



Recommendation of the Council on  
Assessing the Sustainability of  
Bio-Based Products

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## **Date(s)**

Adopted on 17/07/2012

## **Background Information**

The Recommendation on Assessing the Sustainability of Bio-Based Products was adopted by the OECD Council on 17 July 2012 on the proposal of the Committee for Scientific and Technological Policy. Recognising that the current and future magnitude of the economic, environmental and societal impacts of bio-based products are of such significance that they warrant strong, sustained and coherent action from governments, business and consumers to agree on harmonised frameworks for assessing the sustainability of bio-based products, this instrument is intended to recommend guidance for the development and implementation of the national frameworks for assessing the sustainability of bio-based products that take into consideration their environmental, economic and social impacts throughout the whole life cycle of bio-based products (cradle-to-grave).

## THE COUNCIL

**HAVING REGARD** to Article 5 b) of the Convention on the Organisation for Economic Cooperation and Development of 14 December 1960;

**HAVING REGARD** to Rule 18 b) of the Rules of Procedure;

**HAVING REGARD** to the Decision of the Council concerning the Mutual Acceptance of Data in the Assessment of Chemicals [C(81)30/FINAL, as amended];

**HAVING REGARD** to the Recommendation of the Council on Material Flows and Resource Productivity [C(2004)79];

**RECOGNISING** the increasing impact on national economies of global challenges, such as climate change, environmental footprints, energy security and the need to address these globally;

**RECOGNISING** the increasing contribution of the bioeconomy to the mitigation of global challenges and to green growth;

**RECOGNISING** that the development of the bioeconomy can underpin the evolution of sustainable manufacturing sectors and requires coordinated and systems-based policy development on the part of different ministries and agencies, nationally and internationally;

**RECOGNISING** the proliferation of sustainability indicators, certification schemes and sustainability labels at national levels and internationally for bio-based products that might lead to duplication of efforts and, therefore, to certain inefficiencies in the delivery of the bioeconomy;

**RECOGNISING** the need for the development of harmonised frameworks to assess the sustainability of bio-based products;

**RECOGNISING** existing regional, national and international initiatives concerning the development of bio-based products and assessments of their sustainability;

**CONSIDERING** that the current and future magnitude of the economic, environmental and societal impacts of bio-based products are of such significance that they warrant strong, sustained and coherent action from governments, business and consumers to agree on harmonised frameworks for assessing the sustainability of bio-based products;

### **On the proposal of the Committee for Scientific and Technological Policy:**

**I. AGREES**, for the purpose of this Recommendation, to the following definitions:

1. A “bioeconomy” is an economy where the basic building blocks for industry and the raw materials for energy are derived from plant/crop-based (i.e. renewable) sources and where biotechnology is used to produce a range of goods and services.

2. “Bio-based Products” are commercial or industrial goods (other than food or feed) composed in whole or in significant part of biological products, forestry materials, or renewable domestic agricultural materials, including plant, animal, or marine materials. These are products developed from biological materials, with the intent of replacing or enhancing products derived from non-renewable resources. The term Bio-based Product encompasses bio-based chemicals, bio-based plastics, enzymes, bio-based materials, and bio-fuels. Food and feed are excluded.

**II. RECOMMENDS** that Members:

1. Develop and implement national frameworks for assessing the sustainability of Bio-based Products that take into consideration their environmental, economic and social impacts throughout the whole life cycle of bio-based products (cradle-to-grave).

2. Build consensus amongst relevant stakeholders in developing sustainability assessment frameworks for Bio-based Products.

3. Ensure the international consistency of approaches; use a life cycle approach to measure the sustainability of Bio-based Products, where possible; and compare with substitute non Bio-based Products.

4. Facilitate the development and adoption of assessment methodologies for Bio-based Products that are science-based, broadly accepted, flexible and verifiable; these methodologies should allow for comparisons between various products and production options, including non bio-based equivalents, in order to minimise the possibility of generating trade barriers.

5. Facilitate the development and adoption of international sustainability indicators for Bio-based Products that are science-based, unambiguous and validated. These should take into account factors such as:

- i) Energy balance, including non-renewable and renewable energy use.
- ii) All greenhouse gas reduction over product life cycles.
- iii) Bio-based content as an indicator of renewability.
- iv) Anticipated product life.
- v) Water and solvent use during the different stages of production, and impacts on biodiversity during feedstock production and subsequent processing.
- vi) Direct and indirect land use for feedstock production.
- vii) All aspects of end of product life.
- viii) Conventional as opposed to alternative bio-based production economics.
- ix) Impact on human and environmental health.

6. Develop and implement effective and efficient third party peer review of the sustainability assessments of Bio-based Products, as appropriate, and compare with non bio-based products.

7. Collect and make public appropriate data relevant to the sustainability assessment of Bio-based Products to enhance transparency and to facilitate the development of assessment methodologies for evidence-based decision-making.

8. Promote awareness of the sustainability aspects of Bio-based Products and facilitate and encourage the timely provision of balanced and relevant information on the sustainability aspects of Bio-based Products.

9. Enhance collaboration with non-Members and assist them in the development and implementation of principles for assessing the sustainability of Bio-based Products.

10. Provide, through the public authorities of Members at various levels, support to SMEs involved in bio-based production and assessments of the sustainability of Bio-based Products.

**III. INVITES** non-Members to adhere to the present Recommendation and collaborate with Members in its implementation.

**IV. INSTRUCTS** the Committee for Scientific and Technological Policy to monitor the implementation of this Recommendation and to report to Council five years after its adoption and as appropriate thereafter.

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