



The Vinyl Sustainability Forum 2023 The Episode of PVC Circularity

Additive Technology to Support PVC Recycling

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Agenda

- **What is PVC**
- **Recycling in Europe**
- **Types of recycling method**
- **Current Headwind**

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A sustainable material...

Contain lesser carbon when compared to all major thermoplastic

PVC = Rock salt + Oil
(57%) (43%)

CO₂ emmission from PVC production is similar to other major polymers. Due to >50% of PVC is Chlorine feedstock energy in much lower compared to plastics based mainly on hydrocarbons

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Recycling of PVC

VinylPlus' definition of 'Recycled PVC': "Recycled PVC is prepared by processing PVC waste for the original purpose or other purposes, excluding energy recovery and fuel production".

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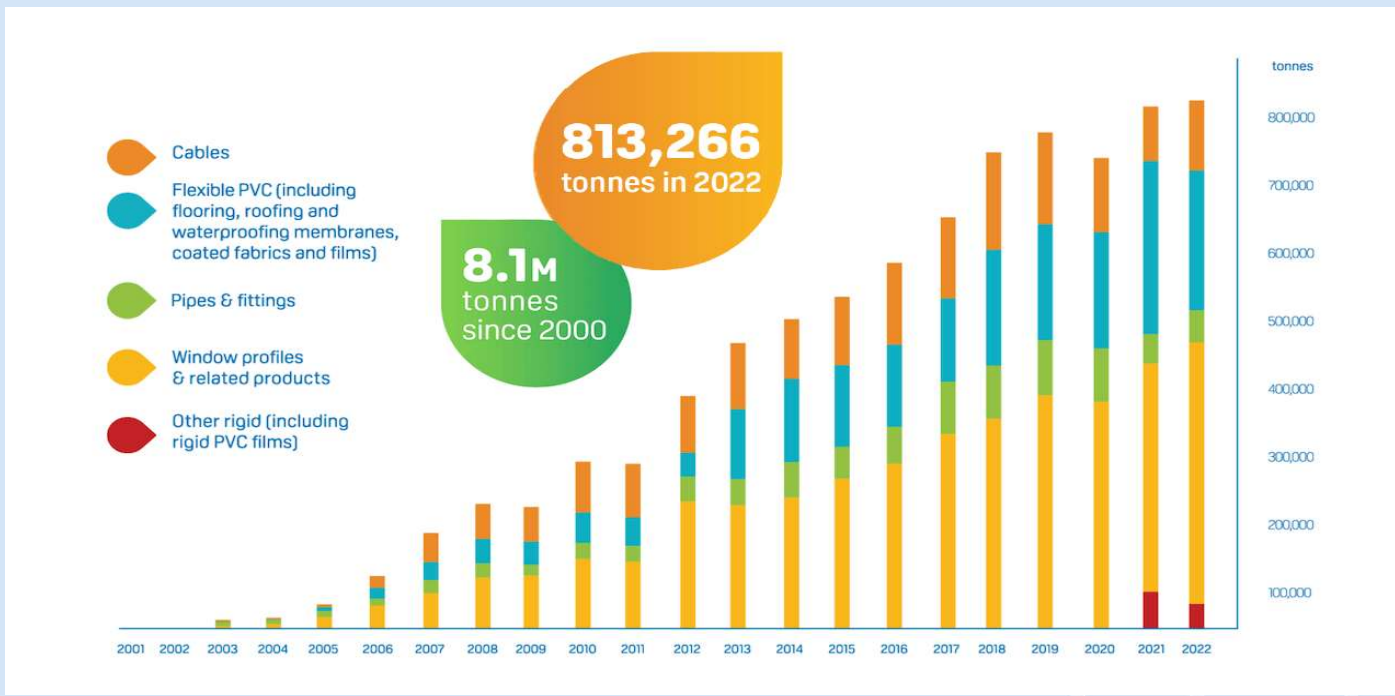
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PVC recycling making in roads



Source: <https://www.vinylplus.eu/our-achievements/progress-report-2023/pathway-1/>

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30 years of 'sledding, bodyline deliveries, ball tampering' and still 'not out'



The PVC industry's ongoing and voluntary commitments to minimise pollution from chemical processing and reducing/eliminating or controlling the safe use of chemicals of major concern, and advance circularity has prevented regulatory

restriction or elimination.

VinylPlus 2030
THE NEXT 10-YEAR COMMITMENT
OF THE EUROPEAN PVC INDUSTRY TO SUSTAINABLE DEVELOPMENT



.....but in EU/US the, fight intensifies

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Type of Recycling

Recycling of PVC can be achieved by 2 means

Mechanical Recycling

- Conventional method
- Simple & economical
- Simple feedstock
- Almost endless cycle with minimal/no impact on mechanical properties

Chemical Recycling

- Technology driven
- Higher cost
- Suitable for complex feedstock



Why is recycling important in the context of sustainability?

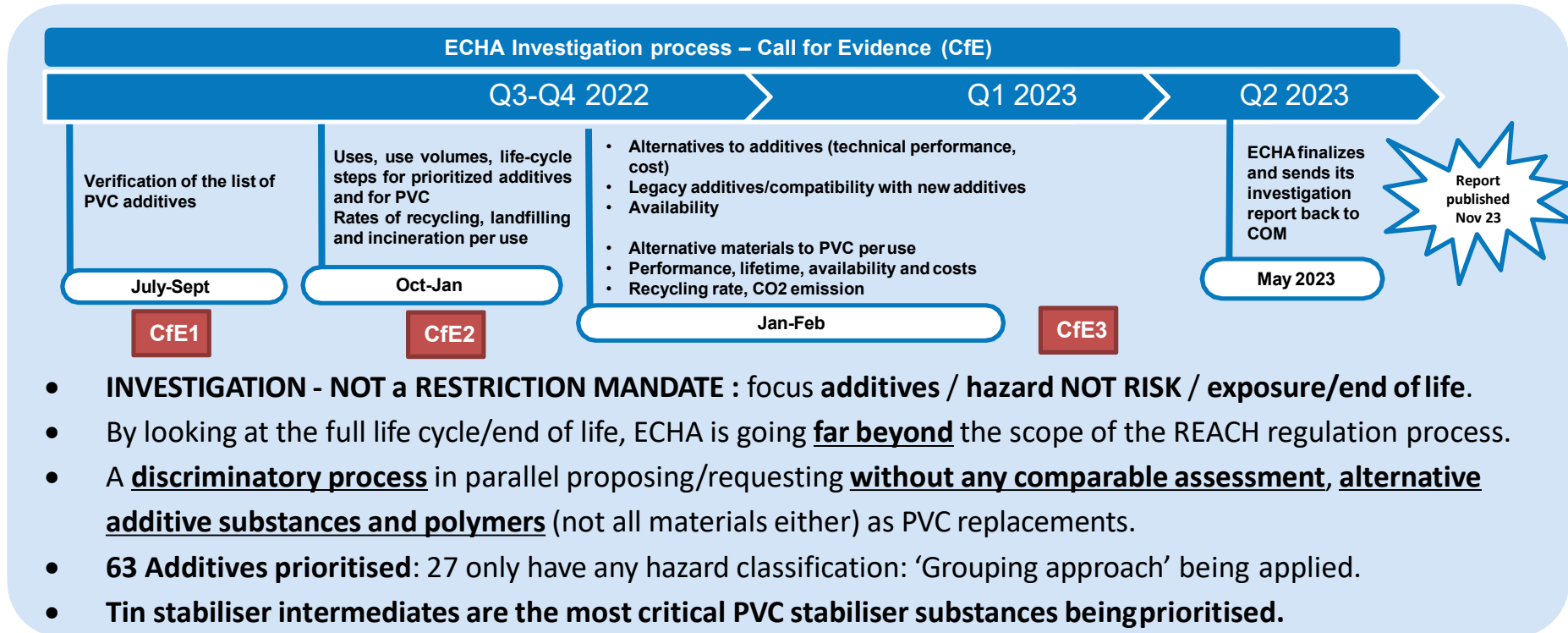
- PVC is well suited to recycling due to its advanced mechanical recycling properties.
- Large volumes of recyclable PVC waste are available due to versatility of PVC.
- To meet resource-efficiency targets and allows the preservation of natural resources. i.e.: oil
- To reduce Green House Gas (GHG) emissions and waste in landfill.



PVC have the longest history of recycling among all plastics



The European Commission's completed investigation into PVC and its additives



Thank you for listening!



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