Operational Review

Cane

Terra has been growing sugar cane and producing sugar since 1838 when the Harel brothers acquired the Belle Vue sugar estate in the north of Mauritius. Today we have around 6,000 hectares of agricultural land, and we operate one of the island's most modern sugar-producing factories. We also jointly manage two sugar estates and factories in Côte d'Ivoire.

Our purpose is to be a global player in growing cane and manufacturing sugar, with a particular focus on specialty sugars.

Cane business model

Value drivers	Context and outlook
Revenue driver (price)	
Market demand and pricing	
• Commodity business shaped by supply and demand dynamics in the global sugar market and local pricing determined by the Mauritius Sugar Syndicate (MSS). • Securing a price premium through the distinct offerings of specialty sugars.	• While sugar prices increased by 28% in 2022, global pricing remains volatile. Government policy is needed to adjust supply and demand dynamics and ensure vital industry support. As a relatively small global producer, Mauritius faces several market obstacles. However, Government has shown positive signs of engagement with the industry and announced better remuneration for *bagasse* in 2021. • Mauritius has specialised in manufacturing a wide range of specialty sugars that appeal to discerning customers and agro-industrial ventures requiring healthier ingredients for finished food products. The MSS markets these products and is a reference for unrefined specialty sugars. With the MSS's renewed focus on targeting households and chefs for our specialty sugars, we have a more direct and active engagement with buyers. • We maximise the value of our sugar mix by producing the right mix and concentrating on higher-value products.
Cost driver (price)	
Material cost efficiencies	
• Supply and demand of raw materials and freight costs. • Efficiency gains in our growing and milling activities.	• The cost of fertiliser remains significant, driven by an imbalance in supply and demand dynamics due to trade restrictions, geo-political tension and supply chain disruptions. This cost increase has been offset to some degree by precision fertilisation but remains a challenge. • We have adopted a predominantly defensive strategy to drive operational efficiencies in our Belle Vue and Côte d'Ivoire operations. • We benefit from state-of-the-art technology and skills in mechanising cane growing and harvesting. Digital farming enables us to increase efficiencies in the face of a reduced workforce and labour shortages. • Our highest costs relate to labour, followed by repairs and maintenance, fuel and fertilisers. We undertake activity-based costing exercises in our fields, mills, and garage to enable further optimisation. • We continue to review possible growth opportunities internationally that harness our recognised technological and process skills.

Cane (Cont'd)

Cane business model (Cont'd)

The main residual risks for the Cane cluster as at 31 December 2022 are summarised below.

	Risk	Contributing factors	Risk mitigating activities	Year on year trend
R1	Decrease in the supply of cane combined with high costs of production resulting in reductions in productivity.	Drop in cane supply is accelerated by the following: • Sharp increase in price of fertilisers. • Decline in number of small and medium planters. • Drop in area available for cultivation as a result of real estate developments by planters. • Urbanisation resulting in challenges to cultivate next to residential areas.	• Supporting small planters: - Taking initiatives to motivate the next generation of farmers. - Advising small farmers on harvesting, weeding, and transporting the cane. - Current price of sugar of MUR 25,000/tonnes for small planters to be sustained in the future. - Current scheme to support re-plantation of old fields to be accelerated in the future. • Optimising efficiency at Terragri: - Adopting new technologies for digital farming. - Adopting lean management principles. - Investing in automation of processes.	Unchanged
R2	Changing climatic conditions adversely impacting cane yield, resulting in losses.	• Increasing demand for water from other users in the water-scarce north of Mauritius. • Certain competing countries are inherently more conducive to sugar cultivation in terms of soil structure, climate, and water availability. • Drought persisting and lack of water for adequate irrigation.	• Optimising water consumption and improving use of effluents for irrigation. • Securing insurance cover (through the Sugar Insurance Fund Board). • Adopting more resistant and higher-yielding strains of cane. • Working with local authorities to increase the capacity of La Nicolière dam. • Working with local authorities on a project of using water from retention basins.	Increased
R3	Dependency on electricity and steam produced by Terragen to manufacture sugar at a reasonable cost	• Machinery breakdowns due to insufficient maintenance due to poor financial condition. • High cost of coal to supplement for *bagasse*, as and when needed. • Government strategy in respect of existing power plant.	• To increase outside stockage area for *bagasse*. • Organise night transfer of *bagasse* into internal storage, i.e. sufficient lights and shift system.	New
R4	Ageing labour force combined with a lack of interest from the new generation for manual work.	• Movement towards white-collar jobs. • Result in disruption in cultivation activities for large and small farmers, more particularly.	• Recruitment of technical skilled labours. • Succession planning exercise underway. • Graduate programmes launched. • Sponsorship programmes to be launched.	Unchanged
R5	Plant and equipment failure, resulting in disruption to operations.	• Breakdown of major equipment within the mill. • Breakdown at Terragen operations impacting the supply of electricity and steam. • Impact of freight to timely supply imported parts.	• Investing in modern plant and equipment and replacing old items as and when needed. • Increased capital expenditure for 2022 to 2024 for Terra Milling (risk should be reduced by the end of the capital expenditure plan in 2024). • Vehicle renewal plan well underway for Terragri and the risk of breakdowns somewhat reduced. • Performing regular preventive maintenance and inspections of plant and equipment by specialist consultants. • Maintaining a stock of critical spares on site.	Unchanged
R6	Fire in the mill and in the fields, resulting in disruption to operations.	• Criminal fires in sugar cane fields caused drop in yields and represent a danger to the health and safety of employees and neighbouring habitations. • Combined presence of combustibles (cane, *bagasse*, sugar) and electrical equipment at the factory.	• Important capital expenditure in 2023 in the milling factory regarding an upgrade of firefighting set-up. • Renewed anti-fire campaign *"Yes We Kann"* to prevent field fires. Only 140 hectares of cane fields burned in 2022.	Unchanged
R7	Volatile global sugar price, below the breakeven point for Mauritius	• Opening up of EU market to other players. • Surge in cost of freight and reduction in vessel availability in Mauritius.	• Shifting towards specialty sugars that command a superior margin. • Working with the Mauritius Sugar Syndicate to market the Mauritian brand, our specialty sugars and gain access to new markets. • Less volatility in overall sugar prices since 25% of the overall sugar prices is fixed (*bagasse*, molasses and bottlers contribution).	Reduced

Cane business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
People	**Terra Milling employees** 127 permanent 241 temporary **Terragri employees** 218 permanent 69 temporary	• Dedicated Health and Safety Officers at Terra Milling and Terragri. • ISO 45001 certification at Terra Milling (an international occupational health and safety standard). • Active investment in health and safety, including training, equipment, and visible management interventions. • Ongoing efforts to instil a health and safety culture among employees and contractors. • Covid-19 safety measures and procedures remain in place. • Mentoring for individual employees, underpinned by enhanced performance management. • Continued to embed our culture and engagement journey for employees, creating a culture of caring and learning.	**Total recordable incident rate (TRIR)** 14.6 (⌄21%) **Lost time incident rate (LTIR)** 13.2 (⌄25%) **Severity rate[2]** 13.2 (⌄69%)
Manufactured	Agricultural and milling equipment	• Annual maintenance and critical spares are kept in stock. • Regular inspections by consultants and equipment monitoring during operations through a computerised system (SCADA). • Fire safety and protection procedures are in place. • User access rights on operator terminals and regular server backups. Access to USB ports disabled to enhance cyber-security.	
Natural	**Land under cane cultivation (including area being prepared for plantation)** 5,086 Ha (⌃1%) **Water consumed** 6,002,260 m³ **Liquid mineral fertilisers** 55,156 T (⌃366%) **Steam from Terragen** 910,710 Gj (⌃17%) **Sugar cane milled** 687,241 T (⌄4%) **Organic fertilisers** 17,209 T (⌃19*%) **Solid fertilisers** 295 T (⌃13%) **Diesel** 1,040 m³ (⌃3%)	• Small planter advisors remain in place to motivate small-scale farmers to implement efficiency measures and assist with harvesting and transport. • Measures are in place to optimise water consumption and improve effluent utilisation for irrigation.	**Own cane harvested** 278,451 T (⌄15%) **Specialty sugar produced** 76,171 T (⌃6%) **Organic cane area planted** 58 Ha (0%) **Oil used** 13.1 m³ (⌃38%) **Vehicle tyres used** 19 T (⌃73%)

[1] Data as at 31 December 2022.

[2] Calculation methodology was updated in 2021

Cane (Cont'd)

Cane business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
Social and relationship	Quality relationships with key stakeholders, including MCIA, MSS, Terragen, planters, employees and trade union representatives, and service providers.	• Following the collective bargaining process initiated in 2021, we successfully signed a collective agreement between companies and the sugar industry trade unions in 2022. • For Terra Milling, 85% of workers remain unionised, and for Terragri, 75% of workers are unionised. • We actively engage with MSS, Business Mauritius, and Government stakeholders on the sugar industry's future. • We are assisting MSS in strengthening the branding and marketing of Mauritius' premium specialty sugars and exploring new market opportunities. • Customer visits to our facilities strengthen our relationships with them, and we are closer to our customers today than five years ago. Our major sugar buyer remains Silver Spoon.	**Employee turnover rate** **9.0% (2021: 9.2%)** **Days lost to strike action** **Nil (2021: Nil)** **Payment in taxes** **MUR 1.5 million** Strengthened relationships with employees, Government departments and customers.
Intellectual	• International certifications, including BRC, GMP, Halal and C-TPAT. • Application of HACCP Codex Alimentarius. • A registered SEDEX B member and subject to annual third-party audits on local and international labour laws; health, safety and environmental regulations; and business ethics.	• Renewal of certificates and customer second-party audits to ensure product and system safety and social and environmental compliance. • Improving efficiencies across our growing and milling operations. • New technologies and software (CanePro) enable digital/precision farming, and we introduced yield monitoring on harvesters to build yield maps, enabling better decision-making.	Continuous improvement in farming and manufacturing techniques. **Production cost (agriculture)** **MUR 19,000/T (⌃33%)** **Production cost (milling)** **MUR 8,100/T (⌃3%)** **Cane processing** **270 T/hr (⌄3%)**
Financial	**Cane cluster total equity (Jan 2022)** **MUR 6,797.8 million** **Total borrowings** **MUR 621.9 million** **Capital expenditure** **MUR 208.7 million**	• Actively manage financial performance through weekly executive meetings, monthly management meetings and regular Board meetings.	**Turnover** **MUR 1,587.1 million (⌃29%)** **Profit** **MUR 329 million (⌃212%)** **Cane cluster total equity (Dec 2022)** **MUR 8,811 million**

[1] *Data as at 31 December 2022.*

The operating context

Material issues impacting value creation	Our response
Sustaining supply from small-scale cane producers - Around 40% of our cane is produced by Terragri, with the balance produced by large (42%) and small (18%) growers. As such, we rely on a regular cane supply from independent small-scale cane producers. With the price of sugar remaining volatile and considering the difficulties securing labour, farmers are leaving the sector.	To ensure a regular flow of cane to our mill, we focus on reviving the interest of existing and prospective independent cane planters. Our team works with and advises small farmers on harvesting, weeding, and transporting the cane. We continue to work with authorities to identify opportunities to motivate the next generation of planters appropriately. We will need to mechanise in the long term, and digital farming is an essential part of this transition.
Water availability - 57% of our fields depend directly on local rainfall and are susceptible to changing weather and climate uncertainties. In 2022 we faced a third year of below-average rainfall (particularly in the second half of the year), which impacted cane yields Mauritius-wide. In terms of irrigation for the remaining 43% of our fields, we face increasing competition from other users as the economy grows in the water-scarce north of Mauritius	We continue implementing measures to optimise our water consumption and ensure better utilisation of effluents for irrigation.
Continuing volatility in global sugar prices - In 2022, global sugar prices continued to improve. In Mauritius, the price of sugar ex-MSS increased from MUR 16,765 per tonne in 2021 to MUR 21,500 per tonne in 2022. Revenue per ton of sugar increased from MUR 22,000 per tonne in 2021 to MUR 26,500 per tonne in 2022. This increase is mainly attributable to improved sugar prices.	Following the World Bank's recommendations for the sugar sector, the Government implemented better remuneration for *bagasse*. This was a major plus for our operations and the industry, reducing the impact of volatile global sugar prices on Terra. We maintain a strong focus on enhancing efficiencies across our growing and milling operations and continue to make progress in reducing production costs.
Challenging sugar trade dynamics - Sugar is a worldwide commodity and is directly linked to the cost of freight, demand and supply dynamics, and climate change. The global sugar market was profoundly affected by the European Union's abolition of sugar quotas in October 2017, which contributed to a global supply surplus and lower sugar prices. In many sugar-producing countries, such as Europe and India, producers are given subsidies. These strong protectionist measures also impact the global sugar market. Brazil, historically the largest sugar producer, mainly produces for its internal use and for ethanol production for energy, with the surplus sold onto the global market. This results in different pricing competitors to Mauritius.	With high competition for specialty sugars in European markets, we are focusing more on emerging markets such as China and India. We are working actively with the MSS to assist them in strengthening the branding and marketing of Mauritian sugar and to identify new market opportunities, particularly in our distinctive specialty sugars. We believe that the longer-term fundamentals for sugar remain strong, particularly given growing consumer demand in emerging markets and demand for healthier, unrefined sugars that command a price premium.
Structural challenges in the Mauritian sugar sector - The Mauritian sugar sector has unique features, including a highly regulated labour environment and a centralised organisation, the MSS, responsible for marketing and selling all locally-produced sugar. As the MSS controls revenue centrally, we focus on new products and reducing production costs. Given that it is challenging to mechanise on mountain flanks or small fields, our industry remains labour-intensive. The World Bank report led to improved remuneration for *bagasse*, which is a step in the right direction.	In the face of challenging global trade and pricing dynamics and considering sugar's substantial contribution to the Mauritian economy, the industry submitted a proposal for structural reform in 2020. Suggested measures to enhance local competitiveness included reviewing the current regulatory context for labour, providing better remuneration for *bagasse* (the sector's renewable energy source), and ensuring that millers receive fair returns from the Sugar Insurance Fund Board (SIFB). In 2021, the Government announced the remuneration of *bagasse* at MUR 3,300 per tonne of sugar. The Government sustained this rate in 2022.

Cane (Cont'd)

Our 2022 performance

The Cane cluster was challenged by a low cane yield in 2022. While we were expecting to produce 80,000 tonnes of specialty sugar to meet demand, we were only able to produce 76,171 tonnes. The low cane yield was due to several factors that included the 2021 crop finishing late, resulting in a shorter 2022 cane cycle; delayed fertilisation and ongoing drought that impacted sugar cane growth.

The poor climatic conditions and low rainfall further impacted replantation volumes. We were only able to plant 352 hectares of cane versus our planned 463 hectares as our fields were without irrigation (due to Government restrictions) or rainwater for several months. The cost of fertilisers, herbicides, and spare parts remains significant. Fortunately, freight and shipping costs normalised, and the cost of raw materials improved; however, long lead times remain a challenge.

Despite these difficulties, the Cane cluster achieved a record performance in 2022, posting profits of MUR 329 million compared to MUR 105.3 million in 2021. This result was driven by tighter cost control and ongoing efforts to drive efficiency, coupled with improved global sugar prices and fair remuneration of *bagasse*. The cluster's strong performance was further supported by improved harvesting efficiency and a much better extraction rate, aided by our investments in digitalisation, automation, and lean management over the years.

Following the collective bargaining process initiated in 2021, the Cane cluster successfully signed Mauritius' first collective agreement between companies and the sugar industry trade unions in 2022. This was a significant highlight for the year, and we believe the negotiations resulted in a fair and positive outcome for all parties. Read more about this on page 74.

For the 2022 crop, Terra Milling processed 687,241 tonnes of cane (2021: 718,969 tonnes). This resulted in 41,120 tonnes of sugar accruing to the Group (2021: 41,540), with 16,902 tonnes attributable to milling operations (2021: 15,815) and 24,218 tonnes to growing operations (2021: 25,725). Terra Milling produced 75,958 tonnes *tel quel* of raw sugar (2021: 71,952) and 76,171 tonnes of specialty sugars (2021: 71,760). The average sucrose content stood at 12.62% (2021: 11.61%). On the growing operations side, the extraction rate stood at 11.17% (2021: 10.01%) with an average yield of 7.04 tonnes of sugar per hectare (2021: 7.14 tonnes).

As mentioned in last year's report, we sadly lost our Terra Milling factory manager, Ajay Parsan, in 2021. We are pleased to announce the recruitment of Didier Ramsamy as our new factory manager, who joined us in August 2022. He has vast experience in the sugar manufacturing industry having spent many years in sugar factories in Africa.

Mauritius: driving efficiency and innovation

We invested MUR 70 million in 2022 in machinery renewal and automation projects as part of our investment plan. This investment yielded further positive changes in the mill's performance and improved efficiency.

In 2022, the mill operated an average of 18.7 hours per day and crushed an average of 5,053 tonnes of cane per day (2021: 17.8 hours and 4,958 tonnes). The extraction rate of the mill was 96.64 (2021: 96.03), while the milling rate was 270 tonnes per hour (2021: 279). Due to the lower volume of cane in the sugar mills, our cost of production was MUR 8,100 per tonne (2021: MUR 7,900 per tonne), a 3% increase. On the growing side, we targeted MUR 15,000 per tonne of sugar for a production of 36,000 tonnes and achieved MUR 19,000 per tonne for a production of 31,000 tonnes.

Previously, we relied on coal and *bagasse* to run our manufacturing operations during the crop season. However, due to challenges at Terragen and Force Majeure declared under the PPA with CEB (page 58), we were solely reliant on *bagasse* for the provision of electricity and steam to Terra Milling. This was a new challenge for the cluster, but we managed it successfully.

Vegetable production made a profit of MUR 13.7 million for the first time in many years, following structural improvements and a change in personnel.

This year we were certified with the BeVeg Vegan standard. BeVeg is ISO accredited and globally recognised for its vegan standard and vegan certification process. Achieving certification with this standard will enable us to access new markets and offer products that meet the needs of the growing vegan consumer base.

Yes We Kann: putting a spotlight on a modern and dynamic industry

After the success of our 2021 campaign to reduce criminal cane burning, another positive development this year was the launch of the *Yes We Kann* campaign. This campaign focused on sending out a positive message about the value of Mauritius' sugar industry and creating awareness of the progress made in recent years to modernise and diversify the sector. We spent MUR 1 million on the campaign, which used a combination of TV, radio, billboards, and social media. The campaign was undertaken in partnership with multiple stakeholders, and we will repeat it in 2023.

Our 2022 performance (Cont'd)

Creating a culture of trust and protecting employees

We continue to see significant benefits from our culture and engagement journey. This was demonstrated by the increase in the cluster's employee engagement score, which improved from 33% in 2017 to 85% in 2022. We continue to identify opportunities to align the cluster's vision, mission and purpose with our goal of building a learning, caring and results-driven culture.

A major highlight for Terra Milling was aligning its operations with ISO 45001, an international occupational health and safety standard issued to protect employees and visitors from work-related accidents and diseases. Terra Milling completed its ISO 45001 certification audit in December 2022.

Unfortunately, we experienced an increase in health and safety incidents at Terragri. In 2023, we will focus on learning from these incidents and taking steps to prevent and mitigate associated risks.

Côte d'Ivoire: A challenging year

It was another challenging year for the two sugar estates and factories that we manage in Côte d'Ivoire with our Ivoirian partner SIFCA. Revenue increased by 5% driven by an increase in sale of imported sugar (+66%), which compensated for the drop in the sale of own production sugar (-10%). Performance was primarily impacted by operational delays and financial constraints. We remain technical advisors in Côte d'Ivoire and are working closely with the business to achieve better yields. We are also reviewing the business's management structure and believe operations will benefit from the newly-appointed management team.

Sucrivoire sold 128,289 tonnes of sugar (comprising 88,356 tonnes of own production and 39,933 tonnes imported), compared to 122,481 tonnes in 2021. Production from our factories in Borotou and Zuenoula, which collectively supply half of the sugar consumed in the country, decreased from 90,401 tonnes in 2021 to 73,948 tonnes in 2022.

We continue to focus on increasing production capacity and upscaling our factories to satisfy strong local demand, with the aim of increasing production to 120,000 tonnes by 2024. The coming years will be challenging, and a major restructuring of the company will need to take place. However, we remain confident in the country's growth potential.

Our strategic outlook

We remain committed to our vision of producing 350,000 tonnes of cane by 2027. To achieve this, we are focused on better irrigation and increased replantation and have prioritised strategies in our fields and mills to increase and sustain sugar production.

In our fields we are focused on:

- Scaling up our replantation programme, underpinned by using CanePro to enable digital/precision farming and improved yield monitoring
- Maximising the value of our sugar mix and concentrating on higher value products
- Increasing precision fertilisation and investing in machinery to increase our daily application capacity
- Improving irrigation and engaging with relevant authorities regarding ground water abstraction
- Optimising and streamlining our harvesting plan and maximising our logistics to deliver on this plan.

Cane (Cont'd)

Our strategic outlook (Cont'd)

In our mills we are focused on:

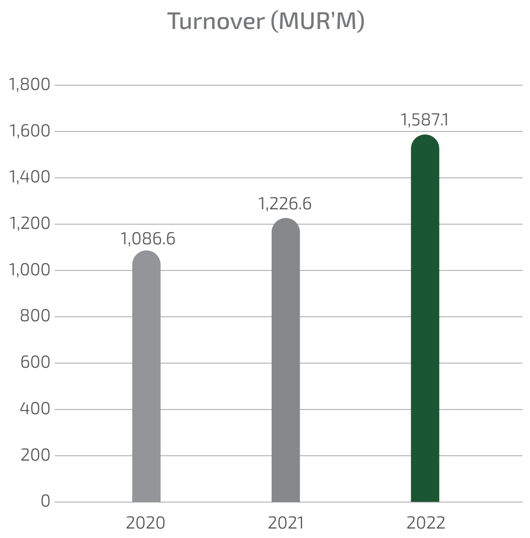
- Engaging with cane suppliers and small cane growers to safeguard cane supply stability
- Tightening cost control
- Replacing and refurbishing old equipment to reduce breakdowns
- Focusing on skills and talent retention, including undertaking succession planning for critical positions.

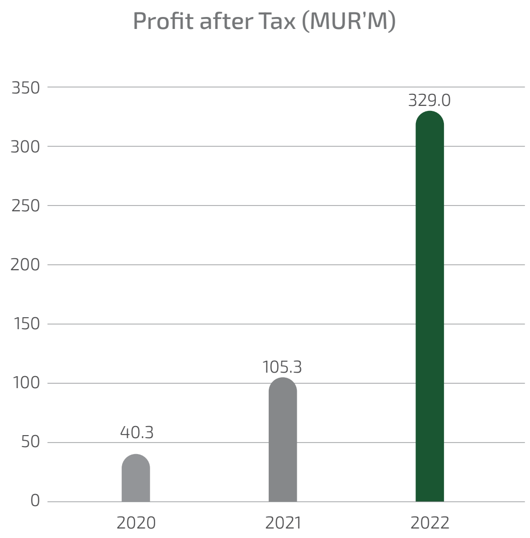
As announced in the National Budget Speech in June 2022, the Development Bank of Mauritius (DBM) established a Cane Replantation Revolving Fund. This fund will provide loans at preferential rates to small and large sugar cane planters wishing to renew their crops or return abandoned land to cane cultivation. We have applied for a loan under this fund and will continue to engage with the DBM in the year ahead.

The World Bank report on the future of the industry was approved by Government in 2022, and we were pleased with the announcement of better *bagasse* prices and the construction of a modern storage facility to improve competitiveness. We await further action by Government to implement the World Bank's recommendations for public policies and programmes to end the decline in sugar production in Mauritius and secure the development of the local sugar cane sector.

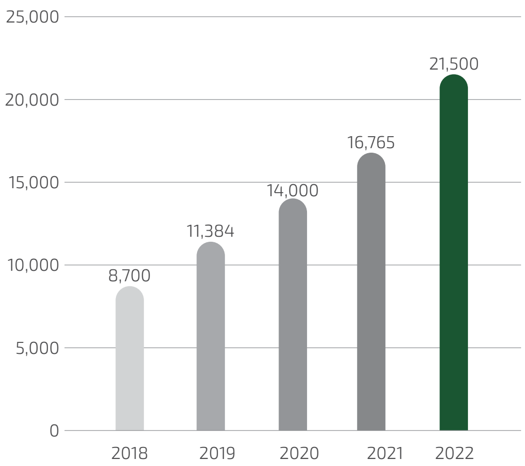
In both our growing and milling operations, we remain focused on our culture and engagement journey; instilling a strong culture of health and safety; and improving our environmental performance with a particular focus on energy, water and waste management. In Côte d'Ivoire we will continue with our expansion plans and taking the necessary steps to improve competitiveness and efficiency.

The year ahead will remain challenging, with water and fertilisation key areas of concern. We are confident, however, that we are well positioned to build on the momentum achieved in 2022 and deliver another strong financial and operational performance, guided by a clear strategic plan. We believe sugar prices will remain elevated in 2023, which will further support profitability. We will continue to engage with the Government through the MSS and Business Mauritius to strengthen the resilience of the local sugar sector.

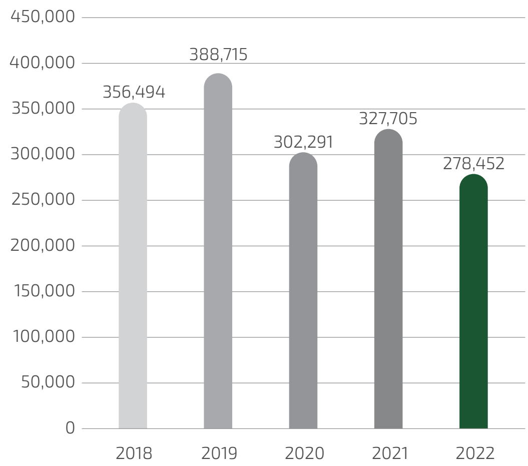




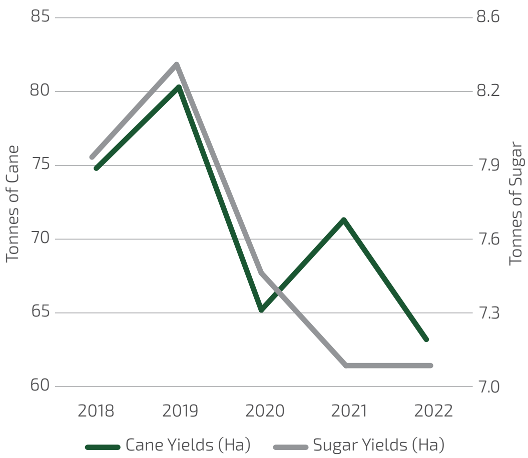
Sugar Price (MUR per tonne)



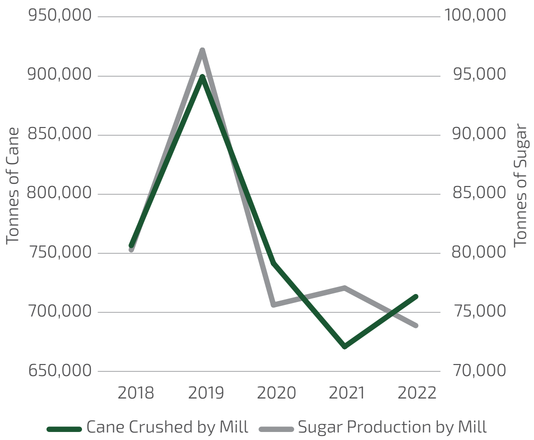
Cane Harvested by Terragri (Agriculture) (Tonnes)



Yields per Hectare



Milling - Cane Crushed and Sugar Production



Brands

Terra Brands Ltd, the holding Company of the Grays cluster, is one of the pioneers in the Mauritian distillation sector, the leading Mauritian producer of premium alcoholic drinks derived from sugar cane, and a top importer and distributer of quality spirits and wines. Established in 1931, we have diversified our activities to include the distribution and sale of personal and homecare products, pharmaceuticals, snacks and non-alcoholic beverages.

Our purpose is to bring pleasure to life.

Brands business model

Value drivers	Context and outlook
Revenue driver (price)	
Creating Brand Equity	
• Managing our own brands • Adding value to third-party brands • Distribution services	• Our value proposition focuses on our strong brands and our ability to drive efficiencies through a structured route-to-market with an emphasis on local products. • Our core competencies lie in brand building, spirit production, distribution and premium retail. • In addition to our well-recognised brand offering in dark spirits (aged, spiced and flavoured rums and Scotch whisky) and white spirits (cane spirit, white rum, vodka, gin and others), we offer global third-party brands in wine, whisky, beer, personal and homecare, pharmaceuticals and food. • We market our brands through all retailers and hotels and premium wines and spirits through our *20/Vin* outlets across Mauritius. We are also expanding our franchised luxury cosmetics stores.
Cost driver (price)	
Material Cost Efficiency	
• Integrated and sustainable production • Supply chain	• We bring synergy to the Group's sugar operations by transforming by-products of the sugar production process into value-added spirits; the sugar crop is declining, amplified by climatic conditions, which proportionately reduces molasses supply and impacts distillery profitability. • We invest in energy-saving equipment to optimise production. • Distillation effluents are evaporated and turned into renewable bio fertiliser used in Terra's and third-party cane fields. • As a vertically integrated cluster, we manage all stages of production onsite, from refining to ageing and bottling and packaging, ensuring guaranteed quality for the finished product; we export our expertise through premium rums and bulk spirits to deliver additional value from this vertical integration. • Activity-based costing enables us to derive more profits from our key brands rather than losing focus by being too diversified. • We emphasise nurturing strong relationships with our employees, unlocking talent and maintaining our position as a recognised employer of choice in the north of Mauritius. • Given the labour-intensive nature of our production and distribution activities, we are digitalising our operations and services to move us towards a leaner company. • Expanding our portfolio with third-party brands and managing an import supply chain provides Grays with scope, expertise and volume. • Availability of shipping lines, port efficiency (in-bound and out-bound), duties and weak valuation of the MUR remain cost drivers. Supply chain disruptions impact costs in three ways: import of raw materials, import of finished goods, and export of finished products.

Brands (Cont'd)

Brands business model (Cont'd)

The main residual risks for the Brands cluster as at 31 December 2022 are summarised below.

	Risk	Contributing factors	Risk mitigating activities	Year on year trend
R1	Economic impact due to the pandemic, resulting in loss of revenue from tourism and related activities.	• Acute erosion of purchasing power of local consumers. • Lack of visibility over timing and speed of recovery from pandemic. • Disruption in the supply of imported items. • Loss of sales from the recovering tourism sector.	• Improved online offering including the launch of an App. • Widening and specialised offering to the recovering tourism industry. • Alternative sourcing to restore supply chain.	Unchanged
R2	The scarcity of molasses disrupts the distillery operations leading to loss of profit and failure to meet client needs.	• The supply of molasses will follow the downward trend in the overall supply of cane.	• The Mauritius Cane Industry Authority ensures sharing of molasses produced among the distilling companies on the island.	Unchanged
R3	The representation of brands is lost due to mergers and/or acquisitions.	• None.	• Of the 20 best performing brands, eight are developed in-house. • Grays is constantly looking for new product opportunities.	Unchanged

Brands business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
People	**Employees** 594 **Outside Mauritius (included in above)** 44	• We continued to roll out refresher training and conduct more frequent visible onsite inspections to address and prevent minor injuries. • We re-established our monthly Health and Safety committee. • Fire safety was maintained as we reinforced onsite fire safety and ensured that all fire certificates were up to date. • Covid-19 safety measures and procedures remain in place. • Executive and leadership development coaching programmes are ongoing. • We are implementing a learning culture.	**Total recordable inicident rate (TRIR)** 34 (↑6%) **Lost time incident rate (LTIR)** 34 (↓80%) **Severity rate[2]** 36.4 (↑12%)
Manufactured	**Distillery** 1 **Bottling plant** 1 **Existing retail stores (*20/VIN*)** 10 **Warehouse space** 8,500 m^3 **Dedicated ageing cellars** 2,150 m^3	• Our fermentation plant has automated multiple processes. • Modernised our bottling plant and made it more versatile by investing in a new labeller and installing an automated 'bag in a box' line.	
Natural	**Molasses** 15,506 T (↓13%) **Alcohol (100%)** 522 m^3 (↑24%) **Water** 57,288 m^3 (↑6%)	• Continued with efforts to optimise water-use efficiency and installed rainwater harvesting infrastructure, which supplied 30% of Grays Inc.'s water needs. • Installed photovoltaic solar panels that generated 50% of Grays Inc.'s energy requirements. • Continued focus on reducing our carbon footprint significantly. • Extended the range of bottles for recycling.	**Alcohol produced** 4.4 million litres **Glass bottles recovered and reused** 1.5 million units (↑15%) **Plastic waste recycled** 7 T (↑27%)

[1] *Data as at 31 December 2022.*

[2] *Calculation methodology was updated in 2021*

Brands (Cont'd)

Brands business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
Social and relationship	Our business model depends on quality relationships, particularly with employees, MRA, Government, brand owners, suppliers and customers.	• Dedicated teams working from home and regular engagement with the workforce.	**Employee turnover rate** **21% (2021: 18.6%)** Recognised as employer of choice. **Payment in taxes (Mauritius)** **MUR 740 million (excluding VAT)** **CSR contribution** **MUR 0.6 million**
Intellectual	**Own brands** **24** Integrated management system underway (ISO 9001, ISO 14001 and ISO 45001)	• Further digitalised our services. • Further consolidated our brand offerings while actively seeking new opportunities to sustain revenue growth, with a particular emphasis on locally produced products.	Progress in securing QSE certification; Fairtrade and Kosher capability
Financial	**Terra Brands total equity (Jan 2022)** **MUR 811.8 million** **Total borrowings** **MUR 888.7 million** **Capital expenditure (subsidiaries)** **MUR 118.7 million**	• Actively managed financial performance through weekly executive meetings, monthly management meetings and regular Board meetings.	**Turnover** **MUR 2,656.5 million (^22%)** **Profit** **MUR 199.9 million (^46%)** **Terra Brands total equity (Dec 2022)** **MUR 807.5 million**

[1] *Data as at 31 December 2022.*

The operating context

Material issue impacting value creation	Our response
Covid-19 – The pandemic significantly impacted performance in 2021 due to the loss of sales from tourism, supply chain disruptions, increased duty costs and challenges around the availability of raw materials. Fortunately, borders reopened in the last three months of 2021, and the cluster's commercial activities benefitted significantly from an improved contribution from the hospitality sector in 2022.	We remain focused on developing strategies to strengthen our supply chain. We continue to emphasise locally manufactured products and encourage consumers to buy 'made in Mauritius'. We remain confident in the hospitality sector's growth potential and see significant opportunities in premium wines and spirits.
Changing regulations and excise taxes – Off an already high base, excise duty on alcoholic drinks increased by a further 10% in 2022. This increase put additional pressure on the purchasing power of local consumers, which is already constrained by high inflation and rising interest rates. Stricter regulations on the consumption and advertising of alcohol can also impact demand of premium brands.	These risks impact the Mauritian market for alcoholic beverages. To mitigate these risks, we have diversified our product offerings to include luxury and more affordable alcoholic beverages. We have also expanded into non-alcoholic wines, ciders and beers, foods, and personal care products.
Increasing health consciousness and regulations – The growing awareness of health-related issues among consumers and regulators presents risks and opportunities for our business. The latest Public Health Act Regulations, promulgated on 6 July 2021, are overwhelmingly restrictive. While the regulations will not impact overall market volumes, they will downgrade consumption to cheaper products where we do not compete. We are awaiting feedback from authorities, delayed due to Covid-19, for clarification on corporate and B2B communication	We continually monitor changing consumer tastes and behaviour and strive to refine our product portfolio accordingly. Through our diversification strategy, we have identified new revenue growth opportunities, specifically in the healthy foods, non-alcoholic drinks, and personal care products sectors. We have increased our non-alcoholic offering, including non-alcoholic cider and extended our range of alcohol-free wines. We are emphasising organic and biodynamic wines. We have invested in advertisements on social media that encourage people not to drink and drive and to raise awareness of domestic violence.
Global mergers and acquisitions – Mergers and acquisitions among global brand owners can potentially impact the availability of our existing offerings. We are confident that the acquisition of Distell by Heineken N.V. will bring us opportunities in the short term. On the other hand, PepsiCo consolidating their business with PepsiCo distributors led to us losing Lays, Doritos and Quaker as of September 2021. We felt the full effect of this in 2022, with 10% of sales impacted.	We have complemented our offering with our own brands, which comprise eight of our 20 best-performing brands, building long-term equity. Our strategy remains to emphasise 'made in Mauritius' and local products.

Brands (Cont'd)

Our 2022 performance

The operating environment remained tough due to the destabilising impact of the Ukraine war; ongoing supply chain disruptions and global shortages of certain critical input materials like glass; the socio-economic effects of high inflation and rising interest rates; and the slowdown of global and regional economies. Despite this, the performance of our Brands cluster continued to improve this year, primarily due to our borders being open for the full year and the strong contribution made by the tourism and hospitality sectors. The cluster's revenue for the year ended at MUR 2,656.5 million, up 22% on MUR 2,182.8 million in 2021. Profit after tax was MUR 199.9 million, up from MUR 136.5 million in 2021.

Production: the distillery's performance was impacted by reduced molasses

Our distillery's performance was again impacted by the shorter sugar cane crop cycle in 2022 and the diminishing molasses supply, with the later primarily due to reduced cultivation and poor climatic conditions. Our distillery produced 4.4 million litres of rum and spirit, down 2% year-on-year. Our main concern remains a much-needed improvement in sugar cane volumes. This challenge is being mitigated to a degree by the improved global sugar price and a slight revival in the interest of existing and prospective independent cane planters. We also continue to focus on fully automating our distilling and fermentation processes to drive efficiency at all levels of our operations, and we reaped the benefits of our new fermentation plant that became operational in the second half of 2021. We achieved yields of 249 litres of alcohol per tonne of molasses, up 5% on our 2021 yields.

As we had spare capacity because of the reduced molasses supply, we initiated a project in 2022 to produce organic rum and rum made from cane juice *(rhum agricole)*. This will enable us to increase our supply available to the market and gain a presence in specialised, higher-value rum products. We also complemented the shortfall in production through trading of alcohol to supply our long-standing customers.

As reported last year, we acquired the minority stake in Grays Distilling in 2022 to become the sole owner, which created synergy in our premium brand business, simplified processes and maximised benefits.

We continue to work on securing QSE certification for our distillery and have taken measures to improve employee wellbeing. We saw a slight increase in minor injuries from lacerations due to broken bottles and moderate injuries from lifting heavy items with improper lifting techniques. We are addressing this through refresher training and more frequent and visible on-site inspections.

Brands: sales improved due to open borders and a strong contribution from the hospitality and tourism sectors

All our brands performed well year-on-year, and we saw a strong performance relative to 2019 (our last pre-pandemic base year). This demonstrates a pleasing recovery from the impact that Covid-19 had on our commercial operations.

We extended and rejuvenated our Seven Seas series of cane-based spirits with the launch of a coconut-flavoured liqueur, Seven Seas Mokoko. This product is locally produced and brings a taste of Mauritius to the world with a label design that speaks to the island's heritage, culture, and natural beauty. Seven Seas Mokoko is also contemporary and opens up Seven Seas to new consumer segments while premiumising the brand.

Our whisky brands performed well across all segments, including all premium and mainstream brands. Underpinned by the opening of borders and the strong performance of four- and five-star hotels, wine sales increased. Pleasingly, our wine category is showing sustained growth and is gaining market share beyond pre-pandemic levels. Our beverage category performed satisfactorily.

The performance of our food and snack categories was impacted by erratic supply arising from logistics issues, which hindered growth. Following PepsiCo's decision not to renew our Distribution Agreement, we introduced substitute products in 2022 to replace Lays, Doritos and Quaker. While these products performed satisfactorily, we felt the full effect of PepsiCo's decision in 2022, with 10% of sales impacted. Our coffee brands performed well, capturing market share and continuing to solidify their market position.

Our personal and home care segment delivered a pleasing performance, with healthy growth in most of our luxury and mainstream brands except for those impacted by supply chain issues.

We continue to see significant growth potential in the tourism and hospitality sectors, as well as good opportunities to increase revenue through the sale of premium wines and spirits, which we market through our *20/Vin* outlets across Mauritius. We are focused on significantly enhancing the customer experience of these outlets and are also investigating opportunities to reduce the associated operating costs.

In 2022 we signed with Beauty Success – a franchise store for luxury perfumes and cosmetics. We opened two new stores in 2022 as part of our expansion into franchised luxury cosmetics stores and are pleased with the momentum we are gaining.

Our 2022 performance (Cont'd)

We also signed a deal to open four new stores in Tribeca Central – a landmark, mixed-use development positioned adjacent to Ebene Cybercity that opened in December 2022. We believe that Tribeca Central will serve as a premier business, commercial and residential hub in Mauritius. We opened three of these stores in 2022, while the last one opened in March 2023.

During the year, we invested significant time and resources into growing the export of our rum brands into focused markets, particularly New Grove and Lazy Dodo. To support this, we reviewed our business model and initiated a project to appoint dedicated brand ambassadors who will work in our targeted markets to promote our brands and manage key accounts. We further modernised our bottling plant during the year and made it more versatile by investing in a new labeller and installing a 'bag in a box' line. We will use this new automated line to box high-quality wines imported from South Africa that can be sold regionally.

Distell Group is a minority shareholder (26%) of Grays Inc. Ltd, and we are monitoring the transaction between Heineken N.V., Distell Group and Namibia Breweries Limited. The South African Competition Tribunal gave final regulatory approval for the transaction in March 2023, and the transaction was implemented as from April 2023. We continue to engage with Heineken N.V. and all relevant stakeholders to assess the impact of the transaction and are confident it will bring new commercial opportunities and benefit our commercial operations.

The latest Public Health Act Regulations, promulgated on 6 July 2021, are overwhelmingly restrictive. We are seeking clarifications from authorities regarding corporate and B2B communication, which are seemingly banned. While the new regulations will not affect overall market volumes, they will hamper competition and lead to the consumption of cheaper products (a category we do not compete in).

Investing in our employees and instilling a learning culture remains a key area of focus. We are also developing talent attraction and retention strategies to offset labour shortages in Mauritius. We continued our efforts to optimise water-use efficiency and installed rainwater harvesting infrastructure, which supplied 30% of our water needs in 2022. We also installed photovoltaic solar panels that generated 50% of our energy requirements. We continue to implement a more structured approach to waste management.

International operations: improved performance and a profitable year in Seychelles

Our subsidiary company in Seychelles, which focuses on wines and spirits, performed well in 2022. Profit after tax stood at SCR 8.9 million (MUR 27 million) compared to SCR 5.7 million in 2021 (MUR 17.6 million). During the year, our subsidiary company acquired a small bottling operation to support volume growth and ensure the company can satisfy consumer demand. Tourist arrivals in Seychelles reached pre-Covid-19 levels, which benefitted the economy and supported strong trade.

Our strategic outlook

One of our biggest priorities for 2023 is restoring our supply chain and strengthening our route-to-market capabilities. We began this process in 2022 but will need to increase our efforts and investments in this regard to consolidate and improve supply chain efficiencies. Activity-based costing remains important to ensure we can derive more profits across our business units and from our key brands.

Digitalisation remains key, and we will continue to find opportunities to digitalise our commercial and distilling operations, underpinned by the full digitalisation of our warehouse.

Our strategy on 'made in Mauritius' and the importance of buying locally manufactured products remains in place.

We will continue to invest in our employees through training and development opportunities. We remain focused on fostering a safe and positive working environment. Developing appropriate talent attraction and retention strategies will be critical in the year ahead.

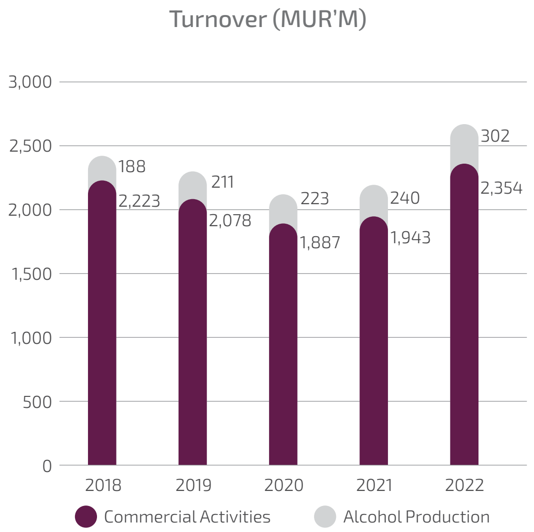
Brands (Cont'd)

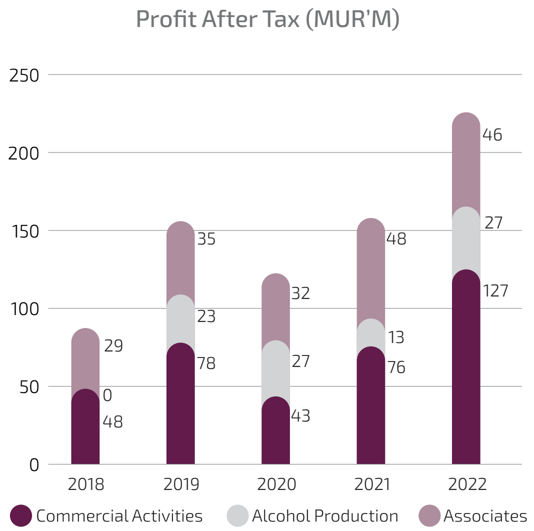
Our strategic outlook (Cont'd)

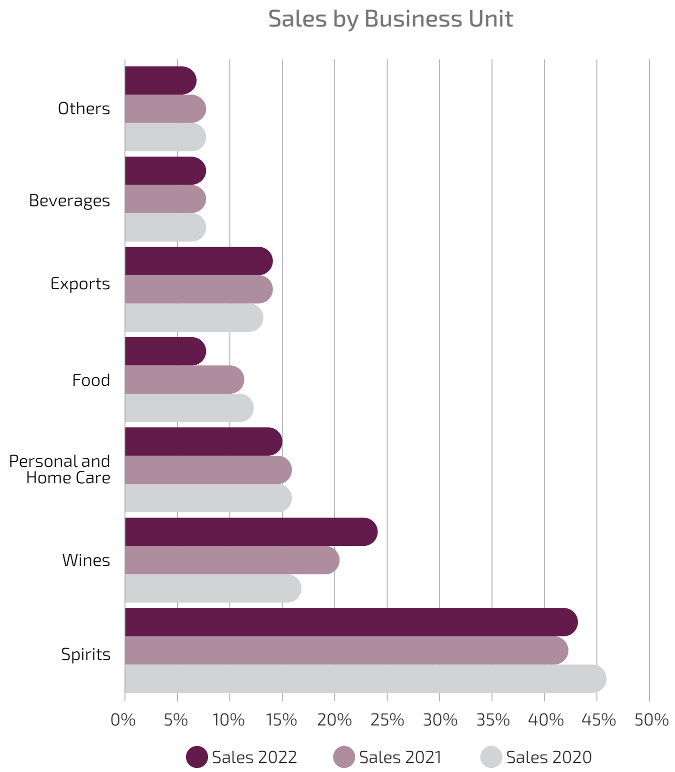
We made good progress on our sustainability journey this year, and this remains a focus for 2023. A key area of investment will be introducing a low-carbon, low-waste distribution technology for our premium spirits, and we have partnered with ecoSPIRITS, a circular economy technology company. We are the only ecoSPIRITS partner in Mauritius and are excited about the possibilities this technology presents, which include eliminating packaging waste in our supply chain and reducing carbon emissions associated with transport. The technology also assists with bottle shortages and alleviates cost-push pressure.

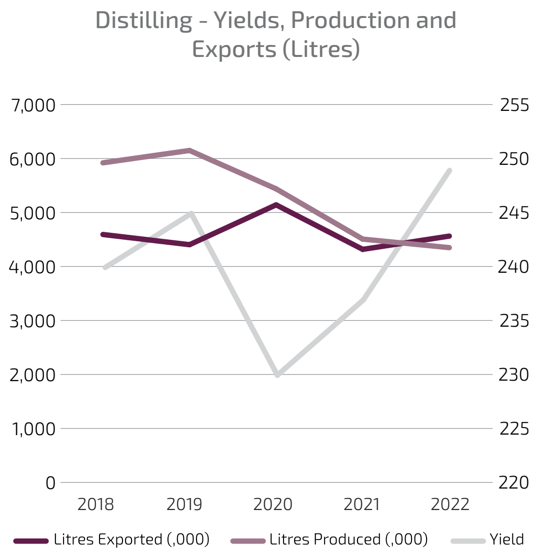
We remain optimistic about the performance prospects of our subsidiary company in Seychelles. This company has a large portfolio of brands, some of which are competing. Previously, this was not significant for the business. However, as per capita consumption has increased and volumes have grown, it has become necessary to split the brand portfolio into two separate companies. This will be executed in 2023 and will ensure that all brands can compete more healthily in the market.

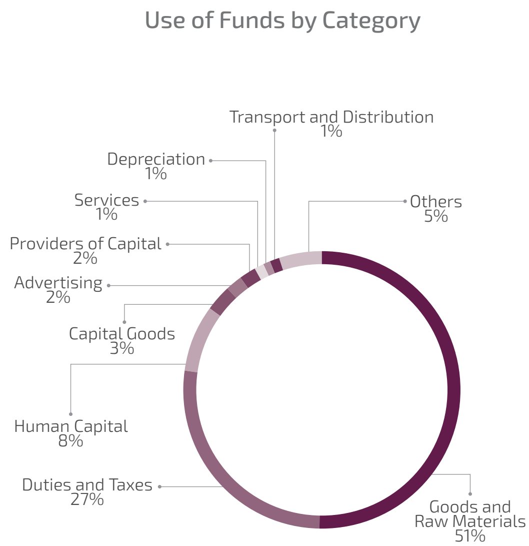
We anticipate that we will continue to see high inflation and interest rates in the year ahead, which will continue to put pressure on disposable income, and it remains challenging to pass increased costs onto consumers. Despite these challenges, we are optimistic for the year ahead and are confident that we can continue to build on the momentum gained in 2022.






Sales by Business Unit
Others
Beverages
Exports
Food
Personal and Home Care
Wines
Spirits
0%
5%
10%
15%
20%
25%
30%
35%
40%
45%
50%
Sales 2022
Sales 2021
Sales 2020


Distilling - Yields, Production and Exports (Litres)
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
255
250
245
240
235
230
225
220
2018
2019
2020
2021
2022
Litres Exported (,000)
Litres Produced (,000)
Yield


Use of Funds by Category
Transport and Distribution 1%
Depreciation 1%
Services 1%
Others 5%
Providers of Capital 2%
Advertising 2%
Capital Goods 3%
Human Capital 8%
Duties and Taxes 27%
Goods and Raw Materials 51%

Power

Terragen is a power producer that supplies electricity to the CEB as well as electricity and steam to Terra's sugar mill through two 35 MW thermal power plants. Operating in a joint venture partnership with French company Albioma, we generate electricity and steam by burning *bagasse* and cane straw during the crop season (from July to December) and imported coal (mainly from South Africa) during the intercrop season.

Our purpose is to supply reliable and low-cost electricity to the country, be available on the CEB grid, and consolidate our position as a major player in the production of renewable energy.

Power business model

Value drivers	Context and outlook
Revenue driver (price)	
Regular and reliable electricity supplier	
• Energy available on demand, responding quickly and efficiently to calls for production and maintaining a reliable supply by avoiding breakdown incidents	• Supply to one major client, CEB, and to Terra's sugar mill. • Terragen runs an efficient and reliable plant and produces power for the country at a competitive rate.
Cost driver (price)	
Raw material cost	
• Increasing the renewable energy portion of electricity production to meet Government's decarbonisation plan, while maintaining cost competitiveness.	• The current energy mix in Mauritius is 82.6% fossil fuel and 17.4% renewable energy; we produce around 9.4 % of the country's renewable energy supply. We are continually looking for opportunities to increase energy efficiency and substitute coal with *bagasse*, cane straw and other renewable energy sources, such as wood biomass and solar. • We remain fully aligned with Government's roadmap to a greener Mauritius and its commitment to phase out coal and achieve 60% renewable energy production by 2030, while maintaining our competitive rate. The National Biomass Renewable Energy Framework, announced in June 2021, will define remuneration for other types of local biomass, other than *bagasse*. The framework will therefore determine which renewable energy projects we prioritise. New announcements have been made in June 2023 and we are currently waiting for the details of the measures that would be adopted. • We foresee more opportunities for the energy transition of the Terragen power plant, especially with biomass.
Material cost efficiency	
• Efficiency gains and safe and clean production processes	• We remain the most efficient, reliable and cost-effective operator in Mauritius, with a strong focus on safety and health; we continually identify opportunities to improve our environmental management, particularly water and chemical consumption, and ash management.

Power (Cont'd)

Power business model (Cont'd)

The main residual risks for the Power cluster as at 31 December 2022 are summarised below.

	Risk	Contributing factors	Risk mitigating activities	Year on year trend
R1	Unplanned and prolonged disruption to production of electricity.	• Unexpected breakdown of a critical item of equipment. • A fire outbreak due to the presence of important amounts of combustible material.	• Performing regular preventive maintenance and inspection of plant and equipment by specialist consultants. • Experience and expertise of Albioma (shareholder and operator of Terragen) in managing numerous power plants around the world. • Investing in plant upgrades including fire protection and the procurement of critical equipment items.	Increased
R2	Severe climatic conditions adversely impact power production.	• Located in a tropical cyclone prone region. • A thunderstorm strike leading to the destruction of electrical and automation systems. • Severe and prolonged drought resulting in interruptions in water supply.	• The power plant is designed to withstand cyclonic gusts of 260 km/h. • Protocols are in place to cater for emergency situations like cyclones. • Terragen can store 900 m^3 of spare water, and measures are taken to optimise water consumption.	Unchanged
R3	Unexpected consequences of specific terms of the PPA resulting in difficult operating and financial conditions.	• Lack of visibility on the terms that will apply to the next PPA (July 2025). • Reduction or stoppage of coal importation, resulting in the power plant not operating at full capacity. • Increase of coal prices on the international markets.	• Engaging closely with the authorities and the CEB. • A new energy business model has been presented to the government and the CEB that incorporates a plan to carry out the energy transition of the plant to a 100% renewable coal-free model.	Unchanged
R4	Disruption in the supply of raw materials and/or spare parts.	• Disruption to the sugar mill activities leading to non-availability of *bagasse* or cane straw for power generation. • Pandemic disrupts supply and availability of spare parts and foreign consultants for timely completion of plant maintenance.	• Using local biomass (cane straw and wood) as alternative sources of fuel to *bagasse*. • Ongoing discussions with authorities to secure a sustainable biomass price for producers.	Increased

Power business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
People	**Employees with the appropriate technical skills and motivation** 47	• Reinforced safety measures including weekly safety risk assessments and site visits with the management team. • Refresher training conducted throughout the year to reinforce health and safety practices. • Implemented employee training to reinforce our lockout/tagout (LOTO) procedure. • Equipment upgraded and installed to ensure employee safety. • Fire Emergency Plan updated.	**Total recordable incident rate (TRIR)** 0.0 (-%) **Lost time incident rate (LTIR)** 0.0 (-%) **Severity rate[2]** 0.0 (-%) **Training hours** 29/person/year (31 in 2021)
Manufactured	One generation plant of 450 GWh capacity. Two units of 35 MW operating on three types of fuel: Coal, *bagasse*, cane straw.	• Covid-19 safety measures and procedures remain in place.	**Produced** 211 GWh (↓52%) **Share of national energy mix** 8.2%
Natural	**Coal** 96,572 T (↓55%) ***Bagasse*** 221,953 T (↓8%) **Sugar cane straw** 7,587 T (↑32%) **Water** 897,741 m^3 (↓44%)	• Continue to explore additional options to expand the production of renewable energy from biomass. • Improved waste management at Terragen, emphasising waste separation and recycling.	**CO_2 (coal)** 221,265 T (↓56%) **Biogenic CO_2 *(bagasse)*** 187,913 T (↑7%) **Biogenic CO_2 (cane straw)** 11,528 T (↑34%) **Environmental emergency situations** 0

[1] *Data as at 31 December 2022.*

[2] *Calculation methodology was updated in 2021*

Power (Cont'd)

Power business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
Social and relationship	Our business model depends on maintaining quality relationships with key stakeholders including: CEB, Terra Milling, regulatory authorities, planters, suppliers and employees.	• Continued partnership with Terragri for the plantation of eucalyptus on marginal land. • Participated in the National Biomass Renewable Energy Framework multi-sectoral working groups. • Responded to a Request for Information (RFI) from CEB on how to phase out our coal by 2030.	**Employee turnover rate** 3% (2021: 0%) **Payment in taxes (Mauritius)** Nil **CSR contribution** MUR 0 million
Intellectual	First Mauritian firm to be granted an AFNOR certified integrated management system certificate based on ISO 9001, ISO 14001 and ISO 45001.	• External Quality, Health and Safety, and Environment (QSE) audit successfully performed without any non-conformities.	**Availability on CEB network** 90.6% **Reliability** 3 plant trips **Specific coal consumption** 591 g/kWh
Financial	**Terragen total equity (Jan 2022)** MUR 901 million **Total borrowings** MUR 0 million **Capital expenditure** MUR 21.4 million	• Actively managed the financial performance through weekly executive meetings, monthly management meetings and regular Board meetings.	**Turnover** MUR 1,097.8 million (⌄39%) **Profit** MUR 56.4 million (⌃115%) **Terragen total equity (Dec 2022)** MUR 1,070.7 million

[1] *Data as at 31 December 2022.*

The operating context

Material issue impacting value creation	Our response
Dependency on a primary client – Being heavily dependent on a single client, it is critical to maintain a strong relationship based on mutually beneficial outcomes. This relationship was challenged during the year due to the Force Majeure declared under the PPA with CEB and the suspension of our operations on 29 April 2022.	We noted the lower coal prices at the start of 2023; as this was a mitigating factor of the Force Majeure, Terragen could restart production using coal. In this respect, we reached an agreement with the CEB on 29 April 2023, and are now back on the grid. The Government has set an ambitious goal of producing 60% of its energy from renewable sources by 2030. In 2021, the CEB asked for an application for a Request for Information (RFI) to see how we can achieve this goal. We have replied to the RFI and are awaiting further engagement on this process. We are identifying opportunities to minimise our emissions, increase our energy efficiency and reduce the use of coal by increasing the use of cane straw, *bagasse* and other biomass sources in the energy mix. Our energy transition strategy sets out our plan to increase the share of renewable energy in our production while maintaining a competitive price per kWh. This includes using solar energy and wood biomass as possible investments.
Potential regulatory changes – Changes in environmental regulation could require significant investment in new equipment and possible changes to current processes.	We engage regularly with authorities to keep abreast of potential regulatory changes and ensure that appropriate measures are taken.
Unplanned disruption to generation or transmission activities – Unplanned outages associated, for example, with a fire, mechanical breakdown, the occurrence of a cyclone or supply chain disruptions could impact our ability to deliver energy.	We have a preventative maintenance programme and clear risk management processes and response measures in place. The power plant is designed to withstand cyclonic gusts of up to 260 km/h and we have a cyclone emergency plan in place.

Power (Cont'd)

Our 2022 performance

Terragen's performance was significantly impacted by the unprecedented increase in coal prices and suspension of our operations based on coal for eight months of the year. We generated 211 GWh of electricity in 2022, a 52% decrease year-on-year. The cluster posted operational losses of MUR 77 million, which were mitigated by the share of associate's profits of MUR 23.4 million and a net reversal of deferred tax provision of MUR 110 million. The cluster therefore realised net profits of MUR 56.4 million, compared to losses of MUR 384.4 million in 2021.

Coal prices first spiked in early October 2021 and reached USD 244 per tonne, up from an average of USD 65 per tonne in 2020. This increase followed the sharp rise in demand for electricity generation as the global economy recovered from the pandemic, especially in China and India. In March 2022, the price of coal reached record highs of USD 430 per tonne triggered by the conflict between Russia and Ukraine. Prices remained elevated for the duration of 2022, averaging USD 276 per tonne.

Unfortunately, our contract with the CEB puts us in a very unfavourable position in terms of raw material price increases, particularly for coal, and at the 2022 prices our power plant would have incurred significant financial losses. Terragen therefore had no other option but to declare Force Majeure under the PPA with CEB and suspend its operations on 29 April 2022. Operations resumed at the beginning of the crop season on 27 June 2022 (using only *bagasse* and cane straw to generate electricity) but were once again suspended on 11 December 2022 at the end the crop season as coal prices remained significantly elevated.

Coal prices normalised at the start of 2023. As this was a mitigating factor of the Force Majeure, we reached an agreement with the CEB on 29 April 2023 and restarted production using coal.

As mentioned, we resumed operations on 27 June 2022 using only *bagasse* and cane straw for the provision of electricity and steam to Terra Milling (previously we used to make use of coal during the crop season to complement electricity production when *bagasse* was not available). We therefore needed to adapt our operations and increase engagement between Terragen and Terra Milling to ensure that both entities ran as efficiently as possible despite constraints and challenges. At Terragen we adapted the frequency of our maintenance programme for our *bagasse* conveyors and engaged with Terra Milling to ensure a consistent supply of *bagasse* to reduce the risk of fuel outages and shutdowns at Terragen.

Our availability index decreased to 90.6% (2021: 95.6%) mainly due to a faulty high-pressure valve in one of our units and a breakdown with our *bagasse* scratcher that is used to feed the boilers.

Increasing our production of renewable energy

We maintained a strong focus on delivering on our commitment to decarbonise our energy mix by shifting from coal to biomass, with continued emphasis on further increasing the use of *bagasse*, cane straw and other renewable energy technologies. Due to the ongoing drought and reduced crop season in 2022, *bagasse* combustion declined to 221,953 tonnes (241,997 in 2021), producing 43.2 GWh for export to the grid.

Electricity produced from cane straw increased this year and we invested in improving the performance of the cane straw shredder at the plant. However, the production rate was affected by rain, breakdowns, low cane yields and high variations in bale density. Despite this, we generated 7.2 GWh using 7,587 tonnes of cane straw, up from 5,735 tonnes in 2021.

Overall, renewable energy production decreased from 82.4 GWh in 2021 to 50.5 GWh in 2022. The decrease was due to the suspension of our coal operations in April 2022; the suspension resulted in reduced fuel availability (only cane straw and *bagasse*), which reduced operational efficiency and impacted renewable energy production levels.

In partnership with Terragri, we continued to explore growing and burning eucalyptus as an additional source of biomass and planted 5.3 additional hectares (18 hectares in 2021) on marginal land. We continued the biomass trial to generate electricity from locally produced wood chips. We also jointly participated with other thermal independent power producers to submit a proposal to the CEB to run a trial with 8,000 tons of imported wood chips.

Our 2022 performance (Cont'd)

Our drive to increase the use of *bagasse*, cane straw and other biomass provides a valuable opportunity to increase green energy generation in Mauritius and reduce the island's coal imports. This became even more critical with the Government's objective to increase renewable energy by 60% and phase out coal by 2030. In 2021, the CEB asked for an application for a RFI to see how we can achieve this goal. We replied to the RFI and presented a new energy business model to the CEB that incorporates a plan to transition our plant to one that is 100% renewable and coal-free. We are waiting for further engagement on this plan.

The Government also announced a National Biomass Renewable Energy Framework in June 2021 and launched multi-sectoral working groups driven by the Mauritius Cane Industry Authority to define remuneration for other local types of biomass, other than ***bagasse***.
We were actively involved in these working groups during the first half of the year and, alongside other working group participants, jointly submitted a proposal to the Government in April 2022. New announcements have been made in June 2023 and we are currently waiting for the details of the measures that would be adopted.

Our participation in the carbon burn-out (CBO) project, a joint venture between Terragen and Omnicane, was impacted by the suspension of our operations, which limited available quantities of coal fly ash. This year, 37.2% of our coal fly ash (2,634 tonnes) was sent to the CBO plant, a decrease from 6,471 tonnes in 2021.

Driving improved health and safety and environmental performance

The cluster again recorded a strong health and safety performance, which highlights the excellent safety culture at Terragen. There were no lost time incidents for employees or external workers, and 53 near-misses were recorded (a decrease from 77 near-misses in 2021). We will continue with ongoing safety routines, which have proved to be very effective. These routines include weekly safety risk assessments and site visits by the management team.

We made a concerted effort to improve waste management at Terragen, emphasising waste separation and recycling; we generated 21% less waste and 31% more recycled waste. We again recorded exceedances in effluent quality due to the presence of oil and grease and are investigating how to resolve the issue and strengthen our environmental controls. We recorded no exceedances for air emissions.

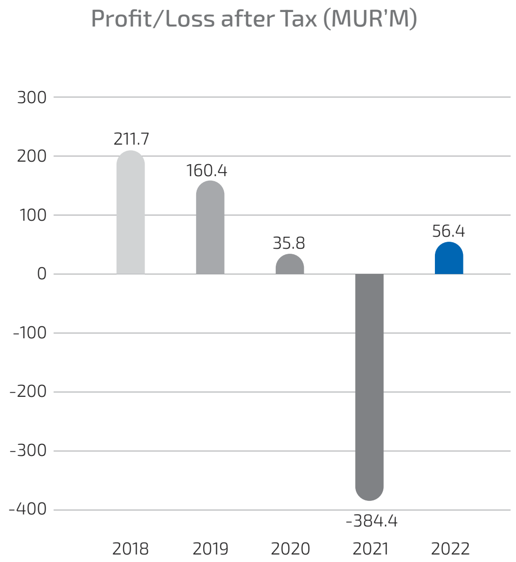
Our strategic outlook

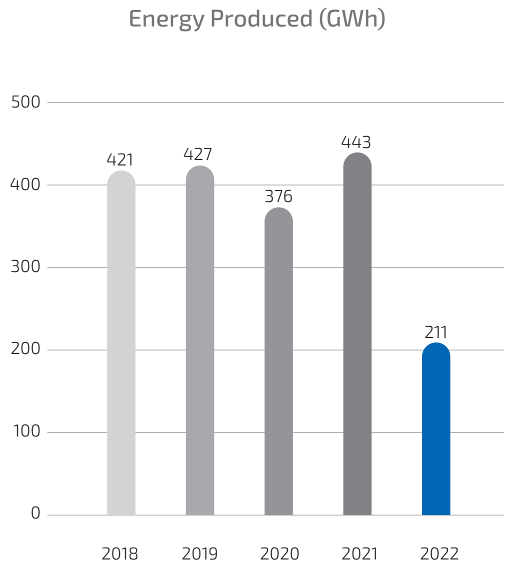
We remain focused on maintaining high levels of availability, reliability and cost effectiveness. In line with this focus, we look forward to further engagement with the CEB and Government stakeholders regarding the RFI and National Biomass Renewable Energy Framework. We remain focused on extending the share of renewable energy in Terragen's production mix, with a competitive price per kWh. In addition to *bagasse*, we will therefore continue to investigate and develop other sources of biomass that can be used in our thermal power plant (with a particular emphasis on wood chips and cane straw).

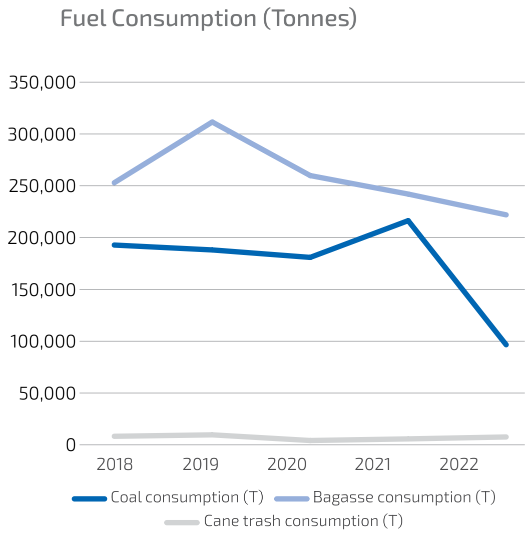
We will maintain our strong culture of health and safety. On the environmental front, we will continue to reduce water consumption, improve waste management and reinforce the control and monitoring of water and air emissions.

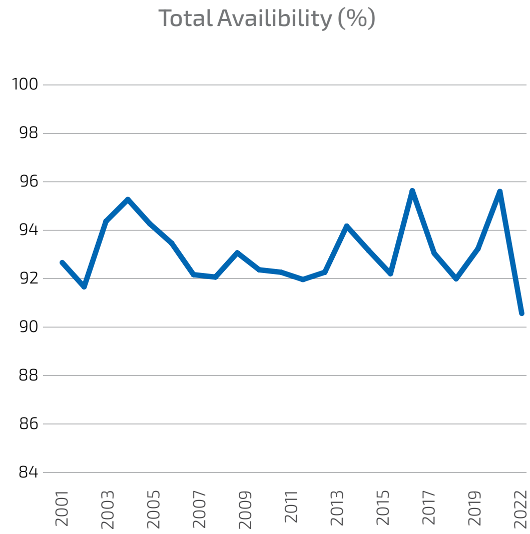
As mentioned, we restarted production using coal as from 30 April 2023. Ultimately, we remain driven by the interests of the Mauritian population and look forward to continuing a strong working relationship with the CEB in the years ahead.

Power (Cont'd)

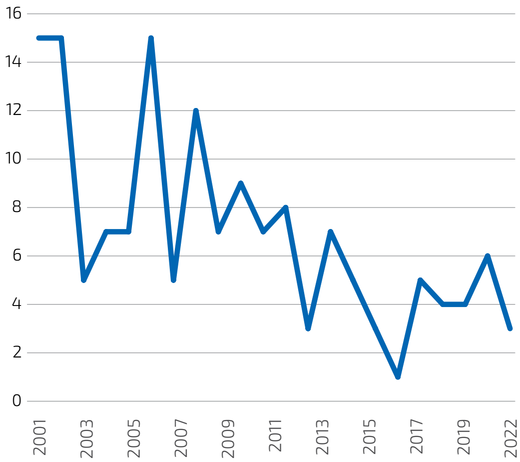

Profit/Loss after Tax (MUR'M)
300
200
100
0
-100
-200
-300
-400
211.7
160.4
35.8
-384.4
56.4
2018
2019
2020
2021
2022


Energy Produced (GWh)
500
400
300
200
100
0
421
427
376
443
211
2018
2019
2020
2021
2022

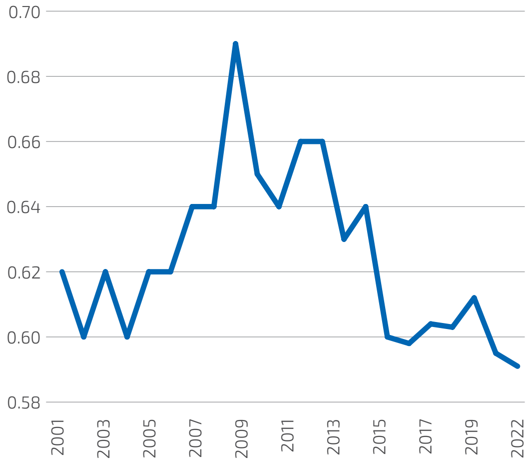

Fuel Consumption (Tonnes)
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2018
2019
2020
2021
2022
Coal consumption (T)
Bagasse consumption (T)
Cane trash consumption (T)


Total Availibility (%)
100
98
96
94
92
90
88
86
84
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2022

Reliability
(Number of trips)



Efficiency
Coal Ratio (kg/kWh)



Property and Leisure

Established in January 2016, our Property and Leisure business (Novaterra) focuses on utilising Terra's land assets to establish an innovative property-development cluster in the north of Mauritius.

The cornerstones of this development will be the Beau Plan Smart City and the Balaclava Golf and Lifestyle Estate, both of which aim to positively transform the region.

Our purpose is to create and unlock the value of the Group's land holdings for all its stakeholders.

Property and Leisure business model

Value drivers	Context and outlook
Revenue driver (rental and sale)	
Property development cluster	
• Long-term value from the Group's existing land ownership in the north of Mauritius. • Beau Plan Smart City project, a mixed activities development covering 228 hectares in the Pamplemousses region, one of the most densely populated districts in the North.	• Targeted sale of 'non-strategic' land generates cash flow for investment. • Development of a mix of real estate projects over the last five years has set a strong base to grow the portfolio of yielding assets. • A new Government incentive to allow the sale of serviced plots to non-citizens is encouraging. • Two priority zones for development include the Beau Plan Smart City development (major projects completed and others under way) and at a second stage the neighbouring Balaclava Golf and Lifestyle Estate (development rights granted), enhancing the value of the broader property portfolio. • A key differentiator to other business destinations in the north of Mauritius is that we offer a mixed activities development within an exceptional urban design framework. Substantial investment has been made in the area's infrastructure, including new roads to improve accessibility to our projects and enhance access to public transport. The Beau Plan Smart City will be inclusive of the adjoining villages of Pamplemousses and Bois Rouge, sites already recognised as a rural regeneration zone in the Government's National Development Strategy. • The Smart City will be an important economic hub, providing an appealing commercial, residential, education and leisure environment; the Mahogany Shopping Promenade, among others, will be a key employer to the surrounding villages.
Cost driver (managing assets)	
Property development and management	
• Commodity prices • Tenant relationships • Integrated and sustainable development	• We have significantly improved the performance of our existing yielding assets and are currently engaging with 278 tenants. • Post Covid-19, the cost of materials remains elevated, raising building costs and ultimately the prices of built-up units. The geo-political situation will maintain pressure on this situation. • We will target new customers by entering new markets. • A key challenge is to ensure a minimum vacancy period once a tenant has left. Ensuring quality tenant relationships will be critical to our success and we are committed to maintaining customer satisfaction. • We have integrated green design principles by working with professionals that have sustainability expertise. • We have invested substantially in the stormwater drainage network to mitigate the potential effects of flash floods. These investments proved to be very effective during the recent events. • The Smart City will integrate multiple digital connectivity solutions, encouraging the uptake of renewable energy sources and facilitating a healthier lifestyle through the provision of quality recreational spaces and non-motorised transport infrastructure.

Property and Leisure (Cont'd)

Property and Leisure business model (Cont'd)

The main residual risks for the Propety and Leisure cluster as at 31 December 2022 are summarised below.

	Risk	Contributing factors	Risk mitigating activities	Year on year trend
R1	Bureaucratic hurdles leading to lower profitability and agility.	• Delays in obtaining permits and clearances from authorities.	• Authorities are working closely with all stakeholders to improve the ease of doing business. • Close watch on current and proposed regulatory policies and legislations. • Diversified service offerings to minimise any impact resulting from changes in Government strategy. • Dedicating resources on a full-time basis to establish appropriate communication with authorities and follow up on all necessary permits and clearances.	Unchanged
R2	Reduction of purchasing power and high finance costs leading to difficulties selling projects and underperforming yielding assets.	• Ongoing impact of the economic recession since the pandemic and additional price increases. • Several consecutive increases in bank interest rates.	• Land sales plan in place to ensure strong cash inflow and maintain low gearing ratio. • Attractiveness of our products is improving. • Beau Plan is now recognised as a premium location.	New
R3	Oversupply of properties on the market impacting on price.	• An increasing number of projects are being implemented nationwide and the market has not grown proportionately.	• Increased focus on marketing strategies and networks. • Every care is taken at the conceptual level of projects to ensure a long-term attractivity for the areas to be developed. • Strategy in place to create a balanced mix of products.	Decreased
R4	Shortage of contractors leading to price increases.	• Increasing number of projects being launched by the public sector.	• Close relationship with sister company (RG) to work in partnership. • Develop and maintain good relationships with a range of reputable contractors.	New

Property and Leisure business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
People	**Employees (Novaterra)** 106 **Employees *(L'Aventure du Sucre)*** 51	• Dedicated health and safety officer in Terragri that supports us on health and safety matters for all our projects. • Annual fire drill for all employees. • Covid-19 safety measures and procedures remain in place. • Executive and leadership development coaching programmes are ongoing. • Continued to roll out our culture and engagement journey	**Total recordable incident rate (TRIR)** 16.3 (^31%) **Lost time incident rate (LTIR)** 16.3 (^75%) **Severity rate[2]** 14.1 (^152%)
Manufactured	**Available space for rent** **Industrial and commercial** 37,061 m^2 **Office** 9,018 m^2 **Residential** 21,322 m^2 **Shopping mall** 8,182 m^2	• Designing smaller apartments to target a new market in Mauritius.	**Occupancy rate** 96.8% (^1%)
Natural	**Land available for development and regeneration** 677 ha	• Smart energy measures. • Waste separation and recycling in our Beau Plan Smart City. • Sewerage treatment plant operational within the Smart City. • Internet of Things (IoT), intelligent sensors, and cloud-based software installed to monitor and manage natural resource impacts. • EDGE Certification for our new office building, The Strand. • Agreement for the construction of a 1.6 MW photovoltaic solar farm to supply renewable energy power to the Smart City.	

[1] *Data as at 31 December 2022.*

[2] *Calculation methodology was updated in 2021*

Property and Leisure (Cont'd)

Property and Leisure business model (Cont'd)

Capital	Material inputs[1]	Activities to sustain value	Material outcomes
Social and relationship	Our business model depends on maintaining quality relationships with key stakeholders including Government, tenants, project developers, financiers, neighbouring communities, and the media.	• Dedicated teams for effective relationship management with relevant stakeholders.	**Employee turnover rate** 7% (2021: 11%) **Payment in taxes (Mauritius)** MUR 3.3 million **Visitors to *L'Aventure du Sucre*** 73,830 people **Participating in events and festivals** 5,000 people
Intellectual	Project timelines include adequate buffer time for obtaining permits.	• To obtain necessary development permits, the Land Management Department works full time following up on applications submitted to various ministries and authorities. • Dedicated Compliance Officer to take clients/buyers through a Know Your Client process. • Audits of *L'Aventure du Sucre* from external tour operators.	Some permits delayed, but these have been addressed. Audits on *L'Aventure du Sucre* conducted in 2022.
Financial	**Property and Leisure total equity (Jan 2022)** MUR 4,620.4 million **Total borrowings** MUR 985.8 million **Capital expenditure** MUR 67.6 million	• Actively managed the financial performance through weekly meetings with head of departments, monthly senior management meetings and regular Board meetings.	**Turnover** MUR 1,032.2 million (^99%) **Profit (including profits on land sales)** MUR 292.6 million (^217%) **Property and Leisure total equity (Dec 2022)** MUR 4,445.3 million

[1] *Data as at 31 December 2022.*

Delivering broader societal value

The Beau Plan Smart City development is anticipated to create at least 8,400 new and direct jobs in the Smart City itself, with an additional 500 construction jobs during the construction phase, and another 5,000 indirect jobs for the suppliers of associated goods and services. We will provide training to develop the skills of people in the region, including small business management, organic farming and ICT.
In addition to job creation opportunities, our development will have a positive impact on the value of Terragri's existing land and on our neighbours' property, contributing positively to and generally enhancing the region.

The operating context

Material issue impacting value creation	Our response
Covid-19 – We continued to experience an increase in construction costs due to the rising cost in building materials post Covid-19, which presents a challenge in terms of affordability for the local market. With the opening of our borders, lifting of Covid-19 restrictions and increase in tourism, we saw a pleasing recovery in revenue from our museum activities, *L'Aventure du Sucre*.	To deal with the increasing cost of materials for all projects, we are negotiating with operators and taking steps to mitigate the impact on new builds.
Regulatory and policy framework – Changes in Government policy and regulation relating to property development, as well as any delays in obtaining approvals and other Government permits, could impact on the nature, cost and timing of proposed developments. Given the nature of our business we deal with several authorities, including environment, traffic, road development, and the more recent land drainage authority.	We monitor current and proposed regulatory and policy developments and place a high priority on building and maintaining strong relationships with Government and regulatory authorities. We have a diversified service offering to minimise any negative impact resulting from changes in Government strategy. We have efficient land management tools in place enabling us to adapt quickly to the continuously changing legislative environment. To obtain necessary development permits, the Land Management Department works full time following up on applications submitted to various ministries and authorities. In 2022 we experienced several delays obtaining clearances and permits, which impacted project delivery. Despite this, we have very good relationships with all authorities, and this was strengthened during the year. Communication between Government, authorities and the private sector in general, has been re-established, which is a significant step in the right direction. Through the Economic Development Board (EDB), Government has called for a regulatory review of the real estate and construction sectors to identify improvements. Recommendations have been made to the EDB and we are optimistic that there will be improvement in terms of doing business going forward. Through our active involvement in committees at Business Mauritius, we are in constant dialogue with authorities. We are fully conversant with the Financial Intelligence and Anti Money Laundering Act with a dedicated Compliance Officer and department. All clients/buyers go through a Know Your Client process, and this has been fully integrated into the sales process.
The changing competitive and business environment – A potential oversupply of properties on the market, and other changing market dynamics, could result in lower occupancy rates, a loss of revenue and reduced return on investment. We are seeing pressure on rental prices, mainly in office space, due to oversupply and competition.	To provide a compelling proposition for entrepreneurs to develop or relocate their businesses, we are ensuring the timely implementation of a mix of facilities. We have established a strong marketing and communications team and we have secured the commitment of key anchor tenants in the retail and boutique leisure sectors. We are creating new living spaces in Beau Plan with more pleasant work environments, which we believe will enable us to attract a premium. However, there remains a limit to how much tenants will pay, and we foresee pressure when negotiating with future office tenants.

Property and Leisure (Cont'd)

Our 2022 performance

The Property and Leisure cluster achieved an excellent set of results in 2022, posting a profit of MUR 292.6 million compared to a profit of MUR 92.3 million in 2021.

Profitability was driven by the successful delivery of the first phase of Mango Village; a strong performance by the Mahogany Shopping Promenade; pleasing momentum on our new office building, The Strand, and our Beau Plan Business District; and a recovery in revenue from our museum activities, *L'Aventure du Sucre*. We continued to see a great sense of solidarity in our team, with everyone remaining focused and motivated, positively impacting performance. After the challenges of Covid-19, the cluster also benefitted from the opening of borders and renewed interest in our residential and commercial properties by locals, foreigners and local and international business tenants.

We completed the infrastructural works for *Les Coteaux de Belle Vue*, with the deed of sales concluded in December 2022 for 28 lots out of 53 (total sales MUR 187.5 million out of MUR 351 million). We also launched the sale of three projects within the Smart City – Mango Village phase two, *Les Muguets* phase two and *Le Parc*. These land sales are part of our cash generation plan, which supports our infrastructure and projects at large. Considering the tough operating conditions and impact of the geo-political situation (including high interest rates and inflation), cash generation is increasingly important to sustain our operations.

We engaged with Government on a land exchange mechanism and agreed to transfer some 45 arpents of land to Government to support the implementation of its scheme to build 12,000 social housing units. In exchange, we secured land at Solitude, Beau Plan and Bassin Paquet for future development. We believe this outcome is the result of active engagement and an improved relationship with Government and establishes a strong base for future collaboration.

We continue to work hard to mitigate delays in obtaining permits and clearances from authorities. This includes dedicating full-time resources to establish appropriate communication with authorities and follow up on all necessary permits and clearances.

Beau Plan Smart City projects

This year, we celebrated the one-year anniversary of our retail centre, the Mahogany Shopping Promenade, which was opened in July 2021 in the heart of our Beau Plan Smart City. Since opening, we continue to gain momentum and have secured a strong returning customer base. Over the course of 2022, we received an average of 200,000 visitors per month – a 7% increase on 2021 monthly footfall. In 2022, we hosted 72 events and 156 exhibitions within the Mahogany Shopping Promenade, and we continue to investigate opportunities to further increase offerings in the mall, improve the customer experience and promote customer loyalty. We secured 93.6% of the tenant leasing with a target to reach full occupancy by the end of 2023.

Another milestone in 2022 was concluding the sale of all 26 units from the first phase of Mango Village duplex and apartments (MUR 289 million). This was the first build and sell concluded by Novaterra and, while there were some challenges delivering this project, we were very pleased with the outcome. We have since launched the second phase comprising 22 units (MUR 345 million) and have received a positive response, with 86% of the units booked as at April 2023. We completed the second phase of *Les Muguets*, residential serviced plots in the Smart City, and will hand over 60 plots to respective buyers as from June 2023 (MUR 443 million). We further sold all five *Le Parc* plots in 2022 (MUR 83 million).

We continue to make good progress with the construction of our new office building, The Strand. We have secured 65% occupancy on the total available area and aim to be finished with construction by May 2023. A major highlight was achieving EDGE (Excellence in Design for Greater Efficiencies) Certification for The Strand – a first for Mauritius. EDGE is an international green building certification system focused on making buildings more resource-efficient. We estimate that we will achieve energy savings of approximately 40%, water savings of approximately 30% and 41% less embodied energy in the materials used in the construction of the building. This will reduce operating costs at the office units and generate savings for tenants.

We further launched phase one of the infrastructural works for the Beau Plan Business District in April 2022. The Business District will provide a new business destination for local and international entrepreneurs, professionals and companies, with commercial plots for sale as well as a dedicated zone for small and medium-sized businesses. Since launch, we have secured two major business tenants for the Business District and are seeing strong interest from other prospective tenants (local and international).

We continue to identify opportunities for developments that will bring additional vibrancy to Beau Plan. Work started at Mon Rocher for a Padel Club and Club House, with construction scheduled to end in the third quarter of 2023. We also completed and handed over the second phase of the Greencoast International School at a cost of MUR 92 million, with 272 students at the school at the start of 2023.

The Beau Plan Smart City now offers educational, leisure, office, cultural, residential and shopping opportunities. We have invested substantially in the infrastructure to make Beau Plan more accessible to the public through non-motorised transport, including walking, cycling, and electric scooters, while bus routes now serve the Mahogany Shopping Promenade.

Our 2022 performance (Cont'd)

In 2022, we further established a company (Viva SC Management Ltd) to manage and oversee the security of our Beau Plan Smart City.

We remain committed to ensuring that the Beau Plan Smart City is inclusive of the adjoining villages of Pamplemousses and Bois Rouge. We initiated our Bois Rouge Social Engagement Project in March 2022. As part of this project, we are upgrading the village's infrastructure and started the construction of sports and leisure amenities. Construction was completed in March 2023.

We continue to integrate sustainability practices into the design of the Smart City, including smart energy measures. We progressed with waste separation and recycling in Beau Plan, including installing three deep waste collection containers to recycle plastic, paper and glass. We installed AI and smart technology to optimise energy consumption and introduced energy-efficient lighting and security systems within the Smart City. We also signed an agreement with the CEB to implement a 1.6 MW photovoltaic solar farm, which will allow us to supply the full energy requirements at the Mahogany Shopping Promenade. Energy will be uploaded to the grid at a predefined tariff, with a ROI of 11 years.

Pleasing recovery in revenue from our museum activities, *L'Aventure du Sucre*

After experiencing a loss of MUR 10 million in 2021 due to the closure of borders and Covid-19 restrictions, our subsidiary Sugarworld Ltd, which operates under the brand name *L'Aventure du Sucre*, achieved a fantastic recovery and record profits of MUR 17.7 million in 2022. We expect to build on this strong performance in 2023.

The key components of the Beau Plan Smart City development are now in place, with MUR 2.9 billion invested to date, and our strategy for creating value has worked well, with the mix of projects bringing higher value to Beau Plan. We have seen this value in the increasing price of land, which has risen by more than 200% since 2017 (in some instances increasing by up to 300% for some exclusive products).

Our strategy for the coming years continues to revolve around three main axes:
- To grow our assets, and continue to build and lease;
- To concentrate on build and sell including villas, duplex, and apartments; and
- The sale of serviced plots, but only where we can extract the highest value.

We are focused on executing this strategy within four main zones with long-term development potential. These zones include Beau Plan (capitalising on the success of our Smart City and existing infrastructure) as well as the neighbouring Balaclava Golf and Lifestyle Estate (development rights granted). In addition, we identified a new zone for development with astonishing views over the North and close to Belle-Vue. We are currently in the planning process. Finally, we identified a one-off opportunity for a sizeable yielding asset in the hospitality sector located at Bassin Paquet, along the coast.

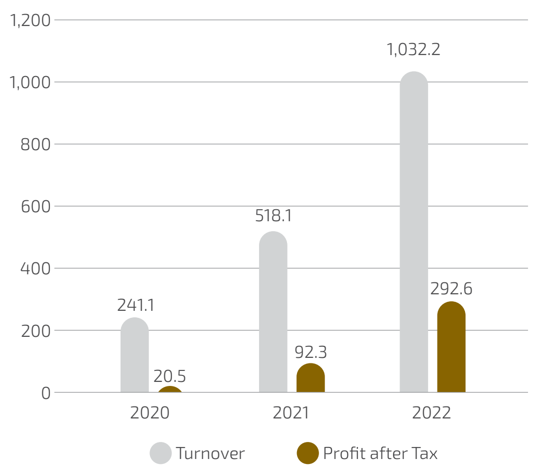
We will maintain a strong focus on managing the development costs of our projects, targeting efficiency opportunities at all different stages, from inception to operation. We will also continue to integrate environmental considerations to reduce our footprint.

Our strategic outlook

Operating conditions are likely to remain challenging. We continue to experience elevated construction costs due to the rising cost in building materials and freight post Covid-19, now aggravated by the geo-political situation. In addition to global commodity price increases, affordability is being challenged by the depreciation of the Mauritian Rupee and high inflation and interest rates.

Against this backdrop, it is incredibly pleasing that we have executed our strategy effectively and delivered what was initially planned as it now provides us with a strong foundation to navigate challenges while building on what we have already achieved. Importantly, we are reaping the benefits of credible and effective strategy execution: along with investors, an increasing number of prospective residential and commercial tenants (including established local and international brands) are showing interest in our Beau Plan Smart City.

Turnover and Profit after Tax (MUR'M)



Investments

	Revenue MUR'M	Profit/(loss) MUR'M	% effective holding
Finance			
SWAN General Ltd is the leading insurance general and life assurance company and financial solutions provider in Mauritius. It provides a range of insurance and financial solutions, from short-term and long-term insurance and retirement plans to wealth management and stockbroking for corporate clients and individual customers.	8,479.8 (▲13.1%)	764.9 (▲10.4%)	34.6
Terra Finance Ltd offers advice and assistance to Terra's subsidiaries on cash management, and on the negotiation of short and long-term funding. The company is authorised to invest liquidities among various subsidiaries, and to manage their foreign currencies and exposure to currency and interest rate risks by using hedging tools.	178.5 (▲24%)	21.1 (▲455.3%)	100
Inside Capital Partners Ltd is an independent private equity manager seeking to invest through equity in strong potential opportunities in selected Southeast African countries. It is a limited company domiciled in Mauritius and also has an office in Lusaka, Zambia.	29.6 (▼11.6%)	2.4 (▲500%)	36.8
Construction			
Terrarock Ltd, incorporated in 1990 further to Terra's policy of field de-rocking, is involved in the manufacturing and sale of hollow concrete blocks, aggregates and rock sand. Management of operations is entrusted to The United Basalt Products Ltd, the strategic partner of Terrarock.	197.3 (▲13.9%)	26.2 (▲5.2%)	45.0
REHM Grinaker Construction Co. Ltd is among the leading construction companies in Mauritius, involved in industrial, commercial, high-end hospitality and leisure projects, as well as in civil and infrastructure works. The company has gained recognition for quality-on-time on a wide range of projects in building and civil engineering, conventional contracts and design-build.	1,616.1 (▲58.5%)	56.5 (▲183.2%)	62.3

	Revenue MUR'M	Profit/(loss) MUR'M	% effective holding
Other investments			
Aquasantec International Ltd is active in development in East Africa, selling plastic equipment such as water tanks, mobile toilets, bio-digesters, septic tanks, HDPE pipe, gutters and other related plastic products using different technologies including roto, blow and injection moulding.	807.9 (↑13%)	(78.9) (↓343.5%)	26.7
AMCO Solutions Ltd specialises in procurement and logistics for the sugar industry. In addition to the traditional storage and distribution of molasses, it also manages the Coal Terminal (Management) Co. Ltd, whose responsibilities include the procurement, transport, storage and distribution of coal for the power plants of the sugar industry and the needs of the country. As from the beginning of 2018, the company has also been driving an aggressive procurement strategy to support its shareholders in their quest to lower the cost of inputs in sugar production.	5.5 (↓72.6%)	51.9 (↑458.1%)	41.9
United Docks Ltd is listed on the Stock Exchange of Mauritius and its main activities consist of real estate holdings and development.	82.2 (↑41%)	474.7 (↑1,589.3%)	21.5

Group-level Functions

While each of Terra's clusters is autonomous in its decision-making, budgeting, and reporting – with each leadership team accountable for its cluster's performance – Group-level strategic guidance and support services are provided in relation to Terra's management of employees, environmental performance, and the community. This section briefly reviews the material performance and outlook of these Group-level activities.

Human resources: investing in our people

Having the right technical and leadership skills, diversity of experience, and a performance-oriented culture are fundamental to Terra's ability to generate value. Terra's Corporate Human Resources (HR) Department, supported by the HR teams at Grays and Terragri, provides strategic guidance on HR issues and various shared and value-added services. These services include customised training and development programmes, HR efficiency matrices, and remuneration and benefits policies.

Deepening our desired working cultures

Talent is a critical driver of business performance, and our ability to attract, develop, deploy and retain talent will be a significant competitive advantage far into the future. Central to this is positioning Terra as an employer of choice and deepening our desired working cultures.

We continue to track and measure desired behaviours through an annual culture index survey. In addition, we rolled out our new employee engagement survey in 2022 to assess levels of employee engagement in our clusters and identify top engagement drivers for the workforce. Undertaken in collaboration with global advisory firm Willis Towers Watson, the survey looked at the aspects of health, personal and financial well-being, diversity and development. We achieved an overall score of 80%, demonstrating that our employees are committed to Terra, receive adequate training and compensation, and feel valued and appreciated for their work. While our score was satisfactory, gaining insight into other improvement areas was valuable. We will conduct this survey every two years going forward. It will be an essential tool to assess our progress in creating an engaging and enabling workplace culture that supports talent retention and improved performance.

We continued to roll out culture and engagement journeys across our Cane and Property and Leisure clusters, and our focus this year was on maintaining momentum.

In our Cane cluster, the executive team participated in facilitated workshops to reflect on progress and to identify opportunities to align the cluster's vision, mission and purpose with its goal of building a learning, caring and results-driven culture. We continue to see improved interaction between colleagues from Terragri and Terra Milling. The impact of the culture and engagement initiatives undertaken in our Cane cluster over the years was further demonstrated by the significant increase in the cluster's employee engagement score, which improved from 33% in 2017 to 85% in 2022.

To further support performance, we implemented a new continuous performance management system in Terragri in 2021 and ran it for the first time in 2022. This PCR (Performance Coaching for Results) system supports meaningful conversations between managers and staff focused on measurable outcomes.

Novaterra received a score of 94% in the engagement survey, demonstrating strong levels of trust, engagement and confidence. As an outcome of the survey, Novaterra identified further opportunities to strengthen employee engagement. We also established teams within the cluster to develop action plans to enhance culture and implement related initiatives.

We launched a succession planning and talent identification project across all clusters in 2022. This project is focused on succession planning for critical positions, factoring in retirement and replacement.

We continued to identify opportunities to digitalise our HR processes, as this enables the use of data and analytics to improve employee experience and enhance our employee value proposition. In 2022 we developed a digital recruitment platform, which we are piloting at *L'Aventure du Sucre*. Anticipated benefits include reducing paper usage and achieving a more streamlined, targeted and efficient recruitment process.

Learning and development

Investing in the learning and development of our employees remains a key strategic focus. Working with the global professional development organisation Dale Carnegie, we conducted a full training needs analysis in all our businesses to establish our annual training plans. We also initiated a project to digitalise our training needs analysis. We will complete the digitalisation project in 2023.

Our Training Centre aims to provide excellent training services to Terra employees and external stakeholders, optimising the Human Resource Development Council refunds and delivering an improved return on investment for all training undertaken. In 2022, we ran 20 programmes at the Training Centre, reaching 189 employees and achieving approximately 342 training hours.

We gained momentum on the uptake of our e-Learning platform. The platform offers eModules that require approximately 10 to 15 minutes to complete and are easy to access at employees' workstations or on a mobile App. We aim to maximise the effectiveness of online learning by enabling employees to learn at their own pace. In 2022, we increased employee participation on the platform from 440 users in 2021 to 480 and have seen a 40% increase in employee participation since launch. We also posted 11 new modules on the platform in 2022. This includes a new ethics eModule, which covers Terra's Code of Ethics and Conflict of Interest Policy. The ethics eModule is mandatory for all permanent employees and all recruits as part of our employee induction process. In 2022, 69% of our employees completed the ethics eModule.

Health and safety

In 2022, Terra hosted its first Health Month to raise employee awareness of the importance of monitoring their health and well-being. Employees received medical check-ups, including breast cancer screening for women, and attended nutrition and mental well-being workshops. We introduced our first online health and safety module, which instructed employees on appropriate ergonomic postures for daily operations. We also integrated health and safety awareness into the redesigned Group induction programme for recruits.

The Group aims to continuously improve its approach to provide a healthy and safe working environment for all its employees, sub-contractors, and visitors. In 2022 the Group saw a slight increase in the total number of accidents recorded, from 57 in 2021 to 60 in 2022. Of these accidents, 92% were classified as minor to moderate, and only 8% accounted for major accidents. We remain committed to instilling a strong health and safety culture across the Group and will roll out various health and safety training and awareness initiatives in the year ahead. This will be supported by our Group Health and Safety Officer and dedicated Health and Safety officers within our clusters who drive a proactive and KPI-orientated health and safety culture.

Cane: The Cane cluster recorded a total recordable incident rate (TRIR) of 22.7 in 2022 (2021: 18.4). Terra Milling delivered a strong health and safety performance, with a 17% and 22% decrease in injuries recorded and man-days lost, respectively. We achieved this improvement through active investment in health and safety, including training, equipment, and visible management interventions. A major highlight for Terra Milling was aligning its operations with ISO 45001, an international occupational health and safety standard issued to protect employees and visitors from work-related accidents and diseases. Terra Milling completed its ISO 45001 certification audit in December 2022. Unfortunately, we experienced an increase in health and safety incidents at Terragri. Recorded accidents tripled, and man-days lost increased by 32%. While most of these accidents were minor (related to lacerations or injuries arising from slips, trips and falls), we unfortunately recorded three major accidents. In 2023, we will focus on learning from the incidents and taking steps to prevent and mitigate associated risks. This includes categorising all risks associated with our operations to ensure we can prioritise and implement required control measures.

Brands: The Brands cluster recorded a TRIR of 34.0 in 2022 (2021: 30.8). This increase mostly relates to minor injuries from lacerations due to broken bottles and moderate injuries from lifting heavy items with improper lifting techniques. We are addressing these issues through refresher training and more frequent and visible on-site inspections. Fortunately, the cluster did not experience any serious incident in 2022. During the year, we also focused on reinforcing on-site fire safety and ensuring that all fire certificates were up to date. Another highlight was re-establishing our monthly Health and Safety Committee. The Committee observed that communication between managers and employees has improved, creating a positive foundation to establish a strong health and safety culture within the cluster.

Power: The Power cluster recorded a TRIR of 0 in 2022 (2021: 0). There were no lost time incidents for employees or external workers, and 53 near-misses were recorded, the details of which inform our continuous learning and improvement. We implemented employee training to reinforce our lockout/tagout (LOTO) procedure for isolating and controlling hazardous energy during maintenance. We reinforced our confined space procedure and created and implemented a confined space work permit. Terragen also purchased new confined space gas meters to ensure air is appropriately monitored in confined areas where maintenance is required. These procedures are critical to ensure employee safety and improve their response to hazardous situations. Terragen further updated its Fire Emergency Plan to ensure employees have the correct equipment and knowledge to respond effectively in emergencies. Other initiatives include completing the safety upgrade of all non-conforming ladders and completing a forklift licensing programme with all relevant employees. Terragen encountered no non-conformities during its triple recertification audit. This strong performance highlights the excellent safety culture at Terragen.

Property and Leisure: The Property and Leisure cluster recorded a TRIR of 16.3 in 2022 (2021: 12.4). This slight increase was mainly due to an increase in minor injuries. Following the opening of our Mahogany Shopping Promenade in June 2021, ensuring the health and safety of tenants and visitors was an utmost priority. The Centre Management Office (CMO) conducted regular site inspections to ensure all tenants complied with established health and safety requirements. Local authorities further audited our Mahogany operations in 2022 and provided minor recommendations to tenants to improve their health and safety procedures. A key focus area for the CMO was electrical safety, and the team tested all electrical protective devices installed within the mall. This enabled the CMO to identify faulty circuits and take corrective action. The CMO Supervisors were trained on properly using scissor lifts to ensure that all work conducted at heights is done safely. We also carried out a fire drill and set up an emergency response team that included tenants. Similarly, *L'Aventure du Sucre* strengthened its fire prevention and protection readiness.

Group-level Functions (Cont'd)

L'Aventure du Sucre further underwent an external audit, verifying its compliance with local legislation and international health and safety standards. Covid-19 management remained a high priority for *L'Aventure du Sucre*, which once again welcomed visitors from around the world.

We provide more information about our health and safety performance in the Terra Sustainability Report, available on our website.

Protecting labour rights

Terra ensures that all employees are adequately remunerated and provided with a respectful working environment free from inappropriate or unprofessional behaviour. This includes any form of harassment or discrimination. We also recognise every employee's right to freedom of association.

In the Cane cluster, 85% of workers are unionised across six different unions. Sector workers are also regulated by sugar industry remuneration orders that set the minimum wages and employment conditions for various categories of workers. Following the collective bargaining process initiated in 2021, the Cane cluster successfully signed the first collective agreement in Mauritius between companies and the sugar industry trade unions (grouped as a Joint Negotiating Panel) in 2022. The agreement represents manual workers. The wages increase of 3.75% considers the impact of the rising cost of living on workers' wages and is indexed to inflation. The agreement promotes equal work for equal pay by ensuring gender pay parity and has safeguards in place to prevent the abuse and exploitation of seasonal and contract workers. The agreement further includes accident cover for any accident arising in or out of the course of their working hours.

Outlook

Looking forward, we will continue to invest in employee learning and development and roll out external training through our Training Centre. We plan to launch a leadership programme in 2023, emphasising soft skills, coaching, and building a strong leadership bench. The outcomes of our succession planning project will be available in 2023, and we will use these to inform our retention and succession planning strategies and learning and development plans. Based on high employee engagement and attendance levels, we intend to roll out another Health Month in 2023.

Environmental performance: driving sustainability at the cluster level

Terra harnesses the productive qualities of landholdings in Mauritius to create stakeholder value. Agriculture and power generation lie at the core of our business model, with our key business activities depending on the availability and quality of natural resources. In addition to our human capital, our key resources include land, water, soil, sugar cane, and biomass. Conserving these resources and safeguarding the island's ecological functioning is central to our value proposition.

At each of our entities, dedicated health, safety, environment, and quality (HSEQ) employees at the cluster level manage sustainability performance. This decentralised approach empowers each cluster to drive performance by identifying and integrating cluster-specific objectives into the overall cluster strategy.

SEMSI LISTING

Since 2015, Terra has been listed on the Stock Exchange of Mauritius' Sustainability Index (SEMSI).

Circular economy: our environmental footprint

Our industrial ecosystem is a leading example of a circular economy in sugar production, with by-products from one part of our business serving as inputs for others. Climate change and water scarcity remain the key environmental risks for Terra, while wastewater management, water pollution and waste production remain other major concerns. The potential to expand renewable energy production from biomass is a climate change-related opportunity for the Group that speaks strongly to our business model (see our Sustainability Report for more details).

Cane: Drought conditions and a reduction in water allocations continued to impact sugar cane production for Terragri. A key focus remained on improving irrigation infrastructure to expand the distribution of treated effluent for irrigation across our fields. In 2022, 589,085 m^3 of treated effluent from Terra Milling and Terragen was used by Terragri for irrigation (2021: 610,966 m^3). Terra Milling focused on reducing water consumption from leaks and inefficiencies and improving waste segregation and recycling. Terragri remained focused on enhancing diesel management and reducing GHG emissions from diesel use. We introduced a smart engine in our harvesting operations, which reduced diesel consumption and maintained efficiency levels.

Brands: In 2022, Grays Distilling sent 48,124 tonnes of vinasse effluent to Topterra for treatment, which is processed into concentrated molasses stillage (CMS) and irrigation water used by Terragri in sugar cane fields. Water consumption declined at Grays Distilling due to lower levels of production and reduced molasses supply. Grays Inc.'s water consumption increased by 15% due to the increased use of recycled bottles requiring washing. Grays Inc. continued with efforts to optimise water-use efficiency and installed rainwater harvesting infrastructure, which supplied 30% of its water needs. As part of its commitment to transition to greener energy sources, Grays Inc. also installed photovoltaic solar panels that generated 50% of its energy requirements.
We recorded no exceedances of effluent quality standards at either entity. Grays Inc. continued to implement a more structured approach to waste management. This includes increasing the number of carton and paper recycling bins on-site and allocating a dedicated bin for collecting and recycling LED bulbs and tubes. We also added new collection points for collecting and recycling used batteries and ink cartridges.

Power: Terragen continued to produce renewable energy from cane straw and b*agasse*. Renewable energy production decreased from 395,492 GJ in 2021 to 315,864 GJ in 2022, and carbon emissions decreased from 500,097 tCO_2e to 221,265 tCO_2e. The decrease was due to the suspension of our coal operations in April 2022; the suspension resulted in reduced fuel availability (only cane straw and *bagasse*), which reduced operational efficiency and impacted production levels. Terragen explored additional options to expand the production of renewable energy from biomass. We planted an additional 5.3 hectares of eucalyptus and continued the biomass trial to generate electricity from locally produced wood chips. We also submitted a proposal to the CEB to run a trial with 8,000 tons of imported wood chips. The share of renewable energy in Terragen's energy mix increased from 19% to 24%. We made a concerted effort to improve waste management at Terragen, emphasising waste separation and recycling; we generated 21% less waste and 31% more recycled waste. We again recorded exceedances in effluent quality due to the presence of oil and grease and are investigating how to resolve the issue and strengthen our environmental controls. We recorded no exceedances for air emissions. Our water consumption decreased to 897,741 m^3 (2021: 1,604,584 m^3) due to decreased energy production and the suspension of our coal operations. The bulk of our effluent was treated and sent to Terragri for irrigation, with 280,000 m^3 of wastewater sent to the local water treatment facility.

Property and Leisure: Novaterra progressed with waste separation and recycling in our Beau Plan Smart City. We installed three deep waste collection containers to recycle plastic, paper and glass. We also installed bi-container bins for recyclable and non-recyclable waste along main avenues. We increased our efforts to optimise water-use efficiency. We treated 20,000 m^3 of our greywater, which we used to irrigate the sugar cane fields in Beau Plan. We installed AI and smart technology to optimise energy consumption and introduce energy-efficient lighting and security systems within Beau Plan Smart City. A major highlight was achieving EDGE (Excellence in Design for Greater Efficiencies) Certification for our new office building, The Strand. EDGE is an international green building certification system focused on making buildings more resource-efficient. *L'Aventure du Sucre* continues to manage its waste and monitor water and electricity use and is taking steps to make its operations more environmentally responsible. This includes prioritising local sourcing, making use of energy-efficient lighting and introducing a paperless approach in its office and marketing activities.

Outlook

During 2023 each of our clusters will focus on the following:

Cane: Enhance irrigation infrastructure to enable more efficient use of water; maintain focus on the management of diesel consumption; implement precision agriculture capabilities to increase the efficiency of chemical fertiliser; and continue to build capacity regarding the use of digital solutions within Terragri.

Brands: Increase employee awareness about water-use efficiency, energy conservation and waste management through campaigns and posters; increase the number of recycling points in warehouses and add dedicated points for scrap metal recycling; include waste management procedures in the induction packs of all recruits; and promote the re-use of rinse water for cleaning-in-place (CIP) processes.

Power: Pursue engagements with Government to develop a strategy in line with the national 60% renewable energy objective by 2030 and the phasing out of coal; increase cane straw and *bagasse* production and enhance renewable energy production; undertake a combustion trial with eucalyptus; develop additional renewable biomass capacity, with a focus on wood chips; and continue employee campaigns to ensure efficient waste segregation.

Property and Leisure: Initiate a Tiny Forest project, which introduces a dense, fast-growing native woodland into the urban space of Beau Plan; develop a roadmap for solid waste management; investigate the use of ground water through boreholes that will supply our Smart City; set up chargers for electric vehicles across our Beau Plan Smart City; construct a 1.6 MW photovoltaic solar farm; and initiate a carbon footprint assessment.

Group-level Functions (Cont'd)

Corporate social responsibility: supporting our communities

In addition to the significant social value the Group creates through its core business activities by providing direct and indirect employment and upskilling its workforce, Terra also provides focused support to neighbouring communities. Our Corporate CSR programme, coordinated by the Terra Foundation, aligns with Government's CSR guidelines and promotes regional and national community development. The foundation's primary focus remained on the geographical areas around Terra's Beau Plan and Belle Vue operations. Going forward, we aim to allocate more resources to ensure that local communities benefit fully from the development of our Beau Plan Smart City.

Strengthened partnerships and extended community support

In 2022, the facility offered by the Mauritius Revenue Authority (MRA) was maintained. Out of the 75% CSR contribution made to the MRA (passed onto the National Social Inclusion Foundation and redistributed to NGOs), companies of the Group retained 25% for our long-term project partners. This retention enabled us to provide 50% of our CSR funds to community projects. We partnered with 23 NGOs and sponsored 50 projects in 2022. We delivered 45 of these projects (representing 84% of our funding) in the northern region.

We remained focused on education and training, poverty alleviation, health care and sports and resumed our focus on heritage and culture as Covid-19 restrictions eased. We also maintained our long-term NGO partnerships. These partnerships include a 48-year sponsorship of *Collège Technique St Gabriel*, a 32-year sponsorship of *Lizie dan la main* and an 18-year sponsorship of the ZEP (priority education zone) school.

We continued to support the resilience and empowerment of communities in the northern region through our Group emergency fund, established in 2020. We launched a service industry training programme targeting unemployed women in the communities surrounding our Beau Plan Smart City. Our focus was to equip these women with the technical and practical skills to work as residential or commercial staff while boosting their self-esteem. We partnered with local NGO *Caritas Solitude*, who assisted with developing a culturally-appropriate training curriculum. The training received positive feedback from the 15 participating women, who received letters of recommendation and were connected to employment opportunities where possible.

The Terra Foundation also collaborated with *Association Mauricienne des Femmes Chefs d'Entreprises* (AMCFE) and enrolled one beneficiary in the Academy for Women Enterprise online course sponsored by the US Embassy. The beneficiary will receive mentorship and training that will enable her to grow her business. In line with our focus on heritage and culture, we resumed our support of a local youth theatre group. Terra Foundation provided funding for transport, props and decorations, and free access to a rehearsal and performance space. Local audiences received the show well, and we are reflecting on how to channel this momentum into renewed support for theatre going forward.

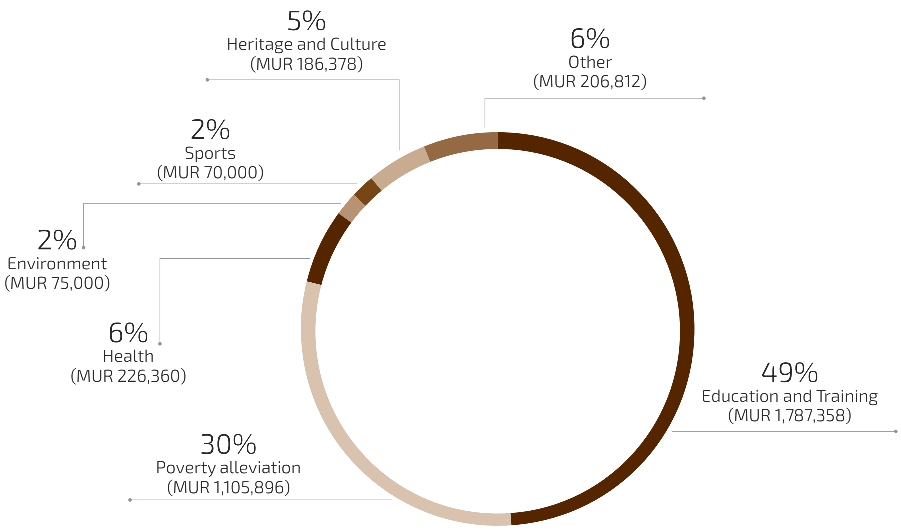
We resumed our employee volunteering initiative this year, which enables our employees to volunteer time for a community cause. Employees assisted with painting facilities and classrooms at a local school and participated in a tree planting day at our Beau Plan Smart City. We also sponsored Christmas activities for the most vulnerable children in the region.

We provide more information on our CSR performance in the Terra Sustainability Report.

Measuring impact

Our budget of MUR 3.6 million net of administrative expenses supported 1,669 beneficiaries (1,911 in 2021), the majority of who were children. We conduct annual evaluation reports to assess the work of our NGO partners.

Sponsorship by focus area in 2022



Outlook

Our focus will remain on maintaining the resilience of our NGO partners. We will continue to draw on our partner network and collaborate with national institutions to ensure we deliver meaningful, high-impact projects in 2023. We remain focused on local integration with our immediate neighbourhoods in Beau Plan Smart City, including offering training and support to job seekers. We remain committed to strengthening our employee volunteering initiative. Our aim of building a database to deliver a broader level of volunteering and in-kind skills-sharing projects remains a focus for the year ahead.