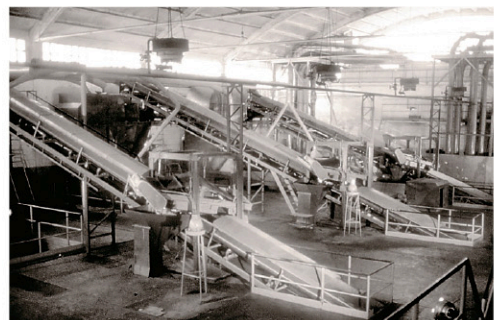


Ecoparco TMB

Flexible and evolutive system
for integrated management
of municipal solid waste
in our cities



In **1964**, Sorain Group realized **first Recycling and Composting plant with heat recovery** in Rome.

60 years after, waste recovery and recycling, targeting mitigation of global warming, is a key issue of central governments all over the world.

Technologies are now well advanced, as well as people awareness on protection measures for our abused environment.

Pioneers in 1964, state-of-the-art today.

Ecoparco Sorain is a multi-tasking platform with proprietary technologies allowing within the same facility the treatment of all municipal waste streams combining mechanical and biological treatment, optical separation and composting.

One single treatment facility guarantees highest recovery rate and reduces overall operational costs.

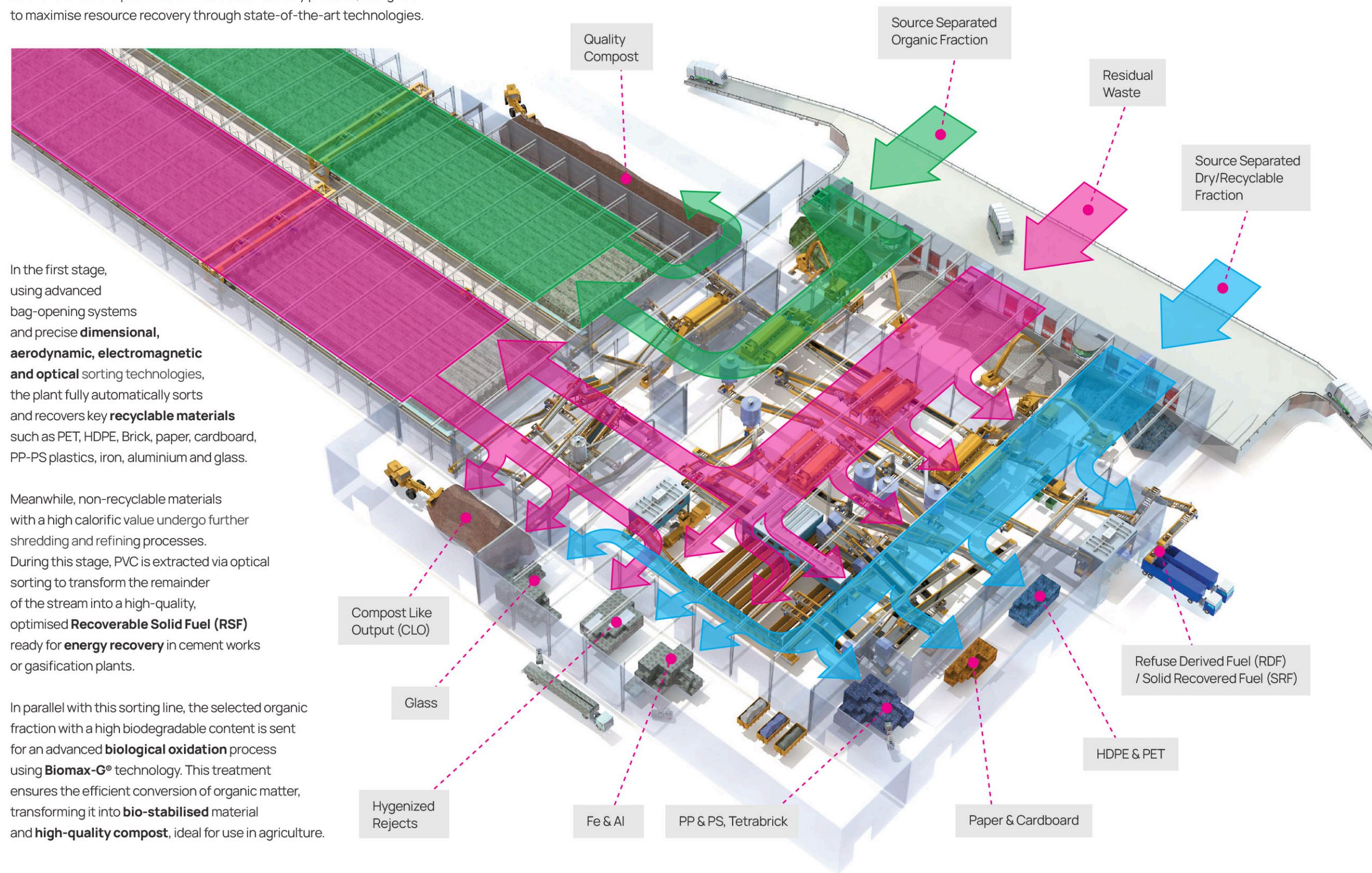
Ecoparco Sorain allows **high flexibility** to public administration to face waste collection strategies evolution and time required to citizen learning curve.



The plant receives three waste streams simultaneously: **packaging, organic waste and residual waste**, which are unloaded independently via dedicated access points. From there, hydraulic multi-arm cranes feed the waste into the treatment lines.

These lines feature an **interchangeable design** that adapts instantly to any type of waste. This allows the plant to accommodate fluctuations in volume over time without the need to modify the machinery (for example, by seamlessly managing increases in separate collection and reductions in the residual fraction).

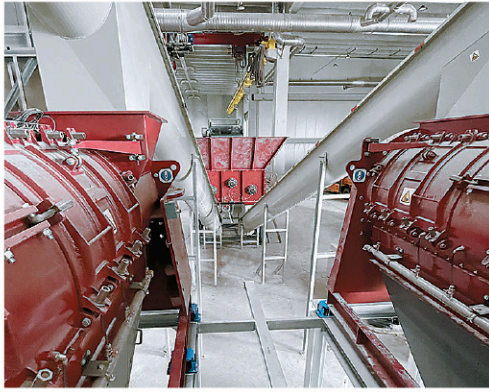
At the heart of the plant lies the resource recovery process, designed to maximise resource recovery through state-of-the-art technologies.



In the first stage, using advanced bag-opening systems and precise **dimensional, aerodynamic, electromagnetic and optical** sorting technologies, the plant fully automatically sorts and recovers key **recyclable materials** such as PET, HDPE, Brick, paper, cardboard, PP-PS plastics, iron, aluminium and glass.

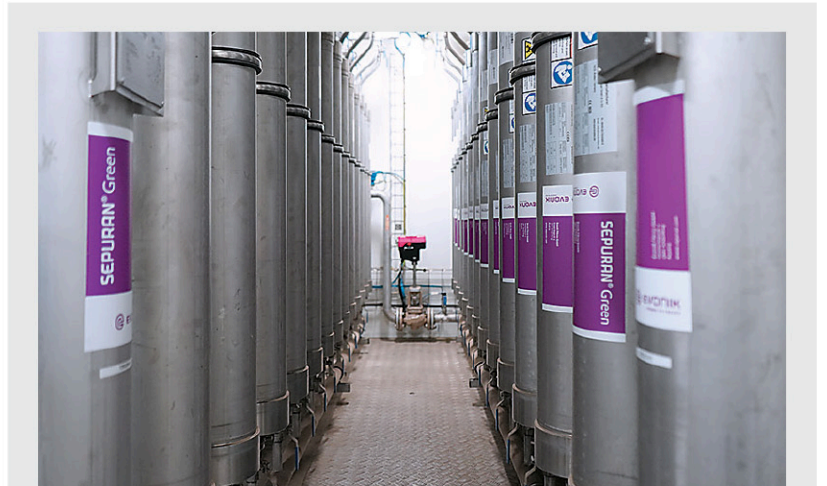
Meanwhile, non-recyclable materials with a high calorific value undergo further shredding and refining processes. During this stage, PVC is extracted via optical sorting to transform the remainder of the stream into a high-quality, optimised **Recoverable Solid Fuel (RSF)** ready for **energy recovery** in cement works or gasification plants.

In parallel with this sorting line, the selected organic fraction with a high biodegradable content is sent for an advanced **biological oxidation** process using **Biomax-G®** technology. This treatment ensures the efficient conversion of organic matter, transforming it into **bio-stabilised** material and **high-quality compost**, ideal for use in agriculture.



Thanks to **Sorain Biomethane** (joint venture with Waste To Methane) solution both biowaste and residual/mixed waste can be separately anaerobic digested before composting/biostabilization.

Resulting biogas is cleaned and up-graded before injection into the local methane network.



Injection into the local methane network