

PVC A JOURNEY FROM MANUFACTURING TO RECYCLING

A closer look at the positive environmental impact and strategic importance of PVC

MANUFACTURING



Chloralkali Process

The production of:

Caustic Soda

Hydrogen

Chlorine



PVC Manufacturing

PVC is produced across Europe

30% of Europe's chlorine goes into PVC production, with **60% of PVC being derived from chlorine** in common salt, making it a low-carbon plastic.

EU regulations and industry guidelines **ensure safe production** by controlling worker exposure, minimising emissions, and ensuring safe transport.

PVC is **inert, non-toxic**, and has undergone **over 20 years of innovation** to remove substances of concern, aligning it with **EU environmental goals**.



The PVC and additives value chain represents 6,100 companies, **80% of which are SMEs**, and **178,000 employees**. The total turnover of the PVC converting industry is around **44.8 billion euros**.

APPLICATIONS

PVC Contributes to Society



Clean Energy & Decarbonisation

- Safe hydrogen distribution (H₂)
- Wind turbine blades and cable profiles
- Biogas pipes and tank covers
- PVC solar roofing membranes for solar panels



Healthcare

- Oxygen masks
- Medical tubing
- Blood bags



Building & Construction

- Windows
- Floor, wall and ceiling coverings
- Pipes
- Cables



PVC is the only material allowing blood to be stored up to **49 days**.



70% of PVC is used for durable, affordable and recyclable building products.

CIRCULARITY



PVC End of Life & Circularity

Recycling into pipes, windows, flooring, road safety etc. **(35%)**

VinylPlus 2030: Leading the Way in PVC Recycling

Goal: Recycle **1 million tonnes** of PVC annually into new products by 2030.

How: Combining highly effective mechanical recycling with cutting-edge technologies like advanced sorting, additive extraction, and chemical recycling to maximise sustainability.

Energy recovery **(46%)**

Landfill **(19%)**



PVC can be recycled **multiple times**.



Since 2000, **8.8M tonnes of PVC** has been recycled, saving **17.6M tonnes of CO₂**.