

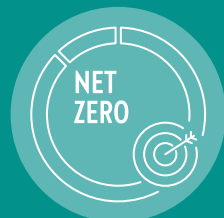


SUSTAINABILITY REPORT 2021

One AECI, *for a better world*

good chemistry

 **AECI[®]**



AECI COMMITS TO NET ZERO EMISSIONS BY 2050

Net Zero is defined as a target of completely negating the amount of our greenhouse gas emissions, to be achieved by reducing these emissions and implementing methods of absorbing carbon dioxide from the atmosphere.

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HIGHLIGHTS FROM 2021

ZERO HARM

100%

Reduction in
life-altering injuries

ZERO

Fatalities
for three years

LOWEST-EVER TRIR

0,23

**ALL ZERO
MILESTONES
ACHIEVED
IN THE SAME
YEAR**

Milestones

2021

Fatalities	0
Life-altering injuries	0
Major/Serious environmental incidents	0
Major process safety incidents	0
Major product transportation incidents	0
Repeat incidents	0



OUR CARBON COMMITMENTS

AECI COMMITS TO

**NET ZERO
EMISSIONS BY 2050**

2025 TARGET

SCOPE 1: 20%

Reduction from baseline

SCOPE 2: 8%

Reduction from baseline

2021 ACTUAL

SCOPE 1: 34%

Reduction from baseline

SCOPE 2: 14%

Reduction from baseline



ENVIRONMENTAL INCIDENTS

52%

Reduction in Moderate
environmental incidents

ZERO

Major environmental
incidents



PASSIONATE PEOPLE

38%

Women in top
management positions

75%

Response rate on our
One Voice Culture Survey

**VACCINATED
1 978**

Beneficiaries across 11 pop-up vaccination sites

RECOGNISED

For empowering and investing in women in South
Africa's Gender Mainstreaming Awards for three years



COMMUNITY ENGAGEMENT



Certified as a
Top Employer
in South Africa

R111m

Cumulative ESD spend

R35m

CSI spend



FINANCIAL PERFORMANCE

EBITDA

**+5% to
R3 091m**

HEPS

**+27% to
1 116c**

TOTAL TAX
CONTRIBUTION
FOR THE YEAR

R1,8bn

GEARING

24%
(1H21: 27%; 2020: 22%)

CASH GENERATED FROM
OPERATING ACTIVITIES

R1 467m

FROM OUR CHIEF EXECUTIVE



Mark Dytor
Chief Executive

In 2021 we solidified **Zero Harm and Sustainability** as one of three strategic platforms in the Group's Growth Strategy, approved by the Board in October. Our vision is to deliver sustainable solutions for a better world through innovation and excellence founded on good chemistry. This is the purpose of One AECI, for a better world and drives who we are and everything we do.

Dear Stakeholders

2021 will be regarded mostly as a year of global recovery, even though the world was still reeling from the devastating impact of the COVID-19 pandemic on human life and all aspects thereof. We lost nine more of our colleagues due to the virus in 2021, after the three we lost in 2020 and this is, by far, the most disappointing part of our reflection on 2021. Our thoughts and prayers remain with their families, friends and colleagues.

As AECI we showed our resilience by forging ahead with realising our sustainability commitments despite facing headwinds, including three waves of the pandemic, significant supply chain disruptions and a challenging economic environment. These challenges notwithstanding, we made significant progress in the year, in relation to most of the sustainability goals we set ourselves for 2025.

Anchoring our Net Zero goal

A global milestone was achieved in Glasgow, Scotland in 2021, at the 26th meeting of the Conference of the Parties (COP26), where much needed climate change agreements were reached. To quote the former President of the United States, Barack Obama, a long-standing ambassador for climate change and most recently a producer and narrator of a series on the world's national parks, "We are the first generation to feel the impact of climate change and the last generation that can do something about it."

He said this as far back as 2014 at the UN Climate Change Summit and, as AECI, we are fully committed to being part of "the generation" which will do its part in the transition pathways to meet the required objective of limiting global temperature rises to 1,5 degrees Celsius.

While AECI has been reporting on several climate-related issues such as emissions, since 2002, I'm excited to announce our official goal, which is: "a commitment to Net Zero emissions by 2050". We elaborate on our Climate Action history and our medium to long-term objectives in this report.

Evolution of our framework, goals and key performance indicators

In last year's report we published our Sustainability Framework with commitments in relation to 10 AECI goals and five priority UN Sustainable Development Goals (SDGs), to give expression to our purpose. In this report you will see an evolution of this Framework with Climate Action becoming a focal part of our strategy, as it cuts across all 10 goals. We have also expanded our UN SDGs to six, by including SDG 9 Industry, Innovation and Infrastructure.

We have further bolstered our Sustainability Strategy with a full suite of ESG indicators, now totalling 23, and have begun to align our reporting with the Draft Sustainability and Climate Change Disclosure Guidelines issued by the Johannesburg Stock Exchange (JSE) in December 2021. In 2022, we will further align our reporting with these guidelines as they are finalised. We will also align our reporting with the International Sustainability Standards Board (ISSB) which was established at COP26 to develop a comprehensive global baseline of sustainability disclosures for the capital markets proposed standards, and the European Financial Reporting Advisory Group (EFRAG) requirements. In this report we elaborate further on the strong governance we have in place and how this features in our ESG Scorecard. Furthermore, we provide extracts from our first and separately published Tax Transparency Report.

FROM OUR CHIEF EXECUTIVE CONTINUED

Assessing stakeholder views and determining our material matters

In 2021 we undertook two Group-wide surveys, the results of which are being used to refine our Group Growth Strategy as well as the Sustainability Strategy. In the Passionate People section of this report, we reflect on the One Voice Culture Survey undertaken internally across our global operations, to which we received a very pleasing 75% response rate. Furthermore, a bespoke Materiality Survey was undertaken, targeting nearly 4 000 internal and external stakeholders, covering 22 topics. The results have enabled us to identify the top five key themes, namely **Strong Governance**, **Economic Prosperity**, **Climate Action**, **Responsible Operations** and **Passionate People** and adapt our strategy accordingly.

Progress towards our 2025 environmental and safety goals

In our report for 2020, as part of our commitment to **Responsible Operations**, we published six “big” sustainability goals for 2025, set in relation to baselines established after analysing data from a number of years prior to 2020 (therefore pre-pandemic). In 2021 our operations still experienced intermittent disruptions in some countries, largely due to ongoing pandemic effects, but they were far less severe. Despite not being completely back to “normal” operations, the progress we made against our goals is very pleasing. The detailed results are presented throughout this report but I want to highlight a few, especially those which have been achieved well ahead of schedule.

Workplace safety improvement was a priority focus area, following the deterioration we saw in 2020, and our existing Zero Harm strategy was bolstered by a safety improvement plan. This saw us deliver a much improved performance in terms of the Total Recordable Incident Rate (TRIR), to our best-ever result of 0,23. Our target and commitment remain Zero and the TRIR serves to reflect on our progress towards interim milestones and the final goal. The 2021 result represents a 43% year-on-year improvement but more importantly it means that many more employees returned home safely. Besides the reduction in total cases, it is very pleasing to report that no work-related life-altering injuries or fatalities to employees or contractors occurred.

A significant reduction in environmental incidents was also achieved and this was largely attributable to a reduction in process safety incidents at our operations as well as product transportation incidents, which predominantly occur on roads during the transportation of our products throughout the world. This is an area where we have seen the distances travelled by our own fleet and those of our transport partners restored to normal figures. Given the condition of many roads in Africa and additional risks faced on these journeys, we are very pleased with this result and the progress made through strong partnerships, improvements in technology and support systems.

Our operations delivered very good results in the reduction of potable water extracted for industrial use and effluent discharged, to sea or sewer. We have made significant commitments to achieve Zero Liquid Discharge at numerous sites by implementing technology through our AECI Water pillar.

We achieved a significant reduction in Scope 1 emissions, largely through the installation of abatement technology at our Nitric Acid plants in Modderfontein, South Africa, but also through energy efficiency projects and reductions in liquid fuel consumption at other sites.

Delivering through our strategic pillars

We report on sustainability-related projects within each pillar in detail in this report and now I draw your attention to some highlights. At AECI Mining Explosives and AECI Mining Chemicals we’ve seen very good progress, particularly through innovative and digitalised technologies which are enabling our customers to mine safer, make their operations more circular and meet many of their own sustainability objectives.

AECI Water has continued to deliver sustainable water solutions to a network of public and private entities through innovative water technologies, treatment chemicals and equipment to gain access to this scarce resource, improve the quality thereof, reduce the use of good potable water in industrial settings and reduce unnecessary discharge. This business also plays a pivotal role in enabling the achievement of AECI’s internal water targets.

Food security and malnutrition are global challenges and through our AECI Food & Beverage as well as AECI Plant Health businesses we are committed to making a long-term impact. We continue to demonstrate our capabilities to provide an array of solutions across a wide range of sectors to improve farming productivity, nutrition and the affordability of food. We are excited to report on progress made with digital solutions in this area as well.

FROM OUR CHIEF EXECUTIVE CONTINUED

AECI Industrial Chemicals and AECI Specialty Chemicals are progressing well in applying the principles of green science and technology across their full value chain. An example is the increase in the volume of green products sold to the personal care sector last year. The “greening” of our chemicals refers not only to the inherent chemistry but also to the reduction in water and carbon intensity throughout the value chain.

We are also working on addressing two other global issues, being plastic waste and the re-use of rubber (tyres). In this regard we are ramping up our international investments and collaborating to produce industrial products from waste plastic, which would typically be derived from oil-based raw material. At AECI SprayPave, we’ve invested in new assets and technology which enable the manufacture of a bitumen which incorporates up to 25% of ground tyre rubber (GTR). This bitumen is used by AECI SprayPave’s parent company, AECI Much Asphalt, to produce an asphalt blend for the road construction industry which contains up to 7% of material from GTR. The ratio grows exponentially for major road surfacing projects.

Looking ahead

When reviewing our 2021 performance in this report, it is evident that the early execution of plans has delivered to expectations in almost every area, some well ahead of schedule and this has required us to revisit the targets, but we are also cognisant of the fact that 2021 was not yet a year of “normal” production and 2022 is likely to provide a far better indication of the true performance. Our set of “big” goals has been expanded to cover many additional areas within our ESG landscape and interim milestones for 2022 have been defined to set us on the path to 2025 and beyond. We have developed innovative dashboards for each element of the Group’s Growth Strategy, not only Zero Harm and Sustainability, and these are updated each quarter to provide us with current information on progress.

As already mentioned, we’ve asked our stakeholders what’s important to them and we’ve asked ourselves, how well we are positioned to deliver on these as part of our overall strategy through our Innovative solutions and Passionate People. We recognise that we are obligated to deliver growth in a sustainable way and, simultaneously, address the pressing social needs in most of the 23 countries in which we have a presence.

I thank all our stakeholders who have assisted us on our journey thus far and look forward to the next phase of our strategy, namely “execution and growth” and further seeing the delivery of sustainable solutions for a better world.



Mark Dytor
Chief Executive

26 May 2022



WHO WE ARE

WE CREATE VALUE THROUGH THE FOUR PILLARS OF OUR BUSINESS MODEL:



AECI Mining provides a mine-to-mineral solution for customers on a global scale. The offering includes commercial explosives, initiating systems, blasting services and surfactants for explosives manufacture as well as chemicals for ore beneficiation and tailings treatment.

Aspiration: to become a recognised global mining explosives and ore-treatment solutions provider



R11 969 million revenue



>4 000 employees



Customers: the global mining sector



AECI Agri Health gives farmers the means to improve crop yields and livestock health and to optimise their use of natural resources.

Falling under AECI Agri Health for management and reporting purposes, AECI Schirm is a contract manufacturer of fine and agricultural chemicals with operations in Germany and the USA.

Aspiration: to be the premier agricultural and fine chemicals solutions provider in markets on three continents.



R6 020 million revenue



>1 100 employees



Customers: the plant and animal health industry in Africa, Europe and the USA, and the fine chemicals sector in Europe



AECI Water offers water treatment, process chemicals and equipment solutions to help customers optimise their water use and improve their processes.

Aspiration: to be Africa's premier water solutions provider



R1 541 million revenue



>400 employees



Customers: the water treatment services market in Africa



AECI Chemicals supplies raw materials and related application know-how, including greener chemicals, to a broad spectrum of customers.

Aspiration: to be the premier producer, distributor and technology provider of chemicals to the African continent.



R6 462 million revenue



>1 200 employees



Customers: the food and beverage, manufacturing, road infrastructure and general industrial sectors, mainly in southern Africa. AECI SANS Fibers targets manufacturers in the USA and elsewhere.

Supporting our delivery of better products and services is AECI Property Services & Corporate.

Property Services leases space and provides management and services in the office, industrial and retail sectors. Corporate covers centralised functions that support businesses in all the pillars. These functions include Treasury and Finance; Human Capital; Safety, Health and the Environment; Stakeholder Relations; Legal and Company Secretarial; Risk and Compliance; Information Technology and Strategy Execution.



Customers: Property Services has 150 tenants and services customers and 120 employees.

Corporate has overall accountability to all stakeholders and has 170 employees.

BIGGER VALUES

OUR VALUES SUPPORT THE DELIVERY OF OUR VISION



BOLD

Pushing our performance above and beyond for a better world.



INNOVATIVE

Actively challenging ourselves to reinvent who we are, what we do and how we do it.



GOING GREEN

Driving solutions for a sustainable future.



GOING GREEN

Driving solutions for a sustainable future.



ENGAGED

Being committed to a culture of accountability, honesty and inclusivity.



RESPONSIBLE

Acting in a manner that is mindful of all stakeholders' interests.

OUR PRESENCE

With roots in South Africa going back to 1896, we operate across six continents, namely Africa, Australia, North America, South America, Europe and Asia.



OUR RESPONSE TO COVID-19

Task Team oversight

In 2021 the COVID-19 Task Team, comprising the full AECI Executive Committee and specialists from various functions, continued to meet and direct the Group in terms of the response to the pandemic.

Tracking the impact

Tragically we lost nine employees in 2021. Three passed away in 2020. The Group's number of active cases peaked at 137 in July. In August we saw this translate into seven tragic deaths in one month, the last month in which we recorded an employee mortality.

COVID-19 relief initiatives

As the world continued to battle the pandemic we continued with focused relief efforts in many countries. Since March 2020, R24,8 million has been invested in making a difference in the lives of communities in need. Support has been provided in many forms, including basic items such as masks and sanitisers to more sophisticated devices such as ventilators for under-resourced healthcare facilities and hand washing stations. We have also leveraged our Better Water goals by improving access to reliable supplies of clean drinking water, to improve hygiene and sanitation. We continued our food-hamper drive and also looked at more sustainable efforts by providing products and giving professional advice to establish food gardens.

Shifting our focus to vaccination

Since the inception of our COVID-19 Response Plan, we committed to following international best practices and this included recognising vaccines as a key part of the response, specifically for the prevention of serious illness and death. Given our presence in 23 countries we were subject not only to the approaches taken to vaccinations in those countries but also the availability of vaccines.

In February 2021, South Africa officially started its national vaccination programme and much like other countries followed a phased approach, prioritising healthcare and frontline workers and then following an age-based approach. At this point 186 countries had already commenced their vaccination drives. It would take till July to open up vaccines to those 50 years and older in South Africa and it was only at this point that we started to see the number of vaccinated employees rise. Unfortunately, the uptake in South Africa was slow and 2021 did not deliver anywhere near the target set for the country. By December only 38% of the country's eligible population had been vaccinated and it was evident that the numbers between the ages of 18 and 40 were alarmingly low. This age band represents a large portion of AECI's employees.

In June 2021, the Department of Employment and Labour released a Directive which consolidated the requirements for workplaces to combat the pandemic. Included in this was the option to develop a Mandatory Vaccination Policy using a risk-based approach. Many of our customers, particularly in the mining sector, quickly adopted such policies and our employees serving these customers were quick to comply.

As AECI we decided to embark on our own drive to educate employees and encourage them to get vaccinated. We undertook an extensive on-site vaccination campaign, establishing clinics within our operations. These were also opened to contractors and on-site tenants. Further, we conducted town-hall type meetings where we gave employees access to medical professionals to answer their questions and concerns.

Mandatory vaccination in South Africa

Despite our efforts to increase vaccinations among employees, we reached a plateau and estimated our uptake to be around 60% in South Africa but much higher in other countries, for example, Germany. Obtaining exact numbers across all businesses proved challenging.

Following a risk assessment of our South African businesses, the decision was taken to develop a Mandatory Vaccination Policy and all stakeholders were informed of this in November. The Policy came into effect on 1 April 2022 following the required consultation process. A three-month grace period has been provided for employees to comply with the Policy or, if they choose to do so, follow an agreed exemption application process.



OUR STAKEHOLDERS

Ongoing engagement with all our stakeholders is important to us as it helps to identify and address material issues, risks and opportunities. These, in turn, inform our Sustainability Strategy. One of our BIGGER values is to be RESPONSIBLE by acting in a manner that is mindful of all stakeholders' interests. Stakeholder engagement is implicit in this and some key relationships are highlighted below.



SHAREHOLDERS AND FUNDERS

We drive innovation and growth to deliver strong financial returns and equally strong environmental and social performance.

CUSTOMERS

We collaborate with our customers to develop innovative new products and services that reduce their Greenhouse Gas (GHG) emissions and enhance their resilience to the impact of climate change.

This is in line with our corporate value of *Going Green*.

LOCAL COMMUNITIES

We are committed to investing our resources in the communities hosting our operations. We are focused on making a long-term sustainable difference to their socio-economic challenges and enhancing their well-being.

SUPPLIERS

We are focused on green procurement and engage with our suppliers to develop new products and services that reduce our customers' environmental impact.

GOVERNMENT AND REGULATORS

We actively seek to build trusted long-term relationships with the governments and regulators in the countries in which we are represented to help achieve the United Nations Sustainable Development Goals (UN SDGs).

EMPLOYEES

Our people are our most valuable asset. With more than 7 000 employees, we create a safe, innovative, engaged and inclusive culture that enables our people to achieve their full potential.

OUR MATERIAL THEMES

Our materiality assessment

Our Sustainability Strategy and this materiality overview were informed by a materiality assessment we undertook with external advisors during the year. The assessment was performed in line with the Global Reporting Initiative (GRI) guidelines on materiality and helped us identify those opportunities and risks that are most important to the Company and its stakeholders, including our impact on the economy, the environment and society.

Our materiality matrix

As part of our materiality assessment we carried out a survey, covering 22 topics and targeting nearly 4 000 stakeholders. The results of “what matters” to them along with senior management deliberation and an impact analysis which took into consideration macroeconomic trends, helped us identify five key themes that we incorporated into our Sustainability Strategy.

The Sustainability Strategy is executed through the implementation of our Sustainability Framework which includes 10 Sustainability Goals.

The implementation of these goals is driven by 23 Key Performance Indicators (KPIs) which are reflected in our ESG Scorecard.

Based on the findings from our stakeholder engagement materiality survey and gap analysis, we:

- Updated our Sustainability Framework to include Climate Action as an overarching goal
- Added another 16 KPIs to our ESG Scorecard during the year (we carried seven KPIs forward from the prior year), and
- Expanded our priority UN SDGs to six, by adding UN SDG 9.



To give expression to our purpose, we are committed to delivering on six priority, interconnected UN SDGs:

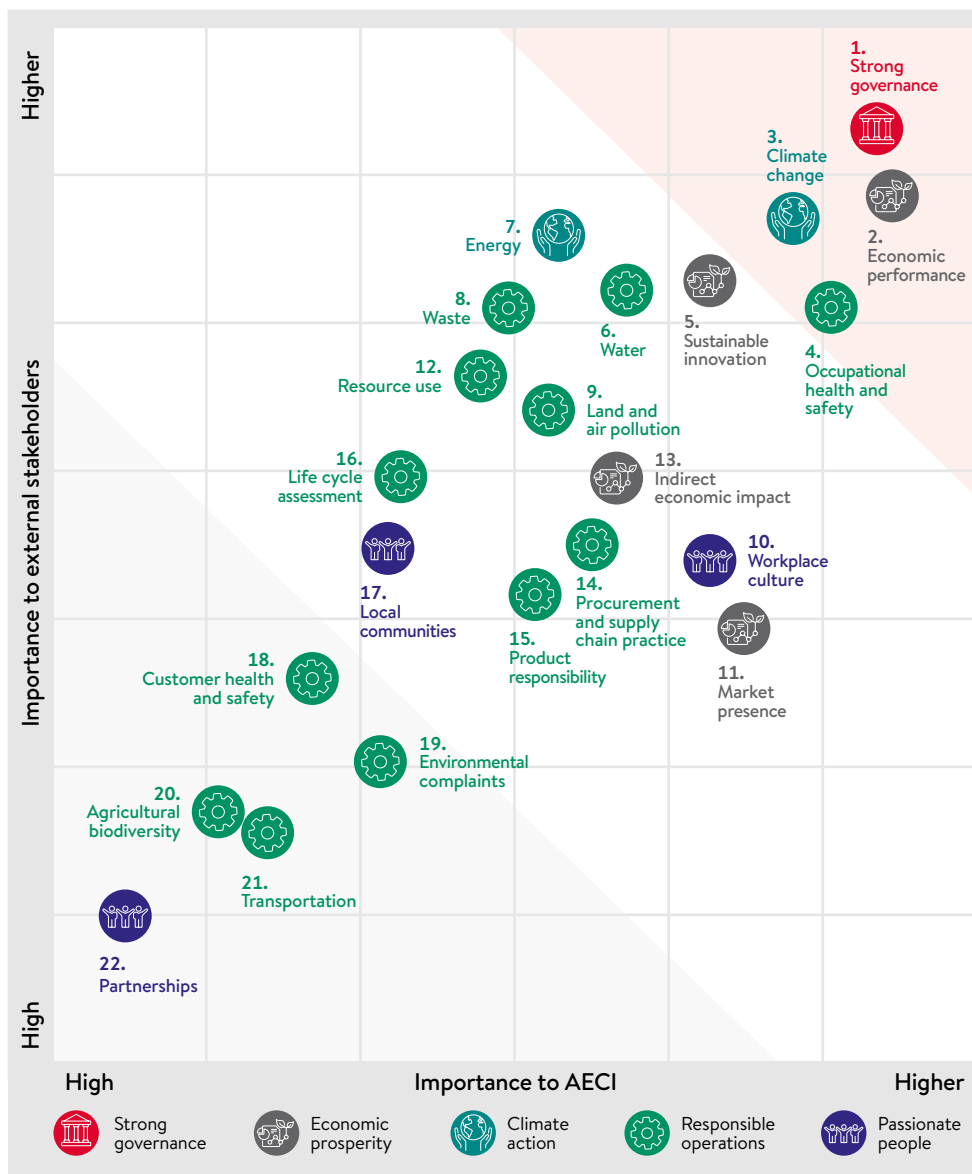


OUR MATERIAL THEMES CONTINUED

Materiality assessment process

	Identify	Prioritise	Integrate
Inputs	<ul style="list-style-type: none"> Stakeholders Global and sector trends Reporting frameworks* UN SDGs Global research reports Internal documentation (Board packs, risk registers, Group policies) Focus sessions, interviews, and workshops 	<ul style="list-style-type: none"> Analysis and evaluation of survey responses Benchmarking Gap analysis Senior management deliberation and impact assessment Approval from appropriate governance structures Board-determined strategic direction 	<ul style="list-style-type: none"> Update risk register Update Sustainability Strategy Set and allocate targets for Group businesses and KPIs Include KPIs in remuneration performance criteria
Outputs	<ul style="list-style-type: none"> 22 material topics Materiality survey 	<ul style="list-style-type: none"> AECI's materiality matrix Identification of: <ul style="list-style-type: none"> Five key themes Opportunities for innovation Sustainability Strategy gaps 	<p>Achievement of our:</p> <ul style="list-style-type: none"> Purpose: One AECI, for a better world Sustainability goals Sustainable stakeholder value creation

Materiality matrix



* GRI, Task Force for Financial Climate Related Financial Disclosures (TCFD), Sustainability Accounting Standards Board (SASB), World Economic Forum (WEF), ISSB, JSE Sustainability and Climate Change Disclosure Guidelines, EFRAG, Corporate Sustainability Reporting Directive (CSRD).

OUR MATERIAL THEMES CONTINUED

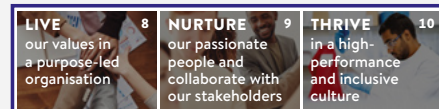
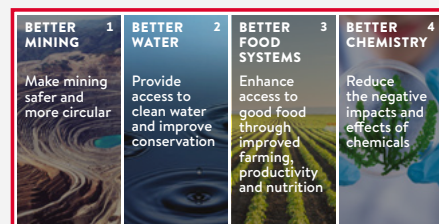
1. STRONG GOVERNANCE



Strong governance is critical to building trust, protecting value and preventing corporate failure.

- Proactively identifying relevant regulatory and policy developments, adhering to environmental laws, rules, standards and other requirements, and effectively managing risks are key to ensuring compliance.
- Strong governance is at the core of our business.
- Key governance sustainability KPIs are in our ESG Scorecard shown on page 23 of this report.

Please refer to the ESG KPI definitions which appear at the end of this report. The full ESG Scorecard is reflected on page 24.



GOVERNANCE

1. Responsible leadership	●
2. Ethical business	●
3. External assurance	●
4. Regulatory reporting	●

- Achieved
- Partially achieved
- Baseline data, targets and projects have not yet been defined
- Not yet achieved



2. ECONOMIC PROSPERITY

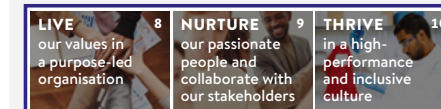


AECI's financial sustainability ensures we will continue to contribute towards creating decent work and economic growth in the countries in which we have a presence.

Socio-economic factors, including social volatility, impact heavily on our supply and demand making it important for AECI to reduce inequality through job creation and assist in a just transition.

- Regulatory and environmental changes, global energy transition risks and market transformation require an innovative response. AECI must remain competitive at an international level and relevant for new markets/demand by investing in the research and development of new carbon reduction technologies, green products and services and the digitalisation of its operations.
- Economic prosperity allows us to fulfil our purpose of **One AECI, for a better world**. This is the overarching theme for our Sustainability Framework.

Please refer to page 22 for the full Sustainability Framework.



GOVERNANCE

1. Responsible leadership	●
2. Ethical business	●
3. External assurance	●
4. Regulatory reporting	●

SOCIAL

1. Total Recordable Incident Rate (TRIR)	●
2. Gender equality	●
3. Leadership development	●
4. Learnerships/ internships/ bursaries	●
5. Employee volunteerism	●
6. Corporate social responsibility	●
7. ESD local community spend	●
8. Enterprise and supplier development	●
9. Preferential procurement	●



OUR MATERIAL THEMES CONTINUED

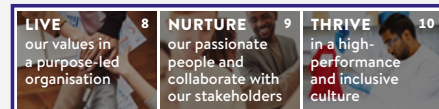
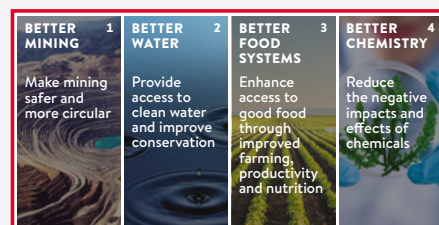
3. CLIMATE ACTION



The effects of climate change are material to AECI's business.

The effects of global warming and climate change have already resulted in some devastating and extreme weather events, which have impacted on our operations, the neighbouring communities and various parts of the value chain, including the shipping ports and roads linked to our operations. This risk features on the Group's top risk register and we have existing control measures in place however, along with the pure risk management efforts we have also made our **Commitment to Net Zero by 2050** and therefore our response related to this theme has been prioritised.

- We need to reduce the carbon intensity of our operations through, for example, making use of renewable energy sources, reducing our GHG emissions and increasing our energy efficiency.
- This theme is now incorporated as a main element which cuts across all facets of our Sustainability Framework.
- Key Climate Action KPIs are incorporated in our ESG Scorecard.



ENVIRONMENT

- | | |
|---|---|
| 3. Decrease Scope 1 emissions | ● |
| 4. Decrease Scope 2 emissions | ● |
| 5. Decrease Scope 3 emissions | ● |
| 6. Increase electricity from renewables | ● |

- Achieved
- Partially achieved
- Baseline data, targets and projects have not yet been defined
- Not yet achieved

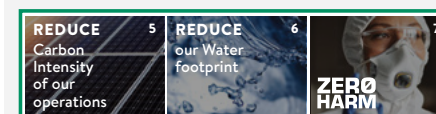


4. RESPONSIBLE OPERATIONS



AECI must align every operational decision and action with its better world aspirations in pursuit of Zero Harm to people and the planet.

- Sustainability-related and climate change risks are significant for us. Reducing these risks through effective management, along with successfully implementing resultant business opportunities, is key to our sustainability.
- This theme is incorporated in our Sustainability Framework.
- Key Responsible Operations KPIs are incorporated in our ESG Scorecard.



ENVIRONMENT

- | | |
|---|---|
| 1. Decrease potable water consumption | ● |
| 2. Decrease discharge to sea or sewer | ● |
| 3. Decrease Scope 1 emissions | ● |
| 4. Decrease Scope 2 emissions | ● |
| 5. Decrease Scope 3 emissions | ● |
| 6. Increase electricity from renewables | ● |
| 7. Increase recycled waste | ● |
| 8. Decrease hazardous waste | ● |
| 9. Increase recycled materials | ● |
| 10. Decrease moderate environmental incidents | ● |

SOCIAL

- | | |
|--|---|
| 1. Total Recordable Incident Rate (TRIR) | ● |
|--|---|



OUR MATERIAL THEMES CONTINUED

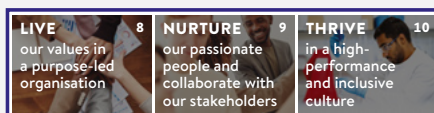
5. PASSIONATE PEOPLE



AECI must create a culture that is focused on high performance and inclusion. We must ensure that the right people are hired and that there is gender equality and opportunity for professional progress.

It's important for us to contribute towards social stability by providing local communities with assistance for education, youth development, water security, community health, well-being, and development.

- To achieve the UN SDGs, we need to form trusted and cooperative partnerships with non-governmental organisations, governments, and other enterprises.
- This theme is incorporated in our Sustainability Framework. It is also incorporated in the goals of our Corporate Social Investment (CSI) and Enterprise and Supplier Development (ESD) functions.
- Key Passionate People KPIs are incorporated into our ESG Scorecard.



SOCIAL

1. Total recordable incident rate (TRIR)	●
2. Gender equality	●
3. Leadership development	●
4. Learnerships/ internships/bursaries	●
5. Employee volunteerism	●
6. Corporate social responsibility	●
7. ESD local community spend	●
8. Enterprise and supplier development	●
9. Preferential procurement	●

- Achieved
- Partially achieved
- Baseline data, targets and projects have not yet been defined
- Not yet achieved



Addressing the materiality assessment outcomes

In reviewing progress against our strategy and information derived from the materiality survey, we have identified the following key deliverables for the short to medium term:

- Develop Sustainability and Climate Change Policies
- Set targets for the additional four Environmental KPIs:
 - › Decrease Scope 3 emissions
 - › Increase recycled waste
 - › Decrease hazardous waste
 - › Increase recycled materials
- Implement the TCFD recommendations:
 - › Undertake a climate change risk assessment across our value chain to identify the most significant physical and transitional climate risks and opportunities
 - › Perform climate-related scenario analysis (including the 1,5°C scenario)
- › Integrate the climate-related physical and transitional risks and opportunities into our strategic scenario planning, risk management and decarbonisation processes
- › Perform energy audits
- › Calculate our Scope 3 emissions
- › Set and validate science-based targets for Scopes 1, 2 and 3 emissions
- › Develop our Net Zero Transition Pathway
- Submit our first TCFD Report
- Include sustainability-related assurance in the Combined Assurance model
- Update our reporting processes to include all:
 - › JSE Sustainability and Climate Change Disclosure Guidance and ISSB requirements
 - › Other countries and exchanges: relevant disclosure requirements such as EFRAG and the CSRD.





SUSTAINABILITY GOVERNANCE

Strong sustainability governance is at the core of our business. It helps us to effectively implement our strategy across the Group and manage climate-related risks while strengthening relations with our external stakeholders.

Sustainability governance not only creates value for AECI but also creates a culture that successfully delivers AECI's BIGGER values. The values are the foundation of our sustainability effort and central to the delivery of our sustainability goals (which are reflected in our Sustainability Framework).

Governance structure

The AECI Board of Directors is responsible for sustainability governance. The Directors have embarked on an exciting journey to enhance the Company's approach to sustainability and climate change and the reporting thereof.

The Chief Executive, assisted by AECI's Executive Committee and guided by the Social and Ethics Committee (SEC) on behalf of the Board, is responsible for reviewing the Sustainability Strategy and Framework, ensuring that they continue to meet their intended objectives and are implemented and monitored effectively across the Group. Adherence to the Group's Code of Ethics and Business Conduct and associated guidelines is overseen by the Group Company Secretary.

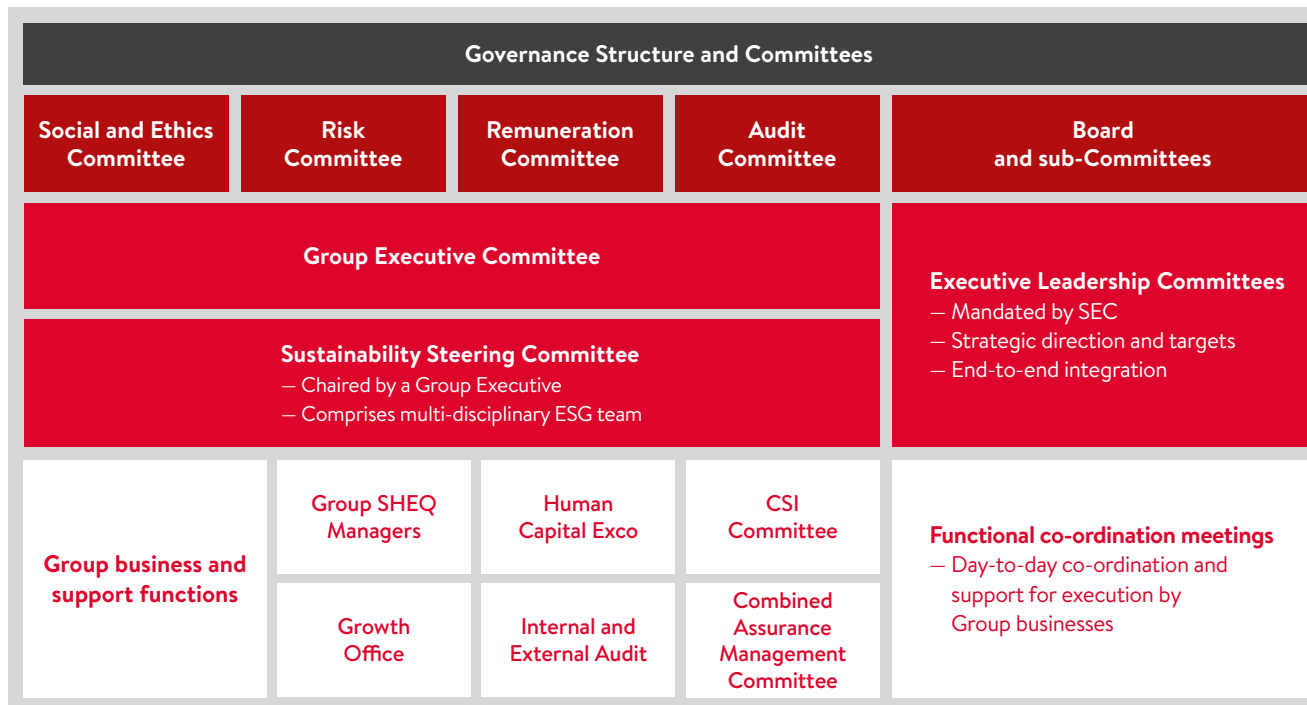
The SEC meets three times a year to oversee and review management's decisions, the adequacy of systems and controls and the implementation of policies in respect of the Sustainability Strategy and performance. The review includes assessing AECI's mitigation activities and its management of climate-related risks and opportunities. The Executive Committee reviews sustainability-related performance and climate-related risks and opportunities monthly.

AECI has a centralised Sustainability Steering Committee that meets quarterly. It is responsible for implementing the strategy throughout the Group and reviewing and managing the KPIs. Each AECI business has appointed its own Champion who is responsible for reporting on all KPIs to the Steering Committee.

The Sustainability Steering Committee is also responsible for evaluating innovative ideas for green projects that come from the businesses or AECI's Growth Office (AECI.GO). These ideas are evaluated according to their ability to add value to our business, our customers and to the achievement of our sustainability goals and targets.

The Group SHEQ Managers meet quarterly to oversee the implementation of Zero Harm and monitor its effectiveness.

The Human Capital function supports the Group across the full human resources value chain. Addressing a range of disciplines pertaining to human, intellectual, social and relationship capitals, it enables a culture that supports the delivery of the sustainability goals.



SUSTAINABILITY GOVERNANCE CONTINUED

The Group CSI Committee meets quarterly to oversee the effectiveness of the CSI Strategy.

Governance pillars

We have four sustainability governance pillars:

SUSTAINABILITY GOVERNANCE

1. RESPONSIBLE
LEADERSHIP

2. ETHICAL BEHAVIOUR

3. COMPLIANCE AND RISK
MANAGEMENT

4. TAX TRANSPARENCY



1. Responsible leadership

AECI's purpose of One AECI, for a better world is based on sustainability and forms the foundation of our Growth Strategy. In 2021, the Board approved the Group's Sustainability Strategy and Reporting Model.

AECI's Executive Committee is strongly focused on the Group's Sustainability Strategy and is fully supported by the Board in this regard.

In terms of remuneration practices, while a number of economic, environmental and social objectives are already included in the performance criteria of many governing body members and Senior Executives, this process needs to be extended and strengthened.

2. Ethical behaviour

AECI has appropriate business policies, procedures and practices in place. All AECI employees have attended ethics training and awareness sessions and, where required, declarations on Conflicts of Interest were made in 2021. These declarations must be submitted annually. AECI has an anonymous whistle-blowing hotline and Legal and Compliance functions to provide advice on ethical matters.

SUSTAINABILITY GOVERNANCE CONTINUED

3. Compliance and risk management

AECI received independent external assurance on applicable standards in place for sustainability reporting and environmental and legal compliance. These included:

Responsible Care®

ISO 45001 – Occupational Health and Safety Management

ISO 14001 – Environmental Management

ISO 9000 – Quality Management

ISO 22001/FSSC 22000 – Food Safety and Quality, and

ISO 50001 – Energy Management.

Safety, Health and Environmental (SHE) data that is collated from across the Group is managed by the centralised Group Safety, Health, Environment and Quality (SHEQ) function, with independent assurance of selected sustainability KPIs.

The assurance statement is on page 77.

In addition to the above, the Group aligns with the voluntary codes of the Carbon Disclosure Project (CDP) Climate Change and Water Programmes and the 10 Principles of the United Nations Global Compact.

In 2021, AECI submitted all requisite regulatory reports relating to the Company's water use licences, air emissions licences, carbon tax, GHG emissions and environmental incidents.

To ensure compliance, AECI requires adherence to the SHEQ Policy and the Sustainability Strategy and Framework by all Group businesses. The Company also has a Compliance Framework and related processes in place. These are monitored by the Board and its Committees to ensure ongoing improvements. The compliance universe is refined continually, considering all related developments in the regulatory context. This includes environmental regulation. The Board, via the Risk Committee, has implemented risk mitigations and controls for significant compliance risk areas. A balanced approach to compliance is adopted and considers AECI's rights, obligations and related costs.

Sustainability-related risks are identified and addressed as part of a structured approach to risk management. This is underpinned by the Group Risk Management Policy Statement and the Group Enterprise Risk Management Framework.

4. Tax transparency

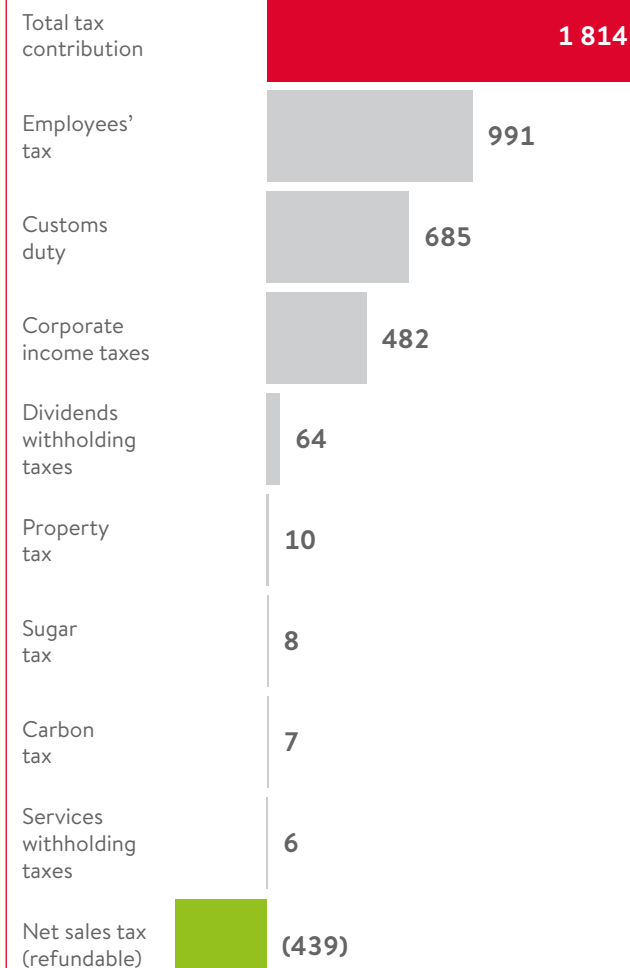
The global tax landscape has been shaped by several trends that have impacted the way businesses operate. Notably, increased levels of globalisation and more integrated value chains, together with greater use of technology, have resulted in policy-makers and multinational enterprises (MNEs) reassessing whether historical taxation principles remain relevant. Across the world, our total tax contribution in the year was R1,8 billion. Of this amount, R1,2 billion was tax collected on behalf of revenue authorities and the rest taxes borne by the Group.

Our approach to tax

As a South African-based company with global operations, we are subject to a variety of taxes in the countries in which we operate. Employees' taxes, customs duties, corporate income taxes, carbon tax, and other taxes are all part of our tax structure. To understand the technicalities of the law, we seek the legal opinion of a respected, experienced, professional tax practitioner when the handling of tax adjustments is uncertain. We then make a prudent decision on the final tax treatment of the transaction under consideration. Please see our Tax Transparency Report, which is available on our website, for a more in-depth look at our tax transparency and approach.



Contribution by tax type (Rm)



SUSTAINABILITY GOVERNANCE CONTINUED



Tax contribution by region (%)



Governance and tax risk management

Responsibility for our Tax Strategy has been delegated to our Group Tax function and the governance of our tax is overseen by the Audit Committee. We utilise a Tax Risk Management (TRM) Framework across the Group that allows for the better alignment between the Group Tax function's strategic vision and the Group's overall Growth Strategy, corporate governance structures and risk governance policies along with appropriate monitoring and tracking of relevant tax risks and strategic tax opportunities. The Group Tax Manager, with sponsorship from our CFO, is the custodian of the TRM framework. With the support of the Tax Steering Committee, the Group Tax Manager is responsible for ensuring Group-wide compliance with the Framework as well as the determination of which risks need escalation to the Audit Committee and the Board, and the roll-out of risk management action plans throughout the Group.

Compliance

Compliance with global tax legislation is a significant focus area for us, and we ensure that we are in accordance with all applicable tax rules and regulations in each jurisdiction, timeously and accurately complying with tax-filing obligations for both direct and indirect taxes. To guarantee that the right tax treatment is applied, relevant training is provided throughout the Group. We collaborate on initiatives across the business to optimise tax benefits, ensure compliance with tax legislation, and effectively and efficiently mitigate tax risks. In this way we promote knowledge sharing to create greater awareness of tax-related matters throughout the Group and take advantage of tax planning opportunities.

Relationships with revenue authorities and public advocacy

AECI seeks to manage tax controversies and relationships with revenue authorities in a proactive and efficient manner. The same is true for managing their perceptions of our businesses. We are co-operative and transparent in all dealings with revenue authorities and maintain proactive relationships, encouraging open dialogue on a timely basis. Where any tax law is unclear or subject to interpretation, we engage with external tax consultants to safeguard compliance in all instances.

Transparency





We are committed to being a compliant, transparent corporate citizen wherever we operate as we continue to expand into new countries. Simultaneously, many revenue authorities are developing new toolsets and methodologies to identify tax risks. Due to the nature of many transparency efforts having potential commercial and reputational risks, the Tax function has become more involved with strategic decision-making and with providing input into future strategies to reduce potential risk.

Implications from multiple jurisdictions

We operate in multiple jurisdictions and are subject to taxes at the in-country statutory rate. The Group benefits from the application of lower in-country statutory rates where a location or manufacturing dispensation is applicable (such as in Botswana, Ghana and Zambia). Entities with assessed losses will not incur any current tax in a jurisdiction unless a minimum tax is payable. Finally, entities with prior year adjustments and known revenue authority assessments will also be liable for additional taxes in the jurisdiction.

SUSTAINABILITY GOVERNANCE CONTINUED

Estimated tax gap: Gap between estimated effective tax rate and estimated statutory tax rate

	Estimated effective tax rate ¹ (%)	Estimated statutory tax rate ² (%)
 Australia	30,04	30,00
 Botswana ³	14,45	22,00
 Brazil ⁴	13,19	34,00
 Burkina Faso ⁵	88,36	27,50
 Chile	26,30	27,00
 Democratic Republic of the Congo ⁵	55,79	30,00
 Germany	29,43	29,32
 Ghana	23,68	25,00
 Guinea ⁶	(30,97)	30,00
 Indonesia ⁵	11,16	22,00
 Malawi	33,34	30,00
 Mali ⁶	(14,22)	30,00
 Mauritius ⁷	29,43	15,00
 Namibia ⁵	370,41	32,00
 Senegal	31,40	30,00
 South Africa	29,48	28,00
 Tanzania	32,76	30,00
 United States of America ⁵	17,76	21,00
 Zambia	37,06	35,00
 Zimbabwe ⁸	(17,26)	24,72

1 ETRs are all based on profit before tax and income tax expenses converted into rand for the Group in the applicable countries that AECI operates.

2 These are standard corporate income tax rates in the respective jurisdictions where our businesses operate. They are in line with in-country income tax legislation.

3 Manufacturing income is taxed at 16% in Botswana.

4 Minimal-trading entity.

5 Adjustment to tax provision following final tax computation on completion of tax returns relating to prior years.

6 In-country minimum tax levied on loss-making entity.

7 Tax rate due to withholding taxes.

8 The deferred tax credit on assessed losses and other temporary differences was not recognised due to requirements of IAS 12 of the IFRS not being met.

SUSTAINABILITY STRATEGY

Time horizons

We define the short, medium and long terms as follows:

Short term: 0-2 years

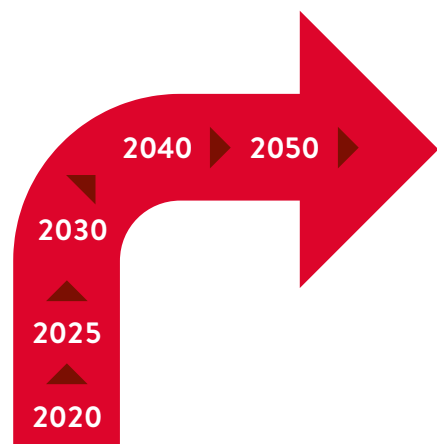
We have a two-year business planning outlook that considers financial and operational factors.

Medium term: 2-5 years

Our sector, supplier and customer outlooks typically have a five-year horizon.

Long term: 5 years and longer

Our long-term strategic outlook extends beyond five years with key milestone years being 2025, 2030, 2040 and 2050.



Approach

Our Sustainability Strategy was informed by the materiality assessment which helped us understand the following:

- Our most significant positive and negative impact on the economy, society and the environment over the short, medium, and long term
- Material sustainability-related risks and opportunities that we reasonably expect could positively or negatively impact our business model, strategy and cash flows over the short, medium, and long term
- The potential impact of these risks and opportunities on enterprise value.

Because we recognise that sustainability issues often manifest themselves over the medium and longer term, we have set our ESG KPI targets to 2025 and Net Zero emissions target to 2050. We will continue to update our KPIs annually based on performance and any newly identified economic, environmental and social developments, including risks and opportunities.

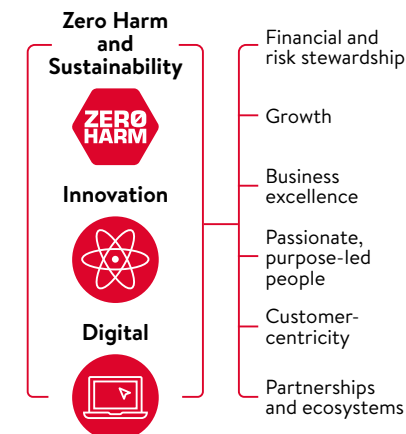
Impact on enterprise value

We define the impact on our enterprise value in terms of consequence scales. A rating ranging from minor to severe is included in our consequence scales with the associated financial measure:

Score	Rating	Financial impact (loss or gain) (Rm)
5	Severe	>R120
4	Major	R80–R120
3	Serious	R40–R80
2	Moderate	R5–R40
1	Minor	<R5

We consider the impact of sustainability on our enterprise value to be severe and we believe that investments in this field will lead to long-term sustainable value creation for AECI, its stakeholders, society and the environment. This is why we defined AECI's Growth Strategy in the context of sustainability as a whole and why we also looked as far ahead as 2050 in respect to addressing climate change.

1 AECI + 3 Strategic platforms + 6 Strategic themes = Perfect 10



Our Growth Strategy

Our purpose, One AECI for a better world, is based on sustainability, which is a foundation block of our Growth Strategy. Our sustainability goals are mapped in each of our 10 strategic dimensions. Climate change, which is a significant identified risk, has been specifically mapped into our business operations through:

- Zero Harm and Sustainability
- Innovation, and
- Growth.

Strategic dimensions

Risks relating to each of the 10 strategic dimensions inform our risk register which is reviewed and amended monthly, as required. We have also identified opportunities arising from our sustainability and climate-related risks (for example: Project Purpose, Beanstalk, SupPlant, Khula, Origin and Clariter) which are discussed further under each of our sustainability goals commencing on page 29.

SUSTAINABILITY FRAMEWORK

The AECI Sustainability Framework was developed in 2020 and published in our inaugural Sustainability Report.

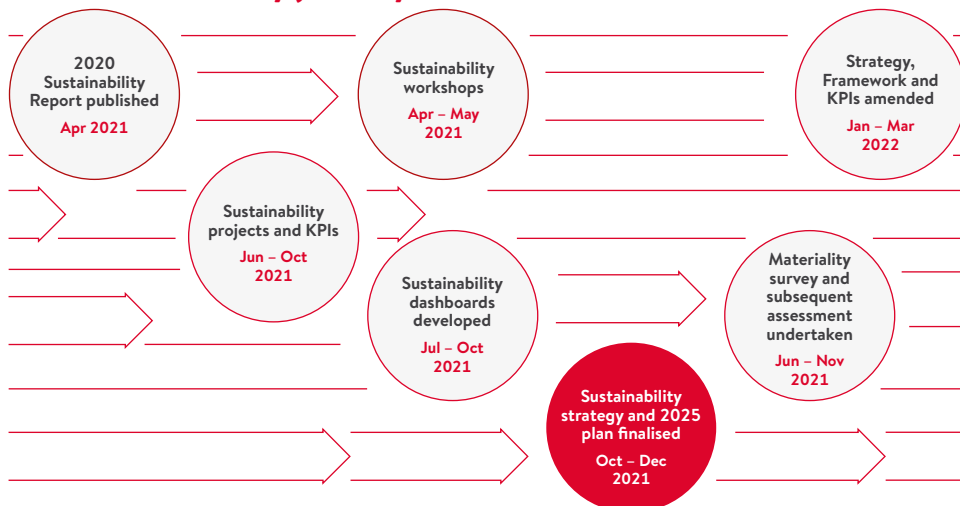
The Framework, now amended to include **Climate Action** and our **Commitment to Net Zero emissions by 2050**, as a new dimension, focuses our collective capability and capacity on shaping a better world. It has 10 goals, each numbered in the Framework.


One AECI, for a better world focuses on the significant opportunity to deliver Better Mining, Better Water, Better Food Systems and Better Chemistry in collaboration with our customers and other partners. Supported by AECI.GO, the Group-wide innovation drive, our teams explore new products, processes and technologies that can be scaled to deliver our purpose.

Responsible Operations focuses on aligning every operational decision and action with #ABetterWorld in pursuit of Zero Harm to people and the environment. Supported by the Group SHEQ function and SHEQ personnel across our businesses in **23 countries**, our commitments inform the efforts of our over **7 000 employees**.

Passionate People focuses on high performance and inclusion, making it easier for AECI teams to contribute, in partnership, to #ABetterWorld. Supported by the Group Human Capital function and Human Capital Business Partners in the businesses, this goal area recognises the value, rights and responsibilities of every employee and all our stakeholders.

Our sustainability journey





**ONE AECI,
FOR A BETTER
WORLD**

We will drive innovation and growth in support of the UN SDGs



CLIMATE ACTION

AECI commits to net zero emissions by 2050



BETTER MINING ¹

Make mining safer and more circular



BETTER WATER ²

Provide access to clean water and improve conservation




BETTER FOOD SYSTEMS ³

Enhance access to good food through improved farming, productivity and nutrition




BETTER CHEMISTRY ⁴

Reduce the negative impacts and effects of chemicals




RESPONSIBLE OPERATIONS

We will minimise our environmental impact and strive for Zero Harm across our value chain




REDUCE ⁵

Carbon Intensity of our operations



REDUCE ⁶

our Water footprint



ZERO HARM ⁷



PASSIONATE PEOPLE

We will nurture a high-performance culture in an inclusive, purpose-led environment



LIVE ⁸

our values in a purpose-led organisation



NURTURE ⁹

our passionate people and collaborate with our stakeholders



THRIVE ¹⁰

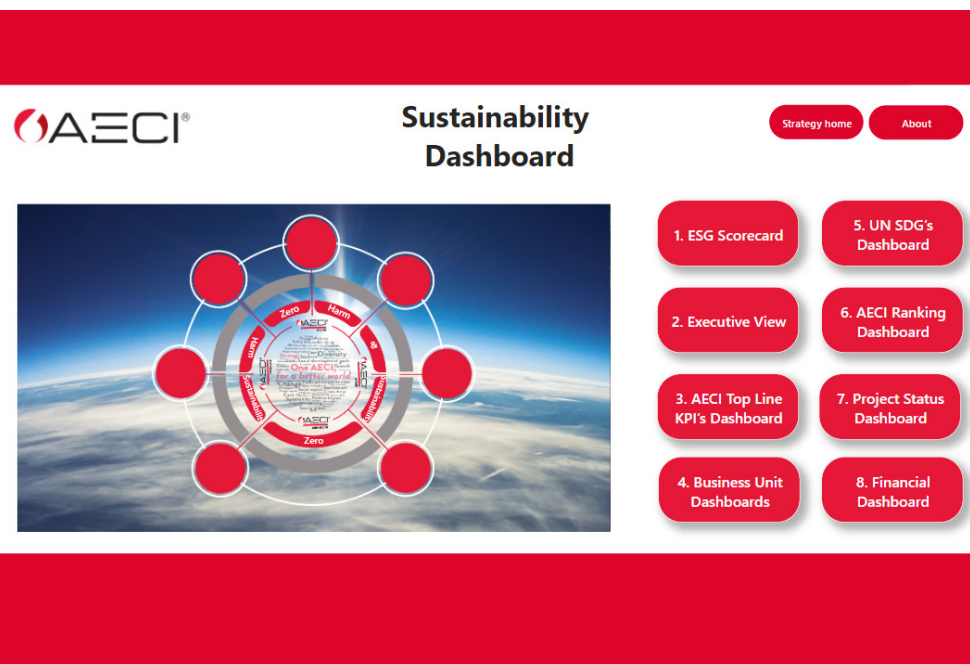
in a high-performance and inclusive culture

MANAGEMENT APPROACH

AECI's sustainability and climate-related risks have been included in the Group's strategic risk register where they are reviewed and amended as required.

Sustainability-related assurance will be included in our Combined Assurance model. Sustainability opportunities are managed through AECI.GO.

Our materiality assessment ensures that we take a diversity of perspectives into consideration when identifying and prioritising sustainability-related impact, risks and opportunities.



AECI's ESG scorecard as at December 2021

In 2021 AECI built a sustainability database and dashboard.

The database contains our sustainability project and operational performance information for 2021, KPI benchmarking data and sustainability project target information from 2022 to 2025 for each Group business. The database feeds into our Sustainability Dashboard which summarises our ESG performance data and is reflected in our ESG Scorecard.

ENVIRONMENT	SOCIAL	GOVERNANCE
1. Decrease potable water consumption ●	1. Total Recordable Incident Rate (TRIR) ●	1. Responsible leadership* ●
2. Decrease discharge to sea or sewer ●	2. Gender equality* ●	2. Ethical business* ●
3. Decrease Scope 1 emissions ●	3. Leadership development* ●	3. External assurance* ●
4. Decrease Scope 2 emissions ●	4. Learnerships/ internships/bursaries* ●	4. Regulatory reporting* ●
5. Decrease Scope 3 emissions* ●	5. Employee volunteerism* ●	
6. Increase electricity from renewables ●	6. Corporate social responsibility* ●	
7. Increase recycled waste* ●	7. ESD local community spend* ●	
8. Decrease hazardous waste* ●	8. Enterprise and supplier development* ●	
9. Increase recycled materials* ●	9. Preferential procurement* ●	
10. Decrease moderate environmental incidents ●		

● Achieved

● Partially achieved

● Baseline data, targets and projects have not yet been defined

● Not yet achieved

* New KPI in 2021

ESG SCORECARD CONTINUED

ENVIRONMENT							
KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 TARGET	2021 PERFORMANCE		STATUS	REFERENCE
1. Decrease potable water consumption	m ³	25% reduction from Baseline	10% reduction from Baseline	30% reduction from Baseline	Production reduced on some plants due to COVID-19 restrictions. Projects undertaken included substituting potable water with a combination of process sewage effluent and low grade water as well as recycling water from production activities back into the system. Closure of one plant at AECI Chempark, Gauteng also led to a decrease.		Page 36
2. Decrease discharge to sea or sewer	m ³	20% reduction from Baseline	5% reduction from Baseline	16% reduction from Baseline	Reduction attributed largely to a recycling project at AECI Mining Chemicals, re-using effluent water generated from plant cleaning. Closure of one plant at the AECI Chempark site and the sale of the Afoodable business also contributed to the reduction.		Page 37
3. Decrease Scope 1 emissions	tonnes CO ₂ e	20% reduction from Baseline	1% reduction from Baseline	34% reduction from Baseline	The reduction was mainly due to installation of abatement technology at No. 9 and No. 11 Nitric Acid plants. Both plants also had lower production due to operational restrictions. Improved plant efficiencies and stability at AECI Mining Chemicals resulted in less usage of methane-rich natural gas and stationary diesel. Two 50/50 recycled fuel projects at AECI Much Asphalt resulted in reductions in fuel usage.		Page 29
4. Decrease Scope 2 emissions	tonnes CO ₂ e	8% reduction from Baseline	Target to be set from 2022	14% reduction from Baseline	An AECI Specialty Chemicals plant experienced reduced manufacturing for six weeks due to a lengthy shutdown at the largest customer. AECI Schirm had lower plant utilisation as a consequence of lower orders received from customers. AECI Mining Chemicals' Polyacrylamide plant was not operational for two months resulting in lower electricity usage.		Page 29
5. Decrease Scope 3 emissions	tonnes CO ₂ e	Target to be set in 2022	New metric for 2022	New metric for 2022			Page 30
6. Increase electricity from renewables	MWh	8% increase from Baseline	0% increase	0% increase	AECI has commenced construction of four solar plants in South Africa. They will become operational from October 2022.		Page 30
7. Increase recycled waste	tonnes	Target to be set in 2022	Target to be set from 2022	New metric for 2022			Page 48
8. Decrease hazardous waste	tonnes	Target to be set in 2022	Target to be set from 2022	New metric for 2022			Page 48

ESG SCORECARD CONTINUED

ENVIRONMENT CONTINUED

KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 TARGET	2021 PERFORMANCE		STATUS	REFERENCE
9. Increase recycled materials	tonnes	Target to be set in 2022	Target to be set from 2022	New metric for 2022		●	Page 15
10. Decrease moderate environmental incidents	# of moderate environmental incidents	<22	N/A	15	This is the lowest number of moderate environmental incidents on record. Improvement was largely due to fewer process safety incidents on site, along with a continued reduction in product transportation incidents (on and off site).	●	Page 50

SOCIAL




KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 TARGET	2021 PERFORMANCE		STATUS	REFERENCE
1. Total Recordable Incident Rate (TRIR)	Rate	<0,25	<0,3	0,23	Lowest-ever TRIR, representing a 43% improvement compared to 2020. Results were driven by the ongoing roll-out of the Zero Harm strategy and the 2021 safety improvement plan.	●	Page 47
2. Gender equality						●	Page 53
2.1. Board and Top Management	% female employees	33%	33%	38%	Female representation increased from 29% (2020) to 38% (2021) and comprises of four Non-executive Board Members and two Top Management Members.	●	Page 53
2.2. Senior, middle and junior management levels	% female employees	40%	36%	30%	221 new hires took place within these three bands in 2021 of which 99 (45%) were female. The overall impact on representation in the band however, is only 1% due to other changes such as resignation of females and the appointment of males. A Talent Manager has been appointed and improving female representation will be one of her key focus areas.	●	Page 53
3. Leadership development	# of employees	120	100	142	142 employees attended Leadership Development Programmes, in order to meet our growing need for future leaders. This will ensure we have better succession pathways from junior to senior management levels.	●	Page 56

ESG SCORECARD CONTINUED

SOCIAL CONTINUED							
KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 TARGET	2021 PERFORMANCE		STATUS	REFERENCE
4. Learnerships/ internships/ bursaries	# of people	212	212	188	188 people were awarded learnerships/internships/bursaries in 2021 which is less than the target set. Our learner intake was still significantly affected by the pandemic. In 2022, we will conduct a needs analysis to assess the requirements of our businesses to better align and extend our investment in this area.	●	Page 56
5. Employee volunteerism	# of employees	300	30	78	Our goal is to integrate volunteerism as a key part of the AECI culture. In 2021, six campaigns were driven with 103 volunteerism days recorded and supported by 78 employees. In addition, 10 schools neighbouring our operations were adopted as beneficiaries of our volunteerism initiatives.	●	Page 67
6. Corporate social responsibility	Rm (value)	10	9	13,1		●	Page 64
6.1. South Africa	Rm (value)	8,5	8	9	Our focus moved from COVID-19 relief and we invested in other areas such as skills development for communities, educational assistance and Better Food Systems implementations.	●	Page 64
6.2. International	Rm (value)	1,5	1	4,1	Due to COVID-19 in 2020, we took a conservative approach when setting our 2021 and 2025 targets. As the impact of COVID-19 decreased, we were better positioned to assist international communities through interventions such as refugee support, health support and educational assistance.	●	Page 64

ESG SCORECARD CONTINUED

SOCIAL CONTINUED

KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 TARGET	2021 PERFORMANCE		STATUS	REFERENCE
7. ESD local community spend	% of direct spend with local suppliers /total supplier spend	33%	15%	20%	We achieved 20% by investing in and engaging with local suppliers neighbouring our operational facilities. We spent R3,9 billion of our total supplier spend on local suppliers. We did this by (a) mobilising the business consciousness and participation to support localised suppliers, (b) sourcing localised suppliers and developing and supporting local SME growth and onboarding into the business's supply chain, and (c) introducing clear KPIs and targets per business and responsible individuals into their performance scorecards. We are on track to achieve our 2025 target.		Page 62
8. Enterprise and supplier development	# SMEs supported	25	9	10	We invested in the following suppliers: Raletjena (farming), Road Bulk Services (transportation), Maano Chemicals (chemicals manufacturing), Farmers Hope (Farming), Kamee-Tek (HVAC), Hempvest (Farming), Afrobotanics (haircare products), Express Business Services (hygiene services), Wassa Logistics (transportation) and Lungisa (engineering services). We will continue to support more SMEs and meet our 2025 target of assisting 25 companies.		Page 59
9. Preferential procurement	BEE points scored	22	15	20,7	The 20,7 points were scored as follows: all suppliers (4,9), Qualifying Small Enterprises (QSE) (1,9), Exempted Micro Enterprises (EME) (2,20), >51% Black-Owned (BO) (6,33), >30% Black Women-Owned (BWO) (4) and Bonus (1). This was achieved through the implementation of a Procurement Policy, the dedicated collection and vetting of B-BBEE certificates, quarterly reporting on performance and improvement gaps and the promotion and encouragement of businesses to buy from SMEs/QSEs, BO and BWO businesses.		Page 61

ESG SCORECARD CONTINUED

GOVERNANCE					
KEY PERFORMANCE INDICATOR	UNIT OF MEASURE	2025 TARGET	2021 PERFORMANCE	STATUS	REFERENCE
1. Responsible leadership				●	Page 16
1.1. Leadership accountability	Description	AECI's Board and Executive Committee are accountable for sustainability.	AECI's purpose, One AECI for a better world, is based on sustainability which is a foundational component of the Growth Strategy, for which the Board and the Executive Committee are responsible. The Board approved the Sustainability Strategy and Reporting Model in 2021.	●	Page 16
1.2. Stakeholder engagement	Description	AECI makes sustainable business decisions which take into account the interests of all stakeholders.	A materiality assessment conducted in 2021 included a materiality survey and the findings from focus sessions, interviews and workshops held with both our internal and external stakeholders.	●	Page 10
1.3. Remuneration practices	Sustainability KPIs	AECI's performance criteria in its remuneration practices for governing body members and senior executives include economic, environmental and social objectives.	While a number of economic, environmental and social objectives are already included in the performance criteria of many governing body members and senior executives, this process needs to be extended and strengthened.	●	Page 55
2. Ethical business	Description	AECI has appropriate business policies, procedures and practices in place.	All AECI employees attend ethics training and awareness sessions. Where required declarations regarding Conflict of Interest are made. AECI has an anonymous whistle-blowing hotline in place. AECI's Legal and Compliance function provides advice on ethical matters as required.	●	Page 17
3. External assurance	Description	AECI receives independent external assurance on applicable standards and KPIs in place for sustainability reporting and environmental legal compliance.	Independent external assurance is received on applicable standards and performance indicators in place for sustainability reporting and environmental legal compliance.	●	Page 18
4. Regulatory reporting	Description	AECI submits regulatory reports which relate to, for example: water use licences, air emissions licences, carbon tax, GHG reporting and environmental incidents.	AECI submitted all relevant regulatory reports.	●	Page 18



CLIMATE ACTION

Matters related to the environment are certainly not new to AECI. For several decades we have reported annually on indicators such as energy usage.

As an example, the first reference to global warming was in the 2002 Annual Report when it was recognised as being a threat to “world climate”. It was also in that year that South Africa became a signatory to the Kyoto Protocol formulated in 1997. At that time, the Protocol sought to limit the release of gases from the burning of fossil fuels to 5% below 1990 levels.

In 2002 AECI reported on an indicator known as Sustainability Environmental Burden (EB) for emissions, and other sustainability issues. EB provided a basis for combining the environmental impact of diverse substances, within a specific impact category, by employing accepted factors and weightings and expressing the impact in terms of a proxy substance for that category. These principles are still applied through the use of conversion factors.

In 2007 AECI reported for the first time in a quantified manner on emissions regarded to have the potential for global warming, expressed in terms of carbon dioxide equivalence. This process has continued annually.

In 2009 AECI took part, for the first time, in the CDP which was promoted in South Africa by the National Business Initiative. It was also the first time that a carbon footprint was developed to provide a more meaningful understanding of the Group’s impact in this area.

At the time, and the situation is quite similar today, the emissions from our Nitric Acid manufacturing plants were the most significant.

The carbon footprint was calculated by using the 2006 Intergovernmental Panel on Climate Change (IPPC) Guidelines for National Greenhouse Gas Inventories and the Greenhouse Gas Protocol’s Corporate Accounting and Reporting Standards, as developed by the World Business Council for Sustainable Development.

AECI has since submitted annual CDP disclosures and from 2016 has undertaken reporting on GHGs in South Africa, supported by a Pollution Prevention Plan.

Global step-change at COP26

2021 will be remembered as a landmark year for adoption of much needed climate change agreements globally, reached at COP26 in Glasgow.

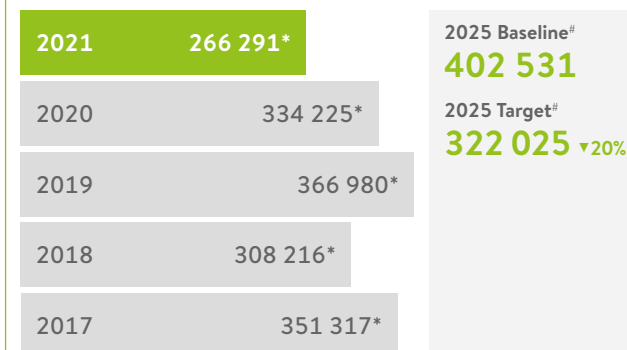
As AECI we fully endorse the required climate actions. We believe that commitment to and achievement of the target of keeping global temperature rises below 1,5°C is still possible. But we have to accelerate our climate action now.

The Paris Agreement, reached at COP21 in 2015, is universally regarded as a seminal point in the development of the international climate change regime under the United Nations Framework Convention on Climate Change (UNFCCC).



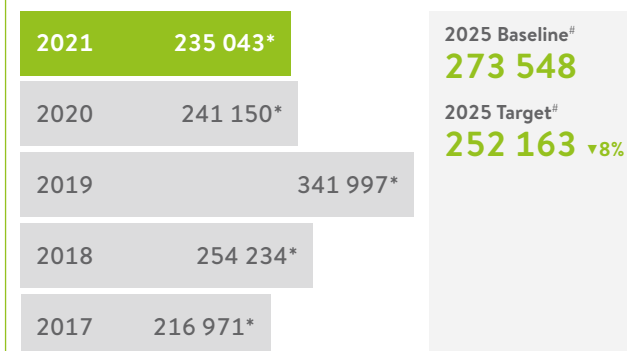
GHG emissions

Scope 1 emissions (tonnes CO₂e)



GHG emissions

Scope 2 emissions (tonnes CO₂e)



* Indicates limited assurance.

Baselines were determined by analysing data for the respective years of highest production over the period 2017–2019.

CLIMATE ACTION CONTINUED



AECI's Net Zero commitment and Transition Pathways

We committed to and communicated, through our Sustainability Strategy and reflected in this report, “Net Zero emissions by 2050.” In 2022 we will develop and adopt the required actions to meet our objective. This will include the development of Net Zero Transition Pathways for the short, medium and long terms, informed by science-based targets and a full analysis of our value chains.

In 2020 we published commitments to reduce Scope 1 and 2 emissions and increase electricity consumption from renewables. Further targets for other indicators, such as a reduction in Scope 3 emissions, will be published once the groundwork has been completed to establish the baselines and validate these along with the associated targets.

Our Sustainability Dashboard, shown on page 23 will be amended from 2022 to include the JSE's recommended Sustainability and Climate Change Disclosures, as AECI has chosen to adopt these to reflect its global performance. Furthermore we will also embark on completion of our first TCFD Report.

AECI in South Africa is a member of the National Business Initiative and through its Chief Executive, who is an active member and participates in the CEO Champions Meeting on the Just Transition Pathways Project for South Africa.

The Group's Transition Pathways towards the 2050 Net Zero commitment will reflect associated actions across our global operations. Given our presence in 23 countries, all with their own economic and societal challenges, as well as more stringent targets in some countries, it is going to be a significant challenge to develop these Pathways.



Electricity Consumption (MWh)

2021	223 419*	2025 Baseline#	249 609
2020	228 065*	2025 Target#	224 047 ▼8%
2019	260 763*		
2018	258 617*		
2017	211 635*		



Energy Consumption (GJ)

2021	2 822 639*
2020	2 930 501*
2019	3 269 369*
2018	3 121 388*
2017	2 320 449*

* Indicates limited assurance.

Baselines were determined by analysing the data in the respective years of highest production over the period 2017-2019.



BETTER MINING

Collaboration with our stakeholders is key to successfully improving our safety practices, minimising environmental impact and developing innovative technologies.

Key SDG goals



EMULSION VERTICAL DROP SYSTEM

Make mining safer and more circular.

AECI Mining continually applies innovation throughout its value chain to meet the challenges of safer and more circular mining.

Making mining safer

Our commitment to responsible and sustainable mining is central to our purpose and strategic vision. To improve safety practices, minimise our impact on the environment, develop leading-edge technology and build strong relationships with our stakeholders, we work closely with employees, suppliers, customers and the communities in which we operate to advance the achievement of Better Mining.

Mining is necessary to supply the minerals required to create everything from roads to digital device screens and silicon chips. However, it must be undertaken responsibly. Increased regulation in the sector over the last few years has improved aspects such as safety, governance, inclusivity, and sustainability. The mining industry has also evolved significantly, with the focus on improving efficiency at every step of the value chain to ensure a safer and more sustainable sector for all involved.

Vertical drop system

A good example of safety and technology enhancement is AECI Mining Explosives' Emulsion Vertical Drop (EVDS) system, which we have continued to deploy at a number of underground mines since inception in 2009. These systems range in depth from 35 metres to among the deepest deployment to date at one of our Zambian mining customers, which reaches 980 metres. EVDS not only allows product to be delivered directly from surface to deep underground areas but, in doing so, removes the need for other equipment which

would traditionally have been required for transportation. This in turn assists in preventing significant emissions and the usage of fuel and electricity. In addition to reducing the environmental impact, there are also numerous safety benefits. It reduces the risk of heavy duty tramming vehicles from colliding with other vehicles or striking employees, who are on foot in these areas. These types of events can be fatal. The system is protected from external stimuli and this prevents uncontrolled detonation.

An evaluation of the data gathered from one of the mines that has deployed EVDS revealed significant decreases in a number of areas including: 90% reduction in tramming distances, 71% reduction in tramming time, 14% reduction in the engine running time of the Mobile Charging Unit and 12% reduction in fuel consumption. All of these translate into reductions in direct, indirect emissions and costs.

The system has been deployed in central African countries, including the DRC and Zambia, and numerous projects across the globe are currently being explored.

Differential GPS (dGPS)

This is part of the AECI Mining Explosives IntelliShot™ system. dGPS helps to eliminate human error from incorrect blast hole identification or incorrect delay assignment, contributing to efforts to work towards Zero Harm. Incorrectly marked blast holes result in incorrect blast timing, which compromises results of the blast. By using dGPS technology customers enjoy faster blast deployment, greater accuracy and increased efficiency. This also reduce the risk to members of the community, living close to the mines, which could be impacted by blasting. Increased safety, through its ability to protect against human error, is another major value addition of this technology. Blast hole coordinates, along with the respective detonator delays, are downloaded onto the hardware to prevent the user from incorrect delay assignments on the bench. The response to blast hole location and fault-finding are made simpler, faster and safer.

BETTER MINING CONTINUED

Emulsions for effective underground blasting

Explosives emulsion formulations continue to evolve to suit modern mining methods. Each formulation is engineered to deliver differentiated blasting outcomes through adjustable energy. The energy output and rate of delivery in a sensitised emulsion, directly influence the blasting outcome pertaining to desired fragmentation in a given geology. Our emulsion product range is developed with unique technology that enables cap sensitivity in the standard range and for it to stick in large diameter up-holes with AECI Mining Explosives' trademarked S-range™. The S-range™ is capable of being dropped to depths of up to 1 000 metres without negatively impacting the properties of the emulsion. The ability to vary density and energy during operations is another addition in our commitment to promote efficient and safe mining. All systems are developed taking into consideration customer requirements and with safety and sustainable mining as key priorities.

Making mining more circular

Alternative booster/primer technology

For decades, boosters (or primers) have been manufactured from pentaerythritol tetranitrate (PETN) and trinitrotoluene (TNT). The chemical make-up of these products has required sophisticated plants and specialised raw material facilities for their manufacture; and safety has been an ongoing concern. AECI Mining Explosives has developed an alternative booster, PowerBoost™, manufactured from non-explosive raw materials. This also allows for the manufacture of explosives products in a safer and more sustainable manner. The handling of energetic materials and explosives raw materials is by nature hazardous and therefore highly regulated in the interests of public safety. Storage and transport of explosives and the associated raw materials comes with a fair amount of risk. The use of non-explosive raw materials in booster technology simplifies logistics

and has the potential to significantly improve safety. For environmental sustainability, this is a move towards limiting the negative effects in line with responsible manufacturing objectives and the drive towards Net Zero.

Reducing disposal to landfill

Polyacrylamide manufacture

The manufacture of polyacrylamide requires the input of acrylamide as a raw material. AECI Mining Chemicals produces acrylamide on-site by converting acrylonitrile through a catalytic conversion process using biological enzymes. The polyacrylamide plant is a world-first industrial scale plant, inherently designed with biotechnology instead of a traditional copper-based catalyst, with limited life-span. The biotechnology thus prevents the disposal of spent catalyst to landfill and the need for replenishment. AECI Mining Chemicals' process thus promotes innovative change that considers and provides sustainable manufacturing alternatives.

Waste recycling

Waste facility

The AECI Mining Modderfontein Waste Recycling Facility opened in November 2021. The facility has become a fast-moving hub for sorting and separating recyclable waste from the site. Waste streams currently being recycled include plastics, cans, paper, cardboard, glass and food waste. Vast quantities of this waste would otherwise have been sent to landfill. Minimising waste to landfill is an important intervention in ensuring environmental sustainability. Landfill sites contribute to methane and carbon emissions, leachates can migrate to ground water sources and construction of landfill sites means the loss of biodiversity, as well as removal of land space vegetation and trees. By reducing waste to landfill we are preserving the earth and supporting an environmentally sustainable approach.

This will contribute markedly to achieving our goal to reduce waste to landfill by 30% by 2025.

Incorporating used fuels into explosives formulations

In 2012, AECI Mining embarked on an initiative to replace virgin oil with recycled oil in its manufacturing process and create a closed loop system. In 2021, we took this initiative further and offered a value-add to our customers where used oils from the mine trucks' gearboxes, maintenance yards, mechanised mining units, tractors and forklifts can be brought to our site and reworked into the emulsion manufacturing process. This has proved highly successful as it eliminates the need for tricky disposal of these hydrocarbon products in areas where disposal challenges exist. The solution has been implemented in multiple areas in our global operations, with approximately 2,5 million litres of used oil recycled to date.

Digitalisation

AECI Mining Explosives is exploring a range of technologies to help mines improve their blast planning, initiation and analysis, using a range of digital tools such as digital twin, blast design, smart mobile manufacturing units (MMUs), virtual reality (VR), digital classroom and automated supply chain.

Digital twin

A digital twin is a virtual representation that serves as the real-time digital counterpart of a physical object or process. The first practical definition of a digital twin originated from NASA as long ago as 2010.

At AECI Mining, a digital twin is a digital duplication of a production facility (assets, equipment, structures, whole mining sites etc.). Guided by actual/measured operational conditions or constraints, scenarios are simulated to better understand changes made to the process.

BETTER MINING CONTINUED

Blast design

Blast design includes the disparate data generated by multiple capturing software programmes in a single repository. The objective is continuous improvement in business intelligence, field applications and operational transparency.

BlastHub™ is a portal that provides predictive software tools to assist with identifying and eliminating inefficiencies in the design process. The vision is to get a closed Performance and Development Review loop, linking products to performance via the cloud.

Smart Mobile Manufacturing Units

AECI Mining Explosives' smart MMU is a standard bulk explosives delivery vehicle capable of wireless data communication, including GPS positioning of blast holes.

This technology allows for delivery of explosives in hazardous environments through application of computer controlled and propelled delivery systems. It also offers advanced loading capabilities.

Virtual Reality

Another digital technology gaining prominence is VR, a simulated experience that can be similar to, or completely different from, the real world. In partnership with the University of Pretoria, AECI Mining Explosives established a VR Centre at the Department of Mining Engineering. The Centre provides VR training material through consequence training and instructional design. One of the benefits of VR training is that it can be scaled quickly to improve operational efficiencies.

Digital classroom

The digital classroom leverages the power of VR to deliver quality training to front-end employees. An example is IntelliShot® e-learning and VR training.

Automated supply chain

AECI Mining Explosives' supply chain focuses on a single web-based exchange portal to facilitate mobile Proof of Delivery solutions, real-time material flow, silo monitoring and transport management to enable the three-way match of purchase orders, delivery notes and invoices. It also includes "track and trace" on a global scale.



Delivering virtual support



Due to COVID-19 restrictions on the movement of people, AECI Mining Explosives' electronic initiation support team could not travel to the customer's site. So they deployed their LogShot™ technology to extract data from the detonator units in question.

Sebotse Nkoana, Electronic Technician: AECI Mining Explosives (pictured above) and part of the support team, talked the customer through the process telephonically. Sebotse then accessed the extracted data remotely before analysing error messages, functionality and user actions.

She determined that the blast initiation difficulties may have been the result of heavy electrical machinery and high-voltage cables introduced close to the blasting area. These installations have the same effect as installing a high-powered radio frequency transmitter near a harness wire, which interferes with electronic data transmission. After investigating along these lines, the customer confirmed the finding. Remote consultation is a crucial advancement in customer support.



BETTER WATER

AECI Water continues to improve access to drinking water for all, reduce potable water use for non-drinking purposes and enhance the quality of water and effluent discharge, while driving and improving other water-related environmental and societal benefits.

In 2021, we collaborated with a variety of corporates and non-profit organisations to address water security issues on the African continent. AECI Water partnered with Water Boards and Departments of Water and Sanitation to better identify and aid communities that are challenged by water scarcity issues. In South Africa, AECI Water established a programme to uplift schools and AECI Water is partnering with the Department of Education. We actively engage with municipalities to identify where and how we can solve water-related problems. By collaboratively resolving water challenges, we assist in ensuring greater food security for all.

Key SDG goals



Provide access to clean water and improve conservation.

AECI Water uses its innovative water technology, treatment chemicals, equipment and plants and network of public and private sector partners to deliver sustainable water solutions to municipalities, schools, communities, farms, mines and other industries.

Making clean water more available

Access to clean potable water is essential to the sustainability of humans in communities and schools. Satisfying this basic human right remains a long-term commitment for us.

Inadequate access to a reliable supply of potable water is a reality for many South Africans. Through a partnership between AECI Water and the AECI Community Education and Development Trust, we used our infrastructure, resources and know-how to supply three schools and three rural villages with potable water in 2021. Our investments have provided 6 000 learners and 185 000 people living in remote areas with safe and clean drinking water.

By 2025, our target is to supply potable water to 50 schools, which we estimate will reach 35 000 learners and a total of 1 million people living in remote areas. Our strategy to reach this target includes the following direct and indirect initiatives:

- Activating CSI initiatives through collaboration with other corporates
- Partnering with large non-profit organisations addressing water security

- Partnering with Water Boards in our areas of operation
- Partnering with the Department of Education to address water scarcity at schools across South Africa
- Partnering with the Department of Water and Sanitation to provide water assistance to communities across South Africa, and
- Partnering with municipalities in non-reticulated villages and areas that require good quality water.



THE DEPARTMENT OF EDUCATION VISITS GOZA PRIMARY SCHOOL

BETTER WATER CONTINUED

Water for schools

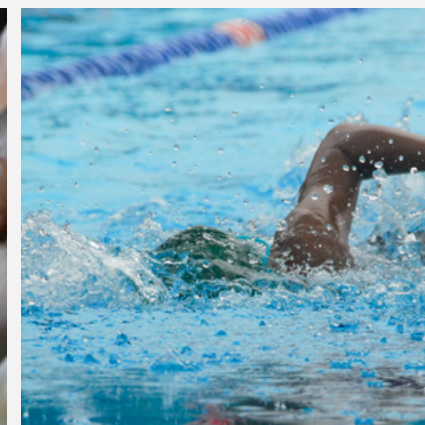


AECI Water equipped Goza Primary School in Soweto with boreholes, taps and water treatment services to the value of nearly R520 000. At the same time, AECI Much Asphalt provided paving, while AECI Plant Health established food gardens in order to, as *One AECI, for a better world*, support water and food security.

Goza Primary opened in 2015 without a reliable supply of potable water. The only option for the principal and teachers was to pipe water from a nearby school. Tap pressure was so low that there was either no water or just a trickle. Consequently, the 1 450 learners were unable to flush toilets or wash their hands properly, particularly challenging in the COVID-19 pandemic. All that has now changed for the better!

The partnership at Goza Primary School is an excellent example of what can be achieved when we collaborate, to mutual benefit.

Water for the community



AECI Water continues to partner with a key customer in a rural area in Cato Ridge, in KwaZulu-Natal in South Africa, to provide potable water to the community.

The 1 million litre-per-day plant was upgraded to a 1,5 million litre-per-day plant. Various design changes were also made to secure water availability and the sustainability of the treatment plant. This plant delivers potable water to over 9 000 households per year.

AECI Water was recently associated with the Ha-Rapokolana High Altitude Sports Training Centre in Lesotho as athletes used the pool to qualify for the 2023 African Games set for Accra, Ghana. A water purification system was installed to pump water from the nearby river to the purification station where the water is refined and transported to the Centre.

The project was undertaken by Lesotho's Water and Sewerage Company in collaboration with AECI Water. 1 million litres of water were transported to the centre each day. This was enough to fill the facility's swimming pool and provide water for consumption at the residence.

African Union Sports Council chairperson, Stanley Mutoya, highlighted the impact and value of this sustainability project when he said that "The Centre is a milestone and a place to be used not only by Basotho, but by the entire region and the African continent." This project will be handed over to the Lesotho Defence force and they will continue to run the plant sustainably.

AECI Water partnered with local authorities and more projects are underway in the Lesotho region. A second project is estimated to produce over 4 billion liters of water, over the next few years. This 1,6 billion liter per annum plant will be extracting water from the Mokare river. The plant, which is planned for commissioning in mid-2022 is designed for filtration and disinfection, potentially providing water to over 300 000 people.

AECI Water continues to focus on sustainable solutions and projects in the Indian Ocean Islands, including Mauritius and Rodrigues, in collaboration with the Central Water Authority.

BETTER WATER CONTINUED

Improving water conservation

Potable water reduced/replaced in the mining sector

By 2030, South Africa is forecast to have a 17% gap in drinking water supply. The growing focus on identifying and using alternative water sources to bridge this gap has driven AECI Water to help take the country's water-intensive mining industry off the potable water grid.

As the leading supplier of water treatment solutions in Africa, one of our strategic goals is to reduce and/or replace an additional 2 billion litres of potable water used in the mining industry's process streams by 2025. This will be achieved by helping miners enhance their water use efficiencies and reduce their consumption at an operational level through compliance with water discharge quality regulations, by identifying and increasing the use and re-use of water sources, and applying appropriate water qualities for specific applications. The mines will benefit from a significant contribution to their own water savings and environmental impact reduction goals as well as improvements in recoveries from reduced fouling.

AECI Water is partnering with several customers (mines) in Africa, including First Quantum Minerals, Mopani Copper Mines, Tenke Fungurume Mine and Glencore on strategic water projects.

These will further expand the footprint which includes the successful water projects completed at Vale in Mozambique and Tenke Fungurume Mining in the DRC.

Various projects are in progress to replace over 2 billion litres of potable water used in process streams with alternative water sources, including grey water recovery. In the North West Province in South Africa, AECI Water is managing a water treatment plant on a customer site, where underground

fissure water is upgraded to potable water standards. The full plant provided more than 800 million litres of potable water in 2021 – enough to supply 16 000 households with potable water for one year.

Another project underway will see grey water being re-used. This will free up an additional 4 million litres of potable water per day. It equates to more than 1,3 billion litres per year, enough to provide water to over 22 000 households for a year.

Potable water reduced/replaced in the private industrial sector

On the industrial side, projects equate to annual savings of over 1 billion litres of water per annum. AECI Water manages desalination plants on the West Coast of South Africa. The plants continue to produce potable water from beach well abstraction for a total volume of more than 1 billion litres per annum. This is equivalent to approximately 400 Olympic sized swimming pools and provides approximately 22 000 households with clean potable water. The desalination plant at Lucky Star, a division of the Oceana Group, has ensured that many jobs continued to be secured in 2021.

AECI Water is also partnering with sister companies in the AECI Group. AECI Food & Beverage, for example, is committed to reducing its potable water usage by 30% from June 2022. An agreement has been signed and approved with AECI Water to commission a Reverse Osmosis (RO) plant in 2022. The target is to have all potable water replaced with RO water by the end of 2023, with average water consumption of around 25 million litres per annum. This will contribute almost 30% of our 2025 reduction target.

A key 2021 project in the Group was the high level water re-use collaboration project between AECI Water and AECI Mining Explosives at the Modderfontein site.

The two businesses are both focused on doing “Business with Purpose” and this project allows AECI to give back or increase the availability of potable water to the community. Phase 1 and now Phase 2 of the project will directly contribute to the achievement of SDG goals and ultimately assist in the reduction in potable water consumption as well as discharge to sewers.

The solution involves using alternative feed water sources such as processed sewage effluent (PSE) as well as cooling tower blow-down instead of potable water. Treatment is required on these water sources to get them in line with potable water standards. Among the unit processes used to treat the water are ultrafiltration and RO membrane technologies. Waste water from the process will also be used as an additional feed source for the treatment plant. In 2021, the plant produced 166 million litres of water – a direct saving in potable water. Phase 2 will focus on increasing the usage of recycled effluent, including PSE, as well as a reduction in discharge to sewer using state-of-the-art technologies. Environmental Impact Assessment (EIA) dependent, it is envisaged that once the project is complete the total potable water demand will drop by over 700 million litres per annum before 2025.

AECI Water remains focused on delivering alternative water sources: sustainable water sources that are not from fresh surface water or ground water and offset the demand for fresh water for industries from chemical to automotive to F&B and many more. We have been awarded three contracts and the results will be shared in the next report.

Based on the internal and external projects, we remain positive that the 2025 goal of 2 billion litres of potable water reduced/replaced in the private industrial sector will be achieved.

BETTER WATER CONTINUED

Reducing effluent discharge

Effluent reduction to sewer or sea

There is a big focus on liquid effluent discharge reduction. AECI Water is seeking to reduce/repurpose 1 billion litres of liquid effluent, as well as enhance discharge compliance and realise Zero Liquid Discharge opportunities (ZLD is a treatment process designed to remove all liquid waste from a system). We continue to work with our customers and educate industry on the importance of water footprint studies. Within AECI's facilities, a number of projects have been initiated. In addition to AECI Mining Explosives Modderfontein, these are at AECI Mining Chemicals, Sasolburg, and the Umbogintwini Industrial Complex in KwaZulu-Natal. The projects are subject to EIA approvals but we are confident of achieving a reduction in excess of 500 million litres of effluent discharged to sewer or sea. Annual progress updates will be shared. In terms of external customers, we have a number of projects underway or in planning, with a potential reduction of over 600 million litres per annum. We are thus confident of achieving the 2025 reduction/repurpose goal of 1 billion litres of liquid effluent discharged by industry. AECI Water is currently running a trial to enable a textile plant in Ghana to achieve it's effluent compliance obligations. This project also has the potential to allow the 100m³/hr of effluent to be re-used.

Better water powered by the sun

In collaboration with the Zambia Environmental Management Agency, AECI Water is operating a sustainable real-time remote monitoring portable skid to secure regulatory compliance. These skids give customers, particularly those in remote areas, the ability to comply with applicable environmental laws and regulations. The monitoring skid is fitted with 14 solar panels to provide 46 hours of back-up power, thus securing environmental sustainability and enabling real-time monitoring.

When it comes to addressing pressing social needs such as water security, we recognise that to deliver growth and maximise resources for the benefit of all stakeholders in a sustainable way, a collaborative and integrative approach has the greatest value. Our good chemistry does not stop with our products and services but always extends to our stakeholder relations, including communities and regulators.

Reducing water, dust and particulate matter

A new area being explored is the use of AECI Water technologies to reduce dust and the amount of water needed to achieve compliance, related to dust or particulate matter (PM), associated with environmental regulations, particularly in the area of roads.

Reducing potable water use in the private industrial sector



We are the first in Africa to offer the eco-friendly, Mega-Inliner® supply chain system. Mega-Inliner® includes a bag and a tank container. The bag is placed in the empty tank container for filling with any non-hazardous liquids. The bag is 100% recyclable. Since all the liquid goes in the bag, the tank container stays clean with no wear and tear. The need for cleaning chemicals, facilities and personnel is removed. No cleaning means that there are significant water savings.

Without Mega-Inliner®, approximately 2 000 litres of water are used to clean a single tank container. With Mega-Inliner®, up to 5 billion litres of water could be saved around the world every year. This is enough water for 300 000 people in Africa annually.

Through Mega-Inliner®, in 2021 AECI Food & Beverage partnered with major customers and suppliers, and saved 245 000 litres of potable water. Uptake of the solution is forecast to increase in 2022.



BETTER FOOD SYSTEMS

Our planet is rich in resources, but unequal access to them, and inefficient handling of these resources, has left many undernourished. Over 800 million people in the world still do not have access to adequate food. Malnutrition in its various forms has become the leading cause of death and illnesses worldwide. Statistics show that the number of undernourished people is expanding at the fastest rate in Africa.

At AECI we strive to ensure food security by making agriculture more inclusive and responsible and by making food production healthier and more affordable.

Key SDG goals



Enhance access to good food through improved farming, productivity and nutrition.

AECI's agricultural, nutritional and digital capabilities are being applied to develop innovative technical solutions that expand nutritional options and support inclusivity towards establishing a food system that is more productive and less wasteful.

In September 2021, the UN Secretary-General, António Guterres convened the first Food Systems Summit as part of the Decade of Action to achieve the UN SDGs by 2030. The Summit launched bold new actions to deliver progress on all 17 SDGs, each of which relies to some degree on healthier, more sustainable and equitable food systems – the aim of our Better Food Systems goal.

For the second year, in 2021 the head of AECI Plant Health served as president of CropLife SA, an association representing manufacturers, suppliers and distributors of crop health and agricultural biotechnology. We support CropLife SA both financially and, particularly, by deploying senior personnel. Working with the full value chain, we believe we can enhance the sustainability of farmers and the food they produce.

In 2021 a big focus for AECI Plant Health was on communicating the advantages of, and best practices for, sustainable farming. Working with our more than 180 Crop Advisers we held numerous sessions with end users of our products and systems. These sessions covered the use of safe/greener chemicals, local community upliftment and human resource development.

Also, in 2021 AECI Plant Health continued to focus on developing greener products and on its technology offerings and by year-end, 31 product registrations had been completed in the USA enabling us to further share our Better Food Systems solutions globally.

Our Better Food Systems goal has six key focus areas under which we implemented key projects during the year:

1. Improving yield through sustainable agriculture

NuWay®
RAPPID®
AgroScout
DrapeNet
Crop Advisers

2. Making water conservation easier

SupPlant

3. Making farming more inclusive

Khula
Nyonga pack

4. Making food healthier and more affordable

Value-for-money nutritional solutions
Reduced sugar content in juices
Fortified, healthier foods and beverages

5. Reducing food waste

Bio-preservation technology

6. Corporate social investment

A number of projects were undertaken as part of our CSI activities. See pages 64 to 69.

BETTER FOOD SYSTEMS CONTINUED

Improving yield through sustainable agriculture

NuWay®

NuWay® is a holistic methodology that uses precision analysis, remote sensing and tailored chemistry to address long-term soil health. This enhances agricultural output and delivers healthier crops. An example of the NuWay® offering is Biocult which uses mycorrhizae and trichoderma to enhance plant nutrition, soil biology and soil chemistry. Application can also improve carbon sequestration by up to 15%. We are in the process of registering Biocult as a carbon sequestration product. This would allow farmers who use the product to accrue carbon credits which they could sell.

Our Biocult sales strategy was focused both nationally and internationally. Nationally, we aimed to increase market share whilst, internationally, we aimed to initiate and obtain registrations. We have been successful, resulting in us maximising our current production facilities for both mycorrhizae and trichoderma. To increase production capacity, we recently completed a new facility in the Western Cape, South Africa.

The future growth of the agricultural market lies in green chemistry and we will continue to expand our role in this arena.

We are also exploring the use of cover crops which help improve soil biology. Currently we are promoting inoculants which convert atmospheric nitrogen into ammonia to stimulate plant growth. Additionally, we promote minimal tillage (conservation agriculture) through the use of our herbicides. All these efforts are geared towards achieving more sustainable agriculture.



RAPPID®

Our RAPPID® (ammonium polyphosphate) product is a nutritional source of nitrogen and phosphate used as a crop fertiliser (for wheat, maize, pastures, sugarcane, citrus, avocados, olives, beans, brassica, strawberries, carrots, potatoes, tomatoes, cucurbits, wine grapes and table grapes). During 2021 we undertook successful trials using a pressure reactor. This will enable us to produce RAPPID® more sustainably, resulting in future growth for our phosphoric acid business.

AgroScout

AgroScout, an Israeli agri-tech start-up with whom we have a partnership, has developed drone technology which collects high-resolution images from the farmer's fields. Built-in algorithms detect diseases and pests, indicating their intensity and locations. Farmers adjust their spray programmes accordingly, reducing the cost and use of chemicals. This technology was tested on South Africa's West Coast at the beginning of 2021 and is in the process of being rolled out in the Free State and KwaZulu-Natal, South Africa. Potato farmers are our primary target for the near future.

DrapeNet®

Developed in Australia 15 years ago, DrapeNet® decreases cross-variety pollination, protects against hail, reduces sunburn damage and saves on irrigation. Previously, Southern Cape farmers in South Africa suffered huge financial losses from fruit damage and now this cost-effective system is protecting their high-value tree crops.

Note: DrapeNet® is a trademark of Nancarrow Holdings (Pty) Ltd.

Crop Advisers

We have a network of 184 AECI-accredited Crop Advisers who serve South Africa's farmers with advice and product support in the interests of healthy yields and hence nutritious, safe food all year round. They cover all aspects of farming, from pest control to soil health.

Making water conservation easier

SupPlant

Precision irrigation should become the norm in water-stressed areas, especially in South Africa where irrigation accounts for 70% of total water consumption.

SupPlant is another Israeli-based agri-tech start-up with whom we formed a partnership in 2020. The technology uses artificial intelligence to improve crop health through efficient irrigation, thus increasing yields. Precision sensors placed on individual plants extract moisture requirements and feed the data to a control centre for irrigation.

To date, 16 installations have been placed on customer farms totalling 614 hectares. Our objective is to expand the offering to 7 000 hectares by 2025. In 2020 we completed 13 installations covering 435 hectares. Our model has been further refined to make it more attractive to a wider portfolio of customers in the interests of accelerating the number of hectares covered.

BETTER FOOD SYSTEMS CONTINUED

Making farming more inclusive

Khula! App

AECI acquired an equity investment in the Khula! App in 2020. The app assists emerging farmers to grow and sell their produce commercially and its ecosystem includes three functions:

- *Input Marketplace* – emerging farmers buy more than 5 000 products from leading national and international suppliers at competitive prices. These products are collected from an AECI Plant Health depot near them or delivered directly to their farms. There is also access to advisory services and spray programmes.
- *Funder Dashboard* – funders allocate grants and/or loans to selected emerging farmers, depositing funds through the Khula! App for drawdown.
- *Fresh Produce Marketplace* – emerging farmers sell their produce to major off-takers and supply chains such as hotels, restaurants and shops.

We aim to have 50 000 registered farmers on the app by 2025.

	2020	2021	2025 target
Number of farmers registered on the Khula! App	4 200	8 000	50 000

Our main focus for 2022 will not be on the number of regulations, however, but rather on creating a more effective, easy-to-use app. This will help us to meet our long-term targets.

Current orders on the app allow us to stress test the logistics and all processes from orders through to delivery. We aim to automate as many of the processes as we can (admin, financial and logistics) to deliver products within seven days from order. This will ensure our app is able to handle large volumes of orders and still be effective.

We are also focusing on adding as many suppliers to the app as possible, which will ensure farmers can find everything they are looking for at competitive prices. The ultimate objective is to boost economic growth by increasing farmers' sales and profits.

Nyonga pack

Our research and development work resulted in the creation of our Nyonga range of crop-specific inputs for smallholder farmers in Malawi. The packs include seeds, fertiliser, crop protection products and personal protection equipment. They are distributed through multinational companies which have contracted smallholder farmers to produce tobacco, cotton, maize and pigeon pea. The objective is to create local economic growth by helping these farmers increase their yields safely and sustainably.

	2020	2021	2022 target
Total Nyonga packs supplied	52 976	97 093	113 258

Making food healthier and more affordable

Value-for-money nutritional solutions

The world's poorest people spend as much as 60% of their household income on food. We are committed to providing quality ingredients for the manufacture of low-cost, nutritious meals, as well as a range of healthier alternatives to everyday ingredients and nutraceuticals with proven health benefits. Through culture technology, AECI Food & Beverage offers solutions to produce Amasi (fermented milk) and Mageu (a maize-based fermented product) to improve traditional fermentation processes, thus optimising production time, quality and consistency in current and new products.

We also offer a range of functional ingredients used in the production of low-cost meat products. In 2021, various projects were successful in South Africa, Zimbabwe and Zambia.

Reduced sugar content in juices

To improve sensory profiles, lower the risk of metabolic disorders and maintain great tasting products, we supply innovative sweeteners for fruit juices that contribute to consumers' daily requirements for natural fibre and vitamins.

BETTER FOOD SYSTEMS CONTINUED

Food security projects



Triple-P is a people- and plant-focused Non-Profit Enterprise with a Public Benefit Organisation status, founded in South Africa. Its purpose is to create partnerships with people to unlock green skills opportunities and recognise the value of their knowledge and capabilities as an asset in creating sustainable livelihoods and a healthy planet.

We first partnered with Triple-P through the AECI Community Education and the Development Trust in 2016 to implement the Wise Wayz Water Care (WWWC) Project, in the Mbokodweni catchment area in KwaZulu-Natal.

Triple-P is implementing two projects addressing the most valuable and currently at-risk resources in South Africa. The Azibuyele Emasweni (going back to our roots) Project is a food security project that focuses on developing commercial agricultural opportunities in a rural area of Umbumbulu in KwaZulu-Natal.



The project has supported 30 beneficiaries from the Madundube community with training and skills in vegetable production and farming business development. The project has established its first agribusiness called Isizwe Sethu Sinothile (nourishing our nation) Organic Farming.

The enterprise is owned and operated by the beneficiaries. The project has resulted in successful harvesting seasons that have generated income, mainly through sales to the local community, including local schools. The initiative has been very well received by the community.

In commemoration of World Food Day in October 2021, the project donated vegetables to local schools and in-need families. A second agri-business is in the process of being established in the same community.



Fortified, healthier foods and beverages

AECI Food & Beverage has partnered with key customers to launch innovative products in line with global trends towards healthier and more sustainable products.

Some of our innovative food solutions are:

- Collagen protein for bone and joint health
- Plant protein as an alternative source of protein
- Prebiotic fibre for gut health and immunity.

Some of our innovative beverage solutions are:

- Botanical extracts that boost cognitive performance and natural energy
- Fermented juices for gut health and immunity
- Fruit and vegetable juices that enhance the nutrient density of beverages for healthy on-the-go meal replacements.

Reducing food waste

Food waste pushes up food prices and makes food increasingly inaccessible to the poor. We are committed to making a difference here.

Bio-preservation technology

Projects are underway with key manufacturers in the dairy industry to reduce food waste through the introduction of bio-preservation bacterial culture technology. Bio-preservation cultures benefit the consumer by improving the quality and consistency of dairy products the natural way, securing quality of the products throughout the value chain, and allowing consumers to enjoy the taste and quality of dairy products every time, as well as extending the shelf-life of products naturally without artificial preservatives.

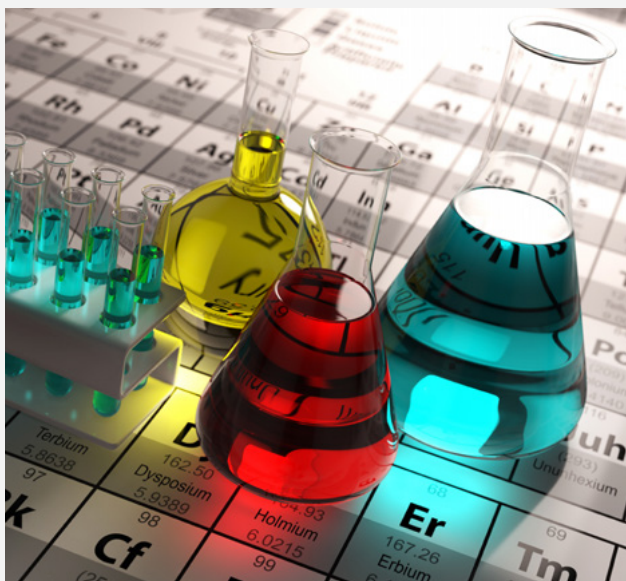


BETTER CHEMISTRY

We are shaping a better world through our commitment to Better Chemistry.

This goal focuses on embracing the principles of green science and technology in researching, developing, manufacturing, packaging and transporting personal care, homecare and industrial products and solutions.

Key SDG goals



Reduce the hazardous nature and effects of chemicals

AECI's extensive chemical application know-how, industrial experience, market access in key geographies, product development capabilities and strategic partnerships mean that we are well positioned to meet the increasing demand for green products.

Making personal care greener

AECI Specialty Chemicals continues to work with suppliers to develop and source materials that are more sustainable. Hydrolysed corn starch, for example, can be used in hairstyling products as can milder surfactants that are naturally sourced and biodegradable. We offer safer and greener replacements to sulphate and other harsh ingredients and preservatives commonly used in the manufacture of shampoos, hand washes and shower gels.

Our alternatives are kinder to the skin and the environment. Although market uptake continues to be slow as a result of cost considerations, green alternatives are being considered more and more by customers as end consumers drive change.

	2020	2021	2025 target
Tonnes of green personal care products sold	5	39	85

We continue to develop and supply emulsifiers that enable a change from hot to cold production processes for lotions, creams and hair products. These processes require less energy and hence support the credible climate change commitments of product manufacturers and brands.

Making homecare greener

To reduce the impact of homecare products on water usage and in support of the emerging shift to greener homes and lifestyles, we continue to leverage our customer relationships to promote the use of greener chemicals in the manufacture of related products. These products reduce water consumption by assisting in breaking down foam during the laundry cleaning cycle, meaning that fewer rinses are required.

We also make use of biodegradable rheology modifiers and greener alternatives to commonly used alkylphenol ethoxylate surfactants. Although market uptake of our green homecare products remains relatively slow due to premium pricing, demand has started to increase in line with consumer education and environmental awareness.

	2020	2021	2025 target
Tonnes of green homecare products sold	4	11	60

BETTER CHEMISTRY CONTINUED

Helping industries green their operations

We are committed to shifting to greener industrial processes in our own operations by leveraging our learnings and established expertise. As always, partnerships with our suppliers and customers are fundamental to our success. AECI Specialty Chemicals has exclusive relationships with suppliers who share best practices and new technologies as a matter of course. For example, one supplier is a leader in the development and promotion of firefighting foam concentrates. This relationship has grown into a technology partnership where we readily share developments and findings. AECI Specialty Chemicals is the only manufacturer of these products under licence in the world.



Sodium lauryl ether sulphate (SLES 70%) capacity increase

SLES 70% is an anionic surfactant which has good cleaning, emulsifying, wetting and foaming properties. It is water soluble and compatible with many surfactants used in the detergents industry. It is biodegradable with low irritation to skin and eyes. During the year we increased production capacity for this product to align with a key customer's Clean Future and Sustainability Strategy.

AECI's green replacement project looks to support the substitution of environmentally harmful chemicals with softer chemicals in the manufacture of industrial cleaning formulations. We have developed environmentally-friendly alternative formulations, eliminating the use of nonylphenols with alcohol ethoxylates.

To reduce reliance on non-renewable oil-derived feedstock, we are testing renewable oleochemical feedstocks for use in epoxy resins and hardeners.

Reducing plastic waste

Plastic waste is a global challenge. 370 million tonnes of plastic are produced annually and only 16% of this is recycled; 25% is burned and 59% is landfilled or discarded in an uncontrolled way. Since demand for plastic is growing by 3% a year and global volumes are expected to reach 515 million tonnes by 2029, the current waste trajectory is unsustainable.

We invested €2,5 million in a strategic collaboration with Clariter, an international cleantech company with a revolutionary upcycling technology that transforms plastic waste into three industrial ingredients (oils, solvents and waxes). These ingredients are used to make thousands of crude oil-free consumer end products which include cleaning agents, leather conditioners, paints, wood and floor polishes through to candles, inks, mineral oils, shoe cream and surface wax.

AECI's investment is a convertible loan and includes the option to participate in further rounds of funding of up to €10 million as well as distribution and offtake agreements for Clariter's range of oils, solvents and waxes.

While the funding will be used to scale up the technology to commercial level, the two companies will also:

- Explore the development and construction of Clariter's full-scale plants across parts of AECI's existing geographic footprint, specifically South Africa as well as Germany and some states in the USA
- Research and develop new specialty chemical applications and blends to create new products with a green premium.

Clariter will upcycle 2 million tonnes of plastic waste, produce 1,7 million tonnes of industrial products, and reduce CO₂e by nearly 1 million tonnes by the end of 2028. To do so, it will utilise a continuous, proprietary and proven chemical upcycling process that overcomes the challenges faced by mechanical recycling. These include being highly sensitive to the types of plastic suitable for processes and limitations on the number of times plastic can be recycled mechanically. Significantly, Clariter's process treats nearly all types of plastic (including polyethylene, polypropylene and some polystyrene) in mixed colours and quantities and converts plastic back to original form to deliver drop-in ready replacements for product manufacturers.

There are three steps in the process:

1. Thermal cracking to convert plastic waste into a wide range of liquid hydrocarbons.
2. Hydro-refining to remove impurities and form naphthenic and paraffinic hydrocarbons.
3. Distilling and separating to distil fractions into stable products which can be blended into diverse products.

BETTER CHEMISTRY CONTINUED



There are many reasons why AECI is well-placed for this type of strategic collaboration including our extensive chemical application know-how, industrial experience, market access in key geographies and product development capabilities. It is also in line with our internationalisation strategy which includes growing hard currency earnings.

Circular, green processes and products have a meaningful role to play towards improved sustainability and ultimately a Net Zero carbon future. The technology has been proven at Clariter's R&D pilot plant in Gliwice, Poland since 2006 and on an industrial-scale plant in East London, South Africa since 2018. During this time, detailed information has been gathered and lessons have been learnt in areas such as core technology, debottlenecking, feedstock variability,

mass energy balances, process flows, scaled engineering parameters and total carbon emissions.

Clariter won Frost & Sullivan's 2021 Technology Innovation Leadership Award in the European chemical upcycling of plastic waste industry. Frost & Sullivan's report indicated that Clariter's upcycling process shows significant benefits, not least of which is a net negative carbon footprint.

Making roads greener

Only 20% of rubber tyres are recycled in South Africa. The re-use of waste rubber in asphalt has the potential to significantly increase this figure and support greater sustainability.

AECI Much Asphalt has supplied several road projects with asphalt mixes containing ground tyre rubber (GTR) in the past year. The increased attraction of this more sustainable solution has also led AECI SprayPave to manufacture binder containing GTR in-house, using technology that adds significantly to the binder's shelf life and lowers energy costs. GTR enables the use of more binder in the asphalt without the risk of bleeding or excessive deformation due to mix viscosity. Increasing the amount of binder provides longer lifespans for roads and lower rolling noise on the asphalt surface. While this technology is not new to South Africa, it is making paving mixes containing waste tyre rubber increasingly popular.

In 2020, AECI SprayPave commissioned a new mobile blending unit with the capability to produce bitumen at a rate of 25 tonnes per hour, incorporating 25% GTR. It is using between 50 tonnes and 150 tonnes of GTR per month depending on orders for extended bitumen rubber (EBR).

EBR blends are produced on a "to order" basis and a significant increase in demand was noted in the second half of 2021.

The advantages of EBR are:

- *Longer shelf life*
- *Long-lasting, maintenance-free and moisture-resistant roads*
- *Lower spray temperatures*
- *Reduced carbon footprint, energy consumption and emissions*
- *Reduced viscosity and longer workability (than conventional GTR mixes).*



RESPONSIBLE OPERATIONS

The nature of our business model creates three very different operating environments: one in which we manufacture at our own facilities, a second where we manufacture and deploy equipment or services on our customers' premises and a third where we host numerous other businesses as tenants on our Modderfontein site and at the UIC. All of this brings with it complex accountabilities and a diverse set of laws, from different countries and sectors, but also the expectations of customers and tenants themselves.

These complexities, though, create opportunities to work with all affected stakeholders, each with their own sustainability goals and expectations. Through collaboration we can showcase our ability and that of our products, as well as some unique methodologies, to collectively achieve much more across our individual value chains.

Key SDG goals



AECI SCHIRM (WOLFENBÜTTEL, GERMANY)

We will minimise our environmental impact and strive for Zero Harm across our value chain.

Our Zero Harm Strategy has enabled significant improvement across occupational safety, process safety, environmental performance and product transportation performances since its launch in 2017.

Managing strategic and operational SHE risks

All risk descriptors and the associated assessment tools for SHE across the AECI Group have been standardised over the last two years. All our activities have been assessed using this methodology, enabling us to identify our top risks in a consistent manner. These assessments are the start of a journey to develop and embed standardised risk controls and assurance methods.

While the full suite of risks across all operations is lengthy, and all levels of risk have to be managed, the priority focus remains on those deemed strategic or high risks in terms of the degree of harm or interruption that they can cause.

The two most significant (strategic) risks we face are:

1. A catastrophic process safety incident.
2. An extreme weather event.

In terms of process safety, described in further detail below, we are pleased to have continued improving in this area and have not recorded any Major (Tier 1) process safety incidents since reporting on this indicator commenced. The prevention and management of these events is within our control and for that reason remains a priority focus area executed through the Zero Harm Strategy.

Because we have far less control over the occurrence of an extreme weather event our focus is on readiness and response. Several such events have affected our operations in recent years and predictions are for them to become more frequent and potentially devastating.

Our facilities all have emergency response and business continuity plans, which are frequently put to the test. The plans are aimed at reducing the impact on our people, operations and the environment neighbouring our sites. The most common events experienced in recent years have been heavy rainfall or hail storms which have led to flooding, property damage and business interruption.

RESPONSIBLE OPERATIONS CONTINUED

Further progress towards Zero Harm

2021 marked the fifth year of implementation of Zero Harm and it is pleasing to report the further progress achieved in all strategic focus areas. This translated into significant improvement in many areas of the SHE performance metrics. Progress was not achieved without some “course-correction” early in the year, when occupational and process safety showed indications of deterioration. Due to this, a safety improvement plan was launched in February 2021 with key focus areas. Our performance highlights are reflected below.

HIGHLIGHTS IN 2021 AECI ACHIEVED:

Zero Fatalities

Zero Life-altering injuries

Zero Major or Serious environmental incidents

Zero Major process safety incidents

Zero Major product transportation incidents

Zero Repeat incidents

Zero SHE legal directives

OUR LOWEST-EVER:

0,23

Total Recordable Incident Rate

0,80

Process Safety Total Incident Rate

Significant reduction in Reportable PSM Incidents

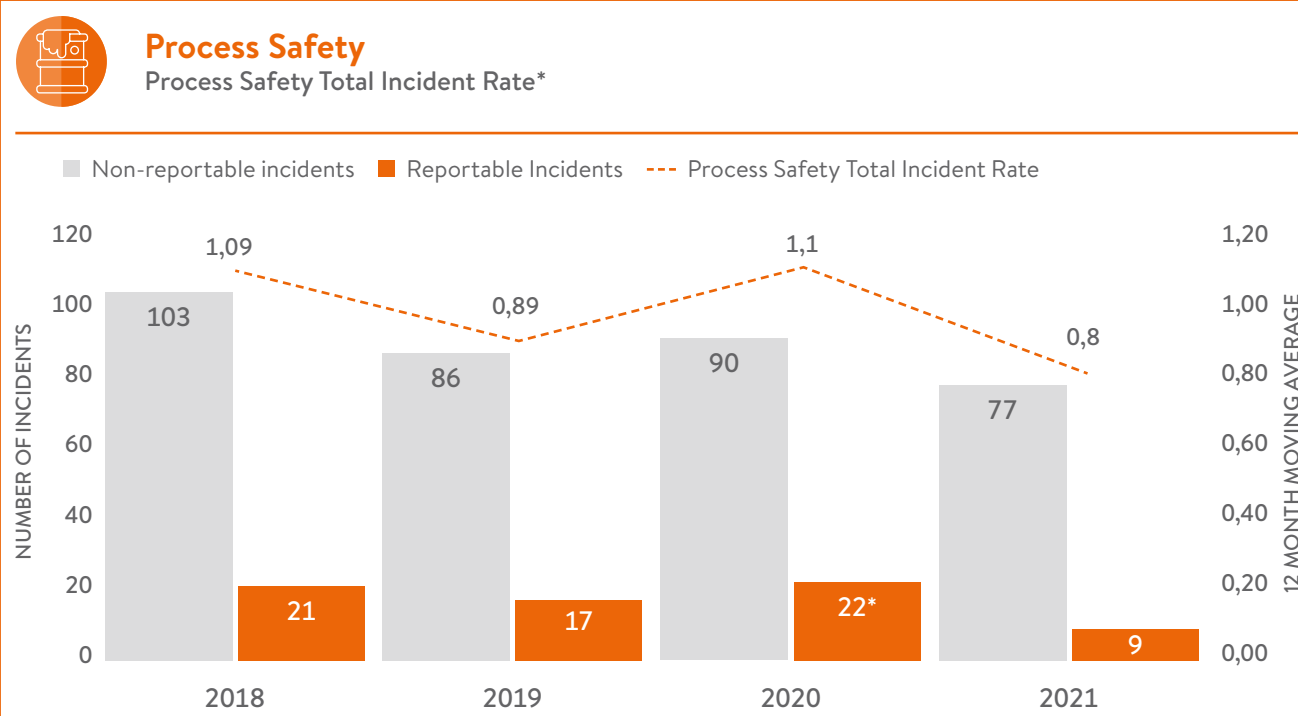
14 Moderate Environmental Incidents down from 29

Significant reduction in all forms of product transportation incidents

We also achieved all our “Zero milestones” for the first time in the same year. This reflects the effort put into eliminating high-severity incidents, serious legal non-compliance and repeat incidents. While these results can be evaluated simply as numbers, what they really indicate is an actual reduction in harm and demonstrate good progress towards our vision, embedded in the Group SHEQ Policy, that “we are committed to operate sustainably, without harm to people, the environment and the communities in which we operate”.

Benchmarking our performance

Our aspiration remains Zero on all our key KPIs and progress on these is evaluated and reported monthly. We also evaluate our performance against chosen peer companies, who have a similar risk profile as ours and have a large global presence. This benchmarking is done by analysing the official reports published by these companies, usually on an annual basis. It is very pleasing to report that we have excelled when benchmarking against these peers, particularly in the areas of Occupational Safety, Process Safety, Environment and Product Transportation.



Graph depicts the occurrence of process safety incidents in relation to exposure hours recorded for employees. The term “Reportable” is an industry-agreed definition. An incident is deemed Reportable when certain thresholds are exceeded.

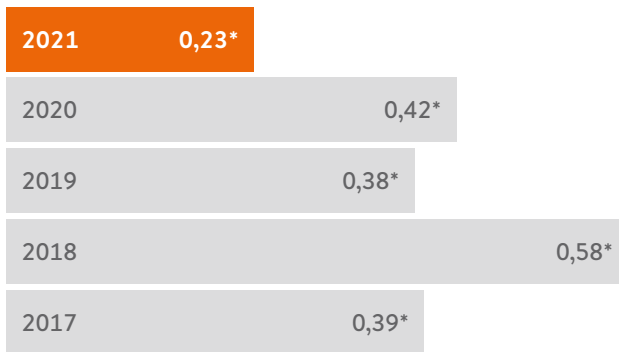
* Indicates limited assurance.

RESPONSIBLE OPERATIONS CONTINUED



Occupational Safety

Total Recordable Incident Rate (TRIR)



* Indicates limited assurance.

Occupational and process safety

The importance of occupational safety was re-confirmed for and by both internal and external stakeholders through our materiality survey conducted in 2021.

The pandemic created a significant challenge in 2020 as it impacted on the ability of many leaders and SHE Managers/ Practitioners to be physically present in the workplace.

This reduced the levels of engagement and conversations on safety. As a consequence some key activities, such as workplace walkabouts and the verification of safety controls, were somewhat limited.

While we were almost back to full production in 2021, the restrictions imposed in individual countries meant leadership teams were not as visible as they would normally be and there

was a drop in the momentum of Zero Harm efforts. It was evident early in 2021 that this had to be restored.

We also focused on standardising Continuous Risk Assessment through a methodology we call “Zero-In”, which aims to trigger all employees to assess their tasks before and during execution. We completed the first draft of a standardised Health and Safety Manual, which will be used to define the required controls, in a consistent manner, for all risks across the Group. This, in turn, will enable a verification process. Significant effort has gone into developing classroom and e-learning material for all SHE risk modules. In 2022, each course will be assigned to employees based on their respective risk profiles. All courses are being translated into five additional languages for our international colleagues.

Roll-out of our Risk-Based Process Safety Management system continued and we are satisfied with the results delivered. However, much more effort will be placed in this area going forward, with the need to create internal competencies and at the same time improve operational discipline in our manufacturing environments. In 2021 we saw a reduction in the total number of process safety incidents and, importantly, a reduction in the number of serious ones.

Occupational health

SARS-CoV-2, or COVID-19 as it soon became known, was declared an Occupational Hazard which meant it had to be managed as part of our Occupational Health Management Programme. This required a complete evaluation of the workplace through risk assessments and the identification of controls to minimise the potential for transmission. In the event of a case in the workplace, the necessary emergency response also had to be developed.

We are pleased to report that no cases of COVID-19 could be directly attributed to work-related exposure. We recorded one new occupational illness in 2021 (of Noise-induced Hearing Loss). We also undertook an evaluation of our global occupational health risks against a set of five standard risk categories. Noise remains our most common health hazard followed by Manual Handling/ Repetitive Strain.

Product transportation and product stewardship

While we have a reasonably large fleet of small to large vehicles of our own, we rely heavily on third-party partners to move most of our products across the globe. In 2021 we saw the distances travelled by all of these vehicles back to “normal” and in some cases they increased.

Our biggest risk remains road transportation, largely in Africa. Unfortunately the condition of many roads has not improved and the rail network is not a viable alternative. Our transporters face numerous other challenges, such as pedestrians and animals crossing roads without caution. Due to the long distances travelled, often requiring multiple border crossings which can cause extensive delays, fatigue becomes another challenge.

Journey planning and management are key as is the use of fatigue management technology, systems and procedures.

We are pleased with the significant improvement achieved in 2021 in the rate and severity of product transportation incidents. No Major transportation incidents have occurred since December 2019. The success is attributed to the collaboration we have with our partners to improve all aspects of transportation, including vehicle safety, engineering measures, driver competency, journey management and emergency response.

RESPONSIBLE OPERATIONS CONTINUED

Waste

Ash reclamation from historical operations at Modderfontein, an area known as Ash Dam 6, continued. Over 2 million tonnes of ash has been reclaimed and transported for the manufacture of bricks for housing developments. In South Africa, all ash from our historical manufacturing sites was reclassified as non-hazardous and a number of projects with third parties are being evaluated for long-term reclamation of these ash sites.

Reducing waste to landfill

AECI is committed to reducing the volumes of waste disposed of to landfill sites and has continued to seek opportunities to redirect waste for use as a raw material or to rework materials on site. Our philosophy related to waste is reflected on page 49.

Land remediation

We have continued executing our risk-based Land Remediation Strategy, which is reviewed each year and presented to the authorities in South Africa where the majority of environmental rehabilitation obligations exist, for approval. In line with our land sales agreement in Modderfontein, we handed over additional remediated parcels to the developer in 2021, after scrutiny by the authorities.

The Enhanced In-situ Bio-remediation project (bio-barriers), was established at the Umbogintwini Industrial Complex over the last five years, following seven years of trials.

This significant investment was sanctioned to address chlorinated hydrocarbon contamination of ground water from historical operations and, in 2020, it successfully moved into its maintenance phase. Extensive monitoring and if required, additional “top ups” of the active chemicals used in the barriers will be undertaken.



Waste Hazardous waste (tonnes)

2021	14 035*
2020	15 844*
2019	13 134*
2018	10 492* ^Δ
2017	6 592*

Note: increases in 2018 and 2019 were due to the inclusion of data from AECI Schirm. The increase in 2020 was due to ash generated from the coal-fired boiler in Modderfontein, which ran at a higher rate.



Waste Recycled waste (tonnes)

2021	3 683*
2020	3 288*
2019	6 280
2018	7 346 ^Δ
2017	9 644

Note: decrease in 2020 was due to a reduction in production as a consequence of COVID-19

** Indicates limited assurance.*

Δ Increase due to inclusion of data from AECI Schirm and AECI Much Asphalt.

AECI Food & Beverage converts waste into compost



In 2021 AECI Food & Beverage converted what has historically been a waste stream from the milling operation at the Clayville site in Gauteng, normally disposed of at a landfill site, into a raw material for compost.

Landfill disposal came at substantial cost so AECI Food & Beverage actively sought an alternative use for this stream. In collaboration with waste management partners, it was established that the waste might be suitable as a possible composting material and a partner (KTL) was identified to progress the idea.

Through this project, the team prevented 580 tonnes of waste from going to landfill in 2021. Other applications for the remaining waste stream are being sought and, if successful, this will result in a further reduction in disposal to landfill and associated costs.

RESPONSIBLE OPERATIONS CONTINUED

Land remediation continued

Remediation work was completed at AECI Mining Explosives' site in Mufulira, Zambia, after low pH was detected in an effluent stream. This was also associated with historical operations and was limited to a small area of the current site. The work was undertaken in line with the requirements of the Zambian Environmental Management Agency.

Reducing our water footprint

Potable water reduction

In 2021 we achieved a reduction in potable water, extracted for industrial use, of 14% in relation to 2020 and 30% from the baseline set. This is below the target of 25% we set ourselves for 2025 and while 2021 does not yet represent a year of "normal production", due to some pandemic-related plant interruptions, it is nonetheless a significant reduction.

A large portion of the reduction was achieved by switching production-related washing tasks from potable water to effluent and re-using as much water as possible. This was mainly at AECI Mining Chemicals and AECI Specialty Chemicals.

Reducing effluent discharge to sea or sewer

In 2021 we saw an increase of 17% in the volume of effluent discharged in comparison to 2020, largely due to the restoration of most plants back to near normal production levels. Nonetheless, it still represents a 16% reduction from the baseline. We have embarked on a number of ZLD projects and will report on these going forward.

* Indicates limited assurance.

Baselines were determined by analysing the data in the respective years of highest production over the period 2017–2019.

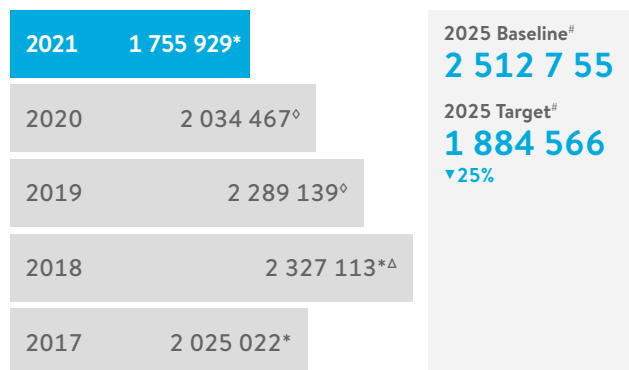
Δ Increase due to inclusion of data from AECI Schirm and AECI Much Asphalt.

◇ Historical figure updated.



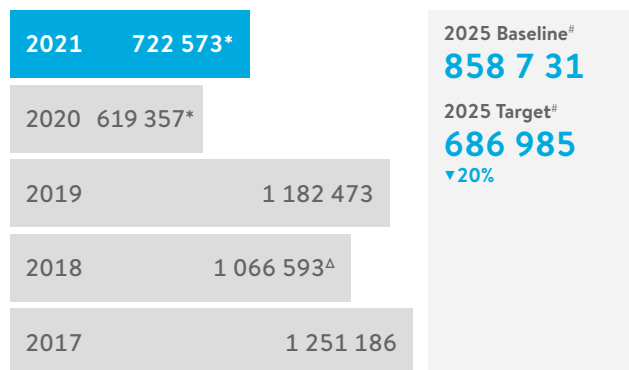
Water

Potable water consumption (m³)



Water

Effluent discharged to sea and sewer (m³)



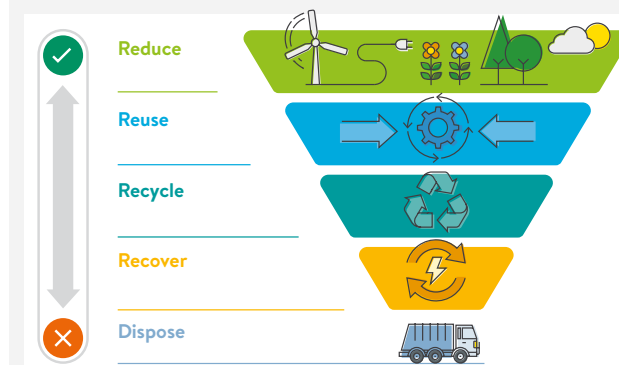
AECI Specialty Chemicals reworked 164 tonnes of sludge, traditionally a waste stream, into value-adding products.

At the AECI Specialty Chemicals plant in Jacobs, near Durban, the rosin component of crude tall oil (CTO) dissociates itself from the CTO and settles out at the bottom of tanks, forming a sludge.

This sludge builds up over years of production and previously it would be dug out and disposed of. The dry concentration of hard chalk-like sludge was considered a waste. Last year, 164 tonnes of this material were removed, transferred to other systems on site and, after mixing with other products, created usable products. The project has realised the following benefits:

1. Reversal of the financial provision for unrecoverable CTO stock.
2. Cost avoidance for the disposal of 164 tonnes of material (approximately R3 million).
3. It created employment opportunities for contract labourers in the recovery phase.

Waste hierarchy

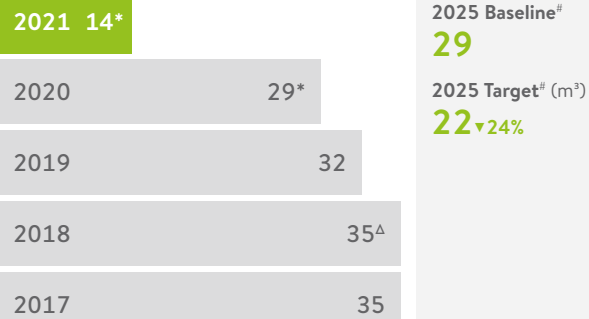


RESPONSIBLE OPERATIONS CONTINUED



Environment

Environmental incidents (Moderate)



* Indicates limited assurance.

Baselines were determined by analysing the data in the respective years of highest production over the period 2017–2019.

Δ Increase due to inclusion of data from AECI Schirm and AECI Much Asphalt.

Air emissions compliance

We continued work to complete our remaining abatement projects at Modderfontein to ensure compliance with the 2020 South African Minimum Emission Standards (MES). Although postponement for compliance had been granted till 2025 for a number of plants, internally we committed ourselves to achieving compliance in 2021. Unfortunately, due to disruption in the supply of certain abatement materials and restrictions on travel by specialists needed to undertake the work, the installations were delayed till very late in the year. Final iso-kinetic sampling was undertaken in February 2022.

Postponement was also granted for the AECI Plant Health facility in Boksburg, South Africa. The plant is currently compliant with the interim emission limits granted and projects to guarantee compliance with the 2020 MES are underway.

Reducing greenhouse gas emissions

In 2021, Scope 1 and 2 emissions reduced by 23% and 4% respectively, in relation to 2020. In relation to our baselines, the reductions were 34% and 14%, respectively. There were two main contributors. At AECI Mining Explosives, Modderfontein, the installation of abatement technology continued at No. 9 and No. 11 Nitric Acid plants. In addition, production on these plants was disrupted for a number of weeks in the year. At AECI Mining Chemicals, Sasolburg, a reduction of 30 703 litres of diesel usage was achieved by decreasing the need for plant cleaning, with high pressure cleaners that have diesel combustion engines. Furthermore, the use of methane-rich natural gas was lower due to improved plant efficiency. 8 989GJ less gas was used to produce 427 tonnes more product.



📍 AECI MINING EXPLOSIVES (LORENA, BRAZIL)

RESPONSIBLE OPERATIONS CONTINUED



Reduce carbon intensity of our operations New carbon-negative technology

AECI and Origin Materials have expanded their existing joint development agreement to develop low-carbon materials based on renewable chemistry. AECI has been a strategic investor in Origin Materials, the world's leading carbon-negative materials company, since 2017.

The new projects involve two of AECI's businesses, namely AECI SANS Fibers and AECI Much Asphalt. AECI SANS Fibers, based in the US, is a global player in engineered thread for high-performance apparel and automotive applications. The expanded partnership aims to develop, industrialise and manufacture advanced materials built on Origin Materials' carbon-negative technology platform.

This platform turns inexpensive, sustainable wood residues into carbon-negative materials and is also expected to provide stable pricing largely de-coupled from the crude oil supply chain, which is exposed to more volatility than supply chains based on sustainable wood residues.

The partnership includes an agreement to buy carbon-negative PET and next-generation polymers to be used in a wide array of end products. This is expected to enhance AECI SANS Fibers' contribution to economic growth and increase sustainability on the North American continent as a whole.

For AECI Much Asphalt, southern Africa's largest commercial asphalt producer for customers in the road infrastructure sector, the expanded partnership with Origin Materials is the next step on its sustainability journey in terms of reducing its own footprint and that of its customers. The asphalt component of AECI Much Asphalt's hot mixes accounts for a significant portion of the carbon footprint of the overall product. Because the asphalt is derived from petroleum processing, the development of a low-carbon alternative based on the Origin Materials platform is expected to substantially reduce the product's overall carbon footprint.



MANUFACTURE OF HIGH PERFORMANCE THREAD

RESPONSIBLE OPERATIONS CONTINUED

Converting xanthate production from charcoal-based to methane-based



📷 XANTHATE PLANT, SASOLBURG

AECI Mining Chemicals is the largest producer of xanthate salts in South Africa. The chemical is made for the mining sector and used as a collector in the processing of mineral ores.

Our facility converted its reliance on a charcoal-based process to a methane-based process, significantly lowering the carbon footprint. The previous technology included a reaction of molten sulphur with charcoal in an electricity-intensive furnace (approximately 1 000 KWh/tonne of carbon disulphide). The new methane process, instead, reacts molten sulphur with methane-rich gas in a gas-fired furnace.

In addition to the greener natural gas fuel source alternative, a state-of-the-art Desulphurisation plant was fitted to further reduce the environmental impact. The Claus unit recovers 95% of sulphur from tail gas waste streams. This is fed back into the system for re-use and significantly reduces the release of emissions to the atmosphere. AECI Mining Chemicals' xanthates are manufactured responsibly to support our journey towards ZLD and reduced carbon emissions.

Understanding the economic impact of our tenant-occupied sites

The UIC is managed by AECI Property Services. This site, like the Modderfontein site, hosts many tenants who are employers in their own right. Several of them are chemical companies and their operations have a direct impact on our environmental footprint. The UIC is managed in a collaborative effort, in line with an agreed Code of Conduct.

The economic effects of this model were unknown. To address this, in 2021 we commissioned an expert third-party body to undertake a local economic impact assessment of our own businesses and others operating there. The study evaluated the combined direct, indirect and induced economic impact to give an estimate of the total economic contribution. This total included the value of procurement, employment and production output.

With direct employment for some 2 600 individuals, the researchers estimated that the UIC was responsible for more than 20 000 permanent positions. Business activity and employment translated into local economic value creation of some R4 billion, positively impacting 83 000 people.



PASSIONATE PEOPLE

We understand the importance of addressing inequalities. We are actively addressing gender inequalities by implementing policies that provide more opportunities for women to progress.

We make certain that our employees come from a variety of backgrounds and that every background is fairly included and represented. Our people's health, employer relations and skills development are crucial to us, and we use in-house designed measures to monitor, assist and develop our people. AECI promotes a high-performance culture and is well-led by our purpose-driven leadership team.



📷 PASSIONATE PEOPLE

We will nurture a high-performance culture in an inclusive, purpose-led environment.

Our ability to successfully nurture a high-performance culture in which our people and communities thrive is at the heart of our success.

Living our values in an inclusive, purpose-led organisation

AECI is unwavering in its commitment to ethics, integrity and our BIGGER values. We do things differently to create a meaningful, inclusive and productive workplace while we transform and uplift society without losing sight of performance, productivity and profit. Our purpose of One AECI, for a better world is in our DNA and guides every action we take.

Women in the workplace

Despite having implemented initiatives to increase the representation of women in our workforce, we still have a way to go. The overall representation of women in our workforce, for both 2020 and 2021, was 24%. It is pleasing to report that we that we achieved our target of increasing the female representation on our Board and in Top Management. The target for 2025 was 33% however we achieved 38% in 2021. This was an increase of 9% from 2020 and mainly the result of having four female Non-executive Board Members and two female Top Management members.

We are committed to achieving our ESG KPI of having 40% women representation in senior, middle and junior management by 2025. In 2021 the representation of women at these employment levels increased marginally from 29% to 30%, however there were 99 new female appointments made in this band which represents 45% of the total appointments made. Unfortunately we also experienced resignations and the net result is the marginal increase in total. We do however have a well-defined plan aimed at achieving our 2025 target, including the appointment of a Talent Lead. This Specialist will drive the talent and representation agenda through succession planning, recruitment and retainment strategies.

Gender representation

	2017*	2020	2021	2025 target
Total women representation	1 484	1 497	1 688	No target
Women on AECI's Board and in top management	20%	29%	38%	33%
Women representation in senior, middle and junior management	33%	29%	30%	40%

* Includes employees in South Africa only

PASSIONATE PEOPLE CONTINUED WALK THE TALK



Dinah Tsebe

**Plant Manager at AECI Mining Chemicals
Waltloo, Tshwane**

AECI Mining is accelerating diversity, gender equality and inclusivity by attracting and developing more women in leadership roles.

One of the success stories is Dinah Tsebe, Plant Manager at AECI Mining Chemicals in Waltloo, Tshwane. She manages all the business' on-site operations including maintenance, occupational health and safety, production and technical.

Dinah has a Bachelor of Technology (BTech) Degree in Chemical Engineering from the Vaal University of Technology and a post-graduate Diploma in Management from North-West University, where she is currently doing her MBA Degree.

“The highlight of my career is being able to develop, grow and inspire my colleagues and peers to do their best.”

She has been in the industry for over two decades, beginning her career as an Engineering Technician at the Council for Scientific and Industrial Research (CSIR) and then a Plant Operator at Dow Agrosiences. After receiving her BTech Degree, she was given the opportunity to manage a newly-built plant at AECI Mining Chemicals before joining Sasol where she managed water, working closely with the Department of Water and Sanitation. She returned to AECI Mining Chemicals to take up her current role.

Dinah attributes her success to determination and resilience. She believes that women can break down barriers to flourish in any career of their choice.

“Traditionally, it has been difficult for women to progress in the manufacturing industry and there are still many barriers, mainly because of the general belief that women do not possess the necessary skills to thrive in such a male-dominated environment. It is encouraging, however, to see that business is changing.”

Her advice to other women and young people seeking their place in the corporate world is that they need to be willing to do the hard yards. “I started my career as a Plant Operator and rose through the ranks. I had to study and work hard. The highlight of my career is being able to develop, grow and inspire my colleagues and peers to do their best.”

In fostering an inclusive culture we seek to educate, empower and engage our workforce, eradicating barriers to the promotion of women and developing the next generation of leaders in a world that is equal for all. Our #BigHer Women Empowerment Programme continues to address gender inequality in the workplace. In 2021, in partnership with Business Engage, we ran monthly Leader Walks and Board Walks to address key issues that impact gender equality at work. These sessions aim to equip, educate and empower women with insights and tools to navigate and grow their careers. In addition, we celebrated both South African and International Women's Days where we drove key messaging across our businesses globally to inspire and encourage gender equality.

Educating, empowering and engaging our women

	2021	% of total women
Advanced women	26	2
Promoted women	29	2
Women enrolled in leadership programmes	46	3

Diversity and inclusion programme

This programme aims to address gender inequality and under-representation of minority groups throughout AECI. It is shaped by 11 action points and six focus areas: representation, awareness and education, reducing barriers, empowerment, fairness and equity, and inclusivity. Our focus in 2021 was to provide Group-wide diversity, equity and inclusion training to educate and empower our leadership and employees to drive a more inclusive workplace for all. In addition, a disability campaign was launched to identify and address targeted critical barriers for persons with disabilities.

PASSIONATE PEOPLE CONTINUED

Fair and equitable remuneration

AECI is committed to fair and equitable remuneration, a key principle of the Remuneration philosophy and one that is aligned to our BIGGER values. The AECI Executive Committee and Remuneration Committee review an annual report on pay equity within the Group, and business-specific action plans are agreed upon for areas of particular concern that are noted.

Please review the Remuneration Report for 2021 as published on our website.

Those two Committees review a variety of pay ratios, including the Company's Gini coefficient and other pay standards to ensure that, year-on-year, AECI makes progress in closing the wage gap. As data becomes available and the Companies Act amendment comes in effect in South Africa, AECI will disclose the pay ratios required and set targets and objectives to close the gap.

Each year, the Remuneration Committee reviews AECI's minimum salary and associated benefits relative to the minimum salary in each country and a deemed "living wage". The 2021 pay-equity report indicated that AECI continues to offer, at entry-level positions, a higher guaranteed package than the minimum wage and the deemed living wage.

Robust reviews of gender pay ratios have been undertaken and each year business and country-specific reports are generated for local management to review and take action to address pay inequity where identified. At a high level, the average female employee's salary is higher than that of the average male employee.

As a continuation of the 2019 and 2020 remuneration equity adjustments, another 33 women had adjustments made to their employee grading and remuneration in 2021.

Nurturing our passionate people and collaborating with our stakeholders

Employee wellness

The overall objectives are to reduce health risks, improve quality of life and enhance the overall effectiveness and wellbeing of our employees. In the year, 713 employees were upskilled on health-related topics such as understanding mental health, managing personal finances, dealing with loss, grief and death and building resilience.

In 2021 the wellness programme focused on the COVID-19 pandemic and specifically vaccinations. Over the course of the year, AECI vaccinated 1 978 beneficiaries (employees, family members, contractors and tenants) across 11 pop-up vaccination sites, in six provinces (Free State, Gauteng, KwaZulu-Natal, Mpumalanga, North West and the Western Cape). COVID-19 vaccination and education sessions were held at various sites to support the WHO's stance on vaccination and to address questions and myths associated with vaccines. This initiative included creating and distributing important information, including an SMS campaign aimed at all employees in South Africa.

Employees across our sites, businesses and certain other countries (Botswana and Chile) came together to show their support for those living with HIV and to remember those who have lost their lives. Furthermore, given the psychological associated stress-related impact of COVID-19, we held 37 Employee Assistance Programme awareness sessions, in South Africa, to provide information on the available avenues of support for employees and their dependants.

To commemorate World Aids Day, AECI ran an "HIV & AIDS forgotten but not gone" campaign. The intention was to educate employees on HIV prevention and treatment

and, importantly, to break the stigma and discrimination associated with HIV and AIDS, thus helping to foster a safe and inclusive work culture.

Employee relations

AECI's employee relations objective is to create a legal framework that protects both the Company and our employees while creating a harmonious and productive workplace. We continue to promote a safe and secure working environment by protecting employees' constitutional rights through labour legislation compliance and ensuring fair labour practices, including the right to not be unfairly dismissed. We run Employee Relations Awareness programmes with the primary focus of ensuring that all our employees are aware of their constitutional rights. Relevant legislation and policies are in place to protect employees from discrimination, victimisation and harassment in the workplace. We are committed to ensuring all employees receive fair and just income by participating in centralised negotiation platforms.

We continue to strive towards improving relations and collaboration between stakeholders including but not limited to recognised labour organisations, Line Managers and employees. This requires consistent, clear and effective communication and stakeholder engagement initiatives aimed at strengthening the trust relationship further, minimising and managing possible workplace conflicts, and dispute resolution. Consultative forums aid in the communication process between AECI, our employees and representative unions.

PASSIONATE PEOPLE CONTINUED

This allows workplace matters to be addressed and attended to effectively. We continue to participate in the Industrial Chemicals Sector Forum, enabling us to address any sector matters and effectively negotiate wages.

Skills development programme

AECI has implemented an integrated talent development approach that focuses on enhancing knowledge and skills across the Group. Employee cross-skilling and re-skilling have been built into the revised talent approach. Employees are given a personalised development plan, in line with their personal KPIs, to ensure effective development and succession planning. Access to financial assistance (the AECI Study Assistance: Financial Access Support Programme) is made available to our permanent employees for them to obtain a formal qualification at recognised higher education institutions. We also provide funding for adult basic education and youth development to individuals from marginalised groups through learnerships, apprenticeships and bursaries.

In 2021 we sent 142 employees on Leadership Development Programmes, more than our target of 100 employees and 120 employees, to meet our growing need for more employees to have well-developed leadership qualities. This will help better succession pathways from junior to senior management levels.

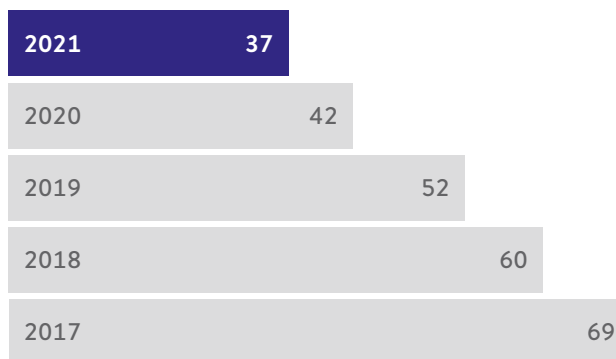
188 people were awarded learnerships/internships/bursaries in 2021. This was less than the target set for the year with learner intake being significantly impacted by the pandemic and lockdown restrictions. In 2022, we will conduct a needs analysis to assess the requirements of our businesses in order to better align our learnerships/internships/bursaries planning with them.

	2020	2021
Leadership development (# of employees)	0*	142
Learnerships/internships/bursaries (# of employees)	256	188
Youths (18 – 25 years old) awarded bursaries	42	37
Participation in at least one learning opportunity	1 982	1 935
Female participation in at least one learning opportunity	29%	27%
Employees living with disabilities participation in learning opportunities	89	66
Female employees living with disabilities accessing learning opportunities	46%	67%

♦ In 2020 there were no Leadership Development Programmes as in person business school attendance stopped due to COVID-19.



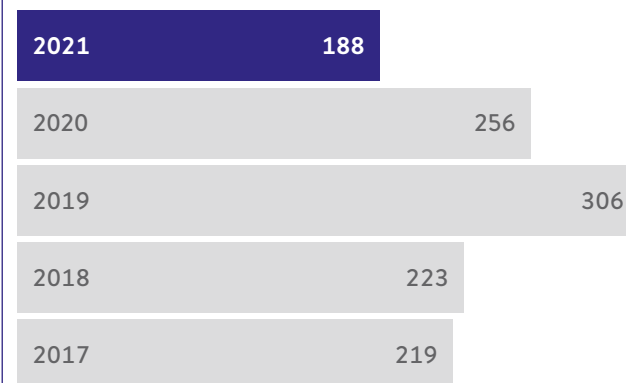
Bursaries* (External and Employee Dependants)



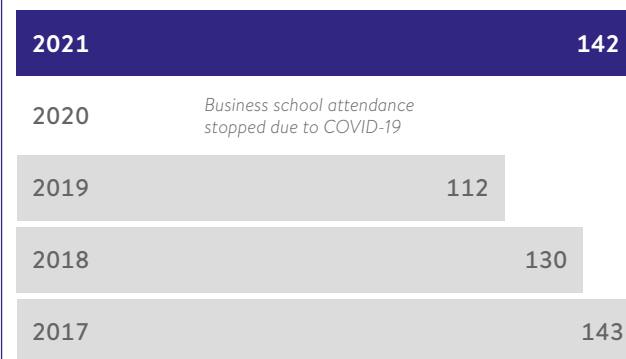
* Included in the learnerships, internships and bursaries numbers elsewhere on this page.



Learnerships, internships and bursaries



Number of employees who have attended Leadership Development Programmes



PASSIONATE PEOPLE CONTINUED

Thriving in a high-performance and inclusive culture

Talent fit-for-purpose

AECI has adopted an integrated approach to talent management by establishing Talent Boards that oversee optimal talent recruitment and fair succession plans.

The objective across all Talent Boards is to maintain a diverse, inclusive workforce free of bias and discrimination, especially at senior and middle management levels. This approach provides our people with opportunities for cross-collaborative skills engagement and professional development, as well as the formation of purpose-driven and collaborative teams in our business.

Performance management

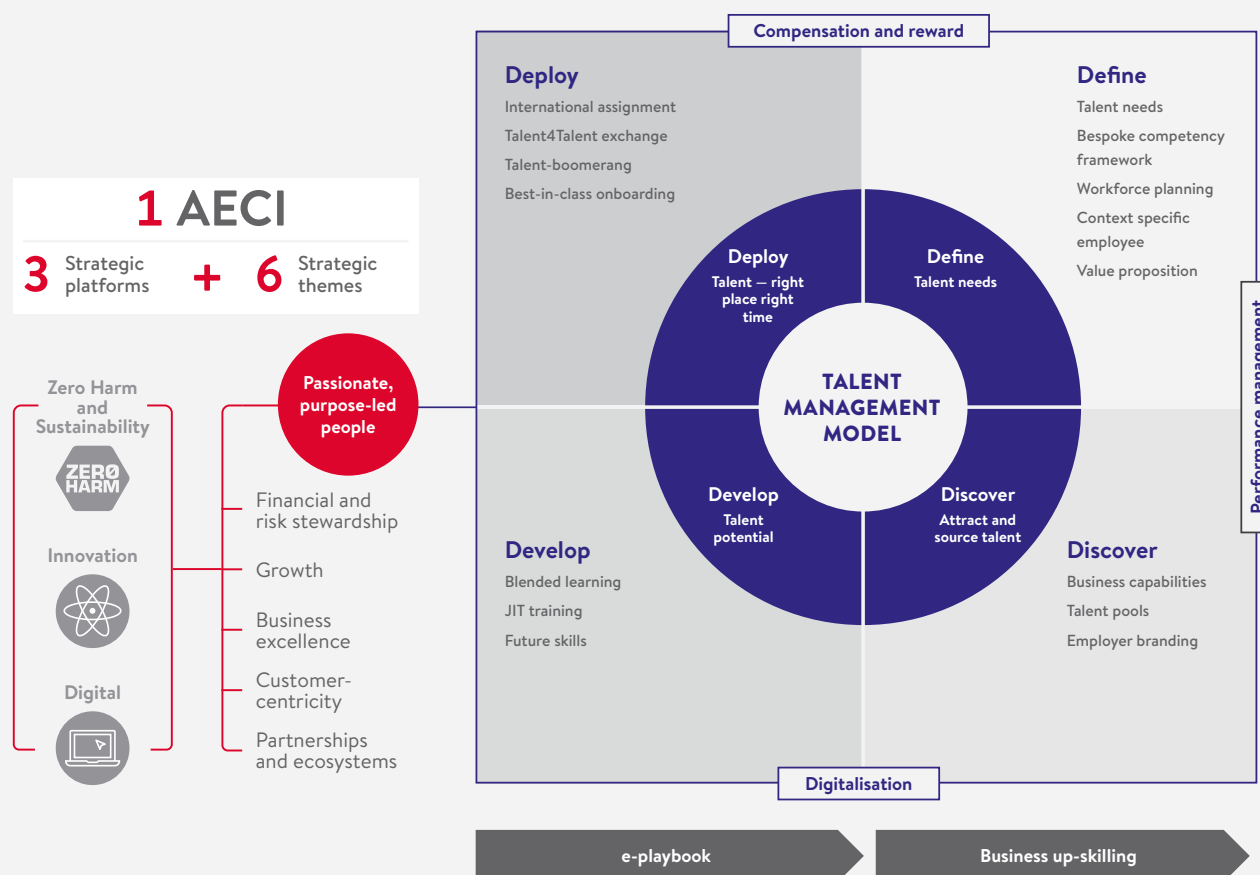
We have implemented a bespoke performance management system that allows the integration of people practices with the Group's key strategic growth objectives. The system facilitates the effective allocation of personal KPIs and enables better skills development programmes, at the same time monitoring employee progress efficiently.

Employee engagement culture

We undertook our first Employee Culture Survey in 2018. In 2021 the journey continued through a second survey, which we called the One Voice Survey, in partnership with Willis Towers Watson. Extensive effort went into ensuring there was equal opportunity for employees to have their voices heard, as the survey was administered via electronic platforms (such as computers and smartphones) as well as paper-based versions. The survey was rolled out in six languages: English, Indonesian Bahasa, Brazilian Portuguese, West African French, Mexican Spanish and German.

TALENT-FIT-FOR PURPOSE: OUR STRATEGY

Our talent-fit-for purpose strategy is a part of the 'Passionate, purpose-led people' Strategic theme of AECI's Growth Strategy.



PASSIONATE PEOPLE CONTINUED

This resulted in more than 5 000 employees across the globe participating, representing an impressive 75% response rate (2018: 64%). Our One Voice Survey comprised four themes and three sub-themes for each of them namely Purpose (Inspiration, Inclusion and Understanding), Work (Drive, Voice, Organisation and Effectiveness), Reward (Growth, Capability and Fair Pay) and People (Trust, Collaboration and Support). The overarching theme was Sustainable Engagement.

Overall, the survey results reflected an engaged, motivated workforce. Results were benchmarked against mining, chemical and food-sector norms and, where such information was available, against national peer companies.

Very encouraging, though, were the following results:

- 93% said they understood how their work contributed to achievement of the Company's goals
- 86% of respondents said they had a clear understanding of the goals and objectives of the Company
- 72% believed that AECI's purpose was about more than profit.

Survey findings were not uniform across the Group. As a consequence, task teams at each business and in each country are now focusing on areas for improvement and leveraging parochial strengths, with minimal support from the Corporate Head Office.

Common areas identified for improvement included communication by the leadership at all levels in the Group and the need to everyone to feel that they are respected by their Line Managers. Work needs to be done on improving the “sense of teamwork” and on demonstrating to employees that leaders are able to manage change effectively.

We were pleased to have been certified as a Top Employer in South Africa for the second consecutive year. The Top Employers Institute is the global authority on recognising excellence in people practices.

Employee experience: what really matters

The survey questions related to 13 key categories that are universal across the Group. Each category received a rating, per business, which was determined by the responses received.

PURPOSE	WORK	REWARD	PEOPLE	SUSTAINABLE ENGAGEMENT Measuring how engaged, enabled and energised people are: <ul style="list-style-type: none"> - Discretionary effort and advocacy - Productive team and lack of obstacles - Ability to sustain energy and fulfilment
INSPIRATION <ul style="list-style-type: none"> - Strong mission and strategy - Clear vision - Socially responsible 	DRIVE <ul style="list-style-type: none"> - Anticipate new products and services - Constantly strive to better serve customers - Drive change effectively 	GROWTH <ul style="list-style-type: none"> - Opportunity to grow and develop - Achieve full potential - Promote only the competent 	TRUST <ul style="list-style-type: none"> - Confidence in leadership decisions - Values-led leadership - People are treated with respect 	
INCLUSION <ul style="list-style-type: none"> - Diversity and inclusion programmes and resources - Equal opportunities 	VOICE <ul style="list-style-type: none"> - Encouraged to find solutions - Sufficient authority - Involved in decisions 	CAPABILITY <ul style="list-style-type: none"> - Sufficient training - Effective performance engagement - Fair performance evaluation 	COLLABORATION <ul style="list-style-type: none"> - Information sharing across functions - Different opinions discussed - Help each other 	
UNDERSTANDING <ul style="list-style-type: none"> - Clear responsibilities - Clear goals and objectives - Understand how work aligns to overall purpose 	ORGANISATION AND EFFECTIVENESS <ul style="list-style-type: none"> - Use technology to improve efficiency - Flexible working - Internal processes geared to customer 	FAIR PAY <ul style="list-style-type: none"> - Total compensation (pay and benefits) is fair - Pay matched to performance 	SUPPORT Supervisor: <ul style="list-style-type: none"> - Communication - Team building - Encouraging learning 	

ENTERPRISE AND SUPPLIER DEVELOPMENT

We recognise the importance of addressing socio-economic inequalities in the countries in which we have a presence. To have a direct impact, we make sustainable investments in Small, Medium, and Micro Enterprises (SMMEs) to help them establish sound operations and grow sustainably.

We also provide specialised consulting services to help our SMME partners with operational and scaling advice. Our continued existence as a business is highly dependent on our future supplier and customer bases. Recognising this, we cultivate long-term business-to-business relationships and nurture a diverse and inclusive culture that values entrepreneurs' ability to generate employment, expand the economy and make a genuine positive impact on society.

Key SDG goals



AECI develops entrepreneurs, creates employment and assists with community business ownership.

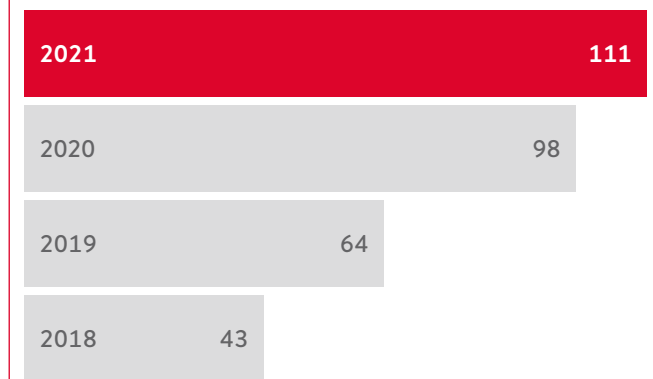
We strive to improve opportunities for all. One way in which we achieve this is by aiding local SMMEs in improving their own businesses through specialised consultations and sustainable investments. We recognise that our future suppliers and customers are essential to the sustainability of our business into the future.

Our Enterprise and Social Development (ESD) objectives are realised through contributions in three areas: Enterprise and Supplier Development, Preferential Procurement, and Localised Procurement and Content Supply.

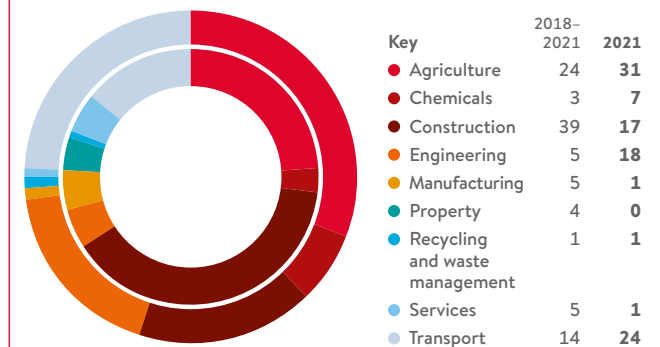
Enterprise and Supplier Development

Since research shows that SMMEs require finance, market access, marketing and new business development, our ESD programmes are powered by sector-specific enabling ecosystems through loans, equity and grant funding. Since 2018 we have invested over R104 million in diverse sectors and created 102 direct job opportunities.

Cumulative ESD spend (Rm)



ESD investment by industry (%)



Outer ring: Cumulative spend % (2018 – 2021)
Inner ring: Spend % (2021)

ENTERPRISE AND SUPPLIER DEVELOPMENT CONTINUED

Part of the R104 million investment has been through the R30 million AECI Good Chemistry Fund which we established in 2017. The Fund's purpose is to invest in AECI's supply chain sustainability and business development as well as to promote South Africa's qualifying Black-Owned entities and SMMEs.

There is strong governance through supervision of the Fund's management in accordance with the principles of the amended B-BBEE Codes of Good Practice and its mandate, while the Investment Committee ensures due processes and procedures are followed in adopting and approving investment transactions. To date 90% (R27 million) of the Fund has been invested in beneficiaries from five provinces: Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo and the North West. Over 40% (R11 million) of this investment went to Black Women-Owned businesses and over 59% (R16 million) to Black Male-Owned businesses. Our investment to Black Male-Owned businesses was R1 million greater than our 50% (R15 million) investment target for this gender, as we received a much larger number of applications from males. We plan to target more Black Women-Owned businesses for investment in 2022.

Initially we invested in transportation and farming enterprises. More recently, we have embarked on a special programme targeted at emerging farmers, as this is critical for food security and South Africa's national growth agenda. A three-year pilot project, in which AECI Plant Health played a pivotal role, served as a catalyst and framework for establishing the programme. The enabling ecosystem includes:

AECI Plant Health

Agricultural skills development and advisory services

AECI Good Chemistry Fund

Finance

IDF Capital

Fund managers

Khula! App

Market access

LEAP Business Development Support

Since the inception of the pilot project and programme, some of the lessons learnt have been:

- *The need for financial reporting*
- *Fortnightly monitoring of the expected harvest output*
- *Technical assistance and technology deployment.*

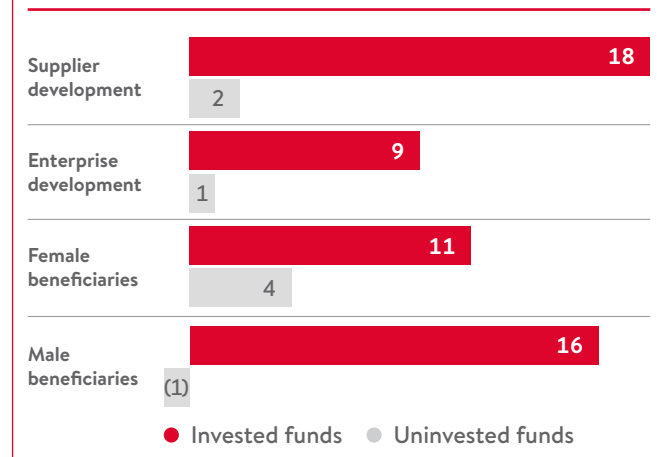
AECI and IDF Capital have also worked closely to:

- *Assess the commercial viability of projects*
- *Design transaction structures*
- *Evaluate funding instruments and their pricing*
- *Facilitate due diligence investigations*
- *Negotiate terms on behalf of farmers with funders and off-takers*
- *Prepare and review legal agreements.*

At the same time, we have partnered with LEAP which is an organisation with extensive experience and know-how in growing SMMEs, and the Khula! App in which we acquired an equity stake in 2020. (page 40).

Today, three emerging farmers are on the ESD programme, namely Farmers Hope, HempVest and Ithuba. Together, they employ 21 permanent employees and 110 seasonal workers across 3 042 hectares in Gauteng, Mpumalanga and North West.

AECI Good Chemistry Fund portfolio (Rm)



ENTERPRISE AND SUPPLIER DEVELOPMENT CONTINUED

Why we have invested 34% of our available funds in the construction sector

Research indicates that South Africa's construction sector has been in steady decline since 2017 and the hard lockdowns of 2020 did not make it easier as construction activities and building plans approvals plummeted by more than 37%. The sector is a strategic contributor to any country's growth due to its labour intensity and multiplier effect.

The local construction sector contributed about 3% to GDP last year (Stats SA Q4 2021). AECI acquired a business servicing this sector (AECI Much Asphalt) in 2018 to pursue opportunities presented by contributing to road infrastructure development. In addition to business, key stakeholders such as government and communities have critical roles to play as roads cut through the length and breadth of any country. In 2021 several local SMMEs in the sector were engaged through support and development as participants in the construction value chain. Beneficiaries received assistance in the form of working capital and technical support from AECI Much Asphalt.

Why we have invested 30% of our available funds in the agricultural sector

Agriculture is critically important to growing economies. The Africa Institute for Policy Analysis (AIPA) states that the agricultural sector is an engine for development and growth because of the downstream and upstream linkages between agriculture and the secondary and tertiary sectors. Agriculture supplies these sectors with raw materials and, in turn, provides a market for goods and services. AIPA estimates that a 1% contribution by agriculture to GDP produces a 2% increase in a country's growth, and an investment of R1 million in agriculture generates twice as many jobs as an equivalent investment in the manufacturing sector.

The South African government believes that the key to food security lies in investing in emerging farmers and has committed R1,2 billion in support for 150 000 smallholder and subsistence farmers.

Preferential Procurement

We have made significant progress in improving our B-BBEE scorecard rating since 2017 when we scored 6,86/27 Preferential Procurement points and the Company was assessed as a Level 8 B-BEE Contributor. We improved

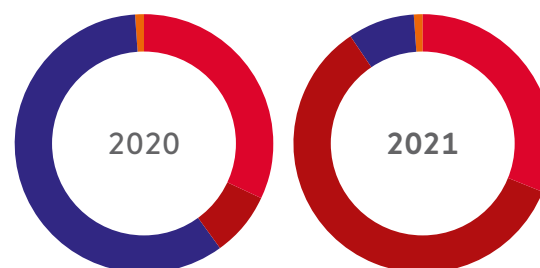
by establishing a number of ESD initiatives. One of them had the defined objective of enabling small companies to grow while diversifying our supply chain. In pursuit of this objective we created systems and procedures aimed at developing procurement channels from B-BBEE certified suppliers. We raised awareness among these stakeholders throughout our supply chain by holding roadshows and planning seminars.

In 2021, we achieved 20,73/27 Preferential Procurement points and a Level 3 B-BBEE Contributor rating. Supplier



Generic code (% achieved)

AECI's supplier B-BBEE Contributor status



Key	2020	2021
Non compliant	32	30
Level 1-4	8	57
Level 5-8	59	8
Not rated	1	1

AECI's Preferential Procurement performance

Element	Target	2020 score	2021 score	% y-o-y progress
All suppliers	5	4,48	4,9	9
Qualifying Small Enterprises	3	1,55	1,9	23
Exempted Micro Enterprises	4	2,01	2,20	9
>51% Black-Owned	11	5,25	6,63	26
>30% Black Women-Owned	4	4,00	4,00	0
Bonus	2	1,17	1,1	0
Total	29	18,46	20,73	12

ENTERPRISE AND SUPPLIER DEVELOPMENT CONTINUED

Development set-asides, higher evaluation weightings on B-BBEE criteria, a focus on Black-Owned and Black Women-Owned businesses, and enhanced Preferential Procurement reporting procedures helped us. A Preferential Procurement Policy and guideline document were also prepared and implemented. They have been critical in driving change and understanding the social effects of preferential procurement on AECI's sustainability.

Our focus on the development and support of SMMEs through the AECI Good Chemistry Fund and procurement spend helps create jobs, work towards Zero Hunger, contributes to local economic growth and sustains livelihoods.

Localised procurement

Another focus for us is businesses generally, not only SMMEs and Black-Owned businesses, because we know that sustainability and prosperity are only realised when our businesses thrive in all countries where we are represented. As a result, we have concentrated on ensuring that we procure from local sources. To date, we have spent an average of 20% of our total cumulative procurement spend on local suppliers.

Local content

Our localised focus includes forming partnerships, developing new initiatives and creating incentives in the communities in which we operate. Our primary aim has been to identify regions in South Africa where we can establish good relationships with local communities, and our future focus will be on identifying international opportunities where we can form similarly solid relationships.

The Mining Charter in South Africa was reviewed in 2018 by the Department of Minerals and Resources and detailed specific transformation targets in various areas for mining licence holders, and the requirement for them to acquire local goods and services with local content exceeding 60%. As a result of this Charter review, our first project was to adopt a programme and engage with the sole approved auditor, the South Africa Bureau of Standards (SABS), to verify the majority of the material goods and services we provide to our mining customers. Also, in 2021 organised business agreed, through the National Economic Development and Labour Council (Nedlac), to replace 20% of non-petroleum imports with locally manufactured goods. We were among the first mining-sector suppliers to receive verification from the SABS to the effect that at least 80% of the products we supply to customers are locally manufactured.

ESD spotlight



Sebastian Munilall started his business while still a teenager in 2017

A young business owner from Isipingo, KwaZulu-Natal, has shown that discipline and dedication can take you places if you apply what you have been taught. Sebastian Munilall, 23, is the owner of SW Collectors and was a top 25 finalist at the 2021 Standard Bank Business Awards in Durban.

Sebastian started his recycling company as a 19-year old in 2017 and has not looked back since. While he did not make the top 10 cut, Sebastian walked away with a trophy of recognition. He and his company are beneficiaries of AECI's ESD investment, which provided him with mentorship. He now has a buy-back centre in Isipingo where he buys recyclable waste from the community.

Sebastian thanked AECI, his parents, friends and his employees for helping put his company on the path to even greater things.

ENTERPRISE AND SUPPLIER DEVELOPMENT CONTINUED

Emerging farmers' support and development programme

In the same way that it takes a village to raise a child, it takes a village to raise a business. This is why we go beyond B-BBEE box-ticking, point-scoring and cheque-writing to provide a dynamic ecosystem committed to scaling and supporting SMMEs.

Meet the farmers



Founded by Tebogo Nyathela in 2016, the 20 hectare farm in North West specialises in crops (cabbages, garlic, peppers and spinach) and poultry (chickens and eggs). There are five permanent employees and seven seasonal workers. Three more seasonal workers are employed in peak seasons.

With a background in corporate affairs and marketing, Tebogo learnt farming literally from the ground up, completing a number of learning programmes at the Agricultural Research Council in Roodeplaat, Tshwane. She registered and started the business with her own money, taking over the Permission to Occupy agreement with the local authority before clearing the area of bush, fencing 5 hectares and installing a borehole, an irrigation system and electricity.

In April 2021, the AECI Good Chemistry Fund approved a loan facility of R880 000 including a technical assistance grant of R80 000 for drilling a second borehole. LEAP provides ongoing business support and mentorship.



Founded by Zunaid Mayet and Zaid Mohidin in 2019, the 22 hectare farm in Gauteng specialises in crops (broccoli, cucumbers, lettuce, peppers and tomatoes) and low/no THC cannabis. (THC is tetrahydrocannabinol, the main psychoactive compound in cannabis). There are 10 permanent employees and 50 seasonal workers. 30 more seasonal workers are employed at peak times.

Cannabis farming is fairly new to South Africa and legislation is changing. The expectation, though, is that the industry will grow to R107 billion by 2025. HempVest's vision is to become a leading, vertically integrated cannabis business, distributing a range of CBD products in South Africa, the rest of the continent and beyond. (CBD is cannabidiol, the second-most prevalent active ingredient in cannabis.)

Operating under a lease-to-buy agreement, HempVest set up the necessary greenhouse, nursery and security infrastructure as well as the required operating processes and procedures. In June 2021, the AECI Good Chemistry Fund approved a convertible loan facility of R2,65 million for a processing facility, farming equipment, land preparation and working capital. Also included is a technical assistance grant of R265 000 for Global G.A.P. certification, software licences and training (Global G.A.P. is the most widely accepted private sector food safety certification).



This cooperative comprises six members who have worked together for more than 10 years. The 3 000 hectare farm is in Mpumalanga. 20 seasonal workers are employed in peak seasons.

Ithuba rotates two crops (maize and soya beans) for sale to local grain silos. There is also livestock (cows and sheep) for sale to three feedlots.

The AECI Good Chemistry Fund recently approved a short-term facility of R600 000 for working capital. Further support could be forthcoming depending on the success of the season.

The requirements to qualify for AECI's emerging farmers support and development programme are:

- 51% (minimum) Black ownership
- 51% (minimum) Black employees
- Land access/tenure
- Agricultural experience
- Openness to mentorship and other support, such as soil testing
- Commitment to meeting performance targets

CORPORATE SOCIAL INVESTMENT

Key SDG goals



Addressing socio-economic challenges and enhancing well-being in the communities hosting our operations.

We actively identify communities in which we can make a significant impact. All of our investments are made in a way that addresses socio-economic challenges and improves the lives of the communities in which we operate.

The CSI imperative

Sustainable development is the idea that societies must live, develop and meet their needs without compromising the ability of future generations to do likewise. For us, sustainable development is a key business imperative and supports the principles of the B-BBEE Codes of Good Practice, ISO 26000: Guidance on social responsibility and the UN SDGs. Most of the countries in which we are present are faced with significant inequalities and high levels of poverty and unemployment.

We are committed to investing available resources effectively to address socio-economic challenges and enhance well-being in our host communities and those of our customers. Improving their quality of life is a commitment in line with our values of being **Engaged** and **Responsible**.

Our CSI focus areas are aligned with the SDGs that target poverty, hunger, health, education, inequality, the provision of clean water and sanitation, decent work and economic growth, innovation and climate action.

Our approach

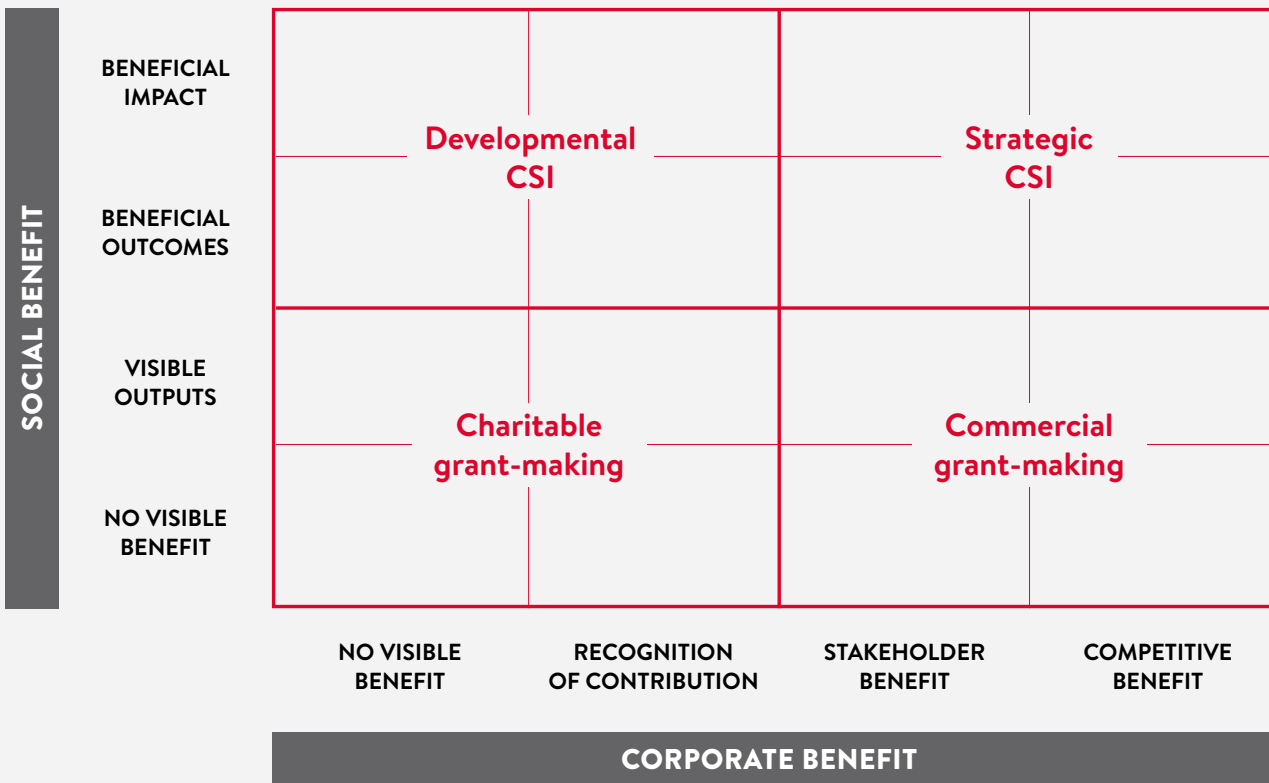
Our CSI efforts have evolved into a blend of legislative compliance (e.g. SED requirements in South Africa) and the strategic enablement of purpose-led social impact. To identify the communities where we can make the greatest difference, we encourage organisations to request assistance through our online portal and permit stakeholders to refer communities in need of support utilising news sources to inform our understanding of emergency events. We collaborate with an independent Monitoring and Evaluations consultancy partner to assess the impact of our projects.

The strategic allocation of CSI funding is determined largely determined by the location of the programme concerned and the community that is impacted, with those communities neighbouring our businesses considered strategic investments and those further afield considered commercial investments.

To effectively identify the benefiting entity of our investments, we position our CSI allocation according to a benefit matrix (page 65), with investments with the most strategic benefit receiving monetary and non-monetary assistance (e.g. mentorship and strategic input) and investments with the most charitable grant-making benefit receiving monetary assistance only.

CORPORATE SOCIAL INVESTMENT CONTINUED

POSITIONING OUR CSI ALLOCATION



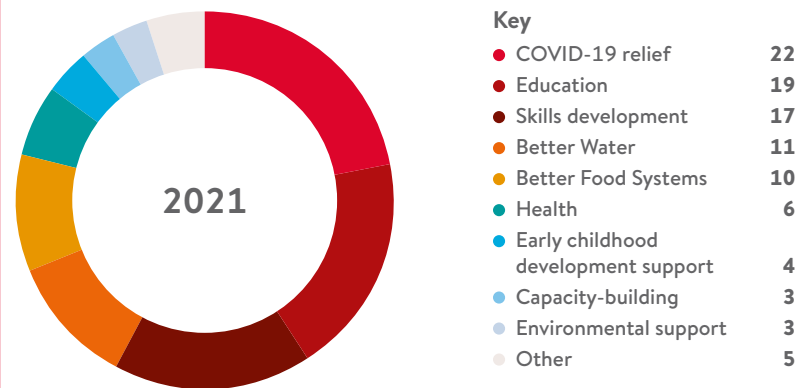
Overview of projects

Social responsibility is a key driver in our purpose of building a better world. In 2020, investments were dedicated to emergency relief in light of the COVID-19 pandemic. As a result, investments were made in family-sized food parcels, preventative protective gear and the provision of water and sanitisers. In this way we helped 1 022 376 beneficiaries. In 2021, our investments were still focused on COVID-19 relief, but a larger proportion were redirected to spending focused on education, skills development, water and food security. There was a strong focus on income generation to ensure sustainable development. This resulted in more sustainable investments in 381 141 beneficiaries.

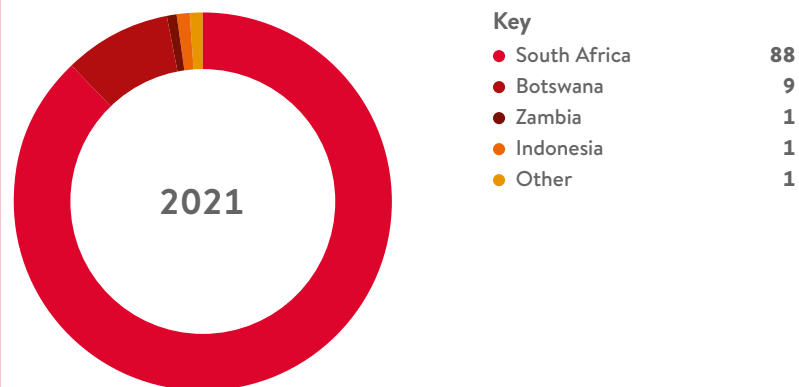
Our R34,8 million investment in 2021 was from the following sources: R9 million mandated spend per the B-BBEE Codes of Practice; an additional R4,1 million from our international entities; R14,6 million from the AECI Community Education and Development Trust and R7,1 million from the Tiso AEL Development Trust.

CORPORATE SOCIAL INVESTMENT CONTINUED

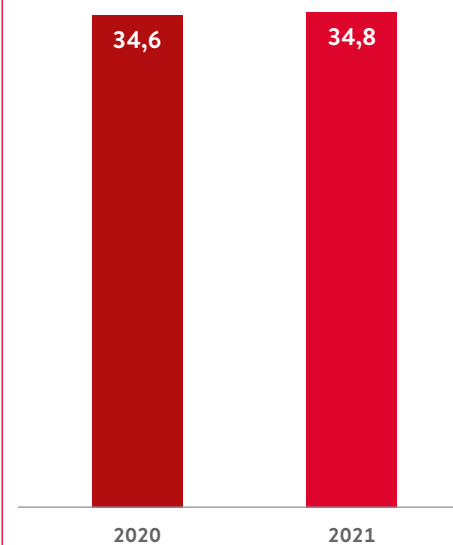
**Total CSI spend
by category (%)**



**Total CSI spend
by country (%)**



**Total
CSI spend (Rm)**



Gender Mainstreaming Awards

For three consecutive years AECI has been recognised for empowering women in communities, young girls and the economic empowerment of women through the Gender Mainstreaming Awards.

These Awards acknowledge and recognise individuals and organisations who are advancing the case for gender diversity and equality through best practices. AECI won two categories, Economic Empowerment of Women and Investing in Young Women, and was a finalist in two others, Women Empowerment in the Workplace and Empowering Women in the Community.

CORPORATE SOCIAL INVESTMENT CONTINUED



Socio-economic CSI spend (Rm)

2021	35
2020	35
2019	31
2018	30
2017	35

Employee volunteerism

Our goal is to integrate volunteerism further into the AECI culture. In 2021 six campaigns were undertaken. In total, 103 volunteerism days were recorded and 78 employees participated. In addition, 10 schools near our operations were adopted as beneficiaries of these volunteerism initiatives.

We are aiming to promote more employee volunteerism programmes so that our employees have the opportunity to make even greater and constructive contributions. As with many initiatives covered in this report, we aim to expand our volunteerism efforts to all countries where our employees are based.

Looking ahead

We are aiming to further integrate our CSI efforts across our global footprint and pursue projects that demonstrate a clear business case and return on investment.

With the effects of COVID-19 lessening, our efforts will shift even further towards making a more positive impact in local communities through enhanced focus on employment, entrepreneurship and community ownership of initiatives. We will continue to provide both monetary and non-monetary assistance until the affected local communities are better equipped to be self-sufficient and self-reliant.

CSI in the spotlight



Indonesia: vaccination drive

COVID-19 has had a negative impact on our operations and our people. To better protect our employees and ensure our operations could return to normal levels, we ran an effective vaccination drive that saw our people, their family members, partner company employees and their family members being fully vaccinated.

Our contribution
R240 000

The value we added
• 348 Indonesian citizens were vaccinated against the COVID-19 virus.



Botswana: Machana Primary School classroom

AECI Botswana contributed to the construction of a classroom block at Machana Satellite Primary School in collaboration with Debswana Jwaneng Mine, Jwaneng Cycling Club and other private organisations.

Our contribution
R110 000

The value we added
• 80 students have benefited from improved classroom infrastructure.

CORPORATE SOCIAL INVESTMENT CONTINUED



South Africa: World Food Day Food for the Mind and Food for the Soul

We made donations to beneficiaries in our host communities that were chosen by our local representatives.

Our contribution
R460 000

The value we added

- 10 schools have been provided with gardens, gardening kits and lesson plans
- 3 235 meals were provided to learners
- 6 000 educational books were donated



South Africa: World Clean Up Day

In collaboration with Triple-P, Clean Environment and Plastics SA, AECI joined the movement for a clean planet. The clean-up was undertaken in Tembisa's Vulumzi informal community and along KwaZulu-Natal's Umbogintwini River.

Our contribution
R134 000

The value we added

- 78 employees volunteered to make a meaningful impact on the environment
- Over 800 refuse bags were filled



South Africa: Azibuyele Emasisweni MyWater-Check Campaign

Triple-P is spearheading two initiatives that address South Africa's most valuable and currently vulnerable resources. The Azibuyele Emasisweni (returning to our origins) project is a food security initiative that focuses on increasing commercial agriculture prospects in Umbumbulu, KwaZulu-Natal. The second project, MyWater-Check Campaign, was launched on World Water Monitoring Day. The aim is to increase beneficiaries' capacity in managing their local water resources.

Our contribution
R2 800 000

The value we added

- 30 individuals benefited from training in commercial agriculture
- An agri-business was established (Isizwe Sethu Sinothile)
- 21 individuals received training and skills development in NPO Governance, Community River Health Conservation and Health and Safety skills
- MyWater-Check was established to assist the community in managing its local water resources.

CORPORATE SOCIAL INVESTMENT CONTINUED



South Africa: Siyabonga Africa

Following the civil unrest and looting that occurred in July 2021, AECI and Siyabonga Africa recognised the need to assist informal business owners whose livelihoods and those of their families are dependent on the daily income generated by their activities. Siyabonga Africa established three community food gardens, 30 home-based food gardens, and four community bakery projects with the assistance of AECI in Thembisa, Hammanskraal, Soweto and Eldorado Park (all in Gauteng).

Our contribution

R994 000

The value we added

- A 12-month programme has been established to assist local businesses with recovery measures
- Three communities have been provided with food gardens
- 30 households now have home-based food gardens
- Training in technical skills and basic business principles was provided, as were the necessary tools and equipment
- Four bakery projects were established
- Employment opportunities were generated



South Africa: iPledge

Food insecurity is a reality in South Africa and COVID-19 brought the issue to the forefront for the country's most vulnerable citizens. To help address this, AECI developed iPledge, an internal crowdfunding campaign, soon after the onset of the pandemic. iPledge has raised over R5,2 million since inception. To date, the funds have enabled AECI to provide 14 800 food hampers to families in 35 towns across the nation in collaboration with NGOs.

Our contribution

R2 400 000

The value we added

- Another 6 857 families were provided with food in 2021

SUSTAINABILITY-RELATED PERFORMANCE DATA

		Target (2025)	Baseline	2021	2020	2019	2018	2017
ENVIRONMENTAL PERFORMANCE DATA								
GHG emissions								
Scope 1	tonnes CO ₂ e	322 025	402 531	266 291	334 225	366 980	308 216	351 317
Scope 2	tonnes CO ₂ e	252 163	273 548	235 043	241 150	341 997	254 234	216 971
Energy								
Electricity	MWh	224 047	249 609	223 419	228 065	260 763	258 617	211 635
Energy consumption [#]	GJ	—	—	2 822 639	2 930 501	3 269 369	3 121 388	2 320 449
Water								
Potable water consumption	m ³	1 884 566	2 512 755	1 755 929	2 034 467	2 289 139	2 327 113	2 025 022
Effluent discharged to sea and sewer	m ³	686 985	858 731	722 573	619 357	1 182 473	1 066 593	1 251 186
Waste								
Recycled waste [#]	tonnes	—	—	3 683	3 288	6 280	7 346	9 644
Hazardous waste [#]	tonnes	—	—	14 035	15 844	13 134	10 492	6 592
Environmental incidents								
Environmental incidents		22	29	14	29	32	35	35
SOCIAL PERFORMANCE DATA								
SHEQ (Zero Milestones)*								
Fatalities	Number	0		0	0	0	1	—
Life-altering injuries	Number	0		0	1	2	3	—
SHE legal directives	Number	0		0	0	0	0	—
Major or Serious environmental incidents	Number	0		0	0	0	0	—
Major process safety incidents	Number	0		0	0	0	0	—
Major product transportation incidents	Number	0		0	0	2	2	—
Repeat incidents (high severity)	Number	0		0	0	0	2	—

* The SHEQ (Zero Milestones) were established in 2018

[#] Baseline values and Targets to be established in 2022

INTRODUCTION

OUR GOALS

ENTERPRISE AND
SUPPLIER DEVELOPMENT

CORPORATE
SOCIAL INVESTMENT

**SUSTAINABILITY-RELATED
PERFORMANCE DATA**

GLOSSARY OF TERMS
AND KPI DEFINITIONS

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SUSTAINABILITY-RELATED PERFORMANCE DATA CONTINUED

		Target (2025)	Baseline	2021	2020	2019	2018	2017
Safety								
Total Recordable Incident Rate		<0,25		0,23	0,42	0,38	0,58	0,39
Process safety total incident rate*								
Non-reportable incidents	Number			77	90	86	103	–
Reportable incidents	Number			9	22	17	21	–
PSTIR				1	1	1	1	–
Socio-economic development data								
CSI spend	Rm			36	35	31	30	35
Number of employees who have attended Leadership Development Programmes	Number			142	–	112	130	143
Bursaries (External and Employee Dependants)	Number			37	42	52	60	69
Learnerships, internships, apprenticeships and graduates	Number			188	256	306	223	219

* The process safety incident rate was only established in 2018.

GLOSSARY OF TERMS AND KPI DEFINITIONS

Abbreviation	Description
AECI. GO	AECI's Growth Office
AIPA	Africa Institute for Policy Analysis
B-BBEE	Broad-Based Black Economic Empowerment
BO	Black-Owned
BTech	Bachelor of Technology
BWO	Black Women-Owned
cbd	Cannabidiol
CDP	Caron Disclosure Project
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHC	Chlorinated hydrocarbon
CO₂e	Carbon Dioxide Equivalent
COP26	26th meeting of the Conference of the Parties
CSI	Corporate Social Investment
CSIR	Council for Scientific and Industrial Research
CSRD	Corporate Sustainability Reporting Directive
DGPS	Differential Global Positioning System
DRC	Democratic Republic of the Congo
EB	Environmental Burden
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation
EBR	Extended bitumen rubber
EFRAG	European Financial Reporting Advisory Group
EIA	Environmental Impact Assessment
EME	Exempted Micro Enterprises
ESD	Enterprise and Social Development
ESG	Environmental, Social and Governance
ETR	Effective tax rate
EVDS	Emulsion Explosives Vertical Drop
G.A.P	Good Agricultural Practices

Abbreviation	Description
GDP	Gross domestic product
GHG	Greenhouse Gas
GJ	Gigajoule
GRI	Global Reporting Initiative
GTR	Ground Tyre Rubber
HEPS	Headline Earnings per Share
HIV & AIDS	Human immunodeficiency virus and acquired immunodeficiency syndrome
HVAC	Heating, ventilation, and air conditioning
IAS	International Accounting Standard
IFRS	International Financial Reporting Standards
IPPC	Intergovernmental Panel on Climate Change
IR	Integrated Report
ISAE	International Standard on Assurance Engagements
ISO	International Organization for Standardisation
ISSB	International Sustainability Standards Board
JSE	Johannesburg Stock Exchange
KPIs	Key Performance Indicator
KWh	Kilowatt hour
MES	Minimum Emission Standards
MMU	Mobile manufacturing units
MNE	Multinational enterprise
MWh	Megawatt hour
NASA	National Aeronautics and Space Administration
Nedlac	National Economic Development and Labour Council
NGO	Non-Governmental Organisation
PET	Polyethylene Terephthalate
PETN	Pentaerythritol tetranitrate
PSE	Processed sewage effluent
PSM	Process Safety Management

Abbreviation	Description
PSTIR	Process safety total incident rate
QSE	Qualifying Small Enterprises
R&D	Research and Development
RO	Reverse Osmosis
SABS	South Africa Bureau of Standards
SDG	Sustainable Development Goal
SEC	Social and Ethics Committee
SED	Socio-economic development
SHE	Safety, Health and Environment
SHEQ	Safety, Health, Environment and Quality
SLES	Sodium lauryl ether sulphate
SME	Small and medium-sized enterprises
SMME	Small and medium and micro enterprises
SMS	Short Message Service
TCFD	Task Force on Climate-related Financial Disclosures
THC	Tetrahydrocannabinol
TNT	Trinitrotoluene
TRIR	Total Recordable Incident Rate
TRM	Tax Risk Management
UIC	Umbogintwini Industrial Complex
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
VR	Virtual reality
WWWC	Wise Wayz Water Care
ZLD	Zero Liquid Discharge

GLOSSARY OF TERMS AND KPI DEFINITIONS CONTINUED

The objective of this document is to provide the definitions, as applied by AECI, for all ESG indicators reflected in the relevant reports, including Integrated Report and Sustainability Report published after 2019.

ENVIRONMENT	DEFINITION	UNIT
1. Decrease potable water consumption	Decrease fresh (drinkable) water withdrawn/extracted or purchased from external sources and used for industrial and domestic purposes.	m ³
2. Decrease discharge to sea or sewer	Decrease liquid effluents, treated or untreated, discharged from industrial sites into 3rd party systems such as sewers or oceans.	m ³
3. Decrease Scope 1 emissions	Decrease Green House Gases (GHGs) emitted directly from sources that are owned or controlled by AECI.	tCO ₂ e
4. Decrease Scope 2 emissions	Decrease indirect GHG emissions that result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by AECI.	tCO ₂ e
5. Decrease Scope 3 emissions	Decrease emissions that result from activities or assets not owned or controlled by AECI, but that AECI utilises through its value chain.	tCO ₂ e
6. Increase electricity from renewables	Increase electricity consumed by AECI from renewable energy sources such as solar or wind.	MWh
7. Increase recycled waste	Increase waste recovered from AECI and diverted from disposal for alternative use.	Metric ton
8. Decrease hazardous waste	Decrease hazardous materials, produced by AECI and directed to an authorised disposal facility.	Metric ton
9. Increase recycled materials	Increase materials re-purposed for use within AECI operations and not directed to disposal.	To be defined
10. Decrease moderate environmental incidents	Decrease unplanned events or occurrences that have an environmental impact, on or off-site. Moderate incidents require limited to no remediation but have the potential to cause long term impact if not addressed. External environmental complaints confirmed to be related to AECI operations, including odours, emissions or particulate matter.	Number of incidents

GLOSSARY OF TERMS AND KPI DEFINITIONS CONTINUED

SOCIAL	DEFINITION	UNIT
1. Decrease Total Recordable Incident Rate (TRIR)	Decrease work-related injuries, sustained by employees and any contractor or non-employee working under AECI supervision, that results in any of the following: death, days away from work, restricted duties, medical treatment beyond first aid. Work-related illnesses are included for employees and are recorded according to in-country occupational health standards and included on once confirmed by a licensed professional and related to exposures during work related activities at AECI.	Incidents per 200 00 hours worked over a rolling 12-month period
2. Gender equality		
2.1. Gender equality: Board and top management	Increase female representation on the AECI Board and Top Management.	%
2.2. Gender equality: Senior, middle and junior management levels	Increase female representation in the Senior Management, Middle Management and Junior Management levels.	%
3. Leadership development	Employees who attended the AECI Management Development Programmes.	Number
4. Learnerships/internships/bursaries	Employees who were awarded learnerships, internships, bursaries or study assistance.	Number
5. Employee volunteerism	Employees who took part in a community related CSI projects.	Number
6. Corporate social responsibility		
6.1. South Africa	CSR project spend in South Africa.	Rm (value)
6.2. International	CSR project spend outside of South Africa.	Rm (value)
7. ESD local community spend	Percentage of expenditure on local goods and services as a percentage of total expenditure on goods and services.	%
8. Enterprise and supplier development	Number of qualifying Small, Medium, and Micro Enterprises supported with financial and or operational/business assistance.	Number
9. Preferential procurement	Points awarded for procurement against qualifying suppliers in South Africa, per B-BBEE Level score including: Qualifying Small Enterprises, Exempted Micro Enterprises, Black-Owned, >30% Black Women-Owned and discretionary bonus points.	B-BBEE points achieved

GLOSSARY OF TERMS AND KPI DEFINITIONS CONTINUED

GOVERNANCE	DEFINITION	UNIT
1. Responsible leadership		
1.1. Leadership accountability	AECI's Board and Executive Committee are accountable for sustainability.	Description
1.2. Stakeholder engagement	AECI makes sustainable business decisions which take into account the interest of all stakeholders.	Description
1.3. Remuneration practices	AECI's performance criteria in its remuneration practices for governing body members and senior executives, include economic, environmental and social objectives.	Description
2. Ethical business	AECI has appropriate business policies, procedures and practices in place. All AECI employees attend ethics training and awareness sessions. Where required declarations on "Conflict of Interest" are made. AECI has an anonymous tip-off hotline in place. AECI has a legal and compliance function to provide advice on ethical matters.	Description
3. External assurance	AECI receives independent external assurance on applicable standards in place for sustainability reporting and environmental legal compliance.	Description
4. Regulatory reporting	AECI submits regulatory reports which relate to for example; AECI's water use licence, air emissions licence, carbon tax, GHG reporting and environmental incidents.	Description

ABOUT THIS REPORT

Our 2021 reporting suite includes this Sustainability Report, our Integrated Report, our Annual Financial Statements, our King IV™ Application Statement, and our Remuneration and Tax Transparency Reports. These documents are available for download from our website.

Reporting approach and scope

Our 2021 Sustainability Report is concerned with the AECI Group with a presence in 23 countries on six continents, subsidiaries and other entities over which it has effective control. It is also concerned with investments, partnerships and other stakeholder relationships which the Board believes have the potential to materially affect our ability to create and preserve value and reduce instances in which value is eroded.

This report relates to the period 1 January to 31 December 2021. It contains certain forward-looking statements concerning our outlook and prospects. However, readers are cautioned to not act upon such forward-looking statements and projections, particularly as these may have a bearing on investment decisions.

There has been an increase in the scope of our sustainability reporting from the prior year as we started to align it with the draft JSE Sustainability and Climate Change Disclosure Guidance (issued in December 2021) and further align with other leading international sustainability reporting frameworks.

This report reflects the considerable advances our leadership has made in embedding sustainability into strategy formulation and execution.

The structure of our report is also aligned to material sustainability topics and themes, identified through our materiality assessment. For each theme we have provided an overview of our approach and performance in the reporting period, with the aim of providing a clear view of how we are addressing our most material matters.

Data contained in this report is for all businesses owned by AECI.

Figures in this document are subject to rounding and financial information is presented in South African rand, the Company's functional currency.

Reporting frameworks

- *The international chemical industry's Responsible Care® programme*
- *The Carbon Disclosure Project Climate Change and Water Programmes*
- *The Greenhouse Gas Protocol*
- *The 10 principles set out in the United Nations Global Compact*
- *The <IR> Framework of the International Integrated Reporting Council*
- *Core Global Reporting Initiative Reporting Standards*
- *Selected United Nations Sustainable Development Goals.*

A GRI Content Index is available on our website: www.aeciworld.com

Verification process

We employ internal and external verification processes to assure the completeness and accuracy of information.

Our internal processes cover data review, verification and validation to accept, reject or qualify data in an objective and consistent manner. The data in this report is collected and checked against internal standards in the respective functional areas including Group Reporting, Safety, Health and Environment (SHEQ), Human Capital, Operations and Governance.

Where applicable and subject to the relevant management system, the requirements for calibration and maintenance of equipment used for the collection of data reflected in this report are documented and implemented.

We obtained independent limited assurance over an agreed selection of performance disclosures in our 2021 Sustainability report. The assurance statement is on the following page.

ASSURANCE STATEMENT

Independent limited assurance report to the Directors of AECI Limited

We have performed our limited assurance engagement in respect of the key performance indicators for the year ended 31 December 2021 presented within the Sustainability Report.

The subject matter comprises the key performance indicators disclosed in accordance with management's basis of preparation, as prepared by the responsible party, during the year ended 31 December 2021.

The terms of management's basis of preparation comprise the criteria by which AECI Limited's compliance is to be evaluated for purposes of our limited assurance engagement.

The key performance indicators are as follows:

No. Sustainability indicator description and metric

Environmental indicators

1 Number of environmental incidents (total major and serious)

2 Potable water consumption (m³)

3 Hazardous waste generated (t)

4 Carbon footprint – Scope 1, Scope 2 and total of Scopes 1 and 2

5 Total electricity usage (MWh)

6 Total energy usage (GJ)

7 Recycled waste (t)

8 Effluent generated (m³)

Health and safety indicators

9 Total recordable incident rate (TRIR)

10 Work-related fatalities

11 Occupational illness rate

12 Product transportation incidents

13 Process safety management performance

Employment equity indicators (expressed as the total number of people for each category)

14 Black males, black females, white males and white females per category of top management, senior management, middle management and professionals, junior management and skilled, semi-skilled and discretionary decision-making and unskilled and defined decision-making

Directors' responsibility

The directors being the responsible party, and where appropriate, those charged with governance are responsible for the key performance indicator information, in accordance with management's basis of preparation.

The responsible party is responsible for:

- Ensuring that the key performance indicator information is properly prepared and presented in accordance with management's basis of preparation;
- Confirming the measurement or evaluation of the underlying key performance indicators against the applicable criteria, including that all relevant matters are reflected in the key performance indicator information; and
- Designing, establishing and maintaining internal controls to ensure that the key performance indicator information is properly prepared and presented in accordance with management's basis of preparation.

ASSURANCE STATEMENT CONTINUED

Assurance Practitioner's responsibility

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historic Financial Information. This standard requires us to comply with ethical requirements and to plan and perform our limited assurance engagement with the aim of obtaining limited assurance regarding the key performance indicators of the engagement.

We shall not be responsible for reporting on any key performance indicator events and transactions beyond the period covered by our limited assurance engagement.

Our independence and quality control

We have complied with the independence and other ethical requirements of the Independent Regulatory Board for Auditors' Code of Professional Conduct for Registered Auditors (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards).

Deloitte applies the International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Summary of work performed

We have performed our procedures on the key performance indicator transactions of AECI Limited, as prepared by management in accordance with management's basis of preparation for the year ended 31 December 2021.

Our evaluation included performing such procedures as we considered necessary which included:

- *Interviewing management and senior executives to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process for the selected key performance indicators;*
- *Assessing the systems and processes to generate, collate, aggregate, validate and monitor the source data used to prepare the selected key performance indicators for disclosure in the reports;*
- *Inspecting supporting documentation and performing analytical review procedures; and*
- *Evaluating whether the selected key performance indicator disclosures are consistent with our overall knowledge and experience of sustainability processes.*

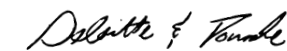
Our assurance engagement does not constitute an audit or review of any of the underlying information conducted in accordance with International Standards on Auditing or International Standards on Review Engagements and accordingly, we do not express an audit opinion or review conclusion.

We believe that our evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

In a limited assurance engagement, the procedures performed vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the key performance indicator information has been properly prepared and presented, in all material respects, in accordance with management's basis of preparation.

Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that the key performance indicators are not prepared, in all material respects, in accordance with management's basis of preparation.



Deloitte & Touche
Registered Auditors

Per Mark Victor
Partner

26 May 2022

5 Magwa Crescent
Waterfall City, Waterfall

Private Bag X6, Gallo Manor, 2052
South Africa

CORPORATE INFORMATION

Physical address

First Floor AECI Place
24 The Woodlands
Woodlands Drive
Woodmead
Sandton 2191
South Africa

Postal address

Private Bag X21
Gallo Manor
2052

Contact details

Telephone: +27 (0)11 806 8700
www.aeciworld.com

Neil Franklin

AECI Group SHE Manager
Email: neil.franklin@aeciworld.com



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