Copyright © United Nations Environment Programme, 2020

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The United Nations Environment Programme would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.
ADVANCING THE TRANSITION TO AN INCLUSIVE GREEN ECONOMY - A POLICY REVIEW MANUAL
Acknowledgements

This manual was produced by the United Nations Environment Programme (UNEP) with funding from the European Union in the framework of the project “Inclusive Green Economy Policy Making for SDGs”. The drafting process was led by Claudia Assmann under the guidance of Sheng Fulai and Steven Stone from the Resources and Markets Branch at UNEP. Special thanks go to Derek Eaton as lead author of the manual.

Elena Antoni provided research assistance and helped shape the early versions of the manual, while Colm Hastings, Vanessa Bauer and Jinseok Kim provided comments and edits. Joseph Price helped refine the manual based on pilot tests in Hainan Province, China, Mongolia and South Africa. Stéphane Bothua of the United Nations Office at Geneva (UNOG) took care of the design and layout of the paper.

UNEP thanks Chantal Dupasquier (United Nations Conference on Trade and Development (UNCTAD), Hoseok Kim (Korean Environment Institute), Joy Kim (UNEP), José Pineda (University of British Columbia) and Stefan Speck (European Environment Agency (EEA)) for the review of the document and their helpful comments and suggestions.
Contents

List of figures

Figure 1: Illustrating green economy policy alignment with SDGs ................................................................. 11
Figure 2: Total green R&D expenditure and green share of R&D based on socioeconomic objectives (2010/11-2016/17), in constant 2016/17 rand values ............................................................................................................ 22
Figure 3: The Green Economy Progress Measurement Framework (PAGE, 2017a) ............................................. 30

List of tables

Table 1: Template for assessing coherence of green economy policies with SDGs ............................................. 10
Table 2: Three categories of challenges to implementation (adjusted from UNEP, 2009) ...................................... 17
Table 3: Example of effects from a policy intervention to increase the provision of electricity to rural areas in the sector of rural economy ........................................................................................................ 19
Table 4: Components of the GEP Index (PAGE, 2017a) .................................................................................... 31
Table 5: GEP Dashboard Indicators (PAGE, 2017a) .......................................................................................... 33

List of boxes

Box 1. The policy cycle .............................................................................................................................................. 3
Box 2. Three areas of policy review in relation to the policy cycle ...................................................................... 6
Box 3. Intra-governmental coordination in South Africa .......................................................................................... 7
Box 4. Criteria for policy objectives ......................................................................................................................... 10
Box 5. Typology of policy instruments .................................................................................................................... 13
Box 6. Indicators ......................................................................................................................................................... 14
Box 7. Indicators for agricultural productivity in Ghana ............................................................................................ 14
## Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EEA</td>
<td>European Environment Agency</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GGGI</td>
<td>Global Green Growth Institute</td>
</tr>
<tr>
<td>GEI</td>
<td>Green Economy Initiative</td>
</tr>
<tr>
<td>GEP</td>
<td>Green Economy Progress</td>
</tr>
<tr>
<td>GGKP</td>
<td>Green Growth Knowledge Platform</td>
</tr>
<tr>
<td>IAEG-SGĐs</td>
<td>Inter-Agency and Expert Group on Sustainable Development Goal Indicators</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>Kg</td>
<td>Kilogram</td>
</tr>
<tr>
<td>MSW</td>
<td>Municipal Solid Waste</td>
</tr>
<tr>
<td>NDCs</td>
<td>Nationally Determined Contributions</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-governmental organizations</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PAGE</td>
<td>Partnership for Action on Green Economy</td>
</tr>
<tr>
<td>PAYT</td>
<td>Pay-as-you-throw</td>
</tr>
<tr>
<td>PEI</td>
<td>Poverty-Environment Initiative</td>
</tr>
<tr>
<td>PES</td>
<td>Payment for environmental services</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>UNCSĐD</td>
<td>United Nations Conference on Sustainable Development</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNEP/GRID</td>
<td>United Nations Environment Programme Global Resource Information Database</td>
</tr>
<tr>
<td>UNEP-WCMC</td>
<td>United Nations Environment Programme-World Conservation Monitoring Centre</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>UNOG</td>
<td>United Nations Office at Geneva</td>
</tr>
<tr>
<td>UNU-IHDP</td>
<td>United Nations University-International Human Dimensions Programme</td>
</tr>
<tr>
<td>WDI</td>
<td>World Development Indicators</td>
</tr>
<tr>
<td>WIPO</td>
<td>World Intellectual Property Organization</td>
</tr>
</tbody>
</table>
1. Introduction

This manual provides policymakers with a methodology for conducting a review of a country’s Inclusive Green Economy Policy framework, to take the pulse of the concept and related policies 10 years after the work on UNEP’s Green Economy report was launched. The Green Economy Policy Review manual provides a step-by-step guide on how to conduct a review of an existing policy framework according to the following criteria: coherence with other policy frameworks, particularly the Sustainable Development Goals and the Paris Agreement of the UN Framework Convention on Climate Change (UNFCCC), including Nationally Determined Contributions (NDCs), as well as existing national frameworks; and effectiveness. The manual hence looks at two levels of achievement by analyzing if: 1) the policies are aligned with national and international frameworks; and 2) the outcomes of the policies correspond to the intended objectives. The methodology in the manual was pilot tested in Hainan Province, China, Mongolia and South Africa, which helped refine the methodology.

The Inclusive Green Economy provides a model or pathway for an economy-wide transformation towards sustainable development and poverty eradication. The concept was brought to the international stage by UNEP in 2008 through the “Green Economy Initiative” (GEI) as a response to ongoing financial and economic crises and recognition that a fundamental economic transformation is necessary to achieve the goal of sustainable development. A green economy is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcity (UNEP, 2011). The national green economy framework and its related policies can be therefore understood as a tool used to achieve sustainable development and poverty eradication, as also recognized by the outcome document, “The Future We Want” of the Rio +20 summit. Since then, a large and growing number of countries have pursued green economy pathways, working with UN agencies and other stakeholders such as the Partnership for Action on Green Economy (PAGE), the Poverty-Environment Initiative (PEI), the Green Growth Knowledge Platform (GGKP) and the Global Green Growth Institute (GGGI).

The 2030 Agenda for Sustainable Development is an integrated framework comprising goals and targets covering social, environmental and economic domains. In 2015, the global community committed to achieving the Sustainable Development Goals (SDGs) in order to follow the 2030 Agenda. The traditional focus of economic policy was exclusively on economic goals. This, however, has come at a considerable cost to the environment and social objectives. The 2030 Agenda for Sustainable Development seeks to harmonize three core objectives: economic growth, social inclusion and environmental protection. The realization of all three elements, as well as the recognition that these elements are interconnected, is crucial for the well-being of individuals and societies.

The Paris Agreement is an international agreement, signed in December 2015, within the context of the UNFCCC. By signing this agreement, the signatories committed to engage in collaborated effort to limit global temperature increases to well below 2 degrees Celsius and, given the grave risks, to limit temperature rises even further to 1.5 degrees Celsius. As part of the implementation of this agreement, all countries pledged a reduction in their greenhouse gas emissions, formally referred to as countries’ NDCs, and to make periodic improvements and adaptations to the commitment.

In order to achieve the 17 SDGs and Paris Agreement commitments, new methods and patterns of sustainable consumption and production are necessary. Sustainable development targets and climate commitments cannot be met if existing production methods are expanded to meet the needs and aspirations of the billions of people living in, or emerging from, poverty. Similarly, consumption patterns observed today in developed countries are already taking heavy tolls on the environment and cannot feasibly be adopted by all those seeking to escape poverty in the future.

An Inclusive Green Economy offers a policy framework to stimulate and guide the transition towards sustainable economic activity that is necessary to address the needs of all people and support the achievement of SDGs. In this

---


2 New approaches are also required to achieve other environmental objectives, not explicitly included in the SDGs, such as the Aichi Biodiversity Targets.
regard, a green economy is critical towards achieving the 2030 Agenda, as well as the Paris Agreement. This framework provides ample scope to reflect different national contexts and priorities, sectoral concerns, and transitional strategies.

**Purpose of a Green Economy Policy Review**

This manual provides guidance to governments on how to undertake a review of their green economy policies, or the extent to which other relevant existing policies can support a transition to an Inclusive Green Economy. Other stakeholders, such as business, non-governmental organizations (NGOs), trade unions, and research institutes, might also wish to initiate or support a review of their country’s policies.

The Inclusive Green Economy is still a relatively new policy agenda. It is therefore important to detect the determinants of both successes and failures with regards to policy design, implementation and effectiveness, as well as the obstacles involved. A Green Economy Policy Review can assist in identifying these factors, thus deriving insights and recommendations to improve the performance of these policies (EEA, 2016). Indeed, a review should produce forward-looking guidance, with the objective of learning and improving.

One important factor in maximizing the potential contribution of an Inclusive Green Economy to sustainable development is to ensure that green economy strategies and policy frameworks are aligned with national SDG and NDC priorities. An Inclusive Green Economy can offer new economic and employment opportunities, while reducing waste, increasing resource efficiency and reducing greenhouse gas emissions. These benefits can and should be aligned with both the SDGs and the objectives of the Paris Agreement. A review can address the coherence across each of these policy frameworks and provide recommendations to strengthen alignment.

A variety of reviews of environmental policies already exist and are referenced in this document. These include, for instance, the Organisation for Economic Co-operation and Development (OECD) and the United Nations Economic Commission for Europe (UNECE) Environmental Performance Reviews. However, generally, in their purpose and design, these reviews do not focus on green economy policies and related contributions to the SDGs and the Paris Agreement. In 2017, the OECD began undertaking Green Growth Policy reviews, with Indonesia being the first country for which a Review has been completed. While this new Green Growth Policy Review has several similarities to the Green Economy Policy Review proposed in this manual, several differences characterize the approach of the two review methods. The principal difference is that a Green Economy Policy Review, as proposed in this report, is an issue-driven review. It therefore focuses on a specific policy framework, or a targeted scope of one or an integrated set of key green economy policies that generate environmental, economic and social benefits, determined by a stakeholder consultation. It can be implemented by only one reviewer or a relatively small team, commissioned by a government. Contrary to the OECD or UNECE reviews, the Green Economy Policy Review proposed in this manual is not a peer review. It is therefore faster to arrange and manage and can be completed in a shorter period of time than a large-scale review with a number of external peer review missions. Furthermore, the review method proposed in this manual places less emphasis on stock-taking, and the description of the status quo of the policy landscape and its related instruments. Rather, the manual emphasizes a forward-looking approach. As such, the purpose of the Green Economy Policy Review lies in drawing insights from past policy-making and implementation, and providing recommendations on policy improvements such as possible next steps. In addition, this manual provides hands-on advice on what needs to be done step-by-step to conduct the review. It provides insights into the underlying methodology, so that a review can be undertaken by actors outside of UNEP.

The point along the policy cycle at which a Green Economy Policy Review is conducted determines its principal purpose and the resulting benefits of a review. The policy cycle provides a useful theoretical framework for depicting the process of policy development, approval and implementation (see Box 1). Although a representation of an idealized model, the framework aids the understanding of the process and sequence by which government policy is often developed within ministries and departments. It therefore helps to explain the differences that arise from conducting policy reviews at different points.

A Green Economy Policy Review can be undertaken in the early stages of the policy cycle — issue identification and agenda setting, policy formulation, decision-making – or at the later stages of implementation and evaluation. It is recommended to conduct the first review of a policy or
strategy in the initial stages of the policy cycle to provide an early feedback loop for improvements – and therefore improve the design of a policy early on in the process. The different purposes and benefits of early and late stage reviews are explained below:

Box 1. The policy cycle

This simple model of the policy cycle, from the integrated policymaking approach, consists of five stages. The cycle begins with the consideration of a problem or issue that requires government attention (agenda setting). It then moves on to the consideration of options to address the problem (policy formulation). In the third stage, government decision-makers prescribe a particular course of action (decision-making). In the fourth stage, the prescribed course of action is translated into action (policy implementation). The impacts of the policy are then monitored and evaluated against its original aims, and, if needed, adjustments to the policy are made (policy evaluation).

Source: UNEP (2009, 2015)
Issue identification and agenda setting, policy formulation, decision-making

A review at these stages of policy cycle can help to:

- Review whether assumptions underlying the policy are relevant and correct, and provide recommendations on how to better align the policy with initial objectives
- Provide recommendations for improving and advancing the policy process
- Provide recommendations for improving the design and increasing coherence with other policy frameworks and objectives, particularly the SDGs and the Paris Agreement

Implementation and evaluation

At these stages, the review would additionally:

- Generate insights into the overall effectiveness of a policy and provide recommendations for improvement
- Identify barriers to effective implementation of the policy and formulate appropriate solutions
- Identify successes and potential shortcomings in policy design, including any unanticipated effects

The relationship of the Green Economy Policy Review to the UNEP’s other initiatives

UNEP and other UN agencies provide extensive support to countries in designing and implementing Inclusive Green Economy policies and frameworks. This takes the form of scoping studies and policy assessments, as well as sector- or subject-specific toolkits and manuals. Scoping studies help governments and other stakeholders to identify specific areas and sectors, and their respective potential and role in the country’s transition to green economy pathways. Policy assessments, which are generally conducted at the policy formulation stage, attempt to describe and estimate the likely impacts of the green economy policies under consideration (UNEP 2014a). Thematic toolkits or manuals often provide ex-ante advice on policy design. These assessments are usually conducted in the early stages of the policy cycle (either scoping or formulation) and their outcome informs the formulation or design of a policy. Green Economy Policy Reviews differ from these assessments by considering policies or frameworks that are underway or already exist. They then provide recommendations on how to improve these policies.

This manual is structured in two main parts:

Section 2 presents the methodology for the review, including the three main areas to review and a series of key questions to guide the review.

Section 3 provides guidance on implementing the Green Economy Policy Review, including preparations and key steps to follow.

Annexes provide additional material on green economy policy goals, the SDGs, the Green Economy Progress (GEP) Measurement Framework, a checklist of key questions, and a suggested outline for the report.

---

3 The distinction between review and evaluation often does not have a common understanding across different institutional contexts. For the purposes of this manual, a review is defined somewhat more broadly than an evaluation. Indeed, a review may often refer to a broader set of policies, or entire policy strategies or frameworks. In environmental domains, it is common to treat evaluation as an exercise that takes place after a policy has been implemented, as illustrated in the policy cycle. For example, the EEA (2016) defines evaluation as “an evidence-based judgement of the extent to which an intervention has been effective and efficient; relevant given the needs and objectives; coherent both internally and with other policy interventions; and achieved added-value.”

4 In particular, support is provided through PAGE.

5 See the “Country Starter Kit” on the PAGE website: http://www.un-page.org/knowledge-resources/technical-guidance/country-starter-kit

6 See for example UNEP (2009).

A Green Economy Policy Review should consider three areas:

I. Policy process
II. Policy design
III. Implementation and effectiveness

Each of these areas is described below, including a set of key questions that the review seeks to answer. This manual provides a general framework and approach. Specific applications will vary depending on the scope of the review (which could be one policy or a number of policies; see Section 3.I), the nature of the policies under review, and the point reached in the policy cycle. In this regard, the third aspect – implementation and effectiveness – is only considered once the implementation of a policy has begun. The review of the policy process is cross-cutting because it will be conducted throughout the various stages of the policy cycle, from policy design to implementation (see Box 2). It should be noted that a review might exclusively focus on the areas of policy process and design, because many green economy policies might not yet have reached the stage of implementation. The "policy process" review is therefore discussed in a dedicated separate section below.

As outlined in the introduction, the goal of a Green Economy Policy Review is learning and improvement, which is reflected in the final result of the review as a set of recommendations. Therefore, the review should seek to identify specific recommendations for improvement as much as possible. These should arise from, and be based on, the analysis of the three areas outlined above. Recommendations should be targeted to specific actors. For national governments, in particular, recommendation targets should be as specific and direct as possible with respect to which unit, division, ministry etc. is concerned.

I. Policy process

When reviewing a policy, a key aspect to consider is the process by which the policy has been developed and how it has moved through the stages of the policy cycle. When assessing this aspect of a policy, the review should clarify where the policy stands in terms of its current stage in the policy cycle (Box 2), or, in other words, the position at which the policy is located within the policy framework. For each stage of the policy cycle, a review should include a detailed description of the process followed (if the information is available) and the outcomes achieved by the policy framework. The review of the policy process should therefore be cross-cutting in nature, covering different stages of the policy cycle model, rather than treated as a stand-alone pillar. The policy process also describes which activities were undertaken to advance the policy within the policy cycle (from issue identification, policy formulation, to implementation of a policy) and the organizations and stakeholders that were involved (and in what role). Activities relevant to the early stages of the policy cycle may include consultation, desk analysis, commissioned research or studies, internal dialogue, drafting of legislation and regulations, political debate, etc. The outcome of the activities in the early stage, or activities relevant to the later stages of the policy cycle, take the form of various documents, reports, legislation, administrative decisions, etc.

The review should pay particular attention to assessing the progress of the policy throughout the stages of the policy cycle. The most relevant progression steps include:

- progressing from issue identification to policy formulation
- progressing from policy formulation to decision-making
- progressing from decision-making to implementation

In practice, it can be difficult to separate stages in the policy cycle from each other, as policy-making and implementation can be iterative and do not always follow a straightforward, linear path. It is useful, however, to attempt to differentiate the stages for several reasons. Firstly, a clear understanding of the policy process resulting from the review may provide a common understanding among different stakeholders on the status of the policy. Secondly, this exercise helps to identify where a policy has not progressed from one stage to the next (as is the case when a policy gets ‘stuck’ and is never implemented) and can offer insights as why this may be the case.

Advancing a policy through the policy cycle is contingent upon the support that the policy receives from its relevant stakeholders; the national government being the most important one. These ‘proponents’ or ‘supporters’ of a policy...
Box 2. Three areas of policy review in relation to the policy cycle

(or, inversely, those ‘blocking’ a policy) can influence the policy process in different ways. For example, a stakeholder can place a proposed policy on the agenda, promote the policy among other stakeholders, propose a draft policy formulation, or lobby for a timely implementation of the policy. Within the government, this support can materialize at different levels, such as the ministerial or senior director-level in ministries, including those bearing principal responsibility for the policy. Other stakeholders include business, consumers, and non-governmental organizations, which all have different motivations and abilities to influence the policy process. These groups can also be represented by different organizations, such as trade unions or business associations.

An expanding base of support is crucial in ensuring that green economy policies successfully move through the policy cycle. This is the case as shifting to an Inclusive Green Economy is a wide-reaching economic transition process.
Box 3. Intra-governmental coordination in South Africa

In South Africa, one of the countries in which the methodology was pilot-tested, advancing green economy policies through the policy cycle requires engagement from a variety of stakeholders and government departments. Different components of policies relevant to the green economy transition are determined by stakeholders which sometimes have conflicting priorities and interests.

To help address this, several official mechanisms aimed at facilitating alignment and coordination between government institutions exist. For example, there are government clusters (groupings of government departments with-cross cutting programmes), which aim to bring an integrated approach to governance and improve planning, decision-making and implementation. Ministerial political structures and technical structures provide coordinating action between South Africa’s national, provincial and municipal levels of government. In addition, for some time in 2013, a ‘Green Growth Task Team’ operated at a management level to coordinate activities among national departments in the economic cluster.

Despite these mechanisms, the pilot test in South Africa found that institutions still often work in silos, developing their own respective strategies. For example, the responsibility for some key policy areas, such as energy efficiency, remains contested among several institutions. As a result, the coordination of various interventions can be perceived by other stakeholders as insufficient. The South Africa experience therefore highlights some potential challenges that can be found when reviewing the cross-cutting “policy process”.

To overcome these challenges, the South Africa review recommended, for example, that the Presidency takes a leadership role in increasing intra-governmental coordination, and that it organises active, collaborative planning and policymaking on sustainability issues. The review also recommended further promoting informal channels of communication, including workshops, social media and digital platforms, to help improve collaboration.

Source: Government of the Republic of South Africa (2020)

The integrated and economy-wide ambition of many green economy policies can therefore touch upon the interests of many different stakeholder groups and the competency of several government departments. For example, in South Africa, green economy-related policies concern multiple departments including the Department of Environment, Forestry and Fisheries, the Department of Trade, Industry and Competition and the Department of Science and Innovation (see further details in Box 3). Hence, to make progress along this green transition pathway, an increasing number and variety of social, political and economic actors must engage with this policy agenda. This engagement can take many forms.

When reviewing the policy process, the progress of a policy should be assessed through the cycle using both official information and the perception of stakeholders. The former includes explicit timeframes that may or may not have been stated by the government. Additionally, it is important to review and document the views of government officials and other stakeholders on whether the policy is progressing at an adequate pace. These perceptions can differ, and the review should take note of and analyze the basis for such differences.

If progress is slow, or if the policy seems to have stalled in moving from one stage to the next, the review should help to understand the underlying problems that cause such hindrance and provide recommendations on how to resolve the issues. For example, one reason why a policy has not progressed through the policy cycle as planned could be the need for a decision or approval from certain bodies or authorities (for example, legislature, cabinet, minister, director-general etc.).

It is also important, though, to determine - through interviews with various officials and stakeholders - why such a decision or approval has not been sought or provided. This may reflect inadequate support for the policy, either within government or among other stakeholders. In this case, recommendations to strengthen support should be provided, based on the primary research conducted as part of the review (particularly insights derived from stakeholder interviews).

---

7 This highlights that there are many decisions taken throughout the policy cycle which are separate to the stage decision-making (Box 2). The latter refers to a major decision to approve and select a design for a policy. It should be clear though that there are a range of decisions involved at each stage of the policy cycle. For example, the government needs to take a decision in the first place to undertake the exercise of issue identification, or subsequently to move to the stage of formulating an appropriate policy.
II. Policy design

Policy design includes the stages “Issue identification and agenda setting” and “Policy formulation” of the policy cycle. Conducting a review makes most sense once a policy has at least proceeded to the stage of formulation. In that case, apart from the process (see I. above), the review should examine the policy design, which includes policy objectives and coherence, policy instruments, and indicators. A well-designed policy should have clear objectives, including general, specific and operational objectives. Additionally, a policy should be aligned with the international development frameworks, priorities and commitments that a country agreed to, and overall national frameworks. Indeed, at these stages, the goal of the review is to provide recommendations on how to better align policies with national plans and international frameworks, such as the Paris Agreement and SDGs, and how to select the most appropriate policy instruments and indicators. The review can thus provide important learnings on how to improve policy design, to support implementation, effectiveness and efficiency of a policy, and maximize its contribution to wider government objectives.
i. Policy objectives and coherence

Policy objectives

The careful elaboration of a policy’s objectives is a key aspect of policy design and formulation. The objectives take, as a baseline, an identified issue area and state what the policy will achieve if successful (in relation to that baseline). For example, an existing issue area might be that parts of the population do not have access to the national power grid. In this case, the policy objective would be to decrease the percentage of population without access to the national power grid with its achievements and success measured against the baseline percentage. Policy objectives exist at different levels of impact. This manual distinguishes between general, specific and operational objectives.8

- General objectives refer to overall goals, typically of a longer-term nature - such as ensuring energy access for all.

- Specific objectives reflect the more immediate targets of a policy, which can usually be measured with indicators (see below) – such as increasing the renewable energy generation capacity.

- Operational objectives represent the deliverables of a policy that contribute towards the specific objectives, such as the provision of funding for renewable energy operators.

It is helpful to identify policy objectives according to this hierarchy in order to assess the overall coherence of policy formulation and design. For instance, the logic of specific objectives contributing to general objectives should be consistent and convincing. This logic should be assessed by the review team, who can also validate their observations with government officials and other stakeholders.

Reviewing the process and criteria for determining policy objectives is an important aspect of the review, as these factors impact the success of the overall policy. Proper design and successful implementation of any policy initiative depends upon acceptance, and possibly uptake, by the government departments and other stakeholders most affected by the policy. Both of these groups are more likely to accept a policy which they have been consulted on and had some form of input into. Given the broad nature of the transition to an Inclusive Green Economy, it is expected that a wide range of departments and stakeholders need to be engaged and committed, as noted.

For example, a Ministry of the Environment might have initiated a green economy policy that promotes public investment in various green sectors. However, public investment decisions will need to be decided upon and coordinated with a Ministry of Finance and/or Economic Planning. If these investments target renewable energy, then a Ministry of Energy must support and likely even channel the investments. The participation or commitment of state/provincial or local levels of government could also be essential. Finally, affected stakeholders of the policy such as the government, companies, consumers and others also shape the success of its implementation.

An important aspect of policy formulation that must be considered is the criteria used in setting the objectives of an Inclusive Green Economy policy framework. Examples of these criteria include considerations relating to sustainability, fairness, feasibility, acceptability and coherence (see Box 4). An understanding of these criteria will be useful in interpreting the theory of change or assumptions that lay behind the policy. The criteria may also help in identifying barriers to implementation that may have arisen, such as a policy being deemed unfair or disproportionate by a particular group of stakeholders who therefore resist its implementation. Accordingly, each review should examine the criteria that has been used for setting policy objectives to understand if these objectives actually match the criteria.

Policymakers apply criteria, either explicitly or implicitly. In the latter case, these criteria might only be revealed or become apparent through careful questioning of key government individuals involved, possibly complemented by the perspective of other important stakeholders.

In some cases, the criteria will be defined explicitly in official policy documents or background documents. In any case, it is helpful to consult relevant senior officials or decision-makers on the criteria applied in setting objectives where possible. It can also be insightful to consult other stakeholders on their perception and understanding of the criteria applied.

Coherence with the SDGs and other policy frameworks

Coherence refers to the extent to which the objectives of a policy are consistent with those of other policy frameworks. Assessing the coherence of a green economy policy with

---

8 Note that various classifications exist for describing and organizing these levels. The national framework might have chosen different terminology, which should be used in that case.
other policy frameworks therefore presents a central aspect of the Green Economy Policy Review. Given their breadth and cross-cutting nature, the SDGs and their respective implementation at the national level are of particular relevance. However, other international frameworks, such as the Paris Agreement (including the NDCs) or the international strategy on biodiversity, the Aichi targets, also need to be considered. Due to the complex interlinkages between core areas of national policy-making, including economic, financial, trade, social and environmental policies, the review should assess a policy in the context of this existing policy framework on a national-level. Although a country’s national policy framework and its international commitments should be aligned in principle, the reviewer should be aware that this might not always be the case in practice.

If a given country had already embarked on a green economy policy cycle prior to the adoption of the SDGs and the Paris Agreement, a review offers the opportunity to determine how a policy can become better aligned with these overarching commitments and thus better contribute to achieving their objectives. If the green economy policy is still under development or has only recently been adopted, the review also provides an opportunity to promote alignment and consistency with the SDGs and the Paris Agreement. Indeed, as an economy wide tool to institutionalize sustainable development, a green economy policy should contribute as much as possible towards the achievement of these goals.

The coherence of the green economy policy with existing policy frameworks such as the SDGs and the Paris Agreement should be assessed in terms of the alignment of their respective objectives and targets. The green economy policy

### Box 4. Criteria for policy objectives

**Sustainability**: are the objectives targeting enduring benefits?

**Fairness**: do the objectives avoid disproportionate effects on certain groups or stakeholders, especially more vulnerable or disadvantaged groups?

**Feasibility**: are there sufficient grounds for expecting the objectives to be attainable?

**Acceptability**: is there sufficient support among relevant stakeholders or groups for the policy objectives?

**Coherence**: are the policy objectives consistent with and supporting other existing policies?

### Table 1: Template for assessing coherence of green economy policies with SDGs

<table>
<thead>
<tr>
<th>Inclusive Green Economy Policy Objective</th>
<th>SDG and Paris Agreement articles</th>
<th>SDG Target</th>
<th>Coherence</th>
<th>Explanation of Coherence</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Specific</td>
<td></td>
<td>(Fully or Partly aligned)</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>1.1</td>
<td>SDG No. 1-17 or Paris Agreement Articles 2-12</td>
<td>(using SDG numbering and wording)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
objectives should be either fully or partially aligned with the SDGs and/or NDCs, or other articles of the Paris Agreement. Fully aligned means that the green economy policy objective corresponds to one of the SDG targets, in terms of the policy’s formulation, scope and ambition. Partly aligned means that the green economy policy objective corresponds in its wording (formulation) to an SDG target, but that there is a difference in scope or ambition. Table 1 should be used as a template for summarizing this coherence.

The assessment under “Explanation of Coherence” (in the final column) should include a qualitative justification. In considering the level of ambition, the review should examine whether the ambition of the green economy objective is matched or surpassed by the SDGs.

For example, one possible green economy policy objective in the water sector is to increase the volume of treated wastewater, perhaps with a specific target in terms of percentage volume. The closest SDG is Goal 6 on water and sanitation, and specifically, target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. In this case, the green economy policy objective would be partly aligned with target 6.3 of the SDG. However, there could also be full alignment, if the specific quantitative target corresponds to the SDG target of reducing the percentage of untreated wastewater by 50% by 2030.

The review should provide recommendations, where relevant, on how to enhance the coherence of the policy with the SDGs and other policy frameworks. This implies that the review may recommend to adjust the objectives of the policy to align with those of the SDGs. A government may, however, choose to maintain its green economy policy objective in partial alignment, as opposed to seeking full alignment with the SDGs, considering that the SDG process also recognizes the need to follow national priorities and circumstances. Thus, the review should consult with relevant stakeholders.

Figure 1: Illustrating green economy policy alignment with SDGs

<table>
<thead>
<tr>
<th>1. NO POVERTY</th>
<th>2. ZERO HUNGER</th>
<th>3. GOOD HEALTH AND WELL-BEING</th>
<th>4. QUALITY EDUCATION</th>
<th>5. GENDER EQUALITY</th>
<th>6. CLEAN WATER AND SANITATION</th>
</tr>
</thead>
</table>

= Full alignment  
Tile = Partial alignment  
Greyed tile = SDG not directly relevant
departments and officials to determine whether adjusting the green economy policy objective would be beneficial. Clearly, some goals and targets might be more relevant than others for an Inclusive Green Economy. All of the 17 goals and 169 targets are provided for ease of reference in Annex II. One suggestion is to summarize the results of Table 1 with a graphic that could be based on the standard tiled presentation of the SDGs. Each SDG tile should be shown if the green economy policy is partly aligned with the respective policy, and highlighted with a black box around the number to indicate complete alignment. The tiles for other SDGs that are not directly relevant to the policy under review can be greyed out. A hypothetical example is shown in Figure 1.

A similar process could be followed for the Paris Agreement articles, if applicable for the chosen type of policy to be reviewed, including the NDCs to reduce greenhouse gas emissions under the UNFCCC. A review should compare a country’s green economy policy objectives (in regards to emissions reduction) to the specific commitments it has made in the form of NDCs. As with SDGs, there will be either partial or full alignment between these.

The PAGE 2017 Annual Report (2018) offers some useful examples on how to assess the level of alignment of a green economy policy with the SDGs and the Paris Agreement, illustrated by 13 country or state/provincial examples. It must be noted, however, that the examples do not go as far as has been recommended here in the review manual, as they do not explicitly present green economy policy objectives. The examples also do not extend to the level of SDG targets. A review should ideally follow through with more detail, as proposed in Table 1, as a more detailed comparison is likely to provide more insights and suggestions for enhancing alignment.

**KEY QUESTIONS TO GUIDE THE REVIEW OF “POLICY DESIGN”, WITH EMPHASIS ON THE SETTING OF OBJECTIVES AND POLICY COHERENCE (SOME OF THESE QUESTIONS MAY OVERLAP WITH “KEY QUESTIONS FOR THE POLICY PROCESS”)**

When assessing a policy’s objectives and its coherence with the wider policy framework, the following guiding questions should be answered:

- What are the policy objectives? Why and how have they been chosen?
- Are the policy and its objectives aligned with the objectives of relevant existing international and national frameworks?

The following investigative questions can help to clarify these overarching issues:

21. Does the policy consist of general, specific and operational objectives? And what are these objectives?
22. Who was involved in formulating the objectives? Who was the driving force for setting the objectives?

23. What criteria were used in formulating objectives? Have these criteria been stated in official policy documents or in background documents? Are these criteria matching the underlying intention of what the policy should achieve?
24. Which government departments and other stakeholders contributed to this process, and how? (please refer to questions on policy process)
25. What kind of assessment of the policy’s likely outcomes was undertaken and by whom?
26. Are the policy objectives relevant and aligned with the applicable SDGs and/or the Paris Agreement and their targets?
27. Are the selected indicators similar to those for the SDGs and/or the Paris Agreement and their targets (see Section 2.II.iii)?
28. Do the policy objectives reinforce or interfere with other national frameworks?
29. How can green economy objectives be enhanced so that existing/new policies can be better aligned with the SDGs and the Paris Agreement? Would there be political backing to do so?
ii. Policy instruments

A well-designed policy chooses appropriate policy instruments, which can be described according to the typology in Box 5. Deciding on the right policy instrument is crucial to ensuring acceptability and effectiveness, and thus to the ultimate success of the policy. A review should assess how these instruments have been chosen (process and criteria) and if these are the most appropriate instruments for reaching the policy objective in question. Leading research and country experiences should inform the assessment of the policy instruments and help to formulate recommendations, for example changes in the specific details of chosen instruments, or the use of different instruments.

Box 5. Typology of policy instruments

- **Direct provision** of a service or good by government (including its related agencies). An example of this is the urban transport sector, where public transport services are provided by local authorities in many instances (either directly or through outsourcing/contracting of suppliers). Governments may decide to initiate or to extend such services in a more sustainable and inclusive manner, for example with the help of sustainable public procurement. An Inclusive Green Economy approach places considerable emphasis on the role of public investment in green sectors and infrastructure by government and public agencies. Relevant policy instruments for these public investments, such as ministerial budgets or sustainable public procurement, would be included here.

- **Regulations and legislation** that prescribes or prohibits certain activities or effects (e.g. emissions levels). These are sometimes referred to as “standards” or “command-and-control” approaches. Compulsory waste emission limits is one such example. Detailed aspects include the technical content of the standards and the means of enforcement.

- **Economic instruments**, which seek to alter incentives facing companies or households by influencing the price or cost of activities, or certain goods. These are sometimes referred to as “market-based instruments”. Economic instruments are usually the primary method used to encourage private sector investment in green sectors. They can include fiscal measures, such as taxation and subsidies, or tradeable permit schemes. A well-known example of a market-based instrument is the feed-in tariff, which promotes the purchase of electricity from renewable energy sources by utilities. Detailed aspects include the size or amount of fiscal measures and the means of enforcement.

- **Information provision** measures that seek to change the actions of companies or consumers through encouragement (or discouragement); these measures seek to promote change through

---

**KEY QUESTIONS FOR “POLICY INSTRUMENTS”**

When assessing policy instruments, the following guiding questions should be answered:

- What are the chosen key policy instruments supposed to achieve?
- Have the most appropriate instruments been chosen?

The following investigative questions can help to clarify these overarching issues:

30. Which policy instruments were considered, and which were selected (please refer to Box 5)?
31. What criteria were used in selecting policy instruments?
32. What has been the process for selecting the policy instruments (Who took decisions related to the policy instruments? Which organizations and individuals were consulted? Please refer to the section on policy process for further questions)
awareness-raising or mobilizing public opinion. One such example is the use of public awareness campaigns through traditional media channels. Regulated or compulsory eco-labeling can also be seen as a form of information provision.

While direct provision generally involves government investment and recurrent expenditures, the latter three types of policy instruments seek to encourage investment or changes in production and consumption patterns by other stakeholders.

iii. Indicators

Effective Inclusive Green Economy policymaking requires indicators that capture the inter-related economic, social and environmental issues and that provide evidence-based information for decision-making (see Box 6, below). The role of indicators at various stages of the policy cycle is presented in detail in UNEP’s Green Economy Indicators Framework (UNEP, 2014b, 2015):

- **Issue identification**: indicators identify and prioritize sustainable development issues (including trends and underlying causes) and set the agenda for policy interventions.

- **Policy formulation**: indicators facilitate the design of solutions, including measurable goals and targets for policies and their objectives.

- **Policy assessment**: indicators support the estimation of the impact of the interventions under consideration.\(^9\)

- **Policy monitoring and evaluation**: indicators enable the ex-post assessment of the performance of the intervention that is being implemented.

The review should assess whether indicators have been formulated and used, by which process and criteria and whether they are appropriate for the policy in question. For indicators that have been identified in policy documents, the review should document and assess these for their relevance and measurability, in both conceptual and practical terms. This last point means that while an indicator may seem relevant to its objective, it may not be realistic to measure it, usually because of data availability issues. The review should therefore first check whether necessary data is available and whether it has been compiled by responsible agencies.

If indicators have not been identified for the relevant stages of the policy cycle, it is the role of the review to make recommendations to do so. These can be based on experiences in other countries, if necessary, and should be validated with key stakeholders within the government. Box 7 provides an illustration of proposed indicators for the issue of low agricultural productivity, as part of a broader Inclusive Green Economy policy framework under consideration in Ghana. The table in Box 7 also shows, for each of the proposed Ghanaian indicators, the possible relevant indicators from the SDG process, and, in particular, those of the IAEG-SDG (see Annex II).

It is also relevant to review the relationship between indicators chosen for green economy policy objectives and internationally agreed or proposed indicators for related agendas or initiatives (see the discussion above with regard to the water sector). UN PAGE has designed a

---

\(^9\) Assessment is considered as part of the formulation stage in the policy cycle (see UNEP, 2015). It can require the identification and use of a set of indicators that are distinct from those used for formulation, in terms of setting objectives.
Box 7. Indicators for agricultural productivity in Ghana

The following table lists indicators that were proposed through a collaborative exercise between UNEP and officials of the Government of Ghana (UNEP, 2015). The exercise considered the forestry, agriculture and energy sectors, although only the indicators for the agricultural sector are presented here. The table clearly distinguishes between indicators appropriate for issue identification, policy formulation or policy assessment. The table shows in the right-hand column relevant indicators from the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDG) (including whether indicators are currently classified as Tier I, II or III). These indicators are numbered according to the SDG target (see Annex II). Note that in some cases, the IAEG-SDG indicators do not correspond exactly to the national indicators. For some national indicators, there are no relevant indicators in the IAEG-SDG list. Such a mapping or comparison can elaborate the degree of alignment with IAEG-SDG indicators. The IAEG-SDG list of indicators might also offer new suggestions for national green economy policy design.

**Issue: Stagnant productivity in major food crop sectors, associated with poor soil conditions, over-reliance on rain-fed agriculture, limited technical advancement and high post-harvest losses**

<table>
<thead>
<tr>
<th>Issue identification indicators</th>
<th>Related IAEG-SDG Target Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity (% of achievable yield)</td>
<td>2.3.1 Volume of production per labour unit by classes of farming enterprise size (Tier III)</td>
</tr>
<tr>
<td>Agricultural mechanisation</td>
<td></td>
</tr>
<tr>
<td>Post-harvest losses (% of total harvest)</td>
<td>12.3.1 Global food loss index (Tier III)</td>
</tr>
</tbody>
</table>

**Policy formulation indicator(s)**

<table>
<thead>
<tr>
<th>Policy formulation indicator(s)</th>
<th>Related IAEG-SDG Target Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture mechanisation (increased by X% in Y years)</td>
<td>2.a.1 The agriculture orientation index for government expenditures (Tier II)</td>
</tr>
<tr>
<td>Cultivated land under irrigation (increased by X% in Y years)</td>
<td>2.4. Proportion of agricultural area under productive and sustainable agriculture (Tier III)</td>
</tr>
<tr>
<td>Food storage and transport infrastructure capacity (increased by X% in Y years)</td>
<td>2.a.1 (see above)</td>
</tr>
</tbody>
</table>

**Policy assessment indicator(s)**

<table>
<thead>
<tr>
<th>Policy assessment indicator(s)</th>
<th>Related IAEG-SDG Target Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity (% of achievable yield)</td>
<td>2.3.1 (see above)</td>
</tr>
<tr>
<td>Improvements to food security</td>
<td>2.1.1 Prevalence of undernourishment (Tier I)</td>
</tr>
<tr>
<td></td>
<td>2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) (Tier II)</td>
</tr>
<tr>
<td>Water consumption efficiency</td>
<td>6.4.1 Change in water-use efficiency over time (Tier II)</td>
</tr>
<tr>
<td>Green jobs created by additional investments</td>
<td></td>
</tr>
<tr>
<td>Impact on poverty rates</td>
<td>1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural) (Tier I)</td>
</tr>
</tbody>
</table>
Green Economy Progress (GEP) Measurement Framework as a comprehensive tool for assessing progress towards an Inclusive Green Economy, both within and across countries (PAGE, 2017). This consists of both a dashboard of sustainability indicators and an index that measures progress across a range of indicators towards identified targets. More detail on these, including lists of indicators for both the index and the dashboard, can be found in Annex III.

The focus on targets by the GEP Measurement Framework enhances its potential utility for reviewing policy. It also places particular emphasis on the initial conditions which, together with the weighting system, is useful for the issue identification process and priority setting. Instead of simply measuring the selected indicators, the framework assesses changes in these indicators relative to established policy targets.

If a government has established specific targets in its Inclusive Green Economy strategies and plans – perhaps with the support of an integrated assessment modelling tool (UNEP, 2014a) – these can be incorporated into the measurement framework, and then revisited in the review. These targets may also align with some of the 169 targets under the 2030 Agenda for Sustainable Development. Indeed, the global application of the GEP Measurement Framework has 14 direct links to 10 of the 17 SDGs.

Drawing on the GEP Measurement Framework, the review should identify whether any of the indicators selected for the policy objectives overlap with those in the dashboard, or the index. Depending on the context, some indicators may not be relevant in the national context while other relevant proxy indicators could be used in the analysis. If a green economy policy initiative is lacking a coherent set of measurable indicators, then the review should consider the applicability of the GEP Measurement Framework and its indicators in its recommendations, among other options.

---

10 These targets are determined by national policy and do not refer to the SDG targets.

---

**KEY QUESTIONS FOR INDICATORS WITH REGARD TO THE TOPIC OF “POLICY DESIGN”**

When assessing the use of indicators, the following guiding questions should be answered:

- What is the role of indicators throughout the policy cycle?
- Have the most appropriate indicators been chosen?
- How can their use enhance the policies examined?

The following investigative questions can help to clarify these overarching issues:

33. What indicators have been identified for issue identification and policy formulation, assessment and monitoring and evaluation?
34. What criteria have been used for choosing the indicators?
35. Is a process in place to collect and report on these indicators, where relevant?
36. Are the indicators measurable?
37. Is data available for the indicators identified?
38. If no indicators have been identified for issue identification and policy formulation, which indicators could be considered?
39. Would the GEP Measurement Framework, as developed by UNEP, provide useful indicators for the country’s policy cycle?
III. Implementation and effectiveness

After the policy formulation stage, and in order to be successful, a policy should be implemented in a timely and effective manner. This means that implementation actions, such as specific processes, institutional coordination, instruments (regulations, market-based instruments, information provision), public investment and expenditure will have been undertaken. They can be found in government legislation, orders, decrees, or programmes that require the use of financial, human or other resources on the part of the government. Implementation actions could also be specified in the policy documents, although this is not always the case.

A careful review of implementation actions is important because any policy issues encountered may be due more to difficulties or unexpected circumstances at the implementation stage, rather than with the policy design itself. For example, insufficient commitment or support for a policy can result in partial or relatively little implementation. A review process should reveal such challenges. A list of possible challenges is presented in Table 2, according to three categories. One group of difficulties encountered may be related to the amount of support for the policy, either within government or among other stakeholders. A second group of challenges may reflect inadequacies in the policy design, such as insufficient clarity of objectives or unrealistic objectives - perhaps due to a lack of technological solutions. A third group of challenges concern operational arrangements. This grouping and list is not exhaustive, but is intended to help reviewers to identify relevant challenges.

The presence of difficulties in implementation may be immediately apparent, for instance, where public investments have not been (fully) undertaken according to schedule, or where a fiscal measure has not been enacted. The precise nature of the challenges faced will require some investigation and analysis. It is useful for a review team to enquire with key decision-makers, implementing agencies and potentially other stakeholders. If possible, the review should propose solutions for these challenges. However, simply making these challenges explicit can provide a basis and impetus for relevant stakeholders to address them. Not all challenges can be addressed directly or immediately and, in some cases, it may be necessary to revisit the formulation and design of the policy framework. One example might be a weak management structure in public agencies, or funding limitations. Difficulties in implementation can be a primary reason for shortcomings in effectiveness.

Effectiveness refers to the degree to which the impacts, or results, from the policy implementation correspond to the intended objectives or goals. Effectiveness essentially means: does the policy “work”? (Gysen et al., 2006). If a green economy policy is still in a stage of scoping and goal-setting, formulation, or design and assessment (see Box 1), then the review does not need to examine effectiveness. If a policy has advanced to the implementation stage, then an assessment of its effectiveness essentially constitutes part

<table>
<thead>
<tr>
<th>Support and authorization</th>
<th>Design</th>
<th>Operational capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Slow authorization</td>
<td>• Vague or multiple missions or objectives</td>
<td></td>
</tr>
<tr>
<td>• Weak political support</td>
<td>• Lacking use of indicators</td>
<td></td>
</tr>
<tr>
<td>• Bureaucratic opposition</td>
<td>• Changing priorities</td>
<td></td>
</tr>
<tr>
<td>• Weak incentives for implementing agencies or personnel</td>
<td>• Poor design</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lack of technological solutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Uneven feasibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Funding or financial limitations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Weak management structure or network coordination capacity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lack of clarity in operational plans</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Three categories of challenges to implementation (adjusted from UNEP, 2009)
of the evaluation stage, among other criteria (UNEP, 2009). However, a review should assess a policy’s effectiveness even if implementation is still underway, as there might already be possible recommendations for improvement.

An evaluation of policy effectiveness can typically use a variety of methodologies, which can be divided into three categories (EEA 2016):

- **Evaluation approaches** include logical framework methods, theory-based evaluation (also known as “theory of change”) and counterfactual (impact) evaluation.
- **Evidence collection methods** include, as examples, monitoring, data and information, case studies, literature reviews, expert interviews and focus groups.
- **Analytical methods** include cost-benefit analysis, indicator analysis, mapping and modelling.

The methodology chosen depends on the subject of the review, data availability, and available expertise.

The most immediate and logical starting point for examining effects are the indicators identified by the policy framework itself (see section 2.II.iii above). The review should determine which indicators have been set and measured. This is an example of evidence collection methods, and these are likely to be the most useful for a Green Economy Policy Review. If no indicators have been systematically measured, then the review should make recommendations on which indicators should be measured, as discussed above.

The effects arising from the policy can be of two types: those that were intended, or anticipated as expected results, and those that were unintended, or unanticipated (Mickwitz and Birnbaum, 2009). Effects could also occur within the targeted area or sector, or possibly outside of this area or sector. Analyzing the intended and unintended effects of the policy in question will help to structure the assessment of the policy’s effectiveness.

An example of a categorization of effects is represented in Table 3, with a hypothetical example for a policy that enhances the provision to rural areas of electricity generated from renewable sources. Such a table can furthermore distinguish between effects that are beneficial (+ or positive) as opposed to those that are detrimental (− or negative).

In collecting evidence for a review of effectiveness, the principle of triangulation should be followed. This principle consists of collecting evidence for a given (supposed) effect from multiple sources. Triangulation can be as simple as the gathering of opinions and perspectives from various individual stakeholders. Using multiple methods, such as both qualitative and quantitative data and focus groups, is also a form of triangulation, leading to more robust conclusions concerning effectiveness.

---

11 Other criteria typically used in evaluations include efficiency, relevance and coherence. The last one, coherence, is also assessed in a Green Economy Policy Review as described above. Therefore, if a review is undertaken at the implementation stage, it has some aspects of an evaluation. In this sense a review overlaps with an evaluation, as discussed in the Introduction. Efficiency is quite distinct from effectiveness and refers to whether the costs involved in implementing a policy and achieving its objectives were justified and reasonable. A stricter interpretation of efficiency would seek to ask whether the results had been achieved at the lowest possible cost.


13 For instance, economists generally use econometric methods in evaluation studies to try to carefully assess causality – the attribution of observed impacts to the policy or programme.
**Table 3:** Example of effects from a policy intervention to increase the provision of electricity to rural areas in the sector of rural economy

<table>
<thead>
<tr>
<th>Intended</th>
<th>Unintended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within targeted area/sector</td>
<td></td>
</tr>
<tr>
<td>+ Increased access of rural households</td>
<td>- Increased transport for greater agricultural output, with associated</td>
</tr>
<tr>
<td>and enterprises to electricity</td>
<td>carbon emissions from increased fuel use</td>
</tr>
<tr>
<td>+ Increased productivity of rural SMEs</td>
<td>- Harmful waste from technology used (e.g. damaged solar panels)</td>
</tr>
<tr>
<td>+ Increased literacy of children</td>
<td></td>
</tr>
<tr>
<td>Outside targeted area/sector</td>
<td></td>
</tr>
<tr>
<td>+ Increased availability of food products</td>
<td>+/- Currency appreciation due to reduced fossil fuel imports affecting</td>
</tr>
<tr>
<td>for urban areas due to growth of rural</td>
<td>many economic sectors differently</td>
</tr>
<tr>
<td>processing sector</td>
<td></td>
</tr>
<tr>
<td>+ Reduced growth in fossil fuel imports</td>
<td></td>
</tr>
<tr>
<td>that would have been required to supply</td>
<td></td>
</tr>
<tr>
<td>electricity to those lacking access</td>
<td></td>
</tr>
</tbody>
</table>

**KEY QUESTIONS FOR “IMPLEMENTATION AND EFFECTIVENESS”**

When assessing implementation and effectiveness, the following guiding questions should be answered:

- How has the policy been implemented?
- How effective has the implementation been?

The following investigative questions can help to clarify these overarching issues:

40. What actions have been undertaken to implement the policy?
41. Which ministries and agencies are responsible for implementation? Has there been sufficient commitment to, and support for, the policy?
42. What types of challenges (see table 2) to implementation have been encountered?
43. How can these challenges be overcome?
44. What have been the main successes or shortcomings of implementation, and what are the lessons learned in this respect?

45. Have indicators been used throughout the policy cycle, which can help to assess the policy’s effectiveness? Have they been regularly measured? If not, which indicators could be recommended?
46. What are the intended and unintended effects of the policy?
47. Is there a way to triangulate the evidence on the policy’s effectiveness?
3. Implementing the Green Economy Policy Review

This section provides guidance on how to implement a Green Economy Policy Review. The previous section presented the methodology for a Green Economy Policy Review, detailing the main areas to cover. Attention now turns to the steps needed to be taken when conducting a review, and, in particular, key decisions to be taken and methods for collecting the information needed.

I. Defining the scope of a Green Economy Policy Review

Defining the scope simply refers to the specific policy framework that is to be reviewed. An Inclusive Green Economy policy framework should ideally consist of a range of policy initiatives covering different economic sectors (UNEP, 2014a). The integrated nature of such a strategy is expected to deliver synergistic benefits that are greater than the total of the benefits of each of the policies on their own (UNEP, 2011). In general, advisory services provided through PAGE (and previously UNEP) have taken a sectoral approach, identifying key sectors and opportunities within these (see Annex I for a generic list taken from the UN PAGE Country Starter Kit). The choices made by governments and other stakeholders of sectors – i.e. specific goals or targets, and the policies to support these - represent the outcome of scoping and assessment exercises, consultation and political decision-making.

A wide range of experiences already exist in developing and implementing Inclusive Green Economy policy frameworks, reflecting the overall approach and philosophy that there are multiple approaches and paths towards an Inclusive Green Economy. These multiple approaches might incorporate different names or labels for particular components, such as green development. It might therefore be necessary to develop an inventory of all possibly relevant policies and programmes.

The scope of a Green Economy Policy Review should ideally be the whole Inclusive Green Economy policy framework that has been adopted in a given country. This allows for the generation of the most insights, permitting the comparison of experiences across sectors or policy instruments. For example, a review can identify the reasons for the relative success of one sector in policy implementation compared to others.

Nevertheless, there are various reasons why a review might examine only part of a broader policy framework. These include:

- **Resources**: the resources made available for the review will help determine its possible scope. This includes both financial resources and human resources, in the form of individuals to both oversee and undertake the review.

- **Learning priorities**: as the review helps to identify insights and lessons learned that can inform the ongoing implementation of both policy and programmes, there may be priority areas for certain stakeholders to learn more. This might reflect the interests of stakeholders by respective sectors (e.g. Ministry of Energy will likely be interested in the energy-related parts of an Inclusive Green Economy policy framework, as may stakeholders in the energy sector).

- **State of implementation**: if resources are limited, it might be more useful, from a learning perspective, to focus on those aspects of the green economy policy that are more advanced in implementation. For instance, the possible effectiveness of the policy may already be visible. On the other hand, if a policy has not been implemented to the extent planned as a result of one or more barriers, a review might help propose recommendations that could overcome these and therefore facilitate implementation. The scope of the review should be decided upon in close cooperation with the relevant government entities.

In such cases, a review can focus on one or more components. These would consist of policies for only some of the sectors in the whole green economy, such as renewable energy, agriculture, buildings, etc. In the case of very limited resources, the review would select only one or more specific policy instruments, such as feed-in tariffs, investments in renewable generation capacity, etc. (see Annex I for an indicative list showing possible specific policies for a range of sectors). Finally, a review may also focus on the extent to which an existing policy area that is not explicitly linked to a green economy or environmental goals supports the transition to an Inclusive Green Economy.
there might be concerns about the independence of the review process and its recommendations. In particular, in the absence of cross-sectoral support for the review, access to information and policymakers across different ministries might be challenging. This might also lead to a lack of ownership for the review’s results. If a review is conducted by an internal team, it is crucial to secure support from the senior management of the relevant ministries to ensure access to information, key personnel and the subsequent uptake of the review’s findings. With regards to the team’s background, while a team leader may have more generalist expertise on mainstreaming economic and social considerations into environmental policy, specialists in specific sectoral policies may also be required (such as those from agriculture, forestry, fisheries, energy, infrastructure, etc.). Members of the review team may be from a range of organizations, including government departments, academic and research organizations, business, consultancies and civil society organizations. In general, it is preferable to select members of the review team in such a way as to minimize possible conflicts of interest, although this may not always be possible. For example, there would be a clear conflict of interest if a member of the review team is officially responsible, even in part, for implementing the policy. The OECD’s Environmental Performance Reviews, in contrast, are undertaken by a team of reviewers from other member countries and are therefore referred to as a peer review process.

Similarly, a detailed workplan should be formulated to capture the following steps (sections III and IV), reflecting both the scope of the review and the availability of resources, as well as providing a detailed time-plan. The overall responsibility for conducting the review should remain in one place, and, typically, with the most relevant government ministry and department, depending on the scope of the review.

III. Review of documents, data and other material

A large part of the review consists of collecting and reviewing documents and background material. This should include relevant policy documents, as well as any documents that are related to the process of policy formulation and implementation, such as internal government memorandums and decisions, meeting reports, etc., where available. Additional material from other stakeholders should also be collected. Depending
on the given stakeholder, this could include reports, communications, and submissions to government/parliamentary committees.

It may also be relevant, and enhance methodological robustness, to collect quantitative data that pertain to the policy framework from government sources, as well as other sources. A natural form of such data includes those on indicators which have been identified in the policy framework, including biodiversity indicators or green economy measures published by particular ministries. Figure 2 above shows an example of relevant data for collection, on green Research and Development (R&D) expenditure in South Africa.

This review of documentation and quantitative data provides the basic, foundational material, or information, on which to inform the review process in the first instance. The review also provides a basis for formulating key questions to put to any stakeholders interviewed in the next phase.

IV. Interviews of stakeholders

The key questions in Section 2 (and collated in Annex IV) should guide the review of documents and other material. These questions should also be posed to relevant stakeholders, including government officials in relevant government departments, research institutes, non-governmental organizations, producers and consumers.

In addition, the review of documents and other material should inspire the formulation of additional questions for these interviews.

The key questions are explanatory in nature. They concern what has been done and why. For example, government officials might be asked about steps taken to develop or formulate a policy – which criteria were set for objectives, for example.

Additional questions for stakeholders will also enquire about individuals’ (or organizations’) viewpoints or perspectives on what has or has not been done, or on what should have been done differently. These types of questions can be as simple as providing an opinion on whether the ‘right’ objectives were set, the ‘right’ indicators used, the formulation process was ‘adequate’, the ‘most appropriate’ policy instruments were selected, and so forth. In other words, individuals are asked to express their views about the policy, its process of formulation, its process of implementation, or indeed all of these.

In general, it is good practice to prepare interview guidance documents in advance. Such a document contains some background information for the interviewee on the purpose of the interview, as well as a number of specific questions to be posed (typically following a semi-structured interviewing approach).

V. Draft report

The information compiled from the interviews is then analyzed together with the review of documents in order to prepare a draft report. The report should be structured according to the three areas of review presented in Section 2: policy process; policy design; and implementation and effectiveness (see also the template in Annex V). The most important focus of the review is the recommendations, which are based on the findings and analysis of the review and should reflect all three areas of assessment (if the policy has already been implemented and evaluated).

Although the process described above consists of distinct steps, in practice there is likely to be some iteration between document review, stakeholder interviews, consultations and report drafting. Work on the report might commence early on during the document review stage. It might also be relevant to seek out other interviewees or documents as a result of the interviews.

The draft report should be presented to the relevant focal point in the government that is responsible for the review.
It might also be useful to present the report to a range of stakeholders who have been consulted. A consultative workshop on the draft report could be held with some groups of stakeholders, in order to provide feedback but also to validate the findings and recommendations of the review. The government may also wish to consider a public consultation process.

The final stage is to revise the report based on feedback received and additional information acquired.

VI. Organizing a Green Economy Policy Review

The typical steps in organizing and undertaking a Green Economy Policy Review process are presented in the following flow chart.

1. Form a team
2. Define the scope, possibly with the help of a first stakeholder consultation
3. Review documents
4. Elaborate workplan according to three areas
   - policy process (cross-cutting)
   - policy design
   - policy implementation & effectiveness
5. Interview officials & stakeholders
6. Organize workshops & consultations
7. Draft report
8. Review draft with key officials and stakeholders
9. Final report & presentation
10. Endorsement, implementation or technical assistance for the implementation of the recommendations
4. References


OECD (2017a). Author Brief: How to Draft an Environmental Performance Review Chapter. Available at: https://www.oecd.org/environment/country-reviews/EPR_Author_brief.pdf


---

15 Most references cited here can be found on the site of the Green Growth Knowledge Platform: http://www.greengrowthknowledge.org
4. References


## Annexes

### I. Overview of green economy policy goals by sector and policy measures
(adapted from UNEP, 2014a)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Goals/General objectives</th>
<th>Investment</th>
<th>Economic instruments</th>
<th>Capacity building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>• Food security • Reduce poverty • Create rural jobs • Reduce pressure on the environment</td>
<td>• Resource efficient technologies • Ecological farming practices • Post harvest storage • R&amp;D</td>
<td>• Market price premium • Elimination of perverse subsidies (e.g., pesticides and fossil fuels) • Organic agriculture incentives</td>
<td>• Training programmes on green farming practices • Information and communications technologies • Public awareness and educational initiatives</td>
</tr>
<tr>
<td>Water and Sanitation</td>
<td>• Achieve SDGs for water in 2015 • Halve the number of people without access to water and sanitation in 2030 • Efficient use of water</td>
<td>• Water efficient infrastructure and technology • Non traditional sources of water (e.g. desalination) • Small local water supply systems</td>
<td>• Removal of harmful subsidies and policies (e.g. input subsidies) • Fiscal measures (e.g. tax revenues, tariffs, etc.) to finance water infrastructure</td>
<td>• Education and information programmes</td>
</tr>
<tr>
<td>Renewable energy</td>
<td>• Universal access to modern energy services • Renewable energy penetration • Emission reduction</td>
<td>• Renewable energy assets • R&amp;D and production • Clean development mechanism</td>
<td>• Phasing out of subsidies for fossil fuel • Carbon tax • Feed-in tariffs • Public Financing mechanisms</td>
<td>• Demonstration projects • Knowledge spillovers from R&amp;D in renewable energy technologies</td>
</tr>
<tr>
<td>Forests</td>
<td>• Manage forestry sector as an asset • Eliminate deforestation</td>
<td>• Protected areas • Forest certification • Planted forests • Agroforestry</td>
<td>• Payments for environmental services (PES) • Incentives for certified activities</td>
<td>• Improved information on forest stocks, flows and cost-benefit distribution • Research on ecosystem services</td>
</tr>
<tr>
<td>Buildings</td>
<td>• Reduce carbon footprint • Improve access to water and basic sanitation through green buildings</td>
<td>• New technologies (e.g. for heating and cooling) • Sustainable building materials • Design and engineering expertise</td>
<td>• Energy or carbon taxes • Property tax exemptions • Grants and rebates • Subsidized loans</td>
<td>• Building codes and standards, green building design, energy auditing, labeling and certification, etc.</td>
</tr>
</tbody>
</table>
### Annexes

**Fisheries**
- Rebuild overfished and depleted fish population to reach sustainable yield
- Adjust fishing capacity
- Manage transitions in labor markets
- Scientific research
- Environmental Fiscal Reform
- Redirection of harmful subsidies to green activities
- Awareness programmes on fish consumption
- Re-training programmes for fishermen
- Best practices

**Manufacturing**
- Life-cycle approaches that enable dematerialization and expanded service systems
- Constantly improve resource efficiency
- Closed-cycle manufacturing
- Energy and water efficient technology
- Support transition to green jobs
- Abolishment of perverse subsidies
- Taxation on waste emissions and/or materials extraction
- Incentives to invest in green technologies
- Consumer awareness and education programmes
- Environmental impact assessments
- Retraining of workers and technicians

**Waste**
- Minimization of material use and waste generation
- Recycling and reuse of waste
- Recovery of energy from waste
- Collection services
- Municipal Solid Waste (MSW) management infrastructure
- Reclaiming contaminated sites
- Volumetric landfill taxes
- Pay-as-you-throw (PAYT)
- Recycling credit
- Deposit-refund
- National certification programmes
- Creative reuse of wastes
- Training for waste workers in the informal sector

**Transport**
- Expand public transport
- Constantly improve resource efficiency
- Public transport infrastructure
- Green vehicles and fuels
- Remote work
- Taxes on fossil fuels
- Congestion charges
- Subsidies for low carbon vehicles and transport modes
- Public information
- Mobility management, labeling of new cars and driver education
- Best practices

**Tourism**
- Energy and water efficiency
- Conserve biodiversity and cultural heritage
- Generate local income
- Infrastructure
- Environmental conservation
- Technology improvements
- Tax reduction and subsidies
- PES
- Labor force skills
- Public awareness campaigns on sustainable tourism

**Cities**
- Reduce carbon emissions and pollution
- Minimize environmental risks
- Public transport infrastructure
- New smart monitoring and metering devices
- Tax incentives and removal of harmful incentives
- Land and licence plate auctioning
- Green education into school curricula
- Demonstration projects
II. Sustainable Development Goals

There are 17 goals comprising of 169 targets, of which 88 are considered to be outcome targets, specifying the desirable change or impact to be achieved. The remaining 81 targets are process targets. These address the means of implementation - of which there are 62 (identified with a letter e.g. 1.a, etc. for goals 1-16 and comprising all targets under goal 17) - or measures to be implemented, of which there are 19 (see UN Development Programme (UNDP, 2017).

An indicator framework was developed by the IAEG-SDGs and subsequently adopted, incorporating refinements made in July 2017 by the UN General Assembly. It is expected that annual refinements of indicators will be included in the indicator list. The list is comprised of 232 indicators on which general agreement has been reached. Nine of the indicators are used under two or three different targets, and so the total number of indicators listed in the global indicator framework is 244.

The list of goals, targets and indicators can be found at the following site:
https://unstats.un.org/sdgs/indicators/indicators-list/
III. Green Economy Progress Measurement Framework

To support green economy at the country level, UNEP, under PAGE, developed a framework that combines four types of indicators into an integrated policymaking process (UNEP, 2014). An initial version of the framework was tested in Ghana, Mauritius, and Uruguay, where green economy indicators were identified as powerful instruments to engage stakeholders in shaping the policymaking process (UNEP, 2015).

The GEP Measurement Framework is composed of a GEP Index and a companion dashboard of sustainability indicators (PAGE 2017a, 2017b). The figure below presents the GEP Measurement Framework and its parts.

The GEP Index is used to track the changes in green economy indicators relative to desired changes, which directly or indirectly impact current human well-being. It captures particular characteristics of the Inclusive Green Economy concept with a set of multidimensional indicators that cover aspects of at least two dimensions of sustainability (e.g. indicators that capture the link between health and the environment). The GEP Index reflects the weighted progress achieved by countries with respect to national targets set within planetary boundaries and relevant thresholds across several indicators. The value of the GEP Index enables countries to gain an overview of their progress towards greening the economy.

The Dashboard of Sustainability aims to monitor the long-term sustainability of any short-term progress as measured by the GEP Index. It tracks some of the main forms of natural capital (e.g. freshwater and land), as well as other key stocks of capital (e.g. human, health) which affect long-term sustainability. A country that manages to conserve the value of its natural assets (i.e. non-decreasing stocks of natural capital), for example, will be considered to be making progress. In this way, the dashboard acts to monitor the lasting prospects of green economy progress within a given country, highlighting impacts on environment and society.

A final ranking of progress in achieving targets is obtained by comparing progress on the indicators in the dashboard with any green economy progress made, as measured by the GEP Index.

As a “framework”, the GEP Index and dashboard provides a structure for selecting specific indicators. While some are fairly clearly defined, application of the framework allows modifications and tailoring of the approach to specific circumstances.
Figure 3: The Green Economy Progress Measurement Framework (PAGE, 2017a)
**Table 4: Components of the GEP Index (PAGE, 2017a)**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Country coverage</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green trade</td>
<td>Export of environmental goods according to OECD and Asia-Pacific Economic Cooperation (APEC) (% of total export)</td>
<td>128</td>
<td>Internal calculations using UN Comtrade, OECD, APEC, UNEP</td>
</tr>
<tr>
<td>Environmental patents</td>
<td>As a measure of green technology innovation, patent publication in environmental technology by filing office (% of total patents)</td>
<td>61</td>
<td>World Intellectual Property Organization (WIPO)</td>
</tr>
<tr>
<td>Renewable energy sources</td>
<td>Share of renewable energy supply (of total energy supply)</td>
<td>129</td>
<td>Internal calculations using World Development Indicators (WDI)</td>
</tr>
<tr>
<td>Energy use</td>
<td>Energy use (kilogram (kg) of oil equivalent) per USD 1,000 gross domestic product (GDP) (constant 2011 purchasing power parity (PPP))</td>
<td>132</td>
<td>WDI</td>
</tr>
<tr>
<td>Palma ratio</td>
<td>Ratio of the richest 10% of the population’s share of income divided by the share of the poorest 40%</td>
<td>121</td>
<td>Internal calculations on WDI and OECD data</td>
</tr>
<tr>
<td>Access to basic services</td>
<td>This is a composite measure created by the average access to three basic services with key social and environmental implications: Access to improved water sources (% of total population), Access to electricity (% of total population), Access to sanitation facilities (% of total population)</td>
<td>197, 211, 198, respectively</td>
<td>WDI</td>
</tr>
<tr>
<td>Air pollution</td>
<td>PM2.5 pollution mean annual exposure (micrograms per cubic metres)</td>
<td>186</td>
<td>WDI</td>
</tr>
<tr>
<td>Material footprint</td>
<td>Raw material consumption of used biotic and abiotic materials (tons/person)</td>
<td>175</td>
<td>International Resource Panel, UNEP</td>
</tr>
<tr>
<td>Marine and terrestrial protected areas</td>
<td>Sum of terrestrial protected area (% of total land area) and marine protected area (% of territorial waters)</td>
<td>145 and 195, respectively</td>
<td>UNEP-World Conservation Monitoring Centre (UNEP-WCMC) via UNEP Global Resource Information Database (UNEP/GRID)</td>
</tr>
<tr>
<td>Gender inequality index</td>
<td>A composite measure reflecting inequality in achievements between women and men across three dimensions: (a) reproductive health; (b) empowerment; and (c) the labour market</td>
<td>129</td>
<td>UNDP</td>
</tr>
</tbody>
</table>
### Indicator Description

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Country coverage</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension coverage</td>
<td>Share of population above statutory pensionable age receiving an old age pension, by contribution and sex</td>
<td>102</td>
<td>International Labour Organization (ILO)</td>
</tr>
<tr>
<td>Education (Mean years of schooling)</td>
<td>Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level</td>
<td>170</td>
<td>UNDP&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>Life expectancy at birth indicates the number of years a new-born infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life</td>
<td>200</td>
<td>WDI&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

### Notes (see PAGE, 2017a for full details and further references):

1. According to WIPO classifications.
2. It should be noted that the inclusion of this indicator could have potential negative impacts on the environment, e.g. reduction of dead biomass in ecosystems. However, it is believed that the overall potential benefits of developing renewable energy sources outweigh the potential costs.
3. Percentage of total energy supply that comes from constantly replenished natural processes, including solar, wind, biomass, geothermal, hydropower and ocean resources, and some waste. It also includes the production of nuclear energy in 30 countries. The indicator is composed of the sum of two variables.
   1) Combustible renewables and waste (as a percentage of total energy) comprise solid biomass, liquid biomass, biogas, industrial waste, and municipal waste, measured as a percentage of total energy use (available at: http://data.worldbank.org/indicator/EG.USE.CRNW.ZS);
   2) Alternative and nuclear energy (as a percentage of total energy). Clean energy is non-carbohydrate energy that does not produce carbon dioxide when generated. It includes hydropower and nuclear, geothermal, and solar power, among others (available at: http://data.worldbank.org/indicator/EG.USE.COMM.CL.ZS/countries).
4. The Palma Ratio was constructed with observations from OECD and WDI datasets.
5. Food and Agriculture Organization of the United Nations (FAO) data on wastewater was also explored (http://www.fao.org/nr/water/aquastat/data/query/results.html).
6. The value of the measure of progress for this dimension is the simple average between each component taken separately (because each component has its own threshold).
7. For further information, see http://hdr.undp.org/en/content/gender-inequality-index.
8. For further information, see http://hdr.undp.org/en/content/mean-years-schooling-females-aged-25-years-and-above-years.
9. For further information, see http://data.worldbank.org/indicator/SP.DYN.LE00.IN.
### Table 5:  GEP Dashboard Indicators (PAGE, 2017a)

<table>
<thead>
<tr>
<th>Description of indicator</th>
<th>Country coverage</th>
<th>Threshold</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater withdrawal (m³/capita/year)</td>
<td>79</td>
<td>585 m³/capita/year</td>
<td>WDI</td>
</tr>
<tr>
<td>Greenhouse gas emissions, excluding land-use change and forestry (CO₂e/capita/year)</td>
<td>104</td>
<td>2 tons/capita/year</td>
<td>CAIT World Resources Institute¹</td>
</tr>
<tr>
<td>Nitrogen emissions (kg/capita/year)</td>
<td>102</td>
<td>5 kg/capita/year</td>
<td>FAO through UNEP/GRID</td>
</tr>
<tr>
<td>Land use (share of land used for permanent crops)</td>
<td>104</td>
<td>15% land use (for permanent crops)</td>
<td>FAO through UNEP/GRID</td>
</tr>
<tr>
<td>Ecological Footprint (global hectares/capita)</td>
<td>92</td>
<td>1.72 global hectares/capita</td>
<td>Global Footprint Network</td>
</tr>
<tr>
<td>Inclusive Wealth Index (millions of constant 2005 US$/capita)</td>
<td>100</td>
<td>non-negative change</td>
<td>UN University-International Human Dimensions Programme (UNU-IHDP) and UNEP</td>
</tr>
</tbody>
</table>

**Notes:**

1. CAIT Climate Data Explorer, available at: http://cait.wri.org/

¹ CAIT Climate Data Explorer, available at: http://cait.wri.org/
IV. Checklist of key questions

The key questions presented in Section 2 for three areas of the Green Economy Policy Review are presented here as one list.

Policy process

The following investigative questions can help to clarify these overarching issues:

1. What was the initial motivation to develop the policy?
2. At what stage of the policy cycle is the green economy policy?
3. Who was responsible for taking the initiative/leading the scoping and goal-setting?
4. What was the initial response of other stakeholders toward this proposal?
5. Where does principal support for the policy lie within government? At which level of seniority? Within other stakeholders?
6. What has been the timeline of the policy in moving through the cycle? Have there been delays, and if yes, why?
7. What kind of analysis was undertaken and by whom?
8. Were representatives of private sector and other stakeholders groups involved?
9. Which organizations and individuals were consulted?
10. How has coordination among different ministries been organized? Has this been sufficient?
11. Has the policy process given enough consideration to stakeholder representation and intra-governmental coordination? If not, how has this affected the policy process thus far?
12. What are the specific documents resulting from the scoping and goal-setting?
13. Which sectors were identified as relevant for green economy policy and how?
14. Were any sectors not included, and if so, why not?
15. Are those responsible for advancing the policy satisfied with the progress?
16. Do all those responsible in government have an interest to advance this policy?
17. Have decisions on the policy been taken in a timely manner?
18. Do you think one of the aforementioned questions pointed to reasons for insufficient progress?
19. If not, where do you see potential stepping stones or hurdles?
20. In your opinion, what could be done to improve the policy progress?

Policy objectives and coherence

21. Does the policy consist of general, specific and operational objectives? And what are these objectives?
22. Who was involved in formulating the objectives? Who was the driving force for setting the objectives?
23. What criteria were used in formulating objectives? Have these criteria been stated in official policy documents or in background documents? Are these criteria matching the underlying intention of what the policy should achieve?
24. Which government departments and other stakeholders contributed to this process, and how? (please refer to questions on policy process)
25. What kind of assessment of the policy’s likely outcomes was undertaken and by whom?
26. Are the policy objectives relevant and aligned with the applicable SDGs and/or the Paris Agreement and their targets?

27. Are the selected indicators similar to those for the SDGs and/or the Paris Agreement and their targets (see Section 2.Iii)?

28. Do the policy objectives reinforce or interfere with other national frameworks?

29. How can green economy objectives be enhanced so that existing/new policies can be better aligned with the SDGs and Paris Agreement? Would there be a political backing to do so?

**Policy instruments**

30. Which policy instruments were considered, and which were selected (please refer to Box 5)?

31. What criteria were used in selecting policy instruments?

32. What has been the process for selecting the policy instruments (Who took decisions related to the policy instruments? Which organizations and individuals were consulted? Please refer to the section on policy process for further questions)

**Indicators**

33. What indicators have been identified for issue identification and policy formulation, assessment and monitoring and evaluation?

34. What criteria have been used for choosing the indicators?

35. Is a process in place to collect and report on these indicators, where relevant?

36. Are the indicators measurable?

37. Is data available for the indicators identified?

38. If no indicators have been identified for issue identification and policy formulation, which indicators could be considered?

39. Would the GEP Measurement Framework, as developed by UNEP, provide useful indicators for the country’s policy cycle?

**Implementation and effectiveness**

40. What actions have been undertaken to implement the policy?

41. Which ministries and agencies are responsible for implementation? Has there been sufficient commitment to, and support for, the policy?

42. What types of challenges (see table 2) to implementation have been encountered?

43. How can these challenges be overcome?

44. What have been the main successes or shortcomings of implementation, and what are the lessons learned in this respect?

45. Have indicators been used throughout the policy cycle, which can help to assess the policy’s effectiveness? Have they been regularly measured? If not, which indicators could be recommended?

46. What are the intended and unintended effects of the policy?

47. Is there a way to triangulate the evidence on the policy’s effectiveness?
V. Suggested outline for a Green Economy Policy Review report

1. National policy framework for Inclusive Green Economy – history, key events, decisions and documents (among others, green economy policy assessment, green economy scoping studies), SDG plans and processes

2. Scope of the review (which policies are reviewed and why)

3. Policy process (could also be mainstreamed in 4. and 5.)

4. Policy design
   4.1 Policy objectives and coherence with SDGs and the Paris Agreement
   4.2 Policy instruments
   4.3 Indicators

5. Implementation and effectiveness

6. Conclusions and overall recommendations

Annexes

1. Process of the review (consultations, stakeholders listed in Annexes, timeline)
2. Detailed agenda of meetings and consultations
3. Documents reviewed and consulted
4. Others as required