

Making Sustainability A Reality



SUSTAINABILITY REPORT 2018



Rethinking waste management solutions is both about going back to the basics and leapfrogging into the future. Cenviro leads the way in waste management solutions by focusing on the things that matter. Our emphasis is on doing things right today while preparing for a better circular economy tomorrow.

EVERY ACTION MATTERS

As Malaysia progresses, each one of us must embrace solutions that meet future needs. Our actions, mindset and decisions collectively impact how we shape this common future.

At Cenviro, we care for our customers, the community and the environment, and want to drive change together. It is not just our responsibility, but also our duty, and one which we take seriously.

The foundation on which Cenviro is built on is trust. This trust, earned over time, serves as our guiding force and is what sets us apart. We are entrusted with a responsibility to take care of our country and to ensure a sustainable future for all its citizens.

To achieve this vision of a sustainable Malaysia, we invite each of you to accompany us on this journey towards better environmental solutions and green thinking.



THIS IS CENVIRO

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Cenviro Sdn. Bhd. (Cenviro) is Malaysia's leading waste management company known for its sustainable performance and integrated solutions. We enable access to responsible waste management in order to enhance quality of life for Malaysians and drive progress towards a more sustainable nation.

Our focus is on running our business the right way, and we strive to build relationships that unlock the potential for progress and prosperity. Our commitment to sustainable solutions has been the driving force behind our journey to become an industry leader in waste solutions.

Above all, we provide our services ethically and responsibly in ways that support our customers, communities and the environment around us. These values distinguish us and guide our actions to deliver results.

We deliver results, we deliver them right.

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ABOUT THIS REPORT

At Cenviro, we are committed to transparency and accountability in our sustainability disclosure. This Report marks our fifth year of sustainability disclosure, building on an additional nine years' worth of annual reporting under our former company name, UEM Environment Sdn. Bhd. Our sustainability reports are produced annually and provide a regular benchmark for our progress against our goals, while offering stakeholders insight into our strategies, actions and achievements.

Reporting Framework

This report has been prepared in accordance with the GRI Standards: Core option, and Amendments to Bursa Malaysia Securities Berhad Main Market Listing Requirements relating to Sustainability Statements in Annual Reports.

Scope

This Sustainability Report covers the reporting period for the year ended 31 December 2018, unless otherwise specified. It encompasses the activities of Cenviro and its subsidiaries, joint ventures and associate companies, all of which are located in Malaysia. References to 'Cenviro', 'the Cenviro Group', 'the Company', 'the Organisation' and 'we' refer to Cenviro Sdn. Bhd. and/or its affiliates and subsidiaries.

Assurance and Verification

This Sustainability Report has been independently verified by Bureau Veritas Certification (M) Sdn. Bhd. (Bureau Veritas). The assurance statement can be found on pages 123 - 126.

Feedback

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VISION

To be the leader in integrated environmental solutions

POSITIONING STATEMENT

Leading the Green Revolution

MISSION

To provide innovative and sustainable waste management and renewable energy solutions

CORE VALUES

Quality Teamwork Accountability Passion Safety

FINANCIAL PERFORMANCE

Financial Performance (RM thousand)	2014	2015	2016	2017	2018
Revenue	150,579	193,341	189,560	176,581	253,057
Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA)	57,382	71,079	66,530	52,910	(1,502)
Profit Before Taxation	55,785	95,097	86,355	57,629	(3,544)1
Net Profit Attributable to a Shareholder	44,277	78,964	75,096	46,183	(1,118)
Total Assets	291,219	414,567	535,489	643,090	648,733
Shareholder's Equity	194,041	325,195	450,410	496,262	467,651
Key Financial Ratios					
Return on Equity	25.74%	30.42%	19.36%	9.75%	-0.68%
Debt/Equity Ratio	0.08	0.03	0.07	0.17	0.18
Value Distributed to Stakeholders					
Providers of Capital • Finance costs and retained for future reinvestment and growth (depreciation, amortisation, retained profits and non-controlling interest)	63.78%	62.03%	66.08%	56.51%	43.50%
Employees • Salaries and employee-related costs	24.71%	26.62%	26.02%	34.62%	56.70%
Government • Taxation (including deferred tax)	11.37%	10.57%	7.17%	8.76%	-0.34% ²
Communities and Others • Corporate donations and sponsorships	0.14%	0.78%	0.73%	0.11%	0.14%

¹ Includes impairment loss on property, plant and equipment, and interest in an associate totalling RM50.8 million. If impairment loss is excluded, the adjusted profit before taxation is RM47.2 million.

² Negative value contributed to Government is mainly due to the recognition of deferred tax assets as per adoption of MFRS15 Revenue from contracts with customers.

AWARDS AND RECOGNITION



Federation of Malaysian Manufacturers Negeri Sembilan Annual Dinner 2018

Kualiti Alam Sdn. Bhd.

- Fire Safety & Emergency
 Response (FSER) Code GOLD
- Environment Sustainability (ES) Code – GOLD
- Employee Health & Safety (EHS) Code – **BRONZE**
- Project Based Award for Best SHE Practice – MERIT



EU-Malaysia Chamber of Commerce & Industry (EUMCCI)'s Europa Awards for Sustainability 2018

 Best Social Impact - Recycle for Life programme





The Malaysian Society for Occupational Safety & Health (MSOSH) OSH Awards 2017

• Gold Class 1 - Kualiti Alam Sdn. Bhd.





 The Edge Malaysia-PAM Green Excellence Award 2018 - Environmental Preservation And Innovation Centre Sdn. Bhd.



Our Vision, Commitment and Approach

Making Sustainability A Reality

We are an integrated waste management company driven by purpose, fuelled by partnerships and geared towards performance. Our aim is to improve lives by fulfilling our promise of quality waste management in the country.

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Doing the right thing no matter what

As we move towards a more resource-resilient economy, we need to continue to make sustainability a reality. This will enable us to enhance our performance for our environment and to support business growth. Sustainability also fuels our purpose-driven agenda to lead the green revolution.

OUR PURPOSE



Improving Quality of Life

Cenviro takes great pride in our role in an industry responsible for managing the lifecycle of waste. We aspire to ensure better quality of life by meeting the needs of society.



Thinking Green for the Industry

Changing times call for new ways of thinking and smarter ways of working. We are committed to building a sustainable future and resilient tomorrow for the nation.

Interlinking Business with Sustainability

Our focus on sustainability is integrated into our company values. We believe that a sustainable business is truly achieved when colleagues live and work with a shared green mindset. Only then can we extend the culture of green thinking to our customers, communities and partners.

Waste is a complex industry with multiple stakeholders, subject to economic shifts and mindset fixations. We are committed to playing our role with the utmost focus on doing the right thing the right way.

The world is our home and we are committed to maintaining it for present and future generations.

OUR STORY

Through Kualiti Alam Sdn. Bhd., Cenviro began operating Malaysia's first Integrated Waste Management Centre in Negeri Sembilan in 1998. Since then, our Waste Management Centre has grown to be the country's largest. Our services have expanded to include municipal solid waste management and public cleansing through our joint venture company E-Idaman Sdn. Bhd. as well as electronic waste management via our associate company Shan Poornam Metals Sdn. Bhd.

Underlying this growth has been our commitment to generate shared economic, environmental and social value for all stakeholders. This overarching ambition has seen Cenviro break boundaries across the Malaysian waste management industry, delivering innovative solutions such as our Scheduled Waste to Energy plant, Vertical Secured Landfill, industry centre of excellence 'Environmental Preservation and Innovation Centre' and our community recycling programme, Recycle for Life.

Across the Group, our practices are grounded in ethical conduct and due consideration of the communities and the environment in which we operate. We are proud of what we have accomplished, but we know there is more to do. As we move forward on our business journey, our promise is, and will always be, to conduct our business responsibly by upholding the trust placed in us.

GROUP STRUCTURE





Kualiti Alam Sdn. Bhd. (KASB)

With more than 20 years of experience, KASB continues to offer a comprehensive range of scheduled waste management services. from analysis and treatment to final disposal of scheduled waste. Through KASB, Cenviro owns and operates Malaysia's first and largest integrated Waste Management Centre (WMC), located in Negeri Sembilan. The centre is licensed to handle 76 of the 77 categories of scheduled wastes listed under the Environmental Quality (Scheduled Wastes) Regulations 2005. The centre covers an area of 241.6 acres. The facility has an annual capacity to store, treat and dispose of more than 100.000 tonnes of scheduled waste.

Cenviro Services Sdn. Bhd. (CS)

Collection, logistics and packaging of scheduled waste.

Cenviro Recycling And Recovery Sdn. Bhd. (CRR)

Recycling and recovery services of scheduled waste.

Cenviro Special Builders Sdn. Bhd. (CSB)

Project management consultancy, engineering, procurement, construction and commissioning services.

Cenviro (Johor) Sdn. Bhd. (CJ)

Satellite facility for collection, treatment and disposal of scheduled waste for the southern region.

Environmental Preservation And Innovation Centre Sdn. Bhd. (EPIC)

A centre of excellence that aims to develop national institutional knowledge and provide innovative and reliable solutions for the complete spectrum of waste management and renewable energy.

Recycle For Life Sdn. Bhd. (RFL)

RFL modernises the conventional method of recycling by rewarding our programme participants with cash through the RFL smart card.

E-Idaman Sdn. Bhd. (EISB)

Integrated municipal solid waste management involving collection, treatment, recycling and final disposal of municipal solid waste in addition to public cleansing services. EISB is a Joint-Venture Company between Cenviro and Metacorp Berhad. Its subsidiaries include Environment Idaman Sdn. Bhd. (ENVI), Environment Idaman (Kedah and Perlis) Sdn. Bhd. (GRRSB) and Environment Idaman (Perak) Sdn. Bhd.

Shan Poornam Metals Sdn. Bhd. (SPM)

Solution provider for scheduled and non-scheduled waste recovery, refining and asset management including household e-waste recycling and chlorofluorocarbon (CFC) recovery. Manufacturer of secondary aluminium alloy ingot, precious metals and copper ingot from scheduled waste.

1. Subsidiaries are companies in which Cenviro holds a majority stake or has direct management control.

A Joint-Venture Company refers to a contractual agreement between Cenviro and a third-party company for executing a particular business undertaking.
 Associates are companies in which Cenviro holds a minority stake.

OUR PRINCIPLES

At Cenviro, all that we do is guided by our core values: Quality, Teamwork, Accountability, Passion and Safety (Q-TAPS).

These values shape our commitment to sustainability and fortify our reputation as a trustworthy service provider. Through Q-TAPS, we strive to show customers that there is more to the waste industry than the customer-facing services that they are privy to. From efficient collection to reliable treatment and, ultimately, to responsible disposal, customers can be assured that Cenviro acts with integrity and purpose throughout our entire value chain.

This is Cenviro at its best - doing the right thing no matter what.



TEAMWORK Collective success, respect for others

ACCOUNTABILITY

Respect the law, rigorous adherence to integrity, rejection of conflict of interest, adherence to internal regulation

PASSION Commitment to professionalism, commitment to learning, commitment to customers

SAFETY Caring for safety, health and the environment

CHAIRMAN'S MESSAGE

Throughout the history of Cenviro, our goal has always been to enable progress and prosperity in the communities we serve – and it will always be. Over the years, we have continued to provide trustworthy, affordable and green waste management services that are necessary to raise the living standards in Malaysia.

The world at present is undergoing a period of rapid change. In this dynamic environment, in order to continue to deliver the solutions that we are known for, we must be adaptable, resilient and above all, innovative. At Cenviro, these qualities not only guide our daily practices but also our long-term strategy. As we move into the future, we will continue to evolve, adapt and grow while holding fast to the values that brought us to where we are today.

We take great pride in our role as a driver of change in an industry that has faced many challenges in Malaysia. The waste management landscape is in need of integrity and trust. Our efforts to bring the industry together for a greater common good and our initiatives to promote shifting social views of waste as a resource reflect this. We believe that businesses can both contribute to society and be profitable by delivering results that matter to stakeholders.

> Tan Sri Dr Azmil Khalili Dato' Khalid Chairman

"

We take great pride in our role as a driver of change in an industry that has faced many challenges in Malaysia. We believe that businesses can both contribute to society and be profitable by delivering results that matter to stakeholders."

Close to our hearts is our responsibility to help meet the needs of people who aspire to a better quality of life. Cenviro has worked hard to build its presence in the country's waste management sector and now serves 8,313 industrial and commercial clients and 328,967 households. That our clients choose to trust us with their disposal needs is a reflection of our commitment to responsible and ethical business practices. In an industry where operations are complex, geographically removed and at times difficult for stakeholders to understand, we work every day to promote transparency and public awareness.

In 2018, we underwent a series of leadership changes that reshaped the senior management team at Cenviro. During this time we bade farewell to two



of our Board Members, Ahmad Farouk Mohamed and Nik Rizal Kamil Nik Ibrahim Kamil, and to our Managing Director, Khalid Bahsoon. In early 2019, we also saw the departure of another Board Member, Amran Hafiz Affifudin. I wish to express my most sincere thanks to our departing leaders for their efforts and contributions to Cenviro. I am honoured to have been entrusted with the leadership of the company and hope to continue to drive success in line with their legacy.



During the interim period caused by the departures of these key leaders, the temporarily established Executive Committee played an integral role in ensuring the continuity of business operations. As always, the quality of our services, the safety of our operations and the satisfaction of our customers remained our first and foremost priority. Thanks to the support provided by the Executive Committee during our transitional period, Cenviro is stronger than ever as we move forward with a newly established leadership team headed by our new Managing Director, Dr Johari Jalil.

Ultimately, the respect we have for our stakeholders and our environment is what drives our innovation and commitment to providing outstanding services. We strive to offer solutions that create links and positive outcomes for all our customers, partners and the community while working relentlessly to reduce the environmental footprint of our operations. With this goal at the centre of our operations, Cenviro continues to forge ahead towards a sustainable future and a better world for all by Leading the Green Revolution.

Q&A with Cenviro's Chairman

Q: Doing the right thing no matter what is perhaps the most important aspect of waste management. What is Cenviro's approach?

At Cenviro, we don't compromise on the well-being of our team, our community or our environment. Our commitment to responsible waste management starts at the top with our Board of Directors, whose leadership and integrity sets the tone for our Group. This integrity and ethical conduct cascades throughout our business, where it is further guided by adherence to the strictest regulatory requirements and international standards. While cutting corners can offer time or cost savings, at Cenviro, that has never been and will never be acceptable business practice.

Q: Cenviro has always emphasised the idea of a fair price for a better service. Can you share more about Cenviro's pricing?

It's an undeniable characteristic of the waste management industry that someone will claim to offer cheaper and better services. While it's true that our services can be costlier than industry alternatives, it's also true that you get what you pay for. At Cenviro, our service fees come with the promise that your waste will be handled in the safest, most ethical, responsible and environmentally friendly manner. Not all companies can say the same. We encourage all waste producers to do their research when selecting waste management services.

Q: As a complex and wide-reaching industry, waste management is a multi-stakeholder game. How does Cenviro build meaningful partnerships within this context?

No company operates in a vacuum. At Cenviro, we work hard to build strong connections to those who impact and are impacted by our operations. We are particularly proud of our close relationship with stakeholders, whom we engage regularly through meetings, site visits, events and programme collaborations. As an industry leader and trusted waste partner, we play an important role in assisting local authorities and regulators in managing and resolving local waste and environmental issues.

Q: It's said that a company is only as good as its people. How do you ensure that the Cenviro team is able to provide the right solutions?

Cenviro recognises that our success is dependent on our employees' skills, knowledge and commitment to the company and our culture of responsibility. Therefore, we ensure this success by investing in our people's development, well-being and understanding of Cenviro's values. Our internal training and development programmes focus on upskilling our workforce and developing leadership capacity within our management team, while our robust approach to workplace health and safety protects our employees from harm. Across the Group, we ensure that regulatory compliance is upheld by promoting widespread familiarity with the Employee Code of Conduct and Cenviro's core values: Quality, Teamwork, Accountability, Passion and Safety (Q-TAPS).

"

At Cenviro, our service fees come with the promise that your waste will be handled in the safest, most ethical, responsible and environmentally friendly manner. Not all companies can say the same. We encourage all waste producers to do their research when selecting waste management services."

Why We Do What We Do



We Improve Quality of Life

This is our promise as a trusted provider of integrated waste management solutions. As we move into the future, Malaysia will increasingly face a number of complex interconnected challenges, including population growth, economic development, an environmental resource crunch and threats to public health, among others. Chief among these issues is reliable and affordable access to waste management, which is essential for household well-being, industry development, public health and the integrity of the environment.

At Cenviro, we provide a range of essential services for managing waste in Malaysia and serve as an industry leader by driving and promoting best practices in the industry.

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Our reliable services protect the environment while allowing businesses to run seamlessly

Cenviro's innovative and sustainable waste management and renewable energy solutions tackle the environmental challenges we are facing today.

Peneraju Revolusi Hijau



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CENVIRO, DELIVERING SOLUTIONS THE RIGHT WAY

Cenviro's core business operations include the integrated management of potentially hazardous waste – known in the industry as scheduled waste – the collection and disposal of municipal solid waste, public cleansing services and recycling and recovery services.





► (O) WMC

Comprises the Incineration Plant, Solidification Treatment Plant, Physical and Chemical Treatment Plant, Vertical Secured Landfill, Scheduled Waste to Energy Plant and Clinical Waste Treatment Centre. Waste is categorised before collection and analysed again on arrival at WMC by our experts to ensure suitable treatment and disposal.

O Incineration Plant

Incinerates waste using controlled burning at high temperatures.

Physical and Chemical Treatment Plant

Capable of handling all types of inorganic liquid waste using various chemical treatment processes.

Solidification Treatment Plant

Solidifies treated waste from the Physical and Chemical Treatment Plant and other processes prior to the material's disposal at the Vertical Secured Landfill.

Recycling and Recovery Facilities

Recycles scheduled waste to recover valuable resources.

O Clinical Waste Treatment Centre

Treats hazardous medical waste using zeroemissions technology, including microwave treatment and an eco-friendly incinerator.

Scheduled Waste to Energy Plant

Scheduled waste is incinerated using a combustion chamber. The energy generated from this incineration is used to produce electricity using a boiler and steam turbine.

(exporting to grid)

► ◎ Vertical Secured Landfill

Disposal site for treated scheduled waste and material from waste generators.

O EPIC

LAB

Serves as a centre of industry excellence and growth by promoting access to information, collaboration, innovation and learning.

O Satelite Facilities

- Satellite Waste Storage Facility (Sabah)
- Satellite Waste Management Facility (Johor) - Future Development



WASTE CHALLENGES IN MALAYSIA

By the year 2050, Malaysia is expected to have a total population of 41.7 million, with over 85% of Malaysians living in urban areas.⁺ Combined with ongoing economic development, this demographic shift and the accompanying changes to consumer lifestyles will drive direct and significant increases in the generation of municipal solid waste. Concurrently, an increase in industrial activity as a result of economic growth will yield greater volumes of hazardous and industrial waste.

With Malaysian waste generation having amounted to approximately 38,000 metric tonnes of waste per day in 2018, the country's waste infrastructure is already feeling the strain of managing a growing urban population's waste. At present, Malaysia is still primarily dependent on landfills for the disposal of waste, most of which lack appropriate treatment facilities. In order to avoid serious environmental and public health implications, industry change is urgently needed to ensure the sustainable management of Malaysia's waste, now and in the future.

Establishing sustainable waste management systems is dependent on both the waste generators and waste management service providers. There is a serious lack of public awareness of the importance of waste management, recycling and responsible resource consumption. If Malaysia is to manage its growing waste challenges, it will not only require bridging the infrastructure gap, but also changing social mindsets towards waste disposal. This includes the need for waste generators to make informed and ethical decisions about the waste management service providers they contract. It is an unfortunate reality of Malaysia's waste management industry that not all operations are conducted in the best interests of our environment and local communities. It is up to waste generators to not only minimise the waste they generate, but also to ensure that waste generated is entrusted to a reliable waste management service provider.

As a responsible industry leader, Cenviro is working to address these waste challenges through investment in essential infrastructure and industry capacity-building as well as programmes and efforts to promote a more evolved public understanding of waste in Malaysia.

⁺ United Nations, Department of Economic and Social Affairs, Population Division (2018). World Population Prospects: The 2017 Revision and World Urbanisation Prospects: The 2018 Revision.

Recycling Rate in Malaysia



Population and Urbanisation Growth in Malaysia



1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030 2035 2040 2045 2050

¹ Ministry of Urban Wellbeing, Housing and Local Government (2017). Solid Waste Management in Malaysia: Towards a Holistic Approach.

² Malay Mail (2014). *Malaysians producing more solid waste than before*. Retrieved from https://www.malaymail.com/news/malaysia/2014/01/20/malaysians-producing-more-solid-waste-than-before/602887

Global Waste Landscape

Due to shifting global policies, in 2018, Malaysia became a leading global destination for other countries' recyclable waste. The influx of material prompted the opening of numerous processing facilities, many of which are not properly licensed or equipped to handle the waste. Lacking the capacity to safely process material, these facilities have resorted to environmentally damaging methods of disposal that also endanger the health of surrounding communities. Some licensed operators who are unable to handle the sudden increase in waste are believed to be subcontracting work to these illegal facilities.

As a responsible service provider, Cenviro's promise to customers is that their waste will be handled with the utmost integrity from the first point of contact to the last. As growing waste disposal pressures offer the opportunity to make quick profits, we continue to prioritise the health of our community and our environment over short-term economic gain.



Approximately **38,000** metric tonnes of waste generated per day



By the year 2050, Malaysia is expected to have a total population of **41.7 million**

Towards A Circular Economy

Changing patterns of consumption and the emergence of a throw-away society, both in Malaysia and globally, have driven the production of unmanageable amounts of waste. The desire to see this waste re-positioned as a resource for other industries has given rise to the global movement towards a circular economy.

Unlike the traditional linear economy, in which raw materials are extracted, consumed and disposed of, resources are now recovered from waste and kept in use for as long as possible through their regeneration into new products and materials. These practices not only improve resource-use efficiency but also promote economic productivity by reducing manufacturing costs and driving the creation of new green industries and jobs.

By leveraging technological innovation, human talent and smarter regulations, Malaysia has a real opportunity to accelerate the growth of the country's circular economy. As waste management specialists, we are positioned to not only drive this growth, but also to capitalise on the opportunities it presents. While we do not have all the solutions needed to achieve this transition, Cenviro is committed to forging the necessary industry partnerships, fostering human capital development and developing breakthrough technologies for the realisation of a circular economy.

OUR FOOTPRINT

In the face of a challenging and rapidly changing business environment, Cenviro makes sustainability a reality by providing the industry-leading solutions customers need. Our reliable services protect the environment, preserve public health and support business and industry growth. Our long-term projects to fortify the Malaysian waste collection and processing industry are linked to the development of the country and the prolonged well-being of its citizens.

Case Study: Making Scheduled Waste to Energy Solutions A Reality

At Cenviro, we understand that providing access to waste services and supporting new models that embrace a cradleto-cradle approach is a priority. This is why we are turning our attention towards reinventing waste management such that scheduled waste can be reclaimed and reintroduced into the value chain as renewable energy, hence creating and contributing to a circular economy.

Our Scheduled Waste to Energy plant is an example of this forward thinking. Constructed in 2016 and completed in late 2017, Malaysia's first Scheduled Waste to Energy plant is fully computerised and equipped with a continuous monitoring system. This plant represents the latest standard in rotary kiln incineration technology, which has helped in ensuring a better burnout of the waste. The combination of rotary kiln and stoker also minimises operational issues and stabilises combustion compared to a single rotary kiln.

In 2018, the plant successfully exported power onto the national grid, generating a total of 10,413.76 MW of electricity, marking Cenviro's foray into renewable energy generation.

CENVIRO 2018 IN FIGURES



Market leader in scheduled waste management in Malaysia with an estimated market share of 22%*





Over **160,000 tonnes** of all classes of scheduled waste were treated and disposed of



5,238 tonnes of scheduled waste recycled at Cenviro Recycling and Recovery

Scheduled Waste to Energy plant exported **10,413.76 MW** of electricity to national grid





819,953 kg of recyclable municipal waste was collected through the RFL programme

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Total number of employees is **2,032**

31 Health, Safety and Environment incidents recorded in 2018 - our **lowest** recorded level since 2010

99% of suppliers were local with 97% of total spending on local suppliers

532,615 tonnes of municipal solid waste collected with an average of **1,846 tonnes** collected per day from nearly **329,000 premises**

* The estimated market share is calculated based on internal data.

OUR MILESTONES

Cenviro's position as an industry leader is evident in the recognition we garner, partnerships we form and achievements we realise. Our major successes throughout the years have included:



Managing Sustainability



Taking Meaningful Action Towards A Better Future

At Cenviro, sustainability is at the core of our operational integrity and innovative solutions. The integration of sustainability into our business is guided by good business conduct and ethical business practices, which form the fundamentals of our multilevel approach to sustainability.

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Our business relies on stakeholders working together

In 2017, global greenhouse gas emissions reached a record 49.2 gigatonnes of CO_2 equivalent. If changes are not made to current nation emission efforts and ambitions, the world will see global warming of about 3°C by the year 2100.¹

As an active member of the communities where we live and work, Cenviro has a stake in strengthening the well-being of our communities. Through our Continuous Emissions Monitoring System, we ensure that our operations meet all Malaysian environmental emission standards at all times.

¹ United Nations Environment Programme (2018). Emissions Gap Report 2018 key messages.









Further shaping our approach are local and global trends and regulatory aspects of the industry landscape in which we operate. We are active members of the industry, and regularly engage with regulatory stakeholders and other industry players in order to better navigate our playing field.

Together, the industry context and our governance provide the foundation for our sustainability strategy. This in turn drives our approach to key sustainability issues.



STAKEHOLDER ENGAGEMENT

SHAREHOLDERS

⊕How

Board Meetings, Site Visits, Townhall Sessions

When

Annually, Quarterly, Regularly, Ad hoc

\oplus Key Issues

 Ongoing updates of Cenviro's business plans and strategies, financial performance, project updates and business operations

\oplus What We Are Doing

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- Good Governance and Ethical Business Conduct, p 110

CUSTOMERS

⊕ How

Customer Satisfaction Survey, Customer Hotline, Website, Open Day, Roadshows, Exhibitions, Customer Visit, Customer Audits

When

Annually, Clinical Waste Service Hotline, Clinical Waste Customer Registration, EISB's Active Hotline (available 7 days a week from 8am - 8pm)

Hey Issues

- Pricing
- Quality of service
- Credibility and trust of Cenviro brand
- Awareness on waste management best practices

\oplus What We Are Doing

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- Customer Satisfaction, p 70

GOVERNMENT, LOCAL AUTHORITIES AND REGULATORS

⊕ How

Regular Meetings, Progress Updates, Compliance Reports, Seminars and Forums, Collaboration Programmes, Visits and Inspections

When

Annually, Monthly, Regularly, Ad hoc

\oplus Key Issues

- Compliance with rules and regulations
- Assistance in managing and resolving waste and environmental issues
- Support the Government's efforts to appreciate, conserve and protect the environment
- Leadership in environmental strategies

\oplus What We Are Doing

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LOCAL COMMUNITIES AND THE PUBLIC

⊕ How

Community Programmes, Public Dialogues, Education Programmes, Environmental Engagement Campaigns, Branding Awareness Programmes, Social Media Platforms

When

Annually, Quarterly, Monthly, Regularly, Ad hoc

Hey Issues

- Handling of environmental hazards
- Project updates and expansion plans
- Handling of health and safety issues
- Handling of complaints and feedback
- Municipal solid waste collection

\oplus What We Are Doing

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SUPPLIERS AND CONTRACTORS

⊕ How

Meetings with Health, Safety and Environment, and Procurement Departments, Contract Management Programme, Vendor Development Programme, Surveys

\oplus When

Annually, Quarterly, Ad hoc

\oplus Key Issues

- Fair procurement practices
- Informative tendering process
- On-site safety and health practices
- Vehicle training for logistics contractors
- Updates on Cenviro's business standing

\oplus What We Are Doing

- About This Report, p 7
- Supply Chain Management, p 76
- Safety, Health and Well-Being at the Workplace, p 89
INDUSTRY AND BUSINESS PARTNERS

⊕ How

Committee and Members Meetings, Collaboration Programmes, Seminars, Forums and Workshops

\oplus When

Annually, Regularly, Ad hoc

\oplus Key Issues

- Conduct operations and services in a responsible manner
- Commitment to integrity and accountability

\oplus What We Are Doing

- Delivering Stronger Waste Solutions, p 42
- Supply Chain Management, p 76
- Safety, Health and Well-Being at the Workplace, p 89

MEDIA

⊕ How

Interviews, Media Briefings, Press Releases

\oplus When

Ad hoc

Hey Issues

• Cenviro's business direction, Corporate Social Responsibility and project development

\oplus What We Are Doing

- About This Report, p 7
- Website: www.cenviro.com

EMPLOYEES

⊕ How

Surveys, Safety Briefings, Training, Townhall Sessions, Focus Groups, Campaigns, Kelab Sukan Kualiti Alam Programmes

\oplus When

Annually, Quarterly, Regularly, New Recruitment

\oplus Key Issues

- Employee benefits and rights
- Workplace safety
- Career development opportunities
- Work-life balance
- Equal workplace opportunities
- Company directions and performance

\oplus What We Are Doing

- Empowering Our People, p 86
- Enhancing Community Livelihoods, p 104

A YEAR OF ENGAGEMENT

Selected highlights of stakeholder engagements in 2018.



MATERIAL MATTERS



Throughout the year, we reach out to, listen to and address the concerns of individuals and organisations who are impacted by our activities.



We engage with our stakeholders, working together to create longlasting and impactful partnerships for the benefit of all. We

Report

We prepare sustainability reports based on the material issues identified by stakeholders in relation to broader sustainability contexts.

As part of the development of this Report, we undertook a materiality assessment to identify the sustainability issues that matter most to our stakeholders. The results allowed us to refine our overall reporting and sustainability strategy in order to prioritise action areas and initiatives. The assessment was undertaken in accordance with the requirements of the GRI Standards by an independent consultant and was verified by Bureau Veritas. Stakeholder input was collected using a web-based survey which received responses from 245 stakeholders.



For the 2018 materiality assessment, the new material aspect 'Sustainable Energy Consumption' was added in order to reflect Cenviro's increased focus on energy management and renewable energy generation and consumption. The aspect 'Materials Management' was also removed, as its constituents were deemed to be sufficiently covered by other aspects or no longer relevant. Key points identified in the 2018 materiality analysis include:

Delivering Stronger Waste Solutions	Stakeholders showed an increased priority in customer satisfaction, good governance and ethical business conduct as well as future-focused integrated solutions
Managing Our Environmental Impact	An increase in data security and privacy, water management and sustainable procurement practices. Meanwhile, operational efficiency remained as one of our priorities
Empowering Our People	Ensuring health and safety at the workplace remained a priority
Enhancing Community Livelihoods	Development and engagement of the community continues as our business is reliant on multiple stakeholders

Notes on methodology:

• Importance to Cenviro is represented by BOD and Senior Management. Importance to Stakeholders is represented by Shareholders, Regulatory Bodies/Government Agencies, Business Partners, Employees, Local Community, Customers, Suppliers and Contractors.

• 14 members of the BOD and Senior Management responded.

• All internal and external stakeholders were asked to rate the importance of 23 matters related to Cenviro's sustainability performance.

SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS

We make contributions to the achievement of the UN Sustainable Development Goals (SDGs) through our business operations, environmental management and social contributions to our workforce and surrounding communities. Below are selected examples of our contributions to 8 out of the 17 SDGs.



The health and safety of our employees and community is a priority on which we never compromise. Read about our health and safety initiatives on page 94 to learn how we put our team's safety front and centre.



A major barrier to responsible resource disposal practices is the difficulty of seeing the value in waste. With 'Recycle for Life', Cenviro is turning waste into cash. Learn how we are driving a resource revolution on page 61.



The growth and development of our workforce is part and parcel of our Group's future. We focus on employee upskilling and career progression at all levels of our workforce. Learn how on page 98.



Embracing alternative energy sources is crucial for reducing the consumption of fossil fuels and preventing climate change. Find out about Cenviro's new solar energy system on page 85.



Our centre of excellence for waste management is breaking boundaries in industry collaboration, learning and innovation. Find out more about how we are upskilling the industry workforce on page 67.



We are committed to minimising the impact our operations have on Malaysia's waterways and regularly monitor surface and groundwater quality. Read more about our efforts on page 80.



As more and more Malaysians move into urban areas, the economic, environmental and health challenges of municipal waste management become more and more pressing. Cenviro has the solutions on page 56.



Our innovative Vertical Secured Landfill is extending the lifespan of our landfill site, reducing land pressures and allowing undeveloped land to stay that way. Learn about this groundbreaking solution on page 53.

Delivering Stronger Waste Solutions

Investing in the Nation's Infrastructure

Cenviro continues to lead solutions in sustainable resource management. We drive innovation through our investments in ground-breaking research and technology for the growth of our business and the betterment of the Malaysian waste industry. By ensuring the availability of essential infrastructure and services, we deliver better quality of life for our customers and promote the preservation of our environment. In the rapidly evolving waste landscape of today, Cenviro provides security and reliability, now and for the future.

In this Section:

Integrated Scheduled Waste Management	45
Integrated Municipal Solid Waste Management	56
Materials Recycling and Recovery	58
Future-Focused Integrated Solutions	64
Customer Satisfaction	70

Innovating for the common good

Fewer than 50% of Malaysian rivers evaluated for water quality are considered 'clean',¹ which is why Cenviro practices zero discharge of wastewater at WMC, with treated effluent used as quench water for the incineration plant.

What we do everyday at Cenviro helps society find solutions to their waste challenges. Underlying our sustainability vision and goals is the relentless pursuit of innovation, which drives us to deliver new breakthroughs and invest in the nation's infrastructure.

13 ACTION

14 LIFE MOTOR MATTER

15 INTERNE



PERFORMANCE OVERVIEW



INTEGRATED SCHEDULED WASTE MANAGEMENT

Cenviro's scheduled waste management services are based at our integrated Waste Management Centre, which has the capacity to store, treat and dispose of over 160,000 tonnes of all classes of scheduled waste annually.

WMC is the only centre of its kind in Malaysia, comprising an Incineration Plant, SWtE Plant, Physical and Chemical Treatment Plant, Solidification Treatment Plant, Clinical Waste Treatment Centre, Vertical Secured Landfill, and Recycling and Recovery Facilities.

The responsible management of WMC is a business imperative for Cenviro, and WMC's end-to-end facilities are designed and managed to meet international standards. We have received various certifications in recognition of WMC's excellence, including MS ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2015, MS 1722:2011 and ISO/IEC 17025:2017. As one of the few waste management companies providing trustworthy solutions for disposal from start to finish, our challenge is to communicate to customers the true value in these certifications and our services.



WASTE TREATED (TONNES)

		2014	2015	2016	2017	2018
(cy)	Incineration Plant For incinerating harmful organic waste using thermal treatment.	35,470	49,488	40,962	31,872	25,293
Z	Scheduled Waste to Energy Plant For generating energy via the incineration of scheduled waste.		(started operat	ting in 2018)		19,275
30	Physical and Chemical Treatment Plant For treating all types of hazardous inorganic liquid waste.	1,504	4,921	2,605	4,884	4,380
	Solidification Treatment Plant For stabilising and solidifying toxic components of hazardous waste to prevent their leaching once waste has been disposed of.	14,450	9,806	11,054	13,176	11,218
<u>S</u>	Clinical Waste Treatment Centre For treating clinical waste using an eco-friendly incinerator and microwave technology.	7,577	14,588	15,841	15,897	14,538
	Recycling and Recovery Facilities For recycling and recovering valuable resources from scheduled waste.	(started opera	ating in 2016)	5,800	8,040	5,238
\triangle	Vertical Secured Landfill For disposing of waste once it has been treated.	57,965	70,845	77,786	92,961	87,120

Responsible Incineration

O The Process

The incineration process incinerates waste by controlled burning at high temperatures. It is typically used for different types of waste, such as scheduled, clinical waste or sewage sludge.

O The Risks and Challenges

- As an energy-intensive process, the efficiency of the plant is crucial to manage its environmental impact.
- Incineration releases ash and emissions to the atmosphere. If flue gases are not cleaned, they may contain particulate matter, heavy metals, dioxins, furans, sulphur dioxide and hydrochloric acid.

Our Solution

With a capacity of 100 tonnes per day, our INC1 is the only large-scale incinerator processing scheduled waste in Malaysia. In order to ensure compliance with the DOE licence requirements, the incineration process at the facility is monitored by a fully computerised Continuous Emissions Monitoring System. The facility is operational 24 hours a day with emissions from the plant meeting all Malaysian environmental emission standards at all times.

In 2018, 25,293 tonnes of waste was incinerated at INC1. Our other incineration facility INC4 has been withdrawn from service to be maintained in operational condition for future use.



Scheduled Waste to Energy Plant

O The Process

Scheduled waste is fed into the Scheduled Waste to Energy (SWtE) facility where it is incinerated using a combustion chamber. The energy generated from burning the waste is used to produce electricity using a boiler and steam turbine.

O The Risks and Challenges

 Poorly managed incinerators can produce toxic emissions and significant volumes of greenhouse gases.



Our Solution

Designed to replace the aging INC1, Cenviro's new SWtE facility provides a more sustainable alternative to incineration by capturing the latent energy in scheduled waste. Once converted into a useable form via the plant's operation, this energy can be used as a substitute for environmentally damaging fossil fuels.

The plant, which is designed to both European Union and Malaysian standards, has the capacity to treat a variety of scheduled wastes at low cost. Its emissions comply with Malaysia's Environmental Quality (Clean Air) Regulations 2014. The facility began exporting power onto the grid in early 2018, generating a total of 10,413.76 MW of electricity during the reporting period. This power was generated through the incineration of 19,275 tonnes of scheduled waste.

As one of the most advanced waste to energy facilities in the region, the SWtE plant marks a key achievement in Cenviro's progress towards building a stronger, greener waste management system in Malaysia.



Ozone-Depleting Substances (ODS) -

As a supporter of the Montreal Protocol on Substances that Deplete the Ozone Layer, the Malaysian government is working to phase out the production and consumption of hydrochlorofluorocarbons by 2040. Cenviro supports these efforts by offering treatment and disposal services for ODS, ensuring that these harmful chemicals are disposed of safely and responsibly to prevent further damage to our planet's ozone layer. In 2018, we treated 8.12 tonnes of ODS.

Year	Amount (metric tonnes)
2014	12.835
2015	14.969
2016	13.673
2017	26.823
2018	8.120

Waste Analysis Laboratory

O The Process

Scheduled waste entering WMC is brought to our state-of the-art laboratory for chemical testing and evaluation prior to treatment and disposal.

O The Risks and Challenges

- Insufficient waste testing and evaluation infrastructure can result in waste generators unknowingly
 disposing of their waste in an unsafe manner, resulting in environmental and public health hazards.
- Waste that is not properly tested and identified may be disposed of in a manner that is noncompliant with applicable regulations.

Our Solution

The testing and evaluation of scheduled waste is essential for safe disposal in compliance with DOE requirements. In order to ensure the appropriate disposal of waste, our highly skilled chemists offer general waste evaluation and specialist waste testing services. This includes the testing of waste and refused fuels as well as Waste Composition and Waste Acceptance Criteria testing. The laboratory is accredited with ISO/IEC 17025 and is recognised by the International Laboratory Accreditation Cooperation (ILAC).

Our waste testing and evaluation services build important capacity into the Malaysian waste management system. By offering a means of accurately identifying scheduled waste, we ensure that this material can be properly and safely disposed of.

Feature: Working at Cenviro's Waste Analysis Laboratory

Fo Mooi Hua has been a chemist at Cenviro's Waste Analysis Laboratory for over 15 years. As part of a team with 33 colleagues, scheduled waste in order to determine how to safely dispose of the material. Together, they conduct between 70 and 100 tests per essential in order to guarantee that waste is not misclassified and the wrong choice of treatment recommended. To ensure that Cenviro is providing the best quality service, Fo and his team work hard to keep abreast of the latest developments in waste analysis, such as new treatment techniques or the use of new technology. Fo finds his work both challenging and exciting and is proud of the role he plays in supporting the sustainable



My field of work is constantly changing due to new technological developments and waste-testing methods. This not only keeps things exciting, but it also means that I am constantly learning and upgrading my skills in order to keep up with new trends and regulations. I am fortunate that at Cenviro, we have state-of-the-art facilities that allow us to adopt the latest techniques and execute work more efficiently."

Clinical Waste Management

O The Process

Waste produced from healthcare and similar activities, known as Clinical Waste, is incinerated or treated using an eco-friendly microwave sterilisation system that converts the hazardous material into an inert, landfill-ready residue.

O The Risks and Challenges

- Poorly managed clinical waste can expose health care workers, patients, waste processors and the community to injury or infection.
- Non-compliance in clinical waste management may cause companies to incur fines or clean-up costs.

Our Solution

Cenviro's Clinical Waste Treatment Centre (CWTC) is one of the largest facilities of its kind in Asia. The CWTC provides a one-stop service for clinical waste management in Malaysia, including the collection and processing of clinical waste, the supply of materials for handling waste and customer training. The facility is outfitted with innovative microwave treatment technology, offering safe disposal of clinical waste while using minimal electricity and producing zero emission. In order to handle waste that exceeds our capacity for microwave treatment, we also operate an incinerator at the Centre.

The proper segregation and handling of medical waste material at the point of generation is essential for subsequent treatment and disposal. In recognition of this, Cenviro conducts a Clinical Waste User Training Programme for new clients as well as annual refresher trainings to existing customers, to promote understanding of clinical waste handling procedures under Malaysian laws and regulations. In 2018, we delivered training programmes at 96 hospitals.

In addition to these hospital training programmes, we organised two roadshows for private clinics and the general public as part of our ongoing engagement efforts since 2017. Supported by the DOE and State Health Departments. these roadshows not only serve as stakeholder engagement opportunities, but also improve public understanding of responsible waste handling, assist customers to register as waste generators and promote Cenviro's services. In 2018, our roadshows reached 378 participants.



In order to further improve the customer's experience, in 2018, we officially launched our clinical waste website and the collection services mobile application, Clinical Waste Integrated Collection and Logistics Infosystem (CWICLI), for our waste transporters. First piloted in 2017, the dedicated website streamlines the registration process for new clients and allows existing customers to plan their collection schedules. Transporters using CWICLI are able to plan each day's collection, find the best route and track pick-ups in real-time. As at the end of 2018, the website has been used to register 3,330 new customers since its creation and CWICLI had been installed by all our licensed transporters.

Clinical Waste Treated (tonnes)

Year	Total	Microwaved
2014	7,577	1,484
2015	14,588	6,341
2016	15,841	7,708
2017	15,897	8,823
2018	14,538	8,924

Case Study: Reliability in Transportation

At Cenviro, our commitment to responsibility is upheld across all levels of our value chain, including the transportation practices that underpin our operations. In line with our promise of transparency and ethical practices, we actively oversee all stages of the journey that our customers' waste takes along our value chain. Our fleet of collection vehicles is outfitted with GPS technology, allowing us to monitor each truck's activity, including dispatch time, route, distance travelled and total driving time. We also receive alerts when trucks do not make their destination time, or when vehicles are operated during prohibited hours from 12 a.m. – 6 a.m.

Across our fleet, drivers also receive mandatory training in the safe collection and transportation of scheduled waste. This includes training in managing scheduled waste leakage during transportation using the spill kits that each truck is equipped with.

Building on these responsible practices, our most recent tender for the provision of transportation services includes the requirement that trucks be outfitted with dashboard cameras at both the front and rear of the vehicle in order to assist with accident investigations.

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SCANIA

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Vertical Secured Landfill

O The Process

Non-recyclable waste and residue from our scheduled waste treatment processes are disposed of through burial at the landfill site.

O The Risks and Challenges

- Growing volumes of waste are causing landfill capacity in Malaysia to shrink rapidly.
- Increasing land pressures means a lack of availability for additional landfill sites.
- Improperly managed landfills have the potential to cause pollution of the local environment.

Our Solution

While Cenviro continues to develop alternative treatment facilities and promote recycling as a form of waste diversion, we recognise that landfilling will continue to serve as an essential waste disposal practice in the immediate future. We have therefore explored new innovations to extend the life of our existing landfill in order to accommodate waste disposal pressures without the need for additional land development.

The result is our Vertical Secured Landfill, in which we have used geogrid walls to expand the capacity of our existing landfill, extending its lifespan by as much as 30 years and saving 45 acres of land from landfill development. The renovation has not only eased the pressure on Cenviro's landfill operations, but also, has allowed us to develop the necessary expertise to guide similar conversions at other Malaysian landfills. By sharing our knowledge of this innovative environmental technology, we can help provide future-focused solutions for the waste industry.

As of year-end 2018, the construction of Phase 1 of the landfill was complete, with Phase 2 expected to begin once the additional capacity provided by Phase 1 has been fully utilised. A total of 87,120 tonnes of waste was disposed of at the site during the year, including waste received from external customers for disposal as well as residual waste from our scheduled waste treatment processes. Waste is disposed of based on its classification, with best-in-class practices applied to prevent any harmful environmental impacts.

Total Amount of Waste Disposed of at the Landfill (tonnes)

2014	2015	2016	2017	2018
57,965	70,845	77,786	92,961	87,120

Best Practices in Landfill Management

Although external stakeholders may perceive landfilling as a simple process, in actuality, ensuring the safety of the environment, the community and our employees requires complex and highly technical operations. Waste disposed of at our landfill is handled with the utmost care in accordance with best industry practices. For instance, in managing the disposal of clinical waste, material is not kept for more than 24 hours before being disposed of in a specific sub-cell of the landfill. Once deposited in the landfill, it is then covered with soil that is measured to at least 300mm of thickness in order to prevent microbiological exposure.



Feature: Secure Disposal for Public Service Institutions

Cenviro is committed to supporting the national agencies that protect our country. We do so by offering our service and expertise for the disposal of sensitive documents and contraband materials. Security is a matter of the utmost importance during the disposal of these materials. Therefore, we work closely with the relevant agencies to ensure that the process is monitored from start to finish.



RM37.19 million worth of pangolin scales were seized and incinerated In December 2018, Cenviro incinerated nearly 3 tonnes of seized pangolin scales worth RM37.19 million (USD9 million) as part of efforts to deter illegal wildlife trafficking. The scales were incinerated at Cenviro's secure disposal plant in Port Dickson, Negeri Sembilan. Throughout the year, we also disposed of RM2.5 million worth of cannabis for the APMM and a combined RM15.1 million worth of exhibit case drugs for the Kuala Lumpur and Negeri Sembilan Narcotics and Crime Units.

Satellite Waste Management Facilities

O The Process

A future Satellite Waste Management facility located in Johor will collect waste from the Pengerang Integrated Complex (PIC) and other parts of Johor. Meanwhile, waste is currently brought to Cenviro's Satellite Waste Management Facility in Sabah for storage prior to transport to WMC in Peninsular Malaysia for processing, treatment and disposal.

O The Risks and Challenges

- Transporting hazardous waste long distances increases the likelihood of harmful spills and accidents.
- Long-distance transportation presents additional costs for clients and increases greenhouse gas emissions.

Our Solution

The 2017 signing of an agreement between KASB and PETRONAS for the Collection, Transportation, Treatment and Disposal of Scheduled Waste Services for the PIC was a landmark moment in Cenviro's efforts in scheduled waste management. Cenviro's facility located 14 km from the Pengerang Integrated Complex in Johor will serve as Cenviro's first satellite facility capable of treating scheduled waste outside of Negeri Sembilan. The facility's location close to the PIC means that scheduled waste generated on site can be managed within the local area, without needing to transport the waste across the country. This in turn minimises the risk of environmental contamination while also reducing costs for our customers. In 2018, the satellite facility remained under construction as we evaluated technologies to be included at the site, including waste to energy facilities to allow the generation of green energy on site.

In addition to the Johor satellite waste management facility, in 2018, we oversaw the opening of our Sabah office for the temporary storage of waste prior to shipping to peninsular Malaysia for processing, treatment and disposal. We aim to engage the Sabah market by providing waste management services to the highest standards and meeting regulations, in the interim, as we put down plans to further develop the Sabah facility. KA Sabah is committed to ensuring customers' compliance with DOE regulations from the point of waste collection, waste compatibility, packing of waste, and fumigation before containers are moved to the port. The stringent process includes compliance to type of container used and the handling process with the Port Authority.

Feature: Harnessing Our Skills to Keep the Community Safe

As a reliable waste solutions provider, local authorities know that Cenviro can be trusted to respond to and resolve public waste crises. In 2018, our services were called upon twice to clear spillages caused by a truck accident and illegally dumped scheduled waste in Port Dickson and Kajang respectively. During these incidents, we responded swiftly to secure the site, assess the level of risk and undertake clean-up activities. In the case of the Kajang event, the process required a full two-day operation. In light of the unknown nature of the material that has been dumped and its potential hazards, the utmost care is taken to protect the safety of our team, the environment and the surrounding community when responding to such requests. Cenviro is proud of the role we play in keeping our communities clean and safe, and honoured by the trust placed in our services by local and regional governments.

INTEGRATED MUNICIPAL SOLID WASTE MANAGEMENT

Through our joint venture, EISB, Cenviro provides public cleansing and municipal solid waste collection, treatment, recycling and disposal services in the Malaysian states of Kedah and Perlis. Collectively, these essential municipal services preserve our customers' health, well-being and environment, delivering improved quality of life for all.

Municipal Solid Waste Collection Services

O The Process

Municipal solid waste, bulky waste and recyclable materials are collected for disposal and recycling.

O The Risks and Challenges

- Insufficient municipal waste collection can promote illegal dumping activities, which in turn threaten public health and the environment.
- Insufficient waste-diversion services result in the disposal of recyclable and compostable material in the waste stream, preventing resource recovery and reducing landfill capacity.

Our Solution

Cenviro provides municipal solid waste collection services for nearly 329,000 premises, collecting domestic, recyclable green and bulky waste. In 2018, an average of 1,846 tonnes of municipal solid waste were collected per day by our fleet of 315 vehicles, totalling 532,615 tonnes of municipal solid waste collected.

We use multi-compartment collection vehicles in Kulim for the segregation of waste during collection. This allows waste streams to be kept separate and facilitates their efficient disposal at the appropriate facilities. The first of their kind to operate in Malaysia, these vehicles demonstrate Cenviro's future-forward thinking and commitment to innovation.



Public Cleansing Services

O The Process

Our employees provide public cleansing management services, including road sweeping, grass cutting and the cleaning of drains, dry and wet markets, public toilets and beaches.

O The Risks and Challenges

- Unclean public spaces threaten public health and the environment.
- Litter and unkempt public spaces are unattractive to both residents and investors, decreasing property values and quality of living.

Our Solution

EISB's public cleansing services are carried out by a team of 1,582 employees in Kedah and Perlis who work diligently to create safe and clean communities. With our sophisticated fleet of public cleansing vehicles ranging from high pressure water jetters to beach combers, we are equipped to efficiently and effectively conduct all manner of cleansing services.

MATERIALS RECYCLING AND RECOVERY

Building sustainability into our waste management systems requires a future-focused approach that prioritises the recovery, rather than disposal, of the valuable materials in our waste streams.

This will reduce pressure on our landfills and prevent the need for resource extraction activities, thereby protecting our environment. At Cenviro, a commitment to maximising recycling and resource recovery permeates both our scheduled and municipal waste services. We play an important role in supporting Malaysia's efforts to increase the national recycling rate to 30% by 2020.



Municipal Recycling Services

O The Process

Recyclables are collected from the public and commercial sectors and manually sorted and baled at our Materials Recovery Facility (MRF) to meet the market specifications.

O The Risks and Challenges

- Insufficient recycling of waste places an increasing burden on the extraction of raw resources from our environment and results in the unnecessary landfilling of waste.
- Inefficient recycling practices produce raw materials that are too contaminated for use in other industries and result in unnecessary landfilling.

Our Solution

Our MRF provides important recycling services to facilitate the reuse of materials and reduce reliance on the extraction of raw resources. We collect recyclable material from the public and from our commercial clients in the form of cardboard, paper, HDPE, PET, PP, steel, aluminium and tin. These mixed recyclable materials are manually sorted at our MRF, where they are then pressed into bales in accordance with market specifications in order to be sold as raw material.

Types of	201 (total of 180,93	-	2017* (total of 1,773,460 tonnes)		2018 (total of 789.4 tonnes)	
Recycling Waste	(tonnes)	%	(tonnes)	%	(tonnes)	%
Paper	69,628.2	38.5	876,970	49.4	597.38	73.1
Aluminium	3,470.3	1.9	2,960	0.2	6.2	0.8
Plastic	70,790.6	39.1	796,870	44.9	161.7	20.5
Glass	6,167.5	3.4	0	0	0	0
Iron	26,059.1	14.4	92,490	5.2	29.6	3.8
E-Waste	3,404.9	1.9	4,170	0.2	0.01	0
Others	1,416.2	0.8	0	0	14.1	1.8

In 2018, EISB recycled a total of 789.4 tonnes of municipal solid waste.

*Note: Restatement of 2017 data due to recalculation.

Cenviro Recycling and Recovery

O The Process

Scheduled waste is manually sorted and processed in order to recover valuable materials.

O The Risks and Challenges

- Improper processing of scheduled waste can be hazardous for human health and the environment.
- Recovering valuable and re-usable material from scheduled waste can be costly and difficult.

Our Solution

Through Cenviro Recycling and Recovery Sdn. Bhd. (CRR), Cenviro offers a spectrum of end-toend scheduled waste recycling and recovery services. Our team of highly experienced management employees and skilled workers provide trusted and reliable solutions for our customers, who represent both the commercial and industrial sectors. The processing services we carry out at the facility include converting used oil and solvent into higher grade materials, dismantling e-waste for shipment to Shan Poornam Metals for processing, scrap dismantling and resale, and plastic drum cleansing and resale.

Valuable Resources Generated

Resources generated	Oil	Solvent	E-Waste	Scrap metal	Plastic
Weight (kg)	2,832,000	362,190	414,507	1,525,732	103,517

In 2018, a total of 5,238 tonnes of waste were recycled and recovered at CRR. Due to the reduction in available material, we have placed our plans to establish a plastic recycling facility on hold.

Cenviro supported DOE Malaysia in its e-waste carnival collection in Kuala Lipis, Pahang in conjunction with 2018 Earth Day celebration.





Recycle for Life

O The Process

Individuals and community members bring recyclable items to collection sites where the materials are weighed and collected for recycling. The market value of the material is then credited to a smart card, which can be used to make purchases at selected partner outlets.

O The Risks and Challenges

• Service unavailability, perceived inconvenience and a lack of understanding of the potential value in recyclable material serve as major barriers to public recycling.

Our Solution

Cenviro recognises that achieving improved recycling rates will require greater societal involvement and community buy-in. In recognition of that, Recycle for Life first began as a community outreach programme to encourage green thinking and recycling practices. Today, thanks to the programme's overwhelming success, Recycle For Life Sdn. Bhd. (RFL) holds licences to collect recyclable waste in 113 areas around the nation and has established corporate partnerships with 24 different organisations. Cenviro's own employees are also participants in the programme, as are the employees of EISB.

Waste Recycled

	EIS	в	Cen	viro
	Volume (kg)	Total (RM)	Volume (kg)	Total (RM)
Paper	89,577	28,157	5,382	1,386
Plastic	53,409	30,699	1,689	950
Steel	32,680	15,029	813	344
Aluminium	1,012	3,842	174	557
Used Cooking Oil	137	137	-	-
E-Waste	-	-	2,385	736
TOTAL	176,815	77,864	10,443	3,973

By offering convenient material collection sites and real, tangible benefits for programme participants, the RFL programme hopes to radically shift public perception towards recycling. In order to further simplify the process, we have also created a mobile app that allows users to track the value of their recycled goods and the balance in their smart card.

	No. of Cards Issued	Amount of Recyclable Waste Collected (kg)	No. of Partner Corporations	No. of Participating Schools
2017	3,530	112,857	2	4
2018	15,669	819,953	24	88

In order to promote uptake of the RFL programme and demonstrate to the community the positive impacts of recycling, Cenviro donates the equivalent of 3% of the cash value generated from the RFL programme to the MyKasih Foundation, a non-profit organisation that helps low-income families through food aid and education programmes. For more information about the impacts of the RFL programme in the community, refer to page 61 of this Report.

Material Type	Amount of Waste Collected
Paper	434,727 kg
Plastic	266,728 kg
Steel	69,167 kg
Used Cooking Oil	204 kg
Aluminium	46,553 kg
E-Waste	2,574 units





The RFL Mission

The RFL programme is on a mission to inspire systemic solutions to waste challenges by collaborating with and empowering individuals to rethink. reduce, reuse and recycle waste. We know we can't solve the world's issue alone. so we engage with communities to learn about their specific challenges and collectively develop solutions. Through this approach, we have engaged with a number of residents from different communities, who have come together with RFL to take part in team clean-ups, vertical garden growing and other communitybuilding activities. Through these activities, RFL's services provide an important mechanism for driving community growth and togetherness. For example, in Kampung Chubadak the community's earnings from the programme were used to buy gifts for in their exams, and food to be shared during community gatherings.

We have diligently recycled in the past but did not receive information about how much we recycled each month. With Recycle for Life, all materials are weighed and these records are reported to parents, students, employees, and teachers. This information makes our recycling effort easy to track and shows our progress throughout the year. Also, our students then learn what can and can't be recycled and which items are more valuable. This information is helpful as we try to inform our broader school community about the reduction of singleuse plastics."

- Amy Popovich Service and Sustainability Coordinator, International School of Kuala Lumpur

Integrated E-Waste Management

O The Process

Household and industrial electronic wastes are processed in order to recover precious metals and create raw material for other industries.

🛈 The Risks and Challenges

- Increased use of electronic devices has positioned e-waste as a rapidly growing waste stream in Malaysia and globally.
- Certain types of e-waste contain sensitive intellectual property, presenting a disposal risk for clients.
- The hazardous metals and chemicals used in electrical and electronic equipment pose environmental and human health risks if incorrectly disposed of.

Our Solution

As electrical and electronic devices become more widely used in Malaysia, volumes of e-waste are similarly increasing across the country. Cenviro's solution for the challenges posed by disposing of this hazardous material is SPM, a subsidiary of Cenviro's associate company Shan Poornam Sdn. Bhd.

An integrated waste management company, SPM specialises in e-waste and scheduled waste recycling, particularly waste with intellectual property rights risks. By using modern technologies, SPM is able to recycle a range of waste to produce valuable, high-grade raw materials compliant with international standards.



FUTURE-FOCUSED INTEGRATED SOLUTIONS

As the only Malaysian company focusing exclusively on largescale waste solutions, we are uniquely positioned to shape the future of sustainable waste management in the country. At Cenviro, we take this responsibility seriously and are committed to fostering meaningful stakeholder partnerships, cutting-edge technological innovation and the highest standards of industry excellence.

Cenviro Eco-Park

While Cenviro continues to push the boundaries of sustainable waste management, we recognise that it is only collectively that we can overcome the complex and multifaceted challenges facing the waste industry. Harnessing Malaysia's intellectual capital to bridge the infrastructure gap will require collaborative industry partnerships underpinned by a start-up mindset.

As a key industry leader, Cenviro has taken the initiative to drive this collaboration through the establishment of the Cenviro Eco-Park. Intended to serve as Malaysia's key destination for waste management, the 241.6-acre park will bring industry players together to deliver greener jobs, lifestyles and solutions. Designed to include all types of recycling and recovering facilities through joint-venture developers, tenants and partners, Cenviro Eco-Park will serve as a world-class waste recycling and recovery complex once fully occupied.

Eco-Park: The Future of Cenviro

Cenviro Group has been focusing its efforts on stakeholder engagement with the objective of increasing public awareness of Cenviro's role in sustainable waste management. This strategy focuses not only on existing operations at WMC, but also the intended expansion areas, namely Cenviro Eco-Park and Cenviro Johor.

As part of this outreach, stakeholders have been informed of the important role the Eco-Park will play in Cenviro's future focus on recycling and recovery activities. Over the past 20 years, through WMC, Cenviro Group has led the country in the final treatment and disposal of scheduled waste. With Cenviro Eco-Park, we aim to also set the tone for world class standards of recycling and recovery technologies in Malaysia.

It was this vision that prompted us to acquire the additional 100-acre plot of land next to WMC for the Eco-Park's creation, and it is this vision that drives our stakeholder engagement efforts. With regards to Cenviro Johor, similar efforts have also been made. In order to drive a sustainable future for Malaysia, we have engaged with all state leaders on a number of occasions to drive collaboration on this important issue.

Cenviro Eco-Park Proposed Layout Plan

Our integrated WMC, a central zone for waste residue from different operators to be used within the Eco-Park System minimising disposal to landfill.



EPIC

At the heart of Cenviro Eco-Park is EPIC, Cenviro's centre of excellence for waste management. The first facility of its kind in Malaysia, EPIC is intended to foster the development of knowledge across all levels of the waste management industry. Under Cenviro's management, EPIC will serve as a hub for knowledge exchange, industry partnerships and the growth of holistic waste management in Malaysia. Constructed using recycled materials and featuring a solar-panelled rooftop, rainwater harvesting system and bioclimatic design, EPIC also serves as a physical manifestation of Cenviro's commitment to sustainable solutions.

As a platform for human capital development in the waste industry, EPIC's primary purpose is to offer training and certification for the next generation of waste management professionals. This includes programmes ranging from multi-day courses to year-long instruction. Following our accreditation in March 2018, all training programmes offered by EPIC are claimable against the Malaysian government's Human Resources Development Fund, which provides funding for skills-based employee training. EPIC is also recognised by the Malaysia Department of Skills and Development so that training programme participants receive certification under the Malaysian Skills Certification System.

In 2018, EPIC provided 13 training programmes, reaching a total of 241 participants, comprising the general public, Cenviro employees, the Fire and Rescue Department and employees of another local waste management company. During the year, EPIC also focused on developing content for future programmes, including the development of five solid waste management training modules for the following competencies outlined under the National Occupational Skills Standard:

Solid Waste Collection

Level 2 - Solid Waste Collection Operation
 Level 2 - Solid Waste Collection Truck Operation
 Level 3 - Supervision of Solid Waste Collection
 Operations

Public Cleansing

Level 2 - Manual Public Cleansing Operation Level 3 - Supervision of Manual Public Cleansing Operations



13 training programmes provided for a total of 241

participants

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	- ©	

EPIC is accredited by the Department of Skills Development's National Dual Training System Following the development of these programmes, EPIC applied for accreditation from the Department of Skills Development's National Dual Training System, an industry-oriented training programme implemented by the Malaysian Government. Accreditation was officially received in March 2019.

Training Programmes Offered in 2018	Participants	Details
WAMITAB: Validate Assessor Program & WAMITAB: Level 1 Award in Waste and Recycling Tutor	17	Public (E-idaman and Cenviro)
Effective Workplace Risk Assessment	20	In-house : Cenviro
Introduction of Scheduled Waste Management	30	In-house : Cenviro
Life Cycle Assessment and Carbon Footprinting	20	In-house : Cenviro
Job Hazard Analysis	20	In-house : Cenviro
Ground Water Quality Monitoring	25	In-house : Cenviro
Introduction of Scheduled Waste Management	20	In-house : Cenviro
Scheduled Waste Control and Handling for Waste Handler – Chemical	14	Public Course
Scheduled Waste Control and Handling Awareness – Chemical	20	Programme to Bahagian Penyiasatan Kebakaran Jabatan Bomba dan Penyelamat Malaysia
Scheduled Waste Control and Handling Management for Waste Handler	43	Public Course (three sessions)
Hazardous Waste Management Training	12	Programme to be'ah Oman

In 2018, EPIC was also appointed by the Construction Industry Development Body (CIDB) of Malaysia as a construction and demolition management training content developer for CIDB's Construction Research Institute of Malaysia. In addition to these projects, EPIC continued to develop scheduled waste management training content during the year.

In 2018, EPIC was awarded The Edge Malaysia-PAM Green Excellence Award, which recognises property developments with sustainable designs that are innovative and outstanding while contributing positively to the community. The award is a testament to EPIC's innovation, design, sustainability and relevance to the community.

Greywater and Rainwater Harvesting System

Greywater from floor traps and rain water harvested using tanks is channelled through a filtration and disinfectant system before being used for irrigation and toilet flushing



Permeable Driveway

A fast-draining concrete hydromedia pavement supports vehicles and rapidly directs and drains storm water.





Rooftop Solar Panel Over 150 solar panels were installed, generating approximately 41.62kWp of electricity.

Recycled Construction Material Approximately **59%** of regional material used in construction was recycled, amounting to over **30%** of the total expenditure on materials.

Bioclimatic Design Shading, air flow and other design

strategies were used in order to optimise the climate of the building with minimal need for electricity or air conditioning.

CUSTOMER SATISFACTION

At Cenviro, we strive to provide the best possible service for our customers, and closely monitor our progress in this area. We conduct annual customer satisfaction e-surveys through KASB and EISB for all active customers with a targeted response rate of 75%. In 2018, we achieved a satisfaction level of 94.3% for our EISB customers.

In 2018, a customer satisfaction survey was also administered to the customers of KASB's clinical waste management services during the once-a-year mandatory visit to customers. The results of this survey showed an average satisfaction rating of 92.7%.



Customer Satisfaction Levels

Protecting Our Customers from Risk –

The safety and security of our customers' sensitive information is a top priority at Cenviro. Our Information and Communication Technologies service provider is certified to ISO/IEC 27001:2013 standards, is compliant with the Payment Card Industry Data Security Standard and has successfully completed a Threats Vulnerabilities Risk Assessment.



How We Create Value for Our Customers

Our Customer Service Executives are meticulous and systematic to ensure Cenviro's operations run smoothly at clients' premises.

On a daily basis, our Regional Head, Chee Yoke Choy, also known as Dave, receives the Collection Transportation Instructions (CTI) from clients that outlines their scheduled waste's collection order(s) for disposal shipment. The CTI includes schedule waste's name, tonnage, SW code and packaging condition. With new accounts or inexperienced customers, Dave will visit them prior to waste collection to guide them on packaging and labeling their waste appropriately and to ensure their consignment note is well-prepared. This visit is also Dave's opportunity to obtain important information from customers that might require special attention during transportation and disposal processes. When Dave confirms everything is in order, then scheduled waste(s) can be collected.

Dave's goal is to ensure waste collection is efficient by clearing predictable disruption before waste pick-up or shipment day. The Customer Service team is vital in building and retaining the trust of our customers through the value of excellent customer service.

Managing Our Environmental Impact

Serving as Responsible Stewards of the Planet

Our community and our customers trust us to act as a responsible steward of the environment for the sake of their health, their reputations and their future. At Cenviro, we are committed to not only meeting, but also exceeding their expectations. Consideration of the environment shapes how we work, the materials that we use and the initiatives that we pursue. Our operations are grounded in excellence in environmental management and underpinned by strong systems, processes and metrics to keep us in check.

In this Section:

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Doing the right thing no matter what

Nearly 1 in 4 global deaths are attributable to unhealthy environments.¹

Cenviro's commitment to the environment is at the heart of our business. It governs how we work, the materials we buy and the decisions we make. This is why Cenviro's reliable waste collection and management services are able to create safe and healthy spaces for Malaysians to live and work.

Excellence in environmental management is at the core of our continued leadership in integrated environmental solutions.

World Health Organization (2016). An estimated 12.6 million deaths each year are attributable to unhealthy environments. Retrieved from https://www.who.int/news-room/detail/15-03-2016-an-estimated-12-6-million-deaths-each-year-are-attributable-to-unhealthy-environments.





generated waste was collected for **recycling** Total effluents generated were 47,366m³ (ETP) and 26,907m³ (LTP), all of which was reused as part of Cenviro's zero-discharge practices

OPERATIONAL SUSTAINABILITY

Ingraining efficient and sustainable practices and policies across Cenviro's value chain reduces our immediate environmental impact and promotes the long-term sustainability of our operations. We therefore make every effort to ensure responsible practices, whether in our own operations, purchasing practices or supplier partnerships.

Plant Downtime

Plant downtime, which includes both scheduled and unscheduled downtime, is a period of time when the plant is not operational. Plant downtime plays an important role in ensuring the sustainability of our plant operations by providing an opportunity for vital maintenance. At the same time, excessive periods of plant downtime decrease our operational efficiency and require waste to be held for longer periods of time before processing.

All our plants are subject to scheduled maintenance downtime of one day per month, with the exception of our incinerator, which is shut down three weeks per year for maintenance. Unscheduled downtime arising from mechanical or other issues is closely monitored.

Facility	2014	2015	2016	2017	2018
INC1	2,505	1,479	1,066	1,054	2,827
INC4*	2,299	1,071	882	717	-
SOL1	1,683	540	819	712	192
РСТ	1,843	207	937	891	112

Downtime (hours)

* INC4 has been withdrawn from service to be maintained in operational condition for future use.

Supply Chain Management

At Cenviro, we are committed to sustainability at all levels of our value chain, including in the goods and services we procure from our suppliers and contractors. These primarily include consumable materials, equipment for waste treatment and services related to equipment maintenance and construction.

We hold our suppliers and contractors to the highest standards of sustainability. We set very high standards in Health, Safety and Environment (HSE) management when selecting suppliers and manage our procurement practices in order to anticipate and prevent HSE risks. We also strive to support our community and procure Malaysian products and services as much as possible. In 2018, 97% of spending was on local suppliers.

Once selected, contractors are required to complete a Contractor Induction Programme to

ensure their compliance with Cenviro's expectations for sustainability. The induction programme includes daily safety briefings which contractors must attend at least once, as well as in-house training programmes in order to further build sustainability capacity across our value chain. After completing the programme, contractors are issued a six-month Contractor Pass, which can only be renewed by attending a refresher course.

In order to evaluate the continued sustainability performance of our registered vendors, we implement a supplier rating system. Using 20 evaluation criteria, including product specifications, after-sales service and environmental requirements, vendor performance is evaluated, with underperforming vendors notified to improve their performance. Vendors whose ranking does not improve in subsequent reviews are classified as Non-Performing.

No. of Suppliers:	2015	2016	2017	2018
Local	312	419	411	442
Foreign	10	12	8	6
Total	322	431	419	448
Percentage of Suppliers by Type:				
Local	97%	97%	98%	99%
Foreign	3%	3%	2%	1%
Total	100%	100%	100%	100%
Percentage of Spending on Suppliers by Type:				
Local	84%	99%	95%	97%
Foreign	16%	1%	5%	3%
Total	100%	100%	100%	100%
Total Spend on Suppliers (RM)	116,016,073	105,416,672	55,109,399	179,129,101

Supplier Breakdown

Driving Efficiency through Partnership

At Cenviro, we believe in the value that is generated by good supplier relationships. As purchasing continues to evolve as an important contributor to organisational success, the traditional approach of driving a hard bargain for price reductions has changed into a more relational approach with suppliers. At Cenviro, our purchasing division helps to improve operation and maintenance process lead time by working jointly with our suppliers to pull costs out of our products and services. By maintaining a positive relationship, we also ensure that suppliers are willing and able to ramp up the completion of each job, particularly in the event of an emergency or unplanned task. The development and management of competent and responsive suppliers is critical when responding to increasing or fluctuating demand of operation and maintenance needs.

Materials Management

The three most commonly used materials in scheduled waste treatment operations are hydrated lime, activated carbon and caustic soda. These non-renewable materials are used to treat the flue gas that is generated from our incineration plant. In 2018, the consumption of caustic soda increased by approximately six times compared to last year due to process tuning and operations of our SWtE plant.

Type of Material	Quantity (metric tonnes)				
(Non-Renewable)	2014	2015	2016	2017	2018
Hydrated Lime	1,453	1,290	1,548	1,628	1,239
Activated Carbon	12	8	10	7	12.7
Caustic Soda	40	50	115	181	1,108





ENVIRONMENTAL MANAGEMENT

At Cenviro, our promise to clients is that their waste will be disposed of in accordance with the highest standards for environmental practices. While the nature of our operations necessitates the use of natural resources and generation of emissions, we make good on our commitment to sustainability by seeking to minimise the negative environmental impacts of our business.

Due to the diversity of our operations, each of our affiliates and subsidiaries has its own unique environmental challenges and each implements an approach most suited to those challenges. All of our WMC facilities comply with the requirements of their licensing conditions, as gazetted and enforced by the DOE. Facility compliance status is reviewed yearly prior to the submission of application for licence renewal. In addition to these licensing conditions, KASB, CS and CRR are certified ISO 14001 - Environmental Management System. In November 2018, we also reviewed and revised our Integrated Management Systems Policy, which is now named the Health, Safety and Environmental (HSE) Policy.

In 2018, our environmental expenditures at KASB, including costs related to compliance, environmental protection, control and research, as well as the capital and operating costs for our waste-handling, amounted to over RM496,000.

Environmental Management at KASB

Under KASB's Integrated Management System Policy Statement, KASB is committed to achieving continual improvement in environmental management. KASB's goal of zero non-compliance is guided by its Environmental Management System, which is certified under ISO 14001:2015. The subsidiary has also had its own Environmental Monitoring Programme (EMP) in place since its establishment in 1997. The EMP is conducted at a regular time interval for regulatory monitoring requirements by an appointed third-party consultant, with monitoring reports submitted to the DOE as part of licensing and compliance requirements.

KASB's Environmental Performance Monitoring Committee (EPMC) meets on a monthly basis to control and minimise pollution from our operations. In accordance with the DOE's Guided Self-Regulation, the EPMC comprises members of various departments. In addition to the EPMC, KASB has in place an Environmental Regulatory Compliance Monitoring Committee (ERCMC). The ERCMC, which is made up of all heads of department, meet to discuss the implementation of environmental pollution control and reports to top management for decision making on policies and resource allocations. The ERCMC met three times in 2018.

In November 2018, KASB conducted its annual Environmental Compliance Audit. A total of three non-conformance reports were issued as a result of the audit. All necessary corrective action was taken and our reply to the reports was submitted to the DOE in December 2018.

Managing Environmental Non-Compliance

We have strict measures in place to ensure that our environmental policies are upheld. These include training for new employees on environmental issues, regular environmental performance reports to EPMC and ERCMC as well as quarterly meetings between both parties and an appointed consultant to review our Environmental Monitoring Report.

While we make every effort to prevent environmental non-conformance, we are prepared to respond quickly and appropriately when such incidents occur. In the event of non-conformance, a Corrective and Preventive Action (CAPA) form is immediately issued to the respective area owner.

> Total environmental expenditure of RM496.000

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KASB, CS and CRR are certified ISO 14001:2015 - Environmental Management System

Key Environmental Performance Indicators Monitored by Cenviro

Cenviro tracks environmental performance using seven indicators, which are evaluated quarterly. We have 57 environmental monitoring locations surrounding WMC.

KEY ENVIRONMENTAL PERFORMANCE	DESCRIPTION
Surface Water Quality	We conduct quarterly surface water quality monitoring to preserve river water quality while identifying changes and potential pollution sources. Cenviro follows the National Water Quality Standards.
Groundwater Quality	Groundwater quality is monitored as a part of licensing requirements.
Wastewater Quality	We practice Zero Discharge as all wastewater is treated and reused within facilities.
Air Quality	Smoke from stacks is monitored to ensure the quality of emissions complies with regulations. Gas emissions from the Vertical Secured Landfill are also monitored.
Odour	We have in place an odour removal system at CWTC.
Noise	The noise level of our operations is monitored according to DOE regulations.
Biodiversity	We strive to prevent or minimise potential harm to sensitive species, habitats and ecosystems from our operations.



Internal Waste

As a leading solid waste service provider, we are committed to walking the talk when it comes to managing our own internally generated waste. This includes waste from our processing plants as well as our corporate offices. In 2018, we made great strides with our waste reduction initiatives by eliminating the consumption of bottled water at WMC, to be replaced instead by water dispensers. In addition, we also implemented a new practice requiring the operator of our WMC canteen to eliminate the use of polystyrene for serving.

Scheduled Waste

Internally generated scheduled waste is collected and sent to our incinerator for treatment, with the exception of empty ink cartridges, which are collected and refilled by an external service provider. Those that are not usable are collected for recycling.

	Amount of Waste (kg))
Type of Waste	2015	2016	2017	2018
Internal Waste Recycled	178*	204.2*	155**	268
Total Internal Scheduled Waste Treated Internally and Landfilled ¹	485	337	446	558
Total Internal General Waste Collected by Appointed Domestic Contractors and Sent to Approved Facilities ^{***2}	61,120	54,680	35,150	29,750

* Data covers KASB only and empty cartridge.

** Data covers KASB only and empty cartridge, paper and plastic.

**** From 2018 internal general waste has been sent to RFL for processing. ¹Code SW410 Contaminated uniform (Operations employee uniform i.e. the green jacket and pants).

² Miscellaneous office waste, canteen and food waste.



General Waste

We collect, recycle and reuse as much internal waste from our offices as possible. Waste from the administrative building's pantry and canteen is separated at source by consumers or segregated by our canteen operator when mixed. Recyclable materials are then sent to RFL station at WMC.

With the exception of cartridges, which are sent to third-party vendors, organic material from our canteen is composted on site with the compost generated by this process ultimately used as fertiliser for landscaping at EPIC.

> 558kg of internal scheduled waste treated internally and landfilled



Water

At Cenviro, our facilities are engineered to operate as efficiently as possible with respect to water consumption and discharge. We not only minimise the use of potable water as much as possible, but also practice a zero-discharge approach at our Effluent Treatment Plant (ETP) and Leachate Treatment Plant (LTP). Using this method, effluents channelled from these facilities are treated using physical, chemical and biological processes to be suitable for reuse as guench water in the incineration plant.

Year

2016

2017

2018

Effluent Generated (m³)

FTP

83.742

91.290

47.366

LTP

37.983

30.542

26.907

Water Usage Summary for WMC*

Year	Volume (m ³)
2014	140,318
2015	212,695
2016	213,200
2017	260,599
2018	254,368

* WMC purchases fresh water from Syarikat Air Negeri Sembilan Sdn. Bhd. We do not withdraw water from any other source.

Greenhouse Gas Emissions

Effectively managing emissions relies on sound monitoring systems and relevant strategies. At Cenviro, we are working to establish a firm baseline of emissions data from which to establish policies and targets for reductions. We have adopted the internationally recognised Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Version) for measuring our emissions.

Emissions Data

Total GHG emissions	2014	2015	2016	2017	2018
Scope 1 Direct GHG emissions (tonnes)	18,823	15,333	10,075.12	163.75*	5,561.07
Scope 2 Indirect GHG emissions (tonnes)	10,218	12,725	12,543.61	11,877.26	12,830.15
Scope 3 Other indirect GHG emissions (tonnes)	10,261	10,236	6,620.76	512.48**	451.27
TOTAL	39,302	38,294	29,239.49	12,553.49**	18,842.49

* Reduction in Scope 1 emissions between 2016 and 2017 was due to the revision of data boundary to exclude plant operations' diesel and RO consumption as well as contractor-owned vehicles.

**Restatement of 2017 data following revised calculations.

Total GHG emissions in 2018 covered diesel consumption in plant operations.

Breakdown of Scope 1, 2 and 3 Emissions:

Scope 1	Scope 2	Scope 3
Direct GHG Emissions Emissions from sources that are owned or controlled by Cenviro.	Indirect GHG Emissions Emissions as a consequence of our activities that occur at sources owned or controlled by another entity.	Other Indirect GHG Emissions Emissions as a consequence of our activities that occur at sources owned or controlled by another entity.
Company-Owned Vehicles GHG emissions produced by our fleet of company-owned vehicles were calculated from purchasing fuel for	Purchased Electricity Consumption Indirect emissions from electricity consumption is calculated for Scope 2.	Employee-Owned Vehicles CO ₂ emissions from the consumption of fuel for employee-owned vehicles were derived from the emission factor published by the IPCC Guidelines for National GHG Inventories.
cars, motorcycles, 4-wheel drives, vans, trucks and other heavy industrial vehicles. The CO_2 emissions from the consumption of fuel were derived from the emission factor published by the IPCC Guidelines for National GHG Inventories.		Air Travel GHG emissions resulting from air travel were measured from origin to destination including the number of employees on board, distance and flight class. We have included all short and long-haul flights in our GHG calculation. The data is tracked by the HR and Admin departments. We use the International Civil Aviation Organisation's Carbon Emissions
Plant Operations Diesel consumption.		Calculator to quantify our carbon emissions due to our business air travel.

* The GHG emissions from the use of electricity were derived using the emissions factors published by the Malaysian Green Technology Corporation for the Peninsular grid.





18,842.49 tonnes of GHG emissions

Climate-Related Financial Disclosures

In accordance with the updated requirements of Bursa Malaysia's Sustainability Reporting Guide 2nd Edition, Cenviro is moving to address the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). We welcome this opportunity to introduce a new level of transparency to our climaterelated governance, risks and operations. Moving forward, we will be reviewing the recommendations set out by the TCFD and endorsed by Bursa Malaysia and will make appropriate inclusions to future reports. Our preliminary disclosure against TCFD requirements is as follows:

Governance

Cenviro's climate-related risks and impacts are assessed by the ERCMC, who report to top management on the basis of decision making for policies and resource allocations related to climate change and environmental impacts. Management in turn report on progress to the Board, who serve to steer Cenviro towards achieving its sustainability agenda, including climate-friendly business practices.

Risk Management

Climate-related and other environmental risks at KASB are managed through our EMP, which is monitored annually by an appointed third-party consultant.

Metrics and Targets

Cenviro monitors our Scope 1, 2 and 3 emissions in order to assess our climate-related impacts and identify opportunities for improvement. At present we do not have targets in place for climate-related performance, but we continue to actively monitor our performance with the goal of establishing suitable targets in the near future.

Energy

At Cenviro, we primarily consume energy in the form of purchased electricity, fuel and self-generated solar energy. Ensuring the efficiency of this consumption is vital as it not only helps us to reduce our greenhouse gas emissions, but also our expenses. Through the implementation of new technologies and industry best practices, we strive to improve energy efficiency across all our operations.

Electricity Consumption

Our operations are energy-intensive by nature, but we are committed to minimising our electricity consumption where possible. To that end, we have in place an Energy Management Plan to drive the implementation of energy saving measures at WMC. Additionally, in 2017, Management undertook a review of the present and future energy consumption in WMC.

Purchased Electricity Consumption (kWh)

2014	2015			
14,960,527	17,173,311			
2016	2017			
16,927,943	16,028,692			
2018				
17.314.636				



2010 (C I)

	2018 (GJ)
Total fuel consumption from non-renewable sources*	136,312
Total fuel consumption from renewable sources	
Energy Consumed** (Electricity consumption)	62,332.69
Energy Sold** (Electricity sold)	37,489.54
Total Energy Consumption	236,134.23

* Includes fuel consumption from motor vehicle usage and diesel used for SWtE plant. Fuel conversion metrics based on those provided by the U.S. Energy Information Administration.

**Cenviro does not consume or sell heating, cooling or steam.

Solar Energy

Our energy reduction strategy includes a focus on developing our renewable energy agenda, namely the production and consumption of solar energy. In 2018, we commissioned a 1MWp peak self-consumption rooftop solar panel system at KASB warehouse, with a projected annual energy yield of 1,350 MWh, amounting to over 1,000 tonnes of CO_2 emission reductions per year. In addition to the KASB warehouse system, we continue to operate a 41.62 kWp solar panel system on the rooftop of EPIC, which began operating in July 2017 with a projected annual energy yield of 47 MWh.

The total combined solar energy generated in 2018 by these two systems was 249,109 kWh.



249,109 kWh of solar energy was generated at KASB In April 2018, Cenviro demonstrated its support for the development of Malaysia's renewable energy sector by hosting an exhibit at the 2018 International Sustainable Energy Summit (ISES) in Sarawak. A biennial event jointly organised by the Ministry of Energy, Green Technology and Water, and the Sustainable Energy Department Authority Malaysia, ISES acts as a knowledge-sharing and networking platform for the realisation of Malaysia's National Renewable Energy Action Plan.

Fuel Consumption

We use both diesel and reconstituted oil (RO) as fuel for our incinerators at WMC. In 2018, we consumed a total of 1,656 tonnes of RO and 1,665 tonnes of diesel to power our facilities.

Year	RO (metric tonnes)	Diesel (metric tonnes)	Ratio
2014	4,322	836	5.2:1
2015	3,126	693	4.5:1
2016	2,164	966	2.2:1
2017	1,330	676	1.96:1
2018	1,656	1,665	0.99:1

Odour-Mitigating Practices -

Cenviro regularly interacts with the communities we operate in to address any concerns that they might have about our operations. For example, Cenviro received notices from the community located nearby about an odour in the area. Our employees then investigated the area with ambient analysers while addressing concerns raised by the local community.





Investing in Our Most Valuable Resource

At Cenviro, our operations are centred on trust. We seek to be both a trusted service provider and employer. We want our employees to feel safe, secure and supported in their well-being and development. It is only in this manner that we are able to attract, nurture and retain the best and brightest talents – an essential component of our growth strategy.

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Malaysian Timber Gertification Columni (MTCC)

Our people culture

How effective a company is ultimately depends on its people. In an industry like ours, the safety and wellbeing of our employees is the number one priority. 13 contre Contre

PERFORMANCE OVERVIEW

Training attended by **310 employees** at a total cost of **RM630,902**

Provided **212** employee training programmes

Recorded our **lowest** level of injuries since 2010 at **31 incidents**

Average training hours per employee was **30.33 hours**

WORKFORCE BREAKDOWN BREAKDOWN BY DESIGNATION **OUR WORKFORCE** BY GENDER Cenviro Cenviro: 186 executives EISB: 115 executives Female: 116 (25.8%) EISB WORKFORCE BREAKDOWN BY CATEGORY Female: 157 (9.9%) **TOTAL WORKFORCE:** Cenviro 2,032 Permanent: 419 WOMEN IN (93.1%) MANAGEMENT Non-Permanent: 31 (6.9%) Cenviro: 450 Cenviro EISB: 1,582 Women in EISB management: 30.90% Permanent: 1,376 Women in top management: (87.0%) Non-Permanent: 206 (13.0%) **TURNOVER RATE** EISB Cenviro Women in 9.56% management: 15.79% EISB Women in top management: 1.9% 7.9%

SAFETY, HEALTH AND WELL-BEING AT THE WORKPLACE

At Cenviro, our employees and contractors work in complex and fast-moving environments with regular exposure to heavy equipment and hazardous materials. In spite of these challenging conditions, we take pride in maintaining a safe and productive workplace.

Ensuring that all of our site personnel make it home safely every day is a bigger priority for us than short-term financial gain.

Our Health, Safety, Security and Environment (HSSE) Department is responsible for administering policies and procedures in place to safeguard the well-being of our employees and other potentially affected parties. In line with the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, WMC also has in place an Occupational Safety and Health Committee to oversee the management of safety and health on-site. We also have in place a Penalty Matrix System to improve contractors' awareness of and compliance with safety, health and environment procedures. The Penalty Matrix System also guides our contractors in cases of noncompliance.

With our solid policies, leadership and safety culture in place, we continue to work toward our goal of zero accidents.



Health and Safety Performance

We recorded a total of 31 HSE incidents this year, representing a decrease over the 34 incidents recorded in 2017. This is the lowest recorded level of incidents since 2010. We also recorded 530,867 man-hours with 3 lost time injury (LTI) events. Our target for the year was to reduce the number of reported incidents and the number of lost time incidents by 20% compared to 2016 levels and to receive zero non-conformance reports from authorities, regulators and customers. We did not meet our target due to the LTIs that occurred during the year.

Programmes and practices that we established in 2018 to meet these targets included:

- Conduct monthly machinery inspections for forklifts, heavy machinery and trucks
- Conduct monthly drill exercises covering all facilities
- Closely follow-up on recommendations and findings from relevant regulatory and government agencies
- Perform evaluation of compliance for KASB Legal Register including EIA Written Consent and Compliance Schedule
- CAPA issuance for non-compliance due to legal and customer requirements

Number of Incidents Recorded

Year	Number of Incidents Recorded
2010	36
2011	36
2012	40
2013	38
2014	59
2015	53
2016	35
2017	34
2018	31

Towards A Safer Cenviro

At Cenviro, we are firm believers in learning from our mistakes. We therefore developed comprehensive action plans in response to the three LTIs that occurred in 2018 to ensure that such incidents are not repeated. These plans were targeted and specific and sought to address not only site conditions, but also employee awareness and workplace practices.

Through these actions we hope to promote safety for all employees, contractors and other stakeholders potentially impacted by our operations.



HSE Audits

In 2018, KASB, CS and CRR were subject to a certification audit by Bureau Veritas Certification for the recertification of OHSAS 18001:2007 and the upgrading of ISO 9001 and ISO 14001 to the 2015 versions. The integration project for the three companies began in June 2018 and comprised a gap analysis, documentation upgrading and integration, training, internal audit and management review. The project also included the integration of the Integrated Management Systems Policy, which was renamed the HSE Policy in 2018. Three positive observations were raised by the auditors during the process, including employees' commitment to improve the existing management system. Six non-conformance areas were also raised for our improvement, all of which were addressed and successfully closed within the given deadline.

This year, we were also audited by 48 of our customers to ensure our practices meet their expectations and regulatory requirements for responsible waste disposal. These audits primarily focused on management commitment, safety management, environmental management, quality management and our scheduled waste handling process. There were no major findings noticed by any of the customers and any concerns raised were resolved accordingly. Furthermore, most customers commented positively on the state of our management systems and operational control.

CHWMEG, Inc. Facility Review

In 2018, Cenviro's facilities were reviewed by CHWMEG, Inc., a non-profit trade organisation that promotes responsible waste stewardship globally. CHWMEG, Inc.'s membership comprises companies representing a number of industrial sectors, including chemical, petroleum, and electronic and other manufacturing sectors. The organisation's activities include conducting comprehensive, independent reviews of commercial facilities that treat, store or otherwise handle waste. Review reports are distributed to members and include valuable information on facility compliance history, incident history, environmental and operational risk, and financial strength.

CHWMEG, Inc.'s report on Cenviro's facilities provided comprehensive information that helped the company evaluate its facilities against industry benchmarks and evaluate the short- and long-term liabilities associated with the facility. The evaluation findings were that Cenviro's facility is performing acceptably compared to industry standards.





48 customers audited Cenviro to ensure requirements were met

Health and Safety Training

Achieving zero accidents means maintaining a workforce that is up to date with best industry practices related to health and safety. In line with this goal, in 2018, we invested RM202,479 in health and safety training for our employees. Our aim is to exceed the minimum number of competent personnel required by relevant regulations in order to ensure that HSE aptitude permeates our workforce. Examples of training provided in 2018 include:

- Oil & Gas Safety Passport
- Defensive driving safety
- Ergonomic programme
- In-house chemical handling
- HSE human capital development
- Safety and Health Officer-related
- Authorised Gas Tester

In addition to providing HSE training for our workforce, we ensure that the contractors we work with are up to date on HSE practices through our Contractor Management Programme. Under this programme, contractors' HSE competency and performance is evaluated and rated on an annual basis by Cenviro's HSSE Department. As a prerequisite for working at Cenviro's premises, we also require that contractors attend a Contractor HSE Induction programme.

Individuals who fail to comply with Cenviro's HSE requirements will be issued a Penalty Ticket. If a contractor company fails to comply with Cenviro's HSE requirements, the HSSE Department will issue a CAPA request.



Year	Total Training Hours	Average Training Hours per Contractor
2014	1,008	5.54
2015	1,118	5.85
2016	495	3.0
2017	225	1.76
2018	529	4.0





Achieving **zero accidents** means maintaining a workforce that is up to date with best industry practices related to health and safety

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Health and Safety Initiatives

In 2018, Cenviro undertook a number of HSE initiatives. Highlights include:

Firefighting System Upgrade -

We continued with the fire prevention and firefighting system improvements project we began in 2016. This year we were able to finalise the project by completing an upgrade of the firefighting equipment at CRR. This included upgrading according to regulatory requirements from the Fire and Rescue Department and to comply with requirements of the Uniform Building By-Laws 1984.

O Hepatitis B Immunisation

We continued to offer free vaccinations to all operational employees at WMC in order to protect them against exposure to the Hepatitis B virus. Employees undergo an annual medical check up that will also determine if they have Hepatitis B immunisation. A total of two employees were vaccinated.

O Take 5

In order to strengthen the safety culture at Cenviro, we introduced the Take 5 for Safety practice. This internal initiative prompts employees to take five minutes to think about the job they are about to perform and any potential hazards prior to starting any task. Take 5 is about employees carrying out five steps when undertaking any task:

- stop, step back, observe
- think through the task
- identify any hazards
- control the hazards
- complete the task safely

Through Take 5, we hope to instil a sense of responsibility within all Cenviro employees on the importance of safety in the workplace.

O HSE Contractor Network

Previously known as Kualiti Alam SHE Contractor Network (KASHECN). Cenviro's regular engagements with contractors and vendors was renamed HSE Contractor Network in 2018. Three meetings of the network were held in 2018, providing opportunities for Cenviro and its contractors and vendors to review, discuss and resolve issues related to HSE at WMC. Meeting focus areas included the HSE performance such as incident statistics. learnings from incidents, use of personal protective equipment, penalty issuance and mitigation plans. One contractor was also issued a warning letter, serving as an important reminder to meeting attendees on Cenviro's HSE performance expectations.

O Cenviro Wellness Centre

The Cenviro Wellness Centre comprises an on-site clinic and the Fitness Zone established in 2017 and 2018 respectively. The on-site clinic provides employees and contractors at WMC with primary and preventative care as well as first-level incident response care. In 2018, the on-site clinic treated 1,123 patients prior to its discontinued operations.

The Fitness Zone comprises a mini gym, acupuncture treatments, physiotherapy, dietary consultation and other occupational safety and health-related treatments. Since its establishment, the Fitness Zone has benefitted employees at WMC and Cenviro headquarters.

O Risk Assessments

Cenviro conducts risk assessments for all activities. These assessments are then reviewed on an annual basis.

In accordance with Occupational Safety and Health (Use and Standard of Exposure Chemical Hazardous to Health) Regulations 2000 and Factories and Machinery (Noise Exposure) Regulations 1989, this year we also completed a Chemical Health Risk Assessment for KASB and CRR, reviewing a total of 49 work units. Other assessments completed include Additional Noise Exposure Monitoring for CRR and inspection, testing and examination of Local Exhaust Ventilation system.

O SOHELP

The Systematic Occupational Health Enhancement Level Programme, known as SOHELP, is an intervention programme by the Department of Occupational Safety and Health (DOSH). SOHELP aims to help industries improve occupational health and industrial hygiene standards at the workplace and to meet regulatory requirements. SOHELP includes three areas – chemical safety, prevention of noise-induced hearing loss and ergonomics – which are evaluated by a DOSH verifier. In February 2018, Cenviro achieved the fifth and highest SOHELP implementation level for all three areas.



49 work units reviewed for the Chemical Health Risk Assestment



Achieved the **fifth and highest** SOHELP implementation level for all three areas

Focus on Safety

We regularly hold emergency response drills to test the readiness of our teams to respond to incidents. In 2018, we held four drills, with the largest being a night rescue drill held at our tank farm. This drill, which was held in collaboration with Jabatan Bomba dan Penyelamat Malaysia (BOMBA), was based on a scenario of a gas leak at the tank farm in WMC. During the drill, employees were evacuated from the area, and a search and rescue operation undertaken to recover two personnel from the site. The two 'victims' were then sent for decontamination and medical treatment while our Fire and Hazmat team resolved the gas leak.

Overall, the outcome of the exercise was satisfactory, with employees on duty aware and alert to the situation and able to assist accordingly. The drill also allowed us to identify areas for improvement in communication between the Emergency Response Command Centre and BOMBA.



At Cenviro we believe there is no such thing as being too prepared. We are always looking beyond compliance and testing the team's readiness to face emergencies as safety is our first priority."

- Muhammad Fauzan Baharudin Head of Health, Safety, Security & Environment

Health and Safety Engagement

Occupational Health, Safety, Environment and Management (OHSEM) Day 2018

OHSEM Day is an annual event held by Cenviro to promote safety and health awareness in the workplace. The 2018 event, which was themed 'Health is Wealth', featured various health activities and awareness talks including free health and dental check-ups, sports events and an exhibition and bazaar. OHSEM Day saw participation from DOSH, DOE, the Fire and Rescue Department and NIOSH, among other stakeholders.





Mega OSH Toolbox

In May 2018, Cenviro's participation in the Mega OSH Toolbox event for the largest number of simultaneous safety briefings, or Toolbox Talks, was recorded in Malaysia Book of Records. The event, which was organised by various NGOs, was supported by the National Council for Occupational Safety and Health and DOSH. Over 200 Cenviro employees contributed to this record-breaking event, which included a total of 52,494 participants around the country.



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DEVELOPING A NEXT GENERATION WORKFORCE

Our goal of achieving a sustainable future for the waste management industry relies on our ability to recruit and retain a diverse, talented and inclusive workforce.

It is only by investing in our employees' skills and career development that we can foster the innovative thinking that is needed to achieve our business ambitions. Through our employee training and development programmes, we seek to foster a workforce that is armed with the skills, expertise and multinational mindset needed to advance our industry. We also endeavour to enhance leadership capabilities by focusing on internal talent development in order to create a ready pool of future leaders.



Training and Development

Our people are the driving force behind our business, and we believe that investing in their future is paramount to investing in our success. We are committed to fostering the next generation of waste-industry professionals, with the necessary skills and expertise to drive the innovation we need. Our in-house training courses support this goal by building our employees' technical knowledge and capability. We also ensure the competency of our team by sending employees for external certification training in accordance with regulatory requirements.





95% of our employees received performance appraisals

310 employees trained

30.33

average

training

hours

Competency Training

Handling scheduled waste is both a highly technical and hazardous process. At Cenviro, we strive to ensure that our employees are suitably equipped with the necessary knowledge and competencies to conduct this work. Our target is to go beyond minimum compliance by maintaining a high number of certified competent employees across all competency areas.

In line with this target, in 2018, we sent 19 of our employees for Certified Environmental Professional in Scheduled Waste Management Training organised by the Environmental Institute of Malaysia (EiMAS). A further 17 employees, including 2 who attended the EiMAS training, participated in competency trainings to secure one-year competency certificates in various technical aspects of health and safety. An additional 16 employees secured full competency certificates.

Leadership Training and Development

The strength of our Group relies on the quality of leadership delivered by Cenviro's management. To ensure this quality, and to help our leaders remain focused and productive, we provide training to people managers on an ad hoc basis. In 2018, we held 12 trainings, which were attended by 69 members of management.

Performance Management

In order to provide our employees with valuable career feedback, we conduct bi-annual performance appraisals. In 2018, 95% of our employees were appraised, compared with 87% in 2017. Employees who did not receive performance reviews included those serving probationary or notice periods and those reaching retirement.

In 2018, we also introduced a peer review programme for senior employees, which includes an evaluation by three peers of an equivalent level of seniority.

Enhancing Our Internal Processes

In order to support our workforce with future-ready internal processes, in 2017, we moved to integrate our information systems using SAP suite on HANA enterprise software. With SAP providing industry-specific solutions, sound data tracking and group-wide access to information through a centralised system, our employees are able to streamline their workflow and improve Cenviro's operational efficiency. The cloud-based system has also offered direct environmental benefits by reducing both our energy requirements and paper consumption.

Phase 1 of the SAP implementation process went live in 2018. In order to familiarise employees with the new system, classroom-based trainings were held in 2017 with additional one-on-one sessions also offered to employees in 2018. Employee uptake of the programme was also evaluated later in the year through a survey that determined departments requiring additional instruction and by exploring areas for improvement. Through the completion of the survey, we were able to identify and assist two departments in need of additional support.

Driving Efficiency Through Automation



Weighbridge Processes

Processes have been streamlined so that data is only entered into a single system, rather than three separate systems, as previously required.



Human Resource Module

All Human Resource (HR) related content for employees, including overtime submission and approval, leave application, salary status and claims submissions is stored within a single centralised system.



Finance Module

Vendor payments are no longer paper-based but managed digitally with automatic digital checks prior to payment approvals.



A single system can now be used to

track waste from first point of pick-up to final disposal, including ancillary information such as billing, final disposal site and treatment type.

Maintaining an Engaged Workforce

Our status as a key industry player relies on our ability to attract and retain talented and motivated individuals for our workforce. As the Malaysian economy grows and local industries develop, the skilled and certified professionals who make up our workforce are in high demand. In 2018, our turnover rate was 9.56%.

A crucial component of promoting an engaged and satisfied workforce is fostering trust and transparency between HR and employees. In order to encourage open communication of this kind at Cenviro, we introduced monthly Employee Focus Groups and weekly plant visits by HR. During these sessions, employees are able to share concerns, issues and grievances so that problems can be escalated to the relevant departments. Monthly Employee Focus Groups include at least 20 employees from various departments while the plant visits involve at least 2 representatives from HR. These initiatives not only provide employees with a platform to voice their concerns, but also allow the HR department to be proactive in identifying and resolving issues in the workplace.

In 2018, we also established a Monthly HR Service Counter offering employees one-on-one sessions with the HR department. The Service Counter, which opens three days after the distribution of payment slips, provides an avenue for employees to address any payroll issues, raise any grievances and even assist employees with their annual tax declaration.

In addition, we hold a number of events throughout the year that bring our workforce together in celebration. These included birthday and major holiday celebrations where employees received birthday gifts, Ang Pow, Duit Raya and other giveaways. We also hosted Operational Excellence Awards during which our top-performing employees were recognised for their achievements. At the end of the year, we thanked our employees for their efforts in 2018 by extending an invitation to all employees and their families to join us for the Cenviro Family Funday in Sunway Lagoon.

Open Communication at Cenviro

In 2018, we hosted two townhall sessions to inform employees about the company's mid-year performance and project updates, to welcome our new Chairman and to introduce the Executive Committee (EXCO).

These sessions promoted transparency and trust, which allowed the Board members, management and employees to come together in discussion about issues and action plans.



PROMOTING DIVERSITY AND EQUAL OPPORTUNITY

At Cenviro, we know that people of all backgrounds and experiences have unique and valuable contributions to make for the growth of our company.

We believe wholeheartedly in equality, and do not discriminate based on race, age, gender or other factors. We are particularly cognisant that, as a traditionally maledominated industry, waste management tends to attract few female employees. In recognition of this, we strive to support the inclusion of women in our ranks and are committed to providing equal opportunities to all under our code of conduct. To further support working mothers at our facilities, in 2018, we established a lactation room in WMC.

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Our commitment to gender diversity spans the entirety of our business operations, from our on-the-ground workforce to our highest level of management. Throughout the leadership changes that occurred in 2018, retaining a representative and gender-diverse Board of Directors remained a priority for Cenviro. We are therefore proud to report a gender composition of 4:2 women to men on our Board.



SPOTLIGHT ON DIVERSITY

Safra Aina Adnan Age: 31 Department: HSSE

Q: What is it like working at the operations site? What are the challenges faced by you when working at this male-dominated site? My co-workers and I work in a hazardous environment that can be both physically and mentally demanding, regardless of gender. My prior working experience in the construction industry helps me to successfully overcome these challenges and complete my assigned tasks safely and efficiently. At Cenviro, my male co-workers are always respectful of my ability to perform my work.

Q: How do you feel when carrying out what can be perceived as a more male-dominated job?

Several studies conducted to examine the gender-gap in industries have shown that women generally take a different approach to the world of work compared to men. These different points of view and function have provided the space and opportunities for me to introduce a new perspective to my male-dominated team within the department as well as Cenviro as a whole. I sincerely believe that gender inclusivity can offer vibrant organisational path, directions and diversion towards achieving a better and balanced work environment.



Safra holds a Master of Environmental Engineering and a Bachelor of Science in Environmental & Occupational Health. She is also an EnviroCert Certified Erosion, Sediment and Storm Water Inspector and is recognised by the DOE as a Competent Scheduled Waste Handler. Safra joined Cenviro in May 2018 and is the Assistant Manager - Environmental in the HSSE Department.



Rahayu holds a Bachelor's Degree in Chemical Engineering. She is also a CePSWaM certified personnel and is recognised by the DOE as a Competent Person in scheduled waste management. Rahayu joined KASB in December 2007 and is the Manager of the Waste Evaluation Section in the EMS Department. **Rahayu Rais** Age: 48 Department: EMS

Q: What is it like working at the operations site? What are the challenges faced by you when working at this male-dominated site?

I don't feel as though I face discrimination or other issues working at the operations site. My male co-workers are fully supportive of me and we really work together as a team. The most important thing is that we know the responsibilities of our job and complete our assigned tasks. Other than that, there is mutual respect – we are free to express our viewpoint and discuss any issues.

Q: How do you feel when carrying out what can be perceived as a more male-dominated job?

I enjoy the challenging nature of my job and feel proud and excited that I am able to contribute my knowledge and skills in Scheduled Waste Management. My principle is to deliver the best outcome on whatever task I am assigned.

HUMAN RIGHTS

At Cenviro, we believe that everyone should be treated with dignity and respect. We do not tolerate any form of discrimination or human rights violation in the workplace and work to ensure the same holds true of our supply chain and local community.

Across our group, our stance against discrimination, harassment and violence in the workplace is communicated to all personnel through the Cenviro Employee Handbook and Code of Conduct. The Code applies to all employees of Cenviro and its associate companies.

We uphold relevant local legislation and regulations pertaining to employee and human rights and comply with the Children and Young Persons (Employment) Act 1966 regarding the employment of individuals below the age of 18 years. We expect our suppliers to do the same and evaluate suppliers and contractors accordingly to ensure that human and workers' rights are respected.

We also support freedom of association and recognise the rights of our employees to bargain collectively. In 2018, the percentages of employees covered by collective bargaining agreements at Cenviro and EISB were 26% and 42% respectively.



employees covered by collective bargaining agreement



Giving Back for the Greater Good

At Cenviro, we seek to create a better future not only for our industry and our environment, but also for the communities where we work. We aim to drive local economic development and well-being by serving as a responsible neighbour and trusted partner in all of our locations of operation. Giving back to the community is a key part of our vision for Malaysia's sustainable future.

Community engagement with Cenviro

We believe our business contributes to the well-being of the nation and revitalises the local economy. Working with communities enables us to address local needs and ensure our accountability.

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13 CLIMATE

Bringing People Together

At Cenviro, we believe in the value of occasions that bring our community together, whether for learning, celebration or the greater good. We support such events by doing what we do best – providing reliable waste services and education.

DOE Partnerships

In 2018, Cenviro supported national and state environmental departments through collaboration on a number of community programmes. This included supporting DOE Malaysia's e-waste carnival collection in Kuala Lipis; participating in DOE Johor's beach cleaning programme; collaborating with DOE Sabah for its Hari Ozone Sabah celebration and hosting Hari Alam Sekitar Negara 2018 at the state level with the DOE Negeri Sembilan. Through these partnerships, we not only enriched our community but also strengthened our relationships with these key regulatory agencies.

Penang International Green Carnival

Cenviro once again collaborated with Penang Green Council to serve as a strategic waste partner for the Penang International Green Carnival in 2018. Through the collaboration, Cenviro endeavoured to raise awareness on the safe and responsible disposal of household hazardous waste such as used light tubes and batteries – TUBA waste – by collecting and safely transporting the waste for treatment and disposal at WMC.





Hasanah Bersama Rakyat Events

In support of Khazanah Nasional Berhad, Cenviro's parent company, we participated in three 'Hasanah Bersama Rakyat' events in 2018. The Hasanah Bersama Rakyat programme, which is intended to foster unity among Malaysians, brings together government, government-linked and nongovernment agencies and organisations to offer information and services alongside event activities.



Sharing Our Knowledge

We know that the waste industry can be confusing. More importantly, we know that this confusion can be a real barrier to responsible waste management – either through non-participation in recycling and waste diversion efforts, mishandling of materials by waste generators or the selection of an irresponsible or underqualified waste hauler and processor. In order to prevent misinformation or misunderstanding and promote transparency within the industry, we undertake efforts to share our industry knowledge with the general public.





Community Outreach Roadshows

In 2018, Cenviro continued to visit local schools, Majlis Pengurusan Komuniti Kampung and regulators to provide information about our operations. By educating community stakeholders on what it is that Cenviro does, we hope to promote public understanding of the importance of responsible waste management, minimise conflict with the community and increase Cenviro's industry recognition. In addition to our general community roadshows, Cenviro held 5 RFL roadshows for schools, educating over 1,100 students, teachers and other participants on the RFL programme, waste recycling and how Cenviro's services contribute to the environment.

Cenviro Site Visits

We encourage educational site visits in order to support the development of Malaysia's up and coming industry workforce. In 2018, Cenviro hosted 23 group visits, comprising 621 students. During these visits, students gained first-hand experience of Cenviro's operations and best-in-class industry practices. Students also learned about career opportunities in waste management and associated technical trades.








Driving Change through Recycling

At Cenviro, we see RFL not only as a recycling programme, but also an opportunity to drive communityled positive change across different dimensions of society. Our outreach programmes under RFL include environmental education targeted towards our country's next generation.



S.M.A.R.T. Ranger Programme

This year, Cenviro through RFL programmes collaborated with Global Environment Centre in partnership with Coca-Cola Foundation to implement the S.M.A.R.T. Ranger programme in schools and communities in the Klang Valley. This initiative is to support Coca-Cola's World Without Waste pledge. The two-year project seeks to create awareness among students of the importance of recycling and zero-waste practices. The initiative is expected to benefit 40,000 students and community members by the year 2020.



and Ethical Business Practices

Good Governance

Steering Cenviro Towards Excellence

Good governance is grounded in responsible leaders, sound policies and ethical practices. Together these fundamentals make up the foundation from which trust is built. At Cenviro, we believe wholeheartedly in the importance of this foundation. Our corporate governance system has helped establish the Company's credibility and will continue to strengthen stakeholder trust in the future. As we move forward, improving our governance practices and promoting executive excellence remains our priority.

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8 DECENT

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Waste management solutions for an evolving society

Our commitment to the environment is at the heart of our business. It governs how we work, the materials we buy and the decisions we make. Excellence in environmental management is at the core of our continued leadership in integrated environmental solutions.

THE BOARD

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Cenviro's drive towards a sustainable future is led by the Board, who are responsible for setting and overseeing the strategic direction of the Company. As the highest governing body, the Board governs the business and affairs of the company, establishing strategies and financial objectives and monitoring the performance of management. The Board adheres to the highest standards of corporate governance and sets the tone for Cenviro's business ethics and values.

66.7% 33.3% Female Male



Managing Director

Non-Independent Non-Executive Director



Non-Independent Non-Executive Director

Our Directors bring a range of knowledge and experience to the Group, including management skills and expertise gained from a variety of industries. Appointments to the Board are overseen by the Group Nomination and Remuneration Committee, who seek to establish a balance of valuable perspectives within the Board. Candidates are evaluated based on personal and professional integrity, sound judgement, professional skills and experience, independence, potential conflicts of interest, diversity and potential for serving the long-term interests of shareholders.

In addition to the Group Nomination and Remuneration Committee, the Board has established a Group Audit and Risk Committee as well as a Group Investment Committee to assist in the execution of its responsibilities for the Group. All Committees of the Board are guided by their respective terms of reference.

Board Composition in 2018

Name	Designation	Age	Meeting Attendance	Meeting Attendance (%)
Tan Sri Dr Azmil Khalili Dato' Khalid (Appointed on 01.10.2018)	Independent Non-Executive Chairman	59	1/1	100
Datin Paduka Che Asmah Ibrahim	Independent Non-Executive Director	56	7/7	100
Loh Tzu Anne	Non-Independent Non-Executive Director	44	7/7	100
Yeo Kar Peng	Independent Non-Executive Director	58	7/7	100

Board New Appointments in 2019

Name	Designation	Age	Meeting Attendance	Meeting Attendance (%)
Serena Tan Mei Shwen (Appointed on 02.04.2019)	Non-Independent Non-Executive Director	41	1/2	50
Dr Johari Jalil (Appointed on 03.06.2019)	Managing Director	52	1/1	100

Board Resignations in 2018 and 2019

Name	Designation	Age	Meeting Attendance	Meeting Attendance (%)
Ahmad Farouk Mohamed (Resigned on 07.11.2018)	Non-Independent Non-Executive Director	46	7/7	100
Khalid Bahsoon (Resigned on 28.09.2018)	Managing Director	50	6/6	100
Nik Rizal Kamil Nik Ibrahim Kamil (Resigned on 31.10.2018)	Non-Independent Non-Executive Director	47	3/6	50
Amran Hafiz Affifudin (Appointed on 30.07.2018, Resigned on 28.02.2019)	Non-Independent Non-Executive Director	45	4/4	100

Board Meeting

The non-executive directors who make up our Board have an important role to play in upholding the company's objectivity and providing strategic guidance. As these directors are generally not involved in the day-to-day management of the Company, we have adopted initiatives to ensure that they are well supported with accurate and timely information. This includes regular briefings on prospective deals and potential developments as well as the circulation of relevant information.

The Board regularly holds Ordinary Meetings in order to review Cenviro Group's financial standing, project progress and business performance. In the event that an urgent or special matter requires attention before the next Ordinary Meeting, a Special Board Meeting will be called. In 2018, the Board held six ordinary meetings and one meeting that was held via teleconference. There were three Board meetings held between February 2019 and June 2019.

Risk Management

At Cenviro, we strive to be prepared for all manner of risk, regardless of any associated uncertainty. Cenviro has in place an Enterprise Risk Management (ERM) strategy to identify, assess, prepare for and manage any potential business risks. These risks are set out in the Corporate and Departmental Risk Register, which is updated by key management personnel and risk owners. Risks are prioritised based on likelihood and potential business impact and classified into five categories: governance, strategy and planning, operations and infrastructure, compliance and reporting.

Under the ERM strategy, programmes and processes related to risk management and the individuals responsible for these programmes were determined through an assessment conducted by Internal Audit. The assessment identified perceived risks to the company and was followed-up by interviews which were conducted to determine any potential oversight gaps.

Sustainability Governance

We have in place a robust governance structure for the oversight of sustainability at Cenviro. This structure is founded on active engagement at the highest level, where our Board play an important role in steering the organisation's sustainability strategies and policies. Guided by the Board, a responsible and dedicated culture of sustainability management permeates all levels of our organisation.

In 2018, Cenviro established a new temporary governance body, the EXCO, to provide leadership during a management transition period. During the time in which they were active, EXCO served to assist in streamlining the day-to-day operations across the group and keep Cenviro's business functions operating smoothly. EXCO was dissolved on 17 June 2019.

Role	Responsibilities
Board of Directors	Steer the organisation towards achieving its sustainability agenda
Corporate Affairs	Coordinate sustainability reporting, branding and stakeholder management
Human Resource & Administration	Oversee employee-related matters
Health, Safety, Security & Environment	Regulate, enforce and monitor environment, occupational safety and health policies
Procurement	Source goods and services
All Divisions and Departments	Track and monitor sustainability-related activities

MANAGEMENT TEAM

Cenviro's Management Team comprises talented professionals with extensive industry experience and strong leadership skills. Reporting to the Board, the Team is responsible for guiding the enaction of the Company's vision for future growth and success.

1 **Dr Johari Jalil** Managing Director

5 Wan Azrizul Azad Zainal Abidin General Manager, Human Resource & Administration

9 Nurulhuda Faisol Head of Legal 2 Adi Saufi Mohamad Daud Chief Operating Officer

6 Seow Hai Yoong General Manager, Corporate Finance

10 Sivapalan S. Kathiravale Head of Environmental Preservation and Innovation Centre **3 Zaki Abdul Aziz M. H. Daud** Senior General Manager, Commercial

7 Chang Siew Khim Company Secretary

11 Khalil Haji Shamsuri Head of Procurement 4 Mohd Norsuradi Man General Manager,

Operations 8

Ismawati Mohd Shah Head of Corporate Affairs

12 Muhammad Fauzan Baharudin

Head of Health, Safety, Security & Environment







Business Ethics

Ethical business practices require strong foundations. Accordingly, Cenviro has in place a series of policies and procedures to prevent and manage fraud and other unethical or illegal conduct. No employee of Cenviro is permitted to engage in activities that are contrary to these regulations or otherwise detrimental to the Company's interests.

In order to ensure that employees understand the standard of conduct to which they are held, Cenviro provides training and education programmes that support adherence to regulations and foster a culture of compliance.

Key Policies and Certifications at Cenviro

- Code of Conduct
- Whistle-Blowing Policy
- Drugs, Alcohol & Substance Abuse Policy
- C KASB Environmental Policy
- Guided Self-Regulation
- C KASB Integrated Management Systems Policy

- 🗅 ISO 9001: KASB, CS, CRR
- ➡ ISO 14001: KASB, CS, CRR
- OHSAS 18001: KASB, CS, CRR
- ➡ ISO/IEC 17025: KASB

In response to an audit conducted in 2016, the HR Department established and upgraded several policies in early 2018 to ensure that guidelines, procedures and processes are in place to safeguard the interests of the company and our employees. These policies also provide a better platform for compliance among employees and transparency processes.

Amongst the upgraded policies were the Training and Development Policy, Employee Code of Conduct and Whistle-Blowing Policy. The HR Department also took the opportunity to establish 17 new policies, including major policies such as:

- Recruitment and Selection Policy
- Code of Practice Sexual Harassment
- Disciplinary Management Policy
- Annual Performance and Goal Setting Policy
- Performance Improvement Plan
- Payroll Administration Policy
- Sick, Hospitalisation and Prolonged Illness Leave Policy

Through these policies, Cenviro has made significant effort to maintain a good relationship between the Company and its employees. Additionally, by establishing these written procedures we are able to achieve clearer and more transparent processes in the above-listed matters.

The Cenviro Employee Code of Conduct governs how our employees carry out their business in accordance with Cenviro's expectations for responsible, ethical and sustainable practices. In order to ensure that the code is delivering appropriate guidance, in 2018, new clauses were added to the code and existing clauses clarified. The new clauses that were added include:

- Solicitation, Bribery and Corruption .
- Information Technology
- **Records Management**
- Workplace Conduct
- Environment, Occupational Safety and Health
- Protecting the Company and Shareholders
- Dealing with Government Authorities. Political Parties and International Organisations

In 2018, we demonstrated our commitment to ethical business practices by hosting the Federation of Malaysian Manufacturers' en bloc signing of the Malaysian Anti-Corruption Commission's Corruption-Free Pledge (IBR). The signing, which took place at EPIC, featured a range of companies from the Malaysian manufacturing industry.

Whistle-Blowing

Cenviro's Whistle-Blowing Policy applies to any suspected improprieties involving employees, consultants, vendors, contractors and any other parties with a business relationship with the Company. The Policy provides a mechanism to report instances of unethical behaviour, actual or suspected fraud, dishonesty or violation of the Company's Code of Conduct or Ethics Policy without fear or retribution.

Cenviro Whistle-Blowing

Cenviro Whistle-Blowing is one of the avenues established by management for employees and ways to use Cenviro Whistle-Blowing:



1800-817-365

.0

report@cenvirowhistleblowing.com

https://cenvirowhistleblowing.com

This channel is managed by an independent professional company with 24/7 services. The whistle-

PERFORMANCE DATA

Employee Breakdown

		Cenviro	EISB		
Criteria	Value	Percentage (%)	Value	Percentage (%)	
Total number of employees	450		1,582		
By Contract Type					
Permanent employees	419	93.11			
Male	313	69.56	1,253	91.06	
Female	106	23.56	123	8.93	
Temporary employees	31	6.89			
Male	21	4.67	172	43,50	
Female	10	2.22	34	16.50	
By Employment Type					
Full-time employees	450	100	1,582	100	
Male	334	74.22	1,425	90.08	
Female	116	25.78	157	9.92	
Part-time employees					
Male	-	-	-	-	
Female	-	-		-	
By Ethnicity					
Malay	390	86.7	1,508	95.32	
Chinese	21	4.67	2	0.13	
Indian	28	6.22	72	4.55	
Others	11	2.44	-	-	
By Employee Category					
Manager	55	12.22	19	1.00	
Male	38	69.10	16	84.21	
Female	17	30.90	3	15.79	
<30 yrs old	1	1.82	-	-	
30-50 yrs old	47	85.45	13	68.42	
>50 years old	7	12.73	6	31.58	
Executive	131	29.11	92	5.80	
Male	64	48.85	51	55.43	
Female	67	51.15	41	44.57	
<30 yrs old	36	27.48	20	21.74	
30-50 yrs old	84	64.12	66	71.74	
>50 years old	11	8.40	6	6.52	
Non-Executive	264	58.67	1,476	93.20	
Male	232	87.88	1,363	92.34	
Female	32	12.12	113	7.66	
<30 years old	59	22.35	20	1.36	
30-50 yrs old	183	69.31	708	47.97	
>50 yrs old	22	8.34	748	50.68	

Occupational	Health an	d Safety Perfor	mance Data
occupational	riculti un	a Surcey r crior	mance Data

	20	016	20	017	20	018
	Employee	Contractor	Employee	Contractor	Employee	Contractor
Total Man hours	600,457	344,320	532,656	215,200	530,867	333,560
Accident-related fatalities (death)	0	0	0	0	0	0
Accident with lost workdays	2	0	1	0	2	1
Accident without lost workdays	25	8	20	13	10	18
Total of number of accidents	27	8	21	13	12	19
Total workdays lost	97	0	96	0	2	3
Fatality Rate						
No. of fatalities X 1000 / Annual average of No. employees	0	0	0	0	0	0
Incident Rate						
No. of accidents X 1000 / Annual average of No. employees	96.77	50	84.68	130	48.58	122.58
Frequency Rate						
No. of accidents X 1,000,000/ Total man-hours worked (Y)	44.97	23.23	39.43	60.41	22.60	56.96
Severity Rate						
Total workdays lost X 1,000,000 / Total man- hours worked	161.54	0	180.22	0	3.77	8.99

* As reported to DOSH in JKKP 8 Form, OSH performance.

Workplace Hazard Identification

Work-related hazards that pose a risk of high- consequence injury:	Gas Release, Explosion, Fire, Fall from Height, Hazardous Chemical
How these hazards have been identified:	Hazard Identification, Risk Assessment and Risk Control (HIRARC)
Which of these hazards have caused or contributed to high-consequence injury:	Gas Release – H_2S Gas released due to Rupture Disc burst
Actions taken to eliminate these hazards:	Engineering Control - Installation of fixed gas detector

New Employee Hires		Employee	Turnover
Number	Rate (%)	Number	Rate (%)
21	4.67	43	9.56
8	1.78	5	1.11
13	2.89	31	6.89
-	-	7	1.56
16	3.56	34	7.56
5	1.11	9	2.00
3	0.67	15	3.33
15	3.33	28	6.22
3	0.67	-	-
	Number 21 8 13 - 16 5 5 3 15	Number Rate (%) 21 4.67 8 1.78 13 2.89 - - 16 3.56 5 1.11 3 0.67 15 3.33	Number Rate (%) Number 21 4.67 43 8 1.78 5 13 2.89 31 - - 7 16 3.56 34 5 1.11 9 3 0.67 15 15 3.33 28

New Employee Hires and Employee Turnover

 Percentage of 'New Employee Hires' and 'Employee Turnover' are calculated based on the average number of employees in the year.

Average Training Hours

Year	No. of Employees	Training Cost (RM)	Average Training Cost per Employee (RM)	Training Hours	Average Training Hours per Employee
2014	315	461,529	1,465	1,785	5.67
2015	412	326,844	793	11,428	27
2016	445	509,360	1,144	15,257	34.29
2017	478	559,351	1,170	15,713	32.87
2018	310	630,902	1,402	13,648	30.33

Employee Training by Employee Category and Gender

Average Training Hours			No. of E	mployees	
Year	Manager	Executive	Non-Executive	Male	Female
2017	49.85	46.09	19.55	358	121
2018	57.3	52.7	13.6	334	116

Employees Receiving Regular Performance Appraisals in 2018

	Total	Manager	Executive	Non- Executive	Male	Female
Number	428	47	124	257	319	109
Percentage (%)	95.1	85.5	94.7	97.4	95.5	94.0

Employees Covered by Collective Bargaining Agreement in 2018

Cenviro	26 %
EISB	42%

ASSURANCE STATEMENT



BUREAU VERITAS

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Service

GRI

Content Index Cenviro 5dn. Bhd.

GRI CONTENT INDEX

GRI Standard	Disclosure	Description	Page Number(s)	Section Title(s) Omis
GRI 101: Foundati GENERAL DISCLO				
GRI 102: General	Organizatio	nal Profile		
Disclosures	102-1	Name of the exception	P7	About This Depart
2016		Name of the organization		About This Report
	102-2	Activities, brands, products,	P16-17	Group Structure
	100 7	and services	22	
	102-3	Location of headquarters	P7	About This Report
	102-4	Location of operations	P16-17	Group Structure
	102-5	Ownership and legal form	P16	Group Structure
	102-6	Markets served	P16-17	Group Structure
	102-7	Scale of the organization	P10; P16-17; P30	Financial Performance; Group
				Structure; Cenviro 2018 in Figures
	102-8	Information on employees and	P120	Performance Data
		other workers		
	102-9	Supply chain	P76	Supply Chain Management
	102-10	Significant changes to the	P16-17	Group Structure
		organization and its supply chain		
	102-11	Precautionary Principle or	P115	Risk Management
		approach		
	102-12	External Initiatives	P41; P84	Supporting the Sustainable
				Development Goals;
				Climate-Related Financial Disclosures
	102-13	Membership of associations	P96	Health and Safety Engagement
	Strategy			
	102-14	Statement from senior decision-maker	010 01	Chairman's Message
	102-15	Key impacts, risks, and opportunities		Chairman's Message; Waste Challenges
			P28; P29	in Malaysia; Towards A Circular Economy;
				Our Footprint
	Ethics and Ir		D10	Que Duis sistes
	102-16	Values, principles, standards, and	P18	Our Principles
	102-17	norms of behavior	D110, D110	Dusiness Ethics M/histle Dlausines
	102-17	Mechanisms for advice	P118; P119	Business Ethics; Whistle-Blowing
	Governance	and concerns about ethics		
	Governance			
	102-18	Governance structure	P115	Sustainability Governance
	Stakeholder	Engagement		
	102-40	List of stakeholder groups	P35-37	Stakeholder Engagement
	102-40	Collective bargaining agreements		Human Rights
	102-41	Identifying and selecting stakeholders		Material Matters
	102-42	Approach to stakeholder engagement		Stakeholder Engagement; Material Matters
	102-44	Key topics and concerns raised	P35-37; P39	Stakeholder Engagement; Material Matters
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	102-45	Entities included in the consolidated financial statements	P7; P16-17	About This Report; Group Structure
	102-46	Defining report content and topic Boundaries	P32-34; P35-37; P39-40	Managing Sustainability; Stakeholder Engagemer Material Matters
	102-47	List of material topics	P39-40 P39-40	Material Matters
	102-48	Restatements of information	P59; P82	Municipal Recycling Services;
	102-40	Restatements of Information	1 JJ, FUZ	Greenhouse Gas Emissions
	102-49	Changes in reporting	P7; P39	About This Report; Material Matters
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For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.

GRI Standard	Disclosure	Description	Page Number(s)	Section Title(s)	Omission
Material Topics					
GRI 200: Economi	ic				
Economic Perform	nance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	P7; P39-40; P29	About This Report; Material Matters; Our Footprint	
	103-2	The management approach and its components	P14; P29; P42	Our Purpose; Our Footprint; Investing in the Nation's Infrastructure	
	103-3	Evaluation of the management approach	P14; P29; P42; P10	Our Purpose; Our Footprint; Investing in the Nation's Infrastructure; Financial Performance	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	P10	Financial Performance	
Indirect Economic	: Impacts				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P14; P42; P104	About This Report; Material Matters; Our Purpose; Investing in the Nation's Infrastructure; Giving Back for the Greater Good	
	103-2	The management approach and its components	P14; P29; P42; P104	Our Purpose; Our Footprint; Investing in the Nation's Infrastructure; Giving Back for the Greater Good	
	103-3	Evaluation of the management approach	P29; P35-37; P42; P104	Our Footprint; Stakeholder Engagement; Investing in the Nation's Infrastructure; Giving Back for the Greater Good	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	P42; P45-46	Investing in the Nation's Infrastructure; Integrated Scheduled Waste Management	
	203-2	Significant indirect economic impacts	P42; P48-49; P53-54; P58; P64; P104	Investing in the Nation's Infrastructure; Scheduled Waste to Energy; Vertical Secured Landfill; Materials Recycling and Recovery; Future-Focused Integrated Solutions; Giving Back for the Greater Good	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P76	About This Report; Material Matters; Supply Chain Management	
	103-2	The management approach and its components	P76	Supply Chain Management	
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GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	P76	Supply Chain Management	

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GRI 300: Environr Materials GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components	P7; P39-40; P75; P77 P75; P77	About This Report; Material Matters; Operational Sustainability; Materials Management	
GRI 103: Management	103-2	material topic and its Boundary The management approach and its components	P77	Matters; Operational Sustainability;	
Management	103-2	material topic and its Boundary The management approach and its components	P77	Matters; Operational Sustainability;	
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	701 1	Evaluation of the management approach	P75; P77	Operational Sustainability; Materials Management	
GRI 301: Materials 2016	301-1	Materials used by weight or volume	P77	Materials Management	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P78; P84-85	About This Report; Material Matters; Environmental Management; Energy	
	103-2	The management approach and its components	P78; P84-85	Environmental Management; Energy	
	103-3	Evaluation of the management approach	P78; P84-85	Environmental Management; Energy	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	P84-85	Energy	
Water and Efflue	nts				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P78; P82	About This Report; Material Matters; Environmental Management; Water	
	103-2	The management approach and its components	P78-80; P82	Environmental Management; Water	
	103-3	Evaluation of the management approach	P78-80; P82	Environmental Management; Water	
GRI 303: Water and Effluents	303-1	Interactions with water as a shared resource	P79; P82	Environmental Management at KASB; Water	
2018	303-2	Management of water discharge-related impacts	P79; P82	Environmental Management at KASB; Water	
	303-3	Water withdrawal	P82	Water	
Emissions					
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P78-79; P82	About This Report; Material Matters; Environmental Management; Greenhouse Gas Emissions	
	103-2	The management approach and its components	P78-79; P82-83	Environmental Management; Greenhouse Gas Emissions	
	103-3	Evaluation of the management approach	P78-79; P82-83	Environmental Management; Greenhouse Gas Emissions	

GRI Standard	Disclosure	Description	Page Number(s)	Section Title(s)	Omission
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	P82-83	Greenhouse Gas Emissions	
	305-2	Energy indirect (Scope 2) GHG emissions	P82-83	Greenhouse Gas Emissions	
	305-3	Other indirect (Scope 3) GHG emissions	P82-83	Greenhouse Gas Emissions	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P78-79; P81	About This Report; Material Matters; Environmental Management; Internal Waste	
	103-2	The management approach and its components	P78-79; P81	Environmental Management; Internal Waste	
	103-3	Evaluation of the management approach	P78-79; P81	Environmental Management; Internal Waste	
GRI 306: Effluents and Waste 2016	306-2	Waste by type and disposal method	P81	Internal Waste	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P78-80	About This Report; Material Matters; Environmental Management	
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GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	P79	Managing Environmental Non-Compliance	
GRI 400: Social					
Occupational Heal	th and Safety	1			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P86; P89	About This Report; Material Matters; Investing in Our Most Valuable Resource; Safety, Health and Well- Being at the Workplace	
	103-2	The management approach and its components	P86; P90; P91	Investing in Our Most Valuable Resource; Health and Safety Performance; HSE Audits	
	103-3	Evaluation of the management approach	P35-37; P90; P91	Stakeholder Engagement; Health and Safety Performance; HSE Audits	
GRI 403: Occupational Health and Safety 2016	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work- related fatalities	P90; P121	Health and Safety Performance; Occupational Health and Safety Performance Data; Workplace Hazard Identification	Information unavailable for occupational diseas rate, lost-day rate, absentee rate and regional and gendei based breakdowns disclosure. We will continue to develop our data tracking in this area in order to disclose on the updated GRI 403: Occupational Health and Safety 2018 in

GRI Standard	Disclosure	Description	Page Number(s)	Section Title(s)	Omission
Training and Educ	ation				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P86; P97	About This Report; Material Matters; Investing in Our Most Valuable Resource; Developing A Next Generation Workforce	
	103-2	The management approach and its components	P97	Developing A Next Generation Workforce	
	103-3	Evaluation of the management approach	P97-98	Developing A Next Generation Workforce	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	P98; P122	Training and Development; Average Training Hours	
	404-2	Programs for upgrading employee skills and transition assistance programs	P98	Training and Development	
	404-3	Percentage of employees receiving regular performance and career development reviews	P98; P122	Performance Management; Employees Receiving Regular Performance Appraisals in 2018	
Diversity and Equa	al Opportunit	У			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P101	About This Report; Material Matters; Promoting Diversity and Equal Opportunity	
	103-2	The management approach and its components	P101	Promoting Diversity and Equal Opportunity	
	103-3	Evaluation of the management approach	P120; P122	Employee Breakdown; New Employee Hires and Employee Turnover	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	P114; P120; P122	Board Composition in 2018; Employee Breakdown; New Employee Hires and Employee Turnover	
Local Communitie	S				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	P7; P39-40; P104	About This Report; Material Matters; Giving Back for the Greater Good	
	103-2	The management approach and its components	P104	Giving Back for the Greater Good	
	103-3	Evaluation of the management approach	P35-37	Stakeholder Engagement	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	P104; P106; P107-108; P109	Giving Back for the Greater Good; Bringing People Together; Sharing Our Knowledge; Driving Change through Recycling	

CENVIRO MARKETING NETWORK

Convenient Services Nationwide

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GLOSSARY

4R

Waste prevention techniques are commonly summarised as the so-called 4Rs: reduce, reuse, recycle and recover. Reduce, reuse and recycle are known in the industry as the 3Rs.

Anaerobic process

Anaerobic processes produce high energy materials such as methane which can be captured and burned as an energy source, and used to power gas-burning appliances or internal combustion engines, or to generate electricity.

Bioclimatic design

A design concept that is based on local climate aimed at providing thermal and visual comfort by making use of solar energy and other environmental sources.

Clinical waste

The Ministry of Health Malaysia defines clinical waste as:

- Any waste which consists wholly or partly of human or animal tissue, blood or other bodily fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it.
- Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practices, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste, which may cause infection to any person coming into contact with it.
- Also, a type of scheduled waste listed in the First Schedule of Environmental Quality (Scheduled Wastes Regulations 2005 (e.g. code: SW404 – Pathogenic wastes, clinical wastes or quarantined materials).

Effluents

Liquid waste discharged into a natural body of water. Liquid factory waste and raw sewage can also be called effluents.

E-Waste

A type of scheduled waste listed in the First Schedule of Environmental Quality (Scheduled Wastes) Regulations 2005. (e.g. code: SW102 - Waste of lead-acid batteries in whole or crushed form and SW103 -Waste of batteries containing cadmium and nickel or mercury or lithium).

Geogrid-walls (previously known as green geogrids)

Geogrids are used in separation, stabilisation, and reinforcement applications. They are frequently used in construction below the stone base to extend the life of the pavements and to stabilise soft soils and reinforce retaining walls.

Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Version)

The Standard provides requirements and guidance for companies and other organisations preparing a corporate-level GHG emissions inventory. The standard covers the accounting and reporting of seven greenhouse gases covered by the Kyoto Protocol – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_2).

Inert Waste

Waste that is neither chemically nor biologically reactive and will not decompose such as sand and concrete.

Leachate

Water that has passed through waste and contains dissolved and suspended material is termed leachate. It may contaminate other sources.

Municipal Solid Waste

More commonly known as trash or garbage – consists of everyday items we use and throw away, such as product packaging, furniture, clothing, bottles, food scraps and newspapers.

Scheduled Waste

Scheduled waste is any waste falling within the categories of waste listed in the First Schedule of Environmental Quality (Scheduled Wastes) Regulations 2005. Scheduled waste is by nature very toxic and dangerous. Improper management of such waste will lead to serious pollution of the environment and the ecosystem as well as immediate long-term impact on human health.

Task Force on Climate-Related Financial Disclosure (TCFD)

Recommendations in the form of framework for companies to develop more effective climate-related financial disclosures through their existing reporting processes.

Leading the Green Revolution

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