

Sustainable water networks

A pipe system's environmental impact depends on its composition and application. Factors that determine efficiency during the entire life cycle of a pipe are mainly: the type of raw material used, the production process, the product finishing and its service life.

PVC-O pipes are shown to be the most eco-friendly solution due to their improved contribution to

global sustainable development, as shown by different studies worldwide, among which it is worth highlighting: Energy consumption and CO₂ emission estimates associated with the production, use and disposal of PVC, HDPE, PP, Cast-iron and Concrete pipes (Polytechnic University of Catalonia) and the PVC-O Environmental Product Declaration TEPPFA (The European Plastics Pipes and Fittings Association).



SUSTAINABILITY

Sustainable water networks designed for maximum preservation of the environment



EFFICIENTY

Less use of raw material in its

manufacture. Only 43% of the

PVC composition depends on

BETTER ENVIRONMENTAL FOOTPRINT

Less CO₂ emitted into the atmosphere and bahaviour improvement against global warming.



WASTE MANAGEMENT EFFICIENCY

PVC is a **100% recyclable** material that can be reused in the manufacture of other plastic applications.



ENERGY EFFICIENCY

Energy consumption is lower in all phases of the life-cycle: raw material extraction, manufacturing and use



WATER RESOURCES OPTIMIZATION

The **complete tightness** of the joints and the durability of the pipe against degradations, prevent leakageS of channeled water.





Moving PVC-O towards circular economy

Oriented PVC (PVC-O) pipes are the greenest solution available on the market, given their lower energy consumption throughout their long life cycle, the lower greenhouse gases emitted into the atmosphere. Therefore, they have a lower Carbon Footprint than alternative materials, and thus a lower impact on climate change.

Additionally, it has also shown that the environmental impact they exhibit, not only in global warming, but on

other environmental impacts such as the destruction of the ozone layer, is also inferior to other materials. For **Molecor**, preserving the environment is an extremely important issue, which is why it has received the Environmental Footprint seal from the Sustainable Life Foundation, calculating the environmental footprint of its TOM® pipes in accordance with the new Recommendation 179/2013CE proposed by the European Commission for the calculation of environmental footprints.

Raw Material

PVC-O pipes are manufactured through a process that uses less raw material, obtaining pipes with better performance

Design

For the design of hydraulic networks Molecor uses the latest technology and tools optimizing resources in the most efficient possible way

Recycling

PVC is a 100% recyclable material that can be reused after having been recycled for other plastic applications

Manufacturing

The absence of the use of boiling water in the manufacture process makes it possible to safeguard a resource as scarce as this while optimizing the energy used to the maximum

Use

The pumping energy used, considering a useful life of 50 years, for PVC-O pipes is much lower than in the case of other materials

Installation

Due to their lower weight, they are light and manageable. Thus, their manipulation and connection can be done mannually up to DN315 mm, reducing the use of machinery, fuel and the CO₂ emissions

Distribution

Thanks to the lower weight of the pipes, we can transport more material, saving fuel and minimizing CO₂ emissions





