# **SUSTAINABILITY**

## **STATEMENT**

The Group is aware of the importance of the sustainability of its actions on social, environment and people. Through sustainable manufacturing practices, the Group strives to develop and bring to market products and solutions in supporting the construction sector to deliver a low energy and sustainable built environment.

### **Economic and Social Sustainability**

The product that the Group manufactures provides thermal and acoustic insulation benefits. In Malaysia, over 30% of energy is consumed by buildings to cool down human occupied spaces. Ecowool, or generally known as glasswool/ fibre glass, can retard heat flow when installed on building envelopes and thereby reducing the need to use energy.

Another common application of Ecowool is air-conditioning ducts commonly seen in commercial buildings, such as shopping malls, offices and hospitals. In hot tropical countries like Malaysia, cool air is generated to cool down spaces for thermal comfort. Air-conditioning ductwork are used as a medium to transfer cool air from chiller or compressors to intended destination. Along the ductwork, heat gain happens and if not properly insulated, more energy is required for cooling. Effective thermal insulation of the ductwork reduces this heat gain and helps minimize energy usage.

On the national level, the Group supports the nation's energy efficiency agenda through educating policy makers and general public on the need for better passive insulation of Malaysian buildings. The Group, either individually or through the Malaysian Insulation Manufacturers Group under the Federation of Malaysian Manufacturers (FMM), contributes actively towards this end. An annual budget of MYR 100,000 is allocated every year to this end. The Group has also provided free insulation to non-profit organization to improve occupants comfort and raise awareness of energy efficiency.

Safety is crucial in any manufacturing plant. The same applies to the Group. All personnel on production lines are provided with adequate protective equipment. New workers are given training on safety procedures in general and specifically on their workstations. Refresher trainings are also provided for experienced personnel. In FY20, a total of 28 safety trainings were conducted relating to fire fighting, ergonomics and noise exposure, chemical handling and forklift driving. However, despite the effort, two safety incidents in the glass wool manufacturing plant were reported in FY20. The Group will continue to put the necessary measures in place to achieve our target of zero safety incident in the plant.

#### **Environmental Sustainability**

In the glass wool manufacturing process, a significant amount of energy is used. The main two sources of energy that the manufacturing plant is consuming are natural gas and electricity drawn from the grid. The Group acknowledges the cost and environmental impact in consuming energy and makes conscious effort to reduce energy consumption.

Since 2017, the Group has started collection of industrial glass waste from sheet glass fabricators and solar panel companies surrounding the plant to be used as raw material. These glass waste would otherwise been sent to landfill. Use of recycled glass instead of silica sand also translates to lower use of energy to melt the same quantity of silica sand. In FY2019, 100% of silica content is drawn out of recycled glass.

The following table summarizes the metrics that the Group monitors in relation to environmental sustainability:

Metrics	FY18 Index	FY19 Index	FY20 Index
Quantity of waste products send to landfill per MT of Good Product			
Output (MT/MT)	100	71	67
Unit Consumption of Energy per kg Good Product Output (kWH/kg)	100	84	89
Unit Consumption of potable water in Liter per kg of Good Product			
Output (L/kg)	100	111	104

The metrics are presented in index form with reference to FY18 as a baseline to protect sensitive information. The goal is to have reduction from year to year. The Process Water Recycling project was tested and commissioned in January 2020. During normal operation, the process water was used 100% in the binder mix as make-up water where previously city water supply was used. This project has contributed to a drop in potable water unit consumption. We are also reducing the load to our Waste Water Treatment Plant (WWTP) with the implementation of this project. In turn, this has reduced our chemical consumption used to treat the process water. Once the project is fully operational, the WWTP will be decommissioned with the approval from DOE.



#### **Environmental Sustainability (CONT'D)**

The Group has decided to embark on solar power project to be installed on the buildings in Perai to reduce electricity usage from the grid. Agreement is being finalized at the time when this report is written. The solar power project is expected to come online in the second half of FY2021.

The Group monitors the emission created by the manufacturing process every year and below are the metrics as per requirements by Malaysian Department of Environment.

Emission	Limit set by DOE	FY18 Results	FY19 Results	FY20 Results
Sulphur Oxides (SOX)	< 800 mg/m³	Met	Met	Met
Nitrous Oxides (NOX)	< 800 mg/m <sup>3</sup>	Met	Met	Met
Total Particulate Matters	< 50 mg/m <sup>3</sup>	Met	Met	Met

Within the working environment, in the face of growing demand for energy and depleting natural resources, employees are encouraged to reduce the use of paper, recycle any recyclable items and reduce wastages.

#### **Product Sustainability**

Fibre glass is made of primarily silica, an inorganic substance that can only melt but does not combust/ burn. The product can pass BS 476: Part 4 (Non-combustibility test for materials), a widely used fire testing standard for building material. No fire-retardant chemical is added to the product. This is crucial in the face of increasing use of insulation materials that do not pass fire safety standards that led to unfortunate fire incidents like the Employee Provident Fund building fire in Petaling Jaya, Toh Guan Building in Singapore and Grenfell Tower in London.

On top of that, fiber glass can last as long as the life of a property when installed according to recommended method and maintained well. That is why the Company is offering a product warranty of 70 years. Please visit www.ecowool.com.my for more information.

PGF sells its products in several countries in the Asia-Pacific region. The Company is committed to ensuring the compliance to local product standards and building codes of the countries that we sell to. The Company obtained and continued to renew local product certifications of Malaysia (MS1020), Australia (AS/NZS 4859.1), New Zealand (AS/NZS 4859.1), where fibre glass product standards exist. Where fibre glass product standard does not exist locally, the Company strives to obtain industry recognized standards or test reports (mainly in British and American Standards) to demonstrate the product quality and performance.

In 2013, the Company stepped up its effort in providing sustainable product by launching its formaldehyde free range of product under the model of Brownie. With that product offering, the Company stands tall together with the other leading fibre glass manufacturing plants around the world in embracing the growing demand for sustainable insulation solution. For more information on Brownie, please visit http://www.ecowool.com.my/brownie.aspx.