DESIGNING A PLASTIC ROAD IN NETHERLANDS MADE FROM RECYCLED PLASTIC MATERIAL

The city of Rotterdam in the Netherlands, in cooperation with the VolkerWessels Company, is promoting an innovative project to design and build a *PlasticRoad* with a surface made entirely from recycled plastic material, as a greener alternative to asphalt. The design of the project is still ongoing, realizing studies and tests and involving potential partners of the plastics industry, recycling sector, universities and other knowledge institutions.

According with the project promoters, plastic offers all kinds of advantages compared to current road construction, both in laying the roads and maintenance. The plastic roads are lighter, reducing the load on the ground, and hollow, making it easier to install cables and utility pipelines below the surface.

The features of the project, presented in the VolkerWessels Company's website, are of great interest. PlasticRoad is a virtually maintenance free product. It is unaffected by corrosion and the weather. The road structure could withstand greater extremes of temperature, between -40 and 80 degrees Celsius. It is also much more resistant to chemical corrosion. Estimations predict that the lifespan of roads will be tripled.

Recycled plastic is made into prefabricated road parts that can be installed in one piece. Sections can be prefabricated in a factory and transported to where they are needed, reducing on-site construction, while the shorter construction time and low maintenance will mean less congestion caused by roadworks. Lighter materials can also be transported more efficiently. Roads can be built in weeks instead of months. It is also much easier to control the quality of the road (stiffness, water drainage etc.).

This innovative project of PlasticRoad is in line with important international initiatives for sustainable development like The Ocean Clean Up to free the seas of plastic, and the new approach to create systems that are not only efficient but also essentially waste- free.

To know more

VolkerWesswls website

Article in the guardian

Article in thermofisher.com