



# SHELL<sup>1</sup> RESPONSE: BIOFUELS – UPDATED LIST OF SUSTAINABLE BIOFUEL FEEDSTOCKS

EUROPEAN COMMISSION CONSULTATION  
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<sup>1</sup> The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this document “Shell” is used for convenience where references are made to Shell plc and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to Shell plc and its subsidiaries in general.

Shell supports the higher ambition for transport decarbonisation in all sectors as proposed in the Fit for 55 package, including the role highlighted for liquid biofuels and gases, as well the increased renewable energy ambition of RePowerEU.

We believe that all types of renewable fuels and technologies are needed in the energy transition and to meet the ongoing challenges faced in response to the war in Ukraine and the heightened pressure on energy security. However, if the European Commission (the Commission) wishes to diversify energy supply and achieve decarbonisation ambitions in hard-to-abate transport sectors and maintain its competitiveness, it will need to develop a significant biofuel industry during the 2020s-2030s to meet this ambition. To achieve this investment now, long-term certainty on biofeedstock acceptability is critical.

Biofuels not only have the potential to contribute significantly towards European energy security and reduce reliance on imported fossil fuels, but they can also leverage waste streams and benefit the agricultural sector by maximising efficiencies in land use, diversifying farmer income and contributing to soil quality.

We welcome the review of Annex IX conducted pursuant to RED II Article 28.6 and the opportunity it brings to recognise additional sustainable feedstocks for biofuel production, particularly advanced biofuel production.

It is essential that the review of Annex IX recognises both the need for a long-term clarity on feedstock classification and the scalability of available feedstocks. The timeline over which Shell and industry partners invest and produce fuels is measured in decades. Long-term certainty in feedstock classification is a key enabler to sustained investment as are incentives which draw advanced biofuels into the hardest-to-abate sectors. In addition, in order to achieve the EU's climate neutrality ambitions, biofuels must be produced at scale in order to contribute to transport decarbonisation along with battery electric vehicles, hydrogen fuel cell and synthetic liquid fuels and gases.

Policy considerations to enable clearly classified and scalable sustainable feedstocks and deliver investment certainty include:

- greater specificity regarding identification/categorisation of feedstocks (and removal of uncertainties caused by conflicting policy proposals)
- recognition of benefits regarding efficient land use (including degraded, abandoned, marginal and contaminated land)
- fostering the bioeconomy / market for feedstocks

In response to the Annex IX revision Delegated Act (DA) proposal we provide the following comments:

### **Long Term Clarity to Enable Investment**

- There must be long-term clarity on feedstocks to enable sustained and certain investments. This includes two important aspects:

- Changes to Annex IX should not be applied retroactively as it will inhibit investment; and
- Feedstocks should not be downgraded/moved from Annex IXA to IXB

We note that a number of feedstocks particularly those currently classified as Annex IXA(d) in some Member States (MSs) have been assigned to the IXB list. Several of these feedstocks such as waste starch slurry and food waste are already considered IXA feedstocks at MS level in some markets. This proposed downgrading creates a precedent which will limit investment certainty in the future as investments cannot be made if the value of the biofuels or the availability of potential feedstocks (based on their designation of advanced for instance) is uncertain.

- We do not support the downgrading of feedstocks from IXA to IXB. However, if this change occurs as currently proposed and where a MS has currently classified feedstocks to be within Annex IXA(d), the MS should be given flexibility to allow these feedstocks to remain as Annex IXA (d) at MS level (e.g. grandfathered from the date of transposition) and then be phased out to solely be classified as IXB over time (e.g. after 2030).
- If the Commission chooses to keep these feedstocks in IXB (identified as (c-g) and (j)) we would ask that rather than Recital 4 of the explanatory note, which is unclear as written, the Commission either make Recital 4 more robust (add more specifics around determination) or prepares a Guidance Note to the Voluntary Schemes which clearly identifies how the assessment of this fitness (related to the clause 'not fit for use in the food and feed chain') shall be determined.

### Critical Role of Intermediate Crops (Catch & Cover)

- Shell welcomes the inclusion of intermediate crops on the Annex IX list. However, these intermediate crops (e.g. catch and cover crops) should be included on the Annex IXA list, not IXB as proposed. The non-food cellulosic part of cover crops is clearly included within Annex IXA (RED II Article 2 (42)). It should also be specified that oil seeds from cover crops should also be included in this designation.

Intermediate crops can play a critical role in the development of Sustainable Aviation Fuel in the near term and biomethane now and in the future, and it should not be capped. In addition, the consideration of advanced technology as related to Annex IXA should reflect the need for complex development of end-to-end supply chains and agronomic advancement which are needed to further facilitate the bioeconomy.

The Commission's assessment report ((ENER C1 2019-412)<sup>2</sup> designates feedstocks as Annex IXB/mature use if they can be processed by both mature and advanced technology. As noted in the JRC report: 'Sustainable Advanced Biofuels – Technology Market Report'<sup>3</sup>, a technology may be already 'mature'/commercially available for a specific feedstock but not for others. This is particularly the case with the intermediate

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<sup>2</sup> European Commission, Directorate-General for Energy, Haye, S., Panchaksharam, Y., Raphael, E., et al., Assessment of the potential for new feedstocks for the production of advanced biofuels : final report, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2833/719121>

<sup>3</sup> <https://publications.jrc.ec.europa.eu/repository/handle/JRC118309>

crops (as well as some grassy and woody energy crops, straw and wood which could require some form of pre-treatment). While the biofuel production technology may be mature, the supply, scale up and pre-treatment of certain feedstocks within that production technology is still nascent and therefore the feedstock should be classified as advanced. When considering if a technology is mature or advanced it should consider the whole value or supply chain which may still require development and not only the final production process.

- There should be clear EU definitions and/or classification guidance on what intermediate crops (e.g. catch and cover crops) can be used for compliance. These classification guidelines can not only support robust sustainability measures and traceability of feedstocks, but it can be information which enables voluntary schemes to evaluate compliance with RED II. For instance, there is a need for clear definitions between main crops and intermediate crops to ensure the potential displacement risks of double main cropping highlighted in the recent assessment report issued by the Commission<sup>4</sup> are eliminated, therefore enabling intermediate feedstocks to be considered IXA. To support the review process of Annex IX, Shell proposes the following characteristics to help define what catch and cover crops should be added to Annex IXA:
  - It should only be grown during historically fallow periods on the farm (e.g. winter), or periods when non-food and feed or fibre generating crops were historically produced, e.g. 3 years previous;
  - There should be no reduction in yield or increase in inputs for the primary crops before and after the cover crop;
  - The farm/grower should follow all applicable laws, regulations, and best management practices
    - The production and processing of the crops should not lead to environmental and social impacts.
- The definition of Intermediate Crops in the proposal (Annex IXB (p) should be altered to remove: 'that are grown in areas where due to a short vegetation period the production of food and feed crops is limited to one harvest'. This should be done to align with RED II Article 2 (44). In addition, rather than requiring that soil organic matter content be maintained, it should state that soil organic matter content is 'not degraded'.

### Increasing the Annex IXB Cap

If additional feedstocks are added to Annex IXB, the current cap of 1.7% of the energy content of transport fuels supplied for consumption or use on the market should either be removed or increased. Should the renewable and/or GHG intensity reduction fuel supplier obligation be increased under RED III, consideration should be given to increase

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<sup>4</sup> European Commission, Directorate-General for Energy, Haye, S., Panchaksharam, Y., Raphael, E., et al., Assessment of the potential for new feedstocks for the production of advanced biofuels : final report, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2833/719121>

the cap on Annex IXB. The Annex IXB cap should be technically credible, an EU wide universal cap with a range so MS cannot go below a certain minimum.

### Critical Contribution of Degraded Lands

- Shell supports the inclusion of feedstocks grown on degraded lands as highlighted in the proposed Annex IXA(t). However, the feedstock description as written is confusing and the comma after land should be deleted so it is clear that the 'not suitable for food and feed crops' statement relates to severely degraded land. In addition, we ask that crops (such as starch, sugar, and oil crops) grown on severely degraded land should be an Annex IXA feedstock as long as they do not compete with food and feed. Consideration should be given to extend the land criteria for feedstock growth to include contaminated/polluted, marginal, unused, and abandoned land.
- Definitions for degraded land, severely degraded land, marginal, unused, abandoned, and contaminated land should be clearly articulated and where possible harmonised across RED II, the Implementing Act and other agricultural or applicable policies to enable benefits to different sectors and actors across the bioeconomy and maximise sustainable decarbonisation potential related to biofuels and biogases.

### Policy Coherence

- Adding those feedstocks specified within Annex IV of the Implementing Regulation<sup>5</sup> would add clarity to acceptability of these feedstocks at MS level. Also, in some instances, the lack of clarity over what feedstocks are included in the subcategories of Annex IXA causes confusion and therefore the lack of acceptance of feedstocks at MS level (when they are in fact allowable).
- Woody biomass waste and residues should remain on Annex IXA (o, p and q) as they are an essential advanced and sustainable feedstock for the development of novel technologies needed to decarbonise the hardest to abate sectors. Importantly, Shell does not support the Parliamentary proposals related to the definition of primary woody biomass as it could include those waste and residue feedstocks identified in Annex IXA. In addition, Shell does not support proposals to cap biofuels from primary woody biomass as biofuels produced from woody biomass waste and residues could be purposely or inadvertently restricted. Ensuring policy coherence is essential.
- Coherence with other initiatives in progress such as ReFuelEU aviation should also be assured. Currently, the Parliament mandate looks to exclude certain feedstocks from SAF production, including intermediate crops, while also stating that all additional feedstocks to Annex IX immediately become available for SAF. Therefore, the Parliament proposal of sustainable feedstock exclusions from SAF should not be taken into account when considering feedstock additions to Annex IX.

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<sup>5</sup> <https://op.europa.eu/en/publication-detail/-/publication/3ed6d1d9-2c0f-11ec-bd8e-01aa75ed71a1/language-en/format-HTML/source-search> (Implementing act (on rules to verify the sustainability and greenhouse gas emissions saving criteria and low indirect land use change-risk criteria) gas emissions saving criteria and low indirect land use change-risk criteria)