July 2022

bp feedback on the draft Delegated Act establishing a Union methodology setting out rules for co-processing[1]

We strongly welcome the European Commission's efforts to establish a standard methodology for determining the share of biofuel and biogas for transport resulting from biomass being processed with fossil fuels in a common process (co-processing).

We warmly welcome the approach taken by the European Commission to allow economic operators the flexibility to make use of company-specific or process-specific testing methods to determine the share of bio-content, adapted to their particular plant design and feedstock mix. This will help encourage further investment in production of renewable fuels and support the European Union in achieving the ambitious GHG reduction targets set for 2030.

We strongly believe it should be left to **Voluntary Schemes/Certification Schemes** to agree the **frequency** of the testing profile for the **^{14}C** verification method with the economic operators, considering the complexity and variability of key parameters of co-processing.

Detailed comments based on the European Commission's draft text

Article 1, paragraph 3: *"Economic operators shall be obliged to define the whole refinery as system boundaries independently from the testing method used"*

- We believe that the system boundaries should not include the entire refinery, but they should instead be drawn around the co-processing unit, also including any downstream/blending units linked to the final product/fuel. Article 3 also refers to the co-processing facility only and not the whole, complex refinery.
- We would also propose that the term "economic operator" is clarified in the context of this Delegated Act as the operator of the co-processing facility/ unit.

[1] Delegated Act supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out rules to determine the share of biofuel and biogas for transport resulting from biomass being processed with fossil fuels in a common process (co-processing)

Article 6, paragraph 4: *"If the 14C testing, when used as a second verification testing method of the bio-content in an output, shows a deviation of more than 1% in absolute terms, compared to the results of the main method used by the economic operator, the lower value of both tests shall be considered valid. In addition, the economic operator shall review its main testing methods to correct any system errors leading to such deviation"*

- The 1% deviation requirement between the testing method of choice by the economic operator and ^{14}C (the verification method) is not deemed appropriate on the basis of the published precision statements of the relevant ASTM and EN test methods covering carbon dating. In sections 4.2 and 4.3 of the ASTM D6866:2022 test procedure, the total uncertainty of the reported bio based carbon is reported at ±3% (absolute), and there is also a note explaining that there can be additional sources of indeterminate error in the origin of the bio based carbon.
- Even if specific labs have been reported to achieve better precision for the AMS test method compared to the published statement referenced above, a carefully designed Interlaboratory Study by a Standardisation Body (eg ASTM, CEN) would have to be carried out in order to confirm these findings are applicable across labs/ regions. It is currently not expected that such labs will be widely available, at least in the short term.
- We would propose that a deviation of 3% at minimum would be appropriate in this case.

Article 1, paragraph 2: *"Economic operators shall ensure that the share of biofuels or biogas is above the detection limit of the testing method"*

- This requirement raises significant concerns over specific feedstocks like pyrolysis oils, co-processed at lower amounts due to their challenging properties if the **^{14}C** verification test method also needs to be applied.
- In 2019, CEN kicked off a research project on the co-processing pyrolysis oil, with the main objective to produce an allocation technique for co-processing pyrolysis oil in refineries to produce alternative fuels. It was highlighted that, based on first investigations by Stakeholders, the analytical method based on radiocarbon analysis is not a suitable method for determining the bio-based carbon when co-processing pyrolysis oils. Additionally, it was noted that the pyrolysis oil production is too small compared to the normal throughput of a refinery.
- We would strongly encourage the European Commission to continue leveraging CEN's technical expertise on test method development and request that they continue their activities to develop alternative testing methods for novel feedstocks.
- Additionally, it should be noted that it is only the **^{14}C** analytical method that should be referred to as "testing method". The alternative methods

for calculating the % bio based carbon should be referred to as "determination method" or "calculation method".

Article 1, paragraph 1: *"The energy content of both biomass and fossil feedstocks shall be calculated by using the mass of the feedstock and its lower heating value (LHV, measured in MJ per kg). The biofraction, calculated as bio energy input divided by total energy input, shall be applied to all fuel outputs, which result from co-processing, in order to determine the biocontent in the final fuels produced"*

- Clear definition of "total energy input" for the purposes of the calculation laid out in Article 3, paragraph 1 is required, in the context of a co-processing facility.

Article 2, paragraph 1: *"The output shall take into account the mass lost in off-gases, in liquid industrial wastewaters and in solid residues"*

- Allocating the bio-energy output to waste water, without accounting for input water, would put the output at significant disadvantage vs standalone facilities.
- We would instead propose the following amendment to the text: *"If a mass balance method is used, the economic operator shall perform the full mass balance analysis of the total mass of inputs and outputs."*

Article 5, paragraph 1: *"If the production system co-processes renewable hydrogen of biological origin, economic operators shall document and provide evidence about the origin of the hydrogen as well as a proof that the hydrogen entering the hydrotreater: (a) has not been counted as a renewable energy elsewhere in order to avoid double counting, and (b) has been incorporated into the final fuel and not simply used to remove impurities such as sulphur"*

- We believe removing the requirement laid out in point b) above would be fundamental in increasing deployment of renewable hydrogen of biological origin in co-processing facilities.
- Additionally, establishing the share of hydrogen of biological origin should be aligned with how Renewable Fuels of a Non-Biological Origin are considered when used as an intermediate in the production of conventional fuels in the Delegated Act on the methodology for determining GHG emission savings from RFNBOs / RCFs.

Article 7, paragraph 1: *"When economic operators claim there is a specific share of biofuels or biogas in the fuel they put on the market, they shall keep samples for at least two years as well as records of measurement data and calculations"*

- Keeping samples for two years is excessive, particularly for gaseous samples as they are technically challenging to store for long periods of time. Best practices developed by the fuel industry in terms of liquid and gaseous fuel samples retention times should be applied.

Article 7, paragraph 6: *"In case of such notifications made either by certification bodies or the competent authorities of the Member States, the certification scheme concerned shall be obliged to take immediate action by investigating the case. If their investigation confirms the findings of the certification body or the competent authority of the Member State, the certification scheme shall treat the deviations as a major non-conformity and immediately suspend the certificate of the economic operator"*

- Any action undertaken by Certification Bodies and/or Competent Authorities should be a proportionate response given the accuracy of the **^{14}C** verification test. Voluntary Schemes/Certification Bodies should decide how they treat cases of non-conformity, taking into account the specificities of each case.

Key points:

1. It should be left to Voluntary Schemes/Certification Bodies to agree specific rules on frequency with the economic operator.
2. System boundaries should be drawn around the co-processing unit, including any downstream/blending units linked to the final product/fuel.
3. A deviation of 1% would not be appropriate given the reported precision of the ^{14}C test methods. A minimum deviation of 3% based on current precision statements is strongly recommended.
4. The European Commission should continue leveraging CEN's technical expertise on test method development for novel feedstocks.
5. Establishing the share of hydrogen of biological origin should be aligned with how Renewable Fuels of a Non-Biological Origin are considered when used as an intermediate in the production of conventional fuels in the Delegated Act on the Methodology for determining GHG emission savings from RFNBOs / RCFs.