

The Porto Protocol

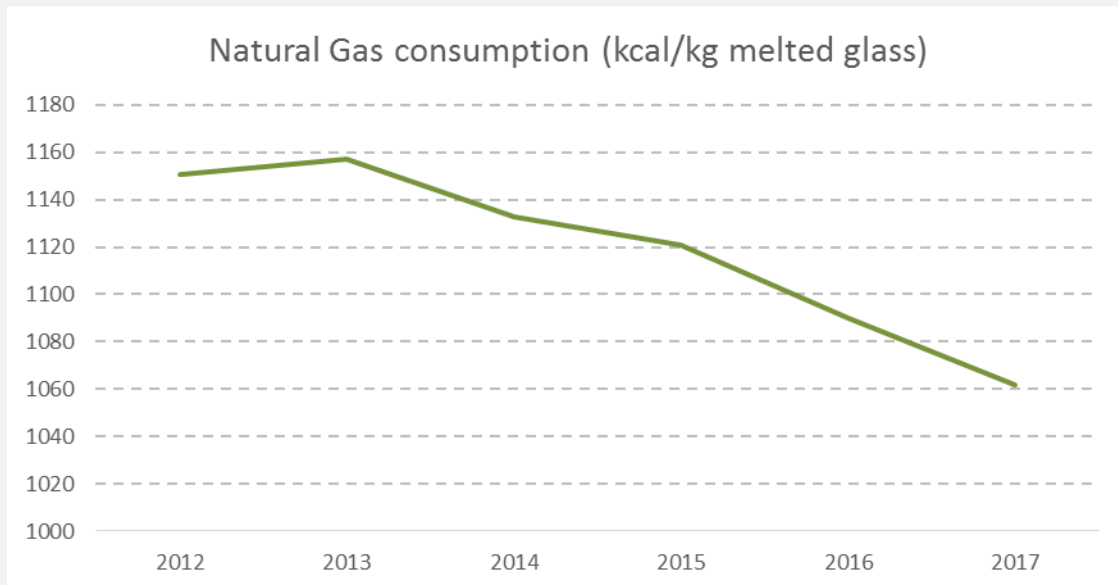
More than just a commitment.

Case Study

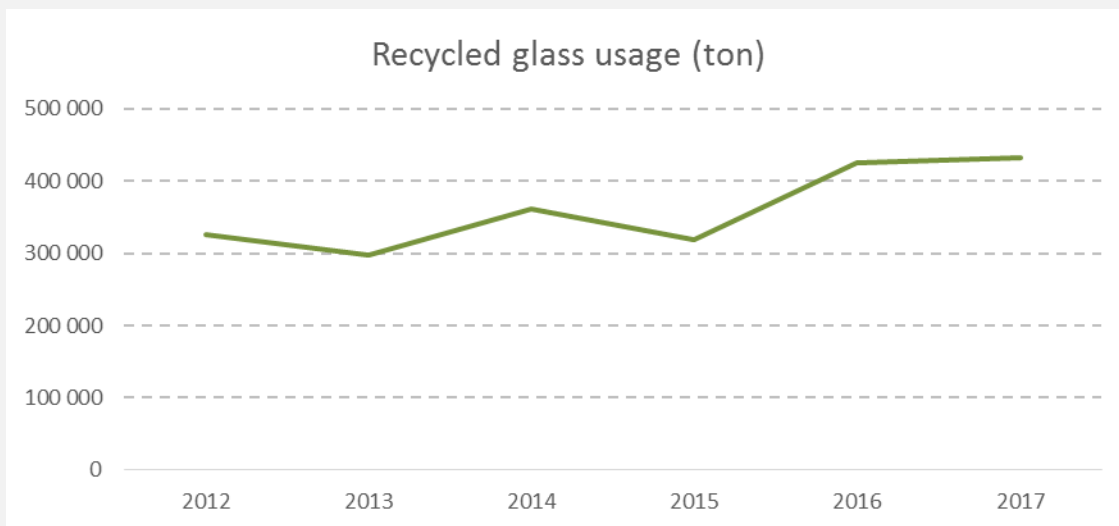
BA Glass - Energy efficiency improvements and CO2 emissions reduction

The glass packaging production starts with the melting of its raw materials, mainly sand, soda ash, limestone and recycled glass (cullet). In this production process, the CO2 emissions result mainly from the combustion of the Natural Gas needed to melt the raw materials and from the soda ash melting losses in the form of CO2.

The glass production is an intensive consumer of energy, mainly natural gas, and BA has a clear goal to continuously decrease its consumption. BA has made several investments in its facilities, applying the best available technologies and implementing and improving monitoring systems, making them progressively more effective and efficient. In the recent furnace rebuilds, the Group has accomplished reductions of over 15% in the furnaces operation consumption. Over the last years, the BA Group Natural Gas consumption efficiency has increased by more than 7,5%, not considering the last acquisitions in 2017, saving over 370 000 Mwh in the last 5 years, the equivalent to the yearly consumption of a small city with 80 000 inhabitants.



The use of recycled glass (cullet) in glass production has a strong environmental impact, as besides enabling the decrease in the deposition of waste in landfills and in the extraction of natural resources, the use of cullet reduces the energy consumption of the furnaces (cullet melts at a lower temperature than the raw materials) and the CO2 emissions, both due to lower natural gas consumption and lower use of the soda ash as raw material. The increase of cullet consumption is a permanent goal for the company and is demonstrated by the increase of the volume of recycled glass in its furnaces.



To guarantee the quality of the recycled glass used as raw material, the group has largely invested in the best technologies in its cullet treatment facilities, to clean used glass and convert it in a raw material with extreme quality. Every single year more than more 340 000 ton of waste don't go to landfill. The facilities capability of separating flint glass from colored glass allows the use of recycled material in the production of flint bottles, something that was not possible to do some years ago.

As a result of the continuous improvement of natural gas consumption efficiency and the consistent utilization of cullet in the melting process, BA has been able to continuously reduce the CO₂ emissions in its production process, saving over 85 000 ton of CO₂ emissions in the last 5 years, the equivalent to the yearly emissions of over 20 000 cars.

