Opinion from the Stockholm Region regarding the European Commission's consultation on a sustainable bioenergy policy for the period after 2020

The Stockholm Region Association for European Affairs (SEF),[1] which represents one of Europe's most competitive and sustainable regions, is behind this statement. The Stockholm region accounts for about 45 percent of Sweden's GDP and has a population of over 3.6 million people, representing nearly 38 percent of the entire population of Sweden.

Introduction

The Stockholm Region welcomes the European Commission's consultation[2] and the opportunity now given to share our views and experiences for the preparation of a new EU strategy for a sustainable bioenergy policy for the period after 2020.

The Stockholm Region would like to express that sustainable production and use of bioenergy plays a very essential role in the Stockholm region's and Sweden's energy mix, and should have a significant role alongside other types of renewable energy in order to achieve the EU's climate goals for 2030 and a sustainable society.

A summary of the Stockholm Region's opinion is presented below. In the annex, you will find the full response to the European Commission's consultation.

Summary

- *The future's energy mix:* The Stockholm Region would like to stress its view that bioenergy plays an important role in the future's energy mix and must be promoted as one of several energy carriers – along with wind, solar and water. Biomass already contributes to a considerable proportion of the Stockholm region's and Sweden's fuel needs, and is very important in the overall energy mix, but obviously there is potential for improvement.
- *The EU's sustainability scheme for biofuels:* In the consultation, the European Commission questions the effectiveness of the EU's existing sustainability scheme for biofuels and liquid biofuels in tackling the risks posed by greenhouse gases. Concerning the risks associated with greenhouse gas emissions from farming, manufacturing and transportation, greenhouse gas emissions from direct and indirect land use change, the Stockholm Region believes that the existing sustainability scheme has been counterproductive. Regarding biodiversity, it has been neither effective nor ineffective, and concerning the impacts on soil, air and water, we have no concrete opinion.
- *The production of biofuels from crops:* The Stockholm Region believes that biofuels from crops is a key tool to counter the strong trend we are seeing with the abandonment of farmland and farming. Since 1990, 15 percent of agricultural land within the EU has been

[1] Members are: The City of Stockholm, the Stockholm County Association of Local Authorities and the Stockholm County Council, the Uppsala Regional Council and the Sörmland Regional Council, Västmanland's municipalities and county, the Mälardalen Council and Region Gotland.

[2] The European Commission consultation on a sustainable bioenergy policy for the period after 2020: https://ec.europa.eu/energy/en/consultations/preparation-sustainable-bioenergy-policy-period-after-2020

abandoned, and an additional 10 percent is expected to be abandoned over the next 25 years. This has resulted in a huge loss of biodiversity. Since the farms with the most biodiversity are those particularly at risk of abandonment, and with the excess capacity in food production, it is necessary to find crops other than food in order to keep these farms alive. Additionally, small improvements in the production of conventional biofuels from crops can easily reduce climate emissions by over 90 percent, and as long as there is an overabundance of farmland and a risk of land abandonment in the EU, the sustainable production of biofuels from crops should be promoted and further developed in parallel with advanced biofuels.

- *The EU's role:*
    - With regard to the EU's role, the Union should promote the sustainable production of biofuels from crops, combined with the exchange of information of best available production practices and assist in the development of crop varieties and agricultural practices that are adapted to local conditions.
    - It is also important that the EU's framework allows those countries that are at the forefront in providing incentives for renewable fuels and renewable energy (such as Sweden, which makes use of its opt-out from energy and carbon dioxide tax in order to make renewable energy from both first and second generation biofuels competitive).
    - The Stockholm Region would also like to express that first-generation biofuels offer a significant cost reduction for farmers in developing countries, providing both income and generating investments in the modernisation of farming. It also provides an opportunity for oil-importing countries such as those in Sub-Saharan Africa to reduce imports and improve their balance of trade. National and international regulations, conventions and voluntary certification schemes for the monitoring of unsustainable forestry and agriculture exist, but the monitoring of their level of compliance is not sufficient. The EU should support developing countries with methods and tools, and possibly even satellite data for surveillance and monitoring.
    - Additional policies are needed for biomass and liquid biofuels, but the EU's and national policies for biomass in liquid and gaseous form are sufficient. The current goal of 10 percent renewable energy within the transport sector has already been achieved in Sweden. The EU's objectives for future periods must be in line with the Paris agreements, in other words, they must be far more ambitious.
- *Development of innovation and technology:* The EU's framework for the market must be predictable and have a long-term focus, particularly in bringing about the necessary large-scale investments within innovative technology. It is important that this framework and support facilitates large-scale pilot projects and market take-off for new technologies in actual use.

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For the Stockholm Region Association for European Affairs

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ANNEX

2. Perceptions of bioenergy

What role should bioenergy play in achieving the EU 2030 climate and energy objectives?

Bioenergy has a significant role to play in achieving climate targets, alongside other types of renewable energy.

For which types of bioenergy are public (EU, national and regional level) policy interventions needed?

Irrespective of whether the fuel is solid or liquid – their sustainability should be valued equally. For example, the energy company Fortum produces electricity/heating and liquid biofuels in the same process, but these are valued in different ways because of the directive covering liquid biofuels.

Biomass already contributes to a considerable proportion of the Stockholm region's and Sweden's fuel needs, and is very important in the overall energy mix, but obviously there is potential for improvement. Waste from woodland raw materials are already being used considerably in the generation of electricity, and shows further potential. The EU's sustainability criteria are needed for original raw material, and these criteria should be applicable to all end products, whether solid or liquid.

3. Benefits and opportunities from bioenergy

What positive benefits can bioenergy have in the contribution to the EU's renewable and climate objectives, and for the EU economy and society?

Innovation and new technologies in fuels leads to jobs and economic development. Sustainable agriculture and forestry provide a circular CO2 budget, i.e. what is discharged rebinds, creating a "net zero CO2 effect."

Bioenergy also plays an important role in the future's energy mix and must be promoted as one of several energy carriers – along with wind, solar and water. Combined heat/cooling and electricity in energy production is valuable to increase the efficiency of fuel. Countries with large forested areas should be able to make use of small resources for climate-related adjustment.

4. Risks from bioenergy production and use

What risks are present in relation to bioenergy production and use?

There is a risk of loss of biodiversity and living forest with a rich flora and fauna. No over-fertilisation should occur.

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

How effective has the existing EU sustainability scheme for biofuels and bioliquids been in addressing the risks of GHG emissions from cultivation, processing and transport, GHG emissions from direct land-use change, indirect land-use change, impacts on biodiversity and impact on soil, air and water?

The existing sustainability scheme has been counterproductive concerning the risks associated with greenhouse gas emissions from cultivation, manufacturing and transportation and greenhouse gas emissions from direct and indirect land use change. Regarding biodiversity, it has been neither effective nor ineffective, and concerning the impacts on soil, air and water, we have no concrete opinion.

Additional comments

Since 1990, 15 percent of the agricultural land within the EU has been abandoned, and additional 10 percent is expected to be abandoned over the next 25 years. This has resulted in a tremendous loss of biodiversity, and today half of all species on the Red List of Threatened Species are dependent upon agriculture. Since the farms with the most biodiversity are those particularly at risk of abandonment, and there is a large over-capacity in food production, it is necessary to find crops other than food in order to keep these farms alive. Biofuels from crops are therefore an important tool to counter the strong trend with the abandonment of farmland and farming.

As some biofuel companies have proven, small improvements in production of conventional biofuels from crops can easily reduce climate emissions by over 90 percent, and as long as there is an overabundance of farmland and a risk of land abandonment in the EU, the sustainable production of biofuels from crops should be promoted and further developed in parallel with advanced biofuels.

Similarly, first-generation biofuels offer a significant cost reduction for farmers in developing countries and provide both income and generate investment in the modernisation of farming and agriculture in general. It also provides an opportunity for oil-importing countries such as those in Sub-Saharan Africa to reduce imports and improve their balance of trade.

The EU should promote the sustainable production of biofuels from crops, combined with the exchange of information concerning best practices for production and assist in the development of varieties of crops and agricultural practices that is adapted to local conditions.

National and international regulations, conventions and voluntary certification schemes for the monitoring of unsustainable forestry and agriculture exist, but the monitoring of their level of compliance is not sufficient. The EU should support developing countries with methods and tools, and perhaps even satellite data for surveillance and monitoring (since Brazil introduced satellite surveillance of the Amazons, devastation of forest land has decreased by 85 percent and illegal deforestation has stopped almost completely – the satellite can be part of a solution, in order to achieve the same results in Southeast Asia).

The obligation for fuel suppliers to present data on greenhouse gas emissions from all biofuels sold based on standard methods and with external reviewers, and national follow-ups from national authorities, has been shown to be a valuable tool concerning the divulging of the real sustainability of biofuels. It has probably also served to avoid the production of biofuels with a "bad" climate balance. The same reporting obligations should be in existence for fossil fuels sold in each country.

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)?

The sustainability framework has been counterproductive.

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

It is important that the EU's framework allows those countries that are at the forefront in providing incentives for renewable fuel and renewable energy (such as Sweden, which makes use of the exception from energy and carbon dioxide tax in order to make renewable energy from both the first and second generation competitive).

The framework for the market must be predictable and have a focus over the long term, particularly for bringing about the necessary large-scale investments in innovative technology.

The rules for indirect changes in land use have been directly counterproductive and there is a risk that farmland will not be used efficiently. The transition to second and third generation biofuels requires that we use land efficiently, especially so in the long term.

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 matters would be regulated by national schemes for biofuel sustainability)?

Not effective.

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?

Strategies in order to reduce the gap from the presentation of new technology to introduction into the marketplace, and market take-off, often include support for an initial test market in order to test out and prove the technology. It is important that the EU's framework and support facilitates large-scale pilot projects and market take-off for new technologies in actual use.

It is important to facilitate and strongly encourage demand for fossil-free transportation and fossil-free energy use in public procurement. This is important not only in cases where transport services, vehicles or energy specifically as such is procured. It is also important when goods or services are procured, which in a significant part also includes transportation or energy. When state owned enterprises are given the opportunity, they have a tremendous opportunity to create markets for sustainable transport and energy.

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

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.

How effective are current EU policies in addressing risks of negative environmental impacts associated with solid and gaseous biomass used for heat and power?

The requirements concerning indirect changes in land use has been counterproductive and farmland is at risk of not being used efficiently. The transition to second and third generation biofuels requires that we use land efficiently, including in the long term, particularly in gasification technology.

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

What should be the key objectives of an improved EU bioenergy sustainability policy post-2020?

1. Contribute to the attainment of climate change targets
2. Promote effective use of biomass resources
3. Ensure long-term legal certainty for operators
4. Promote Europe's industrial competitiveness, economic growth and jobs
5. Promote security of energy supply
6. Promote free trade and competition within the EU between all end-users of biomass resources
7. Avoid negative environmental impacts (in terms of biodiversity, air and water quality)
8. Decrease the impact on the indirect change of land use
9. Minimise the administrative burden for operators

The current goal of 10 percent renewable energy within the transport sector has already been achieved in Sweden. The goals for the approaching periods must be in line with the Paris agreements, in other words, they need to be far more ambitious.

8. EU action on sustainability of bioenergy

Is there a need for additional EU policy on bioenergy sustainability?

Certainly, additional policies are needed for biomass and liquid biofuels, but for biomass in liquid and gaseous form, the EU's and national policies are sufficient.

Given your answers to the previous questions, what should the EU policy framework on the sustainability of bioenergy include?

Biofuel production on abandoned agricultural land in the EU can reduce indirect land use changes, and therefore there should not be any limitation of these biofuels from raw materials grown on agricultural land in the EU – this should be actively supported.

9. Additional contribution

The Stockholm Region would also like to add that it is important to investigate and highlight the problem of taxation of fuels for commercial shipping and that the current design makes it expensive to switch to renewable fuels at sea.

Ships that are used for commercial shipping and those that are approved as tax exempt consumers do not pay carbon dioxide or energy tax on fuel. Carbon dioxide and energy tax is currently SEK 4,000 per cubic metre. Renewable fuels which are exempted according to the Swedish Tax on Energy Act (1994:1776) tend to be cost neutral vis-à-vis the taxed fuel, and thus imply a rise in the cost for those who are already tax-exempt. Renewable fuels which are not tax exempt (green coloured) end up in an even more difficult competitive situation and therefore find it very difficult to compete on price. The various different tax rules are not always predictable over time.