



Revision of the Guidelines on State aid for Environmental Protection and Energy

Fern response to the Public Consultation

January 2021

The use of forest biomass for energy is out of control. In addition to the ongoing review of relevant climate-regulations, a revision of State aid rules is urgently needed to ensure public resources are spend more efficiently to trigger a full decarbonisation of the energy sector and an increase in forests resilience and their role for nature and climate change mitigation.

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Background

To reach climate goals, in addition to rapid emission cuts, the EU will need to remove additional CO₂ from the atmosphere.¹ In this context, the European Green Deal initiative and the Climate Target Plan Communication recognise the need that forests will need to 'step up' their positive role in climate change mitigation: towards 2050 and beyond, forests will need to gradually remove more CO₂ from the atmosphere. Today, Europe's forests are a net sink, meaning they remove more CO₂ from the atmosphere than they emit. This is good news. But the bad news is this sink is rapidly declining, partially because of increasing forest harvests for the 'bioeconomy'.

- Until 2015, EU land was able to remove around 7 per cent of total EU emissions (about 300 million tonnes (Mt) of CO₂ equivalent (CO₂eq)). By 2030, the same land is expected to remove 40 per cent less CO₂ (dropping to -185 Mt CO₂eq).
- Today, energy accounts for almost half of total reported uses of wood on EU-28 level. While energy uses are underreported, the energy share of woody biomass uses should reasonably be even higher (JRC, 2018).
- While bioenergy accounts for around 60 per cent of the EU's renewable energy mix, woody biomass provides around 70 per cent of the bioenergy feedstock. Woody biomass, either directly or indirectly sourced from forests, provides more than 35 per cent of the EU's renewable energy mix (JRC, 2019).

¹ The Impact Assessment to the Climate Target Plan, provides that by 2050, both nature-based and technological solutions are required to offset around 500 MtCO₂ of residual fossil and non-biogenic emissions that are too costly or difficult to abate.

- The combustion of wood leads to more smokestack emissions than coal, while the ‘carbon payback-period’ depends on many factors and can take decades. The role of biomass thus becomes more problematic considering the need to reduce emissions now.

This underscores the urgent need to revisit the role of biomass as a substitute for fossil fuels or high carbon materials versus the need to maintain forest carbon stocks and sinks and carefully consider the role of public and private actors in this regard.

There are also pressing environmental reasons to do so:

- Burning wood pollutes the air. While other renewables improve air quality, [burning biomass has led to increased air pollution since 2005](#). While air pollution is considered the EU’s biggest environmental risk to health, the European Environment Agency (EEA) and the [Court of Auditors](#) speak of a policy gap and a trade-off between climate and air pollution policies with regards to biomass use for energy.
- The harvesting of wood for bioenergy [has a negative impact on biodiversity](#) (EEA, 2020): Forest habitats are in a bad shape with 84 percent of protected areas in either poor or bad conservation status. Forestry provides the biggest pressure to habitats and species.
- Scientists have raised the concern that ‘targets for renewable energy have resulted in a surge in the consumption of woody biomass’, while today energy accounts for almost half (48%) of total reported wood use (JRC, 2018). At the same time, its use is increasing primary energy consumption (EEA, 2019).

Certain Member States now inefficiently overinvest in the substitution of fossil fuels with biomass, rather than cleaner and more innovative renewable energy technologies or for forestry practices that benefit the climate and biodiversity.² The Green Deal and related strategies provide a momentum to trigger change in this regard, both in terms of cost-efficient investment for a clean energy transition as in a transition for forests, that works for people, nature and the climate.³ In addition to revising relevant climate regulations (e.g. the LULUCF Regulation, the Renewable Energy Directive, the Energy Taxation Directive), it is important to revisit State aid rules in this area.

Need for a revision of State aid rules for biomass support

The current State aid rules are relatively lenient towards support for the use of forest biomass for energy.⁴ This leniency has allowed EU Member States spend billions on the use of forest biomass for heating and power each year, mostly in the form of operating aid.

The main rationale for State aid for renewable energy production, is to increase the level of environmental protection by compensating for the benefits of renewable energy for as long as the external costs of (conventional) energy are not effectively priced in. Yet current State aid rules do not allow for an assessment of the compatibility of aid for bioenergy with EU law that gives full consideration to the external costs of bioenergy itself. This is problematic considering the atypical characteristics of bioenergy as a form of renewable energy, as it relies on the combustion of carbon

² In this light, it is concerning that the Commission’s assessment of the National Energy and Climate Plans (NECPs) found that Member States have not sufficiently assessed the negative impacts of expanding bioenergy on carbon sinks, biodiversity, water and air pollution and that they lack detail on ‘*how to supply the required sustainable biomass, by feedstock and origin and trajectories of forest biomass, and how they are aligned with measures to maintain and increase the carbon sink.*’

³ Notably the Biodiversity Strategy, the Farm to Fork Strategy, the New Circular Economy Action Plan

⁴ [State aid for solid biomass: the case for improved scrutiny](#) (European University Institute, Linde Zuidema, 2020)

and the use of already limited natural resources. Bioenergy – notably wood burning – comes with high external costs compared to other forms of renewable energy, largely due to its associated greenhouse gas emissions, air pollution and health-care related costs.^{5,6}

Currently, these costs, which are additional to the public costs of the State aid measure itself, are not fully mitigated through EU policies and thus the (additional) expense is borne by society at large.⁷

This undermines the integrity of EEAG, as ignoring positive or negative external costs of renewable energy technologies in State aid assessments may result in a skewed assessment of the cost-effectiveness of measures to benefit the common interest. As such, it may affect the result of the balancing test, in which the Commission assesses whether the negative effects of the aid measures in terms of distortions of competition and impact on trade between Member States are limited and outweighed by the positive effects in terms of environmental protection.

In this ‘balancing test’, the Commission should in principle consider the overall environmental effects of the measure in relation to its negative impacts on the market: the lower the expected environmental effect of the measure, the more important the verification of its effect on competitors, such as those of other renewable energy providers. The rationale being that a potential harmful effect of State aid is that it forms a barrier to more efficient and innovative competitors - with a cleaner technology - to increase their market share. Not internalising external costs may thus lead to preferential treatment for bioenergy and hinder the development of other – more innovative and cleaner – technologies.

Also market developments provide ample reasons to question whether the current EEAG sufficiently encourage the Commission to assess potential distortive effects of aid to bioenergy on the renewables or raw material markets.⁸ For example, certain (close-to) mature bioenergy technologies remain dependent on continuous (operating) support, which can lock-in State aid, a specific renewable energy technology and the energetic use of (limited) biomass materials.

In this context, it is difficult to justify the current leniency in the EEAG for support for bioenergy. Even without factoring in external costs, the production costs for bio-electricity by 2030 will far exceed costs of alternative RES-E technologies, meaning the level of support will be relatively higher.⁹ Without a comprehensive assessment of all the costs associated with bioenergy and effects on market distortion, State aid may lead to excessive societal costs and may thus contradict the objective of allocating resources more efficiently and the objective of improving the quality of State aid interventions. A more precautionary approach to State aid for bioenergy is warranted.

Recommendations

In terms of policy revisions, there is clear momentum to shift gears and direction. Increased climate ambition requires a long-term vision of an energy transition, a different approach to management of

⁵ See also study on [External Costs](#) (EU Commission, Trinomics (2020))

⁶ Re. greenhouse gas emissions, it is important to note that State aid assessments only consider emission reductions from avoided fossil fuel use (substitution), rather than the full LCA carbon impact of bioenergy, including those from biomass combustion and/or emissions from forest harvest.

⁷ See: Robert Matthews (Forest Research, 2020) [Assessment of the LULUCF Regulation](#); [Fern response](#) to the Public Consultation on the REDII Inception Impact Assessment.

⁸ [State aid for solid biomass: the case for improved scrutiny](#) (European University Institute, Linde Zuidema, 2020)

⁹ Energy prices, costs and subsidies, and their impact on industry and households (EU Commission, Trinomics (2018))

land and forests and a conscious use of limited biomass resources. Policies should prioritise enhancing carbon removals from land through improved management practices and the restoration of forests. Banning regulatory and financial incentives for the use of forest biomass for energy can facilitate a more sustainable and circular use of wood, while benefiting the climate, biodiversity levels and air pollution.¹⁰ This also means deprioritising the development of BECCS as a removal technology, which competes with enhancing removals from forestry on land- and biomass use and has significant additional negative impacts.¹¹

For as long as external costs of forest biomass are not internalised in full through EU climate, environmental and energy policies, the burden is on the State aid regime to integrate a consideration of external costs in its assessment principles to avoid undue distortions in the renewables and raw materials markets and/or to restrict support for bioenergy.

General recommendations

- **Transform the EEAG into true instruments of environmental protection in line with the Green Deal initiative.** There is an urgent need for mainstreaming climate and environmental protection objectives, that are part of EU's constitutional principles, in Member States' decisions to grant aid, and in the Commission's control thereof. State aid policies should be entirely consistent with, and actively support Article 37 of the EU Charter of Fundamental Rights (integration of environmental protection principles into Union's policies), Article 11 TFEU (act towards sustainable development) and Article 9 TFEU (high level of protection of human health).
- **Place aid in the energy sector under the overarching energy efficiency first principle.** As the revision of the State aid framework should reflect the new provisions of the Clean Energy Package and the objectives of the Green Deal and provide a fully updated enabling framework for a cost-effective deployment of clean energy, the EEAG should contribute to strengthen this principle and its full implementation by Member States and the EU institutions. Member States must therefore consider whether alternative energy efficiency measures could replace in whole or in part the envisaged measures, whilst still achieving the objectives of the respective decisions. This includes, in particular, the treatment of energy efficiency as a key consideration in future investment decisions on energy infrastructure in the Union and in decisions on measures to ensure security of supply. Such cost-efficient alternatives include measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy.

Recommendations on State aid rules (EEAG, GBER) for forest biomass:

1. **End the following types of aid:** operating aid for the use of forest biomass for the production of power and CHP; aid for new conversions of coal-fired power installations to forest biomass or new dedicated biomass plants; aid for forest biomass through energy efficiency measures (CHP); aid to BECCS installations; aid for the use of forest biomass for individual heating (notably through energy taxation measures).
2. **Integrate external costs in the assessment principles.**
3. **Differentiate among the conditions for granting aid depending on technological advancement and maturity**, e.g. restricting the possibility for biomass projects to compete

¹⁰ See for Fern's perspective on the revision of relevant climate-regulations: [How European Forests can help tackle the climate crisis](#)

¹¹ See, e.g., <https://easac.eu/projects/details/negative-emission-technologies/>

in open tendering procedures, or restricting technology-specific support schemes to level of maturity, size/type of installation and/or overall capacity levels.

4. **Improve monitoring and reporting of support through various support mechanisms** to increase transparency and avoid distortions.