

VI. Social and environmental responsibility

Grendene's sustainable development program (*Jornada do Desenvolvimento Sustentável*) relates to 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 experiments and analyses for decision on the best was forward.

One of the main initiatives in relation to behavior, which has made a positive change in the behavior and attitude of Grendene employees, is the social-environmental program called *Prato Limpo* (*Clean Plate*). This educational program has been in place for three years at the end of 2018. It has aimed to reduce waste and show employees how useful knowledge can be replicated in their homes and personal life.

The combat of food waste and loss is a humanitarian initiative that is useful worldwide. It was included in the 2030 Agenda through the UN's *Sustainable Development Goal* (SDG) No. 12, which raises the challenge of reducing per capita food waste worldwide by half. In Grendene this recommendation was achieved, and exceeded, with a reduction of more than 70% in waste since the *Prato Limpo* program began in 2015.

In 2018 we achieved a further 4% reduction in food waste: we have achieved a wastage reduction of 10.51 grams/meal. The concept of complete use of food substances was also introduced. This aims to result in meals with a higher nutritional value and less waste, which employees can replicate in their homes. For 2019 we are preparing further awareness and educational initiatives for employees with the target of a waste quotient of 8 grams/meal.

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 reuse of wastes via recycling, and the quality of processes.

Another important objective is empowerment and inclusion for our employees and their local social 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:

Energy Efficiency

– We continued our permanent quest for reduction of electricity consumption per pair of shoes produced:

In 2018 we succeeded in reducing this index by 3.7%: this avoided consumption of 3.1 million kWh, and represented a reduction of 1,753.80 tons of CO₂ equivalent.

Cost of electricity	2016	2017	2018	Change % 2017–2018
Million kWh	99.0	106.6	105.0	(1.5%)
kWh per pair	0.604	0.629	0.606	(3.7%)

In 2018 we made progress on our project for LED lighting in our plants, and updated our temperature control technology in heating chambers and ovens, improving our energy performance.

In June 2018 one of Brazil's largest photovoltaic solar energy generation plants for self-consumption came into operation in Sobral, with peak installed capacity of 1.137 MWh. It produced approximately 1.2 million kWh, avoiding emission of CO₂ equivalent according to international parameters.

Also, by use of energy bought from renewable sources, we reduced emission of CO₂ equivalent; and we also received a certificate of this reduction of emissions.

Waste management: In 2018 we recycled 92% of the waste produced: of this, 97% is directly used, and 3% undergoes some other process before being re-used.

In 2018 our use of new manufacturing technologies, including innovation and systematic adoption of leaner manufacturing methods, resulted in lower consumption of materials and more efficient use of raw materials and

inputs in production, which also reduced generation of wastes. The organization has a *Solid Wastes Management Program* (PGRS), which monitors and controls identification, separation, storage and transport of hazardous and non-hazardous wastes.

In 2018 we reduced generation of wastes per pair produced by 10.9% from 2017 – this means we reduced creation of wastes by 174,536.62 kg.

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

	2016	2017	2018	Change, % 2017–2018
Waste (grams / pair)	8.92	9.28	8.27	(10.9%)

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.

- We re-used 81,102 m³ of water, corresponding to 44% of all effluent treated. The re-used water is currently employed in toilet flushing, and for irrigation of the whole of the Company's green area and gardens.
- We currently have one of the lowest water-consumption footprints in footwear production.
- Our water consumption is approximately 75% for human use.
- We have a target of re-using 100% of treated effluents by 2020 – in other words, zero effluent disposal.

Our project for **Re-use of Industrial Effluents in Industry – Reduction of Consumption of Drinking Water** won the 25th **Brazilian Ecology Expression (Expressão de Ecologia) Award**. This is the biggest and longest-established environmental award in the South of Brazil: a total of 2,643 cases were inscribed by leading companies, NGOs, prefectures and other entities of the region during these last 25 years.

In 2018 our consumption of water per pair produced was increased by 2.9%, due to programmed maintenance on refrigeration systems, new works and some refurbishment. In 2019 our efforts will concentrate on completion of implementation and re-use of effluents, increase water efficiency in processes, and combat of waste.

This shows the results for our drinking water consumption indicator:

Water consumption	2016	2017	2018	Change % 2017–2018
Thousand m ³	252.9	231.3	244.8	5.8%
Liters per pair	1.55	1.37	1.41	2.9%

Education initiatives inside and outside the Company

Grendene seeks to reduce environmental impacts in the communities living around its manufacturing plants, by promoting sustainable development education initiatives. We use education for selective waste collection as a simple basic approach which has a structuring and didactic effect in applying fundamental concepts of citizenship and sustainability. In 2018, at the Sobral Unit, we promoted selective collection at the Raimundo Pimentel Gomes municipal public school, with direct participation by 360 pupils in the 3rd and 4th grades, and total participation by 780 children aged 7 to 11. This is a permanent program – the school maintains it, with support and monitoring by Grendene through periodic visits and quantities of waste sent for recycling. For 2019 we plan to replicate this action for all of Grendene's units, and also for other public schools.

Sustainable Development audits and certifications

In 2018 we had 19 social, environmental and work safety audits in our manufacturing plants, carried out by both international and Brazilian clients. We were approved and certified in all of them.



The *Brazilian Textile Retail Association (ABVTEX)* is a sector effort led by fashion retailers to establish good practices in the supply chain, and to foster a sustainable environment, compliant with dignified working conditions. In 2018, as a result of all the initiatives and care that we implement in relation to the environment, Grendene received ABVTEX Recertification – for the fifth year running – reaffirming Grendene's commitment to ethics and sustainable development. This seal qualifies the Company to provide its products to



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signatory retailers in the program, and makes possible further market opening, since this certification is recognized as a credential of sustainability best practices.