



# Driving towards a sustainable future



## Our Purpose

At GE Steam Power, we work every day to transform the future of steam technology, help our customers create extraordinary outcomes for tomorrow, and keep the power on for everyone—whenever and wherever it’s needed.

## What we do

As an industry leader in cleaner power generation, we work collaboratively with our customers, helping them improve access to reliable and affordable power by harnessing local energy resources as well as implementing innovative power generation technologies to reduce environmental impact.

In South Africa, we are responsible for the engineering, procurement and construction (EPC) and quality of turbine islands and air-cooled condensers at the Kusile and Medupi power stations. In addition, GE Steam Power is constructing the first-of-its-kind environmental control technology system in Africa. The wet flue gas desulphurization (WFGD) plant at the Kusile site helps ensure that emissions released from the thermal power generation process are kept below limits specified by environmental regulations. Once completed, the two power stations will generate enough electricity to power nearly 7 million households in the country.

Outside of South Africa, we have been working closely with Zimbabwe Power Corporation over the past decade to provide reliable energy in support of the country’s growing electricity demand.

We are also active in various projects which vary in size and scope, in Tanzania, Botswana, Cote D’Ivoire and Kenya. These projects will not only close the infrastructure gap but bring much needed power, improve energy security and availability, and provide a catalyst for economic development.

GE Steam Power is proud to be part of GE’s group of companies encompassing healthcare, aviation and energy. GE generates nearly one-third of the world’s power—more than 1,600 GW of electricity—in 140 countries and helps equip 90% of the power transmission utilities worldwide.

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“Our goal is to help countries meet their energy and economic developmental goals given their local needs.”

**– Lee Dawes, CEO & Executive Regional Leader, SSA**



## A proud contributor to economic empowerment (B-BBEE Level 1 & 2)



### SKILLS DEVELOPMENT

Our education and training programs focus on bursaries, learnerships, experiential training, technical training, mentorships, and upskilling of youth living with disabilities.



### ENTERPRISE & SUPPLIER DEVELOPMENT

Through targeted preferential procurement, we have increased spending in support of small, black-owned businesses with a specific focus on Qualifying Small Enterprise (QSE) and Emerging Micro Enterprise (EME) businesses (turnover R10 million and R50 million annually) and businesses owned by people living with disabilities and youth.



### SOCIO-ECONOMIC DEVELOPMENT

We offer numerous socio-economic initiatives in communities across the country, funded by our corporate social responsibility (CSR) programs.

### INVESTMENT ON SUPPLIER TRAINING



## Promoting sustainable development

At GE Steam Power, our developmental approach is aligned with three United Nations sustainable development goals: Good Health and Well-Being; Quality Education and Decent Work; and Economic Growth. We believe that access to affordable, reliable, sustainable electricity is critical to reducing poverty and hunger as well as promoting access to education and healthcare.

And, as a company that has paved the way in innovation for more than a century, GE can deliver technology that helps achieve long-term sustainable development in an effort to meet the world's emissions reduction targets as defined by the 2015 Paris Agreement.

We recognize that to make a sustainable impact, we must be deliberate in our efforts to support social change. Over the years, large infrastructure projects have provided opportunities to create jobs and develop the critical skills needed to drive continuous growth in the energy sector.

“As a responsible corporate citizen, we strive to uplift the communities where we do business through various initiatives, including skills training and local supplier development.”

– **Nthabiseng Kubheka,**  
**Regional Services Executive**

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“Our steam technology surpasses the benchmarks set by the Organization for Economic Cooperation and Development (OECD) for pressure, temperature and emissions requirements, delivering higher efficiency coal plants with less impact on the environment.”

– **Paul Alan Collins, Project Director, Kusile Power Station**

### ENCOURAGING GOOD HEALTH AND WELL-BEING



Our top responsibility is to create a safe and healthy environment for our employees as well as the people in surrounding communities. We work closely with our customers to invest in technologies that reduce our environmental impact and help make our industry cleaner.

Acting with integrity, respect, and trust, we strive to challenge each other in everything we do. Our efforts to create an inclusive and diverse working environment free of discrimination, focus on both geographic and gender diversity. We believe that these efforts are an essential part of our ability to deliver large, global projects on time, on budget, and with the highest standards.



In 2018 Kusile’s Wet Flue Gas Desulphurization (WFGD) plant, the first of its kind installed on the continent, exceeded its performance test by achieving a 93% removal efficiency rate for SO<sub>2</sub>.

### SUPPORTING QUALITY EDUCATION



At GE Steam Power, we understand the importance of ensuring that the future generation of engineers, technicians, and scientists has access to necessary, effective training. Our efforts to support quality education are focused on reducing critical skills gap.

In 2018, GE Steam Power together with Eskom awarded needs-based four-year bursaries worth as much as R36 million to 60 students from the Mpumalanga province. This is another demonstration of a successful collaboration to help ensure continued investment in STEM skills.



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“The timely nature of projects renders us to think a little differently around how we nurture talent. As opportunities into service projects open up, it’s important we explore opportunities across vertical streams including manufacturing as well as reskilling (where needed) for maintenance and the operations of power plants.”

– **Nthabiseng Kubheka, Regional Services Executive**



MAKING A SOCIAL IMPACT—  
GE STEAM POWER SSA BY THE NUMBERS

INTERNAL—EMPOWERMENT

INVESTED **6%** OF OUR TOTAL SALARY BILL

to promote professional development and work-integrated learning through accredited training programs

RECEIVED THE **2017** International Project Management Association (IPMA) DIVERSITY IN PROJECT MANAGEMENT AWARD

honoring project managers and organizations that successfully manage and actively use diversity in their projects and organization.

EXTERNAL—SHARED VALUE

LOCALIZATION

ACHIEVED MORE THAN **70%** LOCAL CONTENT

by sourcing from local suppliers for our projects

SPENT AN ESTIMATED **R19 BILLION**

on local supplier development and black-owned businesses

JOBS

CREATED MORE THAN **3,000** JOBS

(at peak of projects), including about **2,800 local jobs**

SOCIAL INITIATIVES

INVESTED MORE THAN **R250 MILLION**

on corporate social responsibility (CSR) initiatives

SKILLS DEVELOPMENT AND TRAINING

DELIVERED APPROXIMATELY **1,500**

professional accredited training programs, bursaries, apprenticeships and learnerships

BSC MECHANICAL ENGINEERS

**65**

BSC CIVIL ENGINEERS

**46**

PIPE FITTERS

**141**

BSC CHEMICAL ENGINEERS

**21**

BSC INDUSTRIAL ENGINEERS

**3**

WELDERS A CLASS CODED

**176**

BSC ELECTRICAL ENGINEERS

**100**

BSC METALLURGICAL ENGINEERS

**2**

BOILERMAKERS

**121**

# PROJECT HIGHLIGHTS

## GE's school infrastructure upgrade project

Research shows that a healthy and safe learning environment aids learning and enhances education outcomes. In the past seven years, GE Steam Power—working with local municipalities and communities—has supported schools in the Mpumalanga province through its school infrastructure upgrade project, launched in 2013.

Through this initiative, about 10 existing schools have been refurbished and upgraded, and a new school has been built. The projects take the environment into consideration, implementing ecologically conscious solutions like rainwater harvesting, energy efficiency fittings, enviro-loo water-free toilets, and low-maintenance landscaping. This work has enabled a better and more productive learning and teaching environment.

Each project is implemented to benefit the community by providing employment and contracting opportunities that are coordinated in a fair and transparent way to help ensure project stability. GE aims to roll out four school infrastructure projects in 2019 in and around the Mpumalanga province. In addition to infrastructure and building upgrades, landscaping and recreational areas also will be included in some projects.

### THUSHANANG PRIMARY SCHOOL

#### More than 1,000 students benefit from school infrastructure upgrades



GE Steam Power committed R20 million toward the removal of asbestos classrooms and infrastructure upgrades that benefit more than 1,000 learners at Thushanag Primary School in Mpumalanga. The

scope of work includes upgraded asbestos-free classrooms as well as new kitchens, classrooms, administrative buildings and environmentally conscious ablution facilities.

Removal of the harmful material from the building helped the school meet government-defined regulations.

To support the development of local businesses, Pegasus Civil Construction was contracted to lead the upgrades. The company, based in Mpumalanga, further committed to subcontract a minimum of 25% of the work to local experts within the community.

Not only does the upgrade and refurbishment project serve the immediate needs of the school, but it will benefit more than 20,000 learners over the next 20 to 30 years.



### CHIEF AMPIE MAYISA SECONDARY SCHOOL

#### Upgraded science laboratory benefits 350 learners



The aim of the Chief Ampie Mayisa Secondary School science laboratory upgrade project, was to address the lack of access to science laboratory. To execute this project, GE Steam Power

once again, teamed up with Eskom in 2013 as part of the Kriel Power Station Retrofit project to find solutions to bridge this gap. The new state of the art equipment lets teachers conduct prescribed science experiments, providing experiential learning opportunities and practical exposure that better prepares learners for examinations.

The laboratory is benefiting 350 learners registered in 2019 between grades 10 to 12 who are pursuing STEM-related fields of study.

# DEVELOPING SKILLS...

## ...and increasing employability

It is said that 80% of learning and development happens on the job through challenging assignments, stretch opportunities, and performance development. GE's professional leadership, graduate, and learnership programs provide employees with new experiences and insights that accelerate professional growth and development. With GE's portfolio of early career rotational development programs, leaders of the future can grow their talent today in critical company functions.

Technology transfer and skills development are key drivers to advance long-term development of any sector, economy, or country. Not only does GE believe in the continuous development of the company and its employees, but it remains committed toward bridging the critical gap in STEM skills in South Africa. Through joint efforts with the government, universities, and industry professional bodies, GE provides access to necessary training through educational funding or skills development programs that build a future generation of STEM professionals.

### GE LEADERSHIP PROGRAMS—DEVELOPING FUTURE LEADERS



#### Commercial Leadership Program (CLP)

This two-year developmental program in commercial sales and marketing affords participants with three or four rotations, depending on specific business assignment requirements. Participants are placed in thoughtful, challenging roles to develop critical skills like leadership, critical thinking, and taking initiative. The program yields opportunities to work on career development with the best and brightest leaders in a fast-paced environment.



#### Edison Engineering Development Program (EEDP)

Designed for those with a passion for technology, a drive for technical excellence, and a desire to share in GE's core values, EEDP accelerates participants' professional and technical development within GE's Advance Courses in Engineering and a variety of business-critical engineering assignments. The program not only offers noteworthy experiences to get an engineering or product design career off to a good start, but participants also gain professional development through intense technical training and a variety of assignments that require pivotal contributions.



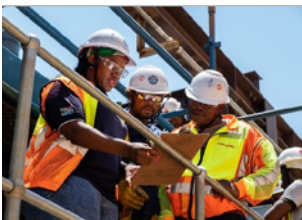
#### Human Resources Leadership Program (HRLP)

The two-year HRLP from GE offers exceptional experiences needed to build corporate human resource acumen and business skills for a career in human resources. Because culture is GE's competitive edge, the program's rotational assignments are designed to develop and grow HR professionals through numerous challenging experiences so they can contribute toward developing and retaining the culture of GE. HRLP members are afforded the opportunity for international cooperation as well as cross business and cross functional visibility.



#### Financial Management Program (FMP)

Spanning two years, this program offers exceptional experiences to launch a career in corporate finance and offers participants a platform to build strong corporate finance and business skills. This rotational program offers a proven path for accelerated career growth by combining coursework, a variety of job assignments, and interaction with senior GE leaders as well as the global FMP community. To date, FMP participants have garnered sought-after corporate finance and business skills and have gone on to assume leadership positions within the organization. FMP members connect every part of GE and offer insights that look beyond numbers to find solutions that help our business succeed.



#### Project Management Leadership Program (PMLP)

This two-year GE program offers active coaching to accelerate participant development. Through exposure to complex work assignments, PMLP produces leaders capable of meeting the challenges facing the operations, supply chain, quality, and engineering functions.



## GRADUATE PROGRAMS AND LEARNERSHIPS—CREATING A FOUNDATION FOR INNOVATION

GE offers graduate internship programs and entry-level learnerships to participants who are strong candidates to feed into GE's pipeline. These programs and learnerships equip participants with work assignments and continuous coaching while delivering invaluable work experience that develops graduates with a technical, administrative, and business foundation to proactively make innovative contributions to GE's future.



### Early Career Graduate Internship Program (ECGIP)

This 12-month career growth program for recent graduates offers its members the opportunity to solve real-world challenges and build a strong network within the organization through cross functional collaboration. ECGIP offers opportunities across different business functions as participants work alongside like-minded people to hone technical skills and business insight.



### Learnership Program

This two-year learnership, initiated in 2016, has afforded South African youth living with disabilities with invaluable work experience across sales and commercial operations, business administration, marketing and communications, and finance and human resource career fields. This learnership forms part of GE's diversity and inclusion strategy that seeks to strengthen inclusion and equity. More than 30 learners have benefitted from the program structured with training and developmental initiatives to harness leadership skills, business acumen, and soft skills.

## BRIDGING THE ARTISAN SKILLS GAP

South Africa's growing need for electricians, welders, mechanics and other manufacturing skills has placed artisans among the top trades in demand to spearhead economic growth and job creation.

In 2014, GE teamed up with Eskom to launch a two-year apprenticeship program to train unemployed youth in artisan skills. The Merseta accredited program aligns to government goals outlined in the National Development Plan and the White Paper on Post-School Education to produce 30,000 artisans by 2030. Since the program was introduced, more than 960 artisans have been trained and qualified as welders, engineers, fitters, and boilermakers.



### Accelerated and Shared Growth Initiative (ASGISA)

By providing necessary training, this program helps accelerate and narrow the gap in scarce skills and increase the employability of graduates. Benefitting more than 50 trainees in various fields of engineering to date, the program has supplied talent to both the Kusile and Medupi projects. ASGISA continues to further empower youth with skills that will benefit the South African economy through qualification and registration with the Engineering Council of South Africa.



### Bursaries

GE's Bursaries program offers young, prospective graduates' opportunities to take advantage of a fully comprehensive bursary while studying toward—though not limited to—Bachelor of Science, Bachelor of Commerce, or Bachelor of Arts qualification. GE's work with various South African universities highlights our commitment to developing and improving critical skills in South Africa. The bursary is aimed at covering the tuition, textbook and accommodation costs of financially needy university students who meet the 60% academic average requirement. In 2019, GE Steam Power invested R12 million in bursary provisions to seven South African universities to alleviate student financial strain.



## INVESTING IN OUR COMMUNITIES TO CREATE SHARED VALUE

GE Steam Power prides itself on partnering with local communities to create shared value in the places where we do business. We provide jobs and training in the communities where we develop power projects, and we do so with a strong record of respect for human rights and promoting safe working conditions.

### POWERING PEOPLE, EMPOWERING COMMUNITIES

GE Volunteers is a global network of GE employees and affinity groups that encourages and supports volunteering activities in communities where GE employees live and work. The projects vary in sizes and scope and, depending on the country, can span across health education, environmental, and community building. The Alusani volunteerism initiative, launched earlier this year, is a GE Steam initiative that encourages employees to identify social projects within the communities in which they live. The program aims to create social awareness and promote ownership, accountability, and a culture of giving back.

Here are a few examples of completed projects:



#### Uitkoms Shelter of the Roepings Bond

Chris Grobler, site and installation operations specialist, realized his vision to install a solar power kit and an automated water irrigation system to sustain the vegetable garden at the Uitkoms Shelter. Achieving this milestone will help restore food shortage challenges and lessen overhead costs at the shelter, which houses 50 families.



#### Impilo Yesizwe Homebased Care and Ndzalamu Daycare Center

Maipato Marumo, site secretary, led a community initiative that donated 14 wheelchairs, laptops, printers and staff uniforms to the Impilo Yesizwe Homebased Care facility in Witbank to assist the organization with its day-to-day operations. Additionally, the Ndzalamala Daycare Center received a painting material donation in addition to 25 mattresses, heaters, and jolly tables. When construction is complete, the learning experience will be enhanced for the 27 preschoolers who attend the daycare.



#### Hlalanikahle Library of Hope

Palesa Molise, electrical engineering intern, and Thandekile Makofane, material handling administrator, made an impactful contribution to the community of Hlalanikahle, Witbank by building new toilet facilities and providing an electric cable that supplies electricity for the library, allowing the facility to extend its operating hours and increase footfall.



#### Duvha Combined School

Bennet Mavundla, project contract manager, sponsored the electrification of the Duvha Combined School to help enhance the learning experience of its students. Since an arson attack at the beginning of the year, most of the classrooms' electricity circuits had been non-functional. This project turned the lights back on!



#### Reach For Life Homebased Care

Ashlyn Mashoene, candidate process engineer, assisted the Reach For Life Homebased Care organization through the donation of wheelchairs, refrigerators, medical aid kits, and sporting equipment. These items will help the facility qualify for Central Chronic Medication and Distribution Program certification that will allow patients to receive medication at the center instead of waiting in long queues at local clinics.

## UPCOMING INVESTMENTS AND COMMITMENTS

### Botleg Clinic, Delmas

#### Description

Primary Healthcare Clinic offering primary consultation, dentistry, maternity and labor (pre-birth) services, child healthcare, emergency services, counselling, HIV treatment, post-natal care, and a dispensary

#### Investment

R45 million



### Dunbar Primary School, eMalahleni

#### Description

The project involves the construction of 30 new Enviro-Loo dry toilets and an additional eight classrooms as well as landscaping.

#### Investment

R10 million



