

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

* 1.4. If you are a professional organisation, which sector(s) does your organisation represent?

- Agriculture
- Automotive
- Biotechnology
- Chemicals
- Energy
- Food
- Forestry
- Furniture
- Mechanical Engineering
- Other
- Printing
- Pulp and Paper
- Woodworking

1.5. If you are a professional organisation, where are your member companies located?

- 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
- non-EU country(ies)

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

200 character(s) maximum

Svenska Trädbränsleföreningen (The Swedish Wood Fuel 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

145045321670-92

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofuels from energy crops (grass, short rotation coppice, etc.)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofuels from waste (municipal solid waste, wood waste)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofuels from agricultural and forest residues	<input checked="" 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 type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biogas from waste, sewage sludge, etc.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat and power from forest biomass (except forest residues)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat and power from forest residues (tree tops, branches, etc.)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

Bioenergy based on feedstocks sourced in the EU	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bioenergy based on feedstocks imported from non-EU countries	<input type="radio"/>	<input type="radio"/>	<input checked="" 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

All renewables are needed, including biogas from forest residues. It must be a level playing field between bioenergy and other renewables. Waste should be minimized and preferably used locally.

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 checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction of GHG emissions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental benefits (including biodiversity)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

It's neither food or fuel nor bioenergy or forest products. With smart production and consumption the possibility to meet the demands with renewable biomass will be achieved.

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

2500 character(s) maximum

The Swedish Wood Fuel Association underlines the importance of promoting forest biomass in the heating/cooling sectors (incl. CHP) and the transport sectors. Variable renewable electricity (wind, solar) needs to be balanced in the energy system, and here biomass has a large advantage.

EU need to minimize greenhouse gas (GHG) emissions, this will benefit climate as well as other environmental values (incl. biodiversity). Without keeping the temperature rise below 2 degrees C there is a fundamental risk that all environmental values will be severely affected.

The Common Agricultural Policy (CAP), Renewable Energy Directive (RED), LULUCF-accounting and EU Timber Regulation EC 995/2010 (EUTR) ensures sustainable production as this is a significant part of the member states (MS) forest legislations.

Bioenergy is needed in order to reach the EU 2030-goals. All avoided GHG-emissions are beneficiary. By using renewable raw material e.g. as bioenergy landowners will be inspired to produce more. Today only 62 % of the forest growth is harvested. If market for biomass grows there is possibility to have higher yields with better management. Bioenergy and biofuel production

has and will encourage investments in farms and forests and related industry as well as research, which allow yields to increase through improved techniques, silviculture and high quality seeds and plants.

Bioenergy is a steppingstone for the whole bioeconomy. It is vital that mobilisation of raw material from the forest is promoted so new supply chains can be established. The transition must be supported and promoted. Consistency in EU energy, climate and agricultural policies would support this.

Biomass has a significant role to reduce energy dependency. By encouraging biomass, the EU will not only alleviate its external dependency and therefore improve its geopolitical situation, but also invest in small and medium sized enterprises (SME:s). This will create growth and jobs in the EU, especially in rural areas, while decarbonizing the economy.

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 type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Change in carbon stock due to deforestation and other direct land-use change in non-EU countries	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 the 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"/>
Impacts on air quality	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacts on water and soil	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacts on biodiversity	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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

The debate that bioenergy should be less prominent in the energy mix is a significant risk that must be acknowledged and addressed, since bioenergy is both sustainable and necessary to use in the EU.

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

2500 character(s) maximum

Energy is cheap due to low coal and oil prices and this hampers the transition to a fossil free energy mix. There is nothing suggesting that the prices will rise substantially in near future so the change into renewables must be justified by reduced GHG emissions and the need to fight climate change. Further burdens on bioenergy due to administration will not help the situation. EU faces a great challenge to become a bioeconomy but with smart sustainable and inclusive growth this can be met. EU needs to stop using fossil energy and fossil raw material and today's fossil supply chains, infrastructure, and logistics need to be changed to new ones. A major societal

challenge.

Competition between uses of renewable raw material is not a problem, as some suggest, it is fruitful for better management, more research and larger investments.

Naturally, more efficient use is better than less efficient use, but using renewables will keep the fossil in the ground and this is the most important. However, high performing solutions should be promoted.

Bioenergy is competing on the market with fossils, and users tend to favour known and existing solutions instead of unknown and new solutions, regardless of economy and environmental performance. This needs to be acknowledged and handled. Moreover, market barriers can be a risk for bioenergy, and therefore all sustainable and legally produced biomass should be accepted within the EU. We have the CAP, RED, and EUTR to ensure sustainable production and there is also other legislative framework in the EU and MS (incl. air, water, and biodiversity etc.) handling possible risks. Change of carbon stock in EU is not a problem. Every single member state has a growing stock of biogenic carbon in forests, shown in positive LULUCF numbers.

The Swedish Energy Agency has funded research carried out by universities and other institutions regarding primary biomass from the forest. The general conclusion is that it is possible to produce large quantities of biomass in managed forests with limited environmental risks, given that proper methods and strategies are implemented. Many strategies and methods to avoid risks and negative impacts have been developed. Therefore, Sweden has legislation and guidance in place for extracting biomass for energy from forests. These practices and rules are made in a national context and ensures sustainability here. This shows that forest legislation is, and should be, a competence of the individual MS.

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GHG emissions from direct land-use change	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impact on soil, air and water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional comments?

2500 character(s) maximum

RED has created a level playing field, as it's now possible to compare the emissions of GHG. On the downside, current RED discriminates first generation biofuels without defining a scientific argumentation for this. There has been a lack of long term policy regarding sustainability criteria, and the ILUC

debate and decisions have led to major uncertainties on the biofuels sector and decreased development in biofuel production. By adopting the ILUC directive with increased double-counting, the dependence on fossil fuels will be higher in 2020, than the earlier RED targets. There is no scientific consensus on the nature and impacts of ILUC.

Instead of having lists with double and quadruple counting the GHG saving should be in focus – regardless of source. All renewable energy sources are needed in order to cut-off the fossil demand. The dependence of imported oil is still very high in the transport sector, and RED has made little to change this. Only a couple of MS so far have reached their targets. Carbon pricing is a better tool for reduced GHG emissions than administrative burdens.

The methodology regarding the calculation of GHG in Annex V of the RED needs revision.

The European Union established the most ambitious sustainability regime for biofuels and bioliquids in the world. CAP ensures the highest level of environmental performance (including impact on soil, air and water), and all MS have adopted legislation based on FOREST EUROPE criteria (MCPFE) ensuring Sustainable Forest Management (SFM).

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

RED was effective at first but after alterations and inclusion of caps and ILUC it became counterproductive. There is no scientific consensus on the nature and impacts of ILUC. The uncertainty the ILUC-directive resulted in has decreased development in biofuel and bioliquid production. Development in this sector depends on a strong market for existing production. To develop new biofuels from e.g. cellulosic feedstock and new production processes, effective measures is needed. A number of large-scale production units must be built in the coming years. For this to happen, the investors and bankers need secure, long-term conditions to enable investments and stimulate the

commercial development of advanced biofuels. Large investments need stability. Any adjustment, whether good or bad, creates insecurity. Today, the opposite is the case. The conditions after 2020 are totally unknown.

The Swedish Wood Fuel Association rejects the European Commission's position to scrap the target to promote renewable energy sources in transport. We ask that a stable and targeted policy be pursued, which aims to support biofuels after 2020. All energy content multipliers should be removed post 2020, as they mislead consumers about the real level of renewable energy sources in the energy mix. Multipliers reduce the competitiveness of advanced biofuels on the market by reducing the size of the market, which results in additional costs to reduce GHG-emissions from transports. In 2014 Sweden reported 18,7 % but the actual use of biofuels and bioliquids was 12 %.

Another problem is the regulation of state aid. In order to replace fossil fuels the regulation of state aid is a huge barrier since it does not consider the difference between fossil and renewable fuels. An exemption from CO₂-tax for renewable fuel is regarded as giving the renewable fuel a subsidy, which of course is not the case since renewable fuels do not contribute to climate harm.

The Swedish Wood fuel association believes that the development and distribution of biofuels can be a step towards achieving an economy which is less dependent on fossil fuels. The production of biofuels is a pre-condition for greater investment in the bioeconomy and the deployment of solutions in the agricultural, food and forestry sectors to mitigate climate change.

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

It is useful to have the same rules within the whole EU and the possibility for farmers to make self-declarations is effective in reducing the administrative burden. However, the administrative burden can be reduced for producers and distributors of biofuels and bioliquids that only handle small volumes. The administrative burden is considerably higher for small actors than for big actors on the market, seen as cost per litre of fuel. This is

logical, as all actors have to present identical paper work, regardless of volumes. A volume threshold should therefore be implemented.

In order to not create additional administrative burdens for forest owners, all biomass produced in the forests under the EUTR needs to be considered as sustainable. Forest biomass shall come from countries with mandatory LULUCF accounting. If biomass is procured from non-LULUCF accounting countries, credible proof has to be given that the harvesting rate in this country does not exceed 100% and the biomass does not come from land conversion. Where there is overharvesting at the country level, the operator has to give sufficient proof that there is no overharvesting at the relevant regional level of the biomass origin

Note that there are no criteria for fossil fuels, not even declaration of origin nor GHG emissions for different categories of fossil fuels, the climate impact do vary between different sources.

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

Stable and long term rules and ambitious targets for renewables are needed to encourage continued investment in innovative technologies. In that respect, the bioenergy policy and the RED need to tie into a single, sustainable, technology-open framework. Taxation of fossil GHG emissions has proven very efficient in Sweden and here bioenergy has outcompeted oil for heat production. At least, monetary subsidies for fossils should be removed.

When innovative technologies and approaches are introduced, there may be a need for funding of research, development and market introduction. It is important to stress the need for a flexible approach as new technologies are being developed constantly in this field. Promote the use of bioenergy with high GHG emission savings, regardless of source.

The use of electric vehicles or hybrids can be a positive contribution as long as the source of the electricity is not fossil. However, to be able to reduce GHG-emissions the produced fuel should be possible to use in the existing fleet of vehicles. Otherwise the transition will take a very long time.

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 checked="" type="radio"/>	<input type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input 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 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"/>
Air quality	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water and soil quality	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversity impacts	<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	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

availability of land and feedstocks					
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 sustainability of biomass production is an issue which cannot be addressed according to the specific end-use of the biomass. EUTR exists and as all MS have adopted legislation based on Forest Europe criteria SFM is ensured. SFM has already been implemented and put into practice by forest owners and foresters for generations. Additionally, there is no scientific consensus on the nature and impacts of ILUC.

The efficient end-use of biomass is dealt with by threshold values within RED and GHG savings can be promoted also for solid and gaseous bioenergy by different types of policy instruments, e.g. Eco-design directive, general incentives, or GHG savings criterion. Energy Efficiency Directive (EED) indicates that effective CHP should be used but as of today there are no sanctions.

The suggested risk for competition between different uses is not relevant as different biomass can be used differently. The cascade principle needs to be regulated by market mechanisms. Biomass is plentiful in most EU regions, and with a higher demand the management will be improved. A better mobilisation of wood would be beneficiary and necessary for the European climate strategy. If there are consumer demands regarding forestry, there are certifications schemes such as PEFC or FSC. However, these market driven schemes should not be needed in order to prove SFM.

GHG emissions from the supply chain are accounted for in the industry and transport sector, and double counting should be avoided. Environmental legislation is in place for combustion in the MS, via the air quality directive. Agricultural biomass from agricultural holdings which are eligible for the CAP should be considered as complying with sustainability criteria. Deforestation and diminishing carbon stocks are not a problem within the EU, and handled through LULUCF reporting. The principle of carbon neutrality of forest biomass must be maintained in line with existing international rules. If biomass is procured in non-LULUCF accounting countries, credible proof can be given that the harvesting rate, at relevant regional level, does not exceed 100%. The EU bioenergy policy is not a legislation that can resolve all the environmental problems in 3rd countries. EU can encourage the introduction of effective environmental legislation through international agreements. The EU could support the Forest Europe process and promote inclusion of FE indicators in 3rd countries legislation. This will enhance the value of EUTR.

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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Promote efficient use of the biomass resource, including efficient energy conversion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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	<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"/>
Ensure long-term legal certainty for operators	<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"/>
Minimise administrative burden for operators	<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 energy security	<input type="radio"/>	<input type="radio"/>	<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"/>
Promote EU industrial competitiveness, growth and jobs	<input type="radio"/>	<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"/>
Other	<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 checked="" type="radio"/>	<input type="radio"/>

Please specify the "other" choice

200 character(s) maximum

Promote active management for higher yield of biomass.

7.2. Any other views? Please specify

2500 character(s) maximum

Today's energy mix within EU is unfortunately not sustainable. Therefore, a sustainable bioenergy policy should ensure continuation and development of secure energy with low GHG-emissions within the EU. The policy should not create rules or burdens but promote bioenergy and establish the crucial value bioenergy has for the whole of EU and that bioenergy contributes to the post-2020 goals. Variable renewable electricity (wind, solar) needs to be balanced in the energy system, and here biomass has a large advantage. Domestic energy is more secure and conducive to investment in the Member States, which creates prosperity. It is also easier to ensure good working conditions with domestically produced energy.

By promoting bioenergy, all three pillars of sustainability are endorsed within the EU. EU need to reduce the use of fossils substantially and therefore active management of the "green sector" and sustainable intensification should be encouraged. Use of bioenergy will create jobs in the EU and enhance rural development if the policy aims at a higher production of biomass from agriculture, forests, and so on within the EU. EU faces a great challenge to become a bioeconomy but with smart sustainable and inclusive growth this can be met.

It is inevitable to reduce GHG-emissions from fossil energy in order to keep the temperature rise below 2 degrees Celsius and this will be necessary in order to safeguard biodiversity as well as other environmental values. High performing solutions should be promoted all along the chain from the production to the end-user.

The European Union established the most ambitious sustainability regime for biofuels and bioliquids in the world. RED together with CAP, that ensures good agricultural practice and the highest level of environmental performance, proves sustainability. In order to not create additional administrative burdens for forest owners, all biomass produced in the forests under the EUTR needs to be considered as sustainable as this is a significant part of the MS forest legislations. LULUCF accounting assures carbon stock issues. There is no scientific consensus on the nature and impacts of ILUC. Thus, sustainable production of biomass can either be proven trough RED, CAP, or EUTR together with LULUCF.

Stable rules, free trade and minimal administrative burden will promote jobs and industrial competitiveness.

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 Swedish Wood Fuel Association calls for ambitious targets for renewables where bioenergy continue to play a prominent role in the energy mix, including target to promote bioenergy in transports. We ask that a stable and targeted policy be pursued, which aims to support biofuels after 2020. Large investments, which is needed in order to produce advanced biofuels, needs stability. Any adjustment, whether good or bad, creates insecurity.

Differentiate between sustainable production and sustainable use. Biomass sourcing must be compatible with and take into account existing national legislation and international regulation schemes. Carbon sustainability is assured through LULUCF and if biomass is procured from non-LULUCF accounting countries, credible proof can be given, at relevant regional level, that the harvesting rate does not exceed 100%. Thus, sustainable production of biomass can either be proven through RED, CAP, or EUTR together with LULUCF.

Use of biomass should be as efficient as possible. Instead of having lists with double and quadruple counting the GHG saving should be in focus - regardless of source. The efficient end-use of biomass is dealt with by threshold values within RED and GHG savings can be promoted also for solid and gaseous bioenergy by different types of policy instruments, e.g. Eco-design directive, general incentives, or GHG savings criterion.

To reach the EU 2030 target its vital to use biomass, have new partners and start new trading routes. Mobilisation of biomass is a critical issue. A new policy needs to stimulate farmers and forest owner to active manage their land. New supply chains, infrastructure, and logistics also need to be encouraged.

There is no need for further EU policies but the sustainability criteria as defined from Article 17.3 to 17.7 of Directive 2009/28/EC do not apply to the majority of wastes and residues listed in Annex IX of Directive (EU) 2015/1513. Due to this, biodiesel derived from palm oil produced on holdings made possible because of deforestation can benefit from double counting in

incorporation obligations without any sustainability requirements. This needs to be resolved.

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

Sometimes it is argued that an increasing demand of forest resources will lead to the depletion of the forests. However, it is certainly not in the interest of forest owners to deplete the very resource that they own, manage, invest in and benefit from. On the contrary, demand drives activity and investment into SFM. The Swedish Wood Fuel Association note that without a market for high-value timber the possibilities to source biomass from the forests will diminish significantly. Timber is and will continue to be the main income for forest owners. SFM and investments benefit Sweden in many ways, not the least through jobs and growth in rural areas and enhanced climate mitigation through better growth and more forest products to replace fossils and advance the bioeconomy. Bioenergy should be seen as an opportunity to further enhance these activities in the forest and the rural area, and as a development that also contributes to the bioeconomy. Discussions on bioenergy in EU are far too negative, and we regret the black picture that is being painted. It does not reflect the reality and neglects the majority of very positive bioenergy developments. Historic deforestation took place in Sweden in a time when trees in the forests had little value and no owner, contrary to current situation. Problems with deforestation in 3rd countries are usually connected to poor user and owner rights.

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

Thank you for participation to the consultation!

Contact

✉ SG-D3-BIOENERGY@ec.europa.eu
