SUSTAINABILITY STATEMENT

Protecting the Environment

The Climate is changing.
Why aren't we?

Ong Weng Leong
Executive Director

6 Actions to fight climate change

1. Value Engineering for Sustainability.
2. Engineering Solutions to reduce environmental impact.
3. Measure & Analyze GHG Emissions
4. Be Energy Efficient
5. Reduce Waste
6. Raise Awarenessof the urgent need to address climate change

We Care for Environment

3.0 HOW WE MANAGE SUSTAINABILITY ISSUES (Cont'd)

SI 1 Preventing Climate Change

Tackling Climate Change

At Kelington, we want to be part of the solution to help address the climate change. Our aim is to ensure our business, and those in our supply chain, continue to deliver economic and social benefits as we assist in the transition to a low-carbon future.

Our role in a low-carbon future

We are committed to Scope 1, 2 and 3 net zero GHG emissions across the Group's operation by FY2050.

Climate change is of strategic importance for the world and for Kelington. It presents a long-term challenge if government, society and business do not take action. Long-term perspective is required to address both the risks and uncertainties, and opportunities.

We believe that Kelington can and should be part of the solution, as we engineer solutions to ensure safe handling of the delivery and distribution of specialty gases and chemicals all the way from source to equipment to waste disposal. Meanwhile, we enable new technologies to solve environmental challenges in the industry.

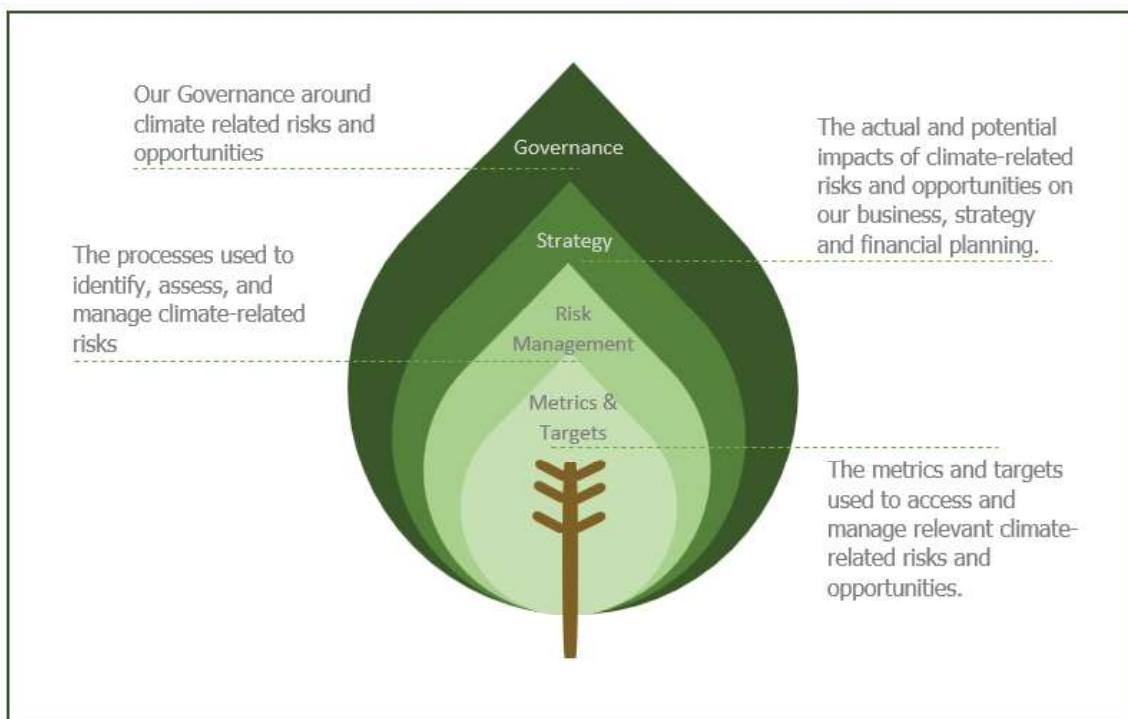| How does exhaust affect the environment?	How can Kelington be a part of the solution?
Exhaust streams in a fab frequently contain very corrosive and/or toxic gases that must be removed by chemical scrubbing prior to release to atmosphere. The process exhaust is fed to a centralized exhaust treatment facility in most semiconductor fabs. These facilities are generally described as exhaust "scrubbers".	Kelington delivers complete solutions for Wet Scrubber System; Greenhouse Gas Reduction System; VOCs Removal System; Odor Control System; and acid/ general/ exhaust/ solvent ductwork system which capable to remove harmful gases from the semiconductor fabrication process.
	Harmful gases include hydrogen fluoride, hydrogen chloride, chlorine, fluorine, silicon tetrafluoride, carbon dioxide, methane, nitrous oxide, fluorinated gases (HFCs, PFCs, SF6, NF3), nitric and sulphuric acids, as well as with other acidic and caustic compounds.
	Kelington supply and install wet scrubbers system which is a type of air pollution control device that is used to remove harmful gases and particles from industrial exhaust streams and we can customise to meet specific emission control requirements.
	Exhaust systems are generally associated with emissions of pollutants and GHG that contribute to air pollution and climate change. However, we engineer solutions to design exhaust systems with emission reduction technology and used to reduce the environmental impact.

How does industrial water/ wastewater affect the environment?	How can Kelington be a part of the solution?
The manufacturing of semiconductors generates wastewater that contains heavy metals and toxic solvents. The untreated wastewater can contaminate the ground water. This is one of the primary reasons for water pollution.	Wastewater Treatment System is used to convert spent streams into an effluent that can either be reused or safely discharged to the environment or municipal treatment facility. We provide waste water treatment system used to remove contaminants from prior to returning the treated water back to the water cycle / sewage. Kelington's well-designed wastewater treatment system helps the facility avoid harming the environment, human health, and a facility's equipment, process or products (especially if the wastewater is being reused).
Valuable materials used in manufacturing process can be expensive to dispose of as waste.	**How can Kelington be a part of the solution?**
The photolithography process is widely used in the semiconductor industry to create microcircuits and microelectronic devices, such as computer processors, memory chips, and integrated circuits. It is also used in the production of flat panel displays, including LCD, OLED, and plasma displays. The photolithography process is a critical manufacturing process for many high-tech industries to create the circuitry and components on the wafer. After the circuitry is completed, a chemical solution is used to strip away the unwanted layers, leaving only the desired components on the wafer. The chemical solution used in this process can contain valuable metals or other materials that can be expensive to dispose of as waste.	Kelington design and build Stripper Reclaim System (SRS) and allowed the manufacturer to recover and recycle the valuable materials and thus reducing waste, saving on material costs, and minimize the environmental impact. The SRS involves the use of filters and chemical treatment processes to recover and purify the materials for reuse.
Emissions	**How can Kelington be a part of the solution?**
Emissions from the combustion of fossil fuels, cement production and human activities increase, they build up in the atmosphere and warm the climate, leading to many other changes around the world—in the atmosphere, on land, and in the oceans.	Reduce CO_2 emission through Separation and Utilisation. Kelington captures waste gas emitted by petrochemical complex for re-use as key raw material to produce Liquid Carbon Dioxide via CO_2 separation technologies. Liquid carbon dioxide produced is used for freezing and chilling of food products, carbonation of beverages etc.

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Task Force on Climate related Financial Disclosures (TCFD)

This year, Kelington Group has adopted the TCFD recommendations to disclose our direct and indirect climate change-related impacts. Whilst we have the building blocks in place to implement the TCFD recommendations into our existing management processes, we recognize that there are areas we need to strengthen specifically in terms of our strategy and disclosure on metrics and targets.

TCFD Key Pillars	Kelington's Key Approaches	Refer to page
Governance	Kelington's board-level has oversight of the Group's climate-related risks and opportunities. The Board is updated on the Group's sustainability strategy and initiatives at least once a year and approves the Sustainability Statement which provides comprehensive disclosures on the company's environmental and climate change agenda.	53
Strategy	Recognising that environmental and climate change issues have imminent impact on our business operations, we look to integrate climate change issues into the Group's business operations, strategy and financial planning including adaptation and mitigation efforts.	54
Risk Management	As part of our sustainability strategy, the Board and the Risk Management Committee considered risks and opportunities associated with climate change in the context of Kelington's businesses as one of the key material issues in the Group. Environment and climate change issues are updated to the Group's risk profile and discussed at the Risk Management Committee. The risks identified include physical and financial climate-related risks such as extreme weather is covered in our framework related to safety and operations.	55
Metrics and Targets	Environmental data monitoring enables Kelington to track and benchmark our environmental progress and performance. Following a review of the metrics and targets in monitoring our environmental performance, we have since started to monitor the direct and indirect GHG emission data from our operational business units since FY2020.	62

In FY2022, we achieved zero case of significant fines and non-monetary sanctions for environmental non-compliance from government authorities.

Our Approach to Climate Change

Governance

Climate Change is discussed at senior management level and by the Board. The Board Risk Management Committee has oversight of the key sustainability risks, including climate change, the quality of the controls and performance against our targets. The Board Risk Management Committee met four times in FY2022.

The assessment of the resilience of our business to transition risks and to climate scenarios have been discussed with both the Executive Management Committee ("EMC") and the board as a key part of the business strategy discussion.

Climate change is also one of the seven key performance indicators for the Group. We are committed to Scope 1, 2 and 3 net zero GHG emissions across the Group's operation by FY2050; and we are committed to reduce our own CO_2 emissions intensity by at least 20% by FY2024 as our short-term goal set in FY2019. Our GHG performance is an important indicator of this commitment and our ability to manage exposure to future climate policy and legislative costs.

In this evolving operational environment, the Board with the support from the management team, adapts and creates resilient business strategies and models that view progress on sustainability as a means of long-term value creation and innovation.

At the Management level, the Executive Directors are responsible for ensuring climate-related risks and opportunities are fully integrated into the Company's long term business strategy. The Executive Directors oversee and report to the Board on management's progress against the Company's key strategic ESG objectives, covering various sustainability and climate-related topics and initiatives.

Summary of Climate Risk and Opportunity Governance

	Governance	Overview
Board Oversight	Board of Directors	The Board develops strategies to promote and strengthen ESG culture across the Group in pursuit of long-term sustainability. The Board carries the ultimate responsibility over the effectiveness of our ESG risk management practices and ensures Kelington's sustainability principles are in line with the Group's long-term business objectives.
	Audit Committee	The Audit Committee, with the assistance of RMC, has oversight over the Group's risk management framework and obtains assurance, through the independent consultant appointed, on the adequacy and effectiveness of the risk management and internal control systems.
	Risk Management Committee	The RMC reviews and discusses with management the Company's Enterprise Risk Management process including its risk governance framework, risk management practices and key risk factors.
		The RMC review the risks and opportunities associated with climate change; review climate change adaptation strategies and initiatives; address climate risks and opportunities; and ensure that climate risks and opportunities are integrated into KGB's overall corporate strategy.
Executive Leadership	Executive Directors	Executive Directors oversee corporate risk functions such as Business Continuity Management and Disaster Recovery. They are members of the Board and are accountable for reporting to the Board on all risks and opportunities.
	Chief Operating Officer	The Group COO holds responsibilities for the Group's climate change strategy and implementation framework, with direct oversight by the Risk Management Committee.
	Chief Financial Officer	Reports directly to the Executive Directors and oversees functions related to the governance of climate risks and opportunities including those related to the Company's reporting on its management of financially material climate-related risks and opportunities and footprint.

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	Governance	Overview
Sustainability Management	Executive Management Committee	The EMC manage climate impacts resulting from rising costs related to energy pricing and cost savings from enhanced operational efficiency initiatives. The EMC supports ongoing monitoring and quantification of company-wide climate-related risks and opportunities. The EMC also undertakes resiliency measures to mitigate against natural disasters that could impact Kelington's operation.
	Sustainability Working Group	The SWG is involved in collecting and tracking of key environmental metrics, monitoring environmental performance targets and has ownership of related policies and programming. The SWG is also tasked with developing the Sustainability Statement and reporting directly to the COO on a quarterly basis.

Kelington's Climate Change Strategy

Expected Outcome:

Reduce our carbon footprint and support our customers to achieve sustainable manufacturing process and mitigate climate change.

We are focused on:

(1) **Carbon reduction:** Target to reduce Industrial Gases Division's operational carbon emissions intensity by 20% by FY2024, and to achieve Scope 1, 2 and 3 net-zero emissions by FY2050. Kelington's Industrial Gases manufacturing activities are energy-intensive as the production and machinery operations run for 24 hours daily. We are taking action to improve both productivity and efficiency, as we reduce emissions.

(2) **Value engineering for sustainability:** Incorporating sustainable design principle into our projects. Consider climate risks from the way we design and construct new projects to closure and beyond.

(3) **Engineer solutions to reduce environmental impact:** Environmental engineering solutions to enable new technologies to solve environmental challenges in the industry and address climate change.

(4) **Advocacy:** Increase awareness of the urgent need to address climate change and engage both internal and external stakeholders to drive change.

(5) **Innovation:** Explore opportunity to collaborate with international players to develop innovative technology that can contribute the mitigation and adaptation to climate change. i.e solutions that can help to address climate change such as energy storage, carbon capture and storage.

Kelington has integrated climate change into our strategic planning since the inception. The greatest risk associated with the gas and chemical delivery system is the flammable, explosive, or toxic materials that it carries. These substances can pose danger to people and property if a release occurs because of a delivery system failure.

As we develop our business strategy, we consider environment, social and governance (ESG) risk and opportunities, including climate change. The climate change actions we take are consistent with our objectives of delivering world class and quality services to meet our customers' requirement without unnecessary harm, safely and cost effectively.

Managing climate risks and opportunities

We manage our climate risks through our risk management framework. The framework reflects our exposure to a variety of uncertainties that can have financial, operational and compliance impacts on our business performance, reputation and ability to operate successfully. It includes clearly defined oversight responsibilities for the Board, Risk Management Committee, and the Executive Management Committee, who are supported by the Sustainability Working Group and support functions, to enable effective risk identification, evaluation and management across Kelington.

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Climate Change Scenario Analysis

The Group conducted a climate change scenario study on how the effects of $2^\circ c$ increase in temperature might affect the business operations over short, medium and long term. The scope of study covered our key business segment i.e engineering and industrial gases. Based on the analysis, climate change is projected to bring the following impacts to our business directly:-

Physical Impact

- Higher temperatures could alter rainfall patterns and potentially leading to changes in the intensity, frequency, and distribution of rainfall. This could result in more intense and prolonged rainfall events, leading to an increased risk of flooding, landslides, and soil erosion. Storms and flooding could lead to building and infrastructure damage. Disruptions in transportation and communications may cause operational disruptions.

Legislative Impact

- Contractual or legal obligations due to uncertainty of water quality, quantity and volume.
- Increased emissions reporting requirements.
- Poor hazardous waste treatment is harmful for the environment and may expose the Group to lawsuits and reputational damage

Financial Impact

- Increased costs to procure water from alternative sources or the relocation of operations due to business interruption or slowdown.
- Energy shortages leading to increasing cost of production.
- Cost to transition to lower emissions technology.
- Introduction of a carbon tax and increased cost of sales.

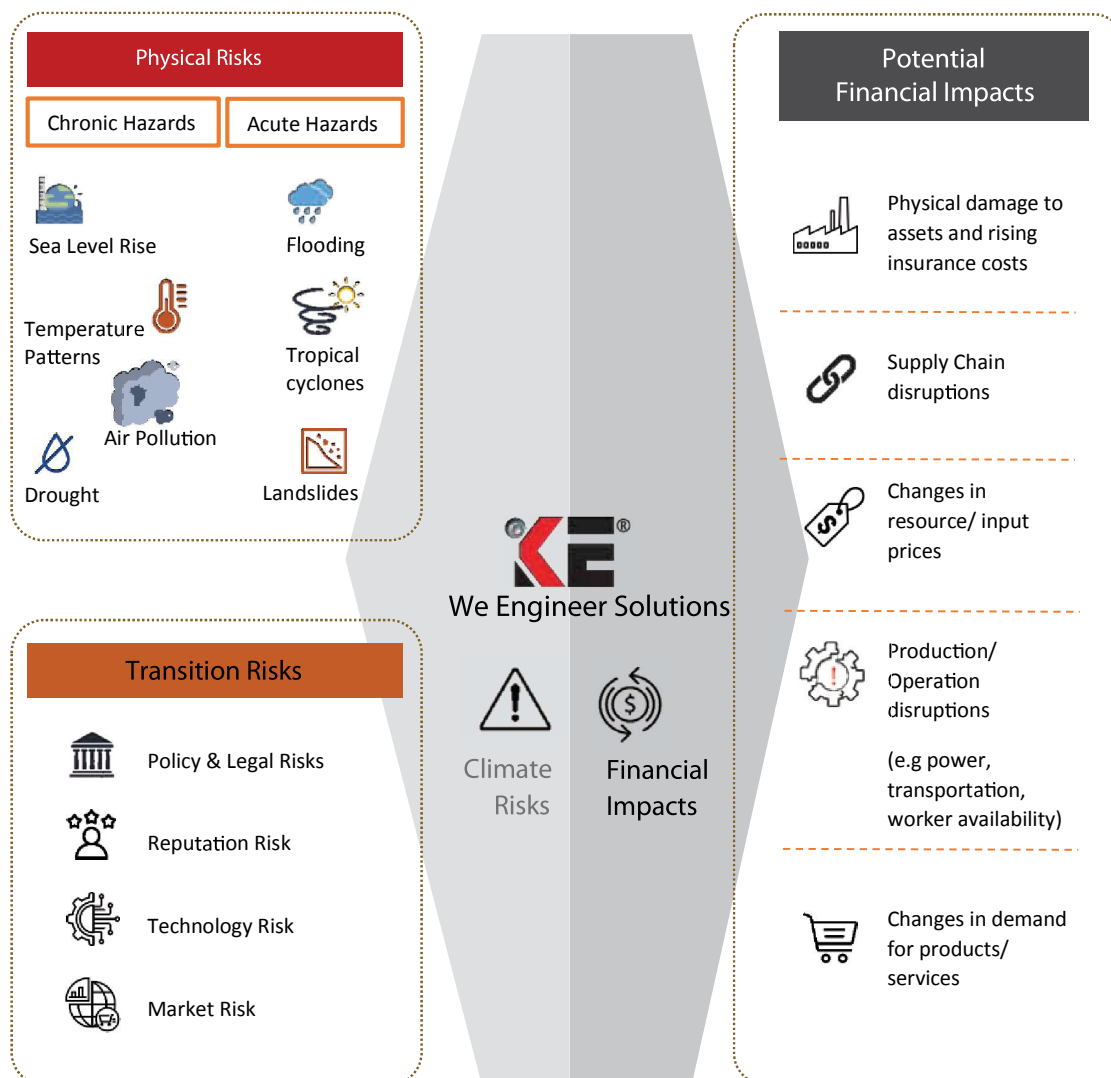### Climate Change Adaptation Strategies & Initiatives

In view that one of our significant contributors to climate change is the emission of greenhouse gases ("GHG"), the transition to a low-carbon economy will have a material impact on Kelington's long term strategy and operations.

A comprehensive assessment of the full range of impacts is challenging, as it must consider the interplay of technical, social and political factors over a long period of time. We therefore incorporate climate change considerations into our strategic planning and commercial frameworks, to ensure that risks and opportunities can be addressed comprehensively.

Climate Change is a strategic business issue which requires a whole-of-business approach. As such, Kelington will review our approach to climate change every year, as part of our ongoing strategy process.

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Climate-related risks and financial impacts

Physical Risks

Chronic Hazards	Acute Hazards

- Sea Level Rise
- Flooding
- Temperature Patterns
- Tropical cyclones
- Air Pollution
- Drought
- Landslides

Transition Risks

- Policy & Legal Risks
- Reputation Risk
- Technology Risk
- Market Risk

We Engineer Solutions

- Climate Risks
- Financial Impacts

Potential Financial Impacts

- Physical damage to assets and rising insurance costs
- Supply Chain disruptions
- Changes in resource/ input prices
- Production/ Operation disruptions (e.g power, transportation, worker availability)
- Changes in demand for products/ services

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Potential Impacts of Climate-related Risks & Opportunities

Under Kelington's risk management framework, emerging risks are identified, assessed and appropriately managed. Kelington has used the major risk categories identified in the TCFD recommendations as the basis for its risk assessment:-

(i)   Risks related to the transition to a lower-carbon economy
(ii)   Risks related to the physical impacts of climate change

Potential Financial Impact Level:	Timeline:
▫ Low ▪ Medium ▪ High	Short Term:0-1 year Medium Term: 1-5 years Long Term: 5-20 years

Transition Risks	Potential Impacts of Climate-related Risks and Opportunities on our business	Short	Medium	Long	Our Strategy
Policy and Regulations	Current and emerging regulation has the potential to impact business costs associated with meeting regulatory requirements and the impact on semiconductor markets. This includes the potential for increases in carbon pricing and emissions reporting obligations.	▫	▫	▪	Ensure full compliance to environmental regulations and improve sustainability performance.
Market	Chip manufacturing contributes to the climate crisis. As the semiconductor industry grows, and so with its carbon footprint. The chip industry used different gases during the production process, many of which have a significant climate impact. Kelington's products and services have an important role in a low-carbon economy.	▫	▪	▪	Explore tender opportunities on Wet Scrubber System; Greenhouse Gas Reduction System; VOCs Removal System; Odor Control System; and acid/ general/ exhaust/ solvent ductwork system which capable to remove harmful gases from semiconductor fabrication processes. Promote our capability to design and build Stripper Reclaim System (SRS) and allowed the manufacturer to recover and recycle the valuable materials and thus reducing waste, saving on material costs, and minimize the environmental impact.
Technology	The development and deployment of low-emissions technology presents cost beneficial opportunities for the business to reduce emissions and improve energy efficiency and productivity. Technology deployment in the electricity sector, and the sector's transition to low carbon, has the potential to impact the future price of purchased electricity.	▫	▪	▪	Opportunity to collaborate with international players to develop innovative technology that can contribute the mitigation and adaptation to climate change. Thus to increase corporate value and revenue from expanded collaborations. We are seeking to identify the technologies that are most relevant and valuable to our business and, where appropriate, to partner and collaborate with others.

Transition Risks	Potential Impacts of Climate-related Risks and Opportunities on our business	Short	Medium	Long	Our Strategy
Legal	Climate change has the potential to result in legal compliance problems and litigation. There is increasing emphasis on the duty of directors to consider and disclose climate change risks.	■	■	■	Regularly review sustainability management framework includes policies, governance structure, ESG integration process, communications and continuous improvements.
Reputation	Stakeholder expectations on climate change are evolving and will impact the sector and Kelington's reputation and ability to operate.	■	■	■	We have worked increasingly closely with our investors on climate change related issues. We recognise that expectations for, and scrutiny of, disclosures will increase. Kelington's intent is to demonstrate that we are following through on our public commitments on climate change, aligning our disclosure with good practice and internationally accepted frameworks.
Physical Risks					
Acute physical risks	Changes to the intensity and frequency of extreme events, such as severe floods, have the potential to damage infrastructure and interrupt business operations. This could result in increased operational costs and loss of revenue from reduced LCO2 production or suspension of works. The changing nature of extreme weather events also has the potential to impact on the design criteria for new projects.	■	■	■	We consider climate risks from the way we design and construct new projects to closure and beyond. We have seen the impacts of climate change in recent years and we are using scenarios to assess further medium to long-term risks.
Chronic physical risks	Longer-term trends can be more difficult to identify and respond to. For example: extreme weather resulting in supply chain disruptions and increased operational costs; rainfall patterns may vary both in terms of average rainfall, and seasonal variability, impacting water availability and requiring stronger discipline in water balance management; and temperature increases will result in more extreme-heat days. This could have knock-on, indirect impacts, including employee and community health. We anticipate that energy use profiles at facilities may change, particularly where energy is used for heating or cooling.	■	■	■	GHG Emission Reduction Initiatives. We measure and track our carbon emissions at our offices and subsidiaries, with the base year of 2019.

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Green House Gas (GHG) Emission Management

One of the significant contributors to climate change is the emission of greenhouse gases ("GHG"). In line with global efforts to reduce GHG releases, Kelington is committed to respond and act accordingly whilst improving our operational efficiency. In return, Kelington enjoys cost savings by spending less on raw materials, energy, water and resource recovery.

We strive to protect our environment and planet via mitigation of carbon dioxide emissions, waste reduction and the preservation of natural resources. In FY2022, we reviewed and managed our environmental risks according to the ISO 14001:2015 Environmental Management System.

Kelington's Environmental Initiatives

Kelington's Environmental Initiatives in the areas of energy management, water management, waste management, emission management, biodiversity conservation and recycling are presented in the table below:

| Environmental focus area	Actions	Company/ Operation country
Energy Management	Optimize manufacturing processes to reduce energy usage. Temperature control for air conditioning. Turn off lights in rooms not used. Replacing faulty lights to LED lights which is more environmentally friendly. Educating employees on energy saving through posters & emails. Solar Panel Installation Investment. Video Conferencing to replace air travel.	Malaysia Group Group Group Group Malaysia Group
Water Management	Water Management Plan outlining approach to manage and reduce water resources. Regular checking and immediate action taken for any leakage.	Group Group
Waste Management	Scheduled/ hazardous waste to be stored in designated container for on-ward disposal by Department of Environment (DOE) licensed contractor to licensed location. Monitor non-recycled waste intensity. Introduction of e-waste bin at office for employees to dispose household or office e-waste properly.	Malaysia Malaysia Group
Emission Management	Capture waste gas emitted by a petrochemical complex, to be reused as a key raw material in our liquid CO_2 production. Continuing to measure our carbon footprint to monitor which operations have the biggest impact on our carbon emissions.	Malaysia Group

Environmental focus area	Actions	Company/ Operation country
Biodiversity Conservation	Conducted Environmental Aspect Identification (EAI), Risk & Opportunities for Environment and Hazard Identification, Risk Assessment and Risk Control (HIRARC) before new construction.	Malaysia
	Regular monitoring programme, continuous risk assessment and audits covering water quality, air quality and noise.	Malaysia
	Continuous participation in programmes that contribute towards positive biodiversity impacts	Malaysia
Recycling	Recycle practice at all offices.	Group
	Reduce paper printing under digitalisation program	Group

Our Carbon Footprint

To determine the carbon footprint of Kelington, we categorise our GHG emissions in Scope 1, Scope 2 and Scope 3 in accordance with the Greenhouse Gas Protocol. Our calculation of Scope 1, Scope 2 and Scope 3 emissions are based on the guideline on how to measure and report GHG emissions published by the Department for Environment, Food and Rural Affairs, UK (www.defra.gov.uk).

In addition, we also refer to the UK Government's GHG Conversion Factors for Company Reporting Rev 1.0 for the CO2e data computation.
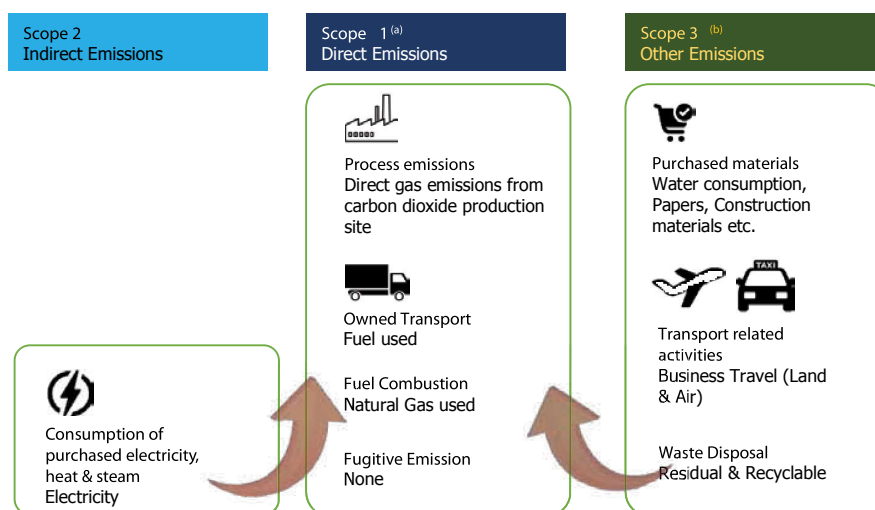
Notes:

(a)   Except for Carbon Dioxide (CO2), the current operations of Kelington do not emit other Scope 1 GHG emissions i.e Methane (CH4); Nitrous Oxide (N2O); Chlorofluorocarbons (CFCs); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulfur hexafluoride (SF6); and Nitrogen Trifluoride (NF3) in FY 2022.

Furthermore, the operations of Kelington Group (included manufacturing and construction processes) are not likely to cause Nitrogen Oxide (NOx), Sulphur Oxides (SOx), Particular Matter (PM) and Volatile Organic Compounds (VOC) Emissions or air pollution.

(b)   Scope 3 emissions are indirect emissions that occur because of Kelington's operations, but from sources not owned or controlled by Kelington i.e employee commuting, use of sold products, processing of sold products, investment, capital goods, transportation and distribution etc.

Managing Scope 3 emissions is important because it allows Kelington to identify opportunities for reducing emissions throughout its value chain. Addressing Scope 3 emissions is crucial for effectively managing climate change and achieving long-term sustainability goals. Kelington's SWG are working hard to gather the best information possible about scope 3 emissions to begin addressing this significant part of our footprint.

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Metrics and Targets

Target FY2024	Base Year FY2020	Progress FY2022
To reduce GHG (CO_2) Emission Intensity by **20 %** as compared to base year.	CO_2 Intensity Ratio **2,345** CO2e tonnes / RM million EBITDA	CO_2 Intensity Ratio **763** CO2e tonnes/ RM million EBITDA YOY ↓39%
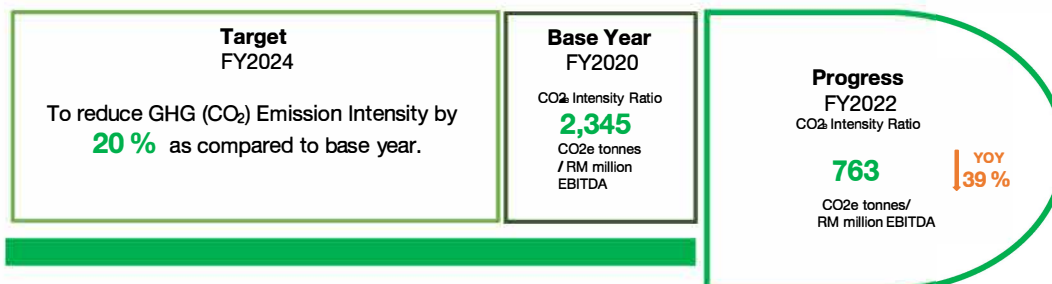
GHG (CO2) Emission of Kelington Group

GHG (CO2) Emission	Unit of Measure	FY2020	FY2021	FY2022
Scope 1: Direct Emissions from manufacturing facilities, distribution tankers	tCO2e	9,349	10,688	11,173
Scope 2: Indirect Emissions from electricity purchased and used	tCO2e	2,281	2,270	3,004
Scope 3: Other Indirect Emissions from the Group activities	tCO2e	5,583	5,470	33,605
Total GHG (CO2) Emission	tCO2e	**17,213**	**18,428**	**47,782** +159%

In FY2022, the increased in LCO2 production required more electricity, heat, or steam, which in turn affected Scope 2 emissions. Kelington's Scope 2 emissions increase by 32% in FY2022, primarily due to the Industrial Gas Division. However, the additional LCO2 production led to increased plant efficiency and energy-efficiency, which mitigated the impact of the rise in Scope 2 emissions, resulting in a lower electricity intensity ratio. (Cross Reference: page 69)

Kelington's Scope 3 emissions increased by 514% mainly due the demand for materials and components for major projects executed in Malaysia.

CO2 Equivalent Intensity Ratio	Unit of Measure	FY2020	FY2021	FY2022
Scope 1: Direct Emissions from manufacturing facilities, distribution tankers	tCO2e	9,349	10,688	11,173
Scope 2: Indirect Emissions from electricity purchased and used	tCO2e	2,281	2,270	3,004
		11,630	12,958	14,177
*EBITDA – Industrial Gases Division	RM' million	4.96	10.35	18.58
CO2e Intensity Ratio	tCO2e RM'mil EBITDA	**2,345**	**1,252**	**763** -39%

*Note:
In view that Kelington's Scope 1 and Scope 2 CO2 emission are mainly contributed from Industrial Gases Division's LCO2 manufacturing process and business activities, the EBITDA of Industrial Gases Division (excluding revenue generated from one-off project) was adopted for CO2e Intensity ratio calculation.

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Kelington's Industrial Gases Division is emitting less greenhouse gases per unit of revenue which is generally considered a positive trend towards sustainability. In FY2022, the CO_2e intensity ratio dropped 39% to 763 tCO2e/ RM'mil EBITDA. The improvement in CO_2e intensity ratio was mainly due to the improvement in energy efficiency and productivity as well as increase in revenue.

Scope 3 GHG (CO2) Emission	Unit of Measure	FY2020	FY2021	FY2022
Purchased goods and services	tCO2e	5,246	5,181	32,137
Capital goods	tCO2e			
Fuel and energy related activities (not include in Scope 1 or 2)	tCO2e			
Upstream transportation and distribution	tCO2e			
Waste generated in operations	tCO2e	159	94	332
Business Travel (By Land)	tCO2e	150	157	260
Business Travel (By Air)	tCO2e	23	29	865
Employee Commuting	tCO2e			
Upstream leased assets	tCO2e			
Investments	tCO2e			
Downstream transportation and distribution	tCO2e			
Processing of sold products	tCO2e			
Use of sold products	tCO2e			
End of life treatment of sold products	tCO2e			
Downstream leased assets	tCO2e			
Franchises	tCO2e			
Water Supply	tCO2e	5	9	11
Other	tCO2e			
Total Scope 3 GHG (CO2 e) Emission	tCO2e	**5,583**	**5,470**	**33,605** +514%

Kelington's FY2022 Scope 3 GHG (CO_2e) emissions 514% increased from 5,470 tCO2e to 33,605 tCO2e was mainly due to the higher number of construction activities which led to the increase in material purchased for Kelington's major projects i.e civil and structural works and tankage construction which required concrete and metal. In addition, the Scope 3 GHG (CO_2e) emissions contributed by the waste generated in operations increased by 253% as compared to FY2021 as a result of higher construction activities.

Employees travel more frequently to execute projects, meet potential clients, partner and rebuilding connections post-COVID in FY2022. The Scope 3 GHG (CO_2e) emissions contributed by business travel increased 505% in FY2022.

Collecting and compiling data on Scope 3 emissions can be a challenging task, as it involves gathering information from a range of different sources, including suppliers, customers, and other stakeholders. In some cases, this data may not be readily available or may be incomplete, which can make it difficult to accurately quantify emissions.

Scope 3 emissions can be very broad and complex, as they cover a wide range of indirect emissions across the entire value chain. This can make it difficult to identify and prioritize the most significant emissions sources and to develop effective strategies for reducing emissions. There is no single standardized methodology for calculating Scope 3 emissions which create uncertainty and make it difficult to assess the effectiveness of emissions reduction strategies.

For example, to determine the tCO2e while Kelington acquired plant and machineries, Kelington would need to determine the GHG emissions associated with the acquisition of the gas plant, including emissions from the manufacturing and transportation of the equipment used to construct the plant.

On the other hand, employee commuting and business travel are both types of travel that are related to work, but they have different purposes, frequencies, distances, expenses, and carbon footprints. The expenses associated with employee commuting are normally borne by the employee, while business travel expenses are usually covered by the company. Collecting accurate data about employee commuting can be challenging, as employees may not always report their commute accurately.

Despite these challenges, Kelington will address Scope 3 CO2 emissions as part of our overall emissions management strategy, as Scope 3 emissions can account for a significant portion of a company's total emissions. By addressing Scope 3 emissions, Kelington can identify opportunities for emissions reductions and demonstrate our commitment to sustainability and environmental stewardship.

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SI 2 | Pollution & Waste Management

Target FY2024	Base Year FY2020	Progress FY2022
To reduce non-recycled waste intensity by **5%** as compared to base year.	Non-Recycled Waste Intensity **14.4** tonnes/ RM million EBITDA	Non-Recycled Waste Intensity **8.4** tonnes/ RM million EBITDA **YOY 83%**
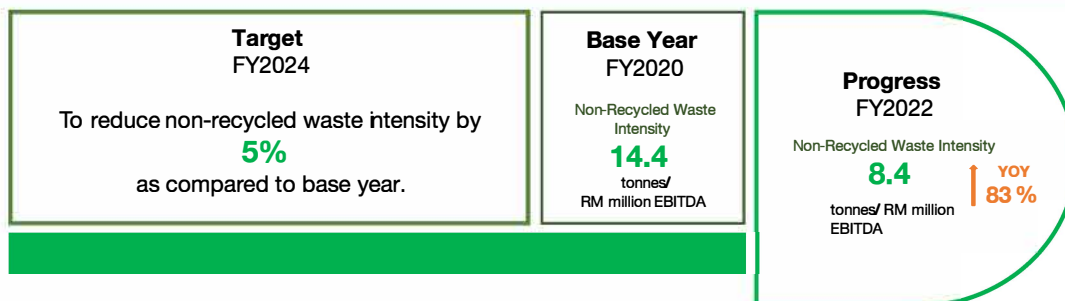
Prevent Pollution

Manufacturing industries have the highest potential for pollution risks. At Kelington, we are mindful of this and views the prevention of pollution seriously when carrying out our business activities. To this end, we have implemented rigorous monitoring activities to ensure compliance with all local and international environmental standards. We seek to minimise the Group's pollution risk for our manufacturing activities at Kerteh and have engaged an independent company to monitor the key parameters of the surrounding environment (water quality of the nearby rivers, air quality and noise level of the amenity as detailed below) on a monthly basis to ensure strict compliance with the standards set by the Department of Environment ("DOE") Malaysia.

The sampling locations are listed as below and the details of the data collected are available for inspection upon request.

	Sampling Locations	Reference Standards
Water Quality	• Sungai Labohan (Upstream, Midstream, Downstream) • Sungai Kerteh (Point 1 & Point 2)	Class IIB of the National Water Quality Standards of Malaysia
Air Quality	• Boundary of Factory • Masjid Kampung Labohan	Malaysian Recommended Ambient Air Quality Guidelines, 1989
Noise	• Boundary of Factory • Masjid Kampung Labohan	Guidelines for Environmental Noise Limits and Control by DOE Malaysia 2007

All data collected would be reviewed by our management on a monthly basis and immediate actions will be taken should the sampling test results approach the alert points. Apart from that, an Environmental Monitoring and Auditing Report is prepared and submitted to the local DOE office every quarter.

In FY2022, there was no reported case of non-compliance against the local government rules and standards, and no penalty imposed in relation to environmental pollution.

Waste Management and Reduction

As part of our sustainability efforts, Kelington aims to minimise the amount of waste we generate. Our Environmental Working Committee monitors the Group's waste management processes as we aim to mitigate the impact of waste on the environment through the reduction, reuse, recycle and disposal hierarchy of waste management.

Our approach to sustainable waste management / waste reduction

Industrial Gases Division

Our LCO2 manufacturing process is designed to capture the waste CO2 released by our raw gas supplier, which we then liquify into LCO2. This will reduce overall CO2 emission, which was previously vented to the atmosphere.

(1)   Capture waste gas emitted by a petrochemical complex, to be re-used as a key raw material in our LCO2 production.

	FY2020	FY2021	FY2022
Waste Gas Reuse – Carbon Dioxide	30,369 tonnes	47,596 tonnes	**60,471 tonnes**

(2)   Improve LCO2 production yield and minimize ready stocks wastages.
(3)   Continuous improvement in dry ice manufacturing efficiency by minimising production waste/ maximising gas recovery.

UHP/ Engineering Division

(1)   Value Engineering: Maximize value and minimize waste.
(2)   Encourage employees' participation in recycling program.
(3)   Practice segregation of solid waste and recycling during or after completion of general construction project.
(4)   Ensure the site induction to staff and sub-contractors includes awareness of good waste management and the specific measures used at the site.
(5)   We monitor non-recycled waste intensity and the non-recycled waste intensity reduced 27% in FY2022 as compared to based year FY2020. However, the year-over-year non-recycled waste intensity increased 128% due to the project mix and increase in construction activities in Malaysia:-

Engineering Division	Unit of measure	FY2020	FY2021	FY2022
Construction Waste	tonnes	330	200	717
EBITDA – Engineering Division	RM' million	22.9	43.1	68.2
Non-Recycled Waste Intensity	tonnes/ RM'million EBITDA	14.4	4.6	**10.5 +128%**

The waste generated by Kelington can be segregated into three main categories: Construction Waste, Scheduled Waste and E-waste.

Construction waste

Construction waste usually comprises metal/steel, wood, concrete/cement and other paper/cardboard. In FY2022, the total construction waste generated by Kelington was recorded at 717 tonnes, mainly generated by our general contracting division in Malaysia. All construction wastes are separated at the designated waste collection areas at the work sites. We engage licensed waste collectors to collect and dispose the wastes to the approved dumpsite and landfill areas.

SUSTAINABILITY STATEMENT

The total construction waste generated in FY2022 increased by 259% as compared to FY2021.

	Construction Waste Generated in			How we manage construction waste
	FY2020	FY2021	FY2022	
KE Malaysia	303	193	621	Manage waste in accordance to The Solid Waste and Public Cleansing Management Act 2007 as well as the local government rules and regulations.
KE Singapore	0	0	94	Dispose construction waste via site waste management facilities and in compliance with the waste management regulations.
KE China	26	6	1	
KE Taiwan	1	1	1	
Ace Gases - Malaysia	0	0	0	N/A
Total Construction Waste generated	**330**	**200**	**717** +259%	

Resource Efficiency Program was implemented since FY2021 as an effort to reduce waste via the identification and implementation of waste minimisation at detailed design, as well as maximising strategies waste prevention on-site.

According to our recyclable waste collection record, we recycled a total of 61 tonnes of industrial waste in FY2022.

	Unit of measure	FY2021	FY2022	FY2023
Recyclable steel and metal	tonnes	39	60	
Wood	tonnes	0	1	
Total Industrial Waste Recycled	tonnes	**39**	**61** +56%	

Scheduled Waste

A small percentage of hazardous waste has been regarded as intractable, or difficult to safely dispose of without special technologies and facilities. These wastes are known as scheduled wastes. To ensure adequate protection of human health and the environment, Kelington is committed to handling our scheduled waste strictly according to specific guidelines and regulations.

To strengthen our processes, Kelington is adopting and implementing the ISO14001:2015 Environmental Management System to serve as a guideline in managing the scheduled / hazardous waste that is being generated.

	Unit of measure	FY2021	FY2022	FY2023
Scheduled Waste	tonnes	27	38	

We disposed scheduled waste in accordance with the Environmental Quality (Scheduled Wastes) Regulations 2005. Only licensed contractors are allowed to transport these scheduled wastes offsite to a suitable treatment facility.

Our industrial gases division endeavour to reduce the generation of the scheduled wastes in order to minimise the handling process. Regular monitoring and maintenance work are carried out at our plant site to reduce the chance of leakage. Emergency response plan is in place to handle the unlikely event of a spillage of hazardous materials. In FY2022, 38 tonnes of scheduled waste was generated when we carried plant maintenance and replace adsorbents or catalysts used in our manufacturing process.

Electronic Waste

E-waste is electronic appliances that are broken, obsolete or reaching the end of their useful life. E-waste has been categorised as Scheduled Waste SW110 First Schedule according to the Environmental Quality (Scheduled Wastes) Regulations 2005 as it contains chemicals like mercury, lead, beryllium, and cadmium. Improper disposal or mishandling during disposal can cause the release of hazardous and toxic chemicals into the soil, water, and air.

This would induce adverse health effects and cause a deterioration of environmental quality. With this in mind, Kelington is committed to recycling this e-waste and creating awareness among employees on proper disposal of e-waste.

SUSTAINABILITY STATEMENT
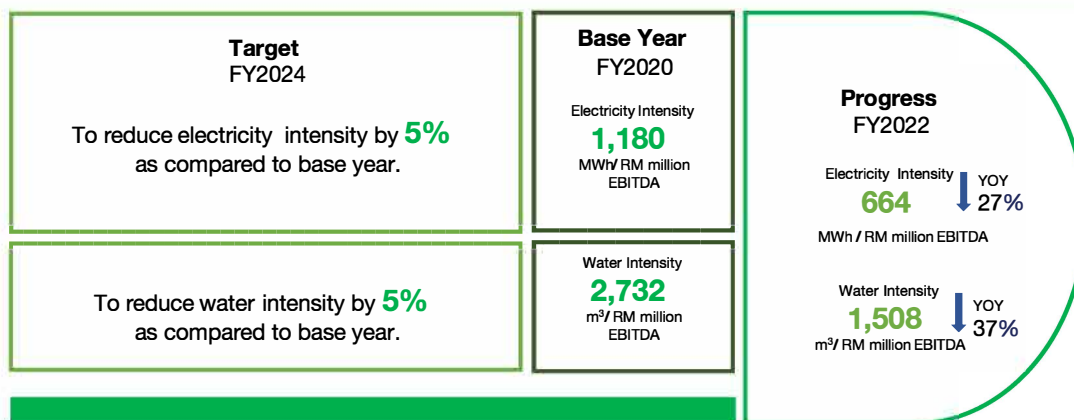
Dispose your electronic waste safely

In FY2022, we provide E-waste Collection Box at Kelington HQ, aimed to educate and raise awareness among employees on the appropriate disposal process of e-waste. All the collected e-waste during this programme was sent to licensed and DOE-registered e-waste recyclers for proper discard.

The breakdown of e-waste recycled for the past three years are as below:

E-Waste Type	Unit of measure	FY2021	FY2022	FY2023
MonitorWood	Number	–	5	2
Notebook Computer	Number	5	7	–
Printer	Number	–	1	1
Server	Number	1	–	–
Others i.e typewriter, desk phone, wireless mouse, laptop battery, laptop adapters & cables	Kg	11	30	6

SI 3 — **Resources Management**

Target
FY2024

To reduce electricity intensity by **5%** as compared to base year.

To reduce water intensity by **5%** as compared to base year.

Base Year
FY2020

Electricity Intensity
1,180
MWh/ RM million EBITDA

Water Intensity
2,732
m³/ RM million EBITDA

Progress
FY2022

Electricity Intensity
664   ↓ YOY 27%
MWh / RM million EBITDA

Water Intensity
1,508   ↓ YOY 37%
m³/ RM million EBITDA

As stated in our Sustainable Development and Climate Change Position Statement, Kelington is channelling efforts to maintain sustainable development and reduce climate change impacts by optimising our own environmental resource usage, including energy, water and other utilities.

SUSTAINABILITY STATEMENT

Energy Management

At Kelington, a majority of our business activities are carried out at customers' sites and fabrication facilities. Due to the nature of our manufacturing business, we consume a substantial amount of electricity. Kelington's Industrial Gases manufacturing activities, production and machinery operations run for 24 hours daily. Hence, it is imperative that we undertake energy management initiatives to enhance our production efficiencies as an effort to manage our GHG emissions.

One of our measures is to monitor and analyse the Group's energy usage, allowing us to pinpoint areas of improvements in relation to costs, performance, and quality. With this, Kelington strives to enhance energy efficiency by increasing efforts to identify energy reduction opportunities and exploring cost-effective practices and technologies.

Our production teams assess internal and external consequences from our processes and deliberate on the energy utilised during production. Energy reduction targets are set to match the Group's key financial indicators such as cost of goods sold. Meanwhile, the local committee conducts a monthly assessment on the plant's energy consumption and identify performance opportunities and gaps. As part of our energy saving strategies, we ensure smooth and effective operations, as well as adhering to scheduled maintenance of equipment to prevent downtime. Apart from that, the management also compares energy usage at similar plants to uncover efficiency opportunities.

We track and benchmark energy usage with our industry peers and communicate with our employees regarding our long-term goals and commitments. As compared to other industrial manufacturing facilities in Malaysia, our trackable electricity consumption is relatively lower.

The trackable electricity consumption of Kelington Group in FY2022 are as follows:
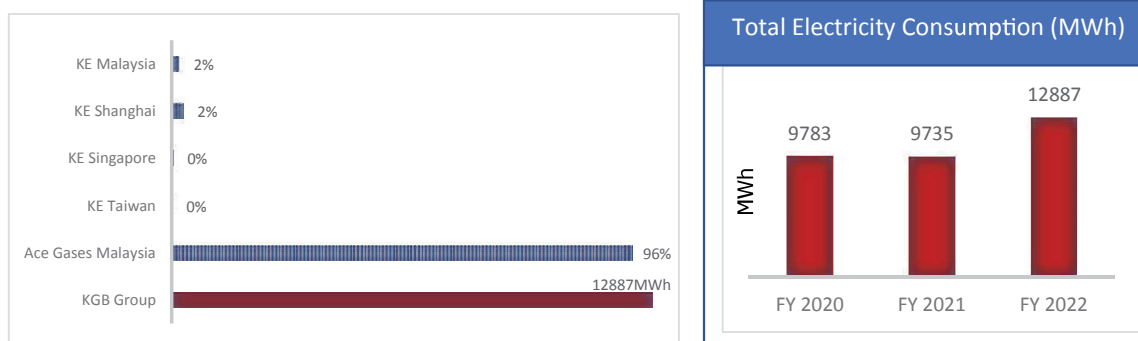
The chart above demonstrates that the major portion of the Group's electricity consumption was derived from our Industrial Gases division, representing 96% of the total electricity consumption in FY2022. As such, we measure the energy performance of our Industrial Gases division with energy intensity by determining how much energy is required to generate RM1 million in EBITDA.

Electricity Intensity

Industrial Gases Division	Unit of measure	FY2020	FY2021	FY2022
Electricity Consumption	MWh	5,853	9,377	12,331
EBITDA	RM' million	4.96	10.35	18.58
Electricity Intensity	MWh/RM'mil EBITDA	**1,180**	**906**	**664**
				-27%

In FY2022, while EBITDA grew 80%, energy intensity was reduced by 27% as a result of improved productivity, improved plant efficiency, energy efficiency initiatives, including effective production planning, improved gas loading and unloading processes, and major equipment maintenance, to name a few.

Renewable Energy Generation

The Group's commitment to mitigating our climate change impact involves looking at our working environment. It is our objective to minimise the environmental effects of our operations and buildings.

As part of our endeavours, we aim to increase the usage of clean energy. Renewable energy ("RE") is increasingly playing an important role in decarbonising the power generation sector, and solar has been one of the top RE sources for electricity generation. Since FY2011, Kelington has installed and maintained solar photovoltaic ("PV") panels on the rooftops of our office building in Shah Alam for a more sustainable energy source. Although the power generation from solar PV tends to be deficient due to environmental impacts i.e dust accumulation, water droplets and bird droppings, we managed to maintain the standard performance of our solar PV systems and generated 11,236 KWh solar power in FY2022.

KE Malaysia – Renewable Energy	Unit of measure	FY2020	FY2021	FY2022
Solar Power Generated	KWh	20,538	18,557	11,236
				-39%

SUSTAINABILITY STATEMENT

Water Management

Clean freshwater is a scarce resource, and it is crucial that we manage its distribution and use. In fact, the significance of clean water and sanitation has been highlighted as one of the United Nations' Sustainable Development Goals ("SDG"). As such, Kelington endeavours to aid millions of people to gain two of life's most fundamental necessities: clean water to drink as well as safe and private restroom to use via strict implementation of our water management plan.

We commit to sustainable water sourcing and consumption practices across operations. Our water management plan consists of the following actions:

1) We engineer solutions to design and install waste water treatment system used to remove contaminants prior returning the water back to sewage.

2) Our Plant Operation team collect water consumption data regularly from the meters, analyse the data, monthly monitoring of water consumption to understand our water usage patterns and identify potential inadequacies. We set target for water usage based on historical data and industry benchmarks. Our operation team track progress toward reducing water consumption and shall implement conservation measures promptly should there be an uptrend in water consumption.

3) Close monitoring of our plant's process parameters to ensure all water discharges meet the local government regulations. At our main operating site in Kerteh, Terengganu, we perform a monthly checking on water quality, ensuring the test results are within the limits set by the Malaysian government authorities.

4) Our cooling tower water treatment system prevents the growth of Legionella bacteria, which may affect workers' health.

We do not have any business operating in a water-stressed or scarce region. Nevertheless, we still view water as a valuable resource and have developed a water management plan at our manufacturing plant to optimise water usage and continuously monitor the quality of water discharged.

Water Withdrawal

The Group primarily consumes municipal water supply, which is mainly derived from the water reservoir (municipal potable water). We do not utilise any other water sources such as surface water from rivers, lakes, natural ponds, groundwater from wells, or external wastewater. The total water withdrawal within our organisation amounted to 31,241 m3 in FY2022.

Water Withdrawal (by sources)	Unit of measure	FY2020	FY2021	FY2022
Surface water from rivers, lakes, natural ponds	m^3	0	0	0
Groundwater from wells, boreholes	m^3	0	0	0
Used quarry water collected in the quarry	m^3	0		0
Municipal potable water	m^3	14,831	25,730	31,241
External wastewater	m^3	0	0	0
Total Water Withdrawal	**m^3**	**14,831**	**25,730**	**31,241** +21%

Water Consumption

Our LCO2 manufacturing plant at Kerteh uses a substantial amount of water in its manufacturing process i.e wash water and cooling tower make-up water.
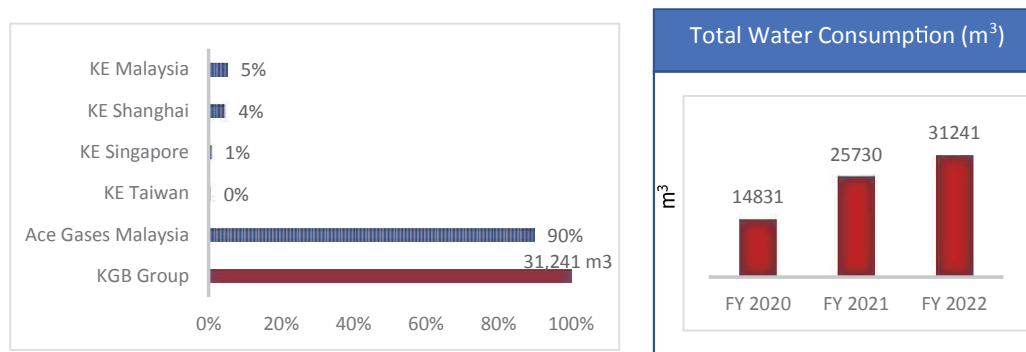
The chart above depicts that the Group's water consumption was largely contributed by Ace Gases – the LCO2 manufacturing plant located at Kerteh – representing 90% of the total water consumption in FY2022.

For our Industrial Gases division, we apply water intensity parameters to measure the water consumed to generate an EBITDA of RM1 million. In FY2022, as EBITDA of LCO2 business division grew by 80%, water consumption increased by 13%. This resulted in an improvement of 37% in water intensity.

Industrial Gases Division	Unit of measure	FY2020	FY2021	FY2022
Water Consumption	m3	13,552	24,791	28,012
EBITDA	RM' million	4.96	10.35	18.58
Water Intensity	m3/RM'mil EBITDA	2,732	2,395	1,508 -37%

Water Discharge

The relationship between water discharge and adverse environmental effects is not linear as an increase in water discharge volume does not necessarily correspond to a greater impact. With this in mind, the environmental impacts shall depend on the quality of the water discharged and the sensitivity of the receiving waterbody.

Our LCO2 manufacturing facilities at Kerteh generates an intensive volume of water discharge. Nonetheless, this discharge does not require treatment and is mainly emitted to the drains and subsequently flows to the rivers and sea.

We undertake quarterly monitoring of the water discharge according to the DOE's Environmental Management Plan. In FY2022, there were no reported incidents of non-compliance with the local government rules and standards, with no penalty imposed in relation to water supply and discharge.
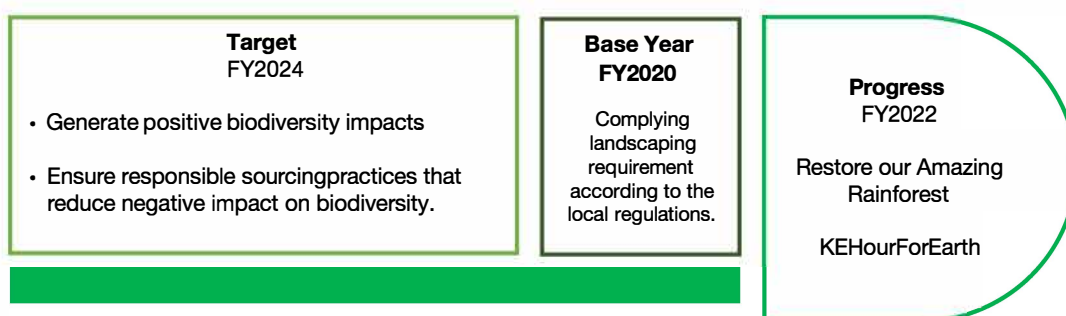
Water Discharge by destination	Unit of measure	FY2020	FY2021	FY2022
Ocean total discharge	m3	0	0	0
Surface water total discharge	m3	14,831	25,730	31,241
Subsurface/ well total discharge	m3	0	0	0
Off-site water treatment total discharge	m3	0	0	0
Beneficial / other use total discharge	m3	0	0	0
Total Water Discharge	m3	14,831	25,730	31,241

SUSTAINABILITY STATEMENT

SI 4   **Support Biodiversity**

Biodiversity provides functioning ecosystems that supply oxygen, clean air and water, pollination of plants, pest control and wastewater treatment, among others. Hence, supporting biodiversity is therefore an integral part of Kelington's efforts to protect and preserve the environment. Kelington acknowledges that economic activities and population growth may result in pollution and climate change, which may threat biodiversity. As such, we are committed to reducing the impact of our operations on biodiversity through systematic management approaches.

Kelington's Sustainable Development Position Statement clearly lays out our policies and commitment on environmental protection and the preservation of biodiversity. We adopt a systematic approach to ensure our business activities have the minimum effect on the surrounding environment of where we operate. We also support governmental agencies as well as NGOs in generating positive impacts on biodiversity. Our goal is to achieve a net positive biodiversity impact as we contribute to a more flourishing biodiversity as a whole.

Target FY2024	Base Year FY2020	Progress FY2022
• Generate positive biodiversity impacts • Ensure responsible sourcingpractices that reduce negative impact on biodiversity.	Complying landscaping requirement according to the local regulations.	Restore our Amazing Rainforest KEHourForEarth

Minimising Biodiversity Impacts

None of our operational sites, either owned or leased, are located in or adjacent to protected areas or areas of rich biodiversity value. Nonetheless, Kelington strives to preserve the biodiversity of the locations and their surrounding environment. Except for the Group's major gas plant located in Kerteh, Kelington carries out its business activities at our customers' premises or within developed industrial areas.

Continuous auditing and monitoring

At Kerteh, local employees are assigned responsibilities to manage our biodiversity impacts through regular monitoring programme, risk assessments and audits covering water quality, air quality and noise. Guided by the relevant regulatory environmental standards and guidelines, we conduct regular air and water quality test, as well as a noise level survey at Kerteh to ensure the effective implementation of pollution prevention and mitigation measures to minimise negative biodiversity impacts on the surrounding environment.

Environmental Impact Assessment shall be conducted for any new proposed projects that we intend to develop and subsequently carry out business activities. In FY2022, our operations at Kerteh conducted monthly monitoring of the air and water quality (rivers nearby), in addition to the noise level survey. All the test results are within the limits set by the Malaysian government authorities.

Additionally, we also submit the Environmental Monitoring and Auditing Report ("EMAR") to the DOE on a quarterly basis to report on our compliance with the relevant standards and guidelines. During the year, we did not encounter any negative comments or fine penalties from the local authorities in the locations where we operate.

Continuous participation in programmes that contribute towards positive biodiversity impacts

Tree planting is beneficial in improving wildlife habitats, in addition to building resiliency to support the various benefits that nature provides. In FY2022, Kelington participated in "Restore our Amazing Rainforest" and a total of 50 trees have been planted towards the restoration of the forest corridor along the Lower Kinabatangan, Sabah, Malaysia. The initiatives of the program is mainly for reforestation at Lower Kinabatangan Wildlife Sanctuary, Sabah - to maintain the landscape and ecology of the forest (a purely jungle) and also to rebuild "home" for wildlife animals.

SUSTAINABILITY STATEMENT

As we move forward, the Group shall constantly explore our day-to-day practices in order to protect biodiversity and raise awareness within the organisation. In February and March 2023, we participated in World Wildlife Fund's landmark movement, Earth Hour and encouraged all our employees to switch off their lights and spend 60 minutes doing something positive for our planet. On Earth Day, we encouraged our people to take a natural walk, sorting trash at home, separate recyclable items into different bins, cooking dinner with sustainable ingredients etc.
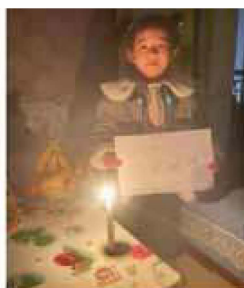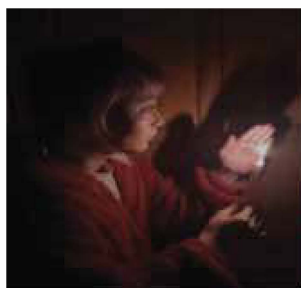
Highlights of KEHourForEarth

Karan & Donna from Puritec Singapore celebrate care and love for our planet by cleaning up Sembawang Beach on Earth Day.

Project team in Singapore join the Earth Hour and they made used of portable rechargeable lights in the office and spread the awareness of environmental issues.

Our employees in KE Shanghai turned off the lights for Earth hour and involved kids in conserving energy resources.