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 Subject:
 Notes: meeting with Wind Europe on wind blades recyclability

Date: Wednesday 1 June 2022 18:29:38

Dear all,

I send you some notes on the meeting of today organised by With Wind Europe. Best regards,

Meeting on wind blades recyclability - 1.06.2022

Participants: (Wind Europe)

Background:

The EC is interested in knowing more about the industry position on recyclable wind blades both for sustainability and internal market competitiveness reasons. It is considered that by setting specific criteria in favour of recyclable blades it would be indeed possible to support the EU manufacturers in public auctions.

Notes:

- The only role played by the EU industry in the wind manufacturing sector is in the blades' production, since most of the other components are just assembled.
- Decommissioned blades are either sent to landfill or put on the second hand market.
- The recycling of blades is a challenge, because blades are made of composite materials
 and fibres (notably glass fibres) that once combined cannot be easily divided. Another
 issue is the lack of enough blades to ensure a stable waste stream for the recycling, as
 these materials are difficult to be sourced elsewhere. Finally, recycled materials have a
 lower quality than virgin ones. All these aspects clearly affect the economic feasibility of
 the recycling.
- The most consolidated technology for recycling of blades consists in a mechanical process
 that grinds the composite materials. The output of this process is used in the cement
 sector either as substitute of the fuels or as raw material to produce cement-type byproducts.

Q&A

Q:

- 1. Are you sure that the emission caused by using these materials as fuel aren't worse than those caused by coal?
- 2. Are you in contact also with other DGs in the Commission (namely, ENV)?
- 3. Is there a common legislation that regulate the processing of decommissioned blades?

A:

- The cement industry did a LCA study that showed a significant reduction of environmental impacts coming from the substitution of coal with these composite materials (he will send us this study).
- 2. They are in contact with DG ENV (meeting planned soon GROW to participate).
- 3. As to blades recyclability criteria, there is no harmonisation in EU so that it is up to the single company to evaluate the recyclability in practice. In order to improve the recyclability of

blades they are using PET and a new resin formula that breaks into monomers more easily. The industry is not yet ready to produce 100% recyclable blends, this is likely to happen by 2030.

Anyway is not possible to produce 100% PET/recycled PET blades, both for structural and functional reasons.

Q: Is it possible that, with the right conditions, the EU industry leads the market in the production of glass fibre?

A: A lot of investments would be needed.

Anyway if glass fibre is deemed as a critical raw material for the EU industry it can be supported with a favourable fiscal and tax policy.