

A second life for carton packages

Ecuaplastic S.C.





Tetra Pak works closely with Ecuaplastic S.C., the main recycler of polyAL (polymer and aluminium) in Ecuador, and together they have significantly advanced circularity in the country.

Ecuador is a country of natural riches and a growing economy, but as industrial activity intensifies, so do calls for a transition to a circular economy. Federal initiatives and regulations have been initiated, but the road ahead is still long.

Fortunately, a bottom-up approach from several businesses like Ecuaplastic is helping push the boundaries. Ecuaplastic is a local plastic and rubber product manufacturer. In 2011, the company entered a partnership with Tetra Pak with a shared ambition to advance the recycling value chain in Ecuador.

A strong partnership.

Ecuaplastic gives carton packages from Tetra Pak a second life by transforming polyAl (polymer and aluminium from cartons) from the inner side of the used cartons into high quality boards, roof tiles and siding for buildings as well as a fibre-like material used for furniture, household goods and even jewellery.

Before the partnership, Ecuaplastic was already producing products from recycled material, although at a smaller scale than today. Seeking a partner for developing solutions to reduce the environmental impact of its carton packaging, Tetra Pak invited Ecuaplastic to enter a cooperation. Tetra Pak then invested in the company and helped to install the technology needed to transform polyAl.



“ We work as a team through a management system of clean and sustainable processes with total respect for the environment ”

Edgar Mora Figueroa

*Mechanical Engineer
and General Manager, Ecuaplastic*





Looking for more polyAl.

Today the demand for environmentally sound, socially responsible polyAl products in Ecuador is very high. In fact, Ecuaplástico is constantly looking to import polyAl from other countries as the current collection of 30 percent post-consumption packages is not enough. Currently, Ecuaplástico recycles 150 tonnes of polyAl each month, which helps reduce 1509 tonnes of CO₂ monthly, but the goal is to handle 400 tonnes of waste each month.

Ecuaplástico and Tetra Pak have a close ongoing dialogue on how to collect more polyAl. The two companies also work together to demonstrate and promote the recycling of packaging materials, organising visits from customers, consumers and students.

“ With Ecuaplástico we have been able to make visible, not only locally, but also outside the country, the recyclability of our packages and the high-quality materials that can be achieved with polyAl ”

Hedda Naranjo

Sustainability Manager,
Tetra Pak Ecuador



“ Tetra Pak has been a very assertive partner since its concern for the environment aligns with our missions and goals. We have seen their efforts on becoming a responsible company and how they put a lot of emphasis on the environment. They have facilitated several processes thanks to their worldwide network and company size ”

Edgar Mora Figueroa

Mechanical Engineer and
General Manager, Ecuaplastic

The following processes is required to produce polyAl tiles and boards:



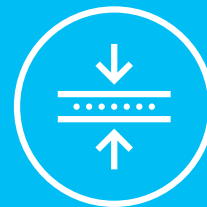
1. polyAl
extracted from
carton packages



2. cleaning and
drying



3. grinding



4. thermo
compression



5. tile and board
Conformation



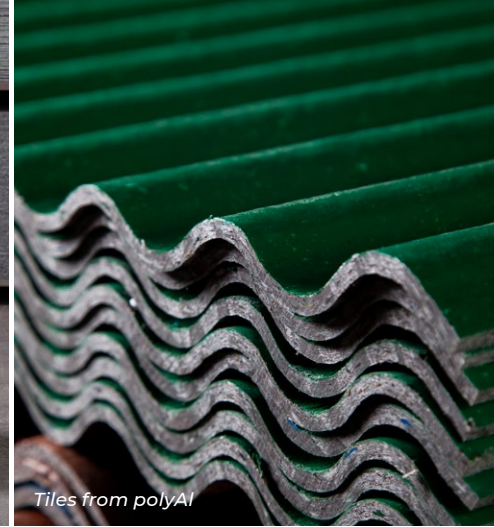
6. cutting

New high-quality products.

The polyAl that Ecuaplastic works with comes from different papermills, who get the collected carton packages and separate the paper fibres and polyAl for recycling. After they receive it, Ecuaplastic cleans and dries the polyAl before pounding and thermocompression set in. Then tile and board conformation start and in the end the materials are cut and made into new high-quality, lightweight, flexible and waterproof polyAl products – and in some cases into a full building, with walls and roof made of polyAl.



Chair woven with polyAl yarn



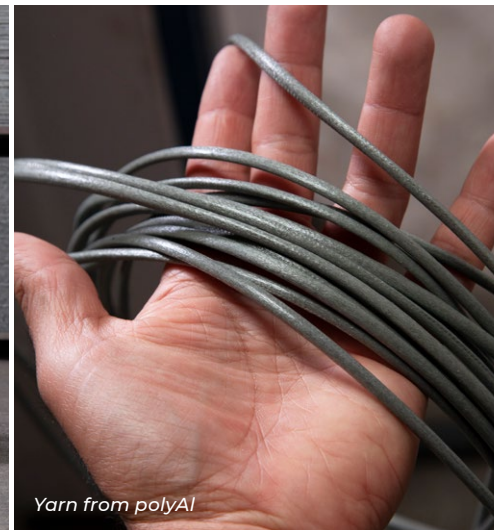
Tiles from polyAl



Yarn from polyAl



Chair from polyAl



Yarn from polyAl



Furniture from polyAl

“ Not only are our products made from plastic waste, they also follow strict quality standards and are cleaned without chemic procedures and have the ability to be pounded and reused again making them 100% recyclable ”

Hedda Naranjo

Sustainability Manager,
Tetra Pak Ecuador



Our goal is to be able to recycle 400 tonnes of waste monthly



Facts

Qualities of polyAl products:

- Thermoacoustic
- Lightweight
- Thermoformable
- Self-extinguishing
- Flexible
- Waterproof
- Fungus and bacteria resistant
- 20-year guarantee

Ecuaplastic S.C. today monthly manages:

- PolyAl 150 tonnes
- Polyethylene 100 tonnes
- Laminates 10 tonnes
- ABS 10 tonnes
- Polypropylene 10 tonnes

