

## VI. Social and environmental responsibility

Grendene's 'Sustainable Development Journey' (*Jornada do Desenvolvimento Sustentável*) embraces various areas for learning, and discoveries related to behavior and attitudes that can have a positive or negative affect on certain indicators. This program is at the stage of in-depth experiment and analysis for decision on best ways forward.

One of the principal actions that has changed Grendene employees' behavior and attitude for the better is the social-environmental program called *Prato Limpo* ('*Clean Plate*'). It aims to reduce waste, while giving employees useful knowledge that can be replicated in their homes and personal life. This program resulted in a reduction of food waste, in 2017 alone, of 241.5 tons, for a workforce of approximately 17,000 employees. It was this program that won us our prize in the *Expressão de Ecologia* Awards.



Our focus continues to be on reducing waste, optimization and awareness of the availability and realistic use of resources (raw materials, equipment, energy, water), thought, and action in relation to the recyclability of wastes and the quality of processes.

Another important objective is to include and involve our employees and their local society in this context, in the areas where our operations are located, as a further component of sustainable development.

We continue to direct special attention to water consumption, energy consumption, and generation of wastes, in general. The actions that we take have not only reduced costs and operational risks but also lowered environmental impacts. Here are some of our results:

In 2017, we achieved a reduction of 11.6% in the amount of water consumed, per pair of footwear produced.

**Water consumption:** Our industrial operations are in an arid region, which strengthens our efforts to increase availability of water – and reduce our water-consumption footprint.

- a. After treatment of effluents, in 2017 we re-used 53,289m3 of water, or 73% of the total flow in the year.
- b. We currently have one of the lowest water-consumption footprints in footwear production.
- c. Our water consumption is approximately 75% for human use.
- d. We have a target of re-using 100% of treated effluents by 2020 in other words, zero effluent disposal.

This shows the result for our drinking water consumption indicator:

	2015	2016	2017	Change % 2016–17
Water consumption (liters / pair)	1.57	1.55	1.37	(11.6%)
Water consumption (thousand m³)	259.4	252.9	231.3	(8.5%)

In 2017 our energy consumption per pair produced increased by 4.1%.

**Energy efficiency** – We are aiming to reduce energy consumption per pair produced, and related carbon emission equivalent. However, due to the increase in complexity of some products (which depends on the product mix offered) we increased our consumption by 6.7 million kWh in the year. In spite of this, with actions to raise awareness with our daily energy efficiency indicator (targets for managers), and projects for automation and improvement in equipment, in 2017 we were able to eliminate consumption of 3.7 million kWh which would have been consumed if we had produced pairs of the same complexity with the consumption patterns of the previous year.

- a. We have invested in energy efficiency since 2012, with actions ranging from replacement of motors to installment of LED lighting. Over this period our energy efficiency actions have reduced electricity consumption per pair of footwear produced by 7.8%.
- b. 85% of the energy supplied to our production plant originates from renewable sources and has low or zero carbon emission equivalent.

Consumption of electricity	2015	2016	Reduction by efficiency	Increase in consumption	2017	Change % 2016–17
Million kWh	106.8	99.0	(3.7)	6.7	106.6	7.7%
kWh per pair	0.587	0.604	-	-	0.629	4.1%



In 2017 our waste generation per pair produced increased by 4%.

## Waste management

Usually we recycle 92% of the waste produced: 97% is directly used, and 3% undergoes some other process before being re-used. Amount of waste created per pair was exacerbated in 2017 by the increased complexity of some products (which would be a consequence of the product mix offered).

On the other hand we took some important measures to reduce waste: increased recycling of EVA (a plastic material); increased recycling of dye sludge; and inclusion of new technologies avoiding generating waste at source – these were responsible for reduction of waste by approximately 76,356kg.

This table shows the indicator of waste generated per pair, and total figures:

	2015	2016	2017	Change % 2016-17
Wastes (grams / pair)	10.67	8.92	9.28	4.0%
Reduction of wastes (million kg)	1.8	1.5	1.6	6.7%

In 2017 we had 24 social-environmental audits in our manufacturing plants – carried out by clients, both international and Brazilian. We were approved and certified in all of them.



In 2017, as a result of all the actions and the care that we take with the environment, Grendene obtained **Re-certification from ABVTEX** (the Brazilian Textile Retail Association) – it is the first footwear company to receive this certificate.

The certificate is to enable the retail sector to certify and monitor its suppliers in relation to practices of environmental and social responsibility, and employment relations.