

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

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

200 character(s) maximum

Wetlands International - European Association

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

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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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Biofuels from algae | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Biogas from manure | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | | | |

| | | | | | |
|---|---|---|--|---|---|
| Heat and power from agricultural biomass (energy crops, short rotation coppice) |  |  |  |  |  |
| Heat and power from industrial residues (such as sawdust or black liquor) |  |  |  |  |  |
| Heat and power from waste |  |  |  |  |  |
| Large-scale electricity generation (50 MW or more) from solid biomass |  |  |  |  |  |
| Commercial heat generation from solid biomass |  |  |  |  |  |
| Large-scale combined heat and power generation from solid biomass |  |  |  |  |  |
| Small-scale combined heat and power generation from solid biomass |  |  |  |  |  |
| Heat generation from biomass in domestic (household) installations |  |  |  |  |  |
| Bioenergy based on locally sourced feedstocks |  |  |  |  |  |

| | | | | | |
|--|-----------------------|-----------------------|----------------------------------|----------------------------------|-----------------------|
| Bioenergy based on feedstocks sourced in the EU | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> |

Please specify the "other" choice

200 character(s) maximum

Any biomass, bioliquids or biogas derived from source materials grown on drained peatlands or wetlands should be most strongly prohibited.

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 checked="" type="radio"/> | <input type="radio"/> | <input 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 type="radio"/> | <input checked="" 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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Competitiveness of European industry | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Growth and jobs, including in rural areas | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please specify the "other" choice

200 character(s) maximum

Bioenergy can have benefits, but currently lacks sustainability and thus impacts negatively on biodiversity, GHG emissions and poverty reduction; especially when produce on drained peat/wetlands.

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

2500 character(s) maximum

Sustainably produced bioenergy can provide many benefits, environmental, social, economic and for biodiversity, but current standards are weak or absent, with bioenergy production competing for space against food crops, against community interests, against ecological values and biodiversity and with a larger carbon footprint than energy derived from fossil fuels. Most pronounced is this when bioenergy is derived from source materials produced on drained peatlands, such as (25% of) palm oil in SE Asia and e.g. the biogas produced from maize grown on peatlands in Lower Saxony. Stringent carbon accounting, social and ecological/biodiversity criteria need to be used to produce bioenergy that is really beneficial. For biofuels produced on peatlands this can be achieved by producing biomass on rewetted peat (using paludiculture species and techniques).

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 type="radio"/> | <input checked="" 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 type="radio"/> | <input checked="" 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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input 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

A critical risk is that biomass is produced in 'marginal areas', such as peatlands. Conversion and drainage of peatlands has disproportionally high impacts on GHG, biodiversity and water management.

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

2500 character(s) maximum

Production of source materials for bioenergy should be strictly prohibited on drained peatlands and other wetlands. This should not count only for biomass, but for all forms of biofuels, bioliquids and biogas production.

Bio-energy production should be strictly linked to no-deforestation, no-wetlands and no land(use) conflicts.

Appropriate certification standards and capacity is required to develop sustainable bioenergy, both in terms of ecological, biodiversity, social and GHG impacts. Current EU certification standards all fail in this regard.

The cascading principle should be adhered to, especially in establishment and roll-out of incentive and dis-incentive mechanisms.

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?

Whereas biofuels cannot be produced on newly drained peat, this does not apply to biogas and bio-liquids. Subsequently the EU has made biogas produced in Germany tax-free and Germany is providing preferential fees and other subsidies for the biogas. However, much of that biogas is produced on drained on converted peatlands, creating bioenergy with a higher carbon footprint than energy derived from fossil fuels. This is a scandal that should be stopped immediately.

The EU hunger for biofuels has stimulated the oil palm expansion in Southeast Asia and elsewhere in the world. It has thus stimulated deforestation, large scale peatland drainage, ILUC and many land conflicts with local and indigenous communities. EU has failed to develop appropriate criteria and safeguards and approved certification mechanisms that are similarly deficient. It therefore has no means to distinguish between palm oil developed on peat (either directly or with ILUC on peat) or palm oil produced sustainably. Over 25% of palm oil is produced on peat, and bioenergy produced with such palm oil will have a carbon footprint that is 8 times higher than fossil fuel derived energy. On average, palm oil thus has a carbon footprint that is 2 times higher than fossil fuel. In addition, there are significant other environmental problems and loss of biodiversity linked to the expanding palm oil industry. In addition, the currently used ISO certification does not include appropriate social criteria.

Wood pellets imported from north America are partly derived from forests where in the absence of the EU wood pellet demand no logging would have taken place. The wood pellets contain not only residues but are developed also on basis of the main tree trunks. The EU demand has even stimulated logging of peat swamp forests in North Carolina.

In view of these aspects, EU's sustainability scheme has failed in addressing the risks above and has thus been counterproductive. We recommend to strictly prohibit and dis-incentivize production of any form of bioenergy that utilizes source materials derived from drained peatlands. Instead, incentivize peatland rewetting, including for paludiculture of biomass for fuel (however, the cascading principle should also be applied).

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

The 7% cap on land based biofuels (as agreed in the ILUC decision of 2015) should be maintained also after 2020 and these biofuels phased out completely. Advanced, non-land based biofuels could play a role in the phase out of land based biofuels but other measures to decarbonize the transport sector (e.g. efficiency and electrification) should be prioritized. There should be no volume / percentage target for advanced (or any other) biofuels as this approach only focuses on quantity and not on quality and impacts of those biofuels. There should be a level playing field for all forms of bioenergy, including advanced biofuels, which would apply the same sustainability requirements for all bioenergy and provide a consistent and more secure policy framework for investments

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 type="radio"/> | <input checked="" 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 type="radio"/> | <input checked="" 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 checked="" type="radio"/> | <input 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 checked="" type="radio"/> | <input type="radio"/> |

Please specify the "other" choice

200 character(s) maximum

Social impacts, such as land-use rights, human rights and food security.

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

2500 character(s) maximum

Targets and mandates for bigger volumes of biofuel or bioenergy use only produce quantities without encouraging more effective, innovative or environmentally beneficial use of bioenergy.

Policy needs to give a clear preference for the kinds of bioenergy (biomass source, conversion technologies etc.) that deliver societal and environmental benefits and exclude bioenergy with negative impacts, so that development of more innovative uses and forms of bioenergy is incentivized.

Stringent requirements for example for higher conversion efficiency can also facilitate technological innovation.

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 checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Avoid environmental impacts (biodiversity, air and water quality) | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mitigate the impacts of indirect land-use change | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Promote efficient use of the biomass resource, including efficient energy conversion | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Promote free trade and competition in | | | | | | | | | | |

| | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|
| the EU among all end-users of the biomass resource | | | | | | | | | | |
| Ensure long-term legal certainty for operators | | | | | | | | | | |
| Minimise administrative burden for operators | | | | | | | | | | |
| Promote energy security | | | | | | | | | | |
| Promote EU industrial competitiveness, growth and jobs | | | | | | | | | | |
| Other | | | | | | | | | | |

Please specify the "other" choice

200 character(s) maximum

Avoid land grabs and negative impacts on food security, land and human rights.

7.2. Any other views? Please specify

2500 character(s) maximum

Bioenergy use needs to contribute to climate change mitigation, the circular economy and resource efficiency without negative impacts on the environmental, biodiversity or on land use and human rights. In all these areas concerns are already raised and evidence of negative impacts exist. Neglecting any of these policy objectives can easily lead to discrediting of the future sustainability policy. Therefore we don't find it meaningful to prioritize between these, equally important objectives.

Extent and scale of negative impacts is not just a matter of quality of biomass used but also the quantity of its use. Studies have shown that the EU is already starting to reach the limits of wood and land resources available for the various growing needs of different sectors, including the policy driven energy demand. The EU should evaluate the sustainable potential of domestic biomass supply for energy use, taking into consideration competing uses in other sectors and environmental protection and cap the use of biomass for energy accordingly.

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

The EU should introduce four main safeguards for bioenergy use as part of the EU's 2030 climate and energy policies:

- A cap to limit the use of biomass for energy production to levels that can be sustainably supplied;
- An efficient and optimal use of biomass resources, in line with the principle of cascading use;

- Verifiable greenhouse gas savings and correct carbon accounting for biomass;
- A comprehensive binding sustainability criteria to mitigate other negative social and environmental impacts

More concretely, the policy should result in exclusion of the kinds of biomass sources that have the highest risk of negative climate and environmental impacts. These include especially biomass sources produced on drained peatlands. EU should support rewetting of peatlands as a high priority for climate change mitigation. This is particularly important, as the EU is after Indonesia the second largest peat carbon emitter in the world, and is contributing to increased demand and thus pressure on peatlands elsewhere, especially SE Asia). Rewetting can go hand in hand with biomass production if paludiculture techniques are used (as promoted by the FAO).

The EU should only the use and support lower risk sources such as waste and residue based biomass, while still respecting the principle of waste hierarchy.

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

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

[b2655ce0-75f0-43fb-93f4-5f609a453920/biomass-the-zero-emission-myth.pdf](#)

[b56f3462-8490-4142-9699-7a3cd9d049d6/letter-to-the-european-commission-on-the-implementation-of-th-35340682-fd98-4bd0-8e9e-1b4ea4dd4ce5/policy-brief-on-indirect-land-use-change-and-peatlands.pdf](#)

[213ee6a6-7128-4c07-8362-69d981ee9701/submission-to-the-european-commission-regarding-indirect-lar-17712b13-609f-4122-a8a2-de82d9dd8753/wetlands-international-letter-10-mandatory-biofuel-target-ep.do](#)

Thank you for participation to the consultation!

Contact

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