

# Pledge for the uptake of R-PET in the nonwovens industry

EDANA, in partnership with PETCore Europe

## 1. <u>Context</u>

The circular economy has become one of Europe's priorities. The transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised, is an essential contribution to the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy<sup>1</sup>.

EDANA is the international association serving the nonwovens and related industries. Our diverse membership of more than 240 companies represents over 90% of the industry across the nonwovens value chain. This vertically integrated structure encompasses upstream suppliers, converters and producers. EDANA endorses the importance of a circular economy and, for its part, helps to realize this ambition in Europe.

In combination with other materials or used alone, nonwovens are used in a wide range of consumer and industrial products with diverse properties, including absorbent hygiene products, apparel, home furnishings, healthcare and surgical fabrics, construction, filtration, engineering, and wipes to name but a few.

They may be a limited life, single-use fabric or a very durable fabric. Nonwovens have specific characteristics that allow them to deliver high-performance across a wide range of applications. Specific functions include: absorbency, liquid repellence, resilience, stretch, softness, strength, flame retardancy, washability, cushioning, filtering, bacterial barrier and sterility.

These properties are often combined to create fabrics suited for specific jobs, while achieving a good balance between product use-life and cost. They can mimic the appearance, texture and strength of a woven fabric and can be as bulky as the thickest paddings. In combination with other materials they provide a spectrum of products with diverse properties.

### 2. <u>R-PET Consumption in Nonwovens (EU28)</u>

Nonwoven manufacture starts by the arrangement of fibres in a sheet or web. The fibres can be staple fibres packed in bales, or filaments extruded from molten polymer granules. In 2017, 30% of the materials used to compose the nonwovens webs is polyethylene terephthalate (PET). Of this total, more than 200,000 tonnes are recycled PET: 34% in staple fibres and 35% in resin.

<sup>&</sup>lt;sup>1</sup> COM/2015/0614 final









### 3. Evolution of the Main Market Segments using R-PET

R-Pet is used in various nonwoven applications: roofing products, the automotive sector and nonwoven geotextiles are large users of R-PET fibres and resins. R-Pet can also be found in some hygiene products, such as diapers.



These are all growing or recovering segments. Furthermore, new applications and increasing demand is expected in these segments by 2025.

### 4. By 2025 ... Nonwovens will use more than 300 kT R-PET

The share of R-PET utilisation in nonwovens is expected to increase from 34% in 2017 up to 40% in 2025. EDANA pledges on behalf of the nonwoven manufacturers among its members, representing over 85 % of the nonwovens production in the EU<sup>2</sup> an uptake of more than 300,000 tonnes of R-PET by 2025, providing that the post-consumer waste volumes necessary to back such a growth are available.

<sup>&</sup>lt;sup>2</sup> An overview of the EDANA nonwoven manufactures can be found here : https://www.edana.org/industry-support/membership#!/members



