

A sustainable bioenergy policy for the period after 2020

Fields marked with * are mandatory.

Introduction

EU Member States have agreed on a new policy framework for climate and energy, including EU-wide targets for the period between 2020 and 2030. The targets include reducing the Union's greenhouse gas (GHG) emissions by 40 % relative to emissions in 2005 and ensuring that at least 27 % of the EU's energy comes from renewable sources. They should help to make the EU's energy system more competitive, secure and sustainable, and help it meet its long-term (2050) GHG reductions target.

In January 2014, in its Communication on A policy framework for climate and energy in the period from 2020 to 2030,[1] the Commission stated that '[a]n improved biomass policy will also be necessary to maximise the resource-efficient use of biomass in order to deliver robust and verifiable greenhouse gas savings and to allow for fair competition between the various uses of biomass resources in the construction sector, paper and pulp industries and biochemical and energy production. This should also encompass the sustainable use of land, the sustainable management of forests in line with the EU's forest strategy and address indirect land-use effects as with biofuels'.

In 2015, in its Energy Union strategy,[2] the Commission announced that it would come forward with an updated bioenergy sustainability policy, as part of a renewable energy package for the period after 2020.

Bioenergy is the form of renewable energy used most in the EU and it is expected to continue to make up a significant part of the overall energy mix in the future. On the other hand, concerns have been raised about the sustainability impacts and competition for resources stemming from the increasing reliance on bioenergy production and use.

Currently, the Renewable Energy Directive[3] and the Fuel Quality Directive[4] provide an EU-level sustainability framework for biofuels[5] and bioliquids.[6] This includes harmonised sustainability criteria for biofuels and provisions aimed at limiting indirect land-use change,[7] which were introduced in 2015.[8]

In 2010, the Commission issued a Recommendation[9] that included non-binding sustainability criteria for solid and gaseous biomass used for electricity, heating and cooling (applicable to installations with a capacity of over 1 MW). Sustainability schemes have also been developed in a number of Member States.

The Commission is now reviewing the sustainability of all bioenergy sources and final uses for the period after 2020. Identified sustainability risks under examination include lifecycle greenhouse gas emissions from bioenergy production and use; impacts on the carbon stock of forests and other ecosystems; impacts on biodiversity, soil and water, and emissions to the air; indirect land use change impacts; as well as impacts on the competition for the use of biomass between different sectors (energy, industrial uses, food). The Commission has carried out a number of studies to examine these issues more in detail.

The development of bioenergy also needs to be seen in the wider context of a number of priorities for the Energy Union, including the ambition for the Union to become the world leader in renewable energy, to lead the fight against global warming, to ensure security of supply and integrated and efficient energy markets, as well as broader EU objectives such as reinforcing Europe's industrial base, stimulating research and innovation and promoting competitiveness and job creation, including in rural areas. The Commission also stated in its 2015 Communication on the circular economy^[10] that it will 'promote synergies with the circular economy when examining the sustainability of bioenergy under the Energy Union'. Finally, the EU and its Member States have committed themselves to meeting the 2030 Sustainable Development Goals.

[1] COM(2014) 15.

[2] COM/2015/080 final.

[3] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

[4] Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (OJ L 350, 28.12.1998, p. 58).

[5] Used for transport.

[6] Used for electricity, heating and cooling.

[7] Biomass production can take place on land that was previously used for other forms of agricultural production, such as growing food or feed. Since such production is still necessary, it may be (partly) displaced to land not previously used for crops, e.g. grassland and forests. This process is known as indirect land use change (ILUC); see <http://ec.europa.eu/energy/en/topics/renewable-energy/biofuels/land-use-change>.

[8] See more details on the existing sustainability framework for biofuels and bioliquids in section 5.

[9] COM/2010/0011 final.

[10] Closing the loop – an EU action plan for the circular economy (COM(2015) 614/2).

1. General information about respondents

* 1.1. In what capacity are you completing this questionnaire?

- academic/research institution
- as an individual / private person
- civil society organisation
-

- international organisation
- other
- private enterprise
- professional organisation
- public authority
- public enterprise

* 1.6. If you are a civil society organisation, please indicate your main area of focus.

- Agriculture
- Energy
- Environment & Climate
- Other
- Technology & Research

1.8. If replying as an individual/private person, please give your name; otherwise give the name of your organisation

200 character(s) maximum

NOAH - Friends of the Earth Denmark / ID number: 927189614844-23

1.9. If your organisation is registered in the Transparency Register, please give your Register ID number.

(If your organisation/institution responds without being registered, the Commission will consider its input as that of an individual and will publish it as such.)

200 character(s) maximum

1.10. Please give your country of residence/establishment

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland

- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other non-EU European country
- Other non-EU Asian country
- Other non-EU African country
- Other non-EU American country

* 1.11. Please indicate your preference for the publication of your response on the Commission's website:

(Please note that regardless the option chosen, your contribution may be subject to a request for access to documents under [Regulation 1049/2001](#) on public access to European Parliament, Council and Commission documents. In this case the request will be assessed against the conditions set out in the Regulation and in accordance with applicable [data protection rules](#).)

- Under the name given: I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication.
- Anonymously: I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication.
- Please keep my contribution confidential. (it will not be published, but will be used internally within the Commission)

Perceptions of bioenergy

2.1. Role of bioenergy in the achievement of EU 2030 climate and energy objectives

Please indicate which of the statements below best corresponds to your perception of the role of bioenergy in the renewable energy mix, in particular in view of the EU's 2030 climate and energy objectives:

- Bioenergy should continue to play a dominant role in the renewable energy mix.
- Bioenergy should continue to play an important role in the renewable energy mix, but the share of other renewable energy sources (such as solar, wind, hydro and geothermal) should increase significantly.
-

Bioenergy should not play an important role in the renewable energy mix: other renewable energy sources should become dominant.

2.2. Perception of different types of bioenergy

Please indicate, for each type of bioenergy described below, which statement best corresponds to your perception of the need for public (EU, national, regional) policy intervention (tick one option in each line):

	Should be further promoted	Should be further promoted, but within limits	Should be neither promoted nor discouraged	Should be discouraged	No opinion
Biofuels from food crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biofuels from energy crops (grass, short rotation coppice, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biofuels from waste (municipal solid waste, wood waste)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biofuels from agricultural and forest residues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofuels from algae	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biogas from manure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biogas from food crops (e.g. maize)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biogas from waste, sewage sludge, etc.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat and power from forest					

biomass (except forest residues)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Heat and power from forest residues (tree tops, branches, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Heat and power from agricultural biomass (energy crops, short rotation coppice)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Heat and power from industrial residues (such as sawdust or black liquor)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Heat and power from waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Large-scale electricity generation (50 MW or more) from solid biomass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Commercial heat generation from solid biomass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Large-scale combined heat and power generation from solid biomass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Small-scale combined heat and power generation from solid biomass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Heat generation from biomass in					

domestic (household) installations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bioenergy based on locally sourced feedstocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bioenergy based on feedstocks sourced in the EU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bioenergy based on feedstocks imported from non-EU countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Benefits and opportunities from bioenergy

3.1. Benefits and opportunities from bioenergy

Bioenergy (biofuel for transport, biomass and biogas for heat and power) is currently promoted as it is considered to be contributing to the EU's renewable energy and climate objectives, and also having other potential benefits to the EU economy and society.

Please rate the contribution of bioenergy, as you see it, to the benefits listed below (one answer per line):

	of critical importance	important	neutral	negative	No opinion
Europe's energy security: safe, secure and affordable energy for European citizens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Grid balancing including through storage of biomass (in an electricity system with a high proportion of electricity from intermittent renewables)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Reduction of GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Environmental benefits (including biodiversity)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Resource efficiency and waste management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boosting research and innovation in bio-based industries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Competitiveness of European industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Growth and jobs, including in rural areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Sustainable development in developing countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.2. Any additional views on the benefits and opportunities from bioenergy? Please explain

2500 character(s) maximum

It can be expected that competition in biomass becomes so large that an energy system based on more biomass is both expensive and unstable.

It is often repeated that bioenergy is needed for grid balancing in a renewable energy system, but some researchers suggest that it will be possible to establish an energy system without big combustion plants. Therefore it is counterproductive to prolong the lifetimes of existing heat and power plants by rebuilding them to burn biomass (or even build new ones) in a transition period.

The way bioenergy is presented as CO₂-neutral (making national climate records look better than they are in reality) misleads citizens to believe that we are on the right track - and that there is no urgency to cut energy consumption. Since emissions are definitely not zero (and probably not even smaller than from fossil fuels) the result for the climate will be negative. On top comes the problem that due to the alleged CO₂ neutrality, the use of biomass in a heat and power plant in one country makes room for a heat and power plant in another country to emit even more.

Resource efficiency and waste management, including recycling of materials is already high on the EU agenda. There is a risk that increased combustion or other use of organic waste for bioenergy will prevent better recycling or even prevent extended lifetime of products made from wood.

The biomass will mainly come from monocultures destroying biodiversity and ecosystems. Bioenergy, especially biofuels for transport and biomass used for electricity, has by far the greatest land footprint per unit of any energy source. Bioenergy puts a particular strain on freshwater and soils fertility. This is leading to soil depletion and erosion, increasing use of agro-chemicals, which pollute waters, damage ecosystems and biodiversity and often poison communities.

Due to its disproportionately large land footprint, the impacts of

large-scale bioenergy on communities are also particularly grave and makes bioenergy a prime driver and justification for land-grabbing in ‘producer’ countries and for the abuse of communities’ rights to land, food and water worldwide, and especially in the global South.

4. Risks from bioenergy production and use

4.1. Identification of risks

A number of risks have been identified (e.g. by certain scientists, stakeholders and studies) in relation to bioenergy production and use. These may concern specific biomass resources (agriculture, forest, waste), their origin (sourced in the EU or imported) or their end-uses (heat, electricity, transport).

Please rate the relevance of each of these risks as you see it (one answer per line):

	critical	significant	not very significant	non-existent	No opinion
Change in carbon stock due to deforestation and other direct land-use change in the EU	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change in carbon stock due to deforestation and other direct land-use change in non-EU countries	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indirect land-use change impacts	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GHG emissions from the supply chain (e.g. cultivation, processing and transport)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GHG emissions from combustion of biomass ('biogenic emissions')	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacts on air quality	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacts on water and soil	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacts on biodiversity	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Varying degrees of efficiency of biomass conversion to energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Competition between different uses of biomass (energy, food, industrial uses) due to limited availability of land and feedstocks and/or subsidies for specific uses	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal market impact of divergent national sustainability schemes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the "other" choice

200 character(s) maximum

Social implications e.g.: poisoning of workers and neighbouring communities with agro-toxins; adverse effects on the local climate; loss of food sovereignty resulting in hunger and malnutrition.

4.2. Any additional views on the risks from bioenergy production and use? Please explain

2500 character(s) maximum

Once logged for bioenergy and other purposes, forests are often not allowed to regenerate but are converted to monoculture plantations that are falsely classed as forests. When this happens, much of the carbon released from logging will never be reabsorbed by new forest growth. Also, the forests are in many places depleted from organic matter due to a more intensive use of residues - especially since the consumption of products made from the residues (e.g. paper or chipboard) is not reduced.

A constant degradation of the soil organic matter content is seen across the globe - this tendency is reinforced via production of biofuels from annual crops.

The forestry and agriculture sectors claim that plantations of fast-growing trees or short rotation coppices will sequester carbon in the soil during the rotations and thus give a positive contribution combatting and climate change on a long term - even if the up-front carbon debt may be huge if the plantations are established on what was previously forest or natural grass-land. However this is not an option considering the urgency for immediate action against climate changes. Furthermore, the idea represents a reductionist mind-set leaving all other environmental and social aspects out of the equation.

In societies where overall consumption is not set to be reduced, the

production of biomass for bioenergy will lead to indirect land-use changes; for instance increased production of bioenergy on agricultural land in Europe can imply that imports of soya or other protein crops from other continent is increased; more use of wood for bioenergy will imply that wood for chipboard, paper etc. has to be produced somewhere else. This is one of the reasons that it is not possible to nominate the production of biomass for large scale bioenergy as 'sustainably produced'. No matter how the biomass is produced, it adds to the overall consumption.

Bioenergy from large-scale monocultures have been shown to result in greater greenhouse gas emissions than the fossil fuels they are meant to replace. This is due to the large-scale carbon emissions from direct and indirect land use changes, as well as nitrous oxide emissions resulting from greater nitrogen fertiliser use. Not counting the CO₂ emissions "from the chimney" when burning bioenergy is falsely misleading European citizens to believe that we are on the right track in combatting climate change.

5. Effectiveness of existing EU sustainability scheme for biofuels and bioliquids

In 2009, the EU established a set of sustainability criteria for biofuels (used in transport) and bioliquids (used for electricity and heating). Only biofuels and bioliquids that comply with the criteria can receive government support or count towards national renewable energy targets. The main criteria are as follows:

- Biofuels produced in new installations must achieve GHG savings of at least 60 % in comparison with fossil fuels. In the case of installations that were in operation before 5 October 2015, biofuels must achieve a GHG emissions saving of at least 35 % until 31 December 2017 and at least 50 % from 1 January 2018. Lifecycle emissions taken into account when calculating GHG savings from biofuels include emissions from cultivation, processing, transport and direct land-use change;
- Biofuels cannot be grown in areas converted from land with previously (before 2008) high carbon stock, such as wetlands or forests;
- Biofuels cannot be produced from raw materials obtained from land with high biodiversity, such as primary forests or highly biodiverse grasslands.

In 2015, new rules^[1] came into force that amend the EU legislation on biofuel sustainability (i.e. the Renewable Energy Directive and the Fuel Quality Directive) with a view to reducing the risk of indirect land-use change, preparing the transition to advanced biofuels and supporting renewable electricity in transport. The amendments:

- limit to 7 % the proportion of biofuels from food crops that can be counted towards the 2020 renewable energy targets;
- set an indicative 0.5 % target for advanced biofuels as a reference for national targets to be set by EU countries in 2017;
- maintain the double-counting of advanced biofuels towards the 2020 target of 10 % renewable energy in transport and lay down a harmonised EU list of eligible feedstocks; and

- introduce stronger incentives for the use of renewable electricity in transport (by counting it more towards the 2020 target of 10 % renewable energy use in transport).

[1] Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources (OJ L 239, 15.9.2015, p. 1).

5.1. Effectiveness in addressing sustainability risks of biofuels and bioliquids

In your view, how effective has the existing EU sustainability scheme for biofuels and bioliquids been in addressing the risks listed below? (one answer per line)

	effective	partly effective	neutral	counter-productive	No opinion
GHG emissions from cultivation, processing and transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GHG emissions from direct land-use change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Indirect land-use change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Impacts on biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Impact on soil, air and water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Any additional comments?

2500 character(s) maximum

Standards and certification cannot address fundamental issues: the scale of demand, and the scale of exploitation. Instead, certification helps to legitimise destructive models and over-exploitation by providing false reassurances.

Greenhouse gas standards use figures agreed by political rather than scientific consensus (as in the case of EU biofuel standards), or on unscientific attempts to translate highly complex, interactive and largely unpredictable indirect impacts into carbon figures for specific assignments of bioenergy feedstock.

Standards and certification rely on private contracts between energy companies and consultancies of their choice, a process that is highly susceptible to fraud. No regulatory body exists in the EU or elsewhere which has the capacity to verify, audit and sanction bioenergy supply chains and confirm their compliance with the standards.

The indirect impacts of bioenergy are more extensive than the direct impacts. They include what is commonly described as Indirect Land Use Change (ILUC) as well as infrastructure investments resulting from the enthusiasm for bioenergy e.g. investments in roads through forests, river diversions, and new ports, all of which can increase deforestation. Other indirect impacts include policies promoted in the global South to support bioenergy and other monoculture investments that also undermine community land rights. These impacts cannot be addressed through standards.

Flexible crops (and trees), suitable for a whole number of applications and purposes, cannot be adequately addressed through bioenergy standards. For example, soya and maize are flexible crops because they are used for animal feed, human food, and many industrial applications, as well as for biofuels. Wood from the same tree plantations can be used for pulp and paper production or for bioenergy. Each of these industries helps to support and perpetuate the others, and standards for one will not address this.

Sustainability standards are a distraction from the impacts of the biomass industry that are already being felt. They legitimise the industry (and actually becomes a driver of it) by persuading the public to think that consumption of these products, commodities and utilities is sustainable. Standards designed to apply to a specific load of biomass or biofuel, but not limiting or addressing industry expansion as a whole, cannot assure sustainability when it is the scale itself that is unsustainable.

5.2. Effectiveness in promoting advanced biofuels

In your view, how effective has the sustainability framework for biofuels, including its provisions on indirect land-use change, been in driving the development of 'advanced' biofuels, in particular biofuels produced from ligno-cellulosic material (e.g. grass or straw) or from waste material (e.g. waste vegetable oils)?

- very effective
- effective
- neutral
- counter-productive
- no opinion

What additional measures could be taken to further improve the effectiveness in promoting advanced biofuels?

2500 character(s) maximum

We do not agree to the assumption that so-called advanced biofuels are desirable. The intentions of the industry (and their associated researchers) are to ease the break-down of plant residues and wood via enzymes. This will facilitate further depletion of the plant, soil and water systems.

There is a strong focus on wood - and there is a huge risk that the sources for European consumption of biofuels for road transport and aviation (or other bio-material in a future bio-economy) will be derived from fast-growing plantations in the global South displacing forests and natural grass-land. It

is proposed to ease the production by planting genetically modified trees, which are more easily broken down. This underlines the intention of depleting and destroying the planet's natural ecosystems.

5.3. Effectiveness in minimising the administrative burden on operators

In your view, how effective has the EU biofuel sustainability policy been in reducing the administrative burden on operators placing biofuels on the internal market by harmonising sustainability requirements in the Member States (as compared with a situation where these matter would be regulated by national schemes for biofuel sustainability)?

- very effective
- effective
- not effective
- no opinion

What are the lessons to be learned from implementation of the EU sustainability criteria for biofuels? What additional measures could be taken to reduce the administrative burden further?

2500 character(s) maximum

5.4. Deployment of innovative technologies

In your view, what is needed to facilitate faster development and deployment of innovative technologies in the area of bioenergy? What are the lessons to be learned from the existing support mechanisms for innovative low-carbon technologies relating to bioenergy?

2500 character(s) maximum

6. Effectiveness of existing EU policies in addressing solid and gaseous biomass sustainability issues

6.1. In addition to the non-binding criteria proposed by the Commission in 2010, a number of other EU policies can contribute to the sustainability of solid and gaseous bioenergy in the EU. These include measures in the areas of energy, climate, environment and agriculture.

In your view, how effective are current EU policies in addressing the following risks of negative environmental impacts associated with solid and gaseous biomass used for heat and power? (one answer per line)

	effective	partly effective	neutral	counter-productive	No opinion

Change in carbon stock due to deforestation, forest degradation and other direct land-use change in the EU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change in carbon stock due to deforestation, forest degradation and other direct land-use change in non-EU countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Indirect land-use change impacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
GHG emissions from supply chain, e.g. cultivation, processing and transport	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
GHG emissions from combustion of biomass ('biogenic emissions')	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Air quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Water and soil quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biodiversity impacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Varying degrees of efficiency of biomass conversion to energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Competition between different uses of biomass (energy, food, industrial uses) due to limited availability of land and feedstocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6.2. Any additional views on the effectiveness of existing EU policies on solid and gaseous biomass?
Please explain

2500 character(s) maximum

The EU policies for agriculture and forestry are not adequate to ensure that European soils, waters and biodiversity are not depleted. Even worse, part of the EU development policies is actually adding to the problem and is in itself a driver or facilitator for exploitation of land.

While the EU renewable energy policies are the driving force for increased bioenergy consumption, the trade and aid policies are facilitating increased land-use in the South.

The EU has an overall trade deficit regarding raw material. Specifically in relation to bioenergy, in recent years, vegetable fats and oils and oilseeds have reached a record large share of imports. Furthermore, according to Eurostat, “The European Union, due to the characteristics of the European industrial base, is highly dependent on imports of raw materials for its competitiveness and for its economic development”.

Thus, the EU seems to be using development aid programmes to support the need for raw material in order to make the European industries ‘competitive’, and facilitate growth in the European Community. This is reflected in the current EU program for aid, Agenda for Change. It has a strong focus on trade and developing countries’ access to world markets. Furthermore a program “Aid for Trade” is directly linked to “support partner countries’ efforts to develop and expand their trade as leverage for growth and poverty reduction”. This support can for instance be directed towards transport infrastructure or investments in agriculture.

In the Agenda for Change the idea is to help create growth in developing countries by targeting the “Business environment, regional integration and access to world markets” and “Sustainable agriculture and energy”. Such targets serve as drivers for expansion of bioenergy production in the South. Especially the focus on access to the world market as a main priority is alarming as it supports the whole idea of changing food to commodities traded globally, thus undermining food sovereignty. When the EU has world market access as a high priority, it opens the door for EU investment in infrastructure such as roads and harbours that support exports of raw material and the looting of countries and continents. It also sends a strong signal to European and regional investment banks to do the same. And, in relation to bioenergy production, it eases the plundering of the Global South for biomass in various forms that they need for their own populations.

7. Policy objectives for a post-2020 bioenergy sustainability policy

7.1. In your view, what should be the key objectives of an improved EU bioenergy sustainability policy post-2020? Please rank the following objectives in order of importance: most important first; least important 9th/10th (you can rank fewer than 9/10 objectives):

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Contribute to climate change objectives	<input type="radio"/>									
Avoid environmental impacts (biodiversity, air and water quality)	<input type="radio"/>									
Mitigate the impacts of indirect land-use change	<input type="radio"/>									
Promote efficient use of the biomass resource, including efficient energy conversion	<input type="radio"/>									
Promote free trade and competition in										

the EU among all end-users of the biomass resource	<input type="radio"/>									
Ensure long-term legal certainty for operators	<input type="radio"/>									
Minimise administrative burden for operators	<input type="radio"/>									
Promote energy security	<input type="radio"/>									
Promote EU industrial competitiveness, growth and jobs	<input type="radio"/>									
Other	<input type="radio"/>									

7.2. Any other views? Please specify

2500 character(s) maximum

As written under 5.1., we do not believe that standards and criteria can ensure sustainability – and therefore the only possible EU bioenergy sustainability policy post-2020 is to exclude bioenergy from definitions of renewable energy and from the next EU RED.

In the scheme 7.1., there is an underlying assumption that bioenergy shall play an important role in the EU energy mix post-2020. As we do not believe in this assumption, it is meaningless to prioritise between the options in the scheme.

8. EU action on sustainability of bioenergy

8.1. In your view, is there a need for additional EU policy on bioenergy sustainability?

- No: the current policy framework (including the sustainability scheme for biofuels and bioliquids, and other EU and national policies covering solid and gaseous biomass) is sufficient.
- Yes: additional policy is needed for solid and gaseous biomass, but for biofuels and bioliquids the existing scheme is sufficient.
- Yes: additional policy is needed on biofuels and bioliquids, but for solid and gaseous biomass existing EU and national policies are sufficient.
- Yes: a new policy is needed covering all types of bioenergy.

8.2. In your view, and given your answers to the previous questions, what should the EU policy framework on the sustainability of bioenergy include? Please be specific

5000 character(s) maximum

Bioenergy must be excluded from definitions of renewable energy and from the next EU RED.

No subsidies aimed for renewable energy purposes can be given to support establishment and use of bioenergy in any form.

Bioenergy can provide a sustainable energy option, but only when produced on a small-scale basis for local energy needs, and only if (for example) the health impacts of indoor smoke, especially on women, are taken into account. Small-scale local bioenergy schemes could still attract support, for example under Rural Development programmes. In fact, community-based bioenergy schemes often benefit from this type of support already, rather than from the subsidies that stem from the Renewable Energy Directive, which disproportionately boost large-scale industrial schemes.

By including bioenergy in renewable energy targets, the EU is promoting direct and indirect subsidies for it, claiming that it is a sustainable alternative to fossil fuels. But according to the International Energy Agency, renewable energy is “energy derived from natural processes (e.g. sunlight and wind) that are replenished at a faster rate than they are consumed”. Bioenergy does not meet this definition as there is no guarantee that all biomass that is burned is replenished, and it is never replenished “at a faster rate” than

it is consumed. Moreover, large-scale bioenergy is far from sustainable, as it relies on a major expansion of industrial agriculture, of monoculture tree plantations, and of industrial logging. These industrial activities deplete and pollute soils and water, destroy forests, grasslands and wetlands, and destroy the livelihoods of many millions of people, particularly in the global South.

Many in the EU claim that the adverse environmental and climatic impacts of large-scale bioenergy can be avoided through the application of sustainability standards. However, standards applied to individual batches of 'raw material' cannot address an issue that is inherently one of scale: the very scale of industrial bioenergy is a problem in itself. Standards and certification schemes are applied only to specific loads of biomass or biofuel, and have no impact on overall scale and expansion. On the contrary, they may add to the problem by legitimising large-scale bioenergy use in the eyes of the public.

In the EU, bioenergy tends to compete with less carbon- and land-intensive renewable energy sources such as wind and solar power, rather than with fossil fuels, because it fits into the current infrastructure for the latter, so hindering real change.

9. Additional contribution

Do you have other specific views that could not be expressed in the context of your replies to the above questions?

5000 character(s) maximum

We have seen in the past (in relation to biofuels) that the EU surrendered to demands from the agricultural and business sectors to set binding targets for the use. At the time, the EU decision makers would not listen to the critical NGOs. When the problems became evident and widely acknowledged (also by the decision makers, who in response wanted to lower the targets) the agricultural and business sectors were complaining that they had invested under false premises.

Palm oil and soybean oil are major biofuel feed-stocks imported by the EU as a result of the current renewable energy policies. Oil palm expansion is responsible for large-scale land-grabs and the destruction of livelihoods of Indigenous Peoples, other forest-dependent peoples and small farmers in a growing number of countries, including Indonesia, Malaysia, Papua New Guinea, Philippines, Cameroon, DR Congo, Liberia, Nigeria, Sierra Leone, Colombia, Ecuador, Honduras and Mexico. Soya expansion, supported in part by the growing use of soya oil for biofuels, is responsible for the displacement of Indigenous Peoples, traditional communities and peasant farmers in several South American countries.

Injustices associated with large-scale tree and crop monocultures include:

- Poisoning of workers and neighbouring communities with pesticides and other agro-toxins;
- Adverse effects on the local climate, lack of shade, changes in rainfall and vegetation;

- Abuse of labour rights and harmful and exploitative working conditions on plantations;
- Small farmers being pressurised into contract-farming agreements, incurring debts and losing their ability to choose what to grow on their land;
- Loss of food sovereignty, in many cases resulting in hunger and malnutrition;
- Particularly serious impacts on women: Differentiated gender impacts mean that land-grabbing and the conversion of land to monoculture plantations commonly results in an increased work load for women (e.g. having to walk longer distances to procure firewood, water and other key resources for their households' livelihoods), and also in an increase in violence against women.

Furthermore, land-grabs are often associated with water-grabs, where river diversion and over-extraction of freshwater to irrigate monoculture plantations further undermines food sovereignty.

Now, the EU risk repeating this mistake on an even larger scale by allowing for and supporting a large-scale transition from fossil fuels to bioenergy in the heat and power sector as well as by promoting 'advanced biofuels'. Incentivising a new high-emission industry under the guise of clean energy is not acceptable.

The EU cannot be allowed to continue the current model of energy consumption, promoted through false assumptions about bioenergy being renewable, when its application at an industrial scale clearly is not. Claims of emission reductions are often false, and come at the expense of land, livelihoods, forests, soil and water. The EU already bears great responsibility for the climate and biodiversity crises currently facing the planet. Claiming more land for bioenergy production, under the false premise that this is a contribution to climate protection, can only increase the already unacceptably high land footprint of the EU.

We call on the EU to end the current overconsumption of energy, and its huge impact on peoples and ecosystems globally, and to move towards a major reduction in energy consumption with all the changes in current development models that will imply.

A positive step and a good signal for the rest of the world would be to fully recognise the devastating direct and indirect impacts of large-scale bioenergy on people, territories, forests, and the climate, and to exclude bioenergy from definitions of renewable energy and from the next EU RED.

Attached is our briefing "Bioenergy Out: Why bioenergy should not be included in the next EU Renewable Energy Directive" and the declaration: "Large-scale bioenergy must be excluded from the renewable energy definition" signed by more than 140 civil society organisations and social networks from 45 different countries.

Finally, you may upload here any relevant documents, e.g. position papers, that you would like the European Commission to be aware of.

3d80c94a-5151-4406-98c9-93bdddb58d9b/Bioenergy_Out_Declaration.pdf
28a9581a-cf12-4448-972f-e00b6e2bbc57/EU_Bioenergy_Briefing_final.pdf

Thank you for participation to the consultation!

Contact

✉ SG-D3-BIOENERGY@ec.europa.eu
