	Indicator	% of Score			
Substance	35.00	Ambition	22.50	2.1.1	Time horizon	3.00			
				2.1.2	Emission reduction targets	0.00			
				2.1.2.1	Emission reduction timeframe	2.00			
				2.1.2.2	Emission reduction milestones	2.00			
				2.1.2.3	Ambition: 2050	2.50			
				2.1.3	Ambition test: EU Roadmap	2.00			
				2.1.4	Ambition test: Temperature goal	1.50			
				2.1.5	Other climate targets	2.50			
				2.1.5.1	Climate targets timeframe	2.50			
				2.1.6	Sustainability	1.50			
				2.1.6.1	SEA	1.50			
				2.1.6.2	Feasibility of reduction methods	1.50			
					Scope	12.50	2.2.1	Sectoral coverage	2.50
							2.2.2	Emissions coverage	2.50
							2.2.3	LULUCF	2.50
							2.2.4	GHG types	2.50
			2.2.5	Adaptation	2.50				
Credibility	35.00	Actionable	10.00	3.1.1	Clear actions	2.00			
				3.1.2	Clear responsibilities	2.00			
				3.1.3	Carbon budget approach	2.00			
				3.1.4	Funding plan	2.00			
				3.1.5	Investment plan	2.00			
					Integration	9.00	3.2.1	Cross-boundary perspective	2,25
							3.2.2	Aligned with other policy fields	2,25
							3.2.3	Multiple agency involvement	2,25
							3.2.4	Multilevel governance	2,25

		Political commitment	4.00	3.3.1	Legal nature	2.00
				3.3.2	High level ownership	2.00
		Monitoring	8.00	3.4.1	Robust monitoring mechanism	2.00
				3.4.2	Institutional innovation	2.00
				3.4.3	Clear monitoring indicators	2.00
				3.4.4	Required reporting	2.00
		Public transparency	4.00	3.5.1	Documents available	2.00
				3.5.2	Documents available in English	0.00
				3.5.3	Data available	2.00
Process	30.00	Process transparency	13.50	4.1.1	Stakeholder engagement	2,25
				4.1.1.1	Method	2,25
				4.1.1.2	Frequency	2,25
				4.1.1.3	Depth	2,25
				4.1.2	Inter-ministerial engagement	2,25
				4.1.3	Sub-national engagement	2,25
		Analytical basis	12.00	4.2.1	Analysis	2,00
				4.2.1.1	Mitigation potentials	2,00
				4.2.1.2	Costs	2,00
				4.2.1.3	Depth of modelling	2,00
				4.2.1.4	Reproducible data	2,00
				4.2.1.5	External verification	2,00
		Review	4.50	4.3.1	Required review/stocktaking	4.50
					TOTAL	100.00

6.2 Status

Scoring the *status* index takes a separate and modified approach. Figure 3 depicts how scores are attached to each question and how they are summed to reach a final LCDS status score. The maximum score a country can receive is 10 and the minimum is 0. As all countries have reported something under the MMR guidelines, it is unlikely that any will receive a score of 0.

Partial scores on the essential elements can be achieved when at least one of the three essential element thresholds are met (see Table 5 below). We utilized this scoring system to assess the six countries mentioned above; results are depicted in Figure 4.

Figure 3: Status index structure (same as Figure 2) with attached scoring

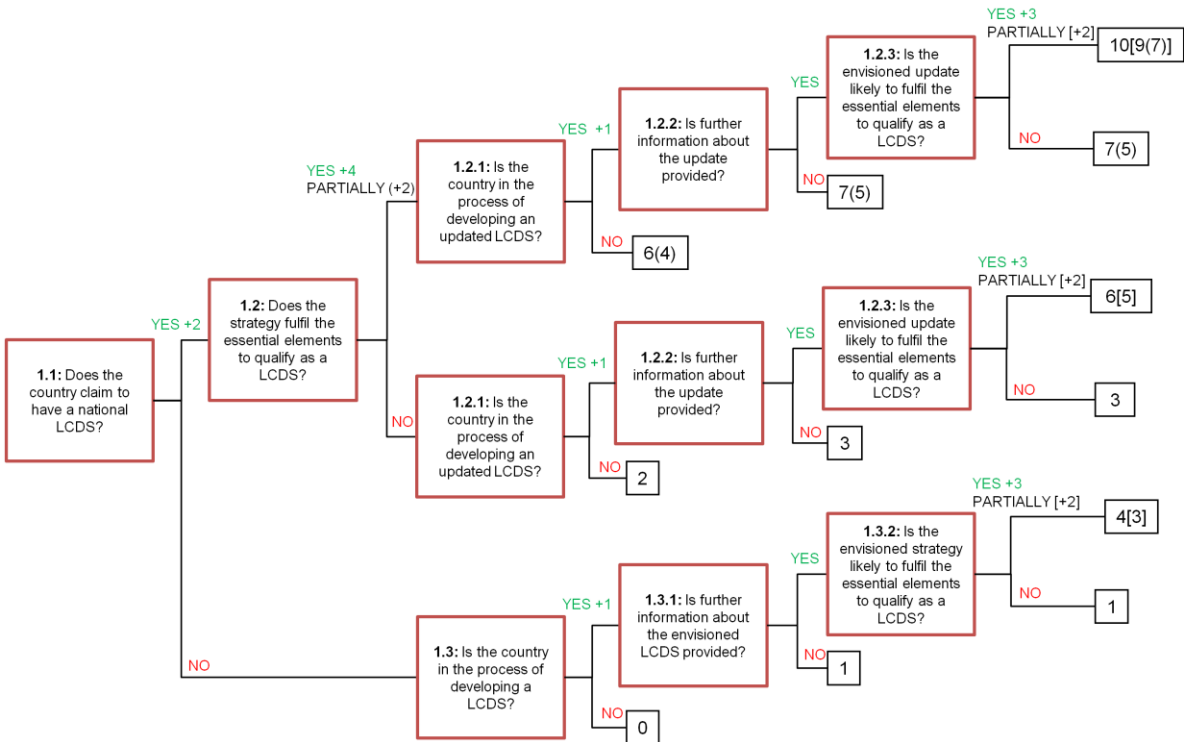
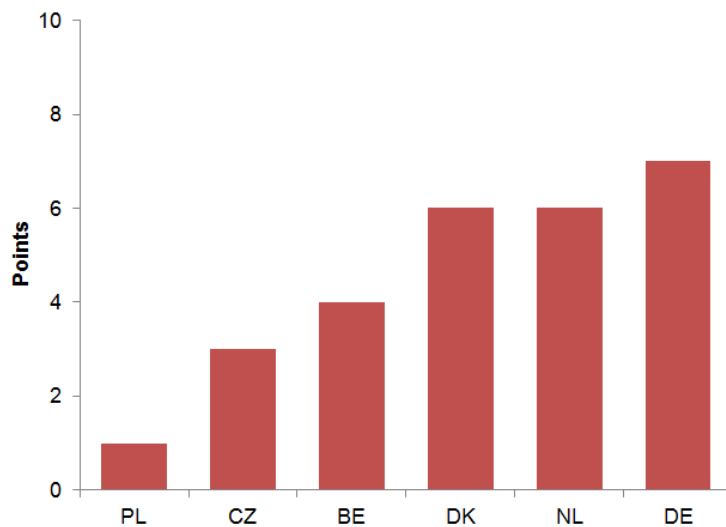


Table 5: Example, how to receive a “partial” score on essential elements

Scenarios	EE1	EE 2	EE 2	Answer
	Threshold met?	Threshold met?	Threshold met?	
A	No	No	No	No
B	No	No	Yes	Partially
C	No	Yes	Yes	Partially
D	Yes	Yes	Yes	Yes

Figure 4: Preliminary LCDS assessment on the status index for six EU Member States



8 Note on technical implementation

At the technical level the tool looks different but closely follows the concept outlined above.

The tool is built and presented in multiple sheets within one MS Excel file. First, an information sheet provides a description of the tool as well as general instructions on how to use it. In addition to this information at the beginning, the user will always be able to seek guidance by clicking on “Info” buttons, which display pop-up windows with additional supporting instructions. There is an **Input Mask** sheet, which uses drop down lists to facilitate ease of data input. The tool will be designed at a technical level to allow the user to update the input for each Member State by selecting the country name on the top of the Input Mask, and then making the desired changes in the previous filled-in data of that Member State. The user will then be prompted to save the new information, overwriting the old recorded data.

Different output sheets present the assessment outcomes using conditional formatting, graphics and lists. These include an (1) **Overview Status** sheet, (2) **Overview Quality** sheet, (3) overview for each Member State and (4) a visual representation of all data using a traffic light system. In addition to these sheets, technical sheets will be needed for saving the data and processing the calculations. These sheets will be locked and hidden for the end user. A final **Logfile** sheet records when changes were made to the data Input Mask.

Annex

The table below spells out all the indicators assessed/questions asked as data input for the tool. It includes all possible answer options to each indicator. In some cases the evaluator will see additional guiding information to support data input. This is displayed in the table below under indicator and scale description.

Note: the numbers attached to the list of possible answers do NOT represent points for the score. See section on scoring for details.

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Status	Claim	1.1			Does the country claim to have a national LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Status	Claim quality	1.2			Does the strategy fulfil the essential elements to qualify as a LCDS?	(determined automatically by the tool) 0 = inadequate information/cannot be evaluated 0 = no 1 = partially 2 = yes	
Status	LCDS Claimed	1.2.1			Is the country in the process of developing an updated LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Status	LCDS Claimed	1.2.2			Is further information about the update provided?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	

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Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Status	LCDS Claimed	1.2.3			Is the envisioned update likely to fulfil the essential elements to qualify as a LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = partially 2 = yes	Essential elements: (1) LCDS covers a time period at least until 2050 (2) LCDS provides at least <i>low detail</i> on PAMs, i.e., mentions existing and envisioned policies and measures for emissions from each covered sector but may not provide a timeline of implementation or detailed information on how they function. (3) LCDS mentions of dedicated analytical input (essential element threshold)
Status	No LCDS Claimed	1.3			Is the country in the process of developing a LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Status	No LCDS Claimed	1.3.1			Is further information about the envisioned LCDS provided?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Status	No LCDS Claimed	1.3.2			Is the envisioned strategy likely to fulfil the essential elements to qualify as a LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = partially 2 = yes	Essential elements: - At least 2030 time horizon - Clear actions in the form of PAMs - Analytical basis
Substance	Ambition	2.1.1	Time horizon		What period of time does the LCDS cover, regardless of whether there are targets?	0 = inadequate information/cannot be evaluated 0 = up to and including 2020 1 = 2021-2029 2 = 2030 3 = 2031-2040 4 = 2041-2050 (essential element threshold) 5 = 2051 and longer	This indicator measures how <i>forward-looking</i> a strategy is.
Substance	Ambition	2.1.2			Emission reduction targets	Does the LCDS include reference to a quantified absolute emission NATIONAL reduction target?	0 = inadequate information/cannot be evaluated 0 = no 0 = yes

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Substance	Ambition	2.1.2.1	Emission reduction targets	Emission reduction timeframe	What is the future year, by which the national emission reduction target should/must be achieved?	0 = inadequate information/cannot be evaluated 1 = up to and including 2020 2 = 2021-2029 3 = 2030 4 = 2031-2040 5 = 2041-2050 6 = 2051 and longer	
Substance	Ambition	2.1.2.2		Emission reduction milestones	Are there interim milestones for the emissions reduction target?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, at least one milestone (other than the longest target) 2 = yes, multiple milestones in between now and the target (e.g. 2030, 2040, 2050)	Here the term "milestone" refers to an interim target or multiple targets that must be met before a final target.
Substance	Ambition	2.1.2.3		Emission reduction long term (2050)	What level of ambition is indicated for 2050?	0 = inadequate information/cannot be evaluated 0 = no 1 = less than or equal to 80% reductions in emissions 2 = more than 80, up to 95% reductions in emissions 3 = over 95% reductions in emissions or net-zero goal	If there is no mention of an absolute emissions reduction target for 2050, answer "inadequate information/cannot be evaluated" Please indicate the baseline year in the comment box.
Substance	Ambition	2.1.3	Ambition test: EU Roadmap		Does the LCDS make reference to the EU Roadmap and its emission reduction targets (at EU level)?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, but no mentions of targets 2 = yes, but mentions only the 80% by 2050 3 = yes, mentions at least the 80% in 2050 and one more milestone 4 = yes, makes reference to 80-95% by 2050 target	
Substance	Ambition	2.1.4	Ambition test: Temperature goal		Does the LCDS make reference to temperature limits?	0 = inadequate information/cannot be evaluated 0 = no 1 = reference to the (well below) 2 degree Celsius target 2 = reference to the 1.5 degree Celsius target (BEST PRACTICE)	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Substance	Ambition	2.1.5	Other climate targets		Does the LCDS include reference to other climate-relevant targets?	0 = inadequate information/cannot be evaluated 0 = no 1 = at least 1 target 2 = at least 2 targets 3 = 3 or more targets	Below is a non-exhaustive list of possible additional climate targets: - share of renewable energy - energy efficiency - emissions intensity per unit of GDP - fossil fuel phase out (e.g. coal) - fossil fuel subsidy phase out If other, please indicate in the comments.
Substance	Ambition	2.1.5.1	Other climate targets	Climate targets timeframe	What is the future year, by which the other climate targets should/must be achieved?	0 = inadequate information/cannot be evaluated 1 = up to and including 2020 2 = 2021-2029 3 = 2030 4 = 2031-2040 5 = 2041-2050 6 = 2051 and longer	For strategies with multiple climate-related targets please choose the most forward-looking.
Substance	Ambition	2.1.6	Sustainability		Does the LCDS include a sustainability assessment of emission reduction methods?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Substance	Ambition	2.1.6.1	Sustainability	SEA	Was a strategic environmental assessment (SEA) conducted for the LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Substance	Ambition	2.1.6.2	Sustainability	Feasibility of reduction methods	Was a feasibility assessment for methods to reduce emissions conducted for the LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	Here "feasibility" refers to whether the emission reduction methods chosen can deliver on the goals of the LCDS.

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Substance	Scope	2.2.1	Sectoral coverage		Is the LCDS for the whole economy or only for specific sectors (e.g. energy)? If the latter, how many sectors are covered?	0 = inadequate information/cannot be evaluated 1 = only one non-energy sector 2 = multi-sectoral not incl. energy 3 = energy sector only 4 = multi-sectoral incl. energy 5 = economy-wide	This question does not include inclusion of LULUCF - see separate indicator further down.
Substance	Scope	2.2.2	Emissions coverage		What percentage of domestic GHG emissions does the LCDS cover?	0 = inadequate information/cannot be evaluated 1 = <20% 2 = 20-39% 3 = 40-59% 4 = 60-79% 5 = 80-99% 6 = 100%	
Substance	Scope	2.2.3	LULUCF		Does the LCDS include a clear reflection on the role of LULUCF in the transition?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes 2 = yes and it is explicitly included in emissions reduction target (BEST PRACTICE)	
Substance	Scope	2.2.4	GHG types		Which greenhouse gases does the LCDS cover?	0 = inadequate information/cannot be evaluated 1 = covers only carbon dioxide (Co2) 2 = CO2, CH4, N2O 3 = 6 Kyoto gases covered (3 above plus f-gas groups) 4 = all 6 above AND additional short-lived climate pollutants e.g. black carbon	
Substance	Scope	2.2.5	Adaptation		Does the LCDS include detailed policies and measures aimed at climate adaptation?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes 2 = yes, strategy incorporates highly detailed plan for domestic climate adaptation measures with a sound analytical basis (BEST PRACTICE)	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Credibility	Actionable	3.1.1	Clear actions		Does the LCDS include reference to envisaged or already existing policies and measures (PAMs)?	0 = inadequate information/cannot be evaluated 1 = low PAM detail (essential element threshold) 2 = high PAM detail 3 = very high PAM detail	<p>Low PAM detail - LCDS mentions existing and envisioned policies and measures for emissions from each covered sector but does not provide a timeline of implementation or detailed information on how they function.</p> <p>High PAM detail - LCDS outlines existing and envisioned policies and measures for emissions from each covered sector, provides a timeline for their implementation and reports on the current state of implementation.</p> <p>Very high PAM detail - LCDS provides a thorough description of existing and envisioned policies and measures for emissions in each covered sector, provides a timeline for their implementation, reports on the current state of implementation</p>
Credibility	Actionable	3.1.2	Clear responsibilities		Does the LCDS indicate which agency or agencies are accountable for implementation?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, but with small level of detail 2 = yes, in significant detail	
Credibility	Actionable	3.1.3	Carbon budget approach		Does the LCDS make use of a carbon budget approach in some form?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, global budget mentioned 2 = yes, national budget for specific period mentioned 3 = yes, national budget and expressed in periodic (<10 years) budget instalments (BEST PRACTICE)	Period required to receive the highest score must be less than 10 years (e.g. annual, biennial or in 5 year intervals),
Credibility	Actionable	3.1.4	Funding plan		Does the LCDS include details on public financing for its implementation process or specific initiatives mentioned in it?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, some mention of public funding for individual elements 2 = yes, significant level of detail for how measures will be financed through public means	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Credibility	Actionable	3.1.5	Investment plan		Does the LCDS include details on private investment needs and a plan on how to steer private investment?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, private investment needs are mentioned 2 = yes, significant level of detail on private investment needs and plan for steering	
Credibility	Integration	3.2.1	Cross-boundary perspective		Does the LCDS account for interactions with or impacts on neighbouring countries?	0 = inadequate information/cannot be evaluated 0 = no 1 = cursory mention of cross-border implications 2 = clear understanding of the interactions or impacts on neighbouring countries 3 = clear understanding of the interactions or impacts on neighbouring countries and consultation with those countries (BEST PRACTICE)	
Credibility	Integration	3.2.2	Aligned with other policy fields		Does the LCDS align with <i>inter alia</i> the Member State's energy policy, economic policy, etc.	0 = inadequate information/cannot be evaluated 0 = no 1 = some reference to other policy fields and possible cohesion 2 = LCDS takes other policy fields into account and actively attempts to establish synergies	
Credibility	Integration	3.2.3	Multiple agency involvement		Are responsibilities for implementation of the LCDS, or specific parts of the strategy, spread horizontally to various ministries with one agency in the lead?	0 = inadequate information/cannot be evaluated 0 = no 1 = one ministry responsible for ensuring implementation of LCDS 2 = one ministry in lead and delegates responsibilities to multiple other ministries or agencies 3 = LCDS is a joint effort with responsibilities for each relevant ministry, one ministry takes on coordinating role	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Credibility	Integration	3.2.4	Multilevel governance		Are responsibilities for implementation of the LCDS, or specific parts of the strategy, distributed vertically to other governance levels, e.g., municipal and state levels?	0 = inadequate information/cannot be evaluated 0 = no 1 = federal level solely responsible for ensuring implementation of LCDS 2 = federal ministries in the lead with responsibilities delegated to other governance levels 3 = LCDS implementation is a joint effort with multiple governance levels working in concert with federal ministries in the lead	
Credibility	Political commitment	3.3.1	Legal nature		How legally binding is the LCDS? Is it enshrined in national law in some form?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: no dedicated legal form, but adopted by Parliament (not just issued by the government) 2 = medium: with the adoption of the strategy, new laws have been proposed (to introduce policies) 3 = high: legally binding target framework (with policies connected to it) (BEST PRACTICE)	
Credibility	Political commitment	3.3.2	High level ownership		Has the LCDS been acknowledged by higher level political bodies or figures?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: associated statement only by the Minister responsible 2 = medium: direct connection to head of government or state 3 = high: strategy formally owned by head of government or state - and adopted by Parliament	
Credibility	Monitoring	3.4.1	Robust monitoring mechanism		Does the LCDS include an element of independent monitoring?	0 = inadequate information/cannot be evaluated 0 = no 1 = soft: the possibility of external input is mentioned in some form 2 = strong: external review is explicitly mentioned and laid out in some amount of detail (incl. e.g. timing, actors involved, link to official reporting) (BEST PRACTICE)	
Credibility	Monitoring	3.4.2	Institutional innovation		Does the LCDS establish a dedicated institutional arrangement for monitoring and/or implementation?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, an institutional arrangement (e.g. working group) has been created 2 = yes, a new institutional body has been created 3 = yes, a new institutional body has been created and is given distinct powers that have the ability to impact decision making (BEST PRACTICE)	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Credibility	Monitoring	3.4.3	Clear monitoring indicators		Does the LCDS monitoring mechanism make use of clear and transparent indicators to measure progress?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: yes, progress towards quantitative targets is explicitly mentioned 2 = high: dedicated set of indicators mentioned (in addition to progress towards quantitative targets, if there are any)	
Credibility	Monitoring	3.4.4	Required reporting		Does the LCDS require reporting?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: yes, reporting on progress is mentioned in the strategy (without detail) 2 = medium: yes, reporting is mentioned with dedicated frequency 3 = high: yes, reporting is specified in detail, incl. e.g. frequency, format, content, actors involved.	
Credibility	Public transparency	3.5.1	Documents available		Is LCDS documentation online for download and available to the public?	0 = inadequate information/cannot be evaluated 0 = no 1 = partially 2 = yes	Partially - some but not all LCDS documentation is publically available for download (e.g. MMR reporting template is publically available but links point to webpages that are restricted access) Yes - all LCDS documentation is publically available for download
Credibility	Public transparency	3.5.2	Documents available in English		Is LCDS documentation available in English?	0 = inadequate information/cannot be evaluated 0 = no 0 = partially 0 = yes (BEST PRACTICE)	Partially - some but not all LCDS documentation is available in English (e.g. MMR reporting template is provided in English but web pages or attached documents are in a different language) Yes - all LCDS documentation is available in English

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Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Credibility	Public transparency	3.5.3	Data available		Is the underlying data to support the LCDS available for download?	0 = inadequate information/cannot be evaluated 0 = no 1 = partially 2 = yes	Partially - some but not all underlying data are publically available for download Yes - all underlying data are publically available for download
Process	Process transparency	4.1.1	Stakeholder engagement		Were stakeholders engaged in a consultation process during the development of the LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, the strategy makes references to some consultation 2 = yes, stakeholder consultation is described in detail	
Process	Process transparency	4.1.1.1	Stakeholder engagement	Method	How were stakeholders consulted?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: only one form of consultation is mentioned (e.g. meeting or in writing) 2 = high: several forms of stakeholder consultation have been utilised in combination	
Process	Process transparency	4.1.1.2	Stakeholder engagement	Frequency	How frequently in the process of developing the LCDS did the responsible agency engage relevant stakeholders?	0 = inadequate information/cannot be evaluated 0 = never 1 = rarely (essentially only once) 2 = sometimes (more than once) 3 = often (at least on three occasions) (BEST PRACTICE)	
Process	Process transparency	4.1.1.3	Stakeholder engagement	Depth	Who was allowed to participate during stakeholder consultation?	0 = inadequate information/cannot be evaluated 0 = no consultation done 1 = at least one stakeholder group 2 = multiple stakeholder groups 3 = all relevant stakeholder groups (BEST PRACTICE)	Stakeholder groups include (but need not be limited to): - research/academia - industry - NGO - civil society
Process	Process transparency	4.1.2	Inter-ministerial engagement		Were additional ministries or public agencies consulted in the development of the LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = some relevant agencies/ministries 2 = all relevant agencies/ministries	

Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Process	Process transparency	4.1.3	Sub-national engagement		Were sub-national (e.g. state, regional or local) agencies consulted in the development of the LCDS?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, low involvement of sub-national bodies 2 = yes, high involvement of sub-national bodies	Low – limited outreach to sub-national bodies. Strategy mentions that an attempt was made but does not indicate the extent to which lower governing agencies were engaged. High – more thorough outreach to sub-national bodies. Concerted effort to include the views of as many regional and local governments as possible in the development of the strategy. Reporting describes how consultation was incorporated into final strategy.
Process	Analytical basis	4.2.1	Analysis		Was the LCDS developed using an analytical assessment?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, there is mention of dedicated analytical input (essential element threshold)	
Process	Analytical basis	4.2.1.1	Analysis	Mitigation potentials	Did the background assessment include an analysis of mitigation potentials?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Process	Analytical basis	4.2.1.2	Analysis	Costs	Did the background assessment include an analysis of cost-effectiveness?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes 2 = use of CBA to assess the implementation of the strategy	

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Index	Criterion	ID	Indicator	Sub-indicator	Indicator description	Scale	If needed: scale description (for the evaluator to see)
Process	Analytical basis	4.2.1.3	Analysis	Depth of modelling	Is the modelling comprehensive?	0 = inadequate information/cannot be evaluated 0 = no 1 = low: reference to underlying modelling reveals only partial sector coverage 2 = high: reference to underlying modelling suggests comprehensive effort (e.g. more than one model/study mentioned)	
Process	Analytical basis	4.2.1.4		Reproducible data	Is the analysis replicable, i.e., based on data that is reproducible?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes, reference is made to publicly accessible data sources	
Process	Analytical basis	4.2.1.5		External verification	Was an outside peer review of the analysis conducted?	0 = inadequate information/cannot be evaluated 0 = no 1 = yes	
Process	Review	4.3.1	Required re-view/ stocktaking		Is a periodic review of the LCDS required?	0 = NA/cannot be evaluated 0 = no 1 = low: yes, review is mentioned in some form 2 = medium: review is mentioned with specific frequency 3 = high: yes, regular review mentioned AND possibility for triggered review (BEST PRACTICE)	

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MaxiMiseR



The EU and other industrialised countries have pledged to cut greenhouse gas emissions by at least 40% by 2030, and by 80-95% by 2050. EU Member States must produce 'Low Carbon Development Strategies' (LCDS) to show how they will do so. Ensuring that these LCDS are ambitious and of a high quality, and are developed in a participative, transparent manner is key to meeting the EU's emissions reductions goals. Helping this to happen is the aim of the MaxiMiseR project. www.maximiser.eu



The Ecologic Institute is a private not-for-profit think tank for applied environmental research, policy analysis and consultancy with offices in Berlin, Brussels and Washington DC. An independent, nonpartisan body, the Ecologic Institute is dedicated to bringing fresh ideas to environmental policies and sustainable development. The Ecologic Institute's work programme focuses on obtaining practical results. It covers the entire spectrum of environmental issues, including the integration of environmental concerns into other policy fields. Founded in 1995, the Ecologic Institute is a partner in the network of Institutes for European Environmental Policy. The Ecologic Institute acts in the public interest; donations are tax-deductible.



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- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption

The WWF European Policy Office The European Policy Office contributes to the achievement of WWF's global mission by leading the WWF network to shape EU policies impacting on the European and global environment. www.wwf.eu