ESA
ENVIRONMENTAL SOLUTIONS

2021

ENVIRONMENTAL SOLUTIONS ASIA
2021 REPORT

About This Report

This 2021 Sustainability Report will be Environmental Solutions (Asia) Pte Ltd ("ESA") first, and we are excited to share more about our sustainability journey. We decided to begin publishing sustainability reports to tell our story, helping others understand our sustainability strategy and key areas of focus.

ESA will be publishing its sustainability reports on an annual basis, with the reporting period being set as the year of the report, i.e. 2021 Sustainability Report will have the year 2021 as its reporting period. Therefore, this report covers our operations from 1 January 2021 to 31 December 2021 in Singapore, unless otherwise stated.

In our first sustainability report, our main sustainability strategies are split into three main parts - environmental, social and governance. We believe that this will provide a holistic overview of what we do and believe in at ESA.

This report has been prepared in accordance with the GRI Standards: Core Option. ESA is a signatory to the United Nations Global Compact (UNGC), and we subscribe to UNGC's 10 principles. This report will also serve as our Communication on Progress to the UNGC and is not externally assured.

This report's quality of the content was defined by the principles of accuracy, balance, clarity, comparability, reliability, and timeliness. Furthermore, the content was established by the following four GRI Standard reporting principles: Stakeholder Inclusiveness, Sustainability Context, Materiality, and Completeness.

We welcome any feedback or questions. Please direct them to info@env-solutions.com.

Highlights

14,397	**98%**
Tons of Waste Collected[1]	**Landfill Diversion Rate**[2]
3	**1st**
New Waste Recycling Plants Commissioned[3]	**ISCC PLUS-Certified Plastic Pyrolysis Plant in Singapore**[4]

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[1] Includes waste wood, plastics, acids/alkali and sludges and other industrial waste collected in 2021
[2] Excludes any waste sent to the landfill or incinerator
[3] Sludge Thermal Processing Plant, Acid/Alkali Physical-Chemical Treatment Plant, and Plastic Pyrolysis Plants
[4] International Sustainability and Carbon Certificate (ISCC) Plus is a globally recognised sustainability certification programme for bio-based and circular (recycled) raw materials.

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CEO's Message

Dear stakeholders, partners, and clients,

Our sustainability strategy is our business strategy.

I am pleased to reaffirm Environmental Solutions Asia's commitment to and support of the Ten Principles of the United Nations Global Compact in Human Rights, Labour, Environment and Anti-Corruption. We have been a member since May 2019.

We imbue our sustainable business practices in all that we do. We are aligned with the 17 UN Sustainable Development Goals, where we actively contribute to 5 goals while indirectly supporting 4 other goals.

In our first sustainability report, which is prepared in accordance with GRI Standards, we describe our actions to continually improve the integration of the Global Compact and its principles into our business strategy, culture and daily operations. In 2021, we completed the commissioning of three new plants to recycle and repurpose industrial waste (chemicals, sludges, wood, and plastics). This has brought about its own set of financial and operational challenges, given that we are a small-medium enterprise navigating the COVID-19 pandemic during this period of business transition.

However, we hope to use these lessons we gleaned along the way (to use a cliché term) to emerge stronger.

To us, sustainability is a never-ending journey, and we are only at the start. This is why we have stated targets for identified priority material issues. In addition, we will continue to engage our key stakeholders better to implement, monitor, correct and adapt our operations to achieve our goals.

By sharing a snapshot of our activities in 2021, we hope to intentionally examine what we have achieved, motivate ourselves to do better, and inspire others to join us in our mission. In 2022, we hope to continue utilising sound, safe, and sustainable engineering principles to give waste a second life.

Yours Sustainably,

Quek Leng Chuang

Chief Executive Officer

About ESA

We bring green engineering and innovation to transform waste – building a sustainable future.

Incorporated in 1999, ESA is a Recycling & Waste Management company based in Singapore. ESA started by providing Transboundary Waste Management to multinational corporations in the ASEAN region to repatriate extremely toxic and hazardous waste, such as Spent Catalysts (Pyrophoric), Flammable Liquid Waste, mercury waste, PCB Oil, Carcinogenic Obsolete Pesticides, and Assorted LabPacks, back to the USA and Europe for proper treatment.

Leveraging our expert knowledge in field services of hazardous waste handling, risk assessments, DG packaging and hazard communication, we started our first treatment facility in 2003.

As a thought leader in the Waste Management & Recycling industry, our plants are designed to be Zero Carbon, Zero Energy, and Net-Zero Water. We actively contribute to five out of 17 UN Sustainable Development Goals and enable our clients and partners to realise their environmental targets.

ESA also harvests heat energy from 500MT a year of waste wood and electrical energy from the sun from our own 750kWp Solar PV roof, which certifies ESA as 130MTCO2 eq carbon negative[5].

Headquartered at 101 Tuas South Avenue 2, Singapore 637226, we provide sustainable solutions to recover and recycle Spent Catalysts, Chemical Waste, Used Oils, Hazardous Waste, Wood and Plastics Waste – giving waste a second life and minimising our negative impact on the environment.

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[5] Based on a carbon footprint report conducted by a third-party consultant in 2017.

Our Values

| Ethics | Safety | Integrity | Ownership | Frugality |

Licenses and Certifications

National Environment Agency
Licensed Waste Collector

bizSAFE₃

ISO 9001 SGS

ISO 14001 SGS

ISCC
International Sustainability & Carbon Certification

Our Memberships

WMRAS
Waste Management & Recycling Association of Singapore

Association of Process Industries
ASPRI
Connect · Engage · Grow

WE SUPPORT
UN GLOBAL COMPACT

Aligning ourselves with the United Nations SDGs

We are aligned with the United Nations Sustainable Development Goals (UN SDGs). Read our UN SDGs Pledge on our website. You can also find out more about how we support (directly and indirectly) each of the following goals by reading Annex 1.

OUR WORK DIRECTLY CONTRIBUTES TO GOALS

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

OUR WORK SUPPORTS GOALS

Governance and Sustainability Committee

ESA is a Singapore-registered private company limited by shares. In FY2021, we have three shareholders who also sit on the board of directors. The directors form the top management team. Our board of directors and management team work closely to monitor and implement sustainability initiatives, as well as work to identify new opportunities to improve our performance.
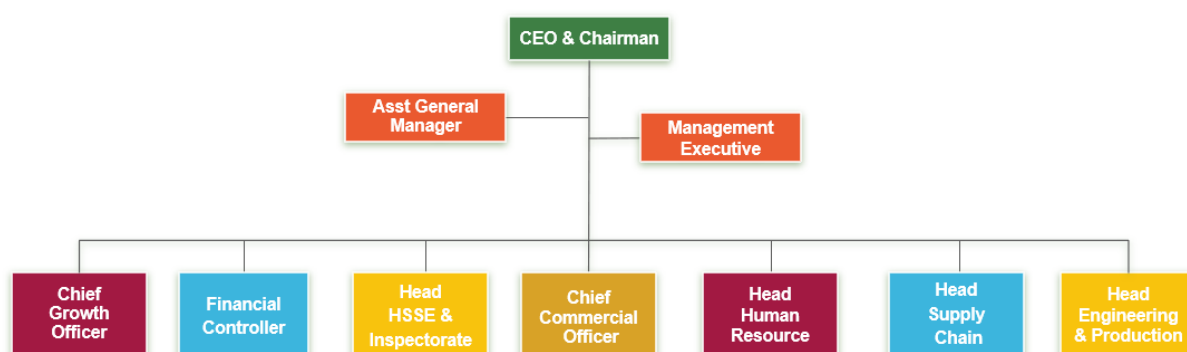
In addition, the company also allocates additional roles to existing staff to explore sustainability initiatives such as the sales of renewable energy certificates and sustainable supply chain certification.

Role	Reports to	Sustainability-Related Responsibilities
Chief Executive Officer	N/A	Oversees engineering and chemist teams to ensure the adoption of green practices
Chief Growth Officer	CEO	Oversees all matters related to sustainability in the company
Chief Commercial Officer and Heads of Departments	CEO	Develop and implement sustainability policies in respective functions, where possible

Role	Reports to	Sustainability-Related Responsibilities
Manager / Management Executive (Sustainability & Energy)	CEO	Manages sales of renewable energy certificates in the company
Assistant Manager (Sustainability & Marketing)	CGO	Manages employee engagement, partnerships and sustainability certifications in the company

Our Operations

We can manage different forms of waste, with plastics, industrial sludge, and wood being our primary focus areas. In 2021, all plant operations are located at our headquarters while we operate a warehouse at 110 Tuas South Avenue 3, #03-17, S637369. Currently, we only serve the Singapore market.

Chemical Recycling of Plastic Waste

We are the only plastic chemical recycling plant in Singapore, and our facility is ISCC PLUS certified. We transform plastic into NewOil, allowing us to create new recycled plastics and recover energy from plastic waste.

Wood Waste Gasification

We take in wooden pallets, crates & boxes, and construction wood. They are then gasified into thermal energy, which is then used to fuel our other recycling operations. This diverts wood waste from landfills and allows us to lower our carbon emissions.

Physical-Chemical Treatment of Acid/Alkali Waste

We safely manage and recycle hazardous waste solutions such as spent acids and alkali. In the future, we hope to expand to include *Metals Electrowinning Recovery* to process solutions containing base and precious metals such as spent plating solutions & etchants and precious metals waste solutions.

Thermal Processing of Industrial Sludge

We recover metals and minerals from sludges and solid industrial waste, safely managing, treating and recycling the hazardous waste. This includes spent industrial catalysts, metal & inorganic sludge, filtercakes and residues.

Our Operations (cont.)

By 2025, we target to expand our operations. The following graphic summarises our expected full capabilities.
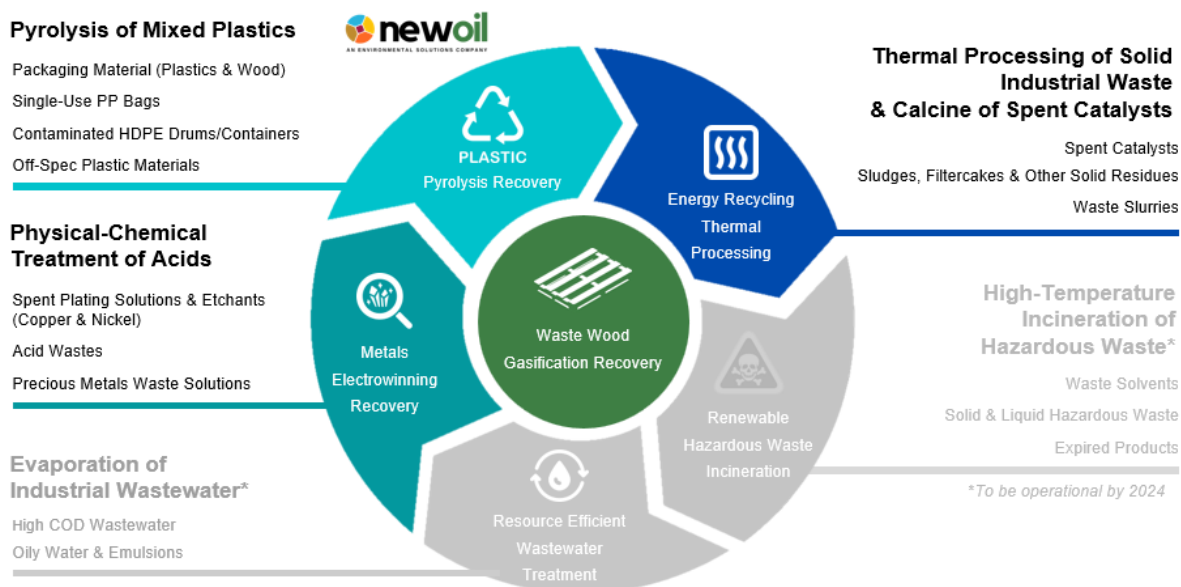
Stakeholder Engagement

The company actively engages with key stakeholder groups to define business priorities and identify potential risks and opportunities. The sustainability committee has identified these stakeholder groups as they would be reasonably expected to be significantly affected by our activities, products and services, or if they are likely to have the ability to influence if we can successfully implement our strategies and achieve our objectives.
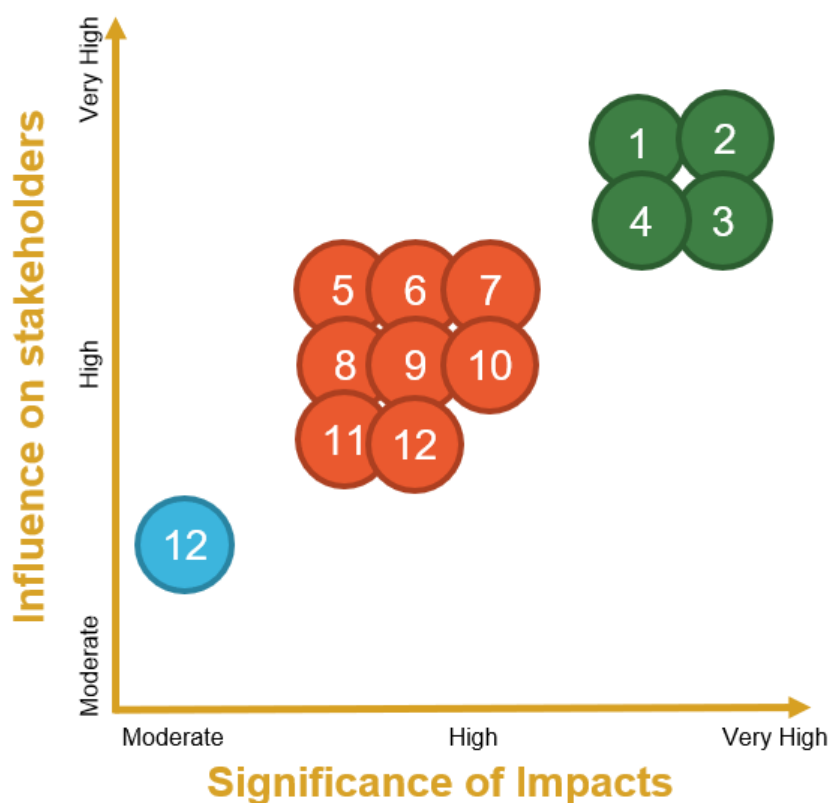
The table on the next page elucidates the topics of concern to our stakeholders and the company's engagement methods.

Stakeholders	Topics	Engagement Methods and Frequency of Engagement
Employees	• Remuneration and Benefits • Employee Health and Safety • Company Growth	• 24/7 Feedback Channel in English and Chinese • Ad-Hoc Lunch & Learn / Training Sessions • Yearly townhalls with Directors • Periodic Informal One-on-One sessions with Managers
Clients	• Quality and Timeliness of Service • Environmental Impact of Waste Managed • Cost of Service	• Ad-Hoc Hotline and Email Queries • Periodic Meetings and Updates with Business Development staff • Periodic Customer Audits
Suppliers, Value Chain Partners	• Timely fulfilment of obligations • Environmental Impact	• Ad-Hoc Hotline and Email Queries • Periodic Meetings and Updates with ESA staff
Directors	• Financial Performance • Operations (Productivity & Safety) • Environmental Impact • Business Ethics	• Ad-Hoc Sustainability Trainings • Ad-Hoc Informal Discussions • Annual General Meeting
Government Regulators	• Environmental Compliance	• Regular inspections by agencies • Monthly/yearly reporting

Materiality Assessment

Here in ESA, we have identified 13 material issues that we believe will be important to our growth and progress. We identified them with the help of the Sustainability Accounting Standards Board (SASB) materiality map through discussions with stakeholders and research into material issues in the waste management space. Then, based on the top management's feedback and analysis of the company's impact (through desktop research and input from company stakeholders), the Sustainability committee ranked the material issues on the materiality matrix developed by the Global Reporting Initiative (GRI). The matrix ranks material topics that significantly influence stakeholders' assessments and decisions, as well as the topics that relate to the organisation's significant environmental, economic, and social impacts.

ESA's material issues and our ranking can be seen as shown below:

1. Worker Health & Safety
2. Operational Safety, Emergency Preparedness and Response
3. Management of the Legal and Regulatory Environment / Business Ethics
4. Energy Management / Waste Management
5. Labour Practices
6. Leachate and Hazardous Materials Management
7. Recycling & Resource Recovery
8. GHG Emissions
9. Air Quality
10. Water and Wastewater Management
11. Safety and Environmental Stewardship of Chemicals
12. Materials Sourcing and Efficiency
13. Community Relations

As such, our priority material factors are as follows:

Bucket	Areas
Environmental	• Environmental Compliance • Waste Management
Social	• Occupational Health and Safety • Diversity and Equal Opportunity
Governance	• Anti-Corruption

ENVIRONMENTAL

Waste Management
Disclosure 306: Waste 2020

We believe in enabling the circularity of critical chemicals and resources to keep our work ecologically and economically sustainable. We aim to align our targets with the goals of Singapore's national Zero Waste Masterplan as well as the UN Sustainable Development Goals.

We conduct safe recycling of toxic and hazardous waste, wood and plastic waste and more. These waste materials primarily come from the industry. We focus on the Pharmaceutical, Petrochemical, and Semiconductor industries. In 2021, we also started to venture into recycling post-consumer plastics. Once the waste has been collected, we prepare and/or process the waste for disposal or recovery by sending it to traders, other recyclers, or directly to off-takers for usage again. Please refer to our relevant company policies here and here.

We designed our facilities to use renewable energy from solar power and waste wood gasification instead of electricity or diesel derived from fossil fuels. Our planned facilities are designed to capture and recycle heat and water within its systems so as to ensure maximum recovery of resources and minimal wastage. Our objective is to use 100% renewable energy to treat our waste. Please refer to our relevant company policy here.

Additionally, we are the **first** ISCC PLUS Certified Waste Plastic Pyrolysis plant in Singapore and the second in APAC. ISCC - International Sustainability and Carbon Certification is a globally recognised sustainability certification system that requires all parties in the supply chain to enforce strict traceability requirements. The ISCC certification scheme requires ESA to go through a yearly third-party audit. This milestone brings us one step closer to realising our commitment to close the plastic waste loop in Singapore.

Our goal is to recycle hard to sort, contaminated plastics into a chemical feedstock that can be used by the petrochemical industry to create new plastics and rubber products. It is estimated that the carbon footprint of pyrolysis of mixed waste plastics is 50% less than that of

Increasing Traceability, Closing the Loop

In Nov 2021, we announced a partnership with Shell Singapore and Wah & Hua (a local waste management company) to recycle hard-to-recycle, post-consumer waste into ISCC Plus-certified circular pyrolysis oil, which will be used to make rubber products by Asahi Kasei.

We will be part of Shell's goal to recycle 1 million metric tons (MT) of plastics worldwide — enabling Singapore's progress towards a circular economy.

incineration[6]. Incineration is the current end of life option for contaminated plastics in Singapore.

In 2021, we generated 14,397 MT of waste. 99% of this waste was generated by our customers. The chart below shows the proportion of waste diverted away from disposal (i.e. reuse / recovery / recycling) vs towards disposal (i.e. incineration plant / direct-to-landfill).

Waste Diverted

From Disposal
98.9%
14,245.7 MT

To Disposal
1.1%
151.5 MT
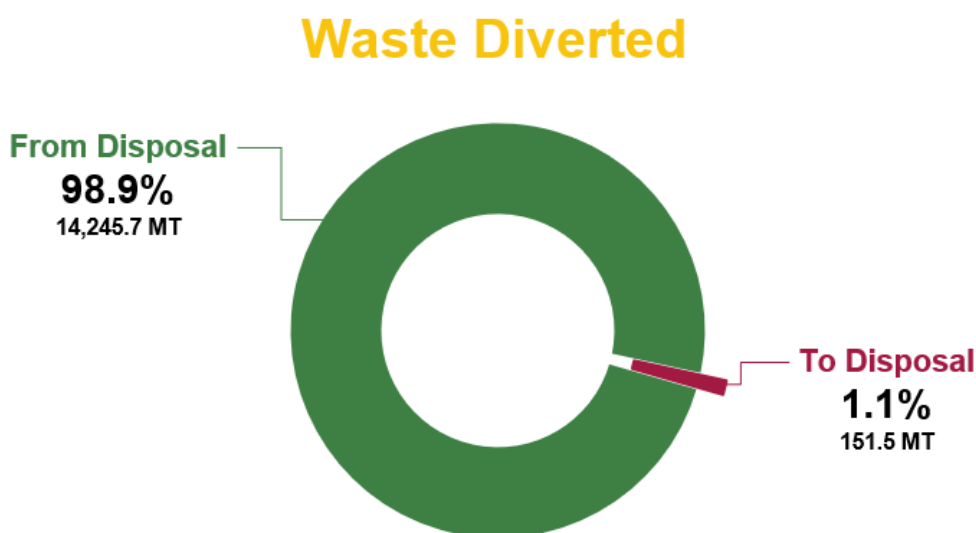
2022 Targets

- Divert 20,000 tons of waste from disposal in 2022

- Report waste diverted by waste streams and treatment type in 2022

- Maintain ISCC PLUS Certification in 2022

2023 to 2025 Targets

- By 2023, increase the national recycling rate of plastic, wood and ash & sludges by 2%, 10%, and 20%, respectively[7]

- Divert 90,000 tons of waste per year from disposal in 2025

- Report and establish a baseline for water and energy use in 2023

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[6] Based on BASF Life-Cycle Analysis (LCA). While this study is based on the recycling landscape in Germany, it is a useful estimate when considering pyrolysis vs incineration as end-of-life options for plastic waste. A localised LCA needs to be conducted in order to provide a more accurate estimate. Source: Slide Deck P.10, https://www.basf.com/global/en/who-we-are/sustainability/we-drive-sustainable-solutions/circular-economy/mass-balance-approach/chemcycling/lca-for-chemcycling.html
[7] Based on NEA Statistics, with 2019 as the base year

2023 to 2025 Targets (cont.)

- Report carbon emissions (Scope 1, 2, 3)[8] by 2025, and increase the contribution of nett negative CO2 (from 130MT in 2017 to 22,000MT CO2eq in 2025) by using 100% renewable energy in our treatment of waste

Environmental Compliance
Disclosure 307: Environmental Compliance 2016

We have incurred **zero** significant fines or non-monetary sanctions for non-compliance with laws and regulations in 2021. ESA places high importance on compliance as this is integral to business continuity. We update internal protocols, set up infrastructure and train employees to ensure that our daily operations comply with local and international law, wherever applicable.

2022 to 2025 Target

- Maintain 2021 track record every year

Improving Transparency in Waste Exports

In 2021, we exported metal containing waste from the steel making industry overseas for metal recovery, thereby playing our part to close the metal loop. The export of such waste is governed by the Basel Convention, which requires stringent reporting and quality assurance processes to ensure that waste is prepared for recovery. By investing in additional resources to do this export in accordance with Basel Convention rules, we are able to offer clients greater transparency and assurance that their waste will be recovered.

SOCIAL

At ESA, we are working to improve our labour practices. This chapter covers two main themes – occupational health and safety, as well as diversity and equal opportunity. Worker health and safety are of utmost importance. In addition, we do not condone the use of child labour or forced labour. We also respect the right of workers to form and join a trade union of their choice without fear of intimidation or reprisal in accordance with national law.

Specifically, worker health and safety have been ranked as the top priority for the top management team. Health is holistic – including not only physical but also psychological well-being. For example, the top management made a decision to provide accommodation for migrant workers in a private property rather than a shared dormitory. This way, workers have a lowered risk of contracting COVID-19 and have

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[8] Last carbon footprint calculation was conducted in 2017 – prior to the setup of the new sludge thermal treatment, physical-chemical treatment and plastic pyrolysis plant.

a comfortable place to rest and relax outside of work, thereby improving their emotional states.

Occupational Health and Safety
Disclosure 403: Occupational Health And Safety 2018

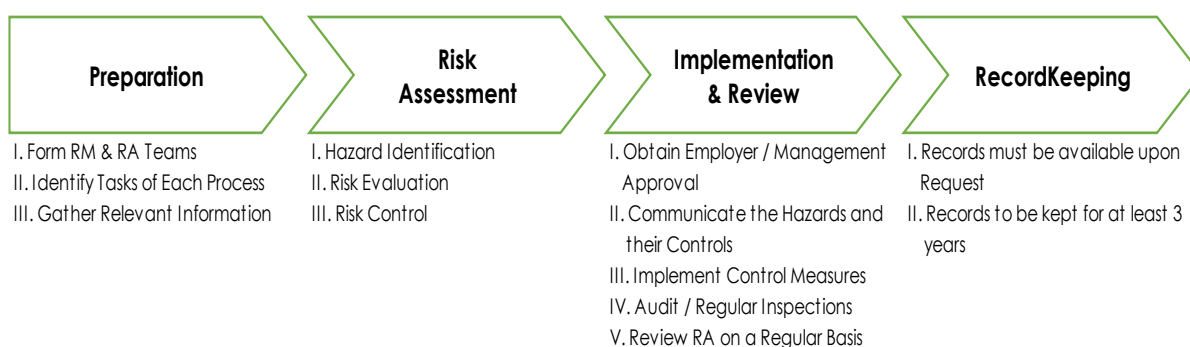### Occupational health and safety management system
Disclosure 403-1

At ESA, the Health & Safety of our employees are of the utmost importance, especially when faced with new challenges such as the Covid-19 pandemic. Therefore, we remain fully committed to our safety management and understanding the imperative of educating our employees with training techniques and operations manuals to minimise the risks incurred on Health & Safety.

Our Workplace Safety and Health (WSH) Management Systems, which cover both employees and contractors, ensure that we continually prioritise our commitment to health and safety. Our WSH management system conforms with the WSH legal and other requirements as shown in the table in Annex 2, ISO 9001, 14001and BizSAFE Level 3. Please refer to our Health & Safety policy here.

ESA adopted bizSAFE to build up our WSH capabilities so that we can achieve improvements in safety and health standards at the workplace. We implemented the system based on the plan-do-check-act continuous improvement model. The system provides us with processes to identify and evaluate hazards and risks associated with our waste management and treatment processes.

In establishing a Risk Management (RM) plan, ESA adopted the following workflow approach to identify, evaluate, prioritise, implement, control and eliminate the risks of each process of projects or work activities (both routine and non-routine), e.g. treatment processes, loading, unloading, transportation, equipment installation, etc. in compliance with WSH applicable legal and other requirements and in accordance with BizSAFE Level 3.

Preparation	Risk Assessment	Implementation & Review	RecordKeeping
I. Form RM & RA Teams II. Identify Tasks of Each Process III. Gather Relevant Information	I. Hazard Identification II. Risk Evaluation III. Risk Control	I. Obtain Employer / Management Approval II. Communicate the Hazards and their Controls III. Implement Control Measures IV. Audit / Regular Inspections V. Review RA on a Regular Basis	I. Records must be available upon Request II. Records to be kept for at least 3 years

To embark on the journey, our Senior Management had attended BizSAFE Level1 workshop for CEOs/Top Management. Our Risk Management (RM) Champion had also attended the BizSAFE Level 2 course on "Develop and Implement a Risk Management Plan" and BizSAFE Level 4 course on "Workplace Safety and Health Management System (WSHMS)", respectively. Presently, we are BizSAFE Level 3 certified. We conduct risk assessments in compliance with the Workplace Safety and Health Act (WSHA) for every work activity and process carried out at our workplaces. In conformance with ISO 9001, 14001and BizSAFE Level 3, ESA establishes a PDCA work process for each project or work activity to define the scope of work, procedures and safety requirements in addressing any significant hazards and risks and taking the feedback and concerns of employees, contractors, customers, suppliers, and other stakeholders into consideration.

Hazard identification, risk assessment, and incident investigation
Disclosure 403-2

Before commencing any new projects or work activities (both routine and non-routine), we perform the following:

a. Conduct a risk assessment (RA) by the RA team to identify top risks and do everything possible to eliminate or reduce risks to As Low As Reasonably Practicable (ALARP) based on the hierarchy of control approach to measure & monitor.

b. Establish a Standard Operating Procedures (SOP) in which, apart from describing the procedures, it also spells out the roles required, scope of responsibilities and Personal Protective Equipment (PPE) to be equipped

c. Develop a relevant Safe Work Procedures (SWP) in conjunction with the SOP and RA documented, if required

d. Demand Permit-To-Work (PTW) for works involving activities in confined space, at height, lifting, hot works, etc. to be in place for inspection and approval prior to starting any works

All the above will be conducted by qualified and competent persons, e.g. process engineers and RA team members. The documents will have to be reviewed and approved by the management, and a safety briefing shall be conducted accordingly before actual works are allowed to be carried out. Next in line, we shall start the monitoring process, schedule periodic inspections/audits, etc., to review and assess the control measures and performance. The data provide us with an avenue to evaluate what are the next steps needed if the improvement actions are required to develop applicable prevention and mitigation strategies to reduce risks within the operational and business context. For instance, if additional control measures are required to introduce and workers to be retrained, as well if the documents are to be revised.

ESA is committed to creating a safe working environment, maintaining a process of safety management over operations systems, instructing and supervising workers on safety measures and the risk to health, providing needed WSH training and ensuring effective communication between workers in all matters regarding Health & Safety. Our policy demands each worker is obliged to adhere to the following:

- Comply with safety regulations to avoid injuring oneself and others
- Wear personal protective equipment and clothing when required
- Report all incidents on the job immediately
- Report all known and potential hazards to their line management
- Take precautionary measures to ensure the safety of oneself and others

It is therefore essential that our workers have the relevant WSH training and certification. We educate our workers on occupational health and safety culture, actively engaging them in our efforts, e.g. during daily toolbox meetings. Periodic on-the-job interactive training sessions. The objective is to drill them and have them appreciate the importance of having a correct mindset of occupational health and safety, following the proper SWP and SOP and using appropriate PPE for the relevant processes or work activities. This involvement is crucial because it is every worker's responsibility to comply with safety rules and report all incidents immediately. Our people best understand their actual working conditions and what is needed, enabling us to constantly improve our occupational health and safety practices and performance.

Our WSH policy requires the output of these hazard identification and risk assessment activities to be documented and used for the development of WSH objectives, plans, and appropriate risk control measures. In addition, ESA requires a contractor permit to work and a contractor job safety analysis (JSA) process (or similar hazards recognition and control process) for contractor-performed jobs and tasks.

As required by our WSH Policy, every employee to report all incidents on the job and all known and potential hazards to their line management promptly so that an appropriate and timely response can be made.

In addition, every employee is required to notify their line management of any symptoms, injuries, or illnesses that may be associated with work. Employees must then seek medical professionals to diagnose possible work-related injuries, illnesses, or pre-existing conditions.

All work-related WSH incidents and near misses related to our activities are classified, reported and thoroughly investigated. We will conduct a complete investigation, and the process will begin after the work environment is under "controlled" following an incident. Depending upon the severity of the incident specifics, an investigation team may be formed.

Once the team is created, it documents the facts of the incidents and key factors, then analyses the root cause and issues recommendations for corrective and/or preventative actions in an incident report. The action items in an incident report are tracked to completion.

Occupational health services
Disclosure 403-3

ESA plans and implements occupational health programs on hearing conservation, respiratory protection, heat stress management and compressed air related disease prevention. We use a safe work procedure to continuously assess the working conditions and environment of our workers in order to safeguard the workers against any exposures arising from work-related activities. The objective of our occupational health programs is to protect workers from health hazards relevant to the industrial waste management industry, such as noise, dust, toxic gases, vapours and radiation.

We also facilitate relevant employees' access to occupational health service providers by arranging for appointments to visit appointed health services providers for their routine health checks. Based on internal feedback, the company's HSE efforts have been focused on shop-floor workers (e.g. workers and technicians who spent all of their working hours at the plant). For example, routine health checks could be included for other executive staff who spend significant amounts of time on the shop floor (e.g. process engineers). The management will continue to engage employees on how best to decide which category of employee to include in relevant HSE policies.

Worker participation, consultation, and communication on occupational health and safety
Disclosure 403-4

Conforming to the WSH (Workplace Safety and Health Committees) Regulations and recognising that a successful safety culture must be underpinned by open and transparent communication, ESA has formed a WSH Committee to facilitate effective communication on workplace safety and health. Chaired by the Inspectorate Manager, the committee comprise representatives from management, various functional groups such as the fire safety manager, process engineer, maintenance technician, production supervisor and supply chain personnel, as well as representatives from the workers. The committee meets at least once a month to review safety initiatives, hazards identified and related mitigation measures, lessons learned from incidents, training plan, policy and applicable regulations, feedback from the workforce, safety cultural events plan and share best practices.

The setup provided access to and communication relevant information on occupational health and safety to workers and allowed their participation in the safety activities via the WSH Committee meetings, cultural events and 2-way dialogue

sessions to share their concerns and problems, understand better the company's values, safety policy, welfare and goals to be achieved, their future with the company and their role is in seeing it succeed as an integral part of the organisation.

In addition, our contractors are invited to the committee meeting when needed for engagement and consultation.

Worker training on occupational health and safety
Disclosure 403-5

Our workers are exposed to heat, noise, dust, and chemical, physical and ergonomic hazards. Thus, it is imperative to educate our workers with training techniques and operations manuals to minimise the risks incurred to Health & Safety.

We conduct daily Toolbox Meetings with our workers to share with them their work schedule and progress and emphasise work-related safety and health matters as well as understand their concerns or issues facing.

Our internal WSH training is tailored for workers according to the particular operations and the level of the risk factor of the operations. Examples include risk identification, abiding by safety requirements for thermal and chemical processing operations, chemical labelling and safety data sheet handling, etc. Both initial and refresher training are conducted and documented as required by applicable regulations and our policy.

We also schedule and plan external specialist training for our workers who need to be qualified to perform the job, such as working at height, working in confined spaces, and dealing with hazardous substances, explosive materials and radiation materials. Workers trained must have all certifications and licensing as required by applicable regulations before they are allowed to perform the specific works.

Promotion of worker health
Disclosure 403-6

Conforming to the regulations, we provide work Injury compensation insurance to protect our workers. We also provide voluntary annual health screenings to all employees. Moreover, we use a safe work procedure to continuously assess the working conditions and environment of our employees.

To cope with the Covid-19 pandemic, we established Workplace Safe Management Measures to ensure efficient, safe management. These measures were in line with MOH and MOM advisories on the emergency protocol in the event our critical business employees are infected. Among other measures, we have also set up SafeEntry,

Social Distancing, Mask Wearing, Rostered Routine Testing of ART Regime, Restriction of Non-vaccinated employees/visitors to access our premises, etc.

Apart from physical health, we believe in the management of our workers' emotional health. This is why the top management decided to provide accommodation for migrant workers in a private property rather than a shared dormitory. This way, workers have a lowered risk of contracting COVID-19 and have a comfortable place to rest and relax outside of work, thereby improving their emotional states.

Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
Disclosure 403-7

As ESA is dealing with toxic industrial waste management for our customers, we complied strictly with the WSH legal and other requirements. To name a few, these are:

•   WSH (General Provisions) Regulations
•   WSH (Risk Management) Regulations
•   WSH (Confined Spaces) Regulations
•   WSH (Work at Heights) Regulations
•   WSH (Noise) Regulations
•   Code of Practice for Working Safely at Height 2011
•   Code of Practice on WSH Risk Management 2012
•   SS 532: Code of Practice for the storage of flammable liquids 2007

The control measures are based on the risk level determined. Risk controls should be selected to reduce or confine the risk level to an acceptable level. The following table suggests the acceptability of risk for different risk levels.

Risk Level	Acceptability of Risk
Low	Acceptable
Medium	Moderately Acceptable
High	Not Acceptable

The risk levels are maintained by taking reasonably practicable measures within the acceptable range. It is essential for risks to be eliminated or reduced 'at source'. If the risk level is high, work cannot commence until the risk level is reduced to the medium level.

For instance, after identifying the pyrolysis oil transfer hazards from the process, we need to evaluate the risks of these hazards and implement appropriate risk control measures. We prioritise the measures according to the Hierarchy of Control. Upstream risk controls (i.e. elimination, substitution and engineering controls) will be considered

first. To ensure that workers are adequately protected from risks posed by the workplace, the following control measures are in place in accordance with the hierarchy of control:

Hierarchy of Control	Sample Risk Control Measure
Elimination	Change process to direct transfer of Pyrolysis Oil to ISO tank
Substitution	Replace the fittings materials with higher temperature resistance
Engineering Controls	Install enclosed splash guards to protect workers from oil splashing during machine operation
Administrative Controls	Establish lock-out tag-out (LOTO) procedures for repairs and maintenance of machines
PPE	Use the appropriate PPE for the job

Additional risk control measures will be needed if the existing control measures are not able to reduce the risk level to an acceptable level before works are allowed to carry out.

Risk levels are being evaluated based on the score of the Risk Prioritisation Number (RPN):
•   < 4   : Acceptable Residual Risk   - Low
•   4 – 12 : Consider Additional Risk Control   - Medium
•   > 12   : Additional Risk Control Required   - High

Severity \ Likelihood	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5	10	15	20	25
Major (4)	4	8	12	16	20
Moderate (3)	3	6	9	12	15
Minor (2)	2	4	6	8	10
Negligible (1)	1	2	3	4	5

Risk Level	Risk Acceptability	Recommended Actions
Low Risk < 4	Acceptable	No additional risk control measures may be needed. However, frequent review may be needed to ensure that the risk level assigned is accurate and does not increase over time
Medium Risk 4 – 12	Moderately Acceptable	A careful evaluation of the hazards should be carried out to ensure that the risk level is reduced to as low as is practicable within a defined time period. Interim risk control measures, such as administrative controls, may be implemented.

Risk Level	Risk Acceptability	Recommended Actions
		Management attention is required.
High Risk >12	Not Acceptable	High-Risk level must be reduced to at least Medium Risk before work commences.

There should not be any interim risk control measures, and risk control measures should not be overly dependent on personal protective equipment or appliances. If need be, the hazard should be eliminated before work commences.

Immediate management intervention is required before work commences |

Our policy requires the output of these hazard identification and risk assessment activities to be documented and used for the development of WSH objectives, plans, and appropriate risk control measures.

Workers covered by an occupational health and safety management system
Disclosure 403-8

100% of ESA employees are covered by our WSH management framework. It complies with the ESA commitment, and workplace safety and health are every employee's responsibility. We also expect our contractors working within our premises to demonstrate conformance to our policy.

Work-related injuries
Disclosure 403-9

ESA is working to improve our safety culture. Our workers are exposed to heat, noise, dust, chemical, physical and ergonomic hazards which increases the risk of injuries. In 2021, chemical (exposure to dangerous chemicals and flammable gas) and physical (work from height) caused 3 work-related injuries.

In 2021, we recorded 3 injuries (skin irritation, burn and bruising) and 1 high-potential work-related incident. In this incident, one staff suffered slight burns on his hands and neck, while another staff complained of dizziness and blurred vision right after the incident. During the incident, a worker conducted grinding work without checking for flammable gas. As a result, sparks from grinding ignited residual flammable gas in the reactor chamber, causing a small explosion.

The top management believes that safety is of top priority to the company. We believe that accountability for the safety of workers sits with the top management while everyone on the ground is responsible for it as well. We commit to improving our safety culture through training and education and implementing punitive measures for non-compliance, as well as incentives to encourage compliance.

	2021[9]	Number	Rate[10]
1	Fatalities	0	0
2	High-Consequence Injuries[11]	0	0
3	High-Potential Incidents[12]	1	N/A
4	Recordable Injuries	3	28.1[13]
3	Total Man Hours Worked	106,711	N/A

2022 Target

- Maintain 2021 record for Fatality Rate

- Establish improvement target for recordable injuries based on continuous stakeholder consultation and report baseline in 2022

- Establish at least one additional measurable target based on continuous stakeholder consultation and report baseline in 2022, e.g. Number of close calls, Level of Awareness of Safety Practices

- Record and report man-hours worked by non-employees

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[9] Includes only employees. In 2021, we did not record man-hours worked by workers who are not employees but work and/or work in a location that is controlled by ESA. This category of workers did not suffer any injuries or fatalities during this period.
[10] Rate calculated based on 1,000,000 hours worked.
[11] This number excludes fatalities. This is defined by GRI as work-related injury that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.
[12] This is defined by GRI as work-related incident with a high probability of causing a high-consequence injury. Examples of high-potential incidents might include incidents involving malfunctioning equipment, explosions, or vehicle collisions with a high probability of causing a high-consequence injury.
[13] Calculation: $(3 / 106{,}711) * 1{,}000{,}000$

2023 to 2025 Targets

- Establish an improvement goal for the above additional measurable target by 2023

- Achieve an additional certification by 2025 (BizSafe4, ISO45001, or CHWMEG)

Diversity And Equal Opportunity
Disclosure 405: Diversity And Equal Opportunity 2016

To attract and retain talent in the 21st century, we believe in focusing on diversity and equal opportunity in our human resource policies. A diverse workforce will also allow for an exchange of new ideas to spark create innovation, which will be useful for our company's value proposition.

The tables below show the breakdown of diversity metrics for our employees in 2021[14]. The company staff strength was 36. This includes our directors, who also served as the top management staff. The second category includes department heads and executive staff from the engineering, production, supply chain, business development, human resource, finance and marketing departments. The last category would include workers and technicians who are on the shop floor, as well as our office janitor.

	Under 30	30 to 50	Above 50
Top Management / Directors	0	1	2
Executive Level	5	11	3
Technicians & Workers	0	13	1

	Women	Men	Non-Binary
Top Management / Directors	0	3	0
Executive Level	10	9	0
Technicians & Workers	1	13	0

[14] Snapshot as of 31 December 2021

	Singaporean/ PR	Filipino	Chinese	Malaysian	Burmese
Top Management / Directors	3	0	0	0	0
Executive Level	12	4	1	1	1
Technicians & Workers	1	0	11	2	0

2022 to 2025 Target

- Establish at least one measurable target based on continuous stakeholder consultation by 2023 (E.g. Employee Pulse Survey, Employee Retention Rate), and set targets for the following two years.

GOVERNANCE

Anti-Corruption

Disclosure 205: Anti-Corruption 2016

Corruption is antithetical to ESA's values of integrity and ethics. While we do not have a formal Whistle-blowers Policy, we have a 24/7 anonymous feedback channel (in English and Chinese) that would allow employees to report suspicions of corruption. In addition, our employee handbook articulates the required Code of Conduct of employees, which includes anti-corruption measures. Based on internal feedback, many employees are not familiar with the employee handbook. The management will continue to engage employees to improve the new employee onboarding process.

In 2021, there were **no** reported incidents of corruption.

2022 to 2025 Target

- Maintain current track record every year

Annex 1: ESA' Contribution to the UN SDGs

Relevant Global Goals	UN SDGs Targets	UN SDGs Indicators
Goal 6. Ensure availability and sustainable management of water and sanitation for all	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption
	7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and	8.4.1 Material footprint, material footprint per capita, and material footprint per GDP

Relevant Global Goals	UN SDGs Targets	UN SDGs Indicators
	Production, with developed countries taking the lead	8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO_2 emission per unit of value added
Goal 12. Ensure sustainable consumption and production patterns	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	12.2.1 Material footprint, material footprint per capita, and material footprint per GDP
		12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP
		12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1 National recycling rate, tons of material recycled

Relevant Global Goals	UN SDGs Targets	UN SDGs Indicators
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
Goal 12. Ensure sustainable consumption and production patterns	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	12.6.1 Number of companies publishing sustainability reports
Goal 13. Take urgent action to combat climate change and its impacts[b]	13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

Relevant Global Goals	UN SDGs Targets	UN SDGs Indicators
	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	14.1.1 Index of coastal eutrophication and floating plastic debris density
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics

Relevant UN SDG Indicators	ESA's Level of Contribution	Explanation on Contribution	Our Targets in 2025
6.3.1	Direct	We will treat industrial wastewater by 2025.	Treat 48,000 MT of Industrial Wastewater
6.4.1	Direct	We will treat industrial wastewater, turning it into process grade water to be used in our system. This means we will avoid using 40,000 m3 of water from the grid each year.	Recycle 40,000 M3 of water
7.2.1	Direct	Our biomimetic plants are design to use renewable energy from solar panels, heat recovered from incineration of hazardous waste, as well as heat and electricity derived from waste wood gasification.	Use 100% renewable energy to run our plants Generate 84,000 MWh of heat and 16,000 MWe of electrical energy from waste Harness 850 MWh of solar energy from our solar panels Capture and Recycle 4MWt of energy within our system
7.3.1	Direct	As we recycle heat energy within our recycling operations, we are able to reduce the total amount of energy required to run the system.	Capture and Recycle 4MWt of energy
8.4.1	Direct	We allow for the reduction of material extraction while maintaining the ability of the economy to meet demand by recycling waste into low-carbon, sustainable pure metals and metal ores (an	Increase the national recycling rate of plastic, wood and ash & sludges by 2%, 10%, and 20%, respectively (By

Relevant UN SDG Indicators	ESA's Level of Contribution	Explanation on Contribution	Our Targets in 2025
		alternative to metals mined from the earth) and pyrolysis oil which we call NewOil (an alternative to fossil fuel).	2023 – based on NEA Statistics, using 2019 as base year) Divert 90,000 tons of waste from disposal annually by 2025
8.4.2	Direct	See 8.4.1	See 8.4.1
9.4.1	Direct	Based on our 2017 report, our operations are carbon negative (130MTCO2eq negative) as we use renewable energy derived from waste. See 7.2.1	By using energy recovered from waste, we avoid use of electricity generated by fossil fuels. See 7.2.1.
12.2.1	Direct	See 8.4.1	See 8.4.1
12.2.2	Direct	See 8.4.1	See 8.4.1
12.4.2	Direct	We treat hazardous waste.	See 8.4.1
12.5.1	Direct	We recycle plastic, wood, ash & sludges.	See 8.4.1
11.6.1	Indirect (Enabling Role)	Through our outreach programmes and partnerships, we are able to increase collection of previously incinerated waste. (E.g. collection of waste from car workshops)	N/A
12.6.1	Indirect (Enabling Role)	We are building capabilities (tracking energy use and recycling rates; understanding CDP and GRI Standards) to collect and disclose sustainability data for our *clients' sustainability reporting needs*.	N/A

Relevant UN SDG Indicators	ESA's Level of Contribution	Explanation on Contribution	Our Targets in 2025
13.2.1	Indirect (Enabling Role)	We are building capabilities (tracking energy use and recycling rates; understanding CDP and GRI Standards) to collect and disclose sustainability data which can be shared with *policymakers*.	N/A
13.3.2	Indirect (Enabling Role)	See 11.6.1 and 13.2.1	N/A
14.1.1	Indirect (Enabling Role)	By 2024, we hope to dedicate resources to recycle ocean and ocean-bound plastics using our plastic pyrolysis process.	N/A
17.18.	Indirect (Enabling Role)	See 13.2.1	N/A

Annex 2: WSH Legal and Other Requirements

S/N	List of Legal and Other Requirements
1.	WSH (Workplace Safety and Health Officers) Regulations
2.	WSH (General Provisions) Regulations
3.	WSH (Incident Reporting) Regulations
4.	WSH (Risk Management) Regulations
5.	WSH (Registration of Factories) Regulations
6.	WSH (Workplace Safety and Health Committees) Regulations
7.	WSH (Confined Spaces) Regulations
8.	WSH (Safety and Health Management System and Auditing) Regulations
9.	WSH (Noise) Regulations
10.	WSH (Work at Heights) Regulations
11.	Factories (Safety Training Courses) Order
12.	Environmental Protection and Management (Hazardous Substances) Regulations.
13.	Environmental Public Health (Cooling Towers & Water Fountains) Regulations.
14.	Fire Safety Act and its subsidiary legislations
15.	Radiation Protection Act and its subsidiary legislations
16.	Work Injury Compensation Act and its subsidiary legislations
17.	Environmental Protection and Management (Hazardous Substances) Regulations.
18.	Environmental Public Health (Cooling Towers & Water Fountains) Regulations.
19.	Fire Safety Act and its subsidiary legislations
20.	Fire Safety (Petroleum and Flammable Materials) Regulations
21.	Radiation Protection Act and its subsidiary legislations
22.	Work Injury Compensation Act and its subsidiary legislations
23.	Code of Practice for Working Safely at Height 2011
24.	Code of Practice on WSH Risk Management 2012
25.	Code of Practice on Safe Lifting Operations in the Workplaces 2011

S/N	List of Legal and Other Requirements
26.	SS 98: Specification for Industrial safety helmets 2005
27.	SS 473: Specification for Personal eye-protectors Part 1: General requirements 2011
28.	SS 473: Specification for Personal eye-protectors Part 2: Selection, use and maintenance 2011
29.	SS 506: Occupational Safety and Health (OSH) Management System Part 1: requirements 2009
30.	SS 506: Occupational Safety and Health (OSH) Management System Part 2: Guidelines for the implementation of SS 506 Part 1:2009
31.	SS 506: Occupational Safety and Health (OSH) Management System Part 3: Requirements for the chemical industry 2006
32.	SS 510: Code of Practice for Safety in welding and cutting 2005
33.	SS 513: Specification for Personal protective equipment — Footwear Part 1: Safety footwear2005
34.	SS 514: Code of Practice for Office ergonomics 2005
35.	SS 528: Specification for Personal fall-arrest systems Part 1: Full-body harnesses 2006
36.	SS 528: Specification for Personal fall-arrest systems Part 2: Lanyards and energy absorbers 2006
37.	SS 528: Specification for Personal fall-arrest systems Part 3: Self-retracting lifelines 2006
38.	SS 528: Specification for Personal fall-arrest systems Part 4: Vertical rails and vertical lifelines incorporating a sliding-type fall arrester 2006
39.	SS 528: Specification for Personal fall-arrest systems Part 5: Connectors with self-closing and self-locking gates 2006
40.	SS 528: Specification for Personal fall-arrest systems Part 6: System performance tests 2006
41.	SS 531: Code of Practice for Lighting of workplaces Part 3: Lighting requirements for safety and security of outdoor workplaces 2008
42.	SS 532: Code of Practice for the storage of flammable liquids 2007
43.	Code of Practice for Safe use of machinery Part 1: General requirements 2008

S/N	List of Legal and Other Requirements
44.	SS 537: Code of Practice for Safe use of machinery Part 2: Woodworking machinery 2009
45.	SS 548: Code of Practice for Selection, use, and maintenance of respiratory protective devices (Formerly CP 74) 2009
46.	SS 553: Code of Practice for Air-conditioning and mechanical ventilation in buildings
47.	SS 567: 2011 Code of Practice for Factory layout — Safety, health and welfare considerations 2011
48.	SS 568: 2011 Code of Practice for Confined spaces 2011
49.	SS 569: Code of Practice for Manual handling (Formerly CP 92) 2011
50.	SS 570: Specification for Personal protective equipment for protection against falls from a height —Single point anchor devices and flexible horizontal lifeline systems 2011
51.	SS 571: Code of Practice for Energy lock-out and tagout (Formerly CP 91) 2011
52.	SS 573: Code of Practice for The safe use of powered counterbalanced forklifts 2012
53.	SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 1: Transport and storage of dangerous goods 2008
54.	SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 2: Globally harmonised system of classification and labelling of chemicals – Singapore's adaptations 2008
55.	SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 3: Preparation of safety data sheets (SDS) 2008
56.	CP 99: Code of Practice for industrial noise control 2003

GRI Content Index

Disclosure Number	Disclosure Name Individual requirements ('a', 'b', 'c', etc.) are not listed here	Section
-GRI 102: GENERAL DISCLOSURES 2016		
102-1	Name of the organization	About This Report
102-2	Activities, brands, products, and services	About ESA Our Operations
102-3	Location of headquarters	About ESA
102-4	Location of operations	About ESA Our Operations
102-5	Ownership and legal form	Governance and Sustainability Committee
102-6	Markets served	Our Operations
102-7	Scale of the organization	Our Operations Diversity And Equal Opportunity
102-8	Information on employees and other workers	Diversity And Equal Opportunity
102-9	Supply chain	ENVIRONMENTAL: Waste Management
102-10	Significant changes to the organisation and its supply chain	No Significant Changes
102-11	Precautionary Principle or approach	No
102-12	External initiatives	Our Memberships
102-13	Membership of associations	Our Memberships
102-14	Statement from senior decision-maker	CEO's Message
102-16	Values, principles, standards, and norms of behavior	Our Values
102-40	List of stakeholder groups	Stakeholder Engagement
102-41	Collective bargaining agreements	0% of Employees
102-42	Identifying and selecting stakeholders	Stakeholder Engagement
102-43	Approach to stakeholder engagement	Stakeholder Engagement
102-44	Key topics and concerns raised	Stakeholder Engagement
102-45	Entities included in the consolidated financial statements	Only 1 Entity – ESA

Disclosure Number	Disclosure Name Individual requirements ('a', 'b', 'c', etc.) are not listed here	Section
GRI 102: GENERAL DISCLOSURES 2016		
102-46	Defining report content and topic Boundaries	Materiality Assessment
102-47	List of material topics	Materiality Assessment
102-48	Restatements of information	None
102-49	Changes in reporting	Not Applicable
102-50	Reporting period	About This Report
102-51	Date of most recent report	Not Applicable
102-52	Reporting cycle	About This Report
102-53	Contact point for questions regarding the report	About This Report
102-54	Claims of reporting in accordance with the GRI Standards	About This Report
102-55	GRI content index	GRI Content Index
102-56	External assurance	About This Report
GRI 306: WASTE 2020		
103-1	Explanation of the material topic and its Boundary	ENVIRONMENTAL: Waste Management
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
306-1	Waste generation and significant waste-related impacts	
306-2	Management of significant waste-related impacts	
306-3	Waste generated	
306-4	Waste diverted from disposal	
306-5	Waste directed to disposal	
GRI 307: ENVIRONMENTAL COMPLIANCE 2016		
103-1	Explanation of the material topic and its Boundary	ENVIRONMENTAL: Environmental Compliance
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
307-1	Non-compliance with environmental laws and regulations	

Disclosure Number	Disclosure Name Individual requirements ('a', 'b', 'c', etc.) are not listed here	Section
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018	
103-1	Explanation of the material topic and its Boundary	SOCIAL: Occupational Health And Safety
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
403-1	Occupational health and safety management system	
403-2	Hazard identification, risk assessment, and incident investigation	
403-3	Occupational health services	
403-4	Worker participation, consultation, and communication on occupational health and safety	
403-5	Worker training on occupational health and safety	
403-6	Promotion of worker health	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
403-8	Workers covered by an occupational health and safety management system	SOCIAL: Occupational Health And Safety
403-9	Work-related injuries	
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016	
103-1	Explanation of the material topic and its Boundary	SOCIAL: Diversity And Equal Opportunity
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
405-1	Diversity of governance bodies and employees	
GRI 205: ANTI-CORRUPTION 2016	
103-1	Explanation of the material topic and its Boundary	GOVERNANCE: Anti-Corruption
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
205-3	Confirmed incidents of corruption and actions taken	

UN Global Compact

THEME	SECTION
Human Rights	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	SOCIAL
Principle 2: make sure that they are not complicit in human rights abuses.	
Labour	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	SOCIAL
Principle 4: the elimination of all forms of forced and compulsory labour;	
Principle 5: the effective abolition of child labour; and	
Principle 6: the elimination of discrimination in respect of employment and occupation.	
Environment	
Principle 7: Businesses should support a precautionary approach to environmental challenges;	Not Yet Implemented
Principle 8: undertake initiatives to promote greater environmental responsibility; and	ENVIRONMENTAL
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	
Anti-Corruption	
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	GOVERNANCE

ESA
REIMAGINING SUSTAINABILITY

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