

Views on the Strategy for long-term EU greenhouse gas emissions reductions

HARRPA calls on the Commission to recognise the role of bio-based materials in achieving GHG emissions reductions, while ensuring that promotion of bioenergy does not displace existing high value uses of renewable raw materials.

The pine chemicals industry is one of the oldest sectors of the European bioeconomy. For over one hundred years, our industry has refined **tall oil** – a raw material coming from kraft pulp and paper production - to produce bio-based products used in paints, inks, adhesives, lubricants, food additives, synthetic rubber, pharmaceuticals and many other applications. Refining tall oil into value-added products is at the heart of the circular economy and is a good example of a well-functioning industrial symbiosis.

The pine chemicals industry contributes to the transition to a circular low-carbon bioeconomy: our industry uses side streams from other industries (industrial symbiosis) to produce bio-based products that find application in many sectors. In line with circular economy principles, use of tall oil for the production of pine chemicals results in long-value chains: this keeps the value of tall oil in the economy for as long as possible creating the highest value out of a limited feedstock.

At the same time, **HARRPA calls on the Commission and EU Member States to avoid incentives (specific targets, support schemes, etc.) for energy uses of scarce feedstocks (such as tall oil), to the detriment of existing applications.** Such incentives can displace tall oil from existing high value uses in the pine chemicals industry:

- Tall oil is a **scarce feedstock**: for each tonne of pulp produced, only 40 kilos of tall oil can be obtained. As tall oil is already broadly used by other industrial sectors, its availability is further limited.
- Since tall oil production depends on the demand for pulp and paper, its **production cannot be increased** to accommodate additional demand for transport uses.

Displacement of tall oil from existing high value uses to energy will:

- **Be counterproductive to the EU objective to decarbonise the transport sector:** utilising tall oil for biofuel production emits 25% more CO₂ than when used for bio-based products.^{1 2} In addition, it can lead to substantial indirect GHG emissions if pine chemicals are replaced with less sustainable alternatives.

¹ Fraunhofer Umsicht: [Analysis of The European Crude Tall Oil Industry – Environmental Impact, Socio- Economic Value & Downstream Potential](#), May 2016

² Franklin Associates, a Division of ERG: GREENHOUSE GAS AND ENERGY LIFE CYCLE ASSESSMENT OF PINE CHEMICALS DERIVED FROM CRUDE TALL OIL AND THEIR SUBSTITUTES, August 2013



According to the estimate of the International Council on Clean Transportation, biofuels made from tall oil emit more carbon dioxide (Co2) than their fossil fuels comparator, once indirect emissions are taken into account.³

- **Hinder the transition towards a circular bioeconomy.** Pine chemicals production is circular economy and industrial symbiosis in practice: we upgrade tall oil into a large variety of products that are used by other industrial sectors, thus creating long value chains. Using CTO for pine chemicals creates 4 times more economic value and 20 times more jobs compared to its use in biofuels.⁴

HARRPA Recommendations

HARRPA recommends that the Strategy for long-term EU greenhouse gas emissions:

- **Recognise the full potential of bio-based materials in reducing GHG emissions.** By keeping in the loop side stream from other sectors, the pine chemicals industry minimise use of virgin materials, hereby enabling significant GHG emissions savings.
- **Avoids distortions of raw materials markets.** Targets and support schemes for energy should avoid displacement of raw materials from one sector to another one, since this can lead to significant indirect emissions. Therefore, incentives for bioenergy and biofuels should only target abundant feedstocks for which there are no alternative uses. Respects the **waste hierarchy** and **circular economy**. To be in line with circular economy, promotion policies should ensure that “biomass is used more than once, if technically and economically possible, typically with material use(s) as the first step(s) and energy conversion as the last step”.⁵

For more information please contact:

Joël Wilmot, Sector Group Manager, HARRPA, a Cefic Sector Group
+32 2.676.72.88 or jwi@cefic.be

About HARRPA

The Hydrocarbon Resins, Rosin Resins and Pine Chemicals Producers Association (HARRPA), a sector group of the European Chemical Industry Council (Cefic) regroups 16 companies in Europe for a total yearly production of more than 1 million tons and a total turnover around 1,5 billion euros. The members have 32 production sites in Europe and employ more than 3000 people.

For more information on HARRPA, click [here](#)

³ Stephanie Searle et al., “Potential greenhouse gas savings from a 2030 greenhouse gas reduction target with indirect emissions accounting for the European Union”, International Council on Clean Transportation (ICCT), WORKING PAPER 2017-05, (5 May 2017), pp. 1-26. Available online: <http://www.theicct.org/potential-savings-2030-GHG-reduction-target-EU>

⁴ See footnote 2

⁵ Didier Bourguignon, “Bioeconomy Challenges and opportunities”, European Parliamentary Research Service (EPRS), p.4, Available online: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595890/EPRS_BRI\(2017\)595890_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595890/EPRS_BRI(2017)595890_EN.pdf)