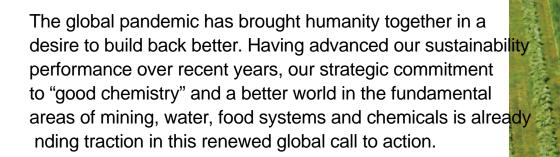




good chemistry





This Report introduces a revised Sustainability Framework for the Group and provides a brief update on performance in relation to material environmental, social and governance (ESG) is lt will in future be part of our Annual Integrated Report, available on our website at <a href="https://investor.aeciworld.com/integrated-reports-and-afs">https://investor.aeciworld.com/integrated-reports-and-afs</a>

The scope of this Report includes all operations over which we have direct management control and for which we set and implement policies and standards. Reported information pertains predominantly to the nancial reporting period 1 January 2020 to 31 December 2020. However in some instances, historical data is re ected from 2016 onwards.

The Board reviewed the content of this Report and con rms that it believes it addresses our material issues as it relates to sustainability and presents a balanced re ection of the sustainability performance and prospects of the Group.

# **CONTENTS**



In 2020 we reviewed our strategy and vision for the next five years in the context of global megatrends that include a shift towards a purpose-led world, where authenticity in creating harmony between actions is paramount.

### Dear Stakeholders

In the last century, the world has seen signi cant evolution in the approach to all issues relating to sustainability. Often changes have been driven by tragedies and, in many cases, these events have occurred in the very industry where we exist and supply. Sadly, AECI too has Commerce's Business Charter for experienced tragic events but we Sustainable Development. are also proud to have played an Environmental matters were becoming far where authenticity in creating harmony and explosives manufacturing.

the environment and consideration for these do. This philosophy and associated community, recognising that its licence tocommitments are captured in our new operate also comes through the approvaburpose of "One AECI, for a better of stakeholders in the countries in which world". The sustainability e orts of every it operates, and that economic progress of dividual, team and business across the present must never be at the expense he Group will be integral to delivering of future generations.

Although this Report will be tabled as AECI's rst Sustainability Report, our related journey started decades ago. One milestone on the journey was in 1991 when our then MD, Mike Sander, signed the International Chamber of

more prominent at the time and AECI chose etween actions is paramount. This active role in shaping our world, as accelerate the thrust needed in this areastrategy will be commented on in some it relates to responsible chemical Accordingly, we convened a major internal detail in our upcoming Integrated Report. conference on environmental managemen. We recognised the need to enhance our and took the initiative in establishing the Chemical Industry Environmental Forum.

AECI, then known as African Explosives In 1994 Mr Sander committed AECI to and Industries was registered as a company ponsible CareAt that same time, on 21 March 1924, with headquarters in AECI was a participant in the move Johannesburg where we are still based to establish the Chemical and Allied today. At the time, our operations were Industries' Association (CAIA), in Modderfontein (established in 1896), a solid and e ective organisation which is into sharper focus by the COVID-19 Somerset West (1903) and Umbogintwirstill the custodian of Responsible Care (1908), all in South Africa. Today, our operations span 22 countries and while received several awards from CAIA for the manufacture of explosives and the provision of services to the mining industry remains a key component of our activities, we have diversi ed signi cantly. Our Group now includes (SDGs). businesses that focus on a spectrum of sectors such as water treatment. agriculture, food and beverage, road

AECI has always been committed to conducting its operations with due care found integrated approach in everything

infrastructure and general industry.

in South Africa today. In 2020, AECI its performance and commitment to Responsible Carand initiatives that

As a Group we have much to o er. To ensure we're able to deliver growth and maximise resources to the bene t of all stakeholders in a sustainable way, we have adopted a more collaborative

this promise. Our revised Sustainability Framework was developed in this context and it is my pleasure to share it with you, together with a brief re ection on how we

are actioning it across the Group.

In 2020 we reviewed our strategy and vision for the next ve years in the context of global megatrends that include a shift towards a purpose-led world, focus on growth by improving customercentricity while helping solve pressing global challenges like food security and water scarcity. The revised strategy places "Zero Harm and Sustainability" at its core.

The urgency needed in addressing the challenges listed above was brought pandemic, which has reversed progress on many of the global SDGs. Issues of poverty and inequality have taken centre stage as rich and poor struggle with new realities and loss. Health and wellness support, among other things, the United have become a priority and it has become Nations Sustainable Development Goalsevident that the challenges we face cannot be dealt with in isolation.

> Innovation and collaboration driven by "good chemistry", leveraging crossbusiness diversity and in partnership with our customers and suppliers, delivers our most signi cant impact on society and the SDGs. In safer and more circular mining,

**AECI's sustainable innovation areas** are supported by responsible practices in our own operations, targeting our environmental footprint and a range of commitments under the umbrella of Zero Harm and Sustainability.

the provision of clean water and through and thereafter for medical facilities, clinic by de nition, therefore, the process is an healthy, a ordable food and greener chemistry, our product and service o ering is challenging the assumptions of the future.

AECI's sustainable innovation areas are supported by responsible practices in our own operations, targeting our environmental footprint and a range of commitments under the umbrella of Zero this agility again and again. Harm and Sustainability. As we achieve Our mining and industrial partners face to achieve so much more. internal milestones, we are committed signi cant challenges from the global to extending the impact through our in uence on the broader value chain. Underpinning the full sustainability e ort are passionate peopleho seek expression in a culture of openness, learning and accountability.

AECI's organisational culture is based on our BIGGER values of beingold, are the foundation of our sustainability e ort and central to delivering our goals. Everyone, everywhere, deserves teams to deliver a #ABetterWorld. to be safe and healthy, and to live in a world that is free of discrimination and empowering of positive pursuits.

Progress in 2020 was swifter in some areas than others. Each of our interlocking stakeholders, to join us on our journey and areas than others. Each of our interlocking areas than others. strategic areas - innovation, responsible operations and passionate people - was We have nalised a set of targets for tested over this di cult period. In some with the COVID-19 pandemic delayed trials of our #ABetterWorld initiatives. In others, the interruption presented new channels and opportunities. For of our production units to manufacture hand sanitiser and disinfectant for our employees, contractors and their families individual countries in which we operate.

and schools. Assumptions about "how we do things" dropped away as our teams thank all our stakeholders who have re-imagined their business, responding materials, substituting for unavailable materials and direct sales to smaller demanded by the moment. Without a

move towards a circular economy. Large-scale agriculture is under constant pressure for productivity, which can be at MARK DYTOR odds with longer-term natural cycles. We CHIEF EXECUTIVE know that a sustainable future requires u20 MARCH 2021 to address trade-o s such as these without further destabilising our economies and societies. Without underplaying the on our BIGGER/alues of beingold, economic realities, our drive remains Innovative, of Going Green, and of being positive and aligned with our business risk Engaged and Responsible. These values appetite. It is my task as Chief Executive, are the foundation of our sustainability. more than ever, to create the space for our

> In this rst dedicated Sustainability Report, we present our Sustainability Framework. We also share how our e orts are progressing and we encourage you, our

many of our respective goals and others cases, lockdown restrictions associated will be set as we progress. In the coming months we will go about formulating the various projects to deliver on these improvement areas. Our rst milestone is 2025 but we are already looking ahead example, we quickly converted a numberto 2030. AECI's sustainability goals will continue to be informed by those of the United Nations and the needs of the

iterative one.

of the past to evolve the business models onew needs: near-shoring strategic raw our management teams, employees, suppliers, customers, shareholders and the communities in which we operate. entrepreneurs who exempli ed the agility AECI will continue to prosper and make a meaningful contribution but we know we doubt, the future will require us to draw on cannot do so alone. I am inspired by the challenge of continuing to work with you





# Task Team to oversee strategic direction and response

In March 2020 a Task Team was formed to and visitors. oversee the response to the pandemic. The team comprised the full AECI Executive Committee, supplemented by specialists in various elds including Medical, Human Capital, Stakeholder Relations, IT, SHEQ 2020 when frequency was reduced as the impact of the pandemic declined.

The strategic intent of the team was:

- > To prevent or reduce, as far as possible, the infection of our employees, their families, co-workers and others who may come into contact with them.
- To help reduce the risk of COVID-19 becoming a community, national or international disaster.
- > To ensure prompt and adequate detection and treatment.
- To reduce the level of absenteeism, due to direct or indirect e ects of COVID-19.
- > To minimise the impact on operations and ensure AECI can honour contractual obligations, and that it
- To reduce the spread of COVID-19 and ultimately reduce the strain on international healthcare systems.
- To ultimately restore society back to "business as usual", and
- > To increase our readiness for future outbreaks.

### **VULNERABLE STAFF**

A strong emphasis was placed on the protection of potentially vulnerable sta due to co-morbidities. All employees were given the option to disclose their conditions voluntarily to a Company Occupational Medicine Practitioner (doctor) who would assess each individual and decide on the best way accommodate the individuals either at work or with an alternative arrangement.

All sta, service providers and their families were provided with critical information, sanitiser and masks.

RESPONSE PLANS AND PROTOCOLS arrangements were introduced for leave

to the public via our website and social and to the chemical industry via CAIA. It fortunate to have most of its operations

#### **HUMAN CAPITAL**

## Communication

of our response.

Our management response needed to and Risk. The team met daily until September as swift as the pandemic itself. With Employee tracking the help of rapidly deployed IT solutions Once the communication channels had and the establishment of dedicated communication channels, we instituted daily updates from the Human Capital was fed directly to the Task Team, based of a hospitalisation, detailed information in Johannesburg, on a daily basis.

> We set up a dedicated mailbox to which any person could direct a question about the pandemic or our response. These would typically be answered within one day of receipt. Direct messages were sent from An integral part of the response plan was the o ces of the CE and Group Human a documented BCP for each business to Capital Executive to all sta on a regular basis. The CE has sent a weekly SMS to all infections in any of our operations, or a oemployees in South Africa, without fail, sinceemporary supply chain interruption, or the beginning of the pandemic. Rapid and

One of the goals set by the Task Team warmediately. It is pleasing to report that to avoid a scenario where salaries could nutere were no outbreaks of infection in the be paid or sta had to be retrenched as a workplace and we did not interrupt supply direct consequence of COVID-19. Specialto any of our customers.

The AECI response plan was made availated to lock-down, working from home, forced quarantine, self-isolation or in the media pages and provided to the authoritiesent of an actual positive case. AECI was was also shared with customers, suppliers deemed providers of essential products and services and this required the re-organising of shift patterns, among other things. All employees who continued to work in our operations while others were in lockdown were given a once-o bonus.

been established, the Task Team was able to monitor the work arrangements of all sta on any given day to ensure that protocols Business Partners, across the globe. This ere being adhered to. All con rmed cases spanned 22 countries and the information infection were discussed and in the event would ow on the condition of the employee via the Company Occupational Medical Practitioner.

# Business Continuity Planning (BCP)

deal with a scenario of single or multiple permanent closure of a customer. Each accurate communication was a key element business has a detailed plan to minimise the risk of transmission within shifts of teams. If a positive case was reported, a continues to secure its revenue streams. Bene ts, leave and remuneration mattered econtamination programme commenced



Katlehong Primary School was among the beneficiaries who received handwashing stations and food parcels.

# **OUR** SUSTAINABILITY **FRAMEWORK**

our teams are seeking to deliver on ve priority SDGs:

SDG 2 Zero hunger

SDG 6 Clean water and sanitation

SDG 8 Decent work and economic growth

SDG 12 Responsible production and consumption

SDG 13 Climate action

Through innovation and collaboration, The AECI Group Sustainability Framework centres our e ort in pursuit of a better world. It presents 10 goals across the tiers of One AECI, for a better world, Responsible Operations and Passionate People.



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

RESPONSIBLE OPERATION focuses on aligning every operational decision and action with a #ABetterWorld in pursuit of Zero Harm to people and the environment. Supported by the Group SHEQ function and SHEQ personnel across our 12 businesses in 22 countries, our commitments inform the e orts of all our 6 800 employees.

PASSIONATE PEOPLEocuses 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, this goal area recognises the value, rights and responsibilities of every employee and all our stakeholders.

# **SUSTAINABILITY FRAMEWORK**





We will drive innovation and growth in support of the SDGs





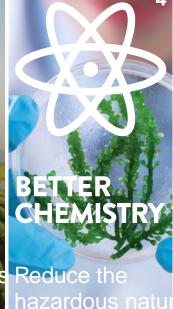
# BETTER WATER

Provide access to clean water and improve conservation



# BETTER FOOD SYSTEMS

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



land e ects

of chemicals



**RESPONSIBLE** OPERATIONS

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

REDUCE Carbon Intensity of our operations



**REDUCE** our Water footprint



ZERØ HARM



 $^{\circ}$ 

PASSIONATE PEOPLE

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

our values in a purpose-led organisation



NURTURE our passionate peop and collaborate with our stakeholders



THRIVE
in a high-performance
and inclusive
culture





Globally, miners are facing a challenging period. Volatility in commodity prices necessitates stringent cost control and safety concerns have made changes in the proximity of explosives and blasting technology, such as automation, a necessity. The mining sector faces a complex transition to a low carbon economy, with growing regulatory and stakeholder pressure. AECI Mining's world-class capabilities

**KEY SDG GOALS** 

and other stakeholders.







# Making mining safer

REMOTE CHARGING

Although mining provides resources needed for our economy, it remains a high vibration, air blast (and noise) and y rock. risk environment. Where people are in activities, inadequate products and expertise can be extremely dangerous. In open cast mining, miners use emulsion NEW EXPLOSIVE TECHNOLOGIES

explosives to charge holes to be blasted, Our new emulsion technology for using a Mobile Manufacturing Unit (MMU) and manually deploy the initiating system. In cases where the threshold, commonly known as a hot

in partnership with our customersof personnel by allowing remote and/or autonomous charging and deployment of initiating systems on benches where there is increased risk. The system will be integrated into our BLASTiTABLET system to record information and providethrough the conversion to emulsion feedback to mine management. The use explosive technologies. of this technology is in testing phase at In a further partnership, the deployment pilot sites in Burkina Faso and eMalahlerof PowergeX2 formulation has helped in South Africa. Testing was delayed signi cantly by COVID-19 restrictions on safety risks when blasting in extreme economic activity and the movement of (hot and reactive) conditions. people but it will resume soon.

# STEMMING TRUCKS

A further development to improve safety is moving into implementation phase with ais part of AECI Mining Explosives' key customer. Stemming is a crucial elemeintegrated o ering. Inherently historically manual and labour-intensive process, aggregate is placed on top of gases in the hole and hence enabling more drop delivery system infrastructure e ective rock-breaking. Stemming trucks with single operator functionality will removeransfer product from surface directly people from the danger area and enable better controlled blast outcomes.

### BLAST EFFICIENCY AND DESIGN

Drawing on precision positioning and digital imagery, our engineers are seeking greater control over blasting to reduce ground This research, in partnership with the University of Pretoria, has led to measurable improvements in blast e ciency and design.

underground mining ensures that a non-sensitised (meaning a non-explosive) product can be transported and deployed in temperature of the hole is above a de nethe mine. Consequently, the user and those involved in transportation are not handling hole, or in reactive ground or where high or in close proximity to an active explosive. are being applied to the challengewalls exist, personnel on the bench are This greatly reduces the safety risk. Only at exposed to additional hazards. We have the time of deployment into the holes is the of safer and more circular mining, embarked on a project to limit exposure product sensitised. The charging of holes and sensitisation of the product is done with our portable charging units which we rst deployed in 2012. Extensive collaboration with our customers has enhanced both safety and environmental parameters

another key mining customer address

### **VERTICAL DROP**

Delivering smart systems and solutions for the underground mining industry in the "drill and blast" mining phase. In this engineered into its delivery systems is state-of-the-art technology that enables miners to operate more safely and with explosives in drill holes, locking the expandingher e ciency. Our emulsion vertical involves a sophisticated system to safely to underground storage facilities. This enables better and safer management of products, simpli es compliance processes and has the potential



to streamline shaft delivery times significantly. It also ensures that at no time is there sufficient pressure to make the product sensitive to outsi the stimuli, change its structure or make it detonatable.

# Making mining more circular

USING WASTE AS RAW MATERIALS

Sustainability initiatives frequently required trade-o s. The vast mobile eets used by mines generate signi cant volumes of used oil which typically require disposal. AEC Mining Chemicals has developed a process which allows the introduction of used oil into the bulk emulsion fuel blend instead of diesel. Our advanced, robust surfactate technology permits the use of the oil without treatment or recycling. Bene to include reduced diesel fuel consumption, reduced pollution risk and a decrease in costs for the customer.

#### **INCLUSIVE SUPPLY CHAINS**

By including AECI Mining's customers in our Enterprise and Supplier Development (ESD) activities in South Africa, we work towards enabling the integration of ESD bene ts into mining tenders, to expand our social impact beyond ou own operations and host communities and to meet the requirements of the Department of Mineral Resources' Mining Charter. In terms of the latter, AECI Mining Explosives is in the process of obtaining veri cation by the SABS on local content on more than 60 of its products. To improve alignment with the Mining Charter and in keeping with a national drive to empower Black industrialists, the AECI Group currently spends more than R10 million annuall on sourcing services preferentially from These services include, among others engineering, transport, cleaning, SHE products and blasting accessories.

# SOCIO-ECONOMIC DEVELOPMENT (SED) SPOTLIGHT





# Supporting healthcare through Unjani Clinics

Through our SED funds, we partner with external organisations to the Mining Charter and in keeping with a national drive to empower Black industrialists, the AECI Group currently spends more than R10 million annually on sourcing services preferentially from small, local, and Black-owned enterprisms. These services include, among others are represented by the most rural and vulnerable communities.



On the back of multi-year drought conditions in South Africa and with water stress a growing global concern, more available

the pressures of the global COVID-19AECI Water partners with municipalities pandemic have highlighted even furthend water boards in South Africa, Mali, the importance of clean water and sustainable water use as precondition water to communities. Using an ecosystem water needed for irrigation purposes without

for addressing a public health crisis. In South Africa, some municipalities face nancial constraints and public resources are often insu cient to address water challenges at local levenunicipal supplies with water derived from Precision irrigation should become the Access to water and sanitation in schools is a particular concern.

Industrial processes and chemical products are known to have negativeuri cation, our teams explore innovativetrack "embedded water" used in upstream e ects on the management of water nancial solutions to address funding availability and water quality and there is consensus on a participator solar energy and opportunities to train role for corporates in realising systemic solutions.

### **KEY SDG GOALS**









# Making clean water

Ghana and Burkina Faso to supply potable chnologies can reduce the volume of are improving the delivery of this basic areas, we are helping to supplement

alternative sources such as boreholes.

Where communities lack adequate access to water, additional challenges ar Agricultural exports face particular risk as inevitable. Beyond infrastructure and

gaps, options to power the system with local community members as operators of alled SupPlant. The technology uses

The scale of the challenge is signi cant and fuller solutions will require multistakeholder collaboration and wide funding nets. We continue to pursue competitive opportunities and CSI and are also drawing on our longstanding hectares. The objective is to expand relationship with South Africa's National the o ering to 7 000 hectares by 2025. Business Initiative to explore prospects for large-scale collaborative solutions.

# Making water conservation easier

Plant Health to explore how water treatment approach and innovative technologies, wecompromising yields. A further collaboration

**AECI** Water is collaborating with AECI

project with AECI Food & Beverage is necessity, bene ting both quality of life and argeting water conservation opportunities municipal compliance. In water-stressed in the dairy industry in the Western Cape.

> norm in water-stressed areas, including in South Africa where irrigation accounts for 70% of total water consumption. some European customers are seeking to agricultural production. AECI Plant

Health has secured access to technology from an Israeli-based agri-tech start-up security personnel at the treatment plantarti cial intelligence to improve crop health through, inter alia, e cient irrigation while increasing yields. Precision sensors placed on individual plants re ect exact moisture requirements and feed the data to a control centre for irrigation. To date, 13 installations opportunities through AECI's SED funds have been placed on customer farms totalling

Key to the expansion of the installation footprint is the initial investment required. Our teams are addressing this through a blend of manual and digital options and

funding models.

# Reducing the demand for potable water for industrial use

**AECI WATER'S FIVE-YEAR TARGETS** 

AECI Water is targeting the replacement of over 3 billion litreso schools of potable water used in the AECI Group's process streams swittplied with potable water recycled/repurposed water alternatives over the next ve years. Another target for AECI Water is to replace over 2 billion litres

2 BILLION LITRES of potable water used in process streams in the mining sector potable water reduced/

## **1 MILLION PEOPLE**

in remote areas supplied with potable water

#### **2 BILLION LITRES**

of potable water reduced/replace in the private industrial sector

### **1 BILLION LITRES**

of liquid e uent discharged by with recycled acid mine drainage and/or grey water alternatives acced in the mining sector industry to be reduced/repurposed AECI Water's capabilities are being applied cross-functionally, drawing on our public- and private-sector network to build and operate better water systems for municipalities and other mandated authorities, schools, communities, farms, mines and industry.

# Purifying water for re-use

Many mining operations generate excess water, known as ssure or seepage water, which can be treated and used. At Anglo Platinum's Dishaba Mine, treated water is returned to the mine, signi cantly reducing the use of potable water. High chemical oxygen demand (COD) e uents are a further opportunity. Trials at a pulp and pa customer have established that bacteria a enzyme treatments can result in re-use of up to 60% of waste water if properly applied. Our teams are currently commercialising a scaling up these initiatives.

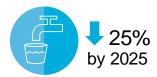
Water re-use is particularly relevant in water-stressed areas. As climate change e ects result in lower rainfall along South Africa's arid West Coast, companies are exploring desalination options and we have successfully partnered with severa in recent times.

Not only did these partnerships secure much needed water but also helped to safeguard more than 2 000 jobs which were at risk cue to potential factory closure.

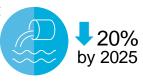
The water treatment plants also ensure that waste water meets speci cations for discharge to sea.

Further, we have started assessing industrial symbiosis opportunities, where puri ed waste water could be made available to operations located on production sites neighbouring our own.

POTABLE WATER



DISCHARGE TO SEWER AND SEA



# WATER FOR SCHOOLS





To address the plight of South African learners with inadequate acc to water and sanitation services, we have partnered with the City of Tshwane to deploy decentralised water solutions at ve schools in Hammanskraal. We aim to expand this programme to provide clean water to more than 500 000 people over the next ve years.

We have set ourselves a target of reaching 50 schools over the nex years with projects similar to that delivered in Hammanskraal.



# Addressing water shortages in the Western Cape through desalination

Desalination provides sustainable Since start-up in April 2018, AECI water supply to drought stricken customers in the Western Cape.





AECI Water designed, built, installed, commissionednd operates a number of desalination plants in the Western Cape. They are a sustainable and cost-e ective solution for water-stressed environments. Given the high cost of energy associated with desalination, an Energy Recovery Device is incorporated into the design. This technology reduces power consumption in terms of kW/m3 by 30% – 50%, depending on the feed source of the water.

The installations at Lucky Star, a division of the Oceana Group, secured the sustainability of its shmeal supply. The 36 m³/h containerised plant at St Helena Bay, comprising 10 reverse osmosis vessels and 70 membranes, can produce 864 000 litres of water a day. The 26 m³/h Amawandle Pelagic plant has seven reverse osmosis vessels and 49 membranes. Its daily capacity is 624 000 litres. In both instances, sea water is sourced from beach wells.

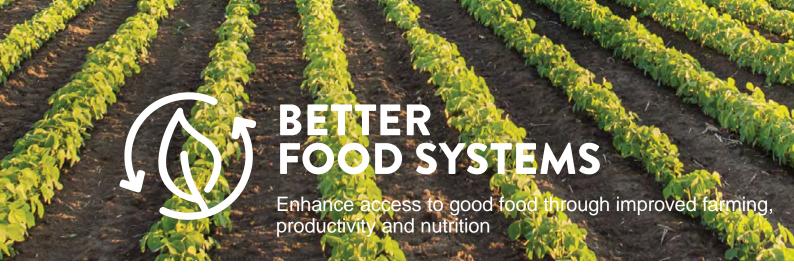
Sea Harvest's desalination plant in Saldanha produces million litres of potable water a day. It has dissolved air otation, ultra- Itration and sea water reverse osmosis (SWRO) systems. These technologies treat e uent or sea water, providing the company with all the water it requires. The quality of the water produced by the plant conforms to the South African National Standard (SANS 241-1:2015) as a minimum requirement for potable water. In time, the SWRO will replace the current municipal feed with sea water.











According to the United Nations, one in nine people in the world do working with nature not have enough to eat and onethird of all food produced goes to complement the ecological processes waste. This situation is mirrored in AECI Plant Health's NuWay Africa where food waste is equallymethodology uses precision analysis, high, hunger and malnutrition persist at alarming levels and diet-enhances agricultural output and related diseases are among the topelivers healthier crops. An example of causes of death. These patterns

There are wide economic and racial inequalities on the African continent in a food system that depends heavily on small-scale food producers yet struggles to provide a context in which these small players can thrive.

of the COVID-19 pandemic.

**KEY SDG GOALS** 









# Improving yield by

New AECI solutions seek to better remote sensing and tailored chemistry to address long-term soil health. This the holistic NuWavo ering is Biocult which uses mycorrhizae to enhance have been ampli ed by the impact plant nutrition, soil biology and soil chemistry. Application can improve soil

carbon sequestration by up to 15% and the potential for this product to generate South Africa. 4 200 of them are already new revenue streams in the carbon market is being assessed. Through our R&D capabilities, we are exploring other Making food healthier and quality of produce by using treated and more a ordable water abstracted from dams, boreholes, and rivers for irrigation purposes.

# Making farming more inclusive

New "turnkey" and digital agricultural solutions provided by AECI Plant Health seek to support emerging- and smallholder-farmers' start-up, enhance their productivity and facilitate their access to commercial markets. In Malawi, for example, we have developed utrition to consumers in Africa. We our Nyonga input packs that provide a tailored solution for smallholders. The packs include seeds, fertilizer, crop protection products and personal protection equipment for the farmers. The packs are distributed through multinational companies which have contracted smallholder farmers to produce tobacco, cotton, maize and pigeon pea.

The Khula App is another innovative product for emerging farmers. It is a

digital trading platform that makes it easier for this growing sector of the market to connect to commercial o -takers for their produce and source input supplies, including the full suite of plant and soil health products and services from AECI Plant Health. We have piloted this solution through our customer base in South Africa including the Industrial Development Corporation, the Land Bank and ABInBev. The partnerships link to the customers' own ESD spend objectives. The aim is to build an inclusive product and service ecosystem, centred on smallholders, that draws on the capabilities of our diverse customer base. The medium-term objective is to reach 50 000 of these farmers, initially in registered on the Khula platform.

INGREDIENTS FOR BASIC. AFFORDABLE FOODSTUFFS

Lower-income consumers spend a disproportionally high percentage of their total income on food. In partnership with Chr-Hansen, a principal with whom we have built a relationship over 20 years, we supply a range of specialty cultures used in the production of Mageu and Amasi. These low-cost, non-alcoholic ferments o er a ordable on-the-go also source and sell a range of functional ingredients used in the production of low-cost processed meat products which are favoured across South Africa for their broad availability, a ordability, taste and protein content. A new project is underway to produce a healthier dairy fruit juice blend for this target market.

### AFFORDABLE ALTERNATIVE **PROTEINS**

Global growth in demand for protein, coupled with the rising environmental 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

impact of conventional animal farming and shifting consumer ethics, has led to a growing protein gap and increased assessed. For example, an additive demand for alternatives. Input sources produced from silkworm silk is being such as peas and hemp are becoming increasingly popular and AECI Food & Beverage markets a range of novel and other sources (rice, whey, collagen, and keratin) as bestit. keratin) as healthier protein alternatives unsold food for consumers. For the medium and long
AECI Food & Beverage is currently a number of opportunities to develop low-cost microbial protein for the mass market in Africa.

To meet rising consumer demand for sugar alternatives, we supply a range of CSI programme through the donation healthier alternative sweeteners, including owbins for food deliveries. Greater low-kilojoule erythritol and natural sugar involvement is being considered.

extracted from coconut. Another o ering is a range of lactase enzymes that redu sugar content in dairy products for individuals who are sensitive to lactose. These solutions are provided primarily to food and beverage manufacturers in southern African markets.

## FORTIFIED AND FUNCTIONAL **FOOD INGREDIENTS**

Recent medical research has made a connection between poor gut health and a number of chronic health conditions. Conversely, a healthy gut microbiome has been linked to improved health and wellbeing. To support the gut health of consumers, we provide a range of functio ingredients and additives, including clinically-proven Fibersola dietary juice- bre, and a range of probiotics.

# Reducing food waste

Collective e orts to reduce food waste at global level are in the spotligh AECI Food & Beverage markets natura alternatives to arti cial preservatives th extend the shelf-life of food products. A example is Fresh Qa bio-preservative

of mould in dairy. Additions to the o ering continue to be identi ed and investigated as an opportunity for the longer term.

assisting a non-governmental organisation arket. This is a fully recyclable liner in Cape Town which redistributes unsold which allows the liquid product to be food from retail outlets and fresh fruit and vegetables to people in need. The

# Reducing the need for chemicals and water as cleaning materials when transporting liquid food products

We are the rst to o er a product called Mega-InLine to the South African loaded in the liner itself and eliminates project is being supported as part of our the need to clean vehicles with chemicals and water. A trial was undertaken recently with a large beverage company and the results are promising.



which naturally reduces the developmenthe Mega-InLiner is inserted directly into the cavity of a liquid transport vessel.

# **SPOTLIGHT**

# Witzenburg PALS

With nancial support from AECI, commercial farmers, local communities and farmers by partnering with an established commercial Cape's Witzenburg District to ensure that Black-owned farms established through enterprises and lead to the economic National Development Plan.

The programme enables support for emerging Black government are collaborating in the Western and business partner in an initial joint venture with the emerging farmer on the redistributed land, followed by the emerging farmer having rst option to buy all shares land reform processes emerge as successfulthe venture after a set period. The commercial farmer underwrites the business plan and stands surety on the transformation envisioned in South Africa's nancial obligations for the new Black-owned venture.

The programme has expanded considerably over the last three years and has attracted widespread attention as a model for use in other provinces across South Africa.















Growing public concerns are driving changes in legislation and care greener leading to a shift in consumer ethics and demand towards the sustainable consumption of healthier, more natural, safer and more protective products. The ingredients, materials and manufacturing processes used to commonly used in the manufacture of We promote and supply organic

goods are being interrogated. Our customers are becoming increasingly responsive to this scrutiny and more aware of the economic potential in the sale of greener products. In support of this shift, we are leveraging our chemistry, procurement and customer relations capabilities to develop and o er customercentricity solutions, chemicals and ingredients that embody greener chemistry.

**KEY SDG GOALS** 







# Making personal

With the move towards milder, more natural and sulphate-free cosmetics globally, AECI Chemicals is working with leveraging our learning and our materials and is actively promoting thesehift to greener industry. As always, options to customers. We o er safer and partnerships with our suppliers and greener replacements to sulphate and other harsh ingredients and preservatives

produce (and package) consumerOur alternatives are kinder to the skin been relatively slow due to higher pricedooks to support the substitution of of green alternatives and pressure on consumers' disposable income. Almost softer chemicals in the manufacture 5 tonnes were sold in 2020 from a zero of industrial cleaning formulations. To base in 2018.

> To support the credible climate change commitments of product manufacturers and supplying emulsi ers that enable a change from hot to cold production products. Without the need for heating, lower carbon footprint.

To reduce the impact of homecare and homecare products on water, and in support of the emerging shift to greener customer relationships to promote the use the potential to re-use 50%-60% of promote the replacement of nonylphenol e cacy of this water-saving technology surfactants with less toxic alternatives and are advancing the uptake of an "easyplans are well advanced. Our in-house rinse" technology in washing powders thatow enhancers also reduce water use, reduces water-use for home laundry. Againave a positive impact on water quality market uptake has been relatively slow found address the issue of sticky ore in the reasons already outlined above. Over 4 tonnes were sold in 2020.

# Helping industries green their operations

We are trialling the shift to greener industrial processes in our own operations key suppliers to develop and source sucestablished expertise in support of the customers are fundamental to success.

shampoos, hand washes and shower gangments as a substitute for the toxic lead-chrome pigments used in road and the environment. Market uptake hasmarkings. Our green replacement project environmentally harmful chemicals with reduce reliance on non-renewable oilderived feedstock, we are experimenting with a renewable oleochemical feedstock and brands, we are involved in developing develop an industrial range of epoxy resins and hardeners.

# processes for lotions, creams and hair Developing more natural manufacturers use less energy and have ways to treat waste water

To improve water use by mines we are working with our customers to develop and Making homecare greener implement solutions. We are harnessing the power of enzymes and bacteria to provide a more natural solution for the treatment of e uents with high COD. homes and lifestyles, we are leveraging our initial trial in another sector indicates of greener chemicals in the manufacture water treated through this method. A trial of related products. We supply and active With a mining customer is underway. The has been proven and commercialisation underground applications. This helps extend the life of a mine.

of climate change, COVID-19 has amplified public In the context concern for th disruption and pollution of the earth's biosphere as well as the of industrial processes and the accumulation of toxic sub nces on human health.

# A BUSINESS RESPONSE TO COVID-19





# WHO-approved sanitisers

AECI o ers a range of protective WHO-approved sanitisers that protect people against the spread of the coronavirus.

As the impact of the COVID-19 pandemic led to the shutdown of some quality and e cacy. of our customers' operations, some of our businesses also slowed down or suspended their activities. This unplanned interruption gave us the opportunity to test our capability to unforeseen challenge. We sought new digital marketing channels to source potential in the production and supply donate to our employees, contractors of sanitiser to aid in the response to a and communities. global pandemic.

There was nothing typical about this We took ethical responsibility to source venture that highlighted AECI's potential pharmaceutical grade ingredients, secure drive innovation in response to a crisis, all required permits and permissions and including alignment with the SDGs.

set up a micro-lab for in-house product testing. Further, we worked with the World Health Organisation (WHO) to address any misinformation and ensure the need for such products in e orts to our sanitiser met credible criteria for

The task was signi cant but we were able to draw on our R&D teams, our networks through employees, suppliers and buyers, and our relationships with industry bodies and authorities. We respond innovatively and swiftly to an launched our product publicly and used potentially, sales in other Eurozone adaptive opportunities and found good new customers, sell product in bulk and

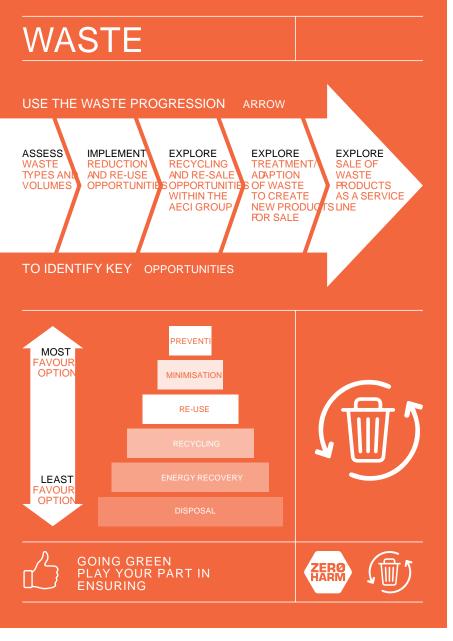
AECI Schirm, in Germany, rapidly deployed the manufacture of hand sanitiser and disinfectant to address control the spread of the coronavirus. Initially, a contract for the supply of 1,9 million litres was concluded with the German Department of Interior and executed in full. Thereafter, AEC Schirm launched its own product range for the German market and, countries will follow.



AECI's environmental e orts are inspired by the circular economy and our aim is to design waste and harmful emissions out of our systems. Our approach employs "progression arrow" to identify key opportunities across energy, wate waste and emissions. We pro le possible solutions from least- to most-favoured to guide decisionmaking and capital allocation (see example for Waste alongside Our social e orts are driven through continual improvement against our Zero Harm aspiration for health and safety. Beyond this, the Group supports inclusive growth through ESD.

## **KEY SDG GOALS**





For more information see our Going Green booklet available at <a href="https://www.aeciworld.com/sustainability-1">https://www.aeciworld.com/sustainability-1</a>

Responsible production requires that we align our operations with the reality of environmental constraints and pressing social needs.

# Towards Zero Harm

Inspired by our commitment to Responsible Careand directed by our SHEQ Policy, we are committed as follows: "to operate sustainably, without harm to people, the environment and the communities in which we operate". Our Zero Harm Strategy was developed to standardise SHEQ best practice and drive world-class performance across the Group. The Strategy is supported by group and use this to inform our own 12 focus areas for implementation over ve to eight years, commencing in 2017. An immediate deliverable for the Group other high severity incidents. This gave rise to a set of "Zero milestones", aimed at reducing a range of high severity incidents to Zero by the end of 2020. The Group was well on track to achieve all milestones in 2020 but unfortunately an incident occurred in late December which resulted in life-altering injuries to one of our employees. We are pleased to report that the employee is recovering well and has commenced his rehabilitation chirm and AECI Much Asphalt, once process. This was one of our biggest disappointments for 2020.



#### **PERFORMANCE HIGHLIGHTS**

In 2020 AECI achieved:

## **ZERO**

**Fatalities** 

SHE legal directives

Major or serious environmental incidents

Major process safety incidents

Major product transportation incidents

Repeat incidents

### OCCUPATIONAL AND PROCESS SAFETY

has always been the top priority for us. While the nal goal is Zero injuries, milestones are agreed with leadership teams across the Group, and for the Group as a whole, each year with We conduct annual benchmarking to include process safety. The SHEQ was to eliminate workplace fatalities and Management system includes a dedicated corded in 2020, down from two 2019. risk-based Process Safety Management (PSM) system through which we track and investigate these incidents. AECI is well represented at CAIA's Process Safety for aand this involvement has enabled us to build our own PSM of PSM in South Africa.

The inclusion of data from AECI these acquisitions had been nalised in February and April 2018, respectively, resulted in a temporary deterioration in the Group's overall safety statistics. The Total Recordable Incident Rate (TRIR) at 31 December 2018 was 0,586d had improved to 0,38in December 2019. The with our numerous transport partners on gure dipped as low as 0,34 January 2020 but increased to 0,42n December 2020, above the interim milestone of 0,36 we set. We have set an aspirational In 2020 we experienced 13 oderate, 14 medium-term target to reduce our TRIR to less than 0,25 by 2025.



\* Indicates limited assurance. See page 41.

## OCCUPATIONAL HEALTH

Through a dynamic set of Occupational Reducing workplace injuries and illness@ealth Standards, we actively manage exposure to occupational health hazards. In partnership with third parties, we provide a suite of services to our employees. These include medical surveillance, chronic medicine management, occupational incremental improvements being soughthygiene assessments, wellness programmes and a number of employee assistance against the best performers in our peer programmes. There has been a reduction in the rate of occupational illnesses across milestones. With the launch of our Zero the Group in recent years. Noise-induced Harm Strategy, we extended our focus Hearing Loss remains our most challenging area. Onenew occupational illness was

### PRODUCT TRANSPORTATION AND STEWARDSHIP

Our products travel thousands of kilometres across the globe by various modes of transportation. This includes extensive capabilities and support the developmentansport by road across Africa undertaken by heavy-duty vehicles on roads that are not always in the best of conditions. Most of the Group's transportation is outsourced but, as part of our commitment to Responsible Care®, we remain accountable for stewarding the product en route unless the risk is transferred by formal agreement. In 2017 we agreed a Group milestone target: to reduce major product transportation incidents to Zero by 2020. Collaboration technological and behavioural solutions enabled us to achieve this target in 2020.

> minor and 2\* serious product transportation incidents. The classi cation criteria used for product transportation is an internal one. Both serious incidents occurred in West Africa, where third party transportation companies moving AECI Mining Explosives' product experienced incidents which resulted in product spillages.

# WASTE AND AIR EMISSIONS

At AECI Mining Explosives, recycling of packaging material has helped cut waste by 40%.

Further, at the Modderfontein site we've reclaimed approximately 1,8 million tonnes of ash from waste sites associated with historical operations. This ash has been used as input in the manufacture of brick for housing developments.

In Australia, a partnership between AEC Bajool explosives facility and a local recy has enabled the recycling of more than 70 tonnes of polypropylene bags – cuttin waste by almost 50%.

AECI Much Asphalt has re-engineered its manufacturing process to include up to 40% of reclaimed asphalt in the nal product. Since 2012, this more circular process has avoided the impact associated originally lled with agricultural products, with mining 1 015 349 tonnes of aggregate manufactured by FOL and sold to farmers. and re ning 53 439 tonnes of bitumen. Asphalt recycling has been so successful that the South African Road Federation has included it in its tender requirements.

Historically, our approach to managing air emissions has been largely complianceled. AECI Mining Explosives has focused on compliance with the 2020 Minimum Emission Standards in South Africa, investing more than R100 million in air emissions abatement initiatives, 80% of this amount was spent in 2019. Despite being granted a postponement of compliance with some Standards until 2025, we are accelerating our related e orts to achieve full compliance during 2021.

#### LAND REMEDIATION

AECI has operated its oldest sites for well over 100 years. The environmental and health risks associated with land and ground water contaminated by historical operations intensify as land now surplus to operational requirements is made available for alternative uses, including residential and commercial development. Accordingly Group and handover to the developer. The we have adopted a risk-based approach, in hanced In-situ Bio-remediation project alignment with the guiding principles of our at the Umbogintwini Industrial Complex Land Remediation Strategy for South Africa reached its nal stage of deployment remediating our historical management areas internance phase. Our active remediation energy e ciency opportunities are in impacted by industrial operations over a lower has shifted to Modderfontein, where 10 ur production plants. Installation of period. Before seeking approval for a land management areas require remediation in line. of Environment, Forestry and Fisheries (DEFF), we follow a formal planning processgreed with the Regulator. which includes land characterisation, risk assessment and selection of treatment and Reducing our management options.

In 2019, we received an award from the DEFF for our contribution to executing the intent of South Africa's National **Environmental Management Waste Act** (2008). Examples of work undertaken included successful completion of remediation of the nal portion of the

REPURPOSING USED CHEMICAL CONTAINERS IN LILONGWE, MALAWI.



AECI Water designed and built a bespoke chemical container chipping and cleaning plant which has been installed at the Farmers services in carbon reduction across the Organisation Limited (FOL) facility in Lilongwe, Malawi. The plant is designed to chip and clean vessels which were The farmers are encouraged to return the containers which are then chipped and

The chipping prevents the containers from being sold or used for water collection. The certi ed clean plastic is then o ered to recycling companies to manufacture non-human consumption plastic materials such as irrigation pipes REDUCING GREENHOUSE or plastic sheets for greenhouses.

Through this initiative, FOL is also helping address a signi cant compliance challenge Farmers are required to comply with the Rain Forest Alliance, as an example, but there are no facilities to handle empty, contaminated containers.

Without cleaning, the containers would be reclassi ed as hazardous waste and additional licensing to handle and store them would be required.

with a signi cant waste footprint, addressesof waste methane gas into the feed for a major compliance issue for farmers and enables small recycling rms.

Somerset West site formerly owned by the and development and now moves into the will be executed within a framework and time Modderfontein facility reduced energy

# carbon intensity

The e ects of climate change are material to our business. Extreme or unpredictable weather events are increasing the frequency, severity and e ects of droughts, oods and water shortages. These events have a real or potential negative impact on our

supply chains and constrain the operations of our mining and agricultural customers, in particular. Reducing our carbon intensity helps us manage the risk and opens new opportunities in the global carbon market.

While we execute our growth strategy and understand the potential expansion of our operations, we remain committed to reducing our Scope 1 emissions by 20%, by 2025.

Building on experience at our own operations, we see opportunities to extend broader value chain.

In 2007-2008, AECI Mining Explosives implemented Clean Development Mechanism (CDM) projects at both its nitric acid plants in Modderfontein to reduce nitrous oxide (NO) emissions through catalytic cleaned of any residual hazardous material reduction. The projects have since generated approximately 1,3 million carbon credits which have been sold. We will be exploring other carbon credit-generating opportunities in our AECI Agri Health business.

# **GAS EMISSIONS**

Installation of a secondary catalyst at AECI Mining Explosives' nitric acid plants in Modderfontein is expected to reduce €O emissions by approximately 45%. Mas a greenhouse potency more than 296 times that of carbon dioxide. Our investment of R10 million will deliver a reduction in the Group's footprint from the end of 2021 and support the achievement of our 2025 reduction target.

The initiative is a win-win for all: it helps deals another example, by the introduction steam production at AECI Property Services at the Umbogintwini Industrial Complex is reducing both its costs and upstream

carbon dioxide emissions.

### INCREASING ENERGY EFFICIENCY

While every lightbulb counts, the biggest remediation proposal from the Department with the aforementioned strategy. The work cooling towers at AECI Mining Explosives' ŭse by 941 600 kilowatt hours per year.

> In January 2020, AECI's Bajool facility in Australia achieved a reduction in overall power usage of 15% by transitioning from mains power to the use of generators on demand. This transition has reduced the facility's carbon emissions by an estimated

> Renewables will meet an increasing share of our energy needs over the next decade. We have already committed to installing four













**RUNNER-UP AECI** Water Hammanskraal Water Project CSR INITIATIVE OF THE YEAR Award

**WINNER** AECI Ltd Group Zero Harm Strategy COMPANY INITIATIVE OF THE YEAR Award

**RUNNER-UP AECI** Water Air Quality Project COMPANY INITIATIVE OF THE YEAR **Award** 

solar plants at our South African operation about by inadequate supply of water of These will be pilot projects for our own the requisite quality, and the impact of energy consumption and will be ramped upextreme weather events on infrastructurebut also enabling savings on e uent if successful. AECI will increase its share irand the activities of our customers in the disposal costs.

electricity from renewable sources by 8% agricultural and mining sectors. Water o a baseline of 249 609MWh.

# Reducing our water footprint

High quality water is a key input for AECI's production processes and for cleaning production areas and equipment. An infrastructure upgrade at AECI Mining the amount of water requiring collection. An infrastructure upgrade at AECI Mining and disposal. At the start of 2020, on Ampli ed by the e ects of climate change, water stress is a rising concern for industrial operations globally. For us, our operations on the African continent are of particular relevance here since general water scarcity is exacerbated by (14 000m³ per month) by substituting it the El Niño-Southern Oscillation (ENSO) with puri ed sewage e uent (PSE). regional weather pattern and recent multiThe facility's water footprint is being reduces avings on disposal costs in 2020. year drought e ects. Material risks for include production interruptions brought of approximately 90m<sup>3</sup>/day of e uent.

conservation is a priority and we continue avings of approximately 600 000k to deploy water-e cient technologies and of water currently drawn from processes in our own operations, at the same time supporting our customers and communities to do the same.

FOR NON DRINKING PURPOSES

Explosives' Nitrates facility, undertaken by .... AECI Water, through the construction of a new plant, depicted below, has reduced same time increase the volume of waste

further through a new e uent recycling our operations on the African continent system with a treatment and re-use capacity

With a 70% recovery rate, the system is not only reducing municipal water usage

The project is expected to deliver Johannesburg Water.

At AECI's Bajool facility, waste water from bunded chemical storage areas is REDUCING USE OF POTABLE WATER re-used in the manufacturing process in small increments, drastically reducing additional system was installed to make the use of municipal water by up to 40% water to be cycled into the re-use scheme. Up to 30 000 of waste water per annum is now available, delivering meaningful

#### BY 2025 AECI WILL TARGET REDUCTIONS IN THE FOLLOWING AREAS

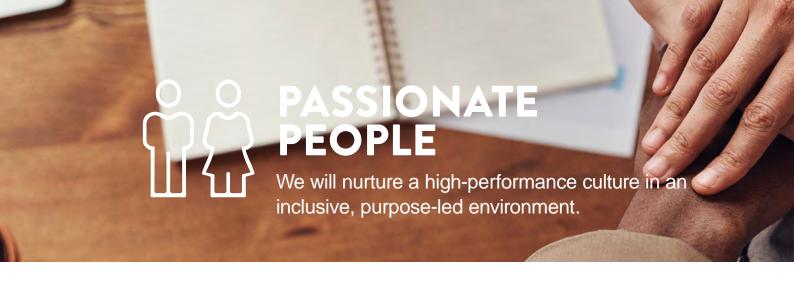
Potable water consumed by 25% off a baseline of 2 512 755m

E uent discharged to sewer and sea by 20%cope 1 CO e emissions by 20% o a baseline o a baseline of 858 731th of 402 531 tonnes COte









The pressure on business to lead on sustainability action is intensifying, spurred by coherent the recent successes of climate activism and new demands from civil society to build back better post-COVID-19. As advances in technology and connectivity amplify consumer voices and increase the possibilities for sustainable business, so too are new challenges emerging on how to ensure transformation and diversity, upskill employees, attract and retain appropriate talent, guarantee cybersecurity and safeguard brand reputation. Central to an e ective response is the cultivation of a highperformance organisational culture that intuitively and passionately drives inclusivity. creativity and collaboration in pursuit of purpose-led innovation for economic success and the achievement of the SDGs.

**KEY SDG GOALS** 





# Living our values in an inclusive, purpose-led organisation

In the context of persistent global sustainability challenges and structural inequalities, we at AECI are committed to transformation and cultivating societal purpose as the core of our business. We aim to achieve this through fully integrating our a #ABetterWorld critiques of shareholder capitalism purpose and pursuing the implementation of policies and practices that promote inclusivity and foster diversity across all occupational levels and throughout our supply chain. To drive our transformation agenda, in line with our Human Capital Strategy, we conduct regular reviews in our workplaces and with our suppliers to identify and address inequities in opportunities, compensation and bene ts.

### WOMEN IN THE WORKPLACE PROGRAMME

We value diversity as a competitive in our chosen markets. Women currently represent less than 30% of our overall workforce, with lower representation at Senior Management levels. 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. Ke initiatives in 2021 will focus on the expansion of our #BigHer programme, including the development of international women's for and training in unconscious bias.

## **DIVERSITY AND INCLUSION PROGRAMME**

This programme addresses gender equality advantage in doing business with purpose and the under-representation of minority groups across the business locally and internationally. It is shaped by 11 action points in six focus areas: representation, awareness and education, reducing barriers, empowerment, fairness and equity, and inclusivity.

Since 2012 we have increased the representation of women on our Board (%) 27,3\* 10\* Since 2012 we have improved the representation of women at senior levels (

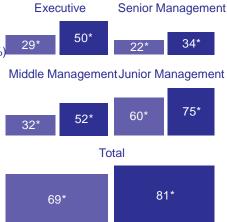
Executive Senior Management 25\* 14 14\* Since 2018 we have **ADVANCED 118 WOMEN PROMOTED 158 WOMEN ENROLLED 82 WOMEN** IN LEADERSHIP PROGRAMMES

Since 2012 the representation of Black (African, Indian or Coloured) people on the Board has increased (%)



Since 2012 we have improved representation of AIC employees at management levels (%)

Executive



AECI's capabilities in human resources are being applied to empower our people to thrive in an inclusive, purpose-led organisation that promotes wellness, embraces technological advancement and builds the skills and relationships required for profit with purpose.

#### REMUNERATION EQUITY

AECI reports regularly on the status of remuneration inequalities across the Groupur Talent Boards, we aim to reduce and is taking active steps to close wage gabes and discrimination in our workplace Action plans are being developed at Boar@nsure fair and consistent processes th and business levels to address imbalance@revide our people with cross-collabora pay relative to gender and race. In 2019 and professional development 2020, adjustments to employee grading and remuneration at business level were made as part of the process of rectifying historical inconsistencies and aligning with 2020, the Group invested R34,6 million our Remuneration Policy.

#### INDIGENISATION COMPLIANCE

with the launch of the AECI Good Chemistry Priority was given to COVID-19 initiatives. Fund targeting Black-owned, small and women-owned businesses in the South African chemical sector. Governed by an independent Board of Trustees and managed satisfying food security needs. by IDF Capital, the Fund has a committed capital allocation of R30 million. Since its We initiated our own food security inception it has disbursed R60 million in loan, equity-and-grant-funding, creating 54 direct jobs. In addition to building a more diverse supply chain, the Fund is supporting our Executives, employees, suppliers localisation e orts in the chemical sector.

## TALENT SUCCESSION PIPELINE DEVELOPMENT

Our diversity and inclusion programme

of high-performing talent in Middle and Senior Management levels. Through opportunities.

## SOCIO ECONOMIC EMPOWERMENT

in strategic community development initiatives in communities neighbouring ou own operations and those of our custome In 2017, AECI's ESD e orts were centralised (1.2027) making a positive di erence in the lives of 1 022 376 bene ciaries internationally. Initially, the focus was on providing protect gear and products in under-resourced are As the pandemic progressed, this shifted

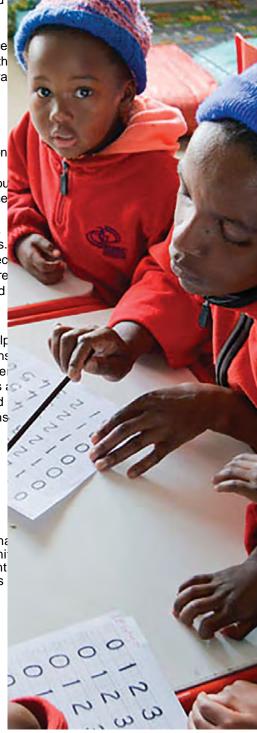
> programme, called iPledge, which help feed 12 315 families, with contributions from our Non-executive Board member shareholders. R3,5 million was raised total, our COVID-19 relief contributions amounted to R15 million.

Our work in the SED and job creation arenas was recognised through Top will focus primarily on the advancement Empowerment awards in the year.

#### LOCAL EMPLOYMENT OPPORTUNITIES

AECI has a presence in many African countries and continues to aspire to many employment levels from in-country nationals. This is enhanced by our commi to skills development and skills transfer. The table below represents a recent our employment ratios between local and non-citizen employees at key sites rest of the African continent.

1001011110111101111	
ធំធំ EMPLOYEES	∰ NON-CITIZEN EMPLOYEES
81	1
192	11
159	10
200	
43	1
30	3
50	3
218	5
	81 192 159 200 43 30 50



Early Childhood Development Centre at Oliver's Village



# **AfroBotanics**

AfroBotanics is an African hair care product supplier founded by entrepreneur, Ntombenhle Khathwane.

This business received R1,4 million with equal contributions from the AECI Good Chemistry Fund and the IDF Development Fund and other donors as well as mentorship and support in the nancial and technical aspects of formulations, inventory management, production planning and quality standards. AfroBotanics' products are stocked by top South African retail stores.







# Collaborating for Enterprise Development

Phophi Raletjana was named PSA's Enterprise Development Farmer of the Year in 2018.

Phophi Raletjana was a successful participant in a collaborative partnership between Potatoes South Africa and ourselves. With access to a revolving credit facility of R4 million, technical support and digital monitoring, the business delivered a healthy crop which was sold on the open market.





## NURTURING AND DEVELOPING OUR PEOPLE AND STAKEHOLDER **RELATIONSHIPS**

We drive inclusive growth in addressing social inequalities through building strong stakeholder relationships. We provide employment in our business value chain.

#### **EMPLOYEE WELLNESS**

AECI runs annual campaigns on wellness- we participate in centralised wage related topics and provides access to basic negotiation platforms. occupational health services Group-wide. The objectives are to reduce health risks, improve quality of life and enhance the overall e ectiveness and wellbeing of our employees. Annual initiatives include physical employment Equity Committees, Skills health screening and testing, with lifestyle advice provided by specialists. Another focus is psychosocial wellbeing, including healthy relationships and nancial stress management. Future initiatives will improve Chemicals Employers Association and thegender-based violence. the design of our programme to o er longerterm wellness support through additional services, more robust tools and essential skillsbuilding for employees and their dependants.

## **EMPLOYEE RELATIONS**

AECI promotes a safe and secure working industry best practices. environment by protecting employees' rights

SKILLS DEVELOPMENT PROGRAMME and ensuring fair labour practices, includin AECI supports the advancement of the right to not be unfairly dismissed. To equal opportunities for full and productive protect these basic labour rights, AECI runly integrating additional learning and implements adherent labour policies. Tadigning the development needs of our

> Employees need a voice in decision-makin gadership, sales, marketing, technical to maximise their contribution to productive and vocational training. Access to forums are in place. These include **Development Committees and Sectional** Fora where work-related issues may be

external for a such as the National Speciality ore recently, we also ran workshops on

Explosives Association for alignment with

knowledge and skills across the organisation Employee Relations Awareness programmesportunities into daily work routines and ensure fair and just income for employees, people with the business growth strategy. Easy-access learning opportunities are provided to build competencies in

employment. For this purpose, consultative nancial assistance is provided for tertiary studies and adult basic education. Youth development is a focus with learnerships, internships, apprenticeships, scholarships and bursaries o ered to participants from raised and addressed. We also participate value and marginalised communities.

Since 2017, parties to the centralised wage negotiations have concluded two consecutive multi-year wage agreements without strike action. AECI honoured a substantive agreement regardless of COVID-19 implications.









In 2020 42 youths were awarded bursaries. 1 982 employees participated in at least one learning opportunity. 29% of participants were female. Literacy and numeracy skills are also addressed through adult basic education for employees. In addition, 89 employees living with disabilities accessed learning opportunities, 46% of them being female.

WE MANAGE TALENT BY FOCUSING ON DEFINING, DISCOVERING, DEVELOPING AND DEPLOYING TALENT IN THE RIGHT PLACE, AT THE RIGHT TIME.

# Thriving in a highperformance culture

In a rapidly-evolving operating context, we strive continually to renew our organisational e ectiveness. We do this through structures that strategically align skills with roles and enable us to attract, retain and grow the capabilities we need to achieve our Human Capital Strategy, compete e ectively and grow the business.

#### TALENT FIT FOR PURPOSE

To attract, nurture and retain passionate, high-performing talent, long-term human resources planning and nding appropriate candidates for positions requiring very speci c skill-sets are essential. Our key initiatives in this regard include improving the recruitment and development of our people and facilitating cross-business moves internally to support career expansion. During 2019, we invested signi cantly in workforce planning and succession planning. Group businesses assessed their existing plans and, with guidance from the AECI Executive Committee Talent Board, made amendments to address short- and long-term employment needs.

# Discover ATTRACT AND SOURCE TALENT **Define** TALENT Develop **MANAGEMENT TALENT TALENT** MODEL **NEEDS** POTENTIAL **Deploy** TALENT RIGHT PLACE **RIGHT TIME**

# PERFORMANCE MANAGEMENT

new ways of working.

#### We have implemented a bespoke AECI aims to create a high-Performance Management model that willperformance culture with "good align our people practices with our busineshemistry", driven by passionate strategy, integrate seamlessly with our newnd purpose-inspired leaders. Our Human Capital technology and facilitate recent priority focus has been on

employee retention, recognition

EMPLOYEE ENGAGEMENT CULTURE

and development, supported by the right leadership behaviours. Our forthcoming employee survey, in 2021, will focus on key sustainable engagement measures.





# Food security during COVID-19 ifledge

Through our iPledge initiative, we raised over R3,5 million in six months to address food security challenges ampli ed by the impact of COVID-19 in our host communities.

By the end of 2020, 12 315 families in need had received food parcels purchased thanks to iPledge. This initiative has been run in partnership with Joint Aid Management.





Food parcel handover by the AECI Executive to Oliver's Village

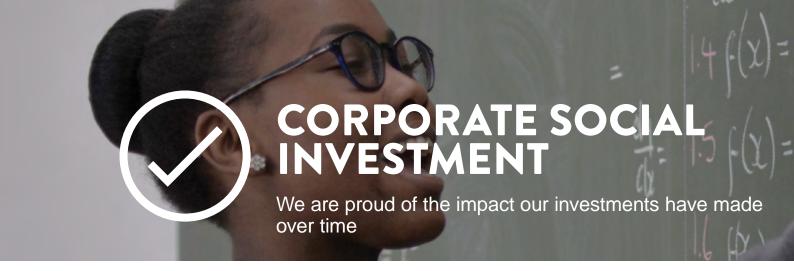












# The CSI imperative

AECI recognises that sustainable development is a key business imperative with customers and other stakeholders. and supports the principles of the B-BBEE Codes of Good Practice, ISO 26000 and the UN SDGs. The world as a whole, and most of the countries in which we operate. are faced with signi cant inequality and high rates of poverty. AECI's CSI team ensures that available spend is invested e ectively to address socio-economic challenges and enhance well-being in our neighbouring communities and those of outoverview of projects is a commitment in terms of our values of Over the last ve years, our SED investments in credible communityfocused partnerships and strategic social strategic investments. This shift has been initiatives, we drive sustainable development cognised in CSI awards received from programmes on the journey to social transformation. We are proud of the impactour investments have increased from our investments have made over time.

# Our approach

Our CSI e orts have evolved into an with SED requirements in South Africa)

social impact. In some areas, for example, for job creation by the Top Empowerment the impact of providing clean drinking wateand CSI Ubuntu awards in 2020.

has been extended through collaboration

SDGs that target poverty, hunger, health, For all our investments we foreground the education, inequality and the provision of imperative of good governance, recognise clean water and sanitation. Key projects are the need to empower communities and highlighted throughout this Report, on the consider opportunities to scale impact following pages: Unjani Clinics (page 11), through our core business and partnership Water for Schools (page 13), Witzenberg Strategic allocation of CSI funds is achieve PALS (page 18), Food security during through a systematic consideration of both COVID-19 (page 32), Oliver's Village (page social and corporate bene ts. 36) and Wize Wayz Water Care (page 37).

grant-making to long-term sustainable Trialogue through 2018, 2019 and 2020. R18 million to R34,6 million between 2015 and 2020.

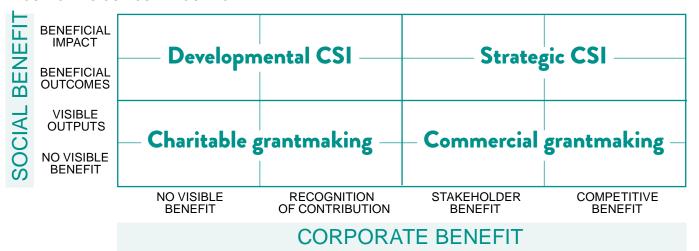
AECI has also been recognised, for on employment, entrepreneurship and empowering women in communities, youngommunity ownership of initiatives. e ective blend of legislative compliance (e.girls and economic empowerment of womehdditionally, we aim to provide our through the Gender Mainstreaming Awards iemployees with more practical opportunities and the strategic enablement of purpose-lego19 and 2020. We have also been recognisted contribute through volunteerism.

# Looking ahead

In light of the ongoing impact of COVID-19, being Engaged and Responsible. Throughprogrammes have matured from charitable we are recalibrating our approach and focus areas. We are aiming to further integrate our CSI e orts across our global operations and pursue projects that demonstrate a clear business case and return on investment. Our e orts will shift towards supporting more positive impact in the local communities where we operate through enhanced focus

Our CSI focus areas are aligned with the

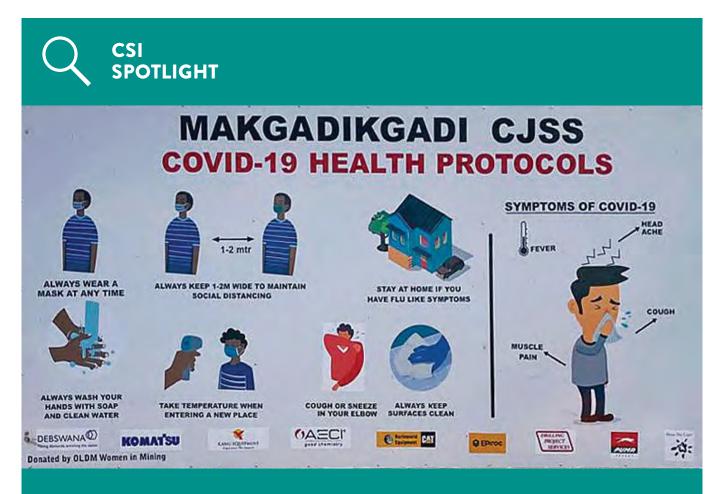
#### POSITIONING OUR CSI ALLOCATION



Our CSI investments are across all quadrants of Trialogue's positioning matrix, in response to di erent contexts and circumstances. Most of our e ort in rece years has focused on Developmental CSI (e.g. Oliver's Village) and Strategic CSI (e.g. Unjani Clinics, Water for Schools).

Charitable grant-making (e.g. Food security during COVID-19) takes place in instances of pressing need.

AECI's CSI team ensures that available spend is invested effectively to address socio-economic challenges and enhance well-being in the communities hosting our operations.



# Providing relief for COVID-19 in Botswan

AECI Mining Explosives partnered with The objective was to provide information and support for Triple 8 and Jwaneng Mining in the provision of handwashing stations early in the pandemic. Later in the year, collaboration to the mining town of Orapa. We also partnered with Major with Debswana (OLD Mines) Women in Mining in a charitable cycling challenge. The objectives there included raising awareness among the youth on gender-based violence in schools, empowering young a billboard highlighting measures to mitigate the spread of COVID-19 being donated. The objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the objective was to provide information and support for the obj



# Oliver's Village



Situated alongside an informal settlement in Benoni, South Africa, Oliver's Village is an NPO that is working towards establishing a self-reliant community and settlement.

AECI has supported the Village since 2013 with nance to establish community enterprises, food gardens, a soup kitchen and a bakery. The bakery and gardens are income-generating, empowering members to provide vegetables and bread to the kitchen which feeds up to 300 people a day. The ovens are powered by bio-gas, a local renewable energy source generated through the safe and e ective capture of gases from the Village's sewage system.













# Wize Wayz Water Care



In 2016 the Wize Wayz Water Care project was established to support and empower unemployed people from the Folweni and Ezimbokodweni communities, in KwaZulu-Natal.

These communities work together voluntarily to collect waste and keep the local river clean. Funds from AECI enabled the cooperative to formalise and expand its activities. Through the integration of skills and enterprise development training, volunteers have been able to start micro-enterprises and build sustainable livelihoods by o ering products and services related to river care, plumbing, food gardening, poultry and crafts. A number of partnerships now support the initiative and, in 2018, the success of the project led to AECI winning the Trialogue Strategic CSI Award.









# Our global CSI footprint in 2020

1 022 376 BENEFICIARIESMPACTED

R34,6m **TOTAL INVESTMENT IN 2020** 

## **R15**m **INVESTED IN COVID 19 RELIEF**

Initial relief initiatives focused on provision of protective gear and products in areas of needwater Itration skids, Further provision made for food security as the pandemic progressed.

# R11,5n INVESTED

in protective gear and providing handwashing stations at schools and clinics, sanitiser, Solidarity Fund.

## R3,5m **PLEDGED**

through crowdfunding and 2 315 food parcels were distributed.







#### **GOVERNANCE STRUCTURE**

is re ected in our cross-functional governance structure. In keeping with our oversee and review management's governance seeks to provide a framework controls and the implementation of supported by a strategy and charter across our 12 businesses and at every operational strategy and performance. The Executive trategic innovation e orts focused on Strategy and performance. to deliver the trust, transparency and accountability that drive high levels of ESG compliance as well as sustainable quarterly to oversee the implementation of businesses. The BIGGER Idea online innovation in our identi ed strategic growth areas.

The AECI Board formulates all fundamental policy and strategic goals in conjunction with management. The Chief Executive, assisted by the AECI Social and Ethics Committee (SEC) on behalf of the Board, will be responsible

for the annual review of the Sustainability The Group CSI Committee meets Framework and Strategy to ensure it continues to meet its intended objectivesof the CSI strategy.

for overseeing its implementation Group-POLICIES AND MANAGEMENT The multi-faceted nature of sustainabilitywide and for monitoring performance. **SYSTEMS** 

The SEC meets at least quarterly to overall governance approach, sustainability decisions, the adequacy of systems and

The Group SHEQ Committee meets Zero Harm and monitor its e ectiveness.

Group across the full human resource value than. Addressing a range of areas pertaining to human, intellectual, social and relations he sponsible operations are driven by an capitals, it seeks to evolve an organisation integrated management approach under Executive Committee and guided by the context and culture conducive to delivery of the umbrella of Zero Harm. This covers our sustainability goals.

quarterly to oversee the e ectiveness

In alignment with our core purpose of One

AECI, for a better world, the Sustainability Strategy frames our ESG e orts across strategic innovation, responsible production

site in 22 countries. Our structure seeks

Committee reviews performance monthlythe "Business of Tomorrow" are managed by the AECI.GO with support from the in-house e orts of individual Group platform and mobile app make it possible for employees to participate in innovation

> occupational safety, process safety, occupational health, environmental performance, product transportation, adherence to Responsible ®are principles and practices, and

#### **BOARD ACCOUNTABILITY**

#### **AECI BOARD** SOCIAL AND ETHICS COMMITTEE

#### **EXECUTIVE LEADERSHIP**

- MANDATED BY SEC
- STRATEGIC DIRECTION AND TARGETS
- END-TO-END INTEGRATION

#### AECI GROUP EXECUTIVE COMMITTEE

#### **EXECUTIVE COMMITTEE** OF GROUP BUSINESSES

#### FUNCTIONAL CO-ORDINATION

 DAY-TO-DAY CO-ORDINATION AND SUPPORT FOR EXECUTION BY GROUP **BUSINESSES** 

Sustainable Development Steering Committee	Group SHEQ Committee	Group Human Capital
Sustainable innovation AECI.GO	Responsible operations Zero Harm	Passionate people and CSI



quality management. The approach is based on the fundamentals of Accountable Leadership, Engaged and Empowered Employees, Risk-based SHEQ Management and Continuous Improvement. This is guided by the SHEQ Policy, the SHEQ Framework and supporting procedures.

The ESG compliance universe is re ned and interviews were held with senior practices which consider compliance developments across all jurisdictions where the Group has business operation AECI GO. The process was guided by In South Africa, compliance is managed external advisors, Incite. using a digital solution, which will be rolledSG risks are identi ed and addressed as out across international operations in due course. A full review of the Group's compliance approach and processes will by the Group Risk Management Policy be undertaken in 2021.

Beyond compliance considerations, our businesses align responsible ESG practices with relevant external standards against which third-party audits may be undertaken. Over the medium to long term, all management systems will be aligned with the AECI SHEQ Framework and prioritised in accordance with the needs and risks of each business.

The most commonly adopted management standards are: Responsible data is collated from across the Ground 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 In addition, the Group aligns with the voluntary codes of the CDP Climate Change and Water Programs and the 10 principles of the United Nations Global Compact.

#### RISK IDENTIFICATION AND MATERIALITY

Our Sustainability Strategy and this performance overview were informed by a materiality analysis which guided our e orts based on relevance, risk and opportunities for the business.

Following initial research, focus sessions continually as part of broader compliance eadership at Group and individual business levels, as well as with key Group functions such as Human Capital and the

> part of an ongoing, structured approach to risk management. This is underpinned Statement and the Group Enterprise Risk Management Framework.

#### STAKEHOLDER ENGAGEMENT

Our sustainability focus is informed by ongoing engagement with a diverse rang of stakeholders. Structured engagement undertaken by the Group and/or individu businesses helps to inform our perspect on potential ESG risks and opportunities

#### DATA MANAGEMENT AND ASSURANCE OF BASELINE DATA

in our COGNOS nancial system. This process is managed by Group SHEQ, with independent assurance of selected sustainability key performance indicators provided by Deloitte & Touche. The established baseline data provided in thi Report and used to set targets for 2025, was assured by IBIS Consulting.

The assurance statements can be accessed at the following links

Ibis Consulting: www.aeciworld.com/pdf/sustainability/assurance-statement-2020a.pdf Deloitte & Touche: www.aeciworld.com/pdf/sustainability/assurance-statement-2020b.pdf

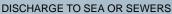


# OUR 2020 MILESTONES AND TARGETS











**DECREASE IN SCOPE 1 EMISSIONS** 

341 997\*

## **ENVIRONMENTAL PERFORMANCE DATA**

#### **GHG EMISSIONS**

SCOPE 1 EMISSION Sonnes COe)

2016	314 780*	
2017	351 317	7*
2018	308 216*	
2019	366 98	30
2020	334 225*	

2025 Baseline#: 402 531 tonnes CO e Target#: 322 025 tonnes CO **€**20%)

#### SCOPE 2 EMISSION & onnes COe)

2016	217 088*	
2017	216 971*	
2018	254	234*
2019		

2020 241 150\*

2025 Baseline#: 273 548 tonnes CO e Target#: 252 163 tonnes CO **B**%)

#### **ENERGY**

ELECTRICITY(MWh)

2016		211 239*	
2017		211 635*	
2018			258 617*
2019			260 763*
2020		228 065*	
2025	Baseline#: 249 609 MWh Target#: 224 047 MWh (8%)		

#### **WATER**

POTABLE WATER CONSUMPTION )

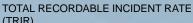
#### EFFLUENT DISCHARGED TO SEA AND SEWER)



#### **ENVIRONMENTAL INCIDENTS (MODERATE)**

16	35	35	32	29*	Baseline#: 29 Target#: 22 <b>(</b> 24%)
2016	2017	2018	2019	2020	2025











INCREASE IN ELECTRICITY FROM RENEWABLES

## SOCIAL PERFORMANCE DATA

#### **ZERO HARM**

2020 ACTUAL

FATALITIES :

LIFE ALTERING

**INJURY** 

SHI

SHE LEGAL DIRECTIVES

MAJOR OR SERIOUS ENVIRONMENTAL INCIDENTS

MAJOR PROCESS SAFETY INCIDENTS

O MAJOR PRODUCT TRANSPORTATION INCIDENTS

REPEAT INCIDENTS HIGH SEVERITY

2025 TARGETS

O

0

0

FATALITIES LIFE ALTE

LIFE ALTERING

SHE LEGAL DIRECTIVES

MAJOR OR SERIOUS ENVIRONMENTAL INCIDENTS

O MAJOR PROCESS SAFETY INCIDENTS

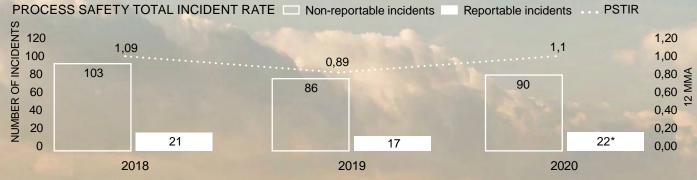
MAJOR PRODUCT TRANSPORTATION INCIDENTS

REPEAT INCIDENTS HIGH SEVERITY

#### **SAFETY**

TOTAL RECORDABLE INCIDENT RATE TRIR





Graph depicts the occurrence of process safety incidents. The term "Reportable" is an industry-agreed de nition. An incident is deemed reportable when certain thresholds are exceeded.

## ADDITIONAL PERFORMANCE DATA

#### ENERGY CONSUMPTION(GJ)

2016	2 295 753*		
2017	2 320 449*		
2018		3 12	21 388*
2019			3 269 369*
2020		2 930 501*	

#### **WASTE**

#### RECYCLED WAST#onnes)

2016				10 3	23
2017				9 644	
2018			7 346		
2019		6 280			
2020	3 288*				

#### HAZARDOUS WASTEtonnes)

2016	7 474*			
2017	6 592*			
2018		10 492*		
2019			13 134*	
2020				15 844*

Note: Decrease in 2020 due to reduction in production as a consequend to the inclusion of Schirm. Increase of COVID–19 in 2020 due to ash generated from coal red boiler which ran at a higher rate.

#### SOCIO-ECONOMIC DEVELOPMENT

CSI SPEND(Rm)



## NUMBER OF EMPLOYEES WHO HAVE ATTENDED LEADERSHIP PROGRAMMES



#### BURSARIESEXTERNAL AND EMPLOYEE DEPENDANTS

# LEARNERSHIPS, INTERNSHIPS, APPRENTICESHIPS AND GRADUATES 306



<sup>\*</sup> Indicates limited assurance.

<sup>#</sup> Baselines were determined by analysing the data in the respective years of highest production over the period 2017–2019. Increase due to inclusion of data from AECI Schirm and AECI Much Asphalt.

