

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

What we do everyday at Cenviro helps society find solutions to their waste challenges. Underlying our sustainability vision and goals is a relentless pursuit for innovation which has enabled us to continue to scale new breakthroughs and catalyse further our pursuit of the circular economy.

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Copper Nuggets after the recycling
and recovery process



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About This Report

Cenviro Sdn. Bhd. together with its subsidiaries have been publishing Sustainability Reports since 2014, before which its former company name, UEM Environment Sdn. Bhd., also disclosed sustainability information. It is a key part of our commitment towards transparency and accountability in our sustainability disclosure. The report is also a baseline for us to measure progress towards our goal of transforming our business into a truly sustainable future, one that is green and circular.

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 Statement in Annual Reports.

Scopes

The report covers sustainability activities in 2017 of Cenviro and its subsidiaries, joint ventures and associate companies, all of which are in Malaysia.

Details of scope:

Cenviro Sdn. Bhd. (Cenviro) and its subsidiaries Kualiti Alam Sdn. Bhd. (KASB), Cenviro Services Sdn. Bhd. (CS), Cenviro Recycling And Recovery Sdn. Bhd. (CRR), Cenviro Special Builders Sdn. Bhd. (CSB), Cenviro (Johor) Sdn. Bhd. (CJ), Cenviro Green Energy Sdn. Bhd. (CGE), Cenviro Green Energy (Melaka) Sdn. Bhd. (CGE Melaka), Kualiti Alam (Lahat) Sdn. Bhd. (KAL), Environmental Preservation And Innovation Centre Sdn. Bhd. (EPIC), and Recycle For Life Sdn. Bhd. (RFL).

E-Idaman Sdn. Bhd. (EISB) is a Joint-Venture Company (JVC). Environment Idaman Sdn. Bhd. (ENVI), Environment Idaman (Kedah and Perlis) Sdn. Bhd., Green Resource Recovery Sdn. Bhd. (GRRSB) and Environment Idaman (Perak) Sdn. Bhd. are subsidiaries of EISB.

Shan Poornam Sdn. Bhd. (SPSB) is an associate company, who holds 40% in Shan Poornam Metals Sdn. Bhd. (SPM).

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

References to 'Cenviro', 'the Cenviro Group', 'the Company', 'the Organisation' and 'we' refer to Cenviro and/or its affiliates and subsidiaries.

Reporting Period

All data is for the year ended 31 December 2017, unless otherwise specified. We are committed to transparency and the discussion of our progress through the publication of annual Sustainability Reports and ongoing disclosure.

Assurance and Verification

This Sustainability Report has been independently verified by Bureau Veritas Certification (M) Sdn. Bhd. (Bureau Veritas) and the assurance statement can be found on 106-109.

Feedback

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This Report was submitted for the GRI Content Index Service, and GRI confirmed the accuracy of the GRI Content Index.

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

Q-TAPS

Q UALITY

T EAMWORK

A CCOUNTABILITY

P ASSION

S AFETY

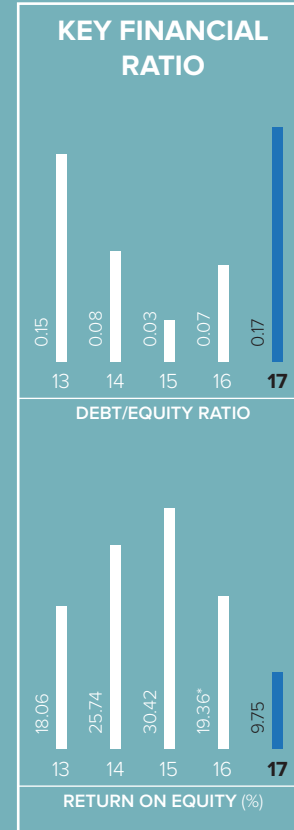
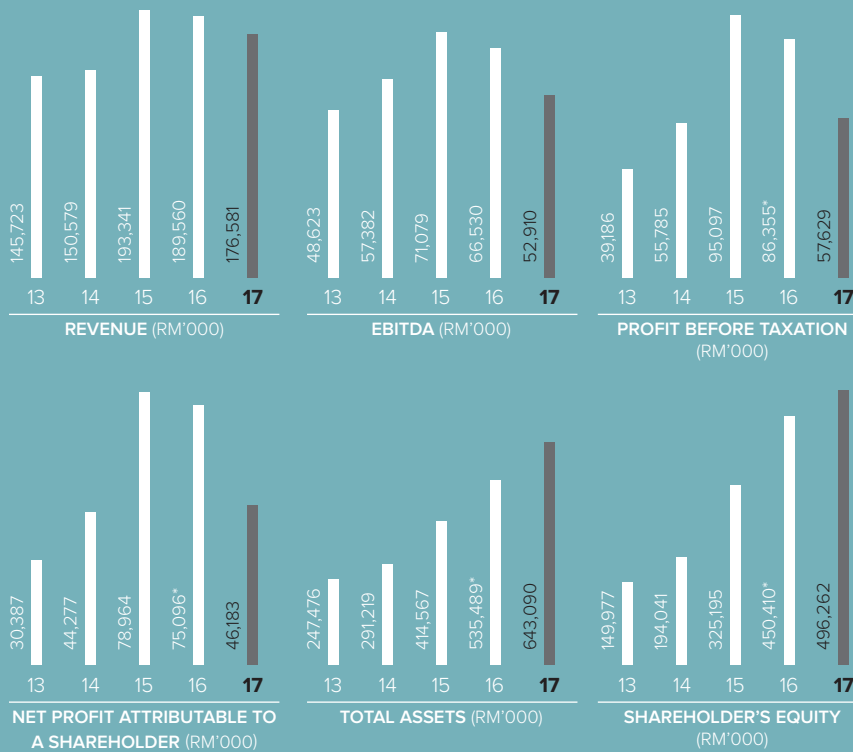
102-7, 102-48, 201-1, 201-3

Financial Performance

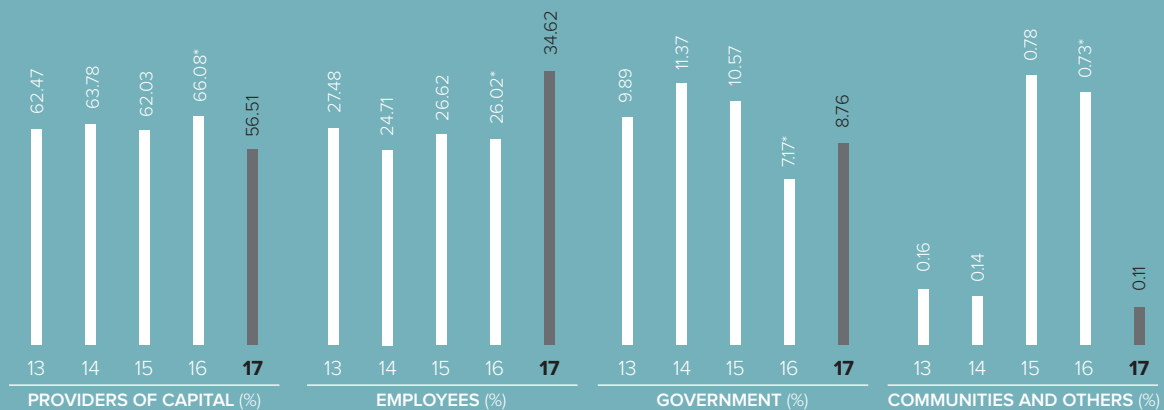
Financial Performance	2013 RM'000	2014 RM'000	2015 RM'000	2016 RM'000	2017 RM'000
Revenue	145,723	150,579	193,341	189,560	176,581
Earnings before interest, tax, depreciation and amortisation (EBITDA)	48,623	57,382	71,079	66,530	52,910
Profit Before Taxation	39,186	55,785	95,097	86,355*	57,629
Net Profit Attributable to a Shareholder	30,387	44,277	78,964	75,096*	46,183
Total Assets	247,476	291,219	414,567	535,489*	643,090
Shareholder's Equity	149,977	194,041	325,195	450,410*	496,262
Key Financial Ratios					
Return on Equity	18.06%	25.74%	30.42%	19.36%*	9.75%
Debt/Equity Ratio	0.15	0.08	0.03	0.07	0.17
Value Distributed to Recipients					
Recipients					
Providers of Capital	62.47%	63.78%	62.03%	66.08%*	56.51%
Employees	27.48%	24.71%	26.62%	26.02%*	34.62%
Government	9.89%	11.37%	10.57%	7.17%*	8.76%
Communities and Others	0.16%	0.14%	0.78%	0.73%*	0.11%

* Restatement of 2016 data due to adjustments arising from completion of purchase price allocation exercise and allocation of goodwill to a specific cash-generating unit, which in 2016 was done on provisional basis.

102-7, 102-48, 201-1, 201-3 Financial Performance



VALUE DISTRIBUTED TO RECIPIENTS



* Restatement of 2016 data due to adjustments arising from completion of purchase price allocation exercise and allocation of goodwill to a specific cash-generating unit, which in 2016 was done on provisional basis.

Awards and Recognitions



RAM Sustainability Rating
– Gold



FMM Negeri Sembilan Awards

- i. Gold Award, Fire Safety and Emergency Response Code
- ii. Silver Award, Environmental Sustainability Code
- iii. Silver Award, Best SHE Practice
- iv. Bronze Award, Employee Health & Safety

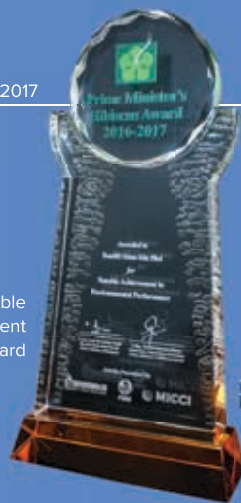
Awards and Recognitions



ACCA MaSRA Award 2017
– Commendation Award for Circular Economy

PMHA Awards 2017

Notable Achievement Award



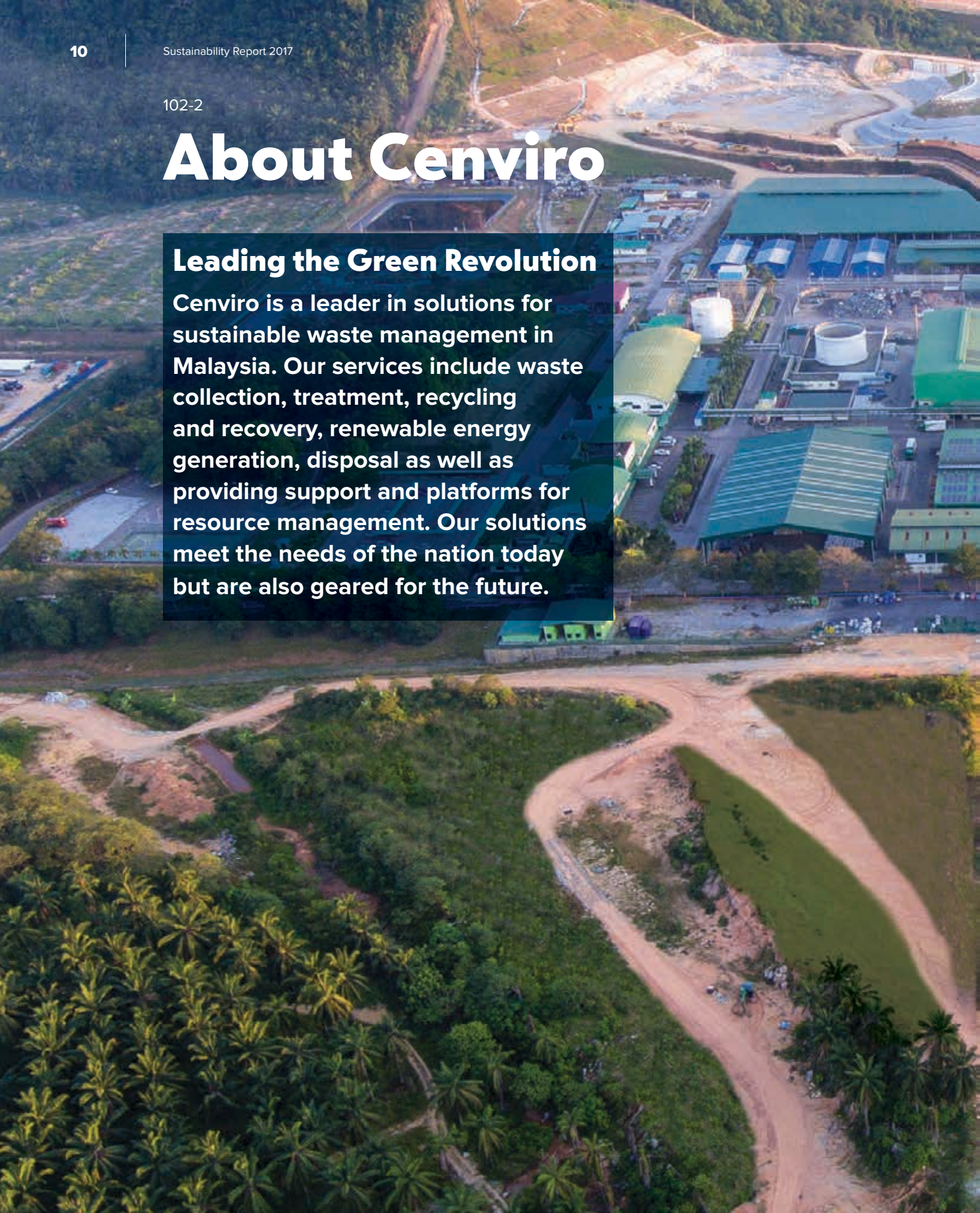
Bronze for Special Project Award - Sustainable Water Management

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About Cenviro

Leading the Green Revolution

Cenviro is a leader in solutions for sustainable waste management in Malaysia. Our services include waste collection, treatment, recycling and recovery, renewable energy generation, disposal as well as providing support and platforms for resource management. Our solutions meet the needs of the nation today but are also geared for the future.



About Cenviro



102-2, 102-6 About Cenviro

Our name stands for 'Clean Environment' which reflects our ambition to create value while maximising environmental and economic sustainability for all stakeholders. Through our companies, we offer a wide array of innovative and viable environmental solutions and services.

We are a subsidiary of Khazanah Nasional Berhad. We work together with customers, regulators, local councils and communities to enhance their sustainability commitments.

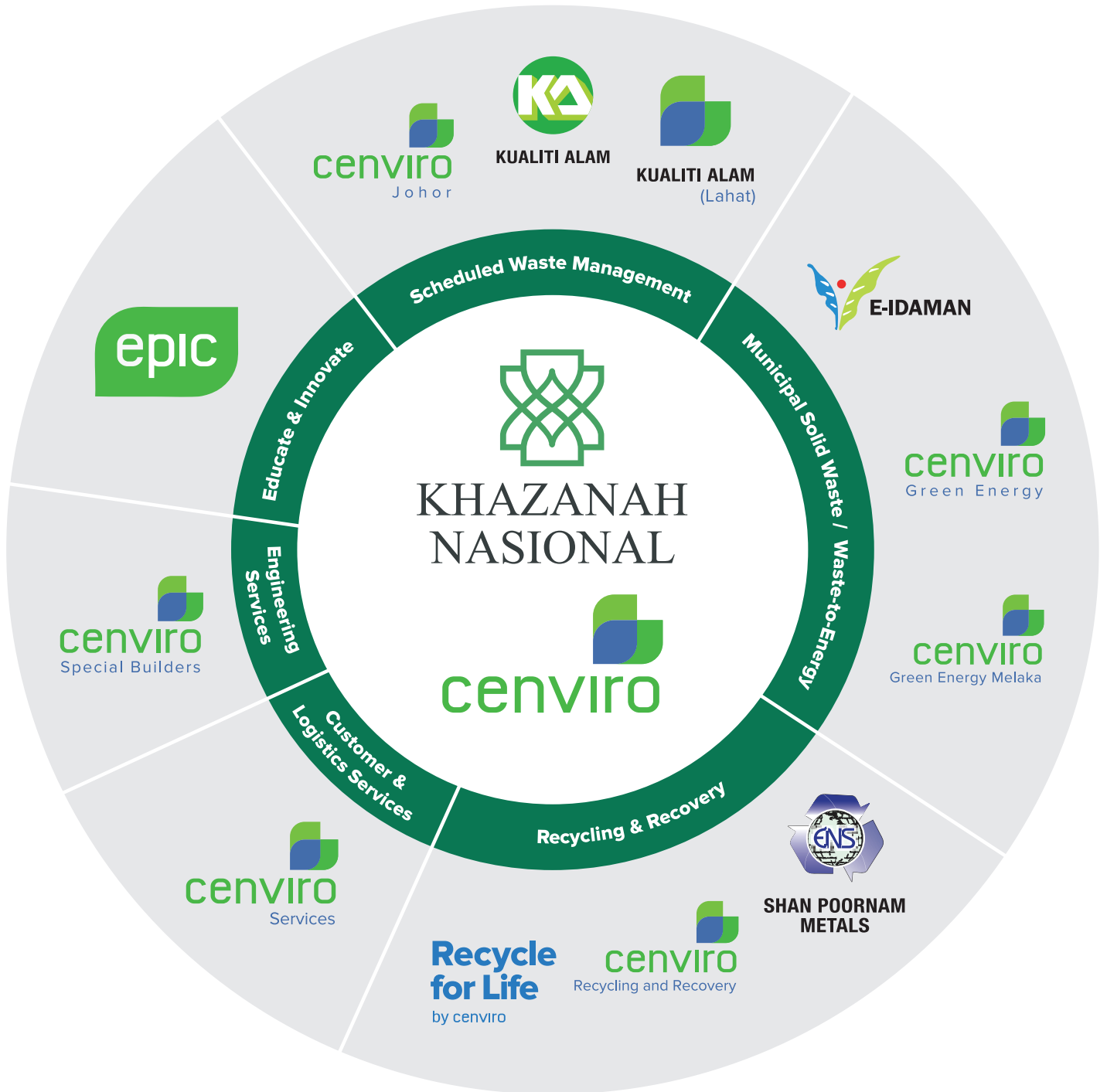
Cenviro has been operating Malaysia's first and largest integrated Waste Management Centre in Negeri Sembilan since 1998. We also handle municipal solid waste management and public cleansing through our joint venture company, E-Idaman Sdn. Bhd. in Northern Peninsular Malaysia, and electronic waste management via our associate company, Shan Poornam Metals Sdn. Bhd.

Today, Cenviro is making breakthroughs across the waste management value chain via greener solutions that are first of its kind in Malaysia, including our Scheduled Waste-to-Energy plant, vertical secured landfill, a centre of excellence named Environmental Preservation and Innovation Centre and our community recycling programme, Recycle for Life.



About Cenviro

Group Structure



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About Cenviro

Kualiti Alam Sdn. Bhd. (KASB)

With more than 20 years of expertise and experience, KASB continues to offer a comprehensive range of scheduled waste management services, from analysis, treatment, recycling and recovery 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 240 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.

Cenviro Green Energy Sdn. Bhd. (CGE)

An investment holding company for waste-to-energy projects.

Cenviro Green Energy (Melaka) Sdn. Bhd. (CGE Melaka)

Satellite facility for renewable energy.

Kualiti Alam (Lahat) Sdn. Bhd. (KAL)

Satellite facility for collection, treatment and disposal of scheduled waste for the northern 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, a subsidiary of CRR, promotes nationwide recycling programmes that rewards cash through the use of a smart card.

E-Idaman Sdn. Bhd. (EISB)

Integrated municipal solid waste management involving collection, public cleansing, treatment, recycling and final disposal of municipal solid waste.

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.

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About Cenviro

Cenviro in Figures 2017

RM176,581,000
in revenue



Over **9,010***
industrial and commercial
customers (As of April 2018)



Market leader in
scheduled waste management
in Malaysia, with a market share of **24%**



8,040
tonnes of
recycling waste
treated at CRR



158,790
tonnes of scheduled
and clinical waste
treated and
disposed of



576,090
tonnes of
municipal
solid waste treated



2,020
MT of e-waste
recycled



34 incidents
recorded in 2017,
2.9% lower
as compared to 2016:
the lowest since 2010



2,064
total workforce



98% of suppliers
were local
95% of total spending
was on local suppliers
Total spend on suppliers
over **RM55 million**



315 municipal solid waste collection
vehicles retrieved an average
1,846 tonnes of waste per day,
produced by more than
328,967 premises



Through RFL, **112,857 kg**
of recyclable waste collected
in selected areas nationwide.



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Message from the Managing Director

This sustainability report is not just a disclosure of our efforts and progress; it also encapsulates our attempt to reimagine the narrative about waste management in Malaysia.

The green revolution is a resource revolution. The only way we can truly bring change is by thinking green as there is a pressing need to build the Malaysian economy around managing resources effectively. The waste management sector has undergone a huge transformation in thinking over the past few years. Traditionally disposal-led, the sector is now geared towards recovering value from waste, with ultimate disposal as a last resort.

We have long-term plans to create renewable value for a globally competitive Malaysia and are committed to developing and commercialising cutting-edge technologies while contributing to the capacity of our workforce as well as a new generation of waste management professionals. Green thinking is essentially fuelling our leadership in the transition towards a circular economy that maximises resource savings.

Ultimately, the public and our stakeholders want to see the environment treated with respect. Communication and collaboration are critical towards this end. We send a strong signal to the market by continuously focusing on innovation and breakthrough solutions. By doing so, we reinforce our firm belief that green thinking is the only way to power the green revolution.

As we have demonstrated over the last few years, strong pricing, the execution of our service delivery and growing the right kind of volume, all interact to drive margin expansion. Cenviro treated and disposed more scheduled waste as compared to last year, a total of 158,790 tonnes for 2017.

Key Highlights and Achievements

We had an eventful 2017, accomplishing several achievements and reaching new milestones. The completion of EPIC, which was launched in July 2017, marked a milestone this year for Cenviro and the nation. EPIC is the country's first integrated training centre for sustainable waste management and already has begun hosting courses and collaborative workshops for the industry. In the coming year, we will continue to lead and intensify capacity building efforts.

We took big steps for the advancement of scheduled waste management in the country. We completed construction of our Scheduled Waste-to-Energy (SWTE) Plant as well as expanded our scheduled waste management facilities and services outside of Negeri Sembilan, including the management of waste generated at Pengerang Integrated Complex (PIC).

Our sustainability efforts continue to receive accolades and recognition. We received a bronze at the Prime Minister's Hibiscus Award under the Special Project Award in Sustainable Water Management as well as a commendation at the Association of Chartered Certified Accountants (ACCA) Malaysia Sustainability Reporting Awards (MaSRA) Awards 2017 for Circular Economy. At the Federation of Malaysian Manufacturers (FMM) Negeri Sembilan Awards we received four awards on our health, safety and environment efforts and practices in a manufacturing context. Rating Agency Malaysia (RAM) awarded a Gold Rating to Cenviro based on an assessment of Environmental, Social, Governance and Positive Impact, representing the highest rating in RAM's three-tiered Sustainability Rating framework.

The Sustainable Development Goals (SDGs) are also a key measure of progress. As a company committed towards the transition to a circular economy, the SDGs enable us to assess our sustainability impact in the country and beyond. All sustainability related disclosure, including progress against the SDGs, are reviewed by the Board.

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Message from the Managing Director



“At Cenviro, sustainability is a fundamental principle of our business model and enables us to create solutions both for today and the future. We are committed to enhancing our leadership role within the waste management community and recognise that operational integrity and innovative solutions are keys to success. Our priority is to solve the hard choices confronting our customers, our company and others who want to be more responsible in waste management. We do so by extracting as much value as possible from waste by continuously thinking green.”

Khalid Bahsoon
Managing Director

We undertook a branding recharge in 2017 to reposition our branding and take it a step ahead, providing customers with familiarity for the brand and its values. We consolidated the various associate companies under the Cenviro brand, linked together to the value proposition of Leading the Green Revolution.

Operational and Environmental Performance

In 2017, we set out to enhance the agenda to meet the green revolution. As a result, we established rigorous internal priorities as well as numerous external engagements to meet stakeholder needs. We took a critical look at our own capacity, equipment and infrastructure within the scheduled waste facility and implemented various improvements and upgrades. Consequently, we revamped the facility's

safety and drainage, and refurbished one of our incinerators. Our Incinerator 1 (INC1), with a capacity of 100 tonnes per day, is the only large-scale incinerator dealing with scheduled waste in Malaysia.

Cenviro also deployed multiple SAP solutions as part of our digital transformation exercise, which is being implemented in three phases. The first phase is the largest phase where the foundation of the whole system will be set, making our operations better integrated and more effective. With this deployment, we expect to move our operations to a whole new level by using simple tools to perform complex processes. The new SAP management provides greater global oversight across our operations, from planning and sourcing to product integrity. We will be able to report on its progress in the coming year. SAP went live in January 2018 as per schedule.

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Message from the Managing Director

Our People at the Heart of Our Business

We have found that doing the right thing is good for business – it deepens our connection to customers and makes our company more attractive to talent. All of our people contribute to the company's success. As the organisation moves forward, we need to continue to innovate and push the boundaries of the green revolution. A diverse and inclusive workplace that attracts exceptional talent is crucial. In 2017, we expanded our training programmes and improved our safety records. We conducted over 279 different employee training programmes with the average training hours at 32.87 hours per employee.

Every year, we aim to improve our health and safety efforts. In 2017, we introduced the Zero Compromise (ZECO) programme – consisting of 12 principles which must be adhered to by everyone, including third-party personnel at our facilities. ZECO was launched during OHSEM Day 2017. As a result, the number of recorded injuries decreased by 2.9% as compared to 2016; it is now at the lowest level it has been since 2010. We recorded 532,656 man-hours with zero-LTI in 2017 as compared to 944,787 man-hours with zero-LTI in 2016.

Commitment for Good

We have always been at the forefront of developing strategic community outreach and we continue to work closely with local communities to maintain good relations, build capacity and create awareness. We aim to have a positive and enduring impact on the communities in which we operate.

Overall, we undertook a number of community-related programmes in 2017. Among other purposes, they actively contribute to social development through our environmental and educational programmes. We continued with our yearly CSR programmes by organising sponsorship, festive contributions and celebrations, and public education campaigns in 2017.

Moving Forward

In 2017, we bid farewell to one of our Board Members, Shahazwan Mohd Harris, and I wish to record our sincere thanks for his efforts and contributions to Cenviro.

We welcomed three new Board Members this year, Nik Rizal Kamil Bin Nik Ibrahim Kamil, Yeo Kar Peng and Datin Paduka Che Asmah Binti Ibrahim. We are hopeful to continue our success in providing sustainable waste solutions to society.

Having an authentic purpose is the way forward as this is what the local and international communities want and it gives us a competitive advantage. Our value proposition, Leading the Green Revolution, ensures that the focus on sustainable waste management remains a top agenda. We are continuing to meet this challenge through innovation, ongoing improvements and the pursuit of exciting new growth opportunities for our business.

Ultimately, we must walk the talk. We will continue to provide innovative and sustainable waste management as well as renewable energy solutions to tackle the environmental challenges that Malaysia faces today.

These are exciting times for waste management in our country and I am proud to head a company that has to date introduced innovative ideas and technologies, which any true champion preserving the environment should and would do.

Cenviro is growing rapidly and we anticipate that in the event of additional changes and challenges, our values will hold us in good stead and support future expansions. There is still much to be done, but we are undaunted. If we can continue delivering meaningful benefits to our many stakeholders as well as build a business that is both economically and environmentally sound, I believe Cenviro can look ahead to a successful future as a sustainable business in a sustainable world.



Khalid Bahsoon
Managing Director

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Message from the Managing Director

2016 Commitments

2017 Achievements

Renewable Energy

Malaysia's first Scheduled Waste-to-Energy (SWTE) Plant construction to be completed by 2017.

The construction progressed according to plan and was completed in the third quarter of 2017. The plant will start commissioning and is expected to begin exporting power to the grid by the first quarter of 2018.

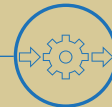


Achieved

Next Generation Landfill

The Vertical Secured Landfill (VSL) Project, a blueprint for a greener landfill, in 2016 was 70% complete of the construction of Phase 1 with the rest due to be completed in 2017.

The construction of the new landfill was 83% completed in 2017, but is still able to receive waste during its construction phase.

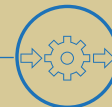


In progress

Environmental Preservation and Innovation Centre (EPIC)

The first centre of excellence focusing on waste management in Malaysia and Southeast Asia expected to be launched in 2017.

EPIC was successfully launched in July 2017 by the Minister of Natural Resources and Environment, YB Dato Sri Dr. Haji Wan Junaidi Tuanku Jaafar. A partnership with Chartered Institution of Wastes Management (CIWM) was established to provide accreditation and certification for waste management professionals.



In progress

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Message from the Managing Director

2016 Commitments

2017 Achievements

Recycle for Life

One of its kind recycling programme initiated by Cenviro to promote recycling amongst the public.

Incorporation of Recycle For Life Sdn. Bhd. (RFL). In 2017, the company successfully attained licenses awarded by The National Solid Waste Management Department (JPSPN) to collect recyclable waste in 113 areas nationwide.



Achieved

Focus on Health and Safety

We will build an on-site clinic to improve our emergency preparedness, providing first-level response to work-related incidents and illnesses.

Successfully launched Cenviro Wellness Centre in 2017, which consists of a fitness zone and Kualiti Alam Clinic which is run by Hospital KPJ Seremban. By December 2017, the clinic had treated 304 patients. The focus of the fitness zone is to promote work-life balance.



Achieved



HDPE resins after the recycling and recovery process

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The Industry

Cenviro provides viable solutions that support the environmental transition of our clients. We are here with long-term plans to create sustainable value and contribute towards a Malaysia that is resource resilient. Our priorities are inter-linked with the development of all players in the ecosystem. As an industry, everyone must contribute to the common good of the nation towards better resource management.





102-15

The Industry

Good waste management needs a mindset change. Landfills are currently the waste disposal method of many types of materials and as a result most waste ends up in landfill sites. Most landfills in the country are of varying designs and capacity.

On the other hand, the scheduled waste treatment and disposal is considered to be appropriate when majority of the waste generated is recovered in recovery facilities.

Cenviro has put in place various programmes and efforts to change mindsets towards a more evolved understanding of waste and will continue capacity-building initiatives for all stakeholders as part of our commitment to green thinking. Some of our key efforts are described in detail in this Report.

Scheduled Waste

Waste is categorised based on the level of potential hazard. According to the Department of Environment (DOE), waste is defined as 'any substance prescribed to be scheduled waste or any matter whether in a solid, semi-solid, or liquid form, or in the form of a gas or vapour, which is emitted, discharged, or deposited in the environment in such volume, composition, or manner as to cause pollution'.

Scheduled wastes are the categories of waste listed in the First Schedule of the Environmental Quality (Scheduled Wastes) Regulations 2005. Some categories of scheduled waste are classified as environmental hazardous waste due to their toxic and harmful nature.

Only licensed operators can handle and treat scheduled waste. The industry is monitored and sanctions will be imposed on non-compliant operators. Industrial waste is the main source of scheduled waste in Malaysia. Other sources are fertiliser and pesticides as well as waste from oil and hydrocarbon industries. The volume of clinical waste and e-waste, including potentially hazardous substances, is growing rapidly.

Municipal Solid Waste

With an ever growing population, Malaysia generates 37,000 metric tonnes of municipal solid waste a day.

The implementation of the Solid Waste and Public Cleansing Management Act 2007 (SWPMA) is challenging with the country still dependent on landfills, most of which lack appropriate treatment facilities. In many areas, there is a lack of public awareness on the importance of waste management and recycling.

Waste minimisation and the promotion of recycling have been on the Malaysian government's agenda since the Eighth Malaysia Plan. In the Ninth Malaysia Plan (2006 – 2010), further emphasis was placed on continuing reduction, reuse, recovery and recycling of waste as well as greater utilisation of environmentally-friendly products. As a result, the National Solid Waste Management Department was set up in 2007 under the Ministry of Housing and Local Government.

With the Solid Waste and Public Cleansing Management Act 2007, the federal government took over municipal solid waste management in certain states in Peninsular Malaysia. Concessionaire agreements were made for the collection and disposal of municipal solid waste.

Waste Challenges

Malaysians create more waste today than ever before. The increase is a direct consequence of the growing population and economy, and higher demand for goods and services. This has raised concern over the waste management infrastructure. Coupled with a lack of expertise in waste management, municipal solid waste has become one of our most critical environmental issues. Malaysia needs to urgently bridge the infrastructure gap in order to re-direct the waste that is currently sent to landfills to more sustainable processing options.

Municipal Solid Waste Overview

Waste generated per day in Malaysia

YEAR	TONNES OF WASTE GENERATED/DAY	RECYCLING RATE
2005	19,000	5%
2015	33,000	15%
2016	38,200*	17.5%
2017	37,000	21%

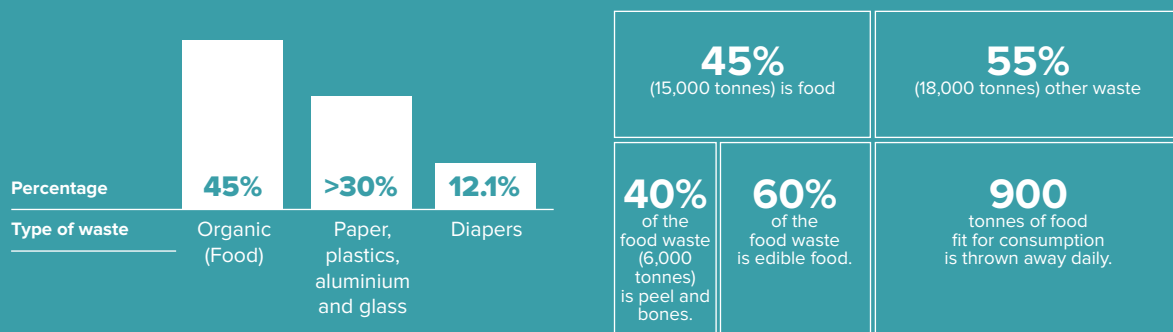
22%
National target
for recycling rate
by 2020

However, the new target is 30% by year 2020. An increment of 3% is expected for each year starting 2018. This is due to the achievement of 21% recycling rate in 2017**.

* Source: <http://global-recycling.info/archives/1451> (August 2017)

** Speech text of Director-General, National Solid Waste Management Department (2017)

Composition of waste generated daily in Peninsular Malaysia (2016)*



* Source: <http://global-recycling.info/archives/1451> (August 2017).

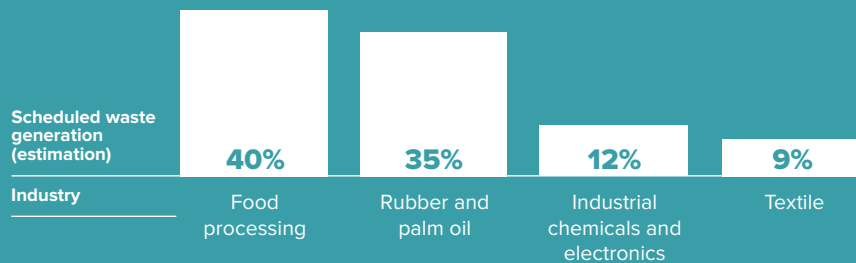
* Source: <http://www.swcorp.gov.my/index.php/value-food-no-waste>

102-15 The Industry

Scheduled Waste Overview

The economic growth that Malaysia has enjoyed in the past decade has led to an increase in construction, manufacturing and agricultural production. All these industries produce significant amounts of scheduled waste.

The Malaysian government estimates that scheduled waste in the country originates across these industries:



Source: Hazardous Waste Management – Case Study 4: Hazardous Waste Management in Malaysia, Zaini Ujang, 2000.

Year	Scheduled Waste Generated ('000 tonnes) Note: Data excluding Special Waste Management	Clinical Waste Generated ('000 tonnes)
2013	1,387.9	18.2
2014	1,665.3	22.0
2015	1,363.5	25.5
2016	1,805.9	16.3

Projections of WEEE in Malaysia ('000 unit)

Projection of waste electrical and electronic equipment (WEEE) in Malaysia (in units) – discarded by households, business entities and institutions

Year	Televisions	Personal computers	Mobile phones	Refrigerators	Air conditioners	Washing machines	Mobile phone rechargeable batteries
2018	217,758	546,937	2,136	69,219	140,501	54,362	262
2019	220,712	592,359	2,192	71,019	142,402	59,847	269
2020	224,226	608,191	2,249	72,866	145,495	65,853	275

Source: Table 12, The e-Waste Inventory Project in Malaysia, Prepared by Perunding Good Earth Sdn. Bhd., 2009.

Towards a Circular Economy

Global aspirations for a growth model that consumes fewer resources is becoming a reality, with stakeholders across the globe embarking on ambitious initiatives related to green growth, efficient resource management and adopting a circular economy model. All this can be seen to be part of the transition of Industry 4.0.

As waste management specialists, we fully understand the desire to separate growth from the consumption of natural resources. In a circular economy, waste has been designed out of the system. Instead of depleting natural resources, resources are kept in use for as long as possible. At the end of their life-cycle, these resources are recovered and regenerated into new products and materials. Changing regulations echo these sentiments.

Targets for recycling, for example, should not be seen as a burden but an opportunity for resource savings.

Integrating the principles of circular economy not only boosts our ability to recover resources but improves economic productivity. This is a real opportunity that could invigorate the growth of the Malaysian economy. Smarter regulation to speed up the transition to the circular economy is also necessary.

We do not have all the solutions. But we do know that the industry needs rapid prototyping and injection of start-up culture, consistent with how we want to model the Cenviro Eco-Park. The infrastructure and knowledge gap must be bridged if Malaysia is to divert all waste currently sent to landfill to productive use and achieve self-sufficiency.

Cenviro and the Circular Economy

An industrial strategy informed by the principles of the circular economy should help ensure that the industry maintains and enhances its competitive advantages.



Cenviro's role in the transition to a circular economy in Malaysia

	Managing waste efficiently	Reducing residual waste	Recovering energy from waste	Advancing recycling	Developing future-focused solutions and innovation
Our Approach	Meeting the needs of customers and the community through eco-efficient solutions	Ensuring that treated waste is recovered efficiently	Energy recovery plays a role in the energy market as a cost-effective local source of energy	Creating a culture of recycling, especially for young people to treat waste as a commodity	Capacity building for waste professionals and providing the platform for next-generation thinking
Our Solutions	<ul style="list-style-type: none"> - Vertical Secured Landfill - Scheduled Waste-to-Energy Plant 	<ul style="list-style-type: none"> - Cenviro Recycling and Recovery - Scheduled Waste-to-Energy Plant 	<ul style="list-style-type: none"> - Scheduled Waste-to-Energy Plant 	<ul style="list-style-type: none"> - Cenviro Recycling and Recovery - Recycle For Life 	<ul style="list-style-type: none"> - Recycle For Life - Environment Preservation and Innovation Centre - Cenviro Eco-Park
The Opportunities	<ul style="list-style-type: none"> - Blueprint for a greener landfill, a model for any municipal solid waste landfill - Advisory and expertise on vertical secured landfill - Renewable energy generation 	<ul style="list-style-type: none"> - Innovative recycling solutions 	<ul style="list-style-type: none"> - Renewable energy generation 	<ul style="list-style-type: none"> - Catalysing a resource-concerned society 	<ul style="list-style-type: none"> - Potential partnerships with start-ups and new players - Breakthrough sustainable solutions and shared technologies - New generation waste management professionals

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Managing Sustainability

We drive our businesses to create positive impact and shared value for our stakeholders. Our material Environmental, Social and Governance (ESG) factors receive Board oversight and are managed by the Management Team. The Managing Director provides guidance on strategic and operational issues. Driven by Cenviro's core values of Quality, Teamwork, Accountability, Passion, Safety (Q-TAPS), sustainability becomes a key aspect in how we drive operational integrity and innovative solutions.

As an industry, waste management is at the core of sustainability. We are already seeing that the opportunities for the business due to the growing population and rapid urbanisation which lead to a pressing need for efficient waste management systems and high-quality recovered resources.

Our Sustainability Disclosure

At Cenviro, our sustainability disclosure is reflective of the many-layered aspects of sustainability in the organisation. Good business conduct and ethical business practices are the fundamentals to our strong governance. We adhere to the highest governance standards based on the notion that good governance must be institutionalised and accountable.

We are impacted by global trends in the waste management industry as well as key local stakeholders. How we manage and navigate around the local regulatory aspects impact some of our decisions and strategies. We are active corporate citizens who engage with the regulatory stakeholders via meetings, dialogues and capacity building collaborations.

Our approach to key business issues are then translated into our sustainability implementation and performance:

- How we provide greener solutions
- Our operations and how we manage the environment
- Empowered people are at the heart of our business
- Community building

Our solution looks towards future-focused frameworks for waste and resource management with fresh thinking to provide in full measure the economic benefits that we are capable of delivering.

- Fundamentals and Organisation**
- Strategy**
- Implementation and Performance**



102-40, 102-43, 102-44
Managing Sustainability

Our Stakeholders and How We Engage with Them

Delivery of our strategy and innovation is influenced by stakeholders. Details of our main stakeholder groups, their expectations and importance to us are summarised in the table below.

Stakeholder Group	Engagement activities	Frequency	Issues and concerns
Government	<ul style="list-style-type: none"> • Meetings • Seminars and Forums • Programme collaboration 	<ul style="list-style-type: none"> • Quarterly • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Compliance with rules and regulations • Assist government agencies to resolve waste and environmental issues • Support the Government's efforts to appreciate, conserve and protect the environment • Leadership in waste and environmental strategies
Shareholder	<ul style="list-style-type: none"> • Board Meetings • Site Visits 	<ul style="list-style-type: none"> • Annually • Quarterly • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Ongoing updates of Cenviro's business plans and strategies, financial performance, project updates and community impact
Local Authorities and Regulators	<ul style="list-style-type: none"> • Regular Meetings • Progress Updates • Compliance Reports • Site Visits and Inspections • Programme Collaboration 	<ul style="list-style-type: none"> • Annually • Monthly • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Compliance with rules and regulations • Assist local authorities and regulators in managing and resolving waste and environmental issues • Leadership in waste and environmental strategies

102-40, 102-43, 102-44, 103-3

Managing Sustainability

Stakeholder Group	Engagement activities	Frequency	Issues and concerns
Local Community	<ul style="list-style-type: none"> • Community CSR Programmes • Public Dialogues • Education Programmes 	<ul style="list-style-type: none"> • Annually • Quarterly • Monthly • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Management of environmental hazards • Project updates and expansion plans • Performing thorough inspections • Management of health and safety issues • Management of complaints and feedback
Public	<ul style="list-style-type: none"> • Awareness Talks and Programmes • Environmental Engagement Campaigns • Branding Awareness Programmes 	<ul style="list-style-type: none"> • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Management of environmental hazards • Municipal solid waste collection
Employees	<ul style="list-style-type: none"> • Surveys • Safety Briefings • Induction Trainings • Townhall Sessions • Employee Long Service Awards • Scheduled Waste Management Trainings • Brand Engagement Campaigns • Joint Consultative Committee (JCC) • Kelab Sukan Kualiti Alam (KESUKA) Programmes 	<ul style="list-style-type: none"> • Annually • Quarterly • Regularly • New recruitment 	<ul style="list-style-type: none"> • Employee benefits and rights • Workplace safety • Career development • Work-life balance • Equal workplace opportunity

102-40, 102-43, 102-44
Managing Sustainability

Stakeholder Group	Engagement activities	Frequency	Issues and concerns
Customers	<ul style="list-style-type: none"> • Customer Satisfaction Survey • Customer Hotline • Website • Open Day • Roadshow and Exhibition 	<ul style="list-style-type: none"> • Annually • EISB's Active Hotline available 7 days a week from 8am - 8pm 	<ul style="list-style-type: none"> • Pricing • Quality of service • Credibility and trust of Cenviro brand
Suppliers and Contractors	<ul style="list-style-type: none"> • Meetings with the HSE and Procurement Departments • Contract Management Programme • Vendor Development Programme • Surveys 	<ul style="list-style-type: none"> • Annually • Quarterly • Ad hoc 	<ul style="list-style-type: none"> • Fair procurement practices • Informative tendering process • Vehicle training for contractors • Updates on Cenviro's business standing
Media	<ul style="list-style-type: none"> • Interviews • Media Briefings • Press Releases 	<ul style="list-style-type: none"> • Ad hoc 	<ul style="list-style-type: none"> • Cenviro's business direction, new acquisition and project development • Brand awareness
Business Partners	<ul style="list-style-type: none"> • Committee and Members Meetings • Seminars, Forums and Workshops • Collaboration Programmes 	<ul style="list-style-type: none"> • Annually • Regularly • Ad hoc 	<ul style="list-style-type: none"> • Conduct operations and services in a responsible manner • Commitment to integrity and accountability

Managing Sustainability

2017 Engagement Highlights



Cenviro Customer's Day



Public Dialogue with Pengerang Community



Earth Day Celebration 2017 in Tangkak, Johor



Director General DOE Malaysia Visit to Kualiti Alam WMC

102-42, 102-46

Managing Sustainability

Material Matters

WE LISTEN

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



WE ENGAGE

We engage with our stakeholders, working together in creating long-lasting and impactful partnerships for the benefit of all parties.



WE REPORT

We have structured the report based on our material issues. We assess issues as low, medium or high materiality in terms of stakeholder concern and business impact.



Our materiality assessment process:

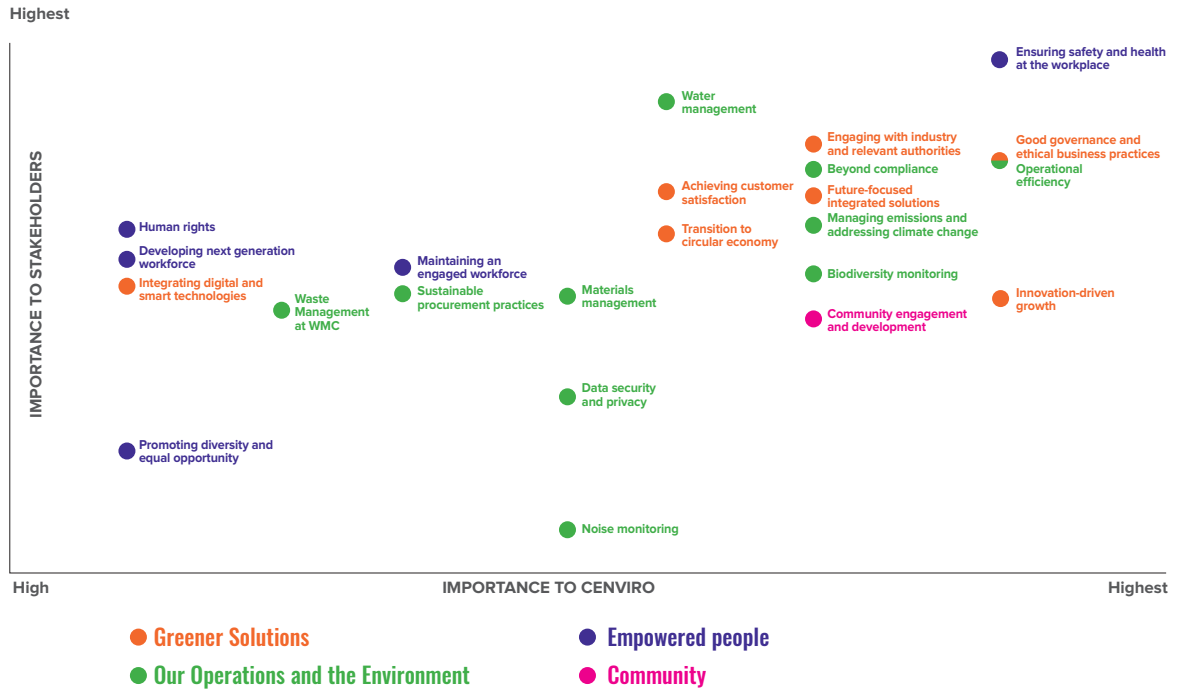
As in previous years, we undertook a materiality analysis as part of the development of this Report, consistent with the requirements of the GRI Standards. This allows us to take a close look at the sustainability issues that matter the most to our stakeholders and which could significantly affect our ability to execute our sustainability plans.

The materiality survey and analysis were carried out by an independent consultant and was verified by Bureau Veritas. We also took into consideration the criteria on accountability in the GRI Standards. A total of 309 respondents answered the survey online and offline. Employees represented the largest stakeholder group.

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Managing Sustainability

Materiality Matrix 2017



Notes on methodology:

- Importance to Cenviro is represented by BOD and Senior Management. Importance to Stakeholders is represented by Shareholders, Regulatory Bodies/Government Agency, Business Partners, Employees, Local Community, Customers and Suppliers and Contractors.
- 13 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.

102-49

Managing Sustainability

The materiality assessment in 2017 included a review of the clusters that group the material issues to better represent Cenviro's operations. Two new material aspects were included to better reflect our increased focus on the circular economy and digitising our business; namely 'Transition to circular economy', and 'Integrating digital and smart technologies'.

Based on this year's assessment, 'Contribution to nation building' was re-named as 'Future-focused integrated solutions'. Key points arising from the materiality analysis in 2017 were:

Greener Solutions:	Stakeholders showed an increased priority for practical and innovative solutions through the services that we are able to provide.
Our Operations and the Environment:	An increase in priority for both internal and external stakeholders; – most notably with regard to 'Operational Efficiency' (previously known as Process Efficiency) and 'Biodiversity Management'. On the other hand, 'Waste Management at WMC' saw a slight decrease in priority. We believe this is based on Cenviro's advanced capability in this area.
Empowered People:	Consistently important because our people drive our business success.
Community:	Development and engagement of the community remains a top priority as our business is reliant on multiple stakeholders.

102-12

Managing Sustainability

Supporting the United Nations Sustainable Development Goals (SDGs)

Cenviro supports the United Nations SDGs through our business operations, environmental management and social contributions to our workforce and surrounding communities. We currently support eight of the 17 SDGs and will continue to drive deeper engagement to deliver on our SDG commitments.



102-12
Managing Sustainability

	Our Operations and the Environment	Empowered People	Community
	<p>Transition to circular economy</p> <p>Managing emissions and addressing climate change</p> <p>Waste management at WMC</p> <p>Water management</p> <p>Operational efficiency</p> <p>Materials management</p> <p>Noise monitoring</p> <p>Biodiversity monitoring</p>	<p>Ensuring safety and health at the workplace</p> <p>Promoting diversity and equal opportunity</p> <p>Developing the next generation workforce</p> <p>Maintaining an engaged workforce</p> <p>Human rights</p>	<p>Community engagement and development</p>
	<div> <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>  </div> <div> <p>13 CLIMATE ACTION</p>  </div> <div> <p>14 LIFE BELOW WATER</p>  </div> <div> <p>15 LIFE ON LAND</p>  </div>	<div> <p>3 GOOD HEALTH AND WELL-BEING</p>  </div> <div> <p>8 DECENT WORK AND ECONOMIC GROWTH</p>  </div>	<div> <p>3 GOOD HEALTH AND WELL-BEING</p>  </div> <div> <p>13 CLIMATE ACTION</p>  </div>

103-1, 103-2

Greener Solutions

As the only Malaysian company focusing exclusively on large-scale waste management, we continue to lead solutions in sustainable resource management. In close collaboration with our customers, regulators as well as government and local communities, we are at the forefront of making waste a resource. We see this as a pathway towards green thinking that will lead to resource transformation. Such thinking will eventually embed the notion of a circular economy in daily Malaysian life.

SDGs





103-2, 103-3

Greener Solutions



In everything we do, we leverage on economies of scale and invest in innovative technologies. We also strive to minimise resource expenditure via continuous improvements. The two-pronged approach enables us to be at the forefront of greener thinking in delivering our solutions. In a rapidly-evolving business, we must have a thorough understanding of customers' lifestyle challenges as we strive to meet those requirements through our vast experience in the logistics of environmental services. This ensures we add value to the economy, both directly and indirectly.

Our focus is therefore always towards greener solutions. As we move forward, we want to truly embed the notion of a circular economy into our business solutions.

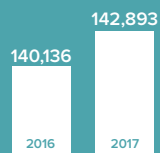
To create renewable value for a globally competitive Malaysia, we are thus committed to developing and commercialising cutting-edge technologies while contributing to the capacity of our workforce.

Greener Solutions

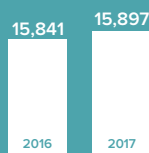
Performance Overview 2017

More scheduled and clinical waste is being treated at Cenviro's treatment facilities

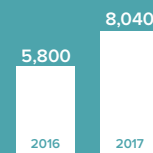
Treated and disposed
scheduled waste
(tonnes)



Treated and
disposed clinical
waste (tonnes)



Recycled and recovered
scheduled and industrial
e-waste (tonnes)



*Began operating in 2016

Some **315 municipal solid waste collection vehicles**, enabling retrieval of **576,090 tonnes** of waste per year, an average of **1,846 tonnes** per day, and serving **328,967** premises



576,090 tonnes of municipal solid waste disposed of



Recycled **1,773 tonnes** of municipal solid waste



Our customers continue to provide great feedback **Customer satisfaction rate** stood at **85.4% and 90.2%** at **KASB and EISB** respectively



Recycled **2,020 MT of e-waste**, **6,838 MT of metal waste**, **10,405 MT of liquid waste** (acid, alkaline, solvents) and **2,226 MT sludge**



203-2

Greener Solutions

Integrated Scheduled Waste Management

Cenviro's facilities are designed and managed to meet stringent international standards. These facilities have the capacity to store, treat and dispose of more than 100,000 tonnes of all classes of scheduled waste annually. The end-to-end facilities comprise of 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 facilities have been recognised for excellence with various certifications including MS ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007, MS 1722:2011 and ISO/IEC 17025.

What happens to the scheduled waste at WMC?



203-1, 203-2
Greener Solutions

WMC receives on average 518 tonnes of waste every day. It can handle 76 types of waste, each with its own treatment method and requirements. The waste is categorised before collection, and analysed again on arrival at WMC by our experts to ensure appropriate treatment and disposal. All waste containers are bar-coded with data logged into our Electronic Integrated Waste Information System (EIWIS). Any recyclable waste is then channelled to its designated facility for final treatment.

Waste treated (tonnes)

Treatment facilities	2014	2015	2016	2017
Incineration Plant				
For organic waste that requires thermal treatment. <i>Capacity: 55,000 metric tonnes a year, 24-hour operations, 330 days per year</i>	35,470	49,488	40,962	31,872
Physical and Chemical Treatment Plant				
For inorganic liquid waste such as acid, alkaline oxidiser, chromate, and cyanide. <i>Capacity: 5,000 metric tonnes per year, 8-hour operations, 5 days a week</i>	1,504	4,921	2,605	4,884
Solidification Treatment Plant				
Immobilises toxic constituents of scheduled waste to prevent them leaching from the waste once disposed of. Often used to treat residue from other treatment processes such as fly ash from incineration and sludge from heavy metal precipitation. Also effective in treating a variety of difficult-to-manage inorganic waste. <i>Capacity: 23,000 metric tonne per year, 8-hour operations, 5 days a week</i>	14,450	9,806	11,054	13,176
Clinical Waste Treatment Centre				
Clinical waste treatment via eco-friendly incinerator as well as microwave ecosteryl – the most innovative technology in clinical waste disposal. <i>Capacity: 300 kg per hour, zero-emissions technology</i>	7,577	14,588	15,841	15,897
Vertical Secured Landfill				
Dispose of scheduled waste treated at WMC as well as from waste generators. <i>The next generation landfill</i>	57,965	70,845	77,786	92,961
Recycling and Recovery Facilities				
Recycle and recover scheduled waste	–	–	5,800	8,040

SWTE started waste feeding in January 2018 and is scheduled to begin exporting power to the grid by early 2018.

203-1, 203-2

Greener Solutions

Towards Greener Incinerators

The incineration process destroys waste by controlled burning at high temperatures. Typically, incineration is used for different types of waste, such as scheduled, clinical and municipal solid waste or sewage sludge.

Our INC1, with a capacity of 100 tonnes per day is the only large-scale incinerator dealing with scheduled waste in Malaysia. As part of our commitment to investing in renewable energy, we are constructing the first scheduled waste to energy plant in the country next to our WMC. The new thermal treatment facility will replace the aging INC1 that has been in operation since 1998.

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

Emissions from the plant meets all Malaysian environmental emission standards. The incineration process is monitored by the Continuous Emissions Monitoring System (CEMS) to ensure compliance with the DOE's licence requirements. Fully computerised and equipped with CEMS, the incineration plant represents the latest standard in rotary kiln incineration technology. It is operational 24 hours a day and managed by competent employees.

In 2017, 31,872 tonnes of waste was incinerated at INC1 and INC4. INC2 and INC3 are no longer operational. We improved the safety and drainage of the facilities in 2017, and refurbished one of the incinerators.

Scheduled Waste-to-Energy (SWTE) Plant

We are in the process of building a new facility for scheduled waste. It is clear to us that if we were to invest in an incinerator, it would have to be a SWTE facility which is currently under construction. The new facility will export about 2.7 MW of renewable energy to the grid, with a capacity of 3.4 MW.

The construction of Malaysia's first SWTE plant progressed according to plan in 2016, and the plant was completed in the third quarter of 2017, with commissioning due to be done by early 2018. The plant started waste feeding in January 2018 and is scheduled to begin exporting power to the grid by early 2018.

The SWTE plant is designed to meet both European Union and Malaysian standards. It simultaneously disposes of scheduled waste and generates a supply of steam to a turbine generator to produce electricity. The plant will be able to treat a wide variety of waste including scheduled waste in solid form, clinical waste, drummed waste and liquid waste with low operation and maintenance cost. The emissions comply with Malaysia's Environment Quality (Clean Air) Regulations 2014. SEDA Malaysia granted the plant Feed-in Approval (FiA) in 2017 to sell renewable energy at the Feed-in Tariff (FiT) rate.

203-2

Greener Solutions

The delivery of rotary kiln unit for installation at Cenviro's SWTE plant



Fully computerised and equipped with continuous monitoring systems, the scheduled waste facility represents the latest standard in rotary kiln incineration technology.

The proposed rotary kiln technology is equipped with advanced capabilities with an extension of a stoker after the rotary kiln. The core reactor or kiln is the main component where the actual conversion of waste to energy occurs. Combustion is the most preferred technique for scheduled waste treatment. The combustion air is injected into the reactor to ensure there is a surplus of air at all times.

The benefit of having the stoker after the kiln is to ensure a better burnout of the waste due to the injection of combustion air through the grate. The combination of rotary kiln and stoker also minimises the operation problems and stabilises the combustion as compared to a single rotary kiln. The rotary kiln and stoker combination has been proven to be more effective in thermal treatment of scheduled waste, especially in ensuring a better burnout of the waste.

When ready, Cenviro's SWTE plant will be one of the most advanced in the region and will boost our lead in generating energy from scheduled waste. This will form a core part of our move towards greener solutions in the circular economy.

Ozone-Depleting Substances (ODS)

Cenviro supports the Malaysian government's commitment to adopt the Montreal Protocol on Substances that Deplete the Ozone Layer, that targets for phasing out the production and consumption of hydrochlorofluorocarbons (HCFCs) by 2040. Cenviro supports global efforts by providing ODS treatment and disposal services. ODS are typically found in equipment used for air-conditioning or refrigeration, but also in foams and solvents. In 2017, we treated 26.823 metric tonnes of ODS.

Amount of ODS treated

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

Since 2009, our team has treated over 89.185 metric tonnes of ODS.

203-2

Greener Solutions

Supporting Public Service Institutions

The police and army are part of a group of national agencies of great importance. Cenviro supports these agencies by providing expertise to dispose of exhibits and classified documents. Cenviro's service is part of our contribution to the nation.

Narcotics-related case exhibits are processed and disposed of at Cenviro's incineration facility as needed. The process is strictly secured, with police personnel monitoring the entire process from weighing the items to disposal to landfill.

In 2017, Cenviro assisted the Malaysian police in disposing of 0.12 tonnes of confiscated drugs worth up to RM2.59 million.

We also assisted the Negeri Sembilan state police destruct gambling slot machines for gratis at WMC. The machines were worth RM1.6 million. There were some 248 simulator machines and 645 computers confiscated in gambling cases in the area between 2006 and 2017.



"The disposal here is safer and more systematic, and all machines are destroyed in such a way that the components are recycled."

Datuk Noor Azam Jamaludin
Negeri Sembilan State Police Chief



203-2 Greener Solutions



Our Laboratory – A Pioneer in Scheduled Waste Analysis Solutions

Our specialist waste testing services are housed in a laboratory equipped with state-of-the-art equipment. The technological investment enables us to provide testing of a wide variety of wastes and refused fuels. We assist with the classification of scheduled waste and help our clients comply with DOE requirements including 76 types of scheduled waste solutions.

With competent and qualified chemists, we are able to offer the highest quality and cost-efficient analysis with a quick turnaround. Apart from general waste classification, specialist waste testing services include Waste Composition and Waste Acceptance Criteria (WAC). The laboratory also has extensive experience in testing waste and refused fuels (Refuse Derived Fuel, Solid Recovered Fuel and Waste Derived Fuel). Testing the waste is a critical step in scheduled waste management to analyse and correctly classify the waste for its respective treatment thereafter.

The laboratory is accredited with ISO/IEC17025 and is recognised internationally via the International Proficiency Testing, Resource Technology Corporation, USA.

Satellite Waste Management Facilities

Pengerang Integrated Complex

In 2017, Cenviro, through its subsidiary KASB, signed agreements with PETRONAS for the Collection, Transportation, Treatment and Disposal (CTTD) of Scheduled Waste Services for the Pengerang Integrated Complex (PIC), in Johor. The CTTD contract marks a new landmark in Cenviro's efforts in scheduled waste management. A facility, located 14 km from PIC, will be Cenviro's first satellite facility for scheduled waste outside of Negeri Sembilan. The facility in Johor will collect waste from PIC and other parts of Johor.

Cenviro will complement PETRONAS' PIC development, add value and capitalise on the growing need for premium differentiated petrochemical and commodity products in Asia. These have potential to become new engines of growth and push the nation towards new frontiers of technological and economic development.

203-1, 203-2

Greener Solutions

Managing Clinical Waste

Cenviro operates Malaysia's first non-incineration CWTC, opened in 2014. One of the largest facilities of its kind in Asia, the centre is equipped with cutting-edge technology in clinical waste disposal called Microwave Ecosteryl. This innovative technology ensures an eco-friendly process that uses minimal electricity while providing a safe solution to customers in the biomedical and clinical industries. It is a zero-emissions technology and the residue from the process is inert and landfill-ready.

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

* Previous reports disclosed only microwaved clinical waste. We have expanded our clinical waste disclosure to include other clinical waste treatment.

The CWTC can process up to 250 kg of clinical waste per machine per hour. In 2017, it processed 15,897 tonnes of clinical waste using both microwave and incinerator (the microwave processed 8,823 tonnes). The waste was collected from 93 private hospitals and 2,816 private clinics.

Clinical Waste User Training Programme

For every new hospital, we organise trainings related to the appropriate handling of clinical waste. Medical officers at 57 hospitals attended the session which raised awareness on clinical waste handling procedures in 2017.

We also organised nine roadshows for the general public and private clinics. These roadshows are stakeholder engagement programmes initiated by Cenviro, promoting awareness of safety when handling clinical waste. In these roadshows, we promoted Cenviro's services, raised awareness on clinical waste handling, as well as assisted customers in registering as waste generators and understanding waste codes. In total, our roadshows covered nine states and saw over 2,000 participants from both public and private clinics.

Vertical Secured Landfill – Blueprint for a Greener Design

Our Vertical Secured Landfill is the final disposal place for non-recyclable waste and all residue from our treatment processes. We are proud of having extended the life of the existing secured landfill by 30 years without having to utilise new land.

Landfill capacity is shrinking rapidly. While there is a significant move towards alternative treatment facilities including waste to energy sites by Cenviro, traditional landfill is still the mainstay of our business. Our vertical secured landfill is a future-focused solution in this area.

We explore realistic alternatives to piling our natural resources into landfills – and when it cannot be avoided, find solutions to do it safely. Operating the landfill gives us a unique perspective of the innovative technology and processes that will enhance the collection, treatment and final disposal of waste.

The Vertical Secured Landfill method is an innovative environmental solution which can be applied to other sanitary landfills in Malaysia. As a result of our rapid innovation, we are now in a position to provide expertise and consultation in tackling the conversion of existing landfills into vertical secured landfills. This is an area that will be of increasing demand due to the land scarcity issue in Malaysia.

Total amount of waste disposed of at the landfill

Year	Tonnes
2014	57,965
2015	70,845
2016	77,786
2017	92,961

In 2017, we disposed of 92,961 tonnes of waste at the landfill. The construction of the new landfill was 83% completed in 2017, however it is still able to receive waste. We are projecting an increase in coverage once Phase 2 is ready. At the end of the construction of Phase 2, we expect a 24-metre geogrid wall to be in place. This will eventually entail land savings of 45 acres.

203-2

Greener Solutions

Recycling and Recovery Facilities

Cenviro Recycling And Recovery Sdn. Bhd. (CRR) is the next growth area in our recycling efforts and moves further into the waste value chain. CRR operates based on the 4R concept of Reduce, Reuse, Recycle and Recover, and provides services for recycling and recovery for various categories of scheduled waste. With CRR, we now offer a spectrum of scheduled waste related services which are also cost effective in managing the complexities of responsible waste management and disposal.

With CRR in place, we are able to offer end-to-end scheduled waste related services. Our WMC is equipped with state-of-the-art facilities to cater to the requirements of CRR.

The end product of generated waste is converted into plastic by-products, namely low-density polyethylene (LDPE) and high-density polyethylene (HDPE) which are in-demand and versatile polymers.

In 2017, we recycled and recovered 8,040 tonnes of waste compared with 5,800 tonnes in 2016. Our Plastic Recycling Project is in line with one of the key strategies to revamp and expand the Group's strategy in the recovery and recycling business segment.

For this purpose, we plan to set up a 350 MT per annum plastic recycling facility in two phases:

Phase 1	Processing of recycled plastic until intermediate product (crushed plastic)
Phase 2	Processing of intermediate product to produce LDPE/HDPE resin



Our newly installed Copper Processing Machine

203-2

Greener Solutions

Integrated Municipal Solid Waste Management

To achieve a circular economy, society should strive for a zero waste to landfill strategy. Businesses can take steps towards this goal by reducing material consumption, recycling and reusing materials, composting and using anaerobic digestion. From what is left over, a facility like ours can recover energy.

Cenviro specialises in the collection, public cleansing, treatment, recovery and final disposal of municipal solid waste through its joint venture, EISB, in the northern part of Peninsular Malaysia – in Kedah and Perlis. Our solutions meet strict environmental regulations and provide greener solutions.

Municipal Solid Waste Collection Services

With 315 municipal solid waste collection vehicles, Cenviro handles an average of 1,846 tonnes of municipal solid waste per day, produced by more than 328,967 premises. We collect municipal solid waste, bulky waste and recyclable materials to be disposed of at the disposal sites or processed at materials recovery facilities. In 2017, we disposed of 576,090 tonnes of municipal solid waste.

Breakdown by state:

State	2016 (tonnes)	2017 (tonnes)
Perlis	62,005	46,197
Kedah	570,563	529,893
Total	632,568	576,090

The Anaerobic Digestion Facility in Kulim, with the capacity to process 500 kg of waste per day, covers an estimated 1,800 premises in the area. The by-products of the anaerobic digestion process are compost sludge (used as a fertiliser) and biogas (used to generate electricity). Our multi-resource collection vehicle used in Kulim is a multi-compartment collection vehicle that collects and separates municipal solid waste into bulky, garden, food, recyclable and non-recyclable waste. It is the first of its kind to operate in Malaysia.

We make available the schedules for municipal solid waste collection and public cleansing to Kedah and Perlis residents through the 1,902 signboards that were installed by EISB, as well as provide access to the schedules on the I-Sprecs System via the SWCorp and EISB websites.

We have made available an avenue for notices to be shared with residents through the mResponz website and device application. Residents can view real-time reports on operations, collection and cleaning schedules and completion of work reports.

Public Cleansing Services

With 1,586 employees in Kedah and Perlis, EISB runs public cleansing services. In addition, EISB provides other related services such as the cleaning of markets, public places and streets, public toilets, beaches and drains.

203-2 Greener Solutions

Recycling Services

In line with the country's aspiration towards 3R, EISB plays a vital role as a concessionaire appointed by the Government to increase the recycling rate from 4% in 2007 to 30% by 2020.

In 2017, we recycled 1,773.0 tonnes of municipal solid waste, a decrease from 180,936.7 tonnes recycled in 2016.

Breakdown by type:

Type of recycling waste	2016 (total 180,936.7 tonnes)		2017 (total 1,773.0 tonnes)	
	(tonnes)	(%)	(tonnes)	(%)
Paper	69,628.2	38.5	876.97	49.5
Aluminium	3,470.3	1.9	2.96	0.2
Plastic	70,790.6	39.1	796.31	44.9
Glass	6,167.5	3.4	0	0
Iron	26,059.1	14.4	92.63	5.2
e-waste	3,404.9	1.9	4.17	0.2
Others	1,416.2	0.8	0	0

REnescience – Municipal Solid Waste to Energy

Together with Orsted, the new name for DONG Energy, we are developing an integrated waste-management concept incorporating REnescience technology. Using enzymes, mechanical sorting, recycled water and anaerobic digestion, REnescience separates household waste into recyclables. Then it liquifies the organics from the waste and turns it into energy, precisely green energy.

The first commercial REnescience plant, located in Northwich, UK, was operational in mid-2017, with a capacity of 120,000 tonnes per year. Following the successful installation of the Northwich plant, Cenviro and Ørsted plan to replicate similar non-thermal waste-to-energy facilities in Malaysia. REnescience technology takes advantage of the moisture in municipal solid waste. It is well suited for Malaysia, where the waste contains up to 50-60% moisture.

The viability of using REnescience in processing Malaysian waste was first tested with an on-site Mobile Demonstration Unit at the KASB plant in 2016. Further independent studies on waste characterisation were conducted in 2016, in four laboratories around the world. The results were satisfactory with regard to methane yield from bioliquid as well as quality of solid fractions – desired outputs of this technology.

In 2017, we focused on training Malaysian engineers in preparation of implementing this technology, through on-site training for engineering, procurement, construction and commissioning (EPCC), as well as on-site training for operation and maintenance (O&M).

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Greener Solutions

Recycle for Life

#trashforcash

A trash for cash rewards programme, Recycle for Life started as a community outreach plan to encourage green thinking through recycling. The recyclable items brought in is weighed and matched in cash value. The amount is then loaded onto smart cards which can be used for purchases at selected hypermarkets, bookshops and partner outlets.

In 2017, Recycle For Life Sdn Bhd. (RFL) saw opportunities for expansion of the programme. Throughout the year, RFL outreach had progressed immensely and we have attained the license, from JPSPN, for the RFL programme to collect recyclable waste in 113 areas nationwide. We recognise that we need more societal involvement to help us recycle waste, and we recognise that leveraging on the community is the way to achieve that.



The RFL was launched and introduced throughout Cenviro and each employee was given an RFL card. E-Idaman also introduced the programme to their employees.

The programme's first corporate partner was PWC as the programme was implemented in their office, helping employees recycle their waste while adding onto their smart card value. To ease the process, we have come up with a mobile app for the smart card users to track its value through the app. Followed by the success in this partnership, corporate partnerships of RFL with Yayasan Hasanah and edotco commenced not long after.

In 2017, we have issued 3,530 cards and have collected 112,857 kg of recyclable waste, nationwide.



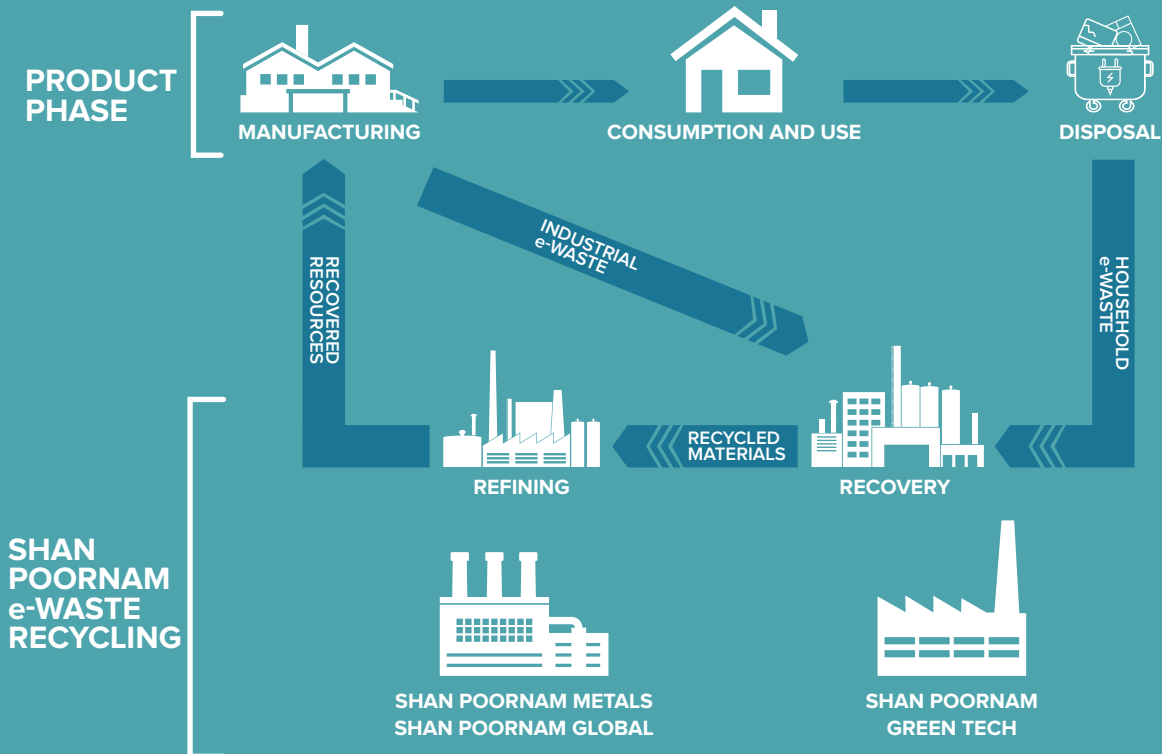
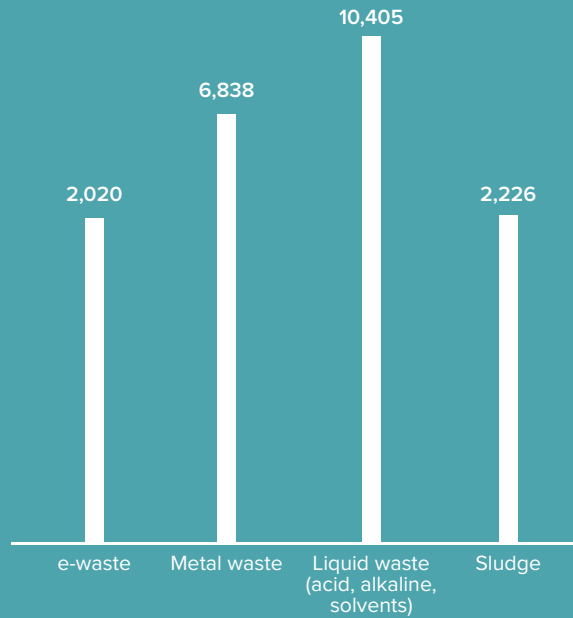
Integrated E-Waste Management

Penang-based Shan Poornam Sdn. Bhd. (SPSB) and its subsidiaries within Shan Poornam Group have been associate companies of Cenviro, through CRR since April 2016.

Shan Poornam Metals Sdn. Bhd. (SPM), a subsidiary of SPSB, is an integrated waste management company specialising in e-waste and scheduled waste, especially waste with intellectual property rights. SPM uses modern technologies to produce ecological, recycled and Restriction of Hazardous Substances Directive (RoHS) compliant products such as secondary aluminium alloy ingot, precious metals such as platinum, palladium, gold and silver.

With the planned household e-waste recycling plant, SPM will be the link between the industries, household e-waste and the environment.

SPM Recycled Waste (MT) in 2017



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Greener Solutions

Achieving Customer Satisfaction

Customer satisfaction is tracked closely to ensure that we provide the best service. At Cenviro, customer satisfaction e-surveys are conducted annually through KASB and EISB. This year, we changed our survey methodology and deployed a comprehensive survey to all active customers. In previous years, only targeted customers were the focus. Our target was a response rate of 75% from active customers.

Overall satisfaction rates for KASB are consistent, with a minor decrease of 1% from 86.4% (2016) to 85.4%. The survey questions covered five segments: customer service, collection, billing, consignment note and overall rating.

For EISB, the survey was conducted to measure the satisfaction levels of municipal solid waste and public cleansing services and the awareness level on the separation at source implementation. The sample sets were randomly segmented across 5 service areas. Based on the customer satisfaction survey results for 2017 by EISB, 90.2% (3,484 of 3,863 respondents) were satisfied with the services provided.

Future-focused Integrated Solutions

Cenviro Eco-Park

The challenge posed by the waste industry needs collective thinking and support. As a business, we are still putting the puzzles together with various stakeholders. This is simply because we do not have all the solutions. We are however buoyed by the power of the community and want to harness a start-up culture mindset amongst industry players. We want to do this by bridging the gap between infrastructure support, technology and human capital.

Our answer to this is the Cenviro Eco-Park which ultimately will deliver greener jobs and greener lifestyles in a greener economy.

Cenviro Eco-Park is the culmination of many years of hard work to realise the vision of a greener future. Functioning as Cenviro's 'Silicon Valley' of recycling and recovery facilities, Cenviro Eco-Park, Negeri Sembilan, is now ready to move to the next phase.

It covers 240.6 acres, including a new 100-acre piece of land adjacent to its existing 140.6-acre. Upon completion, it will be a world class high-technology waste recycling and recovery complex.

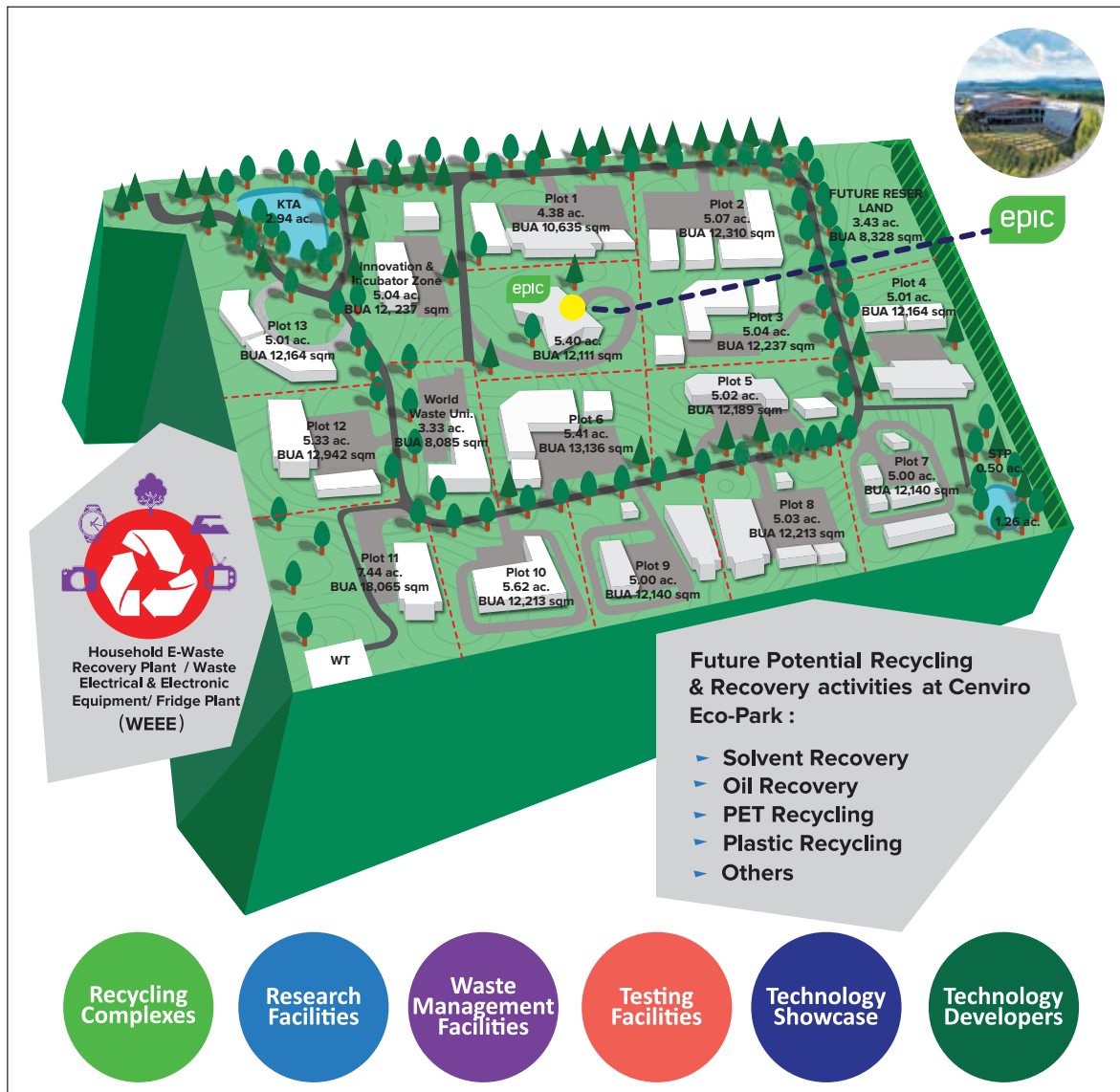
The Cenviro Eco-Park consists of two main zones, Institutional Zone and Operational Zone (for Recycling and Recovery Industrial), which may take five to 10 years to fully develop.

Cenviro Eco-Park will be collaborating with all types of recycling and recovery facilities, including plastic recycling, Polyethylene Terephthalate (PET) recycling, plastic-to-product, high-end waste solvent and waste oil recycling through various collaboration options such as joint-venture developers, tenants or partners.

We welcome well-established recycling and recovery companies with state-of-the-art technologies to be part of Cenviro Eco-Park.

Cenviro Eco-Park Layout Plot

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



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Greener Solutions

EPIC

Located in 5.4 acres of Cenviro Eco-Park, EPIC is Malaysia's first centre of excellence for waste management with the aim of developing knowledge across the whole spectrum of waste management. EPIC's mandate is to fulfil Four Development Pillars; namely Human Capital and Content Development, Innovation and Advanced Technology Development, Green Economy and Eco-Park Facilitation and Environmental Awareness and Social Responsibility.

July 2017 marked a milestone as EPIC was officially launched by the Malaysian Minister of Natural Resources and Environment, YB Dato Sri Dr. Haji Wan Junaidi Tuanku Jaafar.

Through EPIC, a new generation of waste management professionals will be able to fill the gap in professional and technical skills in an ever-evolving industry. We also hope to learn, exchange technologies and improve awareness towards holistic waste management in Malaysia through partnerships and international expertise.

The EPIC building, designed by renowned architect Hijjas Kasturi, was awarded Platinum Green Building Index (GBI) certification for Design Assessment. The building has features such as a solar-panelled rooftop, rainwater harvesting systems and the use of recycled materials in the building structure. The building adopted green technologies from concept to completion, including the bioclimatic design which focuses on energy efficiency, water efficiency and a healthy environment.

EPIC to nurture human capital development

EPIC's main objective is to serve as a platform to raise standards and capabilities of the industry in Malaysia. By being the go-to institution that nurtures expertise in waste management, EPIC will be able to develop a new cohort of Malaysian accredited and certified professionals in the area. Programmes can start from basic 1-3 day courses to up to year-long courses.

For example, there are many compactor drivers in Malaysia and we are looking to get them all certified. By getting certified, it will increase their job grade and remuneration. It may be a 2-3 day course where they learn about the truck, what to do in emergencies, basic maintenance of the truck as well as on health and safety. At a higher level, we will conduct very specific programmes for technical grades. Our Integrated Waste Management Facility will be able to provide trainees with practical experience as well.

One of EPIC's key partnerships is with Chartered Institution of Wastes Management (CIWM). We will work together to establish CIWM Malaysia in 2018 to provide professional training and accredited courses for the industry. The prestigious partnership came to fruition as CIWM is drawn to EPIC's underlying vision.

203-2 Greener Solutions

EPIC Highlights and Training 2017

Programme	Details
Established the Chartered Institution Wastes Management (CIWM) formation in Malaysia	In July, an MoU was signed with the CIWM to establish a Chartered Institute of Waste Managers programme in Malaysia. The CIWM is a professional body for the waste management industry in the United Kingdom. This is the first chapter outside the United Kingdom.
International conferences and workshops conducted by EPIC	
1. Training for be'ah, Oman	An MoU for collaboration between EPIC and be'ah, Oman was signed to enable the exchange of resources and information and to undertake research and development projects. As part of our working partnership, a Hazardous Waste Management training was conducted for their top management in January.
2. Holistic Waste Management training programme, Nepal	A 3-day training programme called Introduction to Holistic Waste Management was organised for Lalitpur Metropolitan City Municipality, Nepal. The programme was attended by 15 officers from Kathmandu in June.
Accreditation by Pearson (Edexcel) to conduct BTEC courses	<p>EPIC was accredited in 2017 by Pearson (Edexcel) to conduct BTEC courses.</p> <p>Edexcel is a UK certification body with affiliated higher education institutions in more than 100 countries around the world to conduct courses in Sustainable Environment BTEC qualifications. The BTEC qualification offered by Pearson (Edexcel), is recognised in more than 80 countries worldwide and has over 1 million learners every year.</p>

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Greener Solutions



"I am pleased to note that EPIC is the first of its kind in the country and aims to become a national excellence centre for developing knowledge and providing innovative solutions for the complete spectrum of sustainable environment and renewable energy. EPIC will conduct trainings and undertake research work in waste related matters not only for Malaysia, but for the ASEAN region."

Minister of Natural Resources

**YB Dato Sri Dr. Haji Wan Junaidi
Tuanku Jaafar**



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Greener Solutions



EPIC

Malaysia's First Centre of Excellence for Waste Management



“EPIC is the latest step in the drive by Cenviro Group to drive standards and share best practice throughout Malaysia and the region, with the intention of becoming the focus for training and innovation, as well as with ambitions to establish a World Waste Management University at the venue.”

CIWM President 2017
Margaret Bates



103-1, 103-2

Our Operations and the Environment

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. We work hard to have systems, processes and metrics in place to motivate us to keep improving. By doing so we can reduce greenhouse gases, energy, noise and water consumption, and improve air quality. We also have ongoing initiatives to conserve biodiversity.

SDGs

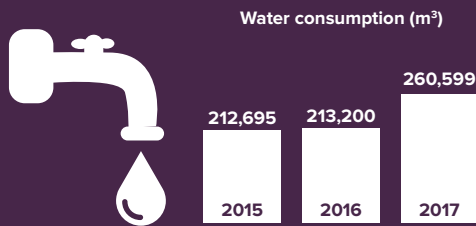




Our Operations and the Environment

Performance Overview 2017

Water consumption increased in correlation to the greater amount of waste treated at our facilities

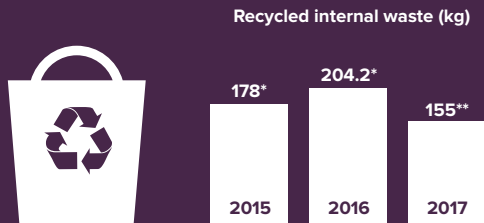


Carbon footprint **12,572.70 tonnes**



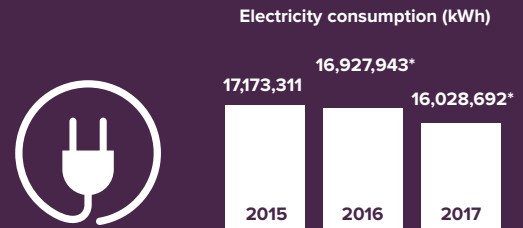
*Refer to page 70 for the change in scope

We continue to recycle waste generated internally at our offices



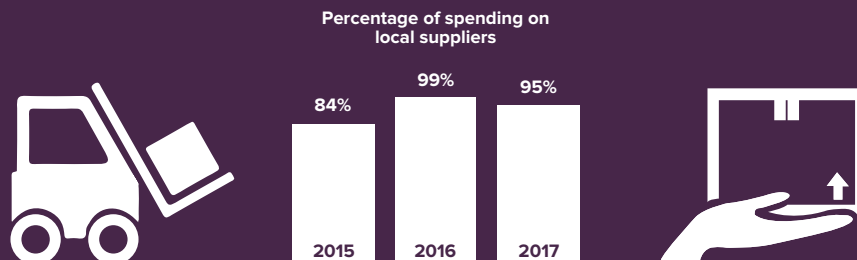
* Data covers WMC only (empty cartridge)
 ** Data covers WMC only (empty cartridge, paper and plastic)

Reduced electricity consumption due to energy saving initiatives



* Data covers WMC (including SELCO solar panel system), the Corporate HQ and CS Regional Offices

We support the local economy by hiring more local suppliers via our sustainable procurement practices



Our Operations and the Environment

Operational Efficiency

In 2017, Cenviro continued improvement measures, including industrialisation processes, purchasing efficiencies, and the reduction of operational expenses.

At Cenviro we also optimise operational performance through plant downtime, materials management (fuel and water), procurement practices and environmental monitoring systems.

Plant Downtime

Plant downtime are periods when the plant is not operational, be it planned or unplanned. All our plants have scheduled downtime for maintenance one day a month. The incinerator plant is shut down three weeks a year, while all unplanned downtime is closely monitored.

In 2017, the downtime for Incineration Plant 1 remained at a similar level to 2016. The downtime of both the Physical and Chemical Treatment Plant and the Solidification Treatment Plant reduced compared with the previous year.

Facility	Downtime (hours)			
	2014	2015	2016	2017
INC1	2,505	1,479	1,066	1,054
INC4	2,299	1,071	882	717
SOL1	1,683	540	819	712
PCT	1,843	207	937	891

301-1

Materials Management

Waste treatment processes require certain chemicals and raw materials. Hydrated lime, activated carbon and caustic soda are the three most commonly used materials to treat scheduled waste. At our plants, these materials are processed efficiently in accordance with environmental regulations.

We source materials that are more eco-friendly at the point of extraction.

Materials used in scheduled waste treatment:

Type of material	Quantity (MT)			
	2014	2015	2016	2017
Hydrated lime	1,453	1,290	1,548	1,628
Activated carbon	12	8	10	7
Caustic soda	40	50	115	181

301-1

Fuel

WMC uses diesel as fuel for the incineration process. In place of diesel, we also use reconstituted oil (RO). In 2017, the amount of RO that WMC consumed reduced by about 38.5% because INC4 experienced a halt in operations for several months. This was due to the low volume of waste collected.

Year	Quantity (MT)		Ratio
	RO	Diesel	
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	2.0:1

Our Operations and the Environment

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Water Management

As part of our commitment to responsible environmental stewardship, we engineer our facilities to run as efficiently as possible. Wherever we can, we minimise potable water use and wastewater discharge. In addition to benefiting the environment, these efforts frequently help us save cost.

Water usage summary

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

103-1, 306-1

Effluent Treated and Discharged

We have a zero-discharge policy. Effluents channelled from the Effluent Treatment Plant (ETP) and Leachate Treatment Plant (LTP) are treated through physical, chemical, biological and advanced oxidation treatment processes. The treated effluent is reused as quench water for the incineration plant.

Type	Quantity (m ³)	
	2016	2017
ETP	83,742	91,290
LTP	37,983	30,542

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Waste Management at WMC

Reducing waste is fundamental to our business and we make every effort to cut down our waste. Our internal waste comes from process plants as well as our corporate offices.

Internal Waste – Food Waste

We collect, recycle and reuse as much internal waste from our offices as possible. Food waste from the administrative building's pantry and canteen is segregated and processed in a COWTEC® machine. The output from the COWTEC® food composting machinery includes biogas (a by-product) and the compost which will be used in fertilising our landscape greenery. The benefits of this technology are the quick composting process of a few days, compared to months when done without a machine, as well as it being automated and self-sustaining. In 2017, we produced 575.8 kg of compost.

Internal Waste – Scheduled Waste

Internally-generated scheduled waste is collected and sent to the incinerator for disposal. We conduct internal recycling programmes at our offices. Empty ink cartridges are collected and refilled by an external service provider. Those that are not usable are collected for recycling. In 2017, we collected 64 kg of ink cartridges compared with 204.2 kg in 2016.

Our Operations and the Environment

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Type of waste	Amount of waste (kg)		
	2015	2016	2017
Waste recycled	178*	204.2*	155**
Internal waste – scheduled waste treated internally and landfilled	485	337	446
Internal waste – appointed contractors collect and send waste to approved facilities	61,120	54,680	35,150

* Data covers WMC only and empty ink cartridges

** Data covers WMC only and empty ink cartridges, paper and plastic

102-9, 103-1, 103-2

Sustainable Procurement Practices

We recognise that our waste, emissions, and environmental risks are often directly linked to the quantity and quality of the goods, services and raw materials we buy. Materials bought typically include equipment for waste treatment, such as pumps and motors, and consumables such as jumbo bags and personal protective equipment. The services we procure are mainly for equipment maintenance and services related to construction projects. Cenviro adopts a responsible approach to procurement practices because we are committed to building and supporting a sustainable supply chain.

Process for Supplier and Contractor	When the process is undertaken	Frequency of process being undertaken	Details of process
Contractual agreement	Upon contract agreement/approval (during submission of PO)	Upon each contract agreement/approval (during submission of PO)	<ul style="list-style-type: none"> • General conditions • Environmental regulation requirements
Evaluation of suppliers/contractors	Upon job completion and/or goods supplied	Every 12 months	<ul style="list-style-type: none"> • Environmental regulation requirements and compliance assessment • Environmental policy • Vendor Assessment (through portal)

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Our Operations and the Environment

We strive for the highest possible standards of business ethics, professional courtesy and competency in our engagement with suppliers. We maintain regular communication with our suppliers, from initial screening and vendor selection through to the fulfilment of procurement.

With the introduction of new SAP systems at Cenviro from early 2017 onwards, our procurement process has become more efficient due to the centralised system. We now have the ability to generate accurate reports instantly, and create and manage contracts using the system, eliminating the need to purchase excess inventory. These improvements save cost and simplify production planning, but also enhance transparency for audit purposes.

KASB is in the process of integrating environmental, health, safety and quality concerns into strategic sourcing. While the implementation process can be challenging, environmentally-preferable purchasing can offer long-term business benefits.

To ensure suppliers comply with our requirements, we offer them support – for example in the form of training and our compulsory Contractor Induction Programme. Only upon completion of the programme is a six-month Contractor Pass offered. The pass must be renewed by attending a refresher course.

We strive to maintain a diverse supplier base that reflects the markets and communities in which the company operates. We procure products and services locally whenever possible.

Breakdown of suppliers by type:

	2015	2016	2017
Number of suppliers:			
Local	312	419	411
Foreign	10	12	8
Total	322	431	419
Percentage of suppliers:			
Local	97%	97%	98%
Foreign	3%	3%	2%
Total	100%	100%	100%
Percentage of spending on suppliers by type:			
Local	84%	99%	95%
Foreign	16%	1%	5%
Total	100%	100%	100%
Total spend on suppliers (RM)	116,016,073	105,416,672	55,109,399

Our Operations and the Environment

We have a supplier rating system that helps us track the performance of our registered vendors. The system covers 20 evaluation criteria, such as meeting product specifications, labour supply, after sales service, safety and health requirements and environmental requirements. Underperforming vendors are notified in writing to improve their performance. Vendors who do not improve their ranking in the subsequent review are classified as Non-Performing Vendors.

Supplier management	2014	2015	2016	2017
Performance of suppliers relative to environmental components of programmes and procedures	60%	67%	67%	64%

Technology and Automation

We took a leap in optimising and automating our internal processes. Our Enterprise Resource Planning (ERP) strategy has guided us since 2016 to optimise our operations with the help of technology and automation. In 2017, we took an important step towards integrating our systems under the SAP umbrella, investing a total of RM20 million over 5 years.

Aimed at integrating and centralising our systems as we embark further on the planned expansion in our business and facilities, SAP will enable us to become the regional champion in Leading the Green Revolution.

The SAP suite on HANA with Industry Specific - Utilities: Waste, known as IS-U Waste, provides an industry specific solution with best practices for waste management within an integrated system. Now, instead of working in silos, everyone across the Group can access data in the system and collaborate with other departments.

With SAP now replacing the legacy system, we can increase efficiency and reduce duplication, improve process efficiency and ensure our internal processes respond to the needs of our organisation. The system will enable Cenviro to meet critical business, technical, and personnel-related requirements cost-effectively and help us offer better and more efficient waste disposal services.



Digitalisation means consolidating and automating processes to better support operations end-to-end and reduce our carbon footprint. Our ERP solution is cloud-based, hence there will be no servers at Cenviro's premises. Having no cold rooms for servers further reduces our carbon footprint and energy consumption.

Our Operations and the Environment

Environmental Management

While most of our services and solutions help clients – and the nation – tackle the environmental challenges of waste and climate change, we ensure that our own operations use natural resources, create emissions and contribute to climate change. Our environmental management policies (KASB IMS Policy) seek to minimise these negative impacts and ensure our carbon footprint is as small as possible. We are also aware that the more efficient our collection methods are and the higher the recycling rates in the country become, the more emissions our operations will release – a trade-off we need to balance with even more effective recovery methods.

Top management involvement and accountability is of utmost importance when driving environmental management performance.

It is only with their foresight that a general strategy can be formulated to lead the organisation's efforts to achieve our environmental vision.

An effective Environmental Management System (EMS) will improve environmental performance. Our top management is committed to providing the necessary resources to develop, operate and maintain the EMS to fulfil our mission, which is “To provide Innovative and Sustainable Waste Management and Renewable Energy Solutions”.

Cenviro's environmental objectives and targets

Objective	Target	2017 Performance
To ensure adequacy of competent personnel	Minimum 1 competent person	10 competent persons.
To maintain management system effectiveness	Zero major non-conformance	An audit for KASB and CS ISO 14001 was conducted by DOE. There were zero major non-conformance, zero notice and zero compound received. Meanwhile, CRR received zero notice and zero compound issued by DOE but three major notices issued by an external auditor.
Continue energy reduction activities	Reduction in monthly electricity consumption (total kWh) by 10%	In 2017, an energy audit was conducted by a third party to obtain total energy consumption at WMC and energy savings recommendations.

305-1, 305-2, 305-3

Our Operations and the Environment

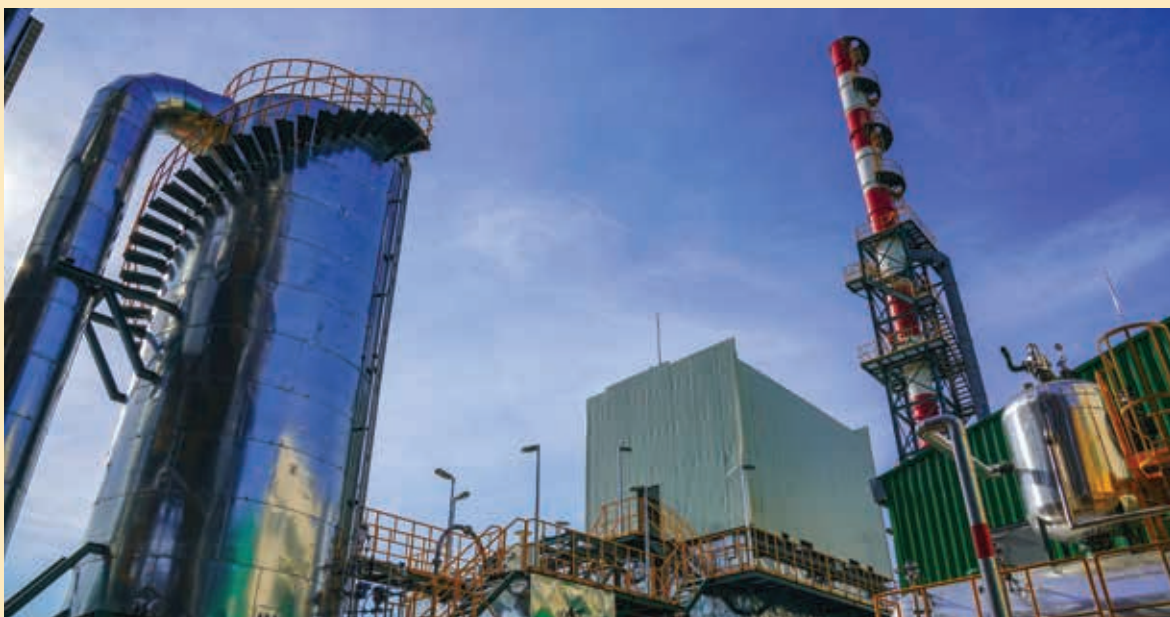
Managing Emissions and Addressing Climate Change

Sustainable development is at the core of Cenviro, and we support Malaysia's efforts to capitalise on opportunities arising from global environmental and climate change initiatives and promote knowledge and technology transfer.

At Cenviro, we work to improve the concerted effort between emitting sources, monitoring systems and the relevant legislation to reduce the amount of serious pollutants released into the air, soil and water.

We are still improving our monitoring systems, especially as the boundaries of the carbon emissions data is incomplete. We aspire to include tracking methods that take into account the environmental aspects and potential impacts throughout a product's life (i.e., cradle to grave) from raw material acquisition through production, usage and disposal. We have adopted the internationally-recognised Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Version). The reduction in the scope 1 and scope 3 emissions from 2016 to 2017 is due to the revision of data boundary (excluding plant operation's diesel and RO consumption as well as contractor-owned vehicles).

Total CO ₂ emissions	2014	2015	2016	2017
Scope 1 Direct GHG emission (tonnes)	18,823	15,333	10,075.12	163.75
Scope 2 Indirect GHG emission (tonnes)	10,218	12,725	12,543.61	11,877.26
Scope 3 Other indirect GHG emission (tonnes)	10,261	10,236	6,620.76	531.69
Total	39,302	38,294	29,239.49	12,572.70



305-1, 305-2, 305-3

Our Operations and the Environment

Breakdown of Scope 1, 2 and 3 in calculating our emissions:

Scope 1	Scope 2	Scope 3
<p>Category Direct GHG Emissions</p>	<p>Category Indirect GHG Emissions</p>	<p>Category Other indirect GHG Emissions</p>
<p>Description Emissions from sources that are owned or controlled by us.</p>	<p>Description Emissions as a consequence of our activities, but occur at sources owned or controlled by another entity</p>	<p>Description Emissions as a consequence of our activities, but occur at sources owned or controlled by another entity</p>
<p>a. Company-owned Vehicles GHG emissions produced by our fleet of company-owned vehicles were calculated from purchasing fuel for cars, motorcycles, 4-wheel drives, vans, trucks and other heavy industrial vehicles. The CO₂ emissions from the consumption of fuel were derived from the emission factor published by the IPCC Guidelines for National GHG Inventories.</p>	<p>a. Purchased electricity consumption Indirect emissions from electricity consumption is calculated for Scope 2.</p>	<p>a. Employee-owned Vehicles CO₂ 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.</p> <p>b. 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 Calculator to quantify our carbon emissions due to our business air travel.</p>

Our Operations and the Environment

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Electricity Consumption

Our indirect GHG emissions are mostly in the form of purchased electricity. The carbon emissions from the use of electricity were derived using the emission factors published by the Malaysian Green Technology Corporation for the Peninsular grid.

Our electricity consumption:

Year	2014	2015	2016	2017
Purchased electricity consumption (kWh)	14,960,527	17,173,311	16,927,943*	16,028,692*

* Data covers WMC, solar panel system at WMC, the Corporate HQ and CS Regional Offices

We will continue striving to minimise our electricity consumption throughout all areas of our operations. For example, we have small-scale solar-powered generators. The solar project is one of WMC's energy saving measures under its Energy Management Plan to reduce the impact on WMC's overall operating cost in light of the rising electricity rate. The amount of solar energy generated in 2017 was 180,191 kWh.

In 2017, WMC consumed about 16 million kWh of energy. An energy audit was conducted by a third party in 2016. The results in 2017 consist of baseline energy consumption as well as recommendations. Based on the third-party verified energy audit, and also the potential shutdown of INC1 and INC4 that consume the most electricity in WMC, the Management decided to review the present and future energy consumption in WMC.

Solar

We further pursued our renewable energy agenda by exploring photovoltaic self-consumption. Sustainable Energy Development Authority Malaysia (SEDA) allows self-consumption (SELCO), providing us with an opportunity to increase the usage of electricity from renewable sources for the facilities in Negeri Sembilan. Example of solar power projects under SELCO at WMC:

- EPIC rooftop solar panel — 41.62 kWp solar panel system on EPIC rooftop, which began operating in July 2017, with a projected annual energy yield of 47MWh
- Warehouse solar panel — 1MWp solar panel system at KASB warehouse, to be operational in May 2018, with a projected annual energy yield of 1,350 MWh



Our Operations and the Environment

103-2, 103-3

Environmental Management Systems

KASB has had its own Environmental Monitoring Programme (EMP) since its establishment in 1997. The EMP is monitored annually by an appointed third-party consultant. Monitoring reports are submitted to the DOE as part of its licensing and compliance requirements. In 2017, we included CRR into our EMP. However it only involved stack emission monitoring at this stage.

As an environmental service infrastructure provider, our environmental expenditure is directly linked to our operations. Such expenditure includes costs related to compliance, environmental protection, control and research, as well as the capital and operating costs for our waste-handling.

In 2017, our environmental expenditure was over RM600,000. We are committed to continually improving our environmental management by monitoring our environmental control measures.

103-2, 103-3, 307-1

Environmental Management at KASB

We have a simple goal for environmental compliance: zero non-compliance. Our Environmental Management System is there to prevent violations. Our systems proved efficient in 2017, with no recorded violations. We monitor numerous environmental indicators closely – to comply with the licensing requirements and to safeguard our reputation as an environmentally-responsible company.

The environmental management system of KASB encompasses these ISO certifications:

1. **ISO 9001 – Quality Management System**

2. **ISO 14001 – Environmental Management System**

3. **OHSAS 18001 – Occupational Health & Safety Management System**

4. **MS 1722 – Occupational Health & Safety Management System**

As an ISO 14001:2004 certified company, KASB was also audited by SIRIM QAS International Sdn. Bhd. in August 2017. Our goal was to achieve zero non-conformance for environmental management. No non-conformance notices were issued and the auditor pointed out several positive findings.

The Environmental Performance Monitoring Committee (EPMC) comprises members of various departments as required by the DOE's Guided Self-Regulation. The committee meets regularly to control and minimise pollution from our operations. The Environmental Regulatory Compliance Monitoring Committee (ERCMC), made up of all heads of department, discusses the budget and implementation of environmental pollution control. In 2017, EPMC continued to improve the tracking and monitoring of environmental performance and provided timely mitigation actions. ERCMC reports to the top management for basis of decision making on policies and resource allocations to sustain good environmental performance.

All our facilities complied with the stringent requirements listed in the Licence Conditions (by Jadual Pematuhan) which is gazetted and enforced by the Department of Environment. The licences of the facilities are renewed yearly with a condition to evaluate compliance status prior to renewal submission.

To ensure that KASB complies with all environmental and legal requirements, we engaged a registered third-party consultant to conduct an audit on our environmental performance in 2017.

103-3, 305-7

Our Operations and the Environment

As a result of the environmental management audit, we have taken steps to upgrade the KASB facilities to mitigate any negative impact to the environment. The main points raised in the assessment and actions taken are summarised in the table below:

Environmental aspects	Facility	Possible environmental impact and actions taken	Control measure
Emissions	Incineration plant	Highly efficient dust collection is achieved with a primary flue gas cleaning system (injection of absorbent lime and activated carbon) and fabric filter.	Comply with stack emission monitoring license condition
	Incineration plant	Without a secondary wet and dry scrubber system (using caustic soda to further neutralise the flue gas), the process emits acids to the atmosphere. Secondary scrubber system is installed after Air Pollution Control Equipment.	Comply with stack emission monitoring license condition
	Incineration plant	Incomplete combustion leads to lower efficiency and higher carbon monoxide emissions. The temperature of the primary combustion chamber needs to be maintained at above 1,000°C at the secondary combustion chamber at INC1 and INC4.	Comply with stack emission monitoring license condition
		Continuous Emissions Monitoring System (CEMS) is used to monitor and ensure emissions from the stacks are within the limits stipulated by DOE. Emission data from CEMS is linked directly to DOE. Above the limit emissions will lead to non-compliance of licensing conditions.	Installation of CEMS Comply with stack emission monitoring license condition
	Solidification Treatment Plant	Our operating licence sets limits to particulate matter released to the air from the plant. A dust collector is used to trap dust and particulate matter from the gas streams.	Comply with stack emission monitoring license condition
	Physical and Chemical Treatment Plant	To meet the air pollution limits, our treatment tanks are ventilated and the gases produced are filtered using a scrubber system.	Installation of a scrubber Comply with stack emission monitoring license condition

103-3

Our Operations and the Environment

Environmental aspects	Facility	Possible environmental impact and actions taken	Control measure
Oil/Chemical spill	All treatment facilities	<p>A bund wall is used to contain spillages from oil/chemical storage tanks. Waste and raw materials are stored within the perimeter drain with a proper sump pit.</p> <p>Spillage control kits are available at each facility. Sawdust is used as an absorbent at the sump pit.</p> <p>We have procedures to ensure packaging from waste generators is in good condition and no containers leak.</p>	<p>Bund wall/containment, perimeter drainage system and sump pit</p> <p>Spillage control kit available</p> <p>Waste Handling Procedure and Packaging Procedure in place</p> <p>In 2017, no incidents were reported</p>
	Transport	Spillage control kit contains sawdust (oil absorbent), oil spillage boom, rubber gloves and other tools mentioned in the Licence Approval for Transportation. The Spillage Control Kit in trucks is to be used in spillage incidents during transporting activities.	<p>All trucks are equipped with a spillage control kit</p> <p>In 2017, a spillage due to rupture of waste packaging, which caused leakage, was reported</p>
Wastewater/ effluent discharge	All facilities	Water that comes in contact with waste must be treated at ETP.	<p>Perimeter drain and sump pit at storage area in place</p> <p>In 2017, no incidents were reported</p>
Land contamination	All facilities	Chemical spills during storage can contaminate surrounding areas.	<p>Concrete pavement for storage area</p> <p>Spill kit is installed at designated area</p> <p>ERT on standby in case of an incident</p> <p>In 2017, no incidents were reported</p>

103-3, 305-7, 413-2

Our Operations and the Environment

Cenviro monitors seven key environmental performance indicators at 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	Monitored as a part of licensing requirements.
Wastewater quality	Practiced Zero Discharge Policy, as all wastewater is being treated and used back in facilities such as quenching water in incineration process.
Air quality	Smoke from stacks (as we treat scheduled waste with inorganic compounds) is monitored to ensure quality of air emitted complies with regulations.
Odour	Odour is controlled at the outlets of microwave system and wastewater treatment plant.
Noise	Noise level monitoring according to Annex A, Schedule of Permissible Sound Levels, Schedule 1: Maximum permissible Sound Level (LAeq) by Receiving Land Use for Planning and New Development under The Planning Guidelines for Environmental Noise Limits and Control, 2004 by DOE.
Biodiversity	We strive to ensure our operations do not harm or reduce potential harm to sensitive species, habitats and ecosystems.

Managing environmental non-conformance

Environmental regulation is the framework that helps companies manage their direct impact on the environment. For a complex industry like waste management, ensuring compliance and monitoring is a complicated task. It requires solid monitoring mechanisms for verification and readiness to implement changes as a response to ground events.

Cenviro's procedures for managing non-conformance:

- In the event of non-conformance, a Corrective Action Preventive Action (CAPA) form will be issued to the respective area owner. There is a procedure for how CAPA forms are registered, assigned for action and archived.
- New employees are trained on environmental issues.
- Respective departments report environmental performance to EPMC on a monthly basis and ERCMC on a quarterly basis.
- There are quarterly meetings on Environmental Monitoring Report (EMR). The meetings are attended by both parties from KASB and appointed consultant.
- WMC has a Penalty Matrix System to improve employees' awareness and compliance of safety, health and environment procedures. It guides us on how to discipline employees in cases of non-compliance.

103-1, 103-2

Empowered People

How effective a company is ultimately depends on its people. At Cenviro, we want to nurture the skills, passion and innovative minds of our employees. We do so through solid policies, development programmes, a caring culture and appropriate benefits. In 2017, our top priority continued to be health and safety as well as employee engagement.

In an industry like ours, the safety and well-being of employees is a number one priority. Our extensive safety programme helps us achieve our goal of zero accidents.

SDGs

3 GOOD HEALTH AND WELL-BEING



8 DECENT WORK AND ECONOMIC GROWTH



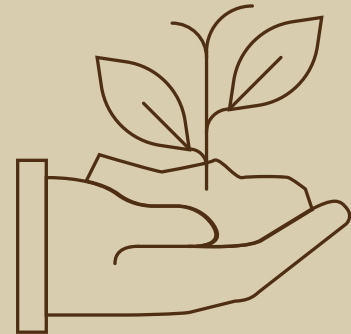


Empowered People

Core Value

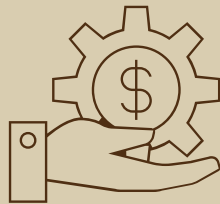
Quality, Teamwork, Accountability, Passion and Safety (Q-TAPS) made us successful in what we do.

Our approach is caring for the environment and our future while applying all efforts to ensure sustainability.

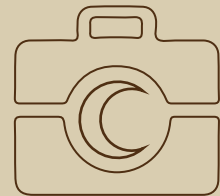


Performance Overview 2017

Conducted **279** employee training programmes, at a cost of almost **RM560,000**



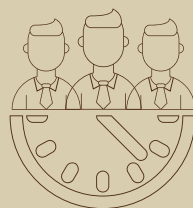
Incident rate 2.9% lower than 2016, resulting in our **lowest incident rate since 2010**



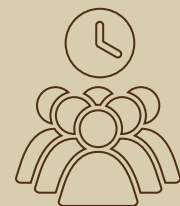
Testing and commissioning stage of Phase 1 and Phase 2 Fire Prevention and Firefighting System Improvement Project



Recorded **532,656 man-hours** with zero-LTI



Average training hours per employee was **32.87 hours in 2017** compared to 34.29 hours in 2016



102-8, 401-1, 405-1
Empowered People

Q QUALITY:
Aiming high – commitment to quality

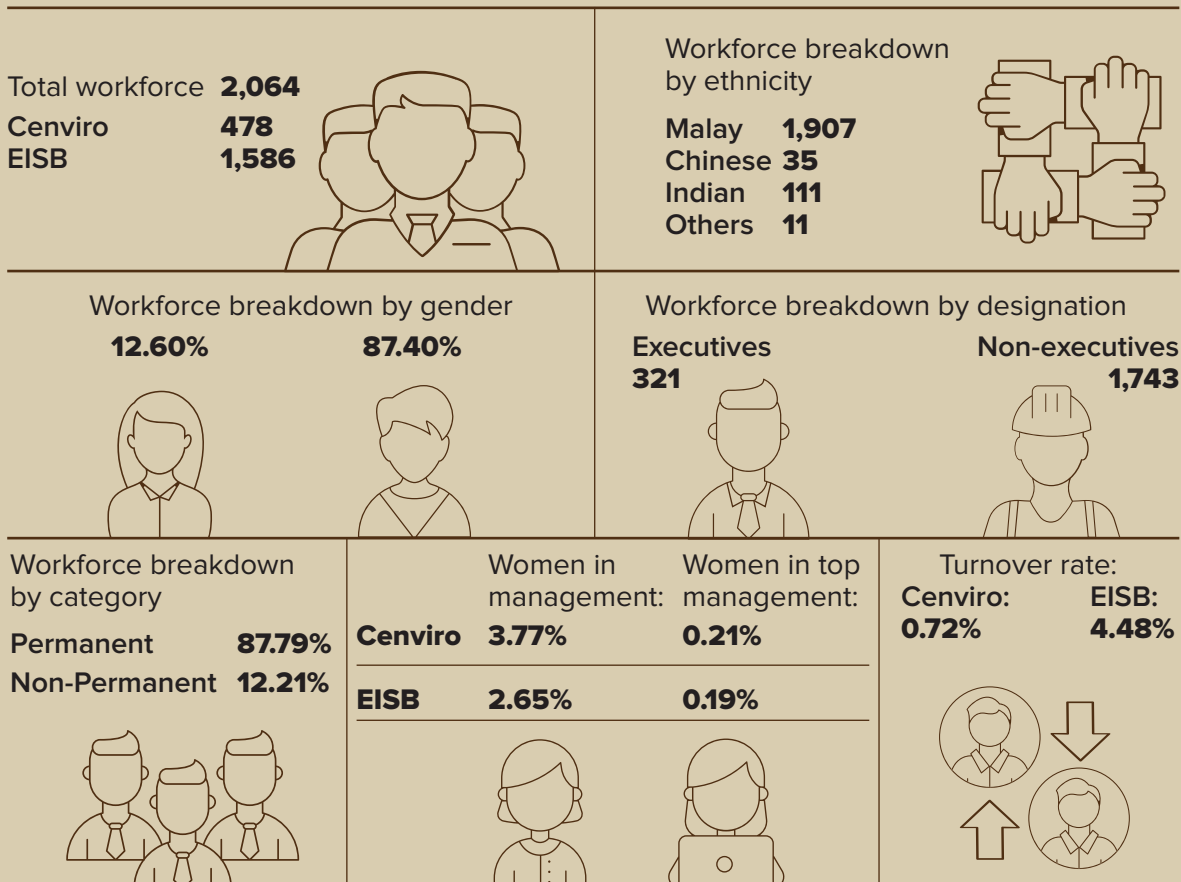
T TEAMWORK:
Collective success, respect for others

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

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

S SAFETY:
Caring for safety, health and the environment

Our Workforce



Empowered People

103-2

Safety, Health and Well-being at the Workplace

Safety is a shared responsibility. Our working environment is complex and involves a range of tasks. Many parts of our operations involve working with heavy equipment or hazardous materials. Realising that any incident may pose health risks to our employees, the local communities and the environment, we have made safety a top priority.

We want to ensure that each employee and contractor returns home safe and healthy after a day at work. Maintaining a first-class safety record and building

stakeholders' trust is more important to us than short-term financial gain.

The Health, Safety and Environment (HSE) Department implements all policies and procedures towards protecting the health, safety and welfare of our employees and those who might be affected by our business. The Environmental section operates under the HSE Department, and is responsible for compliance with the Environmental Quality Act 1974 and the licence conditions issued by the Department of Environment.

Five focus areas of Cenviro Health, Safety and Environment



Empowered People

Cenviro Wellness Centre

The centre, which was officially opened in July 2017, comprises of Kualiti Alam Clinic and a fitness zone. The clinic complies with the standards set by the Ministry of Health (MOH) under the Cawangan Kawalan Amalan Perubatan Swasta (CKAPS) Division. It provides first-level response to work-related incidents and illnesses, and primary and preventive care to employees and contractors. KPJ Seremban has a medical officer, a nurse and a care assistant on duty at the clinic.

An on-site clinic improves our emergency preparedness, since our facility is located about 15 km from the nearest hospital. By December 2017, the clinic had treated 304 patients.

In 2017, we invested in antidotes for certain chemicals that WMC employees may be exposed to during waste treatment, such as sodium thiosulfate. Even though we had only one case of chemical poisoning in 2017, it was one too many, and we hope to have no cases in 2018.



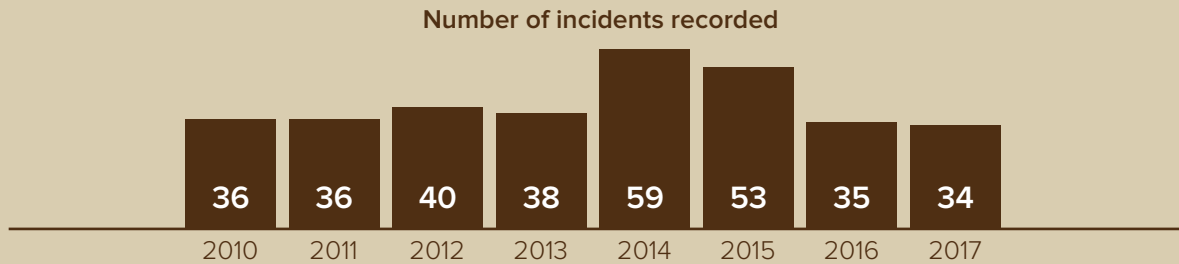
404-2

Empowered People

403-2

HSE Performance

In 2017, the number of recorded incidents decreased by 2.9%, from 36 in 2016 to 34 this year. This is the lowest recorded level it has been since 2010.



Of these recorded incidents, we had a target to reduce incidents in 2016 involving contractors, by 20%, for 2017. However, the target was not met as the incidents involving contractors for 2017 was six, the same number of incidents as 2016.

We recorded 532,656 man-hours with zero-LTI in 2017 as compared to 944,787 man-hours with zero-LTI in 2016. This is equivalent to a 43.6% decrease in man-hours with zero-LTI, due to the lone case of chemical poisoning. The employee was injured but has recovered.

In 2017, we took the following measures to improve HSE awareness:

- 1 Zero Compromise (ZECO):** 12 principles which must be adhered to by everyone, including third-party personnel at our facilities. ZECO was launched during OHSEM Day 2017.
- 2 Health Surveillance programme** is an annual health screening programme. In 2017, it was conducted at Columbia Asia Hospital and involved operational staff, in total 231 employees.
- 3 Upgrading of PPE signages:** New signage was placed at the main entrance to WMC as well as the main security post to remind workers and visitors of the company's policy requiring the use of necessary protective equipment.
- 4 Hepatitis B programme:** Free vaccination was given to all employees at the CWTC as they are exposed to the hepatitis B virus. A total of 14 employees and 10 contract workers were vaccinated. We also vaccinated 7 employees who handle clinical waste in Lok Kawi, Sabah.

404-2

Empowered People

HSE Training

In 2017, we invested RM156,642 and 5,148.5 hours in health and safety training for our people. In addition, we offered a wide variety of guides, health programmes and other benefits to promote employee health and wellness.

List of some health and safety trainings in 2017:

Operation procedures
Defensive driving
Emergency response
Mock fire drill, spillage and accident procedures
Fatigue management
Driver safety
First aid

Year	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

Cenviro's Contractor Management Programme, part of our Integrated Management System, ensures the contractors we work with meet our expectations. Contractors are assessed on their HSE competency and performance through an Annual Vendor Evaluation, and given a rating by HSE Department. The requirements for contractors (compliance with Cenviro's HSE standards) are written in the Purchase Orders issued to them. In 2017, approximately 2,400 contractor employees attended the Contractor HSE Induction – a requirement for contractors working on Cenviro's premises.

If a contractor company fails to comply with these requirements, the HSE Department will issue a Corrective & Preventive Action Request (CAPA). If the non-compliance is by an individual, for an offence such as smoking in the plant, a Penalty Ticket will be given to the person.

HSE Initiatives

In 2017, we conducted a Disaster Management Exercise (DMEX) at Sendayan Tech Valley, as part of our continuous efforts to ensure our Fire and HAZMAT teams are well equipped for all types of disasters that we may face. The mock disaster scenario was a road traffic accident involving an overturned Cenviro truck on the main road at the area. The main objectives of the exercise were to:

Perform a drill of the Emergency First Responder Team of KASB with a single command, in collaboration with multiple agencies

Trial the emergency contingency of the SETMA Emergency Response Team (ERT)

Evaluate the Emergency Response Plan (ERP) of KASB and contingency plan during a disaster or emergency

The agencies involved in the DMEX were:

- Royal Malaysia Police (PDRM) Negeri Sembilan
- Fire and Rescue Department of Malaysia (JBPM) Negeri Sembilan
- Ministry of Health (MOH)
- Department of Safety & Health (DOSH) Negeri Sembilan
- Department of Environment (DOE) Negeri Sembilan
- Tuanku Ja'afar Hospital (HTJ) Negeri Sembilan
- Malaysia Civil Defence Force (APM)
- Sendayan Tanah Merah Emergency Mutual Aid (SETMA)

Empowered People

Both the DMEX and fire prevention project are part of our emergency preparedness efforts. The construction of an Emergency Response Command Centre is now a focus as it will equip us with a central command platform to monitor and manage disaster situations.

We continued with our fire prevention and firefighting system improvements project:

2016	<ul style="list-style-type: none"> Phase 1 – Completed in May 2016 with RM2.46 million invested Phase 2 – Completed in October 2016 with RM2.36 million invested Phase 3 – RM4 million to be invested in four different types of firefighting systems
2017	Testing and commissioning of Phase 1 and Phase 2
2018 - 2019	CRR firefighting system upgrade

HSE Engagement

Kualiti Alam Safety, Health and Environment Contractor Network (KASHECN)

KASHECN provides an opportunity for KASB and its contractors and vendors to discuss, communicate and brainstorm issues and regulations related to HSE. The network met once in 2017. In the future, we aim to increase the frequency of the meeting to once quarterly.

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

This is an annual event by HSE as part of our efforts to promote safety and health awareness in the workplace.

In 2017, the HSE Department organised the OHSEM Week, with the theme ‘Vehicle Safety’ to raise awareness on road safety and defensive driving to prevent motor accidents.

Various programmes and activities took place during the week, including a movie screening, talks by specialists, an OSH exhibition by Malaysian statutory agencies and a blood donation drive.

102-13

SETMA

KASB leads a Joint Safety Committee, known as SETMA, formed in 2015 for the coordination of emergency response around Sendayan TechValley and Tanah Merah. This committee also addresses other matters concerning health, safety and the environment with Sendayan and Tanah Merah. SETMA is now registered with Registrar of Societies (ROS) and we are in the midst of establishing funds for SETMA's activities.

In 2017, SETMA established a relationship with DMEX, with two joint meetings. For 2018, we plan to conduct ERT Trainings for SETMA members and CSR activities to give back to society.

KASB Joint Programme with DOSH

SOHELP, Systematic Occupational Health Enhancement Level Programme, is an intervention programme to help industries improve occupational health and industrial hygiene standards at workplace and to meet regulatory requirements. SOHELP is designed particularly for chemical management, ergonomics issues and hearing protection and has checkpoints for all three elements. Each element has five levels, that are determined by a DOSH SOHELP verifier during a site visit.

Empowered People

The programme is a collaboration between DOSH, the employer and an occupational safety and health practitioner. SOHELP has four phases, from 2016 to 2020 under OSHMP 2020. KASB was invited by DOSH Putrajaya and DOSH Negeri Sembilan to participate in the programme in Phase 2, launched in 2017 at DOSH Negeri Sembilan.

The SOHELP workshop was held in July, and the first and second visit by a DOSH SOHELP verifier in September and December. As of December 2017, we had reached Level 4 and are targeting to reach Level 5 in 2018.

103-2, 103-3, 404-2

Developing Next Generation Workforce

Our employees, fondly called Cenviro Champions, determine our future success and we believe our business is driven by them. We make every effort to position the company for progress by recruiting and training the best talent, retaining a diverse workforce and fostering inclusion of all employees and their ideas. By investing in our employees, we also encourage innovation, reduce costs via continuous improvements and grow revenues through the development of new businesses and services.

404-1

Training and Development

Our training and employee development programmes ensure we have a skilled workforce and a ready pool of future leaders to take on more responsible roles within the Group. We are committed to developing the next generation employees with the necessary skills and expertise to operate our business safely, reliably and affordably.

As a leader in the green revolution in the country, we feel it is our role to build awareness in our industry and acquire ideas well implemented in other countries. We have invested a great deal of effort into developing our in-house training courses, which support the Group's activities and build our employees' capacity.

In 2017, our employees received on average 32.87 (2016: 34.29) hours of training. We delivered 279 training programmes, 80% more than the 155 training programmes conducted in 2016. The significant increase is attributed to running compulsory in-house training on scheduled waste management for all employees, introducing in-house training programmes including ergonomics and Enterprise Risk Management (ERM) workshops, as well as launching an intensive induction programme with plant visits for all new recruits.

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

404-1, 404-2

Empowered People

Average training hours by employee category:

Year	Manager	Executive	Non-executive
2016	59.6	39.57	26.08
2017	51.76	47.81	19.84

Leadership Training

Trainings provided to top management of Cenviro are on an ad hoc basis, designed to empower the leadership team and help them remain focused and productive following the recent restructuring and rebranding exercise. It is a significant part of building a high-performance team within the Company. In 2017, nine trainings were attended by four from our top management.

Competency training organised by Environment Institute of Malaysia (EiMAS)

In 2017, 48 employees attended competency trainings organised by EiMAS and received a one-year competency certification. We have internal targets to ensure that at least six fully-competent employees are available for eight competency areas. We are also putting measures in place to ensure there is a buddy system to assist and support the 10 competent employees. We are keen to build in-house competency and not rely solely on our vendors or external parties.

404-3

Performance Management

Our performance management system includes bi-annual performance appraisals. In 2017, 87% of our employees were appraised, compared with 88.19% in 2016. We use an electronic and automated performance management system (e-PMS), introduced in 2015.

401-1

Maintaining an Engaged Workforce

To remain a lead in the green revolution, it is critical to obtain and retain the best talents in the industry. Our turnover rate is 0.72%. As the local economy continues to grow, skilled and certified professionals who make up our workforce — truck drivers, route managers and maintenance technicians — are in demand. Engaged, experienced employees are integral to safety and operational excellence.

	New employee hires		Employee turnover	
	Number	Rate	Number	Rate
Age				
<30	37	34%	11	10%
30-50	35	11%	23	7%
50>	4	9%	6	13%
Gender				
Male	49	14%	36	10%
Female	27	22%	4	3%
Region				
Johor Bahru	1	20%	2	40%
Kuala Lumpur	13	19%	6	9%
Negeri Sembilan	55	14%	32	8%
Pahang	0	0%	0	0%
Penang	0	0%	0	0%
Sabah	7	88%	0	0%
Terengganu	0	0%	0	0%

Empowered People

103-1, 103-2

Promoting Diversity and Equal Opportunity

The waste industry has traditionally been male-dominated, and it is not easy for us to attract female employees. We recognise the value of building on the diverse backgrounds and perspectives of our employees. We are committed to an employment environment free of discrimination, and employment decisions made by choosing the most qualified people for the job.

Diversity in the workforce



Barani Krishna Moorthy, a Manager at the Marketing and Transportation Division of Scheduled Waste, moved to the waste management industry in 2000 from the world of banking. She started at Toxicol Sdn. Bhd., an agent for KASB, for the marketing and transportation of scheduled waste. Barani had been involved in waste collection from East Malaysia as well as managing the Logistics Division.

When the company was acquired by Cenviro, Barani received a promotion from Executive to Assistant Manager for her invaluable skills experience. In her role today as a Manager, she has become a Certified Professional in Scheduled Waste Management and she is responsible for managing and ensuring

the Logistics Division. This includes ensuring the division maintains profitability and is able to deliver nationwide transportation requests on time. Other duties also include managing the operation and administration of logistics and scheduled waste units and also improving the division's efficiency by developing new policies and procedures where needed.

Barani feels proud to be able to be given trust in a managerial position at Cenviro, where she has the opportunity to be a part of core logistics and transportation operations of Cenviro – a challenging yet fulfilling role that allows her skills and industry experience to continually grow.

Empowered People

Diversity in the workforce



Nur Shahira Binti Samsudin graduated with a Bachelor in Civil Engineering in 2016 and has been working in Cenviro for over two years as a Civil Engineer.

As a Civil Engineer, her work scope includes structural maintenance and project monitoring of civil and structural aspects. In particular, she works out plans and executes the necessary structural rectification works to ensure operations run accordingly. She also assists in landfill operations, overseeing documentations and compliance.

She feels pleased to be able to align her academic interests with her career. Cenviro operates in an evolving sector and the dynamic work environment ensures that she is constantly challenged to pick up new areas of knowledge quickly, particularly during operational challenges. On the job, she deals with a wide range of people within the organisation who sometimes have different viewpoints but ultimately all strive to deliver the best outcome. She believes

the work culture at Cenviro is very nurturing, she is constantly given new and more exciting tasks while being mentored by more senior engineers.

She finds her job rewarding due to the learning opportunities it offers. As a female engineer, she feels her skills and talents are welcomed in the organisation as once upon a time, she believed an engineer was someone who only worked with greasy engines. She has learned that the reality is far from this as a lot of her time is spent on research and analysis. Shahira hopes that more women will consider this line of work, not only to meet the skills gap but also to contribute to exciting technological advances.

Shahira feels grateful for the opportunity to progress in her career at Cenviro. She is able to see the impact of her and her team's work on a daily basis and feels proud to be a part of Cenviro's green revolution, contributing to a sustainable living environment through their job and living Cenviro's core values.

102-41, 103-3
Empowered People

Human Rights

Cenviro respects employees' rights in accordance with relevant local legislation and regulations. We do not tolerate any form of harassment, discrimination or violence in the workplace. We also strive to ensure that the same applies to the supply chain personnel and members of the local community.

Our commitment to human rights is supported by our Employee Code of Conduct, which sets the tone in relation to the Group's stance against discrimination on any basis, inclusive of any bias on the basis of ethnicity, gender, religious beliefs, nationality, age or any physical disability. The rules of conduct apply to all employees of Cenviro and its associate companies.

Aspects	Our approach
Human rights	<ol style="list-style-type: none"> 1. We conduct our business with the belief that everyone should be treated with dignity and respect. 2. We comply with all applicable employment and human rights laws and regulations and our suppliers are expected to do the same. 3. All employees, including security personnel, are issued with an Employee Handbook and Code of Conduct that clearly defines our ethical responsibilities.
Labour	<ol style="list-style-type: none"> 1. Uphold the freedom of association and the effective recognition of the right to collective bargaining. 2. Cenviro complies with the Children and Young Persons (Employment) Act 1966. Individuals below the age of 18 years cannot be employed according to the Malaysian Employment Act 1955.

103-1, 103-2

Community

Giving back to the community has always been part of our company culture. We do this by being a responsible neighbour and a trusted community partner. We believe that businesses should be accountable for the socioeconomic impact they create and play a role in the development of communities around them. We believe our business contributes to the well-being of the nation and revitalises the local economy.



SDGs

3 GOOD HEALTH AND WELL-BEING



13 CLIMATE ACTION



We also actively contribute to social development through our community, environmental and education programmes. These include public education campaigns, sponsorship, festive contributions and celebrations, employee volunteerism and community outreach activities. We believe in the power of education, and support public seminars, exhibitions, roadshows and excellence awards.



102-13, 203-2, 413-1

Community

Community Engagement and Development

Working with communities not only enables us to address local needs and ensure our accountability, but also improves our internal tools and processes for engagement. Collaborating with the public and contributing towards community development is not only the right thing to do, but also makes good business sense.

Through quality relationships, we strive to understand community needs, aspirations and cultures as well as anticipate future generations' needs.

Clinical Waste User Training Programme

One community engagement highlight in 2017 had been the Clinical Waste User Training Programme. Roadshows had been conducted for the general public and private clinics across nine states and saw over 2,000 participants.



Partnership for Penang International Green Carnival 2017

In collaboration with Penang Green Council, Cenviro participated as a strategic waste partner for the Penang International Green Carnival held in September 2017. Cenviro provided the facilities to collect the household hazardous waste, package it safely and transport it to be treated at Cenviro's scheduled waste treatment facilities in WMC. The purpose of this collaboration was to raise awareness on the safe and responsible disposal of household hazardous waste. A total of 0.539 mt TUBA waste was collected and Cenviro's contribution to this partnership amounted to around RM11,000.



203-2, 413-1
Community

Hari Hasanah Bersama Rakyat

The Hari Hasanah Bersama Rakyat volunteer programme is one of the initiatives under Khazanah Nasional's 'Negeraku, Negara Kita' campaign, which celebrates and commemorates Malaysia's journey and progress as a nation, in conjunction with Hari Kebangsaan and Hari Malaysia. The campaign aims to foster unity and patriotism among us.

Cenviro participated in Hari Hasanah Bersama Rakyat programmes in two locations – Kuala Lumpur and Johor. Through this community programme, Cenviro has reached out to almost 20,000 Malaysians from various walks of life, boosting our presence by educating and enhancing awareness on the importance of a sustainable environment.



203-2, 413-1
Community

Cenviro Green Run 2017

In conjunction with Hari Alam Sekitar Negara (HASN) 2017, Cenviro collaborated with DOE to organise its own first edition of Cenviro Green Run in Sendayan, Negeri Sembilan. The run was open for two categories, 12km and 5km fun run.

Elements of recycling activities and education were incorporated in the fun run category. The run was part of our integration activities with stakeholders. Cenviro Green Run 2017 had nearly 1,200 participants.



203-2, 413-1
Community

Community Contributions

- Monetary contributions and donations to the underprivileged communities and mosques during festive celebrations of the year
- Sponsoring the Federation of Malaysian Manufacturers Negeri Sembilan Annual Dinner in 2017
- Contributions to Excellence Programmes in schools in the vicinity, supporting schools to empower students
- Donations to schools in the neighbouring area



Good Conduct and Ethical Business Practices

The long-term sustainability of Cenviro's businesses is underpinned by our core value of integrity and driven at the highest level through strong corporate governance and proactive engagement with stakeholders. When our fundamentals are strong, we are able to harness and synergise distinctive capabilities to capture opportunities arising from the demands of the waste management industry. The focus on execution bears an impact on the design of our products, services and initiatives which we undertake.

SDG

5 GENDER
EQUALITY





AGILITY

The Board



From left sitting : **Ahmad Farouk Bin Mohamed, Khalid Bahsoon**

From left standing : **Loh Tzu Anne, Yeo Kar Peng** (Appointed on 20.06.2017), **Datin Paduka Che Asmah Binti Ibrahim** (Appointed on 20.06.2017), **Nik Rizal Kamil Bin Nik Ibrahim Kamil** (Appointed on 20.06.2017)



Good Conduct and Ethical Business Practices

The Board

The Board ensures that the highest corporate governance standards are adhered to, aligns the interests of stakeholders and sets the tone for its ethics and values.

A strong and independent board as the highest governing body responsible for setting the strategic direction, overseeing the business and affairs of the Company, establishing with management the strategies and financial objectives to be implemented by management, and monitoring the performance of management.

405-1

Board Composition

Name	Designation	Age	Meeting Attendance	Percentage of attendance (%)
Ahmad Farouk Bin Mohamed	Non-Independent Non-Executive Director	45	6/6	100
Khalid Bahsoon	Managing Director	48	6/6	100
Loh Tzu Anne	Non-Independent Non-Executive Director	42	6/6	100
Nik Rizal Kamil Bin Nik Ibrahim Kamil (Appointed on 20.06.2017)	Non-Independent Non-Executive Director	45	3/3	100
Yeo Kar Peng (Appointed on 20.06.2017)	Non-Independent Non-Executive Director	56	3/3	100
Datin Paduka Che Asmah Binti Ibrahim (Appointed on 20.06.2017)	Independent Non-Executive Director	54	3/3	100

Our Directors bring to the Board a wealth of knowledge and experience from different industries. The board mix and composition enables robust engagement and discussion.

In 2017, three new members were appointed to the Board, bringing the total to six. With the three new Board members, the Board now has 50% women representation. The composition supports our efforts to enhance diversity and inclusivity.

We wish to thank Shahazwan Mohd Harris who resigned in February 2017 for his services.

Board Committees

The Board has established three Board Committees to assist in the execution of its responsibilities for the Group:

1. Group Audit and Risk Committee
2. Group Investment Committee
3. Group Nomination and Remuneration Committee

The Board Committees are guided by the respective Terms of Reference.

Good Conduct and Ethical Business Practices

The Group Nomination and Remuneration Committee seeks Board candidates who bring a variety of perspectives and industry knowledge relevant to our waste management business. Candidates are evaluated based on personal and professional integrity and sound judgment, business and professional skills and experience, independence, potential conflicts of interest, diversity and potential for effectiveness in serving the long-term interests of shareholders.

With the three new Board members, Cenviro has 50% women representation at the top level, consistent with SDG 5: Gender Equality, towards closing the gender gap and providing diversity in the highest governance.

Board Meeting

Cenviro has adopted initiatives to put in place processes to ensure that the non-executive directors, who are generally not involved in the day-to-day management of the Company, are well supported through accurate and timely information and have sufficient resources to discharge their oversight function effectively. These initiatives include regular briefings on prospective deals and potential developments and the circulation of relevant information.

Board meetings take place every quarter to review Cenviro Group's financial standing, progress of projects, and operational and business performance. The quarterly and year-end scheduled meetings are categorised as Ordinary Meetings.

If an urgent or special matter arises, and it needs to be dealt with before the next regular Board Meeting, a Special Board Meeting will be called. In 2017, there were 4 ordinary meetings and 2 special meetings.

The Board periodically reviews and approves the Group's strategic plans. In FY2017 the Board approved the operating principles and values of the Group, and the roadmap to achieve faster growth, build a stronger Cenviro that fully captures the significant synergies in its business and fully develop the potential of its people through Q-TAPS.

102-11

Risk Management

At the company level, Cenviro has put in place enterprise risk management (ERM) to identify the company's programmes and processes related to risk management and the individuals responsible for them through an assessment conducted by Internal Audit. The risk assessment identifies perceived risks to the company, with follow-up interviews with members of senior management to determine any gaps between their responses and those of their direct reports.

The ERM implementation helps the Company to identify, assess and manage risks in line with Cenviro Group's risk appetite. The risks have been classified into five categories: governance, strategy and planning, operations and infrastructure, compliance, and reporting.

The Corporate and Departmental Risk Register has been established and is updated by key management personnel and risk owners to manage identified risks. Risks are prioritised in terms of likelihood and impact on the achievement of the Company's business objectives. For 2017, the Company recognised several key risks as part of our risk profile, including risks related to project, operational, market sensitivity, compliance & legal, and talent.

During the financial year ending 31 December 2017, four audit cycles were conducted in accordance with the risk-based internal audit plan approved by the Audit & Risk Committee. The results of the internal audit review and the recommendations for improvements were presented to the Audit & Risk Committee at their scheduled meetings. The internal audit function also carried out follow-up audits to ensure the necessary corrective actions were undertaken to address the gaps. Based on the reviews, none of the weaknesses noted resulted in any material losses, contingencies or uncertainties that would require separate disclosure in this Report.



From left sitting

: **Faridah Ab Ghani** (Head of Human Resources and Administrations), **Khalid Bahsoon** (Managing Director), **Lim Kwee Yong** (Chief Finance Officer), **Mogens Staarup** (Chief Technical Officer), **Zaki Abdul Aziz** (Head of Project Development)

Management Team



From left standing :

Zainudin bin Zulkifli (Head, Project Management & Operational Excellence), **Kamarul Mohd Suki** (Head of Sales - Scheduled Waste), **Chang Siew Khim** (Company Secretary), **Amirul Bahri Abdul Malek** (Head of Sales - Clinical Waste), **Mohd Rizal Zambros** (Acting Head of Operations), **Ismawati Mohd Shah** (Head of Corporate Communications), **Muhammad Fauzan Baharudin** (Head of Health, Safety and Environment)

Not in picture:

Nurulhuda Faisol (Head of Legal)

Good Conduct and Ethical Business Practices

102-18

Sustainability Governance at Cenviro

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

Creating a sustainable future takes more than just good intentions. Hence, the Board and management have an important role to play in maintaining and improving corporate sustainability.

The Board and management fully appreciate that fundamental to good corporate governance is an effective and robust Board whose members engage in open and constructive debate and challenge management on its assumptions and proposals. This approach applies to management of sustainability across the organisation as well, as they oversee the execution of our green thinking.

103-2

Key Policies and Certifications at Cenviro

- Employee Code of Conduct
- Whistle-Blowing Policy
- Anti Corruption and Gift Policy including No Festive Gifts
- Privacy Policy
- KASB Environmental Policy
- Guided Self-Regulation (GSR)
- KASB Integrated Management Systems (IMS) Policy
- ISO 9001: KASB, CS, CRR
- ISO 14001: KASB, CS, CRR
- OSHA 18001: KASB, CS, CRR
- ISO/IEC 17025: KASB

Good Conduct and Ethical Business Practices

Business Ethics

The Board and Management of Cenviro firmly believe that a genuine commitment to good corporate governance is essential to the sustainability of its business and performance. As part of its strategy to prevent and manage fraud and other unethical or illegal conduct, Cenviro has in place a series of policies and procedures to safeguard the organisation. These policies have been communicated to all employees Group-wide.

No employee is permitted to engage in activities that are deemed detrimental to the Company's interest. All new recruits are provided with the Employee Code of Conduct upon joining and are required to disclose all interests.

It is important that employees understand the rules of conduct for which they are accountable, in accordance with relevant laws and regulation. Cenviro has developed training and education programmes to support regulatory compliance programme and foster a compliance centric culture. We will also be looking into more awareness sessions in the coming year.

Whistle-Blowing

Cenviro's Whistle-blowing policy applies to any suspected improprieties involving employees, consultants, vendors, contractors and/or 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 Tip-Offs

Cenviro Tip-Offs is one of the avenues established by management for employees and stakeholders to lodge their concerns regarding improper conduct at Cenviro Group. There are three ways to use Cenviro Tip-Offs:



1800-817-365



report@cenvirotipoffs.com



https://cenvirotipoffs.com

This channel is managed by an independent professional company with 24/7 services. The whistle-blower has the option to remain anonymous.

102-56

Assurance Statement

BUREAU VERITAS
Certification



INDEPENDENT VERIFICATION STATEMENT

To: The Stakeholders of Cenviro Sdn Bhd

Introduction and objectives of work

Bureau Veritas has been engaged by Cenviro Sdn Bhd to conduct an independent verification of its Sustainability Report 2017. This Verification Statement applies to the information included within the scope of work described below.

This information and its presentation in the Sustainability Report 2017 are the sole responsibility of the management of Cenviro Sdn Bhd. Bureau Veritas was not involved in the drafting of the report. Our sole responsibility was to independently verify the accuracy and assure the information included. This is the 10th year we have verified the Cenviro Sdn Bhd Sustainability Report, which includes E-Idaman Sdn Bhd.

Scope of work

Cenviro Sdn Bhd requested Bureau Veritas to verify the accuracy of the data and information included in the Sustainability Report 2017.

Methodology

As part of its independent verification, Bureau Veritas undertook the following activities:

1. Interviews with relevant personnel including the Head of Departments of Cenviro and its subsidiaries.
2. Review of documented evidence produced by Cenviro and its subsidiaries.
3. Audit of performance data.
4. Review of Cenviro and its subsidiaries systems, for qualitative and quantitative data aggregation and analysis.



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Assurance Statement


BUREAU VERITAS
 Certification

5. Site verification and review at 3 different locations, namely Cenviro Sdn Bhd at Mercu UEM in Kuala Lumpur, Kualiti Alam Waste Management Centre in Seremban and E-Idaman Sdn Bhd in Alor Setar.
6. Our work follows Bureau Veritas' standard procedures and the Global Reporting Initiative (GRI) Sustainability Reporting Standards. It is based on current best practice in independent assurance.

The work was planned and carried out to provide limited, rather than absolute assurance. We believe it provides an appropriate basis for our conclusions.

Our findings

Based on our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are inaccurate, or that the information included therein is not fairly stated.
- It is our opinion that Cenviro Group has established appropriate internal processes for the collection, aggregation and analysis of qualitative and quantitative data such as key performance indicators.
- In 2017, amongst its efforts to enhance its rapport and engagement with stakeholders, Cenviro Group conducted numerous external activities that include public dialogues, open days and road shows with communities, customers and regulators to raise awareness and educate the stakeholders about scheduled waste.
- As part of its strategy towards better waste management, Cenviro Group invested in the construction of Malaysia's first SWTE Plant. The plant was completed in the third quarter of 2017.
- We found that EPiC (Environmental Preservation and Innovation Centre), which was officially launched in July 2017 had conducted waste management trainings as well as established a strategic partnership with Chartered Institution of Wastes Management (CIWM) for accreditation and certification of waste management professionals.
- There have been improvements on the awareness and engagement for the Recycle for Life (RFL) programme which is a programme to encourage more of the public to recycle waste in exchange for cash rewards on smart cards. In 2017, a total of 3,530 cards were issued and 112,857 kg of recyclable waste was collected.



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Assurance Statement

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- The customer satisfaction survey conducted by Kualiti Alam Sdn Bhd, from October 2016 to August 2017, showed continuous, maintained Customer Relationship Management ratings. Overall satisfaction was 85.4%, while the customer satisfaction survey results for 2017 that was conducted by E-Idaman Sdn Bhd was 90.2%.
- An investment of RM20 million over five years, beginning 2017, will be made towards optimising and automating Cenviro Group's internal process guided by an Enterprise Resource Planning (ERP) strategy through the SAP system.
- All operations are measured and reported on, in order to manage the environmental impacts of Cenviro Group as much as possible, and to contribute to environmental protection.
- Safety remains a top priority at Cenviro Group. Hence, improvements to Cenviro's health and safety efforts are ongoing every year. In 2017, Zero Compromise (ZECO) programme was launched – consisting of principles applicable to all employees as well as third-party personnel in Cenviro facilities. As a result, the number of recorded incidents decreased by 2.9% as compared to 2016, resulting in the lowest incident level since 2010.
- Significant investments have been made to improve staff safety, in line with the company's core values, with the objective of reducing occupational hazard. Cenviro employees attended a total of 5,148.5 hours in health and safety training.
- Cenviro's Board of Directors welcomed three new members last year, bringing the current total to six. With the three new Board members, the Board now has 50% women representation – the composition supports its efforts to enhance diversity and inclusivity.

Limitations and Exclusions

Any verification of the following information is excluded from our scope of work:

- Activities outside the defined verification period;
- Positional statements (expressions of opinion, belief, aim or future intention by Cenviro Sdn Bhd including E-Idaman Sdn Bhd) and statements of future commitment;
- Data identified by the client for non-inclusion, geographical operations/activities excluded, subsidiaries/Joint Ventures, etc.

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist



102-56
Assurance Statement**BUREAU VERITAS**
Certification**Statement of independence, impartiality and competence**

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services, and an annual turnover in 2017 of Euros 4.69 billion.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

No member of the assurance team has a business relationship with Cenviro Sdn Bhd, its directors or managers beyond that required of this assignment. We have conducted this verification independently and there has been no conflict of interest.

The assurance team has extensive experience in conducting verification and assurance of environmental, social, ethical and health and safety information, systems and processes. The team has over 5 years combined experience in this field and an excellent understanding of the Bureau Veritas standard methodology for the assurance of sustainability reports.

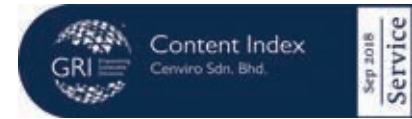
Bureau Veritas
Kuala Lumpur, MALAYSIA
16 August 2018

Kamaruzaman Bin Mohamed
LEAD VERIFIER



102-55

GRI Content Index



GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
GRI 101: Foundation 2016			
General Disclosures			
GRI 102: General Disclosures 2016			
Organizational Profile			
102-1	Name of the organization	P3	-
102-2	Activities, brands, products, and services	P10, P12	-
102-3	Location of headquarters	P3	-
102-4	Location of operations	P3	-
102-5	Ownership and legal form	P14	-
102-6	Markets served	P12, P14	-
102-7	Scale of the organization	P6-P7, P15	-
102-8	Information on employees and other workers	P79	-
102-9	Supply chain	P65-P66	-
102-10	Significant changes to the organization and its supply chain	P14, P19, P52	-
102-11	Precautionary Principle or approach	P101	-
102-12	External initiatives	P36-P37	-
102-13	Membership of associations	P84, P92	-
Strategy			
102-14	Statement from senior decision-maker	P16-P20	-
102-15	Key impacts, risks, and opportunities	P16-P20, P22, P24-P27	-
Ethics and Integrity			
102-16	Values, principles, standards, and norms of behavior	P4-P5	-
102-17	Mechanisms for advice and concerns about ethics	P105	-
Governance			
102-18	Governance structure	P104	-
Stakeholder Engagement			
102-40	List of stakeholder groups	P29-P31	-
102-41	Collective bargaining agreements	P89	-
102-42	Identifying and selecting stakeholders	P33	-
102-43	Approach to stakeholder engagement	P29-P31	-
102-44	Key topics and concerns raised	P29-P31	-
Reporting Practice			
102-45	Entities included in the consolidated financial statements	P3	-
102-46	Defining report content and topic Boundaries	P28, P33	-
102-47	List of material topics	P34	-
102-48	Restatements of information	P6-P7	-
102-49	Changes in reporting	P3, P35	-
102-50	Reporting period	P3	-
102-51	Date of most recent report	P3	-
102-52	Reporting cycle	P3	-
102-53	Contact point for questions regarding the report	P3	-
102-54	Claims of reporting in accordance with the GRI Standards	P3	-
102-55	GRI content index	P110-P113	-
102-56	External assurance	P3, P106-P109	-

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission	
Material Topics				
Economic Performance				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P38	-
	103-2	The management approach and its components	P38, P40	-
	103-3	Evaluation of the management approach	P40	-
GRI 201: Economic Performance 2016				
	201-1	Direct economic value generated and distributed	P6-P7	-
	201-3	Defined benefit plan obligations and other retirement plans	P6-P7	-
Indirect Economic Impacts				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P38	-
	103-2	The management approach and its components	P38, P40	-
	103-3	Evaluation of the management approach	P40	-
GRI 203: Indirect Economic Impacts				
	203-1	Infrastructure investments and services supported	P43-P44, P48, P53, P56	-
	203-2	Significant indirect economic impacts	P42-P59, P92-P95	-
Procurement Practices				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P65	-
	103-2	The management approach and its components	P65	-
	103-3	Evaluation of the management approach	P66	-
GRI 204: Procurement Practices 2016				
	204-1	Proportion of spending on local suppliers	P66	-
Materials				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P60	-
	103-2	The management approach and its components	P60, P72	-
	103-3	Evaluation of the management approach	P72, P74	-
GRI 301: Materials 2016				
	301-1	Materials used by weight or volume	P63	-
Energy				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P60	-
	103-2	The management approach and its components	P60, P72	-
	103-3	Evaluation of the management approach	P72, P74	-
GRI 302: Energy 2016				
	302-1	Energy consumption within the organization	P71	-
Water				
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	P60	-
	103-2	The management approach and its components	P60, P72	-
	103-3	Evaluation of the management approach	P72-P75	-
GRI 303: Water 2016				
	303-1	Water withdrawal by sources	P64	-

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GRI Content Index

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
Emissions			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	P60	-
103-2	The management approach and its components	P60, P72	-
103-3	Evaluation of the management approach	P72-P75	-
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	P69-P70	-
305-2	Energy indirect (Scope 2) GHG emissions	P69-P70	-
305-3	Other indirect (Scope 3) GHG emissions	P69-P70	-
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	P73, P75	-
Effluents and Waste			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	P60, P64	-
103-2	The management approach and its components	P60, P72	-
103-3	Evaluation of the management approach	P73-P75	-
GRI 306: Effluents and Waste 2016			
306-1	Water discharge by quality and destination	P64	-
306-2	Waste by type and disposal method	P64-P65	-
Environmental Compliance			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	P60	-
103-2	The management approach and its components	P60, P72	-
103-3	Evaluation of the management approach	P72-P74	-
GRI 307: Environmental Compliance 2016			
307-1	Non-compliance with environmental laws and regulations	P72	-
Employment			
GRI 103: Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	P76	-
103-2	The management approach and its components	P76, P104	-
103-3	Evaluation of the management approach	P30, P89	-
GRI 401: Employment 2016			
401-1	New employee hires and employee turnover	P79, P86	-

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
Occupational Health and Safety			
GRI 103: Management Approach 2016			
	103-1 Explanation of the material topic and its Boundary	P76	-
	103-2 The management approach and its components	P80	-
	103-3 Evaluation of the management approach	P30	-
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	P82 (Partially reported on 403-2(a) with regards to injury rates as the organisation is currently able to disclose number of incidents which is inclusive of number of injuries.)	Type of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities are currently unavailable as we are collecting the information. To be available in 2019.
Training and Education			
GRI 103: Management Approach 2016			
	103-1 Explanation of the material topic and its Boundary	P76	-
	103-2 The management approach and its components	P85	-
	103-3 Evaluation of the management approach	P85	-
GRI 404: Training and Education 2016			
	404-1 Average hours of training per year per employee	P85-P86	-
	404-2 Programs for upgrading employee skills and transition assistance programs	P82-P83, P85-P86	-
	404-3 Percentage of employees receiving regular performance and career development reviews	P86	-
Diversity and Equal Opportunity			
GRI 103: Management Approach 2016			
	103-1 Explanation of the material topic and its Boundary	P87	-
	103-2 The management approach and its components	P87	-
	103-3 Evaluation of the management approach	P30	-
GRI 405: Diversity and Equal Opportunity 2016			
	405-1 Diversity of governance bodies and employees	P79, P100	-
Local Communities			
GRI 103: Management Approach 2016			
	103-1 Explanation of the material topic and its Boundary	P90	-
	103-2 The management approach and its components	P90	-
	103-3 Evaluation of the management approach	P30	-
GRI 413: Local Communities 2016			
	413-1 Operations with local community engagement, impact assessments, and development programs	P92-95	-
	413-2 Operations with significant actual and potential negative impacts on local communities	P75	-

Marketing Network

Convenient Services Nationwide

You can leverage our comprehensive marketing network for easy access and efficient services. We will be happy to provide you with more information about our capabilities and services for each of your business needs.

PERLIS, KEDAH, PENANG & PERAK

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Glossary

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

5S is a workplace organisation method that uses a list of five Japanese words: seiri, seiton, seiso, seiketsu and shitsuke.

Anaerobic process

Anaerobic processes produce high energy materials like 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, 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 (Code: SW 404).
-

Effluents

Waste that pour into water and air. Liquid factory waste, smoke, and raw sewage can all 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).

Glossary

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 (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

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 then 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.

The waste management sector is undergoing rapid transformation. The drive to innovate is a key aspect for us to surf the waves of change. It is for this purpose that we are constantly looking for better ways of working, breakthrough technologies and building deeper connections in the community.

Ultimately, our focus is to be a one-stop solution for today and tomorrow. Helmed by greener mindsets, we are looking forward to scale the resource-resilient economy.

Leading the Green Revolution

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