



SUSTAINABILITY REPORT 2022

About This Report

This report covers sustainability approach, performance and targets of NSL Ltd and its subsidiaries ("NSL Group") for the financial year ending 31st December 2022 ("FY2022").

REPORTING SCOPE AND PERIOD

Our business spans across a range of sectors and geographical regions in Asia, the Middle East and Europe. The scope of this report covers subsidiaries in countries where they operate namely Singapore, Malaysia, United Arab Emirates, and Finland. Investment holding companies with no operations have been excluded.

The companies included in the report are:

- 1. Dubai Precast L.L.C. ("DPC")
- 2. Eastech Steel Mill Services (M) Sdn Bhd ("ETM")
- 3. Eastern Pretech (Malaysia) Sdn Bhd ("EPM")
- 4. Eastern Pretech Pte Ltd ("EPS")
- 5. NSL Chemicals Ltd ("NSC")
- 6. NSL OilChem Logistics Pte Ltd
- NSL OilChem Waste Management Pte Ltd ("NOWM")
- 8. Parmarine Ltd ("Parmarine")
- 9. Raffles Marina Ltd ("RML")

Note: For this report, data for NSL OilChem Logistics Pte Ltd and NOWM will be reported under "NOWM", as they function as a single business. Similarly, EPM and EPS will be reported as "EP" and ETM and NSC will be reported as "NSC".

REPORTING STANDARD AND ASSURANCE

This report has been prepared with reference to the Global Reporting Initiative (GRI) Standards 2021. This report is also aligned with the Singapore Exchange SGX-ST Listing Rules Practice Note 7.6: "Sustainability Reporting Guide" and Task Force on Climate-Related Financial Disclosures (TCFD).

The Company has commenced its internal review of its sustainability reporting processes as part of its internal audit plan. The internal review processes are ongoing and they continue to be developed and refined. The information and data presented in this report are based on results and data currently available and verifiable.

FEEDBACK

This report is available in soft copy on the website at www.nsl.com.sg.

We welcome questions or feedback on this report. Please drop an email to sustainability@nsl.com.sg if you wish to contact us.



Board Statement

The Board of Directors of NSL Ltd is pleased to issue its sustainability report for the financial year 2022. This annual report covers the same significant companies listed as the group financial statement.

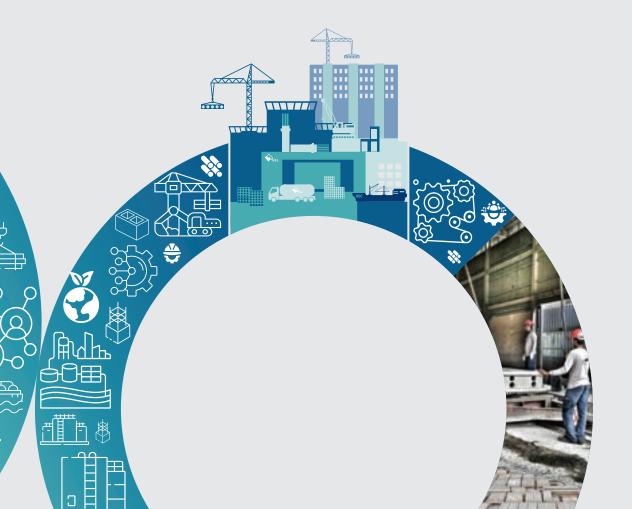
NSL incorporates environment sustainability into its business practices. Its precast operations in Dubai had since 2016 converted all its concrete mix formulations to green precast concrete components. In addition, EP had increased its usage of proportion of green concrete versus total concrete production. Out of the total volume of sand used by EP for production, at least 50% was manufactured sand, a by-product of coarse aggregates production. NSL Chemicals currently uses 100% waste material for production of steel slag aggregates to surface roads.

The Chemicals division is currently researching on possible reuse of landfill material from Pulau Semakau and recovering heavy metals from non-incinerable waste thereby prolonging the service life of Pulau Semakau and promoting near zero-waste discharge with certain tertiary institutions.

To manage the plant's air emission, NOWM invested in a new scrubber system at its Tuas plant which significantly improved the workplace air quality and blowers were upgraded to reduce generation of noise. Frequency of emissions tests is likely to be increased from annual to quarterly basis over the next three years. To help reduce fugitive dust generated by human and vehicular traffic, Parmarine is planning to pave a 12,000m² yard.

Safety and Health of employees are important to us. To enhance its focus on Workplace Safety and Health, NOWM engaged a international Safety and Risk management consultant during the year to review potential major accident events across its three plants in Singapore.

NSL Sports & Recreation Club ("SRC") resumed activities in 2022, after a two-year hiatus due to COVID-19. SRC is responsible for organising employee engagement events to promote healthy lifestyle and employee bonds among staff in Singapore.



About NSL Ltd

NSL and its group of companies is a leading industrial group in Asia Pacific. The Group's core businesses are Precast & Prefabricated Bathroom Unit ("PBU") and Environmental Services.



The Precast & PBU division is a market leader in manufacturing precast concrete components in Singapore, Malaysia and United Arab Emirates while the PBU business is a dominant producer in Scandinavia.

The Environmental Services division is a key player in integrated environmental services in Singapore, covering the treatment and logistics services of hazardous industrial waste and wastewater from the chemical sector and oily wastewater from both land and marine transportation sectors.

In addition, we indirectly hold majority shareholding in Raffles Marina, Asia's Premier Marina Club in Tuas, Singapore.

We benefit from initiatives by an active Corporate Research and Development committee which leverages on technology to develop innovative products and process improvements for productivity. It also partners local government agencies and tertiary institutions to develop new and sustainable solutions for industrial applications.

NSL Ltd has been listed on the Singapore Exchange since 1964 and presently operates in four countries.



Core Businesses

PRECAST AND PREFABRICATED BATHROOM UNITS

Activities:

Design, supply, and delivery of precast concrete components and prefabricated bathroom units.

Products and Brands:

Manufacture of precast products such as customised hollow-core slabs, reinforced concrete columns, beams, walls and other infrastructure concrete components. PBUs and fire doors bear the PARMA brand.

Location of Operations:

Singapore, Malaysia, United Arab Emirates and Finland

Markets Served:

Worldwide

Sectors and Customers Served:

Construction and real estate companies.

Supply Chain:

Key product ingredients include steel, cement, aggregates and sand.

ENVIRONMENTAL SERVICES

Activities and Services:

Specialised treatment and logistics services of hazardous industrial waste and wastewater, and oily wastewater.

Location of Operations:

Singapore

Markets Served:

Asia Pacific

Sectors and Customers Served:

Marine, industrial, chemical, pharmaceutical, oil & gas, manufacturing, and transportation & logistics.

Supply Chain:

Main types of wastes treated include oily slop, wastewater and chemical wastes.

Other Businesses

REFRACTORIES AND STEEL SLAG AGGREGATES

Activities:

Production of monolithic refractories, steel slag aggregates, trade minerals and chemicals.

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Products and Brands:

Refractory products are marketed under the ET brand. Processing of steel slag into graded aggregate.

Location of Operations:

Singapore, Malaysia and Indonesia

Markets Served:

South-East Asia

Sectors and Customers Served:

Steel industry, cement kilns, aluminium industry, incineration plants and petrochemical industries.

Supply Chain:

Key supply for road construction is graded steel slag aggregates.

MARINA SERVICES

Activities and Services:

Berthing facilities, food and beverage outlets, and hotel rooms.

Location of Operations:

Singapore

Markets Served:

Singapore

Sectors Served:

Marine and hospitality.

Customers:

Members and their guests, and the public.

Supply Chain:

General consumables and perishable products.

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Sustainability at NSL

NSL Group relies on its five core values to guide organisational culture and decision-making.



Integrity

We value honesty. It's the foundation of our individual and corporate actions that drives the organisation that we are proud of.



We care for our staff, community and the environment.



Commitment

We honour our commitments. We are committed to work towards the highest level of business excellence that differentiates us from our competitors.



Innovation

We constantly pursue new ideas and creative solutions with a "Can Do" attitude.



Respect

We respect all individuals and value their contributions.



To be the leading Industrial Group in Asia Pacific in Precast & Prefabricated Bathroom Unit and Environmental Services.





MISSION

NSL Group aims to be the market leader in our business by striving to be the most cost effective and sustainable solutions provider through leveraging on technology and business excellence standards.



SUSTAINABILITY GOVERNANCE

The Board of Directors oversee the management of our sustainability strategy. The directors have also attended the regulatory mandated training "Environmental, Social and Governance Essentials Core Module".

Our sustainability governance structure will be developed and disclosed in due course.

STAKEHOLDER ENGAGEMENT

We continue to engage with internal and external stakeholders across all the business segments to understand and respond to the concerns and needs. The table below summarises the key avenues and outcomes of the engagement with NSL Group's main stakeholders in FY2022.

Stakeholder	Engagement Methods	Topics Raised	Our Response
Employees	 Quarterly newsletters Fire safety measures Near-miss reporting system Toolbox meetings	 Training and skills requirements Workplace health and safety Employee well-being 	 Training and development programmes Annual fire drills Quarterly fire safety system inspections Monthly safety committee meetings
Shareholders	Annual General Meeting	Financial performanceCorporate governance	Risk management frameworkCorporate GovernanceRegular Performance Reports
Clients/ Customers	Customer satisfaction surveysPeriodic customer visits	Service qualitySales experienceService delivery, time and safetyService pricing	 Continued effort in areas of improvement Remarks collected and responses sent to relevant operational teams
Regulators/ Government	Industry dialoguesPlant site visits	Environmental complianceWorkplace health & safety	 Provision of housing for migrant workers Adhering to COVID-19 regulations

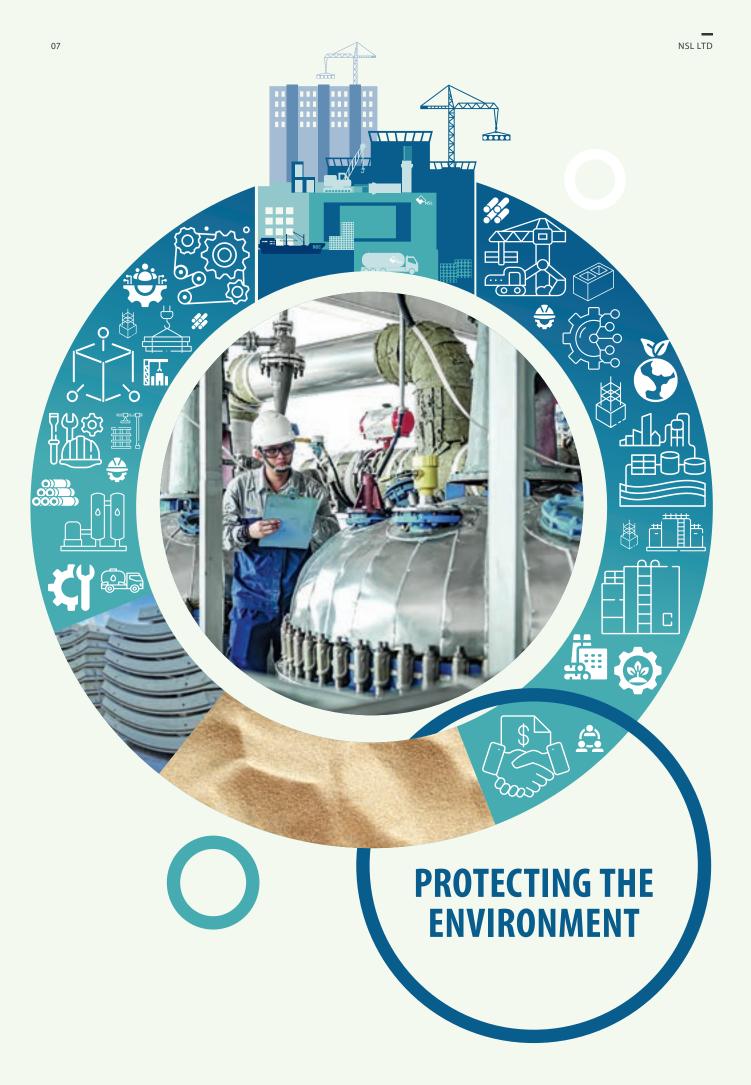
MATERIALITY ASSESSMENT

This year, we reviewed and re-validated the list of material topics identified to ensure the relevance to NSL Group's business as well as to the internal and external stakeholders. There has been no change to the material

topics as the focus is to ensure consistency in reporting and tracking over time.

Our ESG pillars and material topics are summarised below.

Material Topics
Green Products & Services
Energy Management
Emissions, Noise & Dust Pollution
Waste Management
Workplace Health and Safety
Labour Practices, Employee Training and Welfare
Corporate Governance, Ethics, Anti-Corruption & Anti-Competitive Behaviour
Product Quality, Service Quality and Customer Satisfaction

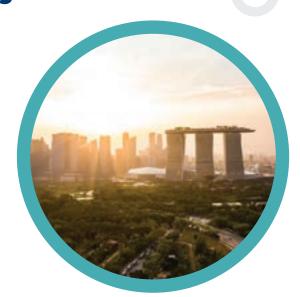


Taskforce for Climate-Related Financial Disclosures

Climate change and society's response is a fundamental driver towards risks and opportunities globally. According to the latest Intergovernmental Panel on Climate Change report¹, as the impact of climate change can be felt across the globe, it is important for businesses to increase their climate ambitions. Although climate change presents risks, there are also climate opportunities for NSL Group. With a deeper understanding of these risks and opportunities, countries and companies globally are putting more emphasis on climate change by responding to climate risks and seizing the opportunities for climate action.

This section of the report is our first step towards the adoption of the Taskforce for Climate-related Financial Disclosure ("TCFD"). It aligns with TCFD's four pillars and outlines the physical and transitional climate risks that the Group is likely to experience in its operations. This is also in line with SGX's Reporting Guide Practice Note 7.6 and the phased approach to TCFD adoption.

TCFD is a consistent, comparable, and internationally recognised reporting framework to inform investors and stakeholders on how NSL Group is building resilience towards climate-related risks and opportunities. In aligning with TCFD, we hope



to facilitate informed financial decisions by investors, lenders, and other stakeholders, and provide them with a greater understanding of how they view sustainability.

The Board of Directors has oversight of climate-related risks and opportunities for sustainability related matters in NSL Group. The CEOs of each subsidiary will implement the initiatives and monitor their progress.

We will integrate climate-related risks into our business strategy. The key climate-related risks and opportunities are identified below:

Climate-related Risks (Physical and Transition Risks)		
Type of Physical Risks	Potential Impact on NSL Group	
Acute physical risks (Floods, hurricanes, wildfires	 The Group may face financial implications due to these severe events which can potentially disrupt production and logistics processes. 	
and droughts)	 The Group may suffer physical damage to its assets, including plants and buildings due to instances of floods. 	
Chronic physical risks (extreme heat and changes to	- Extreme weather changes may lead to higher energy consumption thereby increasing operational costs.	
precipitation patterns)	 The Group may face disruptions to its supply chain brought about by climate- related incidents affecting its operations. 	

Climate-related Risks (Physical and Transition Risks)		
Type of Transition Risks	Potential Impact on NSL Group	
Increased stakeholders' concern on sustainability agenda	 The failure to meet industry standards and reporting requirements may weaken investor confidence, credit rating and liquidity, or potentially increase borrowing costs. 	
Stringent carbon tax	 Operating high carbon emission assets and facilities may lead to payment of a high carbon tax and an increase in operational costs. 	
Consumers' preference for greener products and services	 The inability to provide customers with greener options may lead to a loss in customers. 	
Increase in cost of materials	- Volatile raw material price may affect production costs leading to reduction in profits.	
Regulatory costs	 There may be additional compliance cost due to an increase in reporting requirements under different standards and jurisdictions as well as the alignment and preparation costs for the upcoming standards like ISSB. 	

Climate-related Opportunities			
Type of Opportunities	Potential Impact on NSL Group		
Annual cost savings	 Optimising production by using resources more efficiently. Leveraging on technology to minimise production errors and cutting down on wastage. 		
Improve energy efficiency	 Reducing energy consumption by exploring the use of solar panels in some of the pilot warehouses to harness renewable energy and adopting LED lighting. 		
Improve water efficiency	 Reducing water consumption by exploring ways to collect rainwater for general washing purposes. 		
	- Using cleaning process streams for chemical preparation processes.		
Inclusion of climate criteria in NSL's supply chain	- Engaging stakeholders in its supply chain and possibly including climate criteria in its procurement process so that the Group can create a more sustainable supply chain.		
Development of green	- Developing green products by continuing with research and development.		
products	- Reducing use of virgin materials by increasing the proportion of green raw materials used in some of the NSL Group's production process (e.g. M-sand concrete mix).		
Usage of greener materials and resources	 Phasing out R22 and R410 refrigerants that are currently being used in the air condition systems and adopt a more efficient and environmentally friendly R32 refrigerant. Reducing use of diesel by replacing it with LPG as boiler fuel via modification of the boilers. 		

We will continue to monitor climate-related risks on an annual basis and endeavour to mitigate associated risks.

Green Products & Services

GRI 301-2

Sustainability is at the heart of NSL Group's main business offerings, from the processing and safe disposal of hazardous waste to the development and distribution of green concrete. We place great effort in producing green products and services and believe in creating an impact in this area.

PROGRESS IN OUR GREEN PRODUCT AND SERVICE PORTFOLIO

Green Concrete

We have seen an emerging transition towards achieving net zero carbon emission in the construction and building sector. Recognising the greater demand for reducing embodied carbon across organisations, we have produced green concrete for the construction industry.

In 2022, the precast division offered different varieties of green concrete in the design mix to support sustainable construction in Singapore and Malaysia. Different green concrete types are used in tandem with specific project design and job requirements. Since 2016, DPC has converted all concrete mix designs to green concrete, in line with the local authority's (Dubai Municipality) requirement.



Green Concrete Production

		FY2022			FY2021	
Plant	EP Plant A	EP Plant B	DPC	EP Plant A	EP Plant B	DPC
Use of Green Concrete in Concrete Production	•	•	②	•	•	Ø

We will continue to focus on offering green concrete which contains cement replacements such as fly ash and Ground Granulated Blast-furnace Slag ("GGBS"). The possibility of using cement derived from lower carbon footprint raw materials as a replacement for Ordinary Portland Cement ("OPC") used in the current concrete mix is being explored.

Manufactured Sand

Manufactured Sand is graded fine aggregates created by crushing quarry waste not used in construction. Our plants in Malaysia are increasing the use of manufactured sand in concrete because factors including exhaustion of natural resources and contribution to environmental sustainability are taken into account.

As manufactured sand typically comes in different shapes, gradations, and mineralogy compared to natural sand, there is a concern that these differences may impact the performance of concrete using manufactured sand. After assessing the suitability of manufactured sand as a replacement for natural sand, EP and our Research and Development ("R&D") team successfully developed concrete formulations using 100% manufactured sand for hollow core slab products without compromising on product quality. The project team is also researching the viability of using 100% manufactured sand in the production of reinforced concrete.

EP is using Manufactured Sand and cement replacement such as Pulverised Fly Ash ("PFA") and GGBS. They also plan to increase their cement replacement percentage.

Roadstone

NSC's roadstone operations was set up specifically to process steel slag waste collected from a steel mill into road construction aggregates. In 2022, operation continued to use 100% waste material as roadstone feed material. They have managed to market a new mix design which was successfully trialled on some expressways before the onset of COVID-19 pandemic.

Environmental Services

NOWM has expanded its biological wastewater treatment processes to increase the treatment capacity and to reduce the reliance on more energy intensive processes. NOWM will continue



to improve the energy efficiency levels by looking into building more advanced facilities such as an advanced waste heat recovery system.

Other Businesses

NSC is focusing on reducing the importation of raw materials and using raw materials available locally by collecting and processing basic and neutral/acidic bricks from refractory maintenance works into raw materials for refractory production.

In the long term, Parmarine targets to use carbonfree steel, which utilises fossil-free electricity and hydrogen in the ore-based steelmaking process, emitting water instead of carbon dioxide.

RML is dedicated to the conservation of the environment with an active conservation subcommittee. They had excluded shark fin from their menu since 2010 and will continue to do so to protect biodiversity in the marine ecosystem and certain endangered species.

Manufactured Sand Usage

	FY	FY2022		FY2021	
	Hollow Core Slab	Reinforced Concrete	Hollow Core Slab	Reinforced Concrete	
EP Plant A	•	•	•	Ø	
EP Plant B	•	•	•		

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NSL CHEMICALS' COLLABORATIVE WORK WITH NUS AND NTU

NSC recognises the importance of material reuse as it reduces the negative impacts on the environment since it relies lesser on virgin materials. NSC is currently working with Nanyang Technological University ("NTU") on a three-year project to develop technological solutions for site investigation and material reuse under the Urban Solutions and Sustainability Integration Fund. As part of the project, the team will look at possible reuse of landfill material from Pulau Semakau. If successful, the service life of Pulau Semakau will be prolonged and industrial waste designated for landfill can be reused. The NTU team has characterised the mixed waste samples extracted from boreholes at Pulau Semakau site where around 300 borehole samples were taken. The analysis is on-going and the characterisation job is expected to be completed by March 2023. NSC will cooperate with NTU to study how to reuse this waste and carry out some application trials after the characterisation stage.

In another three-year project, which is funded by the Closing the Waste Loop Funding Initiative administered by the National Environment Agency, NSC is partnering National University of Singapore to seek cost effective means to remove or recover heavy metals from non-incinerable waste. If the project is successful, non-incinerable waste could potentially be reused to promote near zero waste discharge.

NSL GROUP'S PERFORMANCE

DPC uses GGBS as a cement replacement.

NSC imports majority of their raw materials for refractory production. However, to minimise the use of virgin material in refractory production, they collected used refractory bricks from the market which would otherwise be thrown away to supplement the raw material requirement. After extensive processing, sorting and product formulation finetuning, the used bricks can be partially used to replace virgin materials. This reduces import requirements and increases the use of recycled input materials in the production process. Product formulations have been adjusted to ensure product performance.

EP has increased the usage of recycled materials including manufactured sand since 2021. EP will continue to develop the concrete mix design to achieve their targets and use more recycled materials.

NSC currently uses 100% waste material for production of steel slag aggregates for road surfacing.



FY2023 TARGETS

NSC

• In 2023, increase utilisation of used materials in finished products.

ΕP

 In 2023, further increase usage of Manufactured Sand and alternatives to OPC.

Energy Management

GRI 302-1

To improve energy management processes as energy is crucial to our industrial operations and may potentially alleviate climate change.

The National Environment Agency's ("NEA") Energy Conservation Act ("ECA") in Singapore mandates NOWM's registration with NEA for industrial facilities which consistently consume 54 terajoules ("TJ") or more energy per calendar year for two out of three preceding years. Upon registration, the organisation is required to appoint an energy manager and commence the reporting and monitoring of their energy use and greenhouse gas emissions, annually. Additionally, NOWM must submit an energy efficiency improvement plan to NEA annually.

HOW NSL GROUP MANAGES AND REDUCES ENERGY USE

We endeavour in the long term to replace fossil fuels with renewable energy sources wherever and whenever practicable. Several subsidiaries have replaced existing lights with LED lights, to reduce electricity consumption.

In NOWM, an Energy Management Team, comprising employees from various departments, was formed in Q4 2022 to implement an Energy Management System. Under the Energy Management System, NOWM implemented an improvement plan to reduce electricity and diesel consumption focusing on two main aspects:

- Improving incineration plant maintenance programme to reduce downtime and diesel consumption in package boiler or start-up time.
- Including energy consumption as a factor in procurement procedures, where energy efficiency will be an assessment criteria in equipment purchase.

NOWM will be exploring Energy Efficient Opportunities Assessment in FY2023 with plans to conduct the assessment by FY2024.

NSC is upgrading their control room PLC system for higher efficiency and power saving and target to complete installation in the first half of 2023 and they are closely monitoring the electricity consumption in Singapore roadstone plant.

EP is planning to install 600MWh of solar panel systems in Beranang and Seelong plants, which will be able to supply 10-15% of their total power requirements.

Parmarine has introduced initiatives to reduce energy consumption and is exploring the possibility of replacing their current fleet of cars and forklifts with electric vehicles. Over the next few years, they are also considering the possible installation of solar panels on their roof which will produce 630 MWh of electricity which covers Parmarine's annual electricity use.

RML has introduced motion sensor lighting for the staircases and member shower rooms to conserve energy. Solar film for glass windows in 2023 to reduce heat emissions into the building and reduce energy consumption is under consideration.

NSL GROUP'S PERFORMANCE

For FY2022, the scope of the Sustainability Report has been expanded to include subsidiaries beyond Singapore and Malaysia. Therefore, we have commenced to collect energy consumption data for operations in Singapore, Malaysia, UAE and Finland. This includes purchased electricity, heating, cooling and steam for manufacturing activities and office use.









At the NSL Group level, there was an increase in Total Energy

Consumption from FY2021 to FY2022, which can be mainly attributed to the higher production volume of precast products in 2022, given the growth in construction demand as the economy opened up in the wake of the COVID-19 pandemic.

FY2023 TARGETS

The following are under consideration:

ΕP

- To increase the proportion of solar energy consumption in the production facilities over the next three years
- Complete the installation of LED lights in their production facilities over the next three years

NOWM

• To conduct initiatives to reduce specific energy output.

Emissions, Noise and Dust Pollution

GRI 305-1 GRI 305-2 GRI 305-4

NSL Group adheres to regulations relating to Energy and Emissions imposed by the local authorities in the countries where the Group operates in.

Since 2019, NEA enforced the Carbon Pricing Act ("CPA"), which mandates any industrial facility with greenhouse gas ("GHG") emissions equal to or above 2,000 tCO2e annually to register as a reportable facility with the agency. Furthermore, facilities with emissions beyond 25,000 tCO2e annually are subject to the Carbon Tax.

HOW EMISSIONS, NOISE AND DUST POLLUTION IS MANAGED

Factory operations may have an adverse impact on air quality through the emission of greenhouse gases, dust and noise pollution.

Emissions & Dust Pollution

DPC monitors and records air quality at their premises, taking reference from AS/ NZS 3580.15.2014, to ensure a safe working environment for staff. Filters have been installed on the top of the silos to reduce emission of cement dust.

EP has installed new cement dust collection system for one of its plant to ensure that cement dust is not released into the air when silos are being filled.

Parmarine is considering paving a 12,000m² yard in due course to reduce fugitive dust generation by human and vehicular traffic.

In NOWM, an annual source emission test was conducted for the incinerator and boiler stacks and emissions were within allowable limits. NOWM also commissioned a new scrubber system in October 2022, to improve workplace air quality and upgraded blowers with lower noise generation. NOWM hopes to increase the frequency of emissions tests from an annual to quarterly basis from 2023 onwards, over the next 3 years.

In NSC, raw materials used in refractory production are all pre-processed and minimal dust is generated when raw materials are mixed. Annual source emission test is also conducted at NSC's roadstone plant to ensure that all emissions are within allowable limits. Additionally, water sprinklers are used to minimise emissions during material handling operations.

Noise Pollution

DPC monitors noise pollution generated during the operational processes, in accordance with ISO 9613-2 & ISO 1996-2. DPC also ensures that necessary personnel protective equipment ("PPE") such as ear plugs and dust masks are provided to workers, based on their work requirements.

NSC conducts periodic boundary noise measurements and noise mapping, using an external vendor, to manage the noise emissions from their operations. Employees who work near a noisy environment are sent for audiometry testing on an annual basis. The noise levels at various locations of the plant are maintained and all workers are allocated proper PPE to ensure they are protected. NSC adheres to permissible work hours and allowable noise levels.

NSL GROUP'S PERFORMANCE GHG Emissions

We have begun to collect GHG emissions data from the nine operational subsidiaries included in this Sustainability Report based on Scope 1 and 2 emissions with reference to the GHG Protocol which is an internationally recognised GHG accounting standard.



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FY2022 TARGETS

We tracked our progress closely in FY2022 and achieved the following targets which were set in FY2021:

- NOWM has managed to maintain our emissions below allowable limit through timely emission monitoring and maintenance programs.
- NOWM installed and commissioned an additional scrubber at their Wastewater Plant to reduce odour.



Waste Management

GRI 306-3

As a leading provider of waste treatment and disposal services, NSL Group believes that waste management is integral for our business. In addition to providing our customers with waste management services, we also focus on the responsible management and reduction of waste across our business operations.

HOW WASTE IS MANAGED AND REDUCED

DPC continues to follow local authority circulars for the safe disposal/recycling of waste generated from the production process. Solid waste (concrete, wood, polystyrene etc.) is disposed to the municipal disposal area while hazardous waste is disposed to the authority's hazardous waste disposal area. A large amount of concrete wastewater is generated during the process of concrete production, curing, hollow core cutting and washing, and so a wastewater recycling plant was installed near the concrete batching plant area. All industrial wastewater generated is recycled through this plant. Recycled water is stored in storage tanks and it is reused in concrete curing, washing, and cleaning processes.

EP installed a small wastewater treatment plant and a concrete recycling plant in Beranang. A similar system will be installed in Seelong plant by 2024.

NSC uses jumbo bags to contain processed used bricks and pre-production materials. All broken bags generated through production is sent to plastic recycling companies.

At NSC's roadstone operations, no waste is generated from the production process. 100% of waste collected is processed into steel slag aggregates for road construction. Metal particles present in waste, about 1 to 1.5%, are collected via magnetic separators and sent back to the steel mill for use as secondary scrap material for steel production. For NSC's refractory operations, bulk bags from incoming raw material are reused for finished goods and packing of trading materials. Wooden pallets are also reused for refractory finished goods packing.

NOWM continues to follow international standards for safe chemical disposal, safe wastewater discharge and disposal of incineration ashes. In Singapore, NOWM ensures that wastewater discharged to the sea and public sewers, adheres to Singapore regulatory standards. The wastewater treatment processes at NOWM's plants were enhanced to strengthen the plants' capability in meeting regulatory discharge standards. In 2022, NOWM studied the feasibility of incorporating a dryer in their processes, which would help to reduce the amount of waste that eventually is transported to landfill for waste disposal.

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NSL GROUP'S PERFORMANCE

Waste is classified into hazardous and non-hazardous waste. Individual subsidiaries are closely tracking the waste generated from their operations and exploring ways to recycle waste generated. Regrettably both

NOWM and EP were fined S\$13,000 and RM50,000 respectively for breach of environmental regulations in second half of 2022. The table below shows the types of waste generated by various subsidiaries.

Types of Waste Generated

	FY	FY2022		
	Hazardous ^a	Non-Hazardous ^b		
DPC		\bigcirc		
EP	Ø	⊘		
NOWM	-	⊘		
NSC	-	⊘		
Parmarine	-	⊘		
RML	-	Ø		

Hazardous waste includes sewage water, waste containing mercury or its compound, waste from electrical and electronic assemblies, spent lubricating and hydraulic oil, spent mineral oil-water emulsion, disposed containers, bags, or equipment contaminated with chemicals, rags, plastics, papers or filters contaminated with scheduled waste.

FY2022 TARGETS

With reference to targets set in FY2021:

NOWM

- NOWM is still pending trial on the dryer design, which can help to dry non-incinerable waste
- No significant progress has been made in the search for alternative use of waste material, as variability in waste material is too great for meaningful production formulation.



FY2023 TARGETS

EP

 By the end of 2023, EP targets to treat 100% of process water using the in-house wastewater treatment plant.

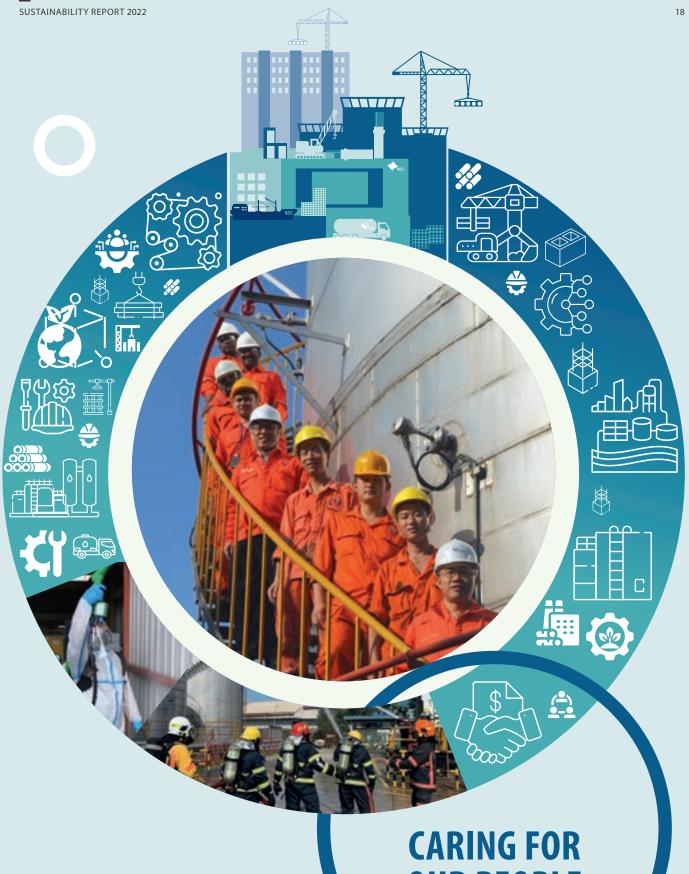
NSC

 In 2023, NSC targets to reuse 100% of bulk bags and wooden pallets from incoming raw materials for refractory operations.





b Non-hazardous waste includes concrete, plywood, polystyrene, steel scrap, metal/rebar scrap, sludge, unused moulds, ceramic tiles, industrial waste, waste for energy production, paper and cardboard, adhesives, waste oil and other general waste, treated industrial waste.



OUR PEOPLE

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Caring for Our People

Our people are at the heart of all that we do. The Group is focused on talent acquisition, development and retention, and ensuring employee health, safety and well-being.

Workplace Health and Safety

GRI 403-4a GRI 403-5

Since 2019, NSC has maintained a track record of zero accidents in their plant and they will continue to ensure that operational environments is safe for employees to minimise the risk of accident.

NOWM engaged a Safety and Risk Management Consultant from August to November 2022, to review potential major accidents across its 3 plants. They are currently working to implement the recommended safety, risk, and job controls across all plants and operations.

Starting in September 2022, RML initiated guarterly Workplace Health and Safety meetings and implemented Safety Time-Out routines. This provides employees a chance to examine the safety of their workplace, highlight their concerns to their supervisors and implement safe working practices in their workplace to reduce injuries. RML also implemented the Environmental Sanitation Regime in December 2022 for their staff canteen, and also appointed an Environmental Control Coordinator to ensure the implementation as it is a part of NEA requirements for F&B outlets.

While DPC successfully completed projects in FY2022 without any lost time injury, winning awards from several contractors, sadly two fatalities occurred in mid-Feb 2023 due to an accident.

PROJECT EAGLE EYE

NOWM was awarded the ASPRI WSH Innovation Awards 2022 (Bronze) for Project Eagle Eye. The project was undertaken to strengthen safety risk control measures with regards to driving and involved installation and positioning of cameras to allow a driver to have visuals surrounding his vehicle, thus eliminating the vehicle's blind spots and enhancing driving safety. Cameras are also equipped with a live view feature to

allow for investigations in the event of any incidents. This project was funded by the **Enterprise Development Grant administered** by Enterprise Singapore.



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NSL GROUP'S PERFORMANCE

NSL Group has implemented measures to ensure the safety and health of their employees. For FY2022, no cases of fatality was recorded.

There were instances of minor injuries due to mishandling of equipment or because of an accident.

Total Number of Work-related Injuries

	FY2022	FY2021
Number of fatalities as a result of work-related injury	0	0
Number of high-consequence work-related injuries (injury that results in a fatality from which the worker cannot recover fully to pre-injury health status within 6 months), excluding fatalities	0	0
Number of recordable work-related injuries	24	27

Total Number of Work-related III Health

	FY2022	FY2021
Number of fatalities as a result of work-related ill health	0	0
Number of cases of recordable work-related ill health	1	0



FY2023 TARGETS

DPC

DPC targets to develop an Employee Assistance
 Program to support mental-health and ensure work
 life balance of employees.

NOWM

• NOWM aims to have zero accident.

NSC

• NSC aims to have zero accident.

Parmarine

• Parmarine may review workplace ergonomics to reduce injuries caused by poor working postures.

RML

• RML targets to roll out the Environmental Sanitation Regime to the food & beverage outlets.



Labour Practices, Employee Training and Welfare

GRI 404-1 GRI 404-3 GRI 405-1b

HOW NSL GROUP MANAGES OUR TALENT

In the wake of the COVID-19 pandemic, talent management has been crucial for business continuity and upholding organisational culture. The Group's human capital management approach is based on five key pillars: fair labour practices, talent attraction, training and development, employee engagement, welfare and well-being.

Labour Practices

We are committed to extend fair labour practices to every employee across all businesses. The Group is particularly conscious of the migrant workers in Singapore and Malaysia, as they are essential to smooth operations.

To comply with Malaysia's new minimum salary regulations, both EP and NSC had adjusted all the basic salaries of workers in its Malaysia operations. Overtime compensation was also adjusted as per the new revised manpower laws, which is expected to be implemented in 2023.

Paramarine has implemented a Gender and Equality Plan. The plan aims to:

- (i) Prevent gender discrimination and promote gender equality and women's job position and work participation.
- (ii) Prevent employees from being treated differently based on personal attributes or circumstances.

Talent Attraction

Our talent attraction efforts focus on creating a work environment that values diversity, equity, and inclusion, as well as providing employees with opportunities for professional growth and development. We believe that attracting and retaining talent is critical to achieving our business objectives and creating long-term value for our stakeholders in a sustainable manner.

Training and Development

We recognise the importance of keeping the staff abreast with market advancements, and continuously upskilling them. Skill development is a positive longterm investment for the company as it contributes to enhanced business performance and employee satisfaction. The average training hours per employee decreased from 30.2 in 2021 to 13.6 in 2022, mainly due to higher course attendance during the COVID-19 period in 2021, as the Group capitalised on the opportunity to send employees for more courses during the extended period of Work-from-home as a result of COVID-19 measures.

Employees participated in a range of courses ranging from equipment and machinery operations (including cranes, forklifts, power tools, boilers), process safety and risk management, auditor training. In 2022, employees in managerial and supervisory positions also had the opportunity to attend courses and webinars to enhance their knowledge of leadership and management in their respective domains.

Employee Engagement

Post lifting of COVID-19 safe distancing measures in 2022, NOWM organised a firmwide engagement program for all staff and also implemented an employee referral programme. EP and NOWM also held physical celebrations and cohesion events for their staff during major festivities to boost staff morale and instill in them a sense of belonging.

NSL Sports & Recreation Club ("SRC") resumed activities for 2022, after two years of dormancy due to COVID-19. SRC is responsible for organising employee engagement events to promote healthy lifestyle and strong employee bonds among staff in Singapore.

Welfare and Well-being

Annual Health screenings allows for early detection and treatment of diseases, even though an individual may not display any symptoms.

From May 2022, RML increased the variety of food in their staff canteen for the benefit of staff.

Parmarine implemented an early support model which supports employees when they return to work after sick leave, with the goal of cutting back on long term absence from work due to illness or accidents. Their early support model also aims to minimise occupational accidents and diseases as well as prevent premature retirement.

NSL GROUP'S PERFORMANCE

All NSL Group employees receive regular performance and career development reviews, regardless of gender and employee category (Management, Executive, Non-Executive).

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The following tables provide information about average hours of training for employee and the

percentage of employees by gender and age group.

Average Hours of Training Undertaken by Employees by Gender (NSL Group)

Gender	FY2022	FY2021
Male	17.0	33.4
Female	8.4	9.5
Overall	15.8	30.2

Note: FY2021 data did not include DPC and Parmarine.

Average Hours of Training Undertaken by Employee Category (NSL Group)

Employee Category	FY2022	FY2021
Management	17.5	9.7
Executive	15.2	17.4
Non-executive	15.8	37.4
Overall	15.8	30.2

Note: FY2021 data did not include DPC and Parmarine.

Percentage of Employees per Employee Category by Gender (NSL Group)

Gender	FY2022	FY2021
Male	87%	86%
Female	13%	14%
Overall	100%	100%

Note: FY2021 data did not include DPC and Parmarine.

Percentage of Employees per Employee Category by Age Group (NSL Group)

Age Group	FY2022	FY2021
Under 30 years old	23%	29%
30-50 years old	62%	58%
Over 50 years old	15%	13%
Overall	100%	100%

Note: FY2021 data did not include DPC and Parmarine.

FY2022 TARGETS

We tracked our progress closely and this is the progress we have achieved for targets set in FY2021:

- NOWM implemented a staff referral scheme in June 2022, rewarding staff upon confirmation and anniversary of the referred individual.
- With safety measures still in place as the spread of COVID-19 slowed down, EP managed to hit 35.9 training hours per employee, falling short of their target of 40 training hours per employee.
- In 2022, staff of RML attended various soft-skill courses such as "Understanding of Good Grievance Handling Practices".
- Given the safe distancing measures in the early part of 2022, employee bonding & recreational events across NSL Group were kept minimal to ensure health and safety of employees.



FY2023 TARGET

Continue to ensure that employees are adequately trained to perform well and efficiently in their assigned job roles.



Corporate Governance, Ethics, Anti-Corruption & Anti-Competitive Behaviour

GRI 205-3

As a business built on strong values, NSL Group works hard to maintain our integrity through good training and strong policies as outlined in our code of conduct.

All new joiners are familiarised with the code of conduct. The Group also has in place a whistleblowing policy.

OUR PERFORMANCE

No known case of corruption or legal action for anti-competitive behaviour or anti-trust practices against the NSL Group was reported by the subsidiaries.



FY2022 TARGETS

The following targets were achieved:

- Maintain zero corruption.
- Maintain zero anti-competitive
- Ensure 100% of staff are aware of the code of conduct.



FY2023 TARGETS

- · Maintain zero corruption.
- Maintain zero anti-competitive behaviour.
- Ensure 100% of staff are aware of the code of conduct.

Product Quality, Service Quality and Customer Satisfaction

Non-GRI Material Factor

NSL Group strives to be a market leader as an essential services provider and works hard to maintain the highest quality of products and services. Customer feedback is solicited through informal conversations and formal customer surveys to assess the quality of services provided and to improve its business performance.

Our customer satisfaction management process includes maintaining good working relationships with customers and surveying them every six months to ascertain feedback on technical support, quality and delivery of services. The feedback collected is provided to the relevant operations team to review and improve their products and services.

Over the course of 2022, NOWM's plant instrumentation systems were enhanced to promote automation of real time alarm reporting thus allowing for timely process intervention and control. The entire plant process flow was digitalised for ease of remote monitoring.

NSL GROUP'S PERFORMANCE

NSC's refractory products are reliable products with good product performance. There was no dispute on product quality in 2022 for all refractory products sold. Being the only local refractory manufacturer in Singapore, NSC was able to provide almost just in time service to the customers in both Singapore and Malaysia. This has been a great help to customers in Malaysia who have suffered late arrival of imported goods due to supply chain interruptions during the COVID-19 pandemic. NSC's roadstone business prides itself on short response time to customers' need of material and achieved 100% on time delivery to all customers in 2022.

RML received 373 Google reviews with an average rating of 4.4 out of 5 for providing good services to its members and guests.

Digital Innovation

Innovation is required for some of our businesses to stand ahead of the curve and we will continue to develop and create products that meets the needs of customers.

An in-house CCTV Artificial Intelligence ("AI") web application was developed in 2022. With this application, CCTV monitoring shifted from a passive record of past events to active monitoring with predefined events of interest triggering automatic alerts for quick investigation and immediate risk mitigation in selected sites within Singapore.

FY2022 TARGETS

Tracking of targets which were set in FY2021:

- NOWM was not able to carry out customer surveys in 2022 due to COVID-19.
- Complete launch of IT Department and NOWM's optimisation project.
 Auto-scheduling of waste collection service orders was completed for a single vehicle type in 2022.



FY2023 TARGETS

NOWM

- NOWM Sales and Marketing team will work with Sales Support team to conduct customer surveys from Q1 2023.
- NOWM will continue the project on waste collection auto-scheduling for other vehicle types.

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Community Initiatives

We believe in giving back to the society while achieving our business goals.

NSL Group acknowledges the importance of making a positive social impact on the community and aims to achieve this through fundraising initiatives and employee volunteering. In 2022, the Group engaged in various causes and did their part to be good corporate citizens.

NSL Ltd donated \$250,000 to the Cham Tao Soon Career Development Professorship (Nanyang Technological University) in Engineering, which recognises mid-career faculty members with distinguished achievements. The income from the endowed fund supports the awardee's research and salary, with any surplus to be used in supporting activities related to their appointment. A total of \$3 million was raised by University alumni, faculty, schools in NTU College of Engineering and partners of NTU Singapore.

NSL SRC continued to spearhead the NSL Love Movement 2022 to raise funds for its long-term beneficiary, Melrose Home (Children's Aid Society). The Home provides a nurturing environment for children and youth from 6 to 18 years of age, who face difficult family situations or require child protection. In FY2022, a total of \$13,852.20 was raised. These proceeds will be utilised in purchasing food items and groceries for the preparation of daily meals for children and youth.

In August 2022, RML partnered with Singapore Management University to raise a total of \$11,225 for the Sailability programme at the 23rd SMU-RM Western Circuit Sailing Regatta.





FY2023 TARGET

Continue NSL Group's engagements with our long-term beneficiaries.



GRI Content Index

NSL Group has reported the information cited in this GRI content index for the period 1st January 2022 to 31st December 2022 with reference to the GRI Standards.

	dards (2021)	Notes/Page number(s
	isclosures	
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2-1	Organizational details	03, 04, Annual Report
2-2	Entities included in the organization's sustainability reporting	01
2-3	Reporting period, frequency and contact point	01, 02
2-4	Restatements of information	There are no restatements of information.
2-5	External Assurance	We have not sought external assurance on this Report.
Activities	and workers	
2-6	Activities, value chain and other business relationships	04
Governan	·	
2-9	Governance Structure	Refer to Annual Report
2-10	Nomination and selection of highest governance body	Refer to Annual Report
2-11	Chair of the highest governance body	Refer to Annual Report
2-14	Role of the highest governance body in sustainability reporting	01, 05
2-15	Conflicts of interest	Refer to Annual Report
2-16	Communication of critical concerns	Refer to Annual Report
2-17	Collective knowledge of the highest governance body	05
2-19	Remuneration policies	Refer to Annual Report
2-20	Process to determine remuneration	Refer to Annual Report
	policies and practices	nerer to Aimaar neport
2-22	Statement of sustainable development strategy	02
2-26	Mechanisms for seeking advice and raising concerns	05,06
2-27	Compliance with laws and regulations	16
2-28	Membership associations	30
	der Engagement	30
2-29	Approach to stakeholder engagement	05, 06
		03, 00
Material 1	-	06
3-1	Process to determine material topics	06
3-2	List of material topics	06
	g the Environment	
	oducts & Services	10.11
3-3	Management of material topics	10-11
301-2	Recycled input materials used	10-12
	anagement	
3-3	Management of material topics	13
302-1	Energy consumption within the organisation	13-14
	, Noise & Dust Pollution	
3-3	Management of material topics	15
305-1	Direct (Scope 1) GHG emissions	15
305-2	Energy indirect (Scope 2) GHG emissions	15
305-4	GHG emissions intensity	15
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3-3	Management of material topics	16
306-3	Waste generated	17

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403-2	Hazard identification, risk assessment and incident investigation	19
403-3	Occupational health services	15, 19
403-4a	Worker participation, consultation and communication on occupational health and safety	05, 06, 19
403-5	Worker training on occupational health and safety	15, 19
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	15, 19
403-9	Work-related injuries	20
403-10	Work-related ill health	20
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3-3	Management of material topics	21
404-1	Average training hours per year per employee	22
404-3	Percentage of employees receiving regular performance and career development reviews	21
405-1b	Diversity of governance bodies and employees	22
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3-3	Management of material topics	24
205-3	Confirmed incidents of corruption and actions taken	24
Product Qua	lity & Customer Satisfaction	
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Non-GRI		27

TCFD Index

TCFD Pillars and Recommended Disclosures	Notes/Page number(s)	
Governance: Disclose the organisation's governance around climate-related risks and opportunities		
a) Describe the board's oversight of climate-related risks and opportunities	08	
b) Describe management's role in assessing and managing climate-related risks and opportunities	08	
Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning where such information is material		
 Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term 	08 - 09	
b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	08 - 09	
c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	To be disclosed in subsequent reports	

SUSTAINABILITY REPORT 2022 30

TCFD Pillars and Recommended Disclosures	Notes/Page number(s)	
Risk Management: Disclose how the organisation identifies, assesses and manages climate-related risks		
a) Describe the organisation's processes for identifying and assessing climate-related risks	08	
b) Describe the organisation's processes for managing climate-related risks	08	
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	To be disclosed in subsequent reports	
Metrics and Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material		
 Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process 	15, 17	
b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	15	
 Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets 	14, 16, 17	

List of Memberships, External Initiatives and Charters

MEMBERSHIPS

- · Aseanarean Bluewater Alliance (ABA)
- · Association of Process Industry (ASPRI)
- Association of Singapore Marine Industries (ASMI)
- Finnish Marine Industries
- International Prestressed Hollowcore Association (IPHA)
- Singapore Shipping Association (SSA)
- Singapore Water Association (SWA)
- · Technology Industries of Finland
- Waste Management and Recycling Association of Singapore (WMRAS)

LICENSES/CERTIFICATIONS

- BCA Licensed Builder Specialist Builder (Pre-cast Concrete Work)
- DCL (Dubai Central Laboratory Department)
 Certificate of Conformity for Batching Plant
- Environmental Clearance Certificate (issued by Dubai Municipality)

- · Etihad Water & Electricity Registration
- Eurofins (VTT) Certificate
- ISO 9001, ISO 14001, ISO45001, SS651 Certification
- MED (Marine Equipment Directive)
 Certification
- Permit for Waste Management Activity (issued by Dubai Municipality)
- SAC (Singapore Accreditation Council)
 Ready Mixed Concrete Product Conformity
 Accreditation
- SCI (Singapore Concrete Institute) PC1
 Accredited Pre-caster, PBU Manufacturer
 Accreditation Scheme
- SGBC (Singapore Green Building Council)
 Green Label Tick 1 to 3
- SINTEF Management System Certification
- UAE National In-Country Value (ICV) Program
- WSHC (Workplace Safety & Health Council) bizSAFE STAR Certification



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