

## Cefic - PlasticsEurope Workshop 28-01-2022

### Participants:

DG ENV: [REDACTED]  
[REDACTED]

DG GROW: [REDACTED]

Eunomia: [REDACTED]

External Participants: [REDACTED] (Cefic), [REDACTED] (Cefic), [REDACTED] (PlasticsEurope), [REDACTED] (Sabic), [REDACTED] (Sabic), [REDACTED] (ISCC), [REDACTED] (MARS), [REDACTED] (MARS), [REDACTED] (Unilever), [REDACTED] (Unilever), [REDACTED] (BASF), [REDACTED] (BASF), [REDACTED] (VAUDE), [REDACTED] (REDCert), [REDACTED] (INEOS), [REDACTED] (RSB), [REDACTED] (Tetra Pak)

### Summary:

Cefic and Plastics Europe gave an overview on chemical recycling of plastic and the so called mass balance approach. They stressed the massive investments made, or planned, and the relevance of chemical recycling for reaching respective recycling and recycled –content targets. Consequently, it was crucial that the mass balance chain of custody approach is incorporated in EU legislation.

Moreover, three case studies were presented that exemplified the traceability by certification and auditing in chemical plastic recycling.

### Introduction to chemical recycling:

Until 2030 more than seven billion euros will be invested into chemical recycling and the chemical recycling capacity will be increased to 3.4 mio t of feedstock for plastic production. With these numbers, chemical recycling has the potential to make a significant contribution to achieve in short term the targets recycling of plastic. The Industry stressed that chemical recycling does not compete with mechanical recycling but would complement it, mainly for difficult to (mechanically) recycle plastic waste streams (mixed polymers rich in PP and PS), which is currently mainly incinerated. They asked for legal certainty with regard to chemical recycling of plastic, in particular that it is considered in the SUP Directive Implementing Act on recycled content and upcoming revised PPWD. This would require that also the so called mass balance approach with credit transfer would be recognized in the legislation.

The challenge with chemical recycling is that it is not possible to physically verify any claim of recycled plastic content in the end product and, moreover, that it is not feasible to run production lines (heat crackers) with 100% recycled plastic. The mass balance approach would only be based on paper control.

The main purpose of the workshop was to give examples on the soundness of the processes employed regarding traceability of recycled plastic content with regard to chemical recycling. This was illustrated by three case studies that were presented during the workshop and aimed at illustrating the application, and acceptance of a Chain of Custody Mass Balance approach.

### The case studies presented:

MARS, UNILEVER, ISCC and SABIC demonstrated in case study #1 their certified chemical recycling process, where the pyrolysis oil is incorporated in ice cream tubs and pet food trays. A considerable

investment was done to upgrade the raw pyrolysis oil from plastic waste in order to allow its feeding into a conventional heat cracker.

VAUDE, BASF and REDCERT presented in case study #2 how polyamids from chemically recycled tires are used to produce robust outdoor pants and an independent certification to ensure transparency and credibility of the mass balance approach.

In case study #3 INEOS highlighted some of the challenges they faced to produce the caps for TETRAPAK beverage containers. Whereas the traditional TETRAPAK contains 20% of product weight plastic (filling and cap), TETRAPAK aims to have 50% of this plastic from recycled plastic. The certification, in this case done by RSB, is key to a credible mass balance chain of custody and requires a credit transfer within the INEOS production streams.

The Commission representatives thanked for the presentations, which would be useful for the further development on the legislative framework concerning plastic waste. A follow up meeting might be needed to clarify some economic and environmental figures.