

Ecopneus is a non-profit company among the main players in the management of End-of-Life Tyres in Italy. It manages an average of 200,000 tonnes of End-of-Life Tyres every year. At the same time, it is also strongly committed to the consolidation of the several application sectors of recycled rubber.



Idea Plast is an interlocutor capable of providing a service throughout the whole chain of thermoplastics design, from the creation of the material up to the production of the object. As such, it is a point of reference in the recycling and sustainability sectors, supporting companies into developing performing products with a lower environmental impact.





Ecopneus S.c.p.a.
Via Messina, 38 – Torre B
20154 Milano (MI)
Tel. +39 02 92 970 1
info@ecopneus.it
www.ecopneus.it







## FROM RECYCLED RUBBER TO COMPOUND.

The Tyreplast materials are the new compounds that combine performances, quality and environmental sustainability. They valorise the elasticity and the anti-vibration properties of recycled rubber, combining them with the practical mouldability of thermoplastic polymers. Developed by Ecopneus with the technical support of Idea Plast, the Tyreplast materials are innovative, performing, sustainable, and at the service of both companies and the processing industry. Appropriately mixed with several typologies of plastic materials thanks to specific compatibilizers, the rubber powder transfers some of the typical characteristics of rubber to the polymeric matrix. Shock absorption and soundproofing properties are examples of such transfer. Moreover, they increase and improve the functional characteristics of thermoplastics. The Tyreplast materials are new families of products where the union of recycled rubber powder with thermoplastic polymers – even post-consumer ones - gives life to eco-friendly mixes with specific characteristics. Moreover, these products have been developed and designed to be treated and transformed with technologies currently in use without the need of specific ones.

## THE ENVIRONMENTAL SUSTAINABILITY OF THE TYREPLAST MATERIALS.

The Tyreplast compounds can be created mixing several different thermoplastic and thermosetting polymers. This gives life to compounds with different characteristics based on their end-use. For the products to be highly environmentally sustainable, not only virgin thermoplastic polymers, but also the materials obtained from post-consumer and industrial waste have been used as polymeric bases at 100%:

- Virgin and recycled polyolefins (LD-LLPE, HDPE. PP....)
- PA6
- Virgin and recycled PET
- SEBS

These bases can be variously mixed with rubber powder, in a range that goes between 10% and 50%.















