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FIT FOR 55 PACKAGE: CEFS FINAL POSITION

The EU sugar industry has reduced its CO_2 emissions by 51 % compared to 1990.[1] The industry is on track to meet the objectives of the Fit for 55 package for 2030. We recognise the importance of transitioning to climate neutrality by 2050. But this will only be possible with a supportive legislative framework.

In the sugar manufacturing sector, the heat and electricity required to produce beet sugar is generally provided by high efficiency Combined Heat and Power (CHP) systems. This form of self-supply is necessary in view of the deficit network situation in rural areas, and to ensure security of supply during the production campaign.

Because of the rural location of sugar factories and limited access to high-voltage power grids, full electrification is neither a cost-effective nor feasible decarbonisation pathway for our sector. The use of biomass, especially own-produced (from residues and waste), in combination with the partial conversion to renewable electricity, is a much more promising avenue to decarbonise the industry. In this regard, legislative and financial support for the energetic self-use of biomass residues from biomass processing will be essential.

Sugar factories produce solid biomass residues in the form of beet pulp, which can be combusted directly in CHP modified for use with solid biomass fuel. Sugar factories also produce biogas, either from the fermentation of beet pulp and other solid residues, or from the fermentation of the biomass fraction of sugar processing waste water. This biogas can be further refined into biomethane.

The energetic use of beet pulp does not present a risk of market distortion. The amount of beet pulp available is linked to the amount of beet sugar produced. The biomass residue is an intermediary product, necessary to obtain beet sugar. Since these residues are not grown separately for use, there is no undesirable land use change nor withdrawal of resources for nutrition. As meat production and consumption fall, EU feed demand is expected to further decline, meaning more beet pulp will become available for energetic use.

Energy costs make up almost 20% of EU sugar manufacturing costs.[2] Higher annual reductions in free allowances, combined with an increase in allowance prices, is aggravating the existing risk of carbon leakage. The proposals of the Fit for 55 package, notably the Renewable Energy Directive

[1] CEFS greenhouse gas emissions survey, led by PwC. Spring 2020. Representativeness: 97% of EU operating factories. Reference year: 2018.

[2] CEFS Manufacturing Costs Survey, led by PwC. February 2021.

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(RED), EU Emission Trading System (ETS), Energy Taxation Directive (ETD) and Energy Efficiency Directive (EED) should support the transition of the EU sugar sector to the maximum extent possible.

1. SELF-USE OF SOLID & GASEOUS BIOMASS FUELS IN STATIONARY INSTALLATIONS IS CRUCIAL IN RURAL AREAS

The energetic self-use of biomass residues from biomass processing is essential for the EU sugar industry's decarbonisation and maximises resource efficiency.

As they are located in rural areas, beet sugar factories often do not have access to high-voltage electricity grids and are unlikely to be serviced by future hydrogen distribution infrastructure. The energetic usability of biomass residues from biomass processing could allow the sugar industry to decarbonise swiftly, without burdening electricity grids or relying on scarce and currently unaffordable renewable fuels of non-biological origin (e.g. hydrogen).

The Fit for 55 package must support the energetic self-use of biomass residues from biomass processing. As such, Annex IX to the RED should be made fit-for-purpose. Currently Annex IX refers only to advanced biofuels for transport, which means it is incoherent with references within the ETD (e.g. minimum taxation rates for heating fuels). Annex IX should be expanded to include a new Annex IX.C on "biomass fuel feedstocks for use in stationary installations outside the transport sector". Energetic self-use of biomass residues from biomass processing should be explicitly exempt from the scope of the Energy Taxation Directive.

Concerning the RED, the sustainability requirements within Art. 29 would add disproportionate obligations for sugar manufacturers to certify beets, without any measurable added value for the environment. Applying the RED sustainability requirements to biogas from sugar processing waste water would be particularly egregious, since this feedstock has no possible food or feed use.

2. HIGH EFFICIENCY CHP IS A SUSTAINABLE SOLUTION FOR ELECTRICITY AND HEAT

The EU sugar industry relies on high-efficiency CHP plants. CHP have a much higher efficiency than power-only plants and play an important role in the energy transition, particularly in areas where electricity grids are under-developed.

Currently, the ETD proposal contains a mandatory exemption from taxation for "energy products and electricity to produce electricity and electricity used to maintain the ability to produce electricity". However, no reduction below the minimum taxation rates is possible for energy products and electricity used to produce heat by CHP.

In addition, recital 50 to the EED specifies that Member States cannot count savings from CHP on-site using natural gas, but they may count savings from the indirect use of fossil fuels in centralised power plants. Discriminating against CHP in this respect does a disservice to the role they will continue to play in the energy transition.

To favour the sugar manufacturing sector's transition, CHP should be put on a level playing field with centralised power plants. This means all energy products and electricity used by CHP should be exempt from taxation. And emissions savings from CHP should count towards Member States' targets.

3. AN EXPANDED ROLE FOR ENERGY AUDITS COULD UNDERMINE THE ETS

The 25% reduction of free allocation foreseen in case of non-compliance with the energy audit recommendations is not aligned with the design of the ETS. This cap-and-trade system aims at incentivising the most impactful decarbonisation solutions in terms of EUR/CO_2t abated: a reduction in free allocation based on other criteria is not in line with the market-based design of the ETS. It would also have implications for investor certainty.

The EED review proposes an obligation to publish the results from energy audits in enterprises' annual report. Here the proposal should clarify that no confidential information will be disclosed to the public.

4. THE SPECIFICITIES OF SUGAR PRODUCTION SHOULD BE RECOGNISED

Sugar production is characterised by numerous specificities. Sugar is produced during campaigns of around 100 days on average. And certain inputs, such as quicklime, are produced on-site, resulting in both lower production costs and lower greenhouse gas emissions.

The current EED proposal would apply a blanket requirement to undertake a cost-benefit analysis, including the possibility of contributing to local heating networks, when installing or refurbishing industrial installations such as CHP. This requirement is not appropriate for the sugar industry, since the campaign-based nature of the sector means CHP could only serve these networks for a limited period of time. Campaign plants (operating <180 days pa) should therefore be exempt from this requirement.

The current ETD proposal would put an end to the existing exemption for mineralogical processes. This would have a direct negative impact for sugar production, which relies on on-site production of quicklime. And it would deliver no benefit in terms of greenhouse gas emissions abatement.

Quicklime is used in the sugar production process to precipitate non-sugar substances from the raw sugar beet diffusion juice. It is produced from the calcination of calcium carbonate. The CO_2 released

from the lime during this process is captured and reincorporated in the secondary product together with the precipitated nutrients. The resulting product, carbonatation lime, is listed as a fertiliser in fertiliser law and is offered to agriculture as a natural soil nutrient. This is a textbook example of cascading use of products. Inclusion of quick lime production in the sugar industry in the scope of the ETD would noticeable increase the costs for the sugar producers whilst not contributing to the objectives of the ETD, namely CO_2 emission reduction and improved environmental performance. For these reasons, the exemption of mineralogical processes from the scope of the ETD should be maintained.

5. BIOFUELS FOR TRANSPORT HAVE A ROLE TO PLAY IN THE ENERGY TRANSITION

Many sugar factories produce bioethanol from sugar beet. Some sugar factories also make energetic use of pulp to produce biogas used in the transport sector. The use of such biofuels in transport has substantial environmental benefits over fossil fuels, most notably in terms of greenhouse gas emissions abatement. These advantages are not recognised in the current package of proposals.

Of most concern: after a 10-year transition period the ETD foresees the same minimum tax rate for sustainable fuels from cultivated biomass (food and feed crops) as for fossil fuels. Sustainable biofuels must be taxed at a lower rate than fossil fuels to recognise their superior environmental performance.

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Text	Topic (Article)	CEFS Request
RED	**List of Advanced Biofuels** (Annex IX)	➢ A new Annex IX C should be created, title: biomass fuel feedstocks for use in stationary installations outside the transport sector, including the following points: 1. Biomass fraction of residues and waste in the primary food processing industry: a) beet pulp (only self-use internal to sector) b) herbs & leaves from beet washing c) cereal husks and fruit shells d) biomass fraction of industrial waste not fit for use in the food and feed chain e) the fibrous fraction of sugar beet after extraction of the diffusion juice, leaves and tails and other liquors obtained after sugar extraction 2. Biomass fraction of sludge from waste water treatment in the primary food processing industry;
	Sustainability Criteria (Art. 29)	➢ The process-integrated use of own biomass residues (e.g. waste water) should remain freely available to help the sugar industry defossilise. ➢ Draft Art. 29 (1) 3rd para. should be redrafted so as to exclude the energetic self-use of biomass residues from biomass processing (e.g. beet pulp) from the sustainability requirements of the RED.
ETD	**Energetic self-use of residues and waste** (Art. 3, para. 1 points b) and c))	➢ Biogas from wastewater or production residues/production waste should not be burdened with increased sustainability requirements from the RED. ➢ Self-used biogas from residues (including waste water and waste) should be exempt from any energy tax. ➢ When used for self-sufficiency/self-consumption, biomass from residue/waste of own production should be excluded from the scope of the directive in Art. 3, para. 1 points b) and c)
	Equal treatment for Combined Heat & Power (CHP) plants (Art. 13)	➢ All energy products and electricity used by CHP to produce both electricity and heat should be exempt from taxation under the ETD.
	Exclusion of the production of quicklime as a mineralogical process from the scope of the ETD (recital 20; Art. 3 para. 1 point (b))	➢ The production of quicklime as a mineralogical process in the sugar industry should remain excluded from the scope of the ETD.
	Minimum levels of taxation applicable to heating fuels (in EUR/Gigajoule) (Annex I, Table C)	➢ The minimum tax rate of €0.15/GJ should apply to taxable sustainable biogas and sustainable solid biomass fuels, as well as to advanced biomass fuels made of sugar production residues (e.g. from sugar processing waste water, beet pulp).
	Minimum levels of taxation of sustainable fuels from food and feed crops (Annex I, Table B)	➢ A lower tax-rate than for fossil fuels shall be applied to sustainably produced biofuels from food and feed crops to take into account their superior environmental performance in comparison to fossil fuels.
ETS	**Sustainability criteria of the RED** (draft article 14 para. 1, sub-para. 1, 3rd sentence)	➢ The sentence "*with any necessary adjustments for the application under this directive*" shall be effectively used: an implementing act shall specify that the energetic self-use of biomass residues from biomass processing is excluded from the sustainability requirements of RED, or treated in the same way as advanced biomass fuels.

	Energy audit recommendations (Art. 10a para. 1, 3rd sub-para.; draft art. 10a para. 1, sub-para. 3)	➢ The sentence "*Otherwise, the amount of free allocation shall be reduced by 25%*" shall be deleted or altered (*draft Art. 10a para. 1, 3rd sub-para.*). ➢ The draft art. 10a para. 1, sub-para. 3 shall ensure that information not intended to be disclosed to the public remains confidential.
	Installations with >95% biomass-emissions share (Annex I, point 1)	➢ Installations where emissions from the combustion of sustainable biomass contribute to more than 95% of the total GHG emissions shall not be excluded from the scope of the Directive as this would be a disincentive to decarbonise.
	Potential double carbon price burden	➢ The ETS directive should clarify that administrative buildings on an ETS site should be covered by the current ETS and not by the future ETS on buildings and road transport.
EED	**Heating and cooling supply** (Art. 24)	➢ Campaign plants (operational during fewer than 180 days in the year) should be exempt from the requirements of Art. 24 (in particular para. 1 & para. 4 (a) & (b)) as they could only serve these networks for a limited period of time. The high costs associated with Art. 24 would deliver no discernible benefit to the general public.
	Recognition of CHP as a sustainable energy solution (Recital 50)	➢ This recital should be amended to ensure the use of CHP is not subject to discrimination.
	Energy audit recommendations (Art. 11 para. 2, sub-para. 2)	➢ Information not intended to be disclosed to the public should remain confidential.