



LIFE20 GIE FR 282 - RE-PLAN CITY LIFE

RElevant Audience Plan Leading to Awareness Network for Circular Economy Use of Recycled TYre materials in city LIFE

**Circular Economy and Urban Environment:
RE-PLAN CITY LIFE - the European project
promotes the use of materials derived from recycled tires
at RESTRUCTURA in Turin**

The use of materials derived from the recycling of tires in construction was one of the themes of Restructura 2023, the exhibition and conference event held in Pavilion 3 of the Lingotto Fiere in Turin from 23 to 25 November. Re-Plan City Life, the European project co-financed by the Life20 program, intervenes on the topic at the Circular Economy in Construction Conference for environmental sustainability organized by ANTEL (National Association of local authority technicians).

There are many possible uses in construction, for example in concrete, where steel fiber as a replacement for iron bars brings high performance with a considerable reduction in CO2 in the production process. Same thing in the manufacture of acoustic insulation sheaths and much more. The use of materials recycled from rubber also responds to the need to replace elements such as sand and gravel, which are increasingly less available and which are indispensable for cement mortars, with the advantage of contributing to more elastic final products, less subject to fractures.

These materials always guarantee significantly higher performance than traditional ones. However, an innovative effort is needed. In fact, although many technicians are aware of their potential advantages of replacing traditional materials, they often have not had direct experience in using them or sufficient support to introduce them into their projects and programs. Therefore, a crucial element of Replan is precisely to define simple and effective guidelines based on these available experiences, in the context of an implementation strategy.

Geom Bruno Marabotto Vice President of ETRA, European Tire Recycling Association and Prof. Alessandro Fantilli of the Polytechnic of Turin talked about the development of the European project on the use of recycled tires in the construction, infrastructure, and sports sectors, with extraordinary results in terms of economic and qualitative. In fact, excellent quality rubber powder and textile fibers are obtained from tyres, which are used in asphalt, improving drainage capacity and extending their life up to 2 or 3 times compared to traditional ones. They are often used in sports surfaces, such as athletics tracks or tennis courts, and in public areas for children.

The workshops involved also other Speakers with whom there are good synergies who presented other experiences of recycled materials used in the same fields of applications, such as Innovative and eco-sustainable concretes produced from the reuse of waste materials for circular construction, presented by Prof. Dora Foti Deputy Director of the Department of Architecture, Construction and Design (ArCoD). Full Professor of Construction Technology at the Polytechnic of Bari; Woodcircles European Project “Integrated, circular and digitally supported sustainable solutions for waste minimization and carbon storage in buildings and the construction sector, presented by Eng. Laura Ribotta a local Public Administration Official.

The program also included a presentation of GreendealAVR (ARV Climate Positive Circular Communities). The project is working towards the implementation of climate-positive circular communities in Europe, focusing on net zero-emission buildings and neighborhoods. ARV will provide guidelines and a policy framework for future energy-efficient, circular, and digital solutions in the construction industry.

Re-Plan City Life's participation in Restructura 2023 underscored the valuable role of recycled tire materials in construction for environmental sustainability and economic benefits. As the construction industry evolves, the continued integration of recycled materials signals a promising future for sustainable and environmentally conscious building practices.

