

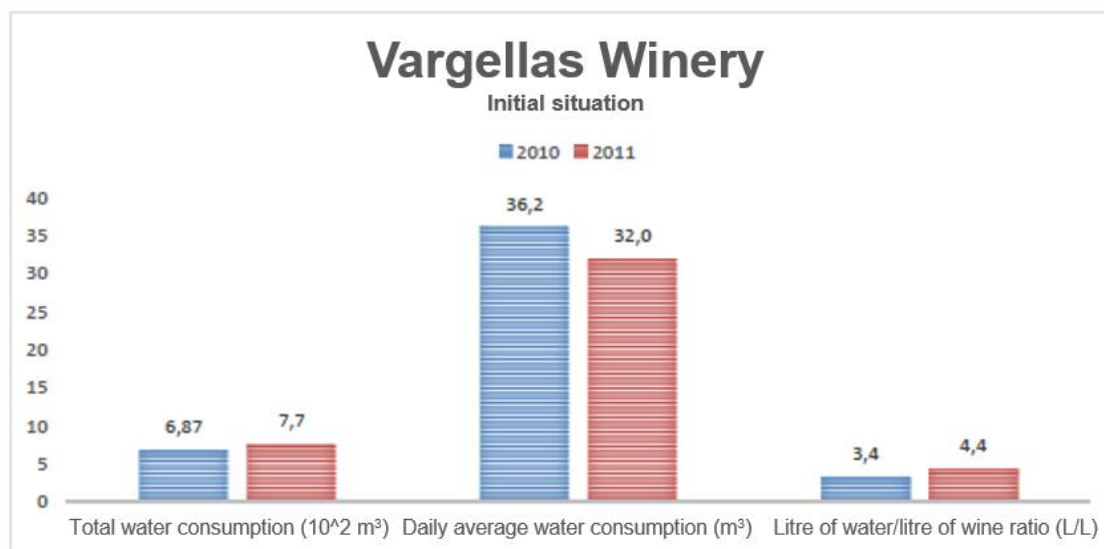
The Porto Protocol

More than just a commitment.

Case Study

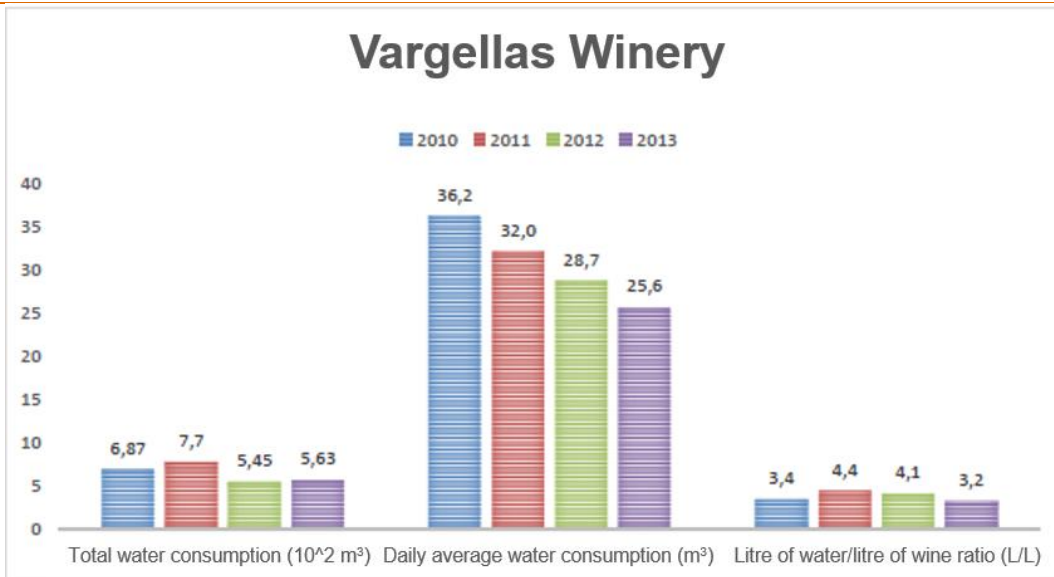
Taylor's - Reduction Measures of Water Consumption

In the early 2010s, the Adega de Vargellas had a disproportionate water consumption to winemaking reality. At that time, the reception and winemaking equipment as its storage capacity did not respond to requirements, which was reflected in an higher water consumption than what was expected. The pipelines that provided masses to mills were made of stainless (AISI316) with 110 mm diameter. There existed approximately 150 meters of pipelines that supply closed and open fermentation tanks.



In order to deal with inadequate consumption, during the years 2012 and 2013, measures to reduce water consumption taken, namely training of all permanent and temporary employees to adopt rationalization and consumption good practices.

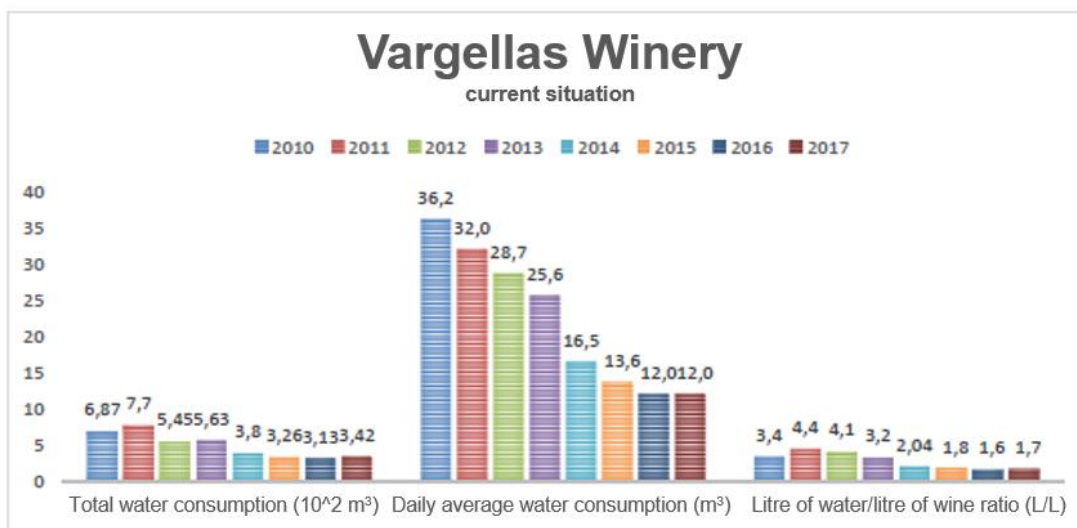
Given the identification of filling and washing hoses as a point of great losses of water, taps/pressure guns placed on the end of all hoses and purchased squeegees for floor washing. These measures resulted in a reduction on the daily consumption average (m³ / day) and in the litre ratio of water per litre of wine produced (L/L) compared to previous years. However, these results were far face to the satisfactory results for the Cellar.



In this way, in 2014, the receipt of grapes and equipment refurbished and all mass pipelines were adapted to the winemaking Cellar reality.

The pipelines reduced to 1/3 of the length (reduction from 145 meters to 50 meters) and the diameter reduced from 100mm to 76mm. This measure enabled a reduction of 91 m³ of water per vintage, approximately.

In addition to the alteration of the mass pipes, a washing machine was acquired with water recirculation (which did not operate with running water) and the refrigeration circuit of the whole cellar was adjusted, as well as the stainless steel capacity and the necessary wooden vessel to the vintage.



Through its commitment to reducing water consumption and implementing a set of measures as of 2011, Adega de Vargellas achieves excellent performances that are reflected in:

- Decrease of the total consumption of water during the vintage by close to 50;
- Decrease of the daily average consumption around to 66%;
- Decrease of the litre of water per litre of wine produced ratio approximately to 63%.

The experience and the good results achieved at Adega de Vargellas enabled the replication of the measures in another Cellars, namely at Adega da Roêda, Panascal and Nogueira during the 2014-2018 term.