

Factsheet of the CCH CircularPET plant in Gaglianico, Italy

The **CCH CircularPET plant in Gaglianico** is a hub of excellence in innovation and environmental sustainability, with pioneer technologies in Europe. It has been converted from a disused bottling plant into an advanced recycled PET processing plant, a milestone in Coca-Cola HBC's long-term sustainability strategy. With more than **30 Million euros**, the largest investment in sustainability in the Group's history, the Gaglianico facility is now an innovative plant that can transform up to **30,000 tons of PET** every year into new **100% recycled PET (rPET) bottles** destined to cover the company's soft drinks bottling needs in Italy.

PLANT STRUCTURE

TOTAL AREA: 18,000 sq. m. organized in:

- **PRODUCTION AREA:** 6.000 sq. m.
- **STORAGE AREA:** 12.000 sq. m.

The production area is divided into 3 distinct sub-areas:

AREA 1

This is the area where the **Hot Washed Flakes (HWF)** arrive in the form of flakes of recycled PET not yet ready for food contact.

In this area, the bags of HWF are unloaded and, by an overhead crane, are discharged inside 2 hoppers (*downloading stations*) that then send the flakes to the sorting stage (*flakes sorters*) to remove any impurities from the material.

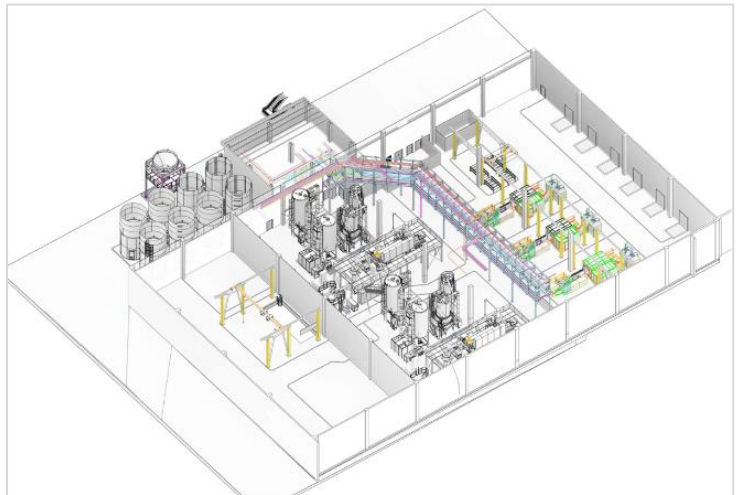
Next, the flakes are stored in 5 *silos* that have a capacity of about 80 cubic meters each.

AREA 2

In this area, the plastic is made suitable for food contact.

Here, 2 *decontamination reactors* melt the flakes and remove all potentially present pollutants through a filtration and vacuum process.

Next, an *extruder* turns the plastic into long strands that are cut into small fragments (**pellets of resin**) and sent to 3 more storage silos of 80 cubic meters each.



AREA 3

This is the area where preforms are produced.

There are 3 injection presses in the area:

- 1 500-ton press with 128 cavities
- 2 400-ton presses with 96 cavities

The 3 presses, through special molds, produce **9 types of preforms** and cover all the needs of Coca-Cola HBC Italy.

PRODUCTION

NO. OF PRODUCTION LINES

- 2 flake decontamination reactors
- 3 preform injection presses

As of July 2022, production is on a 24/7 continuous cycle. When fully operational, the plant has a **maximum production potential of 30,000 tons/year of rPET**.

The plant is **100% powered by electricity from renewable sources** and carries out **4,700 quality checks per day**.

FORMATS PRODUCED

The plant can produce **9 types of preforms**, both for sparkling and flat drinks, in the following formats (*from left to right in the picture*): FuzeTea (iced tea) 400 ml, Powerade (isotonic drink) 500 ml, sparkling drinks 450 ml, sparkling drinks 660 ml, sparkling drinks 1 lt, sparkling drinks 1.35/1.5 lt, sparkling drinks 1.75 lt, FuzeTea 1.25 lt, sparkling drinks 2 lt.



EMPLOYEES

The plant **will employ 41 people**. Most of the resources hired at the plant were selected with the support of the Agenzia Piemonte Lavoro, with the aim of promoting employment in the local area.

INVESTMENTS

The **31 million Euros investment** for the reopening of the production plant is the largest investment in sustainability in the history of the Coca-Cola HBC Group, and is split as follows:

- **4 million Euros** on infrastructure (mainly building works, electrical part and fire-fighting system);
- **27 million Euros** in machinery, such as resin production machines, presses and molds, IT systems.

GLOSSARY

- **Overhead crane:** type of crane (also called "bridge crane") that combines three straight movements along three perpendicular axes: it consists of a hoisting organ installed on a trolley sliding along one or more rails made in a structure (bridge) that can slide on rails in a direction perpendicular to the motion of the trolley.
- **Extruder:** an instrument that performs extrusion, that is the transformation of plastic by heating to obtain the correct technical characteristics of the material, which is then injected into the appropriate molds to shape preforms.
- **Hot washed flakes:** recycled PET flakes, not yet suitable for food contact, are the raw material needed to produce rPET bottles.
- **PET:** the polyethylene terephthalate, better known as PET, is a thermoplastic resin widely used in the food, mechanical, electrical, and chemical industries. PET products are particularly used in the food industry to hold liquids or solid foods because its characteristics make it suitable for food contact. PET plastic is a 100% recyclable material many times over, and it does not lose its basic properties during the recovery process. By properly recycling a PET bottle, in fact, it can become a bottle again, reducing the need to produce additional plastic material.
- **Preform:** Preform is the PET bottle (virgin or recycled) before blow molding that gives it the shape by which it is commonly known. Recycled PET preforms, compared to virgin PET preforms, are darker and more opaque.
- **Injection press:** machinery that enables injection molding, which is the industrial production process in which a plastic material is melted (plasticized) and injected at high pressure inside a closed mold, which is opened after the product solidifies.
- **Decontamination reactor:** is the machinery that makes recycled PET suitable for food contact again. By controlling critical process parameters such as temperature, contact

time and vacuum effect, the plastic is decontaminated of contaminants such as volatile compounds.

- **Resin pellets:** small pieces of PET/rPET that have been made suitable for food contact through decontamination process. They are made into preforms by the injection press.
- **rPET:** recycled PET.
- **Silos:** constructions similar to cylindrical or prismatic towers designed for the storage of materials, mostly located in ports, railway junctions, places of production or processing plants.
- **Hopper:** machinery used to facilitate the discharge, by gravity, of melted, powdered, or small lump materials. In its simplest form it is a vessel shaped like a truncated pyramid or cone, with a smaller base at the bottom fitted with an opening closed by a hatch.