



Contents

1	About Eskom Development Foundation NPC
2	Overview of activities
3	Performance at a glance
4	Sector performance
5	Enterprise development
13	Social development
45	Employee volunteerism
48	Supplementary information
49	Graphs: overview of activities
53	Full list of beneficiaries

Our suite of reports

Our 2016 suite of reports comprises the following, all of which are available online:



Integrated report and fact sheets

The integrated report, which provides an overview of our performance, is prepared in accordance with the IIRC's International <IR> Framework, and subject to combined assurance. Supplementary information, pertinent to interested stakeholders, is available at the back of the report; additional fact sheets are available online



Annual financial statements

The consolidated financial statements of Eskom Holdings SOC Ltd have been prepared in accordance with International Financial Reporting Standards (IFRS) as well as the requirements of the Public Finance Management Act, 1999 and Companies Act, 2008, and audited by our independent auditors



Foundation report

The Eskom Development Foundation NPC (the Foundation) is responsible for the coordination and execution of our corporate social investment activities in support of our business imperatives. The report details the operations and activities of the Foundation for the 2015/16 year

www.eskom.co.za

About Eskom Development Foundation NPC

Eskom's objectives are not limited to commercial concerns. Its performance is also measured by the overall value we add to the lives of the South African public. Our developmental responsibilities range from building and maintaining power plants and networks to supplying households, schools and industries with electricity, to supporting local enterprises and stimulating skills and job creation. Eskom is also about creating a base on which South Africa can grow, helping to transform the lives of the large percentage of the population that lives in poverty.

The Eskom Development Foundation (the Foundation) is responsible for the execution and co-ordination of Eskom's corporate social investment (CSI) strategy in support of Eskom's business imperatives. This strategy supports socio-economic development programmes by targeting primarily the communities where Eskom operates. To this end, we have a number of flagship and national programmes that address specific developmental needs; which include enterprise development in the economic sector and education, health care, energy and the environment, rural school infrastructure development and welfare in the social sector.

The Eskom Development Foundation NPC is a non-profit company which was incorporated on 1 December 1998. The Foundation, which is solely funded by Eskom, is responsible for its corporate social investment initiatives.

Eskom Holdings, a state-owned company, is mandated by the Department of Public Enterprises, to which it is accountable, to "provide sustainable electricity solutions to grow the economy and improve the quality of life of the people of South Africa and the region".

Eskom is committed to improving the quality of life in the communities in which it operates. The Foundation focuses on socio-economic development needs as follows:

Support to small and medium enterprises is provided through the following:

- Eskom Business Investment Competition for registered, black-owned small and medium enterprises, which includes the Eskom Simama Ranta Entrepreneurship Education Competition
- Business Entrepreneurship & Franchise Expo
- Eskom Contractor Academy
- Incubator support

Education programmes:

- Upgrading of rural school infrastructure
- Early childhood development
- School support programme that focuses on mathematics, science and computer literacy
- Energy and sustainability school outreach programme
- Tertiary education support programme

Health support programmes:

- Mobile bus health clinics for rural communities
- Providing medical equipment

Community development and welfare programmes include the following:

- Funding specific needs related to training, equipment or materials for hospices, homes for the aged, children's homes, people with disabilities and disaster relief
- Funding localised community needs through donations
- Food security projects to develop sustainable livelihoods in rural communities
- Employee volunteer programme

Eskom Development Foundation NPC

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Overview of activities

We operate in the nine provinces of South Africa. Economic and social development managers and advisers employed by Eskom are based in each province to represent the Foundation.

Target groups

The primary target groups are women, youth and children, as well as people with disabilities.

Sustainability

Sustainability is a vital element of Eskom's corporate social investment (CSI) interventions. It is considered in developing the Foundation's strategy and also at a project level.

In terms of our CSI strategy:

- Support provided to small businesses through skills development and marketing support assists these businesses in growing and providing further

employment opportunities; and contributes to creating a pool of small and medium enterprises and black woman-owned suppliers from which Eskom and other large corporate companies can procure goods and services

- Support is provided for education, from the early childhood development phase onwards. It is a long-term strategy aimed at ultimately contributing to an improved pipeline of Grade 12 learners with good results in mathematics, physical science and language, helping them to study in the engineering and technical disciplines to meet the human resources needs of Eskom and South Africa
- Support provided to TVET colleges contributes not only to improving the employability of the youth, but also to creating a future pipeline from which to draw technical skills, for Eskom and other industries

Foundation-approved funding

	2015/16		2014/15		2013/14	
	Number of projects	Rm	Number of projects	Rm	Number of projects	Rm
Grants for flagship and national programmes and economic and social sector projects	13	67.0	16	79.4	20	81.5
Donations to registered, non-profit philanthropic organisations	168	24.5	216	15.9	210	28.4
Rural development	3	12.1	7	20.2	5	23.0
Total	184	103.6	239	115.5	235	132.9

Programmes

We have several flagship programmes and also support a number of national programmes that are deemed important for the socio-economic development of the South African landscape. These are classified as enterprise development and social development programmes.

Donations are also considered to philanthropic and welfare causes involving registered non-profit organisations. The donation of assets is facilitated and accounted for on behalf of Eskom and its subsidiaries.

Performance at a glance

During the year, the Foundation funded 184 projects to the value of R103.6 million with 302 736 beneficiaries (2014/15: 239 projects for R115.5 million with 323 882 beneficiaries; 2013/14: 231 projects for R133 million and 357 443 beneficiaries).

Programme	2015/16			2014/15			2013/14		
	No. of projects	Approved Rm	Beneficiaries	No. of projects	Approved Rm	Beneficiaries	No. of projects	Approved Rm	Beneficiaries
Enterprise development									
Eskom Business Investment Competition	1	9.2	65	1	16.0	79	1	13.2	84
Business Entrepreneurship & Franchise Expo	1	6.1	61	1	8.9	64	1	7.8	63
Eskom Contractor Academy	1	13.5	144	1	15.0	156	–	–	–
SMME development	1	0.4	28	–	–	–	–	–	–
Business incubators	–	–	–	–	–	–	2	9.0	135
Sub-total	4	29.2	298	3	39.9	299	4	30.0	282
Social development									
Eskom Expo for Young Scientists	1	16.0	20 416	1	14.5	12 553	1	15.5	8 708
Eskom energy and sustainability programme	1	6.0	186 802	1	2.5	147 885	1	2.5	197 183
Infrastructure development	3	12.1	1 619	7	20.2	2 293	5	23.0	1 232
Education ¹	6	14.2	21 134	5	15.4	8 222	3	16.6	1 140
TVET colleges ²	–	–	–	5	–	–	6	–	–
Food security	–	–	–	–	–	–	1	0.1	–
Health	1	1.6	–	1	7.1	–	2	16.9	28 080
Philanthropy and welfare	168	24.5	72 467	216	15.9	152 630	208	28.4	120 818
Sub-total	180	74.4	302 438	236	75.6	323 583	227	103.0	537 161
Total	184	103.6	302 736	239	115.5	323 882	231	133.0	357 443

1. Education projects managed by Eskom's Human Resources Division included.

2. Formerly known as Further Education and Training Colleges.

Sector performance

- 5 Enterprise development
- 13 Social development
- 45 Employee volunteerism

Sector performance

Enterprise development



Since the inception of corporate social investment at Eskom, one of its key focus areas has been to give small and medium enterprises (SMEs) the capacity to enable them to develop, grow and compete in the formal economy. A lack of management and business skills negatively affects the ability of SMEs to grow and become sustainable. Many enterprises have difficulties with accessing finance because their business models are flawed and they often lack sufficient collateral for loans. The Foundation seeks to address this challenge.

Eskom Business Investment Competition



The annual Eskom Business Investment Competition (BIC) was launched in 2009 by the Foundation with a view to recognise, reward and inspire small businesses that are significantly contributing to the fight against South Africa's biggest socio-economic challenges, unemployment and poverty.

The BIC rewards outstanding work in entrepreneurship and encourages small and medium enterprises to thrive and lead the country's economic development. The competition is open to local, black-owned and registered enterprises that have been operating for more than 24 months in the agriculture, manufacturing, trade and services sectors.

The competition helps the enterprises move to the next level as over and above the financial rewards, business skills and training are provided to contribute towards sustainability. With R1.3 million worth of prizes in 2015, the competition was evidently tough for the 65 finalists from across the country.

The overall winner for 2015 took home a cash prize of R150 000. Winners in each of the four sectors (manufacturing, services, trade and agriculture) received R100 000, first runners-up in each sector received R50 000, while second runners-up collected R25 000. The rest of the finalists received R5 000. Prizes include a cash component to invest into the business, as well as a series of training workshops to gain important business skills.

In addition to the abovementioned rewards, all finalists were given free exhibition space at the annual four-day Business Entrepreneurship & Franchise Expo (BEFE) held at the Ticketpro Dome in Johannesburg. Every year, the expo provides small and medium enterprises with a versatile marketing platform from which to build brand awareness and network with potential customers and investors.

The 2015 team of adjudicators were unanimous in their satisfaction with the quality of this year's entrants. The finalists impressed with their excellent business skills, professionalism and the passion they all displayed for their businesses. Despite the fierce competition, all the adjudicators were in agreement that they had found a worthy winner in Mamapo



Enterprise development

continued

Chemicals from Lebowaikgomo, Limpopo. The company, which was competing in the manufacturing category, was named the overall winner for 2015.

Mamapo Chemicals



Eskom BIC 2015 overall winner and Foundation CEO, Haylene Liberty-Nel.

The company was founded in 2012 by Ezekiel Madigoe, who, upon completing his BSc degree in Chemical Engineering, decided it was time to start his own business. Mamapo Chemicals is an innovative manufacturer and distributor of cleaning chemicals for industrial, commercial and household consumption. Part of their production process involves collecting waste chemicals from detergent manufacturing companies, recycling and processing them into degreaser and car wax, as well as a range of multipurpose cleaners.

With 34 employees, the business has grown far beyond expectations, and intends to buy additional machinery to increase production to meet demand.

Madigoe said that being named the overall winner of the competition was totally unexpected as they were just happy to make it to the finals. The prize money will be used to expand operations and create more than 150 jobs.

Mospak Trading and Projects Primary Co-operative



Eskom BIC 2015 Awards, Foundation Chairman, Chose Choeu, BIC manufacturing sector winner, Mospak Trading and Projects, Foundation CEO, Haylene Liberty-Nel, Grace Mothusi from MTN Business and Palesa Mosiea from Mospak Trading and Projects.

The company, based in Phuthaditjhaba in the Free State, took the honours in the manufacturing sector. The company has been in operation since 2012. With 60 employees, the full-on cut, make and trim (CMT) factory manufactures clothing, including school uniforms, personal protective clothing (PPC), corporate wear/uniforms and linen.

Like many small businesses, they struggled to stay afloat, but have since grown. They have improved the quality of the garments they produce and with the R100 000 prize money they plan to buy more equipment, including an embroidery machine, a generator and a printer, which will assist with the expansion.

Exquisite Stationery



Western Cape services sector winner and Foundation CEO, Haylene Liberty-Nel.

The winner of the services sector, headed up by managing director Ms Shariefa Osman, is a Cape Town-based company that provides a wide range of stationery products and printing solutions to its customers. The company has eight employees and its clients include Sanlam, Santam and Woolworths.

After their near collapse two years ago, they have come a long way and grown beyond their wildest imagination. Using the prize money, they plan to expand and create more job opportunities.

Ngaphaya Y2K10



Western Cape trade sector winner and Foundation CEO, Haylene Liberty-Nel.

The first prize winner in the trade sector is from Cape Town. The company, owned by Ms Jennifer Classen, offers procurement services for general tools and specialised equipment and supplies goods as per specifications mainly to government and public enterprises. They also train and assist women-run small and medium enterprises in basic business management skills.

Ms Classen said that winning this prize comes as recognition for their hard work and also as affirmation that she needs to keep at it and possibly do more. They plan to increase their product offering and meet more customers' demands.

Greenland Landscaping



Eskom BIC 2015 Awards, Foundation Chairman, Mr Chose Choeu, BIC agriculture sector winner, Greenland Landscaping, Foundation CEO, Haylene Liberty-Nel and MTN Business, Grace Mothusi.

Limpopo-based Greenland Landscaping in Thohoyandou emerged as the winner in the agricultural sector. The company has 22 employees and specialises in designing gardens for homeowners in and around Thohoyandou. Over and above planting avocados and pears, the company also operates a nursery.

Owner, Ms Aluwani Netshia commented that her father gave her 10 hectares of land to start the business eight years ago and that she has never looked back. The prize money will be used to expand the business.

Eskom Simama Ranta Entrepreneurship Education Competition



The Simama Ranta (SR) competition is aimed at identifying and acknowledging South African secondary schools that are exemplars and leading the way in entrepreneurship education. The Foundation believes that one of the best ways to curb underdevelopment in our communities is to teach the youth of South Africa, at school level, that entrepreneurship has to be considered a viable career choice. Instead of studying to be job seekers, they could learn the skills to start and run successful businesses and in so doing, become job creators.

All South African intermediate and secondary schools are eligible to enter. To qualify for the competition, these schools must run an enterprise club that teaches learners the basic principles of business through practical application while responding to their respective communities' socio-economic challenges. The prize money for the overall winning school club is R100 000. Each provincial winner receives R75 000. Provincial runners-up receive R25 000 and provincial second runners-up each receive R10 000. In addition, the provincial winners are invited to exhibit their work at the annual Business Entrepreneurship & Franchise Expo.

In the 2015 finals, 28 schools from across South Africa attended the Simama Ranta Awards where the overall and provincial winners were announced. The overall winner was New Orleans Secondary School from Paarl in the Western Cape.

New Orleans Secondary School



Western Cape, Eskom Simama Ranta 2015 winner, New Orleans Secondary School.

The "New Orleans Yes Club", which started with only 10 members in April 2014 and has now grown to 60 members, aims to make a difference in their community.

Enterprise development

continued

This club's passion is to support battered and abused women and neglected children. For their first project, they hosted a market day, where they generated enough funds to buy all the women at a local shelter new boots for winter as well as scarves and matching caps for the children.

The club is now planning on developing a "load shedding life saver project", to manufacture light bulbs that use electricity sparingly, and to sell them to Paarl residents and businesses. They also want to start their own "health food court", where they will sell fruit and healthy snacks during school breaks.

Eskom BIC winner's star continues to shine

In 2014 the Strato Group was named the winner in the manufacturing category of the Eskom Business Investment Competition (BIC) and the company has since made major strides in establishing itself in the fashion industry.

Strato, which creates designs that humbly show an intrinsic understanding of the new African streetwear man, has appeared on the local catwalks such as Mercedes Benz Fashion Week Cape Town and Design Indaba, along with making its debut in international magazines Le Cap and the French edition of Louis Vuitton City Guide.

Strato presents itself as a sought after, original urban brand in its South African design aesthetic. It is a celebration of the country's humble beginnings in dusty streets, a lifestyle apparel that reflects all things contemporarily African.

The company has come a long way since bursting on to the local fashion scene in 2011 when designer Maloti Mothobi opened the Strato Concept Store on Long Street in Cape Town and an online store. Mothobi, a fashion design graduate from the Cape Peninsula University of Technology had started her career in the buying department of the Foschini Group before going out on her own.

Following her achievement at the BIC, in 2015 Mothobi was nominated by Mail & Guardian as one of 200 Young South Africans to watch in the Arts and Culture category. In the same year, her company celebrated yet another milestone and the beginning of a new dawn in African fashion as they opened their Johannesburg concept store in Marshalltown, Johannesburg, made possible by some of the R150 000 prize money from the BIC. The company has a total of six employees in all its operations.

"One of the main lessons the club members learnt, was the importance of working together as a team," said club chairman, Cole Wessel.

He further commented that they are not just team members, they have become a little family of learners, who want to better their community and school; and that none of them want to be employees one day, but all intend to be employers.

"Winning the Eskom Business Investment Competition last year gave us more confidence to spread our wings. The experience fuelled our desire to broaden our portfolio and we opened the doors of the Strato Group's manufacturing subsidiary, StyleKontrol, to designers and corporate South Africa. Our offering includes small and medium scale manufacturing (CMT), supplying t-shirts, promotional and corporate clothing. We also provide in-house garment digital printing and embroidery solutions to the public, nationally," says Mothobi.

StyleKontrol aims to bridge the gap in clothing manufacturing between micro enterprises and giant suppliers. "At the Strato Group we strive to continuously develop our craft to meet the dynamic demands and expectations of a growing client base. We stand firm behind unique creative concepts and ensuring quality products that are driven by passion for design," declares Mothobi.



The Cape Town Long Street store attracts many young people.

Business Entrepreneurship & Franchise Expo



The Business Entrepreneurship & Franchise Expo is presented by the Brand owner and exhibition organiser specialists Thebe Exhibitions in partnership with the Foundation. The Expo's aim is to develop and promote opportunities for entrepreneurial businesses that want to grow, diversify and succeed.

The 2015 Business Entrepreneurship & Franchise Expo drew entrepreneurs and influential business owners from across the country. This platform enabled aspirant entrepreneurs, suppliers, customers, investors and funders to come together and explore a variety of investment prospects and franchise options, enhanced by workshop programmes and extensive networking opportunities.

Eskom was well represented amongst the 210 exhibitors with 49M, IDM, Public Safety, SD&L and the Foundation exhibiting. Of the total, 126 companies that exhibited are black-owned. This included the BIC finalists. There were 4 354 visitors over four days. International visitors came from Botswana, Namibia, Zimbabwe, Ivory Coast, Nigeria and India.



Eskom Contractor Academy

The Eskom Contractor Academy trains emerging contractors and suppliers on fundamental business skills over an eight-month period. This is in support of government's initiative to create jobs, develop skills and alleviate poverty. Students are trained, amongst others, in finance, project management, safety and people management. The programme is run in all provinces, but the focus area is around Eskom's new build sites such as the Kusile Power Station in Mpumalanga. All provinces are represented at the eight sites where training was conducted in Bloemfontein, Cape Town, Durban, East London, Harrismith, Ladysmith, Midrand and Polokwane.

Since its inception in 2008, the academy has made a huge impact in the small businesses that have been engaged and has given invaluable opportunities to emerging contractors nationally. In the period 2010 – 2012 for instance, 438 contracts with a total value of R1.2 billion were awarded to contractors who completed their training through the academy. Based on information gathered from these companies, 302 new permanent jobs and 242 temporary positions were created. In addition, R269 million was invested by the businesses in assets such as vehicles, trucks and R4 million in buildings, offices and workshops.

The objective of the academy is to equip emerging contractors and suppliers (especially black women-owned and black youth-owned companies) with the entrepreneurial, legislative, management and leadership skills needed to run a business successfully. The programme is facilitated by Edupark, a non-profit company of the University of Limpopo. The modules are accredited by the relevant SETAs and students who successfully complete the whole programme are awarded a certificate by the University of Limpopo.

Contractor Academy student analysis

Demographic table	2015/16	2014/15	2013/14
Black men	67	88	129
Black women	77	68	89
Total number of students	144	156	218
Number of youths included in the total	67	156	99

Since inception, 1 014 students enrolled and 991 students successfully completed the course; a success rate of 97%.

Provincial profile – Contractor Academy

Province	2015/16				2014/15				2013/14			
	Number of students				Number of students				Number of students			
	Total	Men	Women	Youth	Total	Men	Women	Youth	Total	Men	Women	Youth
Eastern Cape	13	10	3	3	17	11	6	3	29	17	12	11
Free State	20	11	9	9	22	12	10	11	31	20	11	16
Gauteng	9	3	6	4	10	6	4	6	15	10	5	7
KwaZulu-Natal	30	13	17	16	28	17	11	25	30	18	12	17
Limpopo	13	4	9	9	17	7	10	14	30	17	13	22
Mpumalanga	27	14	13	16	28	18	10	16	27	19	8	9
Northern Cape	7	1	6	–	8	4	4	5	13	10	3	5
North West	8	3	5	4	8	5	3	5	13	8	5	5
Western Cape	17	8	9	5	18	7	11	8	30	10	20	7
Total	144	67	77	66	156	87	69	93	218	129	89	99



Proud Contractor Academy participants on their graduation day.

Ermelo Welding Project, Wesseltion and Ermelo, Mpumalanga

The Ermelo Local Business Services Centre requested Eskom to become part of a welding project for community members within Wesseltion in Ermelo. The centre provides capacity building through skills development and facilitates training of small, medium and micro enterprises to enable them to contribute towards local economic growth. Funding was approved towards basic welding training for 28 community members. At their graduation, they requested Eskom to assist them to obtain further qualifications in tig, gas and CO₂ welding.

The Foundation obliged and approved funding towards additional welding training for 28 community members from Ermelo, to enable them to obtain jobs around the area or embark on their own small businesses. The training was completed in January 2016. The qualified welders' details were added to Camden Power Station's local database when sourcing welding services and these contractors may be sourced through the database for job opportunities.



Young men from the community put theory into practice.

Eskom Contractor Academy student's business in Limpopo thrives

In 2009, Ms Mikateko Jeleni from Malamulele in Limpopo made a decision which changed the course of her life. The 40-year old mother of three, who had until then been working as an educator, realised that she didn't have a passion for teaching and instead had a keen interest in becoming an entrepreneur.

According to a 2015 Feasibility Study by the Municipal Demarcation Board, unemployment in the Greater Malamulele area stood at a dire 49%. With enterprises like Vukona Trading, the high rate of unemployment could go down.

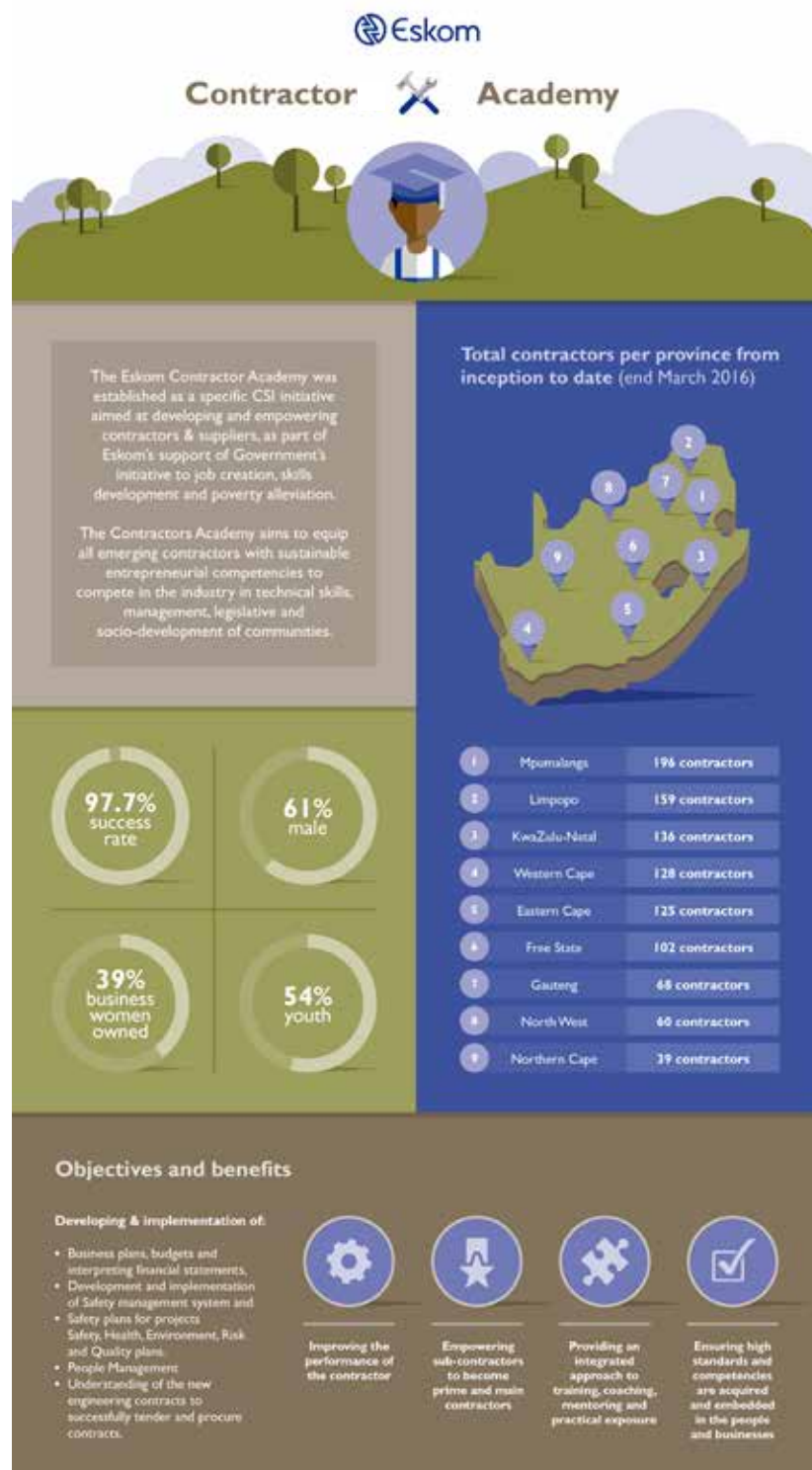
Ms Jeleni registered her business, Vukona Byayena Trading, in 2006 but only started operating in 2009 after securing a three-year contract from Eskom as an electrical contractor for electrifying newly built houses in towns. For some time, the business stayed stagnant and was not growing as she had expected. That was when she found out about the Eskom Contractor Academy. She successfully completed her academy course in 2013.

According to Mikateko, people usually don't know what they don't know and the Eskom Contractor Academy was a real eye-opener for her considering the skills she had gained. She did not know how to put together a proper tender bid document before, but since completing the course, she has been consistently winning some good contracts, helping her business to grow. In the last three years, her business has won several contracts for electrification, live work, vegetation management or bush clearing, as well as maintenance and wood pole replacement. The company currently employs 42 people and has set objectives to expand.

Mikateko commented that unemployment is a major problem across South Africa and she was pleased that, in a small way, she was enabled to be part of the solution in her hometown.

Enterprise development

continued



Sector performance

Social development



Since the inception of corporate social investment at Eskom, another of its key focus areas has been to focus on development needs in the social sector, which includes projects in the health, education, environment, community development and welfare sectors. The Foundation seeks to contribute to addressing some of these challenges.

Early childhood development (ECD)

The Foundation embarked on an education programme to assist formative learning at grassroots level to improve education through equipping education practitioners with the necessary knowledge to give young children a chance to a quality life and started the ECD Programme. The overall programme goal is to provide quality, holistic and sustainable early childhood development training and educational material for community-based early childhood development centres that promotes children's universal rights.

The programme was approved and implemented from 2013 to 2015 to benefit 186 preschools with 9 023 children and 346 practitioners around KwaZulu-Natal (Ingula at Mnambithi and Nquthu), Mpumalanga (around the Return-to-service power stations (Camden and Komati); Kusile and Majuba Rail in Ermelo, as well as in East London in the Eastern Cape. The funding was used towards training and equipment. As training is completed, the educational material and outdoor equipment are delivered to preschools, with planned completion by April 2017.

The training was completed in December 2015. Practitioners are now enabled to provide a sound early childhood development service. They are empowered to prepare early childhood development programmes, design activities for children, prepare resources for a stimulating learning environment, provide proper care for the children, observe and report on child development, as well as being empowered in maths and communication literacy.

Site support visits were conducted to assess and support practitioners with practical implementation of the theory. Progress was evident in the areas of development. Classroom layouts improved, themes were displayed on the walls, observation and reporting records on each child's development have been recorded. Practical demonstrations and role play during training enhanced the practitioners' understanding of different concepts discussed, which they found very useful as they were enabled to apply the newfound knowledge, skills and competencies in their own schools, which also boosted their confidence. They now provide a holistic early childhood development service to the children in their care.

Rural infrastructure development

It is aimed at addressing inadequate infrastructure by contributing to the building of schools, the renovation and construction of multipurpose centres, the construction of access roads and food markets and other infrastructural needs.

Social development

continued

In 2001, Eskom undertook to support Government's integrated sustainable rural development programme (ISRDP). This was made possible by providing strategic inputs into identifying the gaps in the integrated development plans for local and provincial government.

The programme is boosted by strong partnerships with various government departments and municipalities.

In the period under review, we have upgraded school infrastructure or conducted building projects in three schools, resulting in 1 619 beneficiaries (2014/15: seven schools with 2 293 beneficiaries; 2013/2014: five schools with 1 232 beneficiaries).

Chief Luthuli Primary School, Luthuli Village, KwaMhlanga

The school started in the year 2000 in an open and semi-rural area called Luthuli Village in KwaMhlanga in Mpumalanga. The school is 3km from KwaMhlanga crossroad at the R538. This school was named after the late Chief Albert Luthuli.

The school started operating in tin shacks with two official educators and three volunteers and with 140 learners. Luthuli Village is dominated by young men and women, most of who are working as domestic workers in KwaMhlanga. Some commute to the nearby city of Tshwane. These parents leave their homes at around 4:00 in the morning and return home at around 21:00 in the evening.

In 2002, the Japanese Embassy entered into a partnership with the Department of Basic Education in South Africa. The partnership included, amongst other things, to build schools in the country, and Chief Luthuli area was amongst the chosen few.

This school has again been selected in the +94 Projects for Madiba Programme and is one of the largest primary schools in KwaMhlanga.

The school was in need of an administration block, a new kitchen block and alterations to the existing two classrooms with some external works.

Design drawings were prepared by professional services appointed by Eskom and construction was executed by a contractor appointed by Eskom. This project was successfully completed and handed over in the presence of all stakeholders including the provincial Department of Basic Education, the Department of Public Works and Roads and the school governing body.

Since Eskom's intervention, enrolment has increased from 1 101 to 1 250 learners in 2015, due to the two classrooms refurbished for teaching and learning.

The 31 educators now enjoy the space in the new administration block, which offers offices, lavatories, a reception area, a document room, sick bay and kitchenette. Meals are now cooked and served in a more suitable kitchen.



The school's toilets before...



...and after.



The new kitchen space.



The new kitchen and catering building has pride of place at the school.

Ngqengelele High School, Mahlabathini

Ngqengelele High School is located in a deep rural area of Mahlabathini under the Ulundi Municipality in KwaZulu-Natal. It was built by the community in 1996. The first classroom was used for Grade 8 learners. Each year the community would add a new classroom. There are six classrooms built by the community; and another four classrooms were added by a donor.

The school produced many outstanding Grade 12 results in the past; and as a result, Shoprite donated computers which were unable to be used as there was no electricity.

Supplying electricity to the school would help the 323 learners and the 15 educators to use the donated equipment. Learners would also benefit by being able to have evening classes because of their access to electricity. In the past learners were using candles to study during examination time, which is now something of the past. This has assisted the school to improve the teaching and learning conditions. The school's mission is leading and providing their community with responsive, relevant and quality education and training, resulting in academic excellence and practical experience.

The atmosphere was palpable on the day that the excited learners, educators and community witnessed "the switch-on".

Mathematics, science and technology programme

The student development department in the Human Resources Division is the custodian of the mathematics, science and technology programme. Several programmes were initiated in 2003 in support of the Dinaledi Programme launched by the Department of Basic Education to improve studies in mathematics and science in South Africa.

The Human Resources Division celebrated the twelfth anniversary of the mathematics, science and technology programme. Our investment in education is a comprehensive intervention enabling our youth to realise their full potential.

The programme was launched to identify high schools with the potential to improve the mathematics and science results and attract girl learners to participate in these subjects. The primary objective was to provide the much-needed pipeline of the high school learners who would supply Eskom and other industries with critical engineering skills. In pursuit of these objectives, Eskom provided funding to cover the costs for additional requirements. The schools, mostly in rural areas, were selected from previously disadvantaged backgrounds. The National Development Plan has also identified mathematics, science and technology as one of South Africa's long-term goals for basic education.

Eskom's strategy was to double the number of learners passing mathematics and science and increase the number of girl learners. The focus was on the provision of resources; the educator development support programmes and constant monitoring on progress achieved.

In 2003, eighteen schools from the nine provinces (two schools per province) were selected as pilot schools for the programme. It was then popularly known as the 18 Schools Programme.

Challenges

Many schools lack educators with appropriate qualifications, experience and confidence to teach the critical subjects, as well as experiencing insufficient allocation of educators. Furthermore, schools had few or no adequate teaching resources. Where facilities for practical teaching were available, they were ill equipped or had no equipment. Most of the schools fall under the “no school fee” category and some have no proper ablution facilities. Many schools also had communication challenges.

Selection criteria

- Previously disadvantaged schools
- Must have potential to improve performance
- Must offer mathematics and science
- Must participate in initiatives like the Eskom Expo for Young Scientists

Achievements based on objectives

This is a snapshot of the achievements of the Eskom “Dinaledi” schools, based on the objectives:

- All the schools qualified to be in the Dinaledi programme initiated by the Department of Basic Education (DBE). This was because of the improved resources that were provided to the schools
- The DBE adopted the Eskom model of monitoring and evaluation at the schools
- All the schools participated in the mathematics and science higher grade stream and no longer the standard grade. This ensured that the Grade 12 learners at the time could qualify to be in Eskom’s pipeline for university entrance
- The greatest achievement was when the number of girls taking mathematics and science surpassed that of the boys by close to 120%
- In the previous Grade 12 results, girls obtained more distinctions in both the subjects than boys
- Eskom has awarded bursaries to some 1 500 learners for tertiary education from 2004 to 2012 and thereafter, 400 merit bursaries in various fields, 500 bursaries for university engineering studies and 430 technikon bursaries

Highlights from other schools and some latest resources provided

Name of school and location	Year	Total	Pass %	Number of distinctions
Mbilwi – Venda, Limpopo	2012	403	98.5	49
	2013	421	99	62
	2014	478	98.9	71 2015 top science learner in South Africa
	2015	386	95	43 Mathematics; 49 Science Mbilwi has been the top school in the former Venda in Limpopo until 2015 when Thengwe toppled them. Very active in the Eskom Expo for Young Scientists with learners participating in London and Australia in 2015. In 2015 Mbilwi learners worked on a project to produce electricity from lemons and avocado, and were featured on the SABC 2’s Morning Live show
Thengwe – Venda, Limpopo	2012	237	95.7	21
	2013	290	98.5	28
	2014	242	97.6	30
	2015	242	95.5	33 Mathematics; 30 Science 2015 top school in Venda
Little Flower – Ixopo, KwaZulu-Natal	2012	89	92	18
	2013	103	96	17
	2014	114	99.3	22
	2015	120	98.3	31 Only school with A symbols in the district with 89 bachelor passes out of 120. Best mathematics/science marks in the district. Best performing school award in 2013; 2014 and 2015. Best performing headmaster for three consecutive years. In the 2014 Eskom Expo for Young Scientists two learners made it to International level
Makgetse – Hammanskraal, Gauteng	2012	158	93.5	21
	2013	186	95.6	26 Top school in Gauteng
	2014	235	98	29 Third position for quality results with bachelor passes
	2015	287	95	Makgetse received the Minister of National Education’s “Best school award of excellence in mathematics and consistency in outstanding performance” 2015 winners of the metrology competition (science of measurements/theoretical and practical aspects of measurement)
Mmathabo – Qwaqwa, Free State	2013	122	87.6	1
	2014	151	94	4 Received an award of R100 000 for being in the top 10 in the Free State province in 2014. They achieved a 94.4% aggregate in mathematics
Oval North – Oval North, Western Cape	2015	124	95.1	Despite the constant threat of gang violence, the Oval North High School class of 2015 almost achieved a 100% pass rate. They achieved a 95.1% pass rate – up from 86% in 2014. Oval North High School principal, Na-aim Kassiem, said he and his staff stand in awe that learners remained so positive, determined and hardworking notwithstanding the grinding poverty they live in

Oliver Tambo High School in the Eastern Cape entered 102 learners; 57 passed with 56% in 2014. One boy learner obtained four distinctions including mathematics and science.

Botlhabelo High School in North West improved the mathematics pass rate from 28% to 80% in

2014; physical science moved from 19% to 77.4%. In 2015 the overall pass percentage was 95%, an improvement from 88% in 2014. Success was credited to the Eskom additional educators and resources provided, as well as the winter school.

Social development

continued

List of current schools participating in the programme since 2012/2013

Name of school	Province	Number of learners
Oval North	Western Cape	1 257
Manzomthombo	Western Cape	1 587
Indwe	Western Cape	1 310
Healdtown	Eastern Cape	259
Oliver Tambo	Eastern Cape	402
Milton Mbekela	Eastern Cape	933
Little Flower	KwaZulu-Natal	1 446
Mphathesitha	KwaZulu-Natal	566
Mmathabo	Free State	532
Yakhisizwe	Free State	370
Umso	Northern Cape	953
William Pescod	Northern Cape	1 123
Kgomotso	Gauteng	870
Makgetse	Gauteng	1 152
Mbilwi	Limpopo	2 218
Thengwe	Limpopo	2 221
Botlhabelo	North West	1 544
Thutopele	North West	1 603
Kopanang	Mpumalanga	844
Mafa Max	Mpumalanga	924
Total beneficiaries		21 514

Telematics System Mathematics and Science Programme

The Telematics System Programme is owned by the University of Stellenbosch, which provides a satellite-based interactive platform for learners to access education support in various subjects such as mathematics and science with the aim of improving their performance. However, content is developed and copyright is held by the Western Cape Department of Basic Education (WCDBE).

In June 2013, the Department of Public Enterprises launched the DPE-SOC CSI Forum to ensure proper coordination of CSI initiatives by SOCs that have impact on the intended beneficiaries. It was through the CSI Forum, chaired by the Deputy Minister Bulelani Magwanishe and attended by representatives from all state-owned companies (SOCs) i.e. Eskom Foundation, Transnet, South African Airways and Denel's CSI functions, that flagship projects were identified and approved. The same flagship projects were presented to the Minister Bulelani Magwanishe and endorsed.

In demonstrating an ongoing commitment and support to addressing challenges of education and poverty in South Africa, DPE and SOCs embarked

on a telematics project rollout to provide mathematics and science subjects (i.e. physics, chemistry as well as biology) support that will benefit learners from disadvantaged and underperforming schools across the country.

All SOCs have identified schools in a province where their operations are located, prioritising poor performing schools in rural areas. In other circumstances excelling schools have been chosen to be the champions of excellence, through this Telematics programme that allows such a school to share their good practice with other surrounding schools.

The Foundation selected the following schools:

- Harding Secondary School, based in Harding in KwaZulu-Natal with a total number of 7 381 learners
- Zikode High School, based in the Ladysmith uMhlumayo iNdaka area in KwaZulu-Natal province with a total number of 1 299 learners
- OR Tambo Technical School, based in Bizana Nkantolo area in Eastern Cape with a total number of 465 learners
- St John's College, based in uMthatha in the Eastern Cape with a total number of 1 828 learners

A total number of 4 973 beneficiaries, benefited from the programme.

The Annual National Assessments (ANA) have become powerful tools to assess the health of our education system that South Africa uses to keep track of the improvements of teaching and learning in mathematics, sciences and languages; and to plan interventions needed in the schooling system.

This approach in curriculum delivery and support emanates from the understanding that the problems and misconceptions identified during the National Senior Certificate examination, particularly in mathematics and science, have their roots in the earlier phases of learning. This understanding dictates that interventions in mathematics and science must focus on both General Education and Training (GET) and Further Education and Training (FET) level.

Umbele Wolwazi Education Trust – mobile laboratory trolleys for uThukela District Municipality

Most of the uThukela schools have neither science laboratories nor the chemicals required. Both educators and learners find it difficult to exercise and participate meaningfully in the curriculum. The mobile science laboratories will intensify DBE's efforts to improve learner performance in mathematics and science.

The Department of Basic Education in KwaZulu-Natal's uThukela district made an appeal to the Foundation to assist with the construction of laboratories in rural schools in this circuit. Using mobile science trolleys instead was suggested and supported by the district director as a cost saving initiative, thereby reaching as many schools as possible. Thirty schools from Bergville, Estcourt and uMnambithi were identified. The Foundation approved funding to supply 30 mobile laboratories to 15 schools.

In 2014, the District Intervention Strategy was done to develop clear programmes to improve learner performance in mathematics and natural sciences in the GET-band. The successful implementation of natural sciences CAPS curriculum requires well-resourced laboratories in schools.

Eskom Expo for Young Scientists Programme



Eskom Expo for Young Scientists (EEYS) has a vision of inspiring young scientists and researchers. This vision is realised by an evolved organisation that is a practical, "grassroots" and higher-level enterprise that engages young people in research projects in science, technology, engineering, mathematics and innovation (STEMI). It is now a national initiative which is well positioned to develop the inquiring minds of the youth and encourage them to pursue further research well into their university studies. EEYS functions at all levels ranging from the individual student in the classroom to the provincial basic education departments, and spreads out to tertiary education institutions, commerce and industry.

EEYS arranges 35 regional science expos across the country and one prestigious International Science Fair where students exhibit their research or investigative work and are judged by experts. Due to the expertise developed by EEYS over three decades, EEYS now hosts the ISF which covers the African continent as well as a few other countries by invitation. At the two levels of expo science fairs, outstanding projects are rewarded with various prizes including university bursaries. These regions are managed by teams of volunteers headed by a regional science fair director.

By participating in EEYS activities, learners increase their awareness of the wonders of science, add to their knowledge and broaden their scientific horizons. Our mission is to develop young scientists who are able to identify a problem, analyse data, find solutions and communicate findings effectively.

Social development

continued

Learners can enter their scientific investigation into one of the 24 categories, listed below, that range from agricultural sciences to sustainability, recycling and recycled materials.

No.	Category
1	Agricultural sciences
2	Animal/veterinary science, including marine animals and animal ecology
3	Chemistry and biochemistry
4	Earth science, housing and settlement studies – geography and geology, including oceanography
5	Energy: non-renewable (fossil fuels and use of electricity)
6	Energy: alternative and renewable (solar, wind, wave)
7	Energy: alternative and renewable (biofuels, geothermal)
8	Energy efficiency and conservation (efficient use of energy and ways of using less energy)
9	Engineering: electronics and electrical
10	Engineering: chemical, civil, metallurgical and mining
11	Engineering: mechanical, aeronautical and industrial
12	Environmental management: study of human interaction with the environment (e.g. waste management, deforestation, land management and bioremediation)
13	Environmental science: changes to the environment (e.g. pollution, climate change, carbon emissions)
14	Food science, food technology and healthy eating (diet)
15	Health care and sports science
16	Information technology
17	Innovation and technology
18	Mathematics and statistics
19	Medical sciences: human biology (anatomy, genetics, physiology)
20	Microbiology and medical sciences: diseases and disease-causing organisms and medicine
21	Physics, astronomy and space science
22	Plant sciences including marine plants and plant ecology
23	Social and psychological sciences
24	Sustainability, recycling and recycled materials

EEYS reaches over 5 000 schools and 100 000 learners nationally during the school, district and regional expos. Since 2015, the district expo concept has been implemented with a total of 329 district expos convened. Winners from the district expos present their research projects at the regional expo. Finally, the top 600 learners from the 35 regions are selected to exhibit at the International Science Fair. The 35 regions are situated in the nine provinces as follows:

Province	Regions
Eastern Cape	East London, Grahamstown, Mthatha (Umtata), Port Elizabeth
Free State	Bethlehem, Bloemfontein, Welkom
Gauteng	Ekurhuleni (East Rand), Gauteng South, Johannesburg, Northern Gauteng
KwaZulu-Natal	Central KwaZulu-Natal, Far North KwaZulu-Natal North Coast, Northern KwaZulu-Natal, Southern KwaZulu-Natal
Limpopo	Capricorn, Mopani, Vhembe, Waterberg Region
Mpumalanga	Bohlabela, Ehlanzeni, Gert Sibande (Mpumalanga Highveld), Nkangala
Northern Cape	Kalahari, Kimberley, Namaqua
North West	Bojanala, Dr Kenneth Kaunda (Potchefstroom), Dr Ruth Segomotsi Mompati (Bophirima), Ngaka Modiri Molema
Western Cape	Cape Town, Eden Karoo, Stellenbosch, West Coast

EEYS's primary aim is to encourage the youth of South Africa to participate in STEMI activities in order to promote an interest in these areas, develop a passion for science, acquire scientific skills and improve their tertiary education prospects. EEYS also strives to increase participation of female and previously disadvantaged learners (PDL) at EEYS events at district, regional and national levels, maintaining a minimum of 60% PDI and 50% female learners.

These aims will be realised through a series of programme objectives starting with arranging science fairs at school district level, moving to a higher level of regional expos, and culminating in the International Science Fair. At all levels of these science fairs, EEYS has to enlist the support, cooperation and participation of interested organisations, companies and individuals and to engender interest among the general public in the purpose of the organisation. A crucial sector that has a symbiotic relationship with EEYS is the educational and scientific institutions in South Africa and elsewhere that are interested in similar enterprises. Finally, EEYS has to raise and administer funds to fulfil the purpose of the organisation.

The activities of EEYS currently reach about 20% of all schools in South Africa. As a key partner in the Department of Basic Education's mathematics, science and technology (MST) strategy, EEYS provides support at school level in order to grow more scientists and engineers at grassroots level. To achieve this, EEYS conducts workshops for educators with accredited material, on the entire process of project work and conducting scientific research. Schools that register to participate then receive a project guide book, training DVD and a judges' book. Each year workshops are conducted across the country targeting new schools with an emphasis on 50% female participation and 60% schools in previously disadvantaged communities. The provincial coordinators integrate the EEYS strategy into the provincial MST strategy to ensure a systemic intervention which can be sustained.

Through the expansion strategy of EEYS over the past three years, there was a steady increase in girls participating in expo activities, from 50% in 2012 to 57% in 2015 at ISF level. This is consistent with global trends of promoting access to education for girls, especially science fields of study. Learners also benefit directly from EEYS activities by winning bursaries and various awards at regional and ISF level, as well as the opportunity to represent South Africa at various international science events in Asia, Europe, North America and Africa.

In the past, EEYS primarily focused on hosting science fairs for the purpose of judging research projects and presenting awards accordingly. However, this only gave access to well-resourced schools and schools that were in the major cities and towns. With the new mandate from Eskom and a new expansion strategy in place, EEYS has been pro-actively marketed to all schools with the focus on schools in previously disadvantaged communities. This was backed up by hiring professional staff for the first time in 2013, who actively conducted training for educators and supported learners in their research, as well as fostering partnerships at provincial level. This has led to increased support from the private sector and universities, offering many more bursaries and awards. In 2015, universities awarded bursaries to the value of R1.35 million. EEYS has also received increased support from government through the Departments of Science and Technology, Basic Education, Public Enterprises and the Presidency. It has now been positioned as a national initiative.

International participation

On the international competition platform in recent years, EEYS delegates have won awards at every competition entered.

In 2015, EEYS delegates received 11 awards at four prestigious international science fairs as follows:

Name of science fair	Delegate	Award
Taiwan International Science Fair	Heidi Bottcher	Won a second place award in her category and received a medal and NT\$2 200
INTEL ISEF – USA	Bernard Smit	1. Special award of \$1 750 from the American Society for Microbiology 2. Special award of \$1 200 from the China Association of Science and Technology 3. Grand award 2nd place and \$1 500 cash
	Iselle van der Heever	Special Award \$1 000 from the Society of Exploration Geophysicists
	Anna Midgely	Grand award second place and \$1 500 cash
	Armand Duvénage	Grand award third place and \$1 000 cash
INESPO International Awards – Netherlands	Thajna Sewspersad	First International Award (medal, certificate and €250)
	Carissa Viljoen	Second International Award (medal, certificate and €75)
	Mieke Lagendyk	Second International Award (medal, certificate and €75)
I – SWEEEP – USA	Brendan Weaver	Gold medal and \$750; South Africa was the only African country that was awarded a gold medal

In 2014, EEYS delegates received 13 awards at five prestigious international science fairs as follows:

Name of science fair	Delegate	Award
Taiwan International Science Fair	Savannah Mendolson	Certificate for fourth position and NT\$1 500
INTEL ISEF – USA	Neil Fair	Special award of \$5 000 from United Airlines Foundation
	Boyd Kane	Honourable mention from the Society for Exploration Geophysicists
	Sophie Demetriou	Fourth place award and \$500
	Lungelo Sigudla	Fourth place award and \$500
	Toni-Ann Black	Third place award and \$1 000
GENUIS – USA	Wandile Khumalo	Gold medal and a Samsung Galaxy tablet
	Tevo'n Campbell	Honourable mention
INESPO Netherlands	Janke Hoon	Third prize, bronze medal, bronze trophy and €50
	Jean-Marie van der Riet	Third prize, bronze medal, bronze trophy and €50
	Patrick Noah	Third prize, bronze medal, bronze trophy and €50
I – SWEEEP – USA	James Garisch	Bronze medal
	Richard Grant	Bronze medal

In 2013, EEYS delegates received 13 awards at four prestigious international science fairs as follows:

Name of science fair	Delegate	Award
Taiwan International Science Fair	Courtney Dedekind	Fourth place
	Shannon Pincus	Second place
INTEL ISEF – USA	Ben Langer	The New American University Provost Scholarship, renewable for four years, \$2 500 award to conduct research, sponsored by the Office of Knowledge Enterprise Development. Grand Award fourth place and \$500
	Philipe Lothaler	Special Award of \$7 500 from United Airlines Foundation
	Danielle Mallabone	Special Award of \$1 000 from American Intellectual Property Law Association
	Retselisitsoe Monyake	Grand Award fourth place and \$500
	Danielle Jacobson	West Virginia University – Renewable Tuition Scholarship Award
GENUIS – USA	Simon Stolz	Gold medal
	Jordaan Kingsley	Silver medal
I – SWEEEP – USA	Jason Beangstrom	Bronze medal
	Gabrielle Wiseman	Honourable mention
	Aritia Reyneke	Bronze medal

Number of schools and learners participating

	2015	2014	2013
Regionals			
Schools	1 104	879	1121
Entries	5 846	6 358	5 604
Learners	7 650	8 479	7 832
National			
Schools	290	348	368
Entries	479	659	664
Learners	574	823	878
International			
Schools	27	20	19
Entries	27	22	24
Learners	28	24	24

National statistics achieved by Eskom Expo for Young Scientists in 2014¹

National statistics for nine provinces		2014
Number of projects		12 884
Number of participants		17 820
Number of females		9 811
Number of black females		4 885
Number of males		8 009
Number of black males		3 166
Number of development schools (Quintile 1-3)		646
Total number of schools		1 293
Number of judges		3 297

1. Audited figures for 2015 will only be available after June 2016.



Proud young scientists participating in the 2015 National Finals of the Eskom Expo for Young Scientists.



Category winners display their certificates.



International delegation for 2015

Successful learners who represented Eskom Expo at various international science fairs in 2015.

Title of project	Name of learner	Region	Grade
The relationship between music and maths	Daniel Steyn	Bloemfontein	7
Effective natural home-made anti-bacterial soap	Neelan Gouden	Northern KwaZulu-Natal	8
The coal dust absorber	Bongani Shube	Ehlazeni	9
Detective optical activity with a homemade polarimeter	Rickus Kriel	Northern Gauteng	9
Born a sprinter	Yolanda Zakaza	Welkom	11
TiO ₂	Mieke Lagendyk	Welkom	11
Acid mine drainage: An eco-friendly solution	Thajna Sewparsad	Northern KwaZulu-Natal	8
It's a bloody mess	Carissa Viljoen	Bethlehem	10
Dog day dynamics	Iselle van der Heever	Bloemfontein	9
Platinum – Shiny but expensive	Ronald Dubb	Cape Town	10
Increasing the power output of mud	Siyabonga Nkosi	Highveld	11
Wireless energy management system	Armand Duvenhage	Northern Gauteng	10
Magnetotactic bacteria with a Faraday application	Bernard Smit	Northern Gauteng	11
Walker-aid alarm	Nishka Ramkhelawan	Northern KwaZulu-Natal	10
Leucadendron Sessile, the new super food	Anna Midgeley	Cape Town	9
Worm tea: An ecological solution to agricultural issues in rural areas	Avuyile Mabangatha	East London	11
Portable suntracking solar power kit	Fritz Keyser	Cape Town	11
It's a berry bright future	Tyrique Byroo	KwaZulu-Natal Central	9
The effect of heating on lipid oxidation in cooking oils	Theresea Brummer	Port Elizabeth	11
Turbo Terpenes polystyrene recycling	Shaun Varghese	Bophirima Central	11
Sodium Thiosulphate leaching for gold	Brendan Weaver	Cape Town	10
Fold a crutch	Taskeen Alli	Bophirima Central	10
Using drama to teach healthy eating	Nonsikilelo Mpungose	KwaZulu-Natal Central	11
Ceater stove	Mthembu Nondumiso	Northern KwaZulu-Natal	11
Eco absorber	Jenna Goosen	Johannesburg	10
Eeuw maggots and chicken feed	Jeanelle Jefthas	Weskus	10
Awake! Gaming for social change	Leia French	Johannesburg	10
What really attracts boys to girls	Heidi Bottcher	Cape Town	8

My road with Expo for Young Scientists, by Dillon Hopley

My Expo-adventure started in high school. This was the first time that I was exposed to something of that nature. At Bredasdorp High School in the Western Cape, it is compulsory to participate in the school's science fair, so in Grades 8 and 9, I participated merely because it was compulsory. I was "brainwashed" by some friends not to like it.

It was in Grade 10 when I had to select my subjects that I realised how I have been brainwashed by fellow-learners who had a disinterest in science and technology. I was busy with my Grade 10 project when my science educator referred me to the Eskom Expo web page and that was the moment when the chemistry happened.

No-one is born with a passion for science, it is developed. I grew up in a society that seemed scared to speak about science and technology; it was just too difficult, vague and unreachable. It was my participation in expos that aided in adjusting my limited perceptions about science in general. This made me realise that expo is not only for the so-called "nerds", it is for everyone.

Whether you are a cultural, sports or academic person, Eskom Expo grants you the opportunity to explore whatever your passion is. If you are practically inclined and think you have found a method to improve the way you do things, or if you invented a new method or device, then the engineering design process will allow you to explore your field of interest.

I am currently busy completing my BEng (Mechanical) at Stellenbosch University. I am also a permanent member of the South African Air Force. I can honestly say that Eskom Expo has helped me in making a career decision. I used my expo opportunities to find what I really am interested in, because not only do the judges look at your work critically, they also give you advice and share their knowledge and experience in that particular field.

I have been adjudicating at the Stellenbosch Regional Eskom Expo for the past two years. I never criticise a participant's work, but see as my duty to encourage them to explore things with either/both science and technology. By judging I keep on learning new things; every year I walk away with new information and knowledge.

If there is one thing I would like learners to know about Expo for Young Scientists, it is that Expo is for everyone. Do not let an ill-informed peers influence your perception of science and technology. It is something you need to explore on your own and believe me, Eskom Expo is a brilliant starting place. An added benefit to participation is that you meet strangers that become friends, and what is better than having friends with whom you share a mutual interest!



Dillon Hopley as Grade 11 learner in Bredasdorp High School with his project on how to design a smokeless chimney, 2010.



Dillon Hopley as mechanical engineering student at Stellenbosch University and as regional Expo judge.

2006 Expo for Young Scientists winner reaches new heights

Siyabulela (Siya) Xuza is a Harvard engineering graduate and one of the 2006 Eskom Expo for Young Scientists (EEYS) National Finals winners. His "solid rocket fuel" project won a gold medal and Siya was the recipient of the Dr Derek Gray Memorial Award for the most prestigious project in South Africa at the 2006 EEYS National Finals.

He won a Harvard scholarship at Intel ISEF, made possible through his participation at EEYS. Siya was an official guest at a NASA space shuttle launch and a minor planet of Jupiter was named after him.

Siya has a passion for harnessing the power of the sun for clean affordable energy. He conducted research geared towards making cheaper solar cells and assesses the commercial viability of solar technologies.

Siya says: "I was chasing the roar of a Cessna plane dropping election pamphlets over Mthatha, my South African township. It was 1994, the first year of a new democracy in my country and the sight of that technological marvel ignited in me a curiosity for science and a passion for using technology to engineer an African renaissance."

A born innovator, Siya began experimenting with rocket fuels in his mother's kitchen. This passion turned into a serious science project that culminated in him developing a cheaper and safer rocket fuel.

Siya's science project won gold at the National Science Expo for Young Scientists and the Dr Derek Gray Memorial award for the most prestigious project in South Africa. This led to an invitation to the International Youth Science Fair in Sweden in 2006, where he presented his project to the King and Queen of Sweden and attended the Nobel Prize ceremony in Stockholm.

In 2007, his project was then entered into the world's biggest student science event, attracting about 1 500 students from 52 countries – the Intel International Science & Engineering Fair in the USA. He won the two grand awards.

His credibility was further endorsed by the Nasa-affiliated Lincoln Laboratory, which was so impressed by the young engineer's achievement that it named a minor planet after him. Planet 23182, discovered in 2000, is now known as Siyaxuza and is to be found in the main asteroid belt near Jupiter.

In 2010 he was elected as a Fellow of the African Leadership Network, a premier network of those individuals poised to shape Africa's future over the next 10 to 20 years, consisting of the most dynamic, influential and successful leaders and entrepreneurs in Africa and its Diaspora. He travelled to the African Union in Addis Ababa, Ethiopia to engage in discussions on creating prosperity for Africa.

In 2011 he became a fellow of the Kairos Society, a global network of top student and global leaders using entrepreneurship and innovation to solve the world's greatest challenges. He was invited to the United Nations and the New York Stock Exchange in recognition of being one of the world's emerging business leaders and to offer strategies for solving the world's energy crisis.

Siya says: "I may not be able to predict what the future holds. But I am excited at how my engineering education will enable me to achieve my aspirations for Africa. My mother told me that even if a planet is named after you...You should always remain down to earth."



Siyabulela Xuza addresses the 2015 EEYS delegates.

Education: Stellenbosch University bridging programme (SciMathUS)

SciMathUS is an intensive, holistic year-long programme which aims to afford students who have already written the final National Senior Certificate (NSC) examination, but who did not qualify for admission into higher education or selected programmes with high entry requirements (such as engineering, medicine etc.), the opportunity to improve their results in gateway subjects. On average more than 88% of the students who complete the programme successfully enrol in higher education.

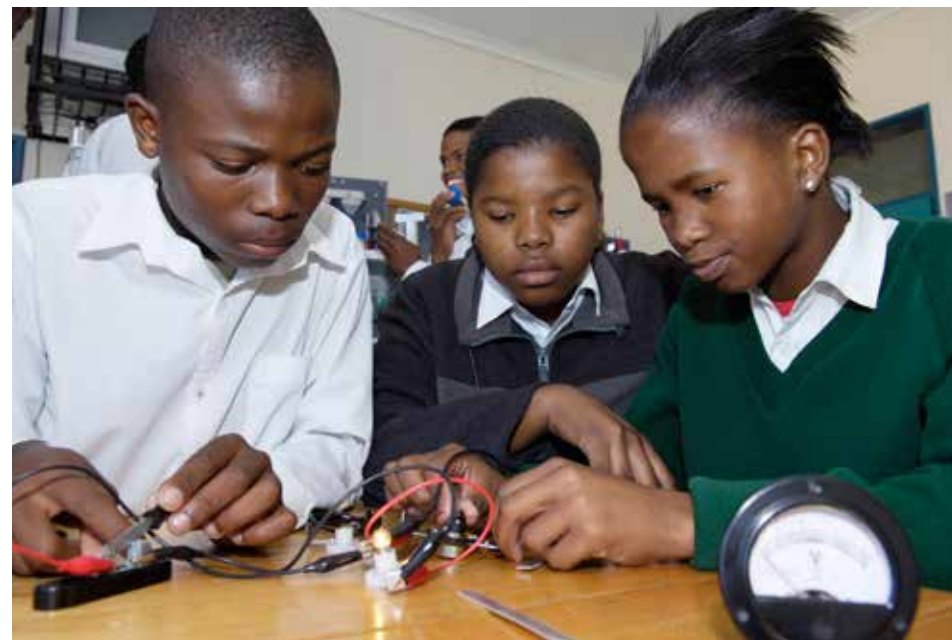
The Foundation supports SciMathUS (Science and Mathematics at the University of Stellenbosch) bridging programme. The year-long SciMathUS programme helps students from educationally disadvantaged communities to gain access to higher education and also prepares them for success in their tertiary studies. During the 2015/16 financial year, the Foundation supported 50 students from previously disadvantaged communities to participate in this programme.

Results achieved in the 2015 academic year

All the students supported by the Foundation during 2015 completed the programme successfully. Forty-nine students are enrolled with the University of Stellenbosch to continue their formal studies during 2016. This includes seven engineering, 24 BSc and 11 BCom students.

- Twenty percent of the group scored more than 80% in mathematics and in physical sciences
- The average in each of the two subjects is 72%
- On average, the students' performance increased by 17 percentage points
- The biggest improvement in mathematics is 41 percentage points and 39 percentage points in physical sciences
- The top performer scored more than 90% in both mathematics and physical sciences

With these new improved results, students can now be accepted to study at any tertiary institution in South Africa. Most students have chosen to study at Stellenbosch University in 2016.



Science learners explore the world of electrical current.

Lucy's story



Lucy Sangweni graduated with a Master's degree in Engineering at Stellenbosch University in March 2015. Lucy attended the Ndlela Secondary School in Piet Retief before she attended SciMathUS in 2005 and then enrolled at SU in 2006. She is currently employed as an engineer by Eskom in Brackenfell, Western Cape.

Tertiary education support programme (TESP)

Programme objectives

The vision of TESP is to contribute to the building of human resource capacity at tertiary education institutions through investment in industry-related research and education for building the industry skills pipeline. The objectives of the programme include: developing learners with increased level of knowledge and skills in science, engineering and technology, increasing the knowledge base of lecturing staff at higher education institutions, retention of lecturing staff, increasing the pool of potential employees, exposing industry experts to larger specialist networks locally and internationally and providing a platform for networking and continuous development, providing universities with a platform to understand the needs of industry, and developing capability to conduct research, and support learning delivery for the industry.

The shortage of engineering practitioners and engineering academics in Africa is a growing concern. This shortage in South Africa is compounded

further in the engineering specialisation categories with the lack of critical mass to be able to address infrastructure development challenges and opportunities through the use of African citizens. This therefore requires a structured and focused approach to develop capacity. TESP systematically addresses and provides part of the total solution to this problem from an industry perspective. Eskom is privileged to have the current Chair of TESP (Yashin Brijmohan), who is the Chair of the International Engineering Capacity Building Committee at the World Federation of Engineering Organisations, the organisation that represents the engineering profession at a global level. This leverage assists Eskom to also be able to focus the capacity building strategy based on international collective wisdom.

TESP's main success relies on the joint partnership with industry and HEIs (Higher Education Institutions), four universities of technology, and 17 universities. TESP is able to identify industry specialists who work closely with academics in specialisation areas to work together to further, research, education and capacity development initiatives. This joint working relationship has been further supported by national government programmes such as THRIP, and has also been used to solicit international partnerships and funding support in certain areas. TESP also works closely with the higher education structures.

Results achieved

The programme has been in existence for more than 25 years, and has evolved since its humble beginnings supporting about 300 students and has in recent years supported more than 1 300 students per year in the areas of science, engineering and technology.

During the 2015 academic year, a total of 142 grant-holders (academics) from 17 universities and four universities of technology were supported through TESP, with 1 326 students (356 Masters, 218 doctoral and 53 post-doctoral students within the TESP centres) being supported in the various degree programmes. Grant-holders have been supported with grants ranging between R30 000 and R250 000. The grant-holders submit annual progress reports and financial statements during the year. Amongst the students supported in 2015, 24% comprised females and 76% males.

The successes of TESP range from developing research centres at universities in several areas related to Eskom's business, which have undertaken contract research work, produced academic papers, developed academics, supported the skills pipeline, and contributed to transformation in the SET (science, engineering and technology) fields. The technical networks of specialisation

supported by TESP are renewable energy, primary energy, asset management, power transmission systems, power systems analysis and control, power electronics and control systems, electrification, energy efficiency and demand side management, metering and measurement, integrated system and energy planning, information and communications technology, electrical machines, environmental impacts, water, materials and mechanical systems,

Dear EAL Guardians

It is recognised that collaboration between industry and universities is critical for the co-ordination and alignment of engineering education and training outcomes, as well as research and development agencies to address South Africa's skills and economic development priorities.

Eskom Academy of Learning (EAL) through its learning delivery offering, partnered with academia to seek and apply newest "state-of-the art" learning delivery via action research to effect continual improvement.

We are proud to announce that Eskom has received a Platinum Award in recognition of its partnership in working with the University of KwaZulu-Natal (UKZN).

The EAL has been working closely with Universities in the engineering environment for several years in collaboration with Eskom's engineering and research specialists. Logan Pillay (Senior Manager: Engineering, Eskom Academy of Learning), who received the award on Eskom's behalf, has been instrumental in directing the development of several centres at the University of KwaZulu-Natal.

The programme where Eskom has partnered with the University of KwaZulu-Natal, include:

- High-voltage direct current (HVDC)
- Vibration Research and Test Centre
- Smart Grid Centre

TESP has strengthened collaborations between industry and engineering universities within South Africa. This year, TESP grant-holders (Electrical) from all over South Africa met at the Vaal (co-ordinated by the Vaal University of Technology) to present at the report-back meeting. TESP is an invaluable programme that develops and support

human resource development, and health and safety. The article below illustrates the success of programmes with higher education with Eskom receiving a Platinum Award from the University of KwaZulu-Natal. Shown on the next page is an output from one of the annual report submissions illustrating innovation and patents.

The support of the HDVC Centre is aligned to Eskom's long-term plan to introduce several HVDC schemes within South Africa and within the Southern African Power Pool. There is a strategic need to have HVDC facilities for the testing and evaluation of designs and training provision for the future skills required.

The Vibration Research and Test Centre has also been developed at UKZN for the testing of overhead lines and supporting hardware. An innovative project developed at the University was recently reported in the Eskom Power News: The Power Line Robot.

This innovation in Robotics assists to retrieve vital inspection data for both transmission and distribution power lines, and was presented to an International Cigre Conference.

It is an honour to receive such an award, which not only illustrates the significant support that Eskom provides to universities, but also the dedication of the teams both at Eskom and the university that work together in achieving South Africa's capacity building goals and aspirations.

Best regards,

Sylvia Mamorare
Chief Learning Officer
Eskom Academy of Learning

students, academics and researchers across South Africa. TESP has received sincere gratitude from universities to Eskom for its total commitment to the advancement of researchers, academics and students in the area of science, technology and engineering, and is encouraged to further enhance the support through this valuable mechanism.

Line inspection robot (annual report submission)

"This project is developing a prototype line-powered inspection robot capable of carrying a camera along a line to inspect for mechanical anomalies (and later with a multi-spectral camera, for corona and hot-spots). The robot is tele-operated but the long-term aim is to increase the level of autonomy for both navigation and inspection. TESP funding was used to support the post-graduate training component of the project. TESP funded projects in 2015 were mechanical design of a brachiating robot and an investigation into reconstruction of wiry objects (aka power line towers). An undergraduate project related to this work was undertaken: Real-time sag monitoring of overhead power lines.

The robot was a runner-up in the NSTF Awards (Category: Research leading to an innovation by teams or individuals in organisations) and in the Energy Innovation UK Energy Innovation Awards (Category: University Technology). It was presented at the Eskom National Lines Conference and as part of the Cigré WG B2.52 meeting (23 October 2015). In addition, we had a test and demonstration on an out-of-service 132kV line in Cape Town (22 October 2015) and displayed the robot at the Cigré meeting in Somerset West (26-29 October 2015)."

Eskom Energy and Sustainability Programme

The Eskom WESSA Energy and Sustainability (E&S) Programme received grant funding to continue the work of this programme, based on its 18-year history. The longevity of the programme is based on the close working relationship between Eskom and WESSA in order to both achieve their core focus – for Eskom CSI, to best serve their beneficiaries, specifically the people living close to the Eskom strategic areas; and for WESSA, to implement high impact environmental projects.

In order to best utilise the grant funding amount, the programme used these funds to good advantage, concentrating on five sections of implementation.

Section 1 – Active learning projects

The oldest section of the programme, active learning projects supported groups of young people to identify contextual environmental issues, research, plan, take action, monitor and evaluate their projects. It is this section which produced many eta Award entries, and it is this section which assisted the programme for strong visibility and for national and international award submissions.

Section 2 – Educator workshops

Energy misinformation is always a challenge, and particularly in schools and with educators. This section assisted educators to understand energy issues. The workshops, given in three specific provinces, also supported educators to understand the energy components which related to their teaching curriculums. The specific provinces were Free State, KwaZulu-Natal and Mpumalanga.

Section 3 – Eskom strategic sites

These are areas which are close to Eskom infrastructure and new-build sites; and are designed to support communities and schools and contribute to supporting an Eskom presence in these regions. The strategic areas were Mpumalanga Highveld (five regions); KwaZulu-Natal escarpment (two regions); Limpopo (one region); and Western Cape (three regions). Five schools in each of the strategic regions were supported, making a total of 55 schools.

Section 4 – Edible Plant Networks

One of our well supported initiatives, the Edible Plant Networks (EPN), assisted the programme to make the leap from school to community by establishing large-scale school and community food gardens. There were 10 EPNs situated nation-wide consisting of a community greenhouse or shade-house for plant propagation; vegetable beds and orchards.

Section 5 – Rural school development

The Foundation has made one-off donations to many rural schools in the past. This section supports these schools on a regular basis offering curriculum support and other environmental assistance.

Performance

Section 1 – Active learning projects

There were 153 projects supported in the reporting period. This is presented below, and indicates the number of projects as well as attempts to categorise them in preference of project choice by beneficiaries.

Category	Number of projects
Climate change	14
Renewable energy	22
Electrical efficiency	47
Sustainability	61
Social learning	7
Uncategorised	2

Case studies of examples of these projects are presented below:

A case for how the programme supports other Eskom development programmes

Isiqophamithi Primary School, Ladysmith, KwaZulu-Natal

Learners	752
Educators	18
Administrative staff	3

The Eskom Expo for Young Scientists (EEYS) is a longstanding programme that benefits all schools in South Africa to increase the capacity of learners to develop skills of scientific investigation. The staff of the EEYS Programme always involve themselves at regional and national judging and often support groups of learners with their chosen topic especially because the categories of the Expo have a strong component for environmental issues.

In the KwaZulu-Natal North regional Expo a young group was identified as a possible entry to the national finals of Expo, provided they strengthened their project further. This case study describes how the E&S Programme can assist to strengthen other Eskom supported programmes.

The young learner involved is Nokwande Dube, who noticed that in her community at eZakheni there was a highly degraded wetland and she wanted to do something about this. Her entry into the regional Expo described the identification of “her” wetland and her process to involve community leaders to take up the challenge of rehabilitation.

The judges at the regional event described Nokwande's efforts as most worthy to develop further and to present at the national finals.

The EEYS Programme therefore supported her project to the next level.

It is often the case, in the work of the E&S Programme, that the desire to improve environmental sustainability in local communities is very evident, yet this appears not to reach its full potential, because young learners involved

do not know (and often have never experienced) what the pristine version of the system they desire to rehabilitate is! Such was the case with Nokwande's project.

The E&S Programme supported her and her group of friends to deepen her project, and specifically arranged for the group to experience the ultimate outcome of her project, a fully functional wetland. The group was taken to nearby Ingula wetlands, where they interacted with all aspects of wetlands and how a functional wetland delivers to society.

Armed with this knowledge, Nokwande and her group could now visualise the ultimate for her community wetland. During a second field trip, an investigation of the community wetland, it was evident that full understanding of the wetland system, and how the system services the community had been realised, and Nokwande was able to proceed with confidence with her community project.

At the national EEYS finals, Nokwande's project was recognised as worthy of being one of the group of projects that was earmarked for consideration for international attention.



A view of Nokwande's community wetland showing every possible negative impact to wetlands.

Limpopo and Gauteng: Upcycling – Making tyre seats

Ditekhu Primary School, Lephalale

Learners	1 140
Educators	34
Administration	5

Cosmo City West Primary School, Johannesburg

Learners	1 178
Educators	36
Administration	6

Many rural schools do not have adequate outdoor seating for their learners and as there is a large number of redundant tyres available it was logical to show the schools how to make their own seats using old tyres. These are inexpensive to make and fall within the recycling part of the Grades 6 and 7 curriculum. This project also lends itself to entrepreneurship through making extra tyres and selling them to the public.

Sixty learners and 20 educators were shown how to make their own tyre seats. The impact of this project is significant in that it promotes skills creation, technological learning and mathematics.

It was the first time for many to learn to operate a drill; know the names of tools needed; and learning how to assemble the seat.

It was empowering for the women to learn to use tools which would otherwise only be used by men. After the training the Cosmos City West club held their own workshop to show community members how to upcycle.

Adding value is that the schools stated they would make additional seats as part of their Soul Buddyz afternoon programme so that they could raise funds for their school.



Cosmo City West.



Ditekhu Primary School.



Using the template.

Section 2 – Educator workshops

Energy misinformation is always a challenge and particularly in schools and with educators. This section assisted educators to understand energy issues. The workshops, presented in the Free State, KwaZulu-Natal and Mpumalanga, also supported educators to understand the energy components which related to their teaching curriculums.

In past years, the E&S programme embarked on a programme to align the support given to schools and educators with the Curriculum and Assessment Policy Statement (CAPS). This required that the coordinators develop materials based on CAPS, but with a focus on energy. Educators have shown much appreciation.

Social development

continued

The following resources were completed:

- Resources for the Natural Science/Technology learning area for Grades 4 to 7
- Mathematics, Grades 1 to 3
- Social Science: Geography, Grades 4 to 7
- Social Science: History, Grades 4 to 7

In all three selected provinces, the theme of the workshops follows the CAPS curriculum; in the second term, “energy and change” is the Natural Science/Technology theme for teaching, and the workshops detail additional learning and discussion for educators around these specific subjects.

Nine workshops were held during the year.

The ingenuity of South African schools

Umvulo Primary School, Ladysmith, KwaZulu-Natal

Learners	154
Educators	5
Administrative staff	1

Umvulo Primary School is locally known as Besters and is a landmark on the road to Ingula Power Station. The school has been a vibrant participant in the E&S programme for many years and has built up a number of very impressive environmental projects, most notably, their mixed fruit orchard with over a hundred trees. When space became an issue, they simply looked for other ways to increase their food production and began a project where edible fruits were grown on the gables supporting the school verandas, thereby also providing much needed shade to the learners.

Continuing their quest for environmental learning with edible foods, the E&S programme supported them to build a spiral herb garden, and plans for this were discussed at one supporting visit. However, the plans required that building materials were necessary for the spiral structure.

This case study describes the ingenuity of the staff and learners at the school, in order to get their herb spiral built. The school is situated just below a rocky outcrop. Their plan was brilliant in its simplicity. In one afternoon, the learners walked to the top of the koppie, and

Section 3 – Eskom strategic sites

These are areas which are close to Eskom infrastructure and new-build sites and are designed to support communities and schools and contribute to supporting an Eskom presence in these regions. For the most part, this support consisted of a combination of active learning projects (Section 1) and educator workshops (Section 2).

The case studies presented are from schools situated on the KwaZulu-Natal escarpment and the Plettenberg Bay area in the Western Cape.

simply rolled the rocks that they required down the hill and right into the school grounds. Within a very short time, the herb spiral was built and at the next supporting visit, the E&S facilitator provided them with enough herb plants to plant up in their structure.



Learners putting up a structure.



The herb spiral building operation.

Wetland conservation and restoration

Wittedrift Primary School, Plettenberg Bay, Western Cape

Learners	452
Educators	12
Administrative staff	1

Wittedrift Primary School is situated near a large wetland area that has been threatened for many years by farming practices and development. There has been a group of conservationists in the area working with farmers and local residents to restore the wetland that is degraded and to practise conservation. There is also an initiative to try to attract tourism to help the conservation ethic, and generate income for locals. The wetland is abundant with wildlife and wetland birds, including endangered blue cranes.

The project was chosen by the school as a way of introducing young learners to the importance of seeing the wetland as a natural heritage and looking after it. They focused on the biodiversity of plants, animals, birds and insects.

The project took learners in groups from Grades 3 to 7 onto the wetlands for two hours at a time and focused their attention on experiencing the richness and diversity of this wetland in detail. They observed sights, sounds, textures, tracks in the mud (and identified their owners with the help of a chart). They identified the different kinds of vegetation and where each was abundant, noting the difference between pristine wetland and degraded. They learned about the ecological function of the wetlands and the importance of

it. They often, but not always, had a birdwatcher accompanying to help them identify birds and their differences.



Learners discover otter tracks during an excursion.



Sitting on the spongy vegetation and recording observations.

Section 4 – Edible Plant Networks

One of the well supported initiatives, the Edible Plant Networks (EPNs), assisted the programme to make the leap from school to community by establishing large-scale school and community food gardens. In the reporting period, four EPNs situated nation-wide and consisting of a community

greenhouse/shade-house for plant propagation; vegetable beds, orchard (as depicted in the previous section) were supported – and further sought out other opportunities, as represented in the following case studies.

Moringa leaf production plots

Enzani Primary School, Matsulu, Mpumalanga

Learners	435
Educators	15
Administrative staff	3

Growing a Moringa orchard for leaf production, and utilising and harvesting the leaves and pods in order to be added into the learners' food at school, fits in well with the Grade 6 natural science and technology life and living CAPS components. This project provides a practical element to the required content material covered.

Moringa Oleifera is known as a miracle tree and the seeds are inexpensive, with the plants growing fast. The first harvest can take place after six months. Moringas grow very well in the Lowveld and so the project was undertaken with the very eager Enzani Primary School.

They successfully grew 100 Moringa plants in tree bags and in tyres which were transplanted into a 10m x 10m leaf production plot. The learners implemented all aspects from sowing the seeds, caring for the seedlings, transplanting and continued care to the Moringas.

The whole school has been exposed to the project through the SGB and assembly announcements. After showing various Moringa products sold at pharmacies, educators have on their own gone out to buy Moringa oil, tea and powder to use at home. Various educators have acquired seeds for planting at their homes.

At the time of writing the narrative the Moringas were averaging a height of 60cm and doing well.



Learners plant their Moringa seedlings.



A proud learner with the Moringa seedlings she grew herself.

Levana vegetable garden with permaculture practices

Levana Primary School, Lavender Hill, Western Cape

Learners	1 042
Educators	33
Administrative staff	7

Levana Primary School is situated on the Cape Flats in Lavender Hill, a poverty and gang-ridden area with high numbers of unemployment. There is also an informal settlement close by that depends on the services delivered to Lavender Hill.

As the result of the gangsterism the parents have stopped their children from attending extramural activities which take place after school hours fearing for their safety. It is for this reason that many projects at the school have collapsed. Many other organisations have also stopped supporting the school due to vandalism and robbery so the school is challenged to provide meaningful after-school activities for their learners.

Miss Charity, our contact at the school, felt the need to have outdoor sessions with the learners so as to get them excited with hands-on learning. So they needed to have activities that would run concurrently with classroom sessions and since the area is poverty stricken, they felt that the garden would be an educational response to outdoor learning and also assist the feeding scheme of the school by providing nutritious vegetables.

The school was previously part of the E&S Programme but over time dropped out due to the reasons above, and in 2015 the partnership was renewed. The project describes the overgrown and bushy grounds at the start of the project, which have now turned into a wonderful and productive garden.

This garden will in the future be used as an outdoor learning area. The school plans to link multiple projects into the garden which include tyre seats, outdoor class sessions, greenhouse, tyre gardening, orchard and vineyard.

The garden project has gained attention from community members who are now assisting, among them is Mr Willemse, who has committed

to help in the garden every day and much of the success of the garden is due to him. Additionally, parents have offered to escort learners who were willing to assist Mr Willemse during weekends.

The garden has had a good impact on the community, it has built unity amongst the people. Mr Willemse, who had worked on a wine farm for over 10 years, committed himself to sharing all his farming experience with the learners, and at the time of writing, has started the orchard. The school has also shown interest in doing other activities to keep the learners occupied – all because their energies were ignited by the establishment of the garden.



The garden site at the start of the project.



A beautiful, flourishing garden at Levana Primary.

Section 5 – Rural schools development

The Foundation has made one-off donations to many rural schools in the past. This section supported these schools on a regular basis offering curriculum support and other environmental assistance.

Solar can heater

Mhlonyaneni Senior Primary Ntabankulu, Eastern Cape

Learners	326
Educators	9
Administrative staff	2

Mhlonyaneni Senior Primary School is situated in Ntabankulu, Eastern Cape just on the border of Kokstad.

The Grade 7 learners noticed that their school generated a large number of cans through their feeding scheme so they decided to make a solar can heater which uses the sun's heat to warm up a classroom.

They used 72 fish cans and painted these black. They then drilled holes at the bottom of the cans and stacked 10 cans together. They placed seven of these stacks in wooden housing which had an air inlet at the bottom and an outlet at the top. This top outlet was connected to a black pipe which could feed into a classroom window. The warm air absorbed from the cans rises and then feeds into the classroom through the air outlet extension pipe.

The learners noted that the warm air came gushing from the outlet pipe. The pipe temperature went from 20 degrees Celsius to 26 degrees within 30 minutes and tests showed an average temperature variation of 6 – 7 degrees warmer than the average room temperature.

The learners and educators really enjoyed the project and were amazed to see how their

The case study is taken from the deeply rural former Transkei area and demonstrates the ingenuity of the school to use recycled material of what they have on hand and to fashion a very useful piece of equipment.

"rubbish" cans could add so much value to their lives by making their classrooms more comfortable during the cold winter months.



Building the solar heater.



The completed heater.

Beneficiaries per province

Province	Number of learners
Eastern Cape	26 986
Free State	57 663
Gauteng	7 429
KwaZulu-Natal	13 551
Limpopo	3 537
Mpumalanga	57 235
Northern Cape	–
North West	–
Western Cape	20 401
Total	186 802

Highlights and awards

- Tsembalefu Primary School, Mpumalanga won the National Nutritional Award. The plant networks, orchards and nursery were acknowledged to be a key contributor towards enabling them to win the award
- Sakhile High School, Mpumalanga came second in the National Recycling Competition sponsored by Plastics SA. The category they entered was the Cleanup and Recycle section
- Ms Louise Williamson, one of the E&S Programme coordinators, was chosen as the Planet Protector in a short feature "What On Earth!" in the green pages of the June edition of Pick n Pay's Fresh Living magazine

The full programme award list is presented below as a celebration of the environmental richness which this programme enjoyed throughout its full history.

Area	Year	Award	Status
National	2003	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – "Balancing carbon debt" project in KwaZulu-Natal
International	2003	Energy Globe – international award – Youth Category	Second position – Full programme award in Austria
National	2004	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – "CFL's energy efficiency in our town" project in KwaZulu-Natal
National	2005	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – "Fuel efficiency on the N3" project in KwaZulu-Natal
National	2005	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Young Designers – "Using seeds for oil extraction" project in the Eastern Cape
International	2005	Energy Globe – international award – Youth Category	First position – Full programme award in Brussels
National	2006	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner 1 – Young Designers – "Eco bench" project in KwaZulu-Natal
National	2006	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner 2 – Young Designers – "Energy game resource" in the Western Cape
International	2006	Volvo Adventure (Sweden) – International award for young learners	Third position – "Energy game resource" – Western Cape
National	2007	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – "Solar heating in informal settlement" project in the Southern Cape
National	2008	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – "Enviro bike" project in KwaZulu-Natal
National	2008	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Young Designers – "Cooking for the future" project in KwaZulu-Natal

Social development

continued

Area	Year	Award	Status
National	2009	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – “Rural energy applications” project in the Eastern Cape
National	2009	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Young Designers – “Eco fridge” project in KwaZulu-Natal
National	2009	Special resource development prize	“Puzzling climate change” project in KwaZulu-Natal
National	2010	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Residential category – Special award for “Innovative rural residential solutions” project in the Eastern Cape
National	2010	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – “Energy efficiency” project in Western Cape
National	2010	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Special Award – Young Designers – “Evaporative cooling” project in the Southern Cape
International	2010	All Africa Public Sector Innovation Awards – Innovation in Partnerships category	Winner of the Innovative Partnerships category for the “Sustainability commons” project
International	2010	All Africa Public Sector Innovation Awards – Best project category	Overall winner for best project in Africa (“Sustainability commons” project)
National	2011	Climate hero leadership award – National award	Special Award – “Sustainability commons” project
National	2011	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Special community category – “Sustainability commons” project with the Chris Hani District Municipality
National	2011	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – “Energy efficient building” project in the Southern Cape
National	2011	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Individual’s energy saving category in the Eastern Cape
National	2011	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Individual’s energy saving category in Mpumalanga
National	2011	National competition by Plastics SA	Winner – Recycling group in Mpumalanga
International	2011	Volvo Adventure (Sweden) – International award for young learners	Finalist – Learners from “Sustainability commons” project represented SA in Sweden
International	2011	Energy Globe – international award – Earth Category	Winning project – “Sustainability commons” project for South African National Award
Continental	2011	All Africa Public Sector Innovation Awards – Innovation in Partnerships category	Winner of the Innovative Partnerships category for “Sustainability commons” project
Continental	2011	All Africa Public Sector Innovation Awards – Best project category	Overall winner for best project (“Sustainability commons” project) in Africa (second consecutive win)
National	2012	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers – “Energy efficient cooking” project in the Southern Cape
National	2012	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Community category for “Recycling project” in Mpumalanga
National	2012	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Individual’s energy saving category in Mpumalanga
National	2012	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up – Young Designers – “Energy efficient vehicles” project in Mpumalanga

Area	Year	Award	Status
National	2012	National Nutrition Award by Nestlé SA	Winner – School in Mpumalanga
International	2013	Volvo Adventure (Sweden) – International award for young learners	Special commendation for “Energy efficient cooking” project in Southern Cape
National	2013	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers (groups) – “Change practice cooking” project in the Eastern Cape
National	2013	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runners-up – Young Designers (groups) – projects in the Southern Cape and Mpumalanga
National	2013	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner (Young Designers, Individual) for ethanol fuel in Free State
National	2013	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runner-up (Community) – Community bakery in Mpumalanga
National	2013	Kruger Lowveld Chamber of Business and Tourism awards (Environmental Award category)	Runners-up award
National	2014	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner – Young Designers (groups) – “Cooking with syngas” project in the Mpumalanga
National	2014	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Runners-up – Young Designers (groups) – projects in the Southern Cape and KwaZulu-Natal
National	2014	eta Award – a national award endorsed by the Department of Minerals and Energy for energy projects	Winner (community) – Syngas community project in Mpumalanga
Continental	2015	African Energy Awards – Innovation Category	Winner – Syngas community project in Mpumalanga

Eskom mobile health bus clinics

As part of its national health programme, the Foundation approved four mobile health buses to provide much needed basic medical care to children from rural areas having difficulty in accessing medical attention otherwise. The funding includes the running and maintenance of the four mobile units, consumables on each unit for the duration of the project of three years. This project was done in partnership with the respective provincial Departments of Health and Basic Education. Two mobile health buses were approved for Mpumalanga (Nkangala and Gert Sibande Municipalities), one for Limpopo (Lephalale Municipality) and one for KwaZulu-Natal and Free State to share.



Social development

continued

The purpose of the mobile health buses is to reduce the barriers that children are often faced with during their educational careers. These specific mobile units were designed by the Foundation and encompasses a dental booth, equipped with all necessary material to screen, polish, extract and do fillings on teeth; a primary health care (PHC) consultation room to carry out general health check-ups; nutritional assessments, hearing assessments, gross and fine motor assessments, as well as immunisations and a visual care booth to assess their eyesight and provide the necessary treatment and even spectacles where necessary.

Learners with severe medical problems that cannot be treated within these mobile units are referred by the medical staff to the nearest clinics and public hospitals. The mobile clinics have dedicated medical staff who perform screenings and examinations which include a professional nurse, optometrist and dentist.

Since inception, the health mobile units have visited a total of 278 locations. A total of 21 543 learners have been screened, 18 557 optometry, 16 544 dental and 19 502 primary health screenings have been conducted. A total of 490 spectacles have been provided to learners and a total of 5 031 referrals have been done for children with more serious conditions.



A friendly optometrist does eye tests for pupils from Hlaboloha Primary School in Bothaville in the Free State.



It is very comforting for learners to go for a primary health care screening by the friendly staff on Eskom's mobile health buses.



Learners receiving medical attention for eye and dental examination.



The mobile health bus was deployed in Mpumalanga within reach of schools.

Beyond the three years, there is great potential to re-invest and run the mobile units for another three years. These units have a life span of ten years. It is the goal of the Foundation to secure partnerships beyond the initial three years to ensure the viability and sustainability of this project in the rural communities around which Eskom operates and to reach the majority of learners in all these provinces and provide them with the opportunity missed by so many.

Philanthropy and welfare

These projects operate in sectors such as education, early childhood development, health, support of the elderly, caring for people living with HIV/Aids, environmental issues and disaster relief.

Donations were made to 168 philanthropic and welfare causes (all to registered non-profit organisations). The donations totalling R24.5 million, benefited 72 467 people (2014/15: 216 projects for R15.9 million and 152 630 beneficiaries; 2013/14: 208 projects for R28.4 million and 120 818 beneficiaries).

Eskom mobile health bus statistics – 1 April 2015 to 31 March 2016

	Optometry screenings	Dental screenings	Primary health care screenings	Spectacles	Number of locations	Number of referrals	Total screened
Eskom 1 – Mpumalanga May 2014 – March 2016	4 848	4 469	4 877	341	44	964	5 319
Eskom 2 – Limpopo June 2014 – March 2016	5 051	4 409	5 945	51	108	1 243	6 217
Eskom 3 – KwaZulu-Natal/ Free State August 2014 – March 2016	4 730	4 269	4 677	25	87	1 954	6 392
Eskom 4 – Mpumalanga March 2015 – March 2016	3 928	3 397	4 003	73	39	870	3 615
Total	18 557	16 544	19 502	490	278	5 031	21 543

Eskom Foundation and Transnet Foundation collaboration

In the interest of optimising the reach between the Eskom Foundation health mobile buses and Transnet's Phelophepa health train, Eskom and Transnet agreed to join forces to reach a total of 10 communities in four provinces during the reporting period in the Free State, Mpumalanga, KwaZulu-Natal and Limpopo. The programme commenced on 22 February 2016 and will end on 12 August 2016.

From 22 to 26 February 2016 the first collaboration took place in Bethlehem in the Free State and the mobile health bus was based at Rehopotse Primary

School in Bethlehem. A total of 260 optometry and primary health care screenings was done during this week and 13 learners were referred to clinics and hospitals in more serious cases. During the week of 14 to 18 March, the health mobile unit and the Phelophepa train were stationed in Koppies and the mobile health unit serviced Dibaseholo Primary School. A total of 114 optometry and primary health care screenings were done as well as 93 dental screenings. Twenty five children were referred to clinics and hospitals due to the severity of their conditions.

Social development

continued

Girls and Boys Town South Africa

In 1958, Magaliesburg saw the first then “Boys Town” residential home established – born out of the compassion, altruism and social consciousness of its founders, initially providing a home for youngsters from a local children’s home who had been destined for a so-called “Trade School”. The story of the then “Boys Town”, now known as the Girls and Boys Town since 2004, is one of the most heart-warming tales of human endeavour of the 20th century. The Girls and Boys Town (GBT) journey has been a tale of everyday life in most societies of the world – the tragedy of fear, loss, despair, abuse and neglect and the triumph of faith, courage and hope that changes the way we care for children. Its legacy is about fulfilling dreams and bettering lives.

The vision of Girls and Boys Town South Africa is: Youth, Family and Community – South Africa’s Strength and Future.

Their mission is to create opportunities nationally for youth to grow and develop into responsible citizens, able to contribute to family and community life in the spirit of peace, dignity, tolerance, equality and solidarity with others.

These boys were soon joined by 17 others from children’s homes throughout the country, and since then, the organisation has continued to expand exponentially over the next 57 years – including focusing on work with girls. Services have expanded and evolved with the changing dynamics of the social and economic environment. Currently the organisation consists of four major national service divisions.

Last year Girls and Boys Town management approached the media with a view to create awareness and to raise funds for this institution, which was a major task to deal with. A media platform was seen as the best vehicle to achieve

the raising of funds. Various companies were given the platform via media to challenge one another in order to pledge for Girls and Boys Town. The targeted group was executives from these companies.

A strategy was to “buy a site” on the pavement at Sandton City for R100 000 per company for the executive to spend a cold winter night sleeping on the pavement as a demonstration and also to have a feeling on how people survive without shelter. A total amount of more than R22 million was raised to assist various sites belonging to Girls and Boys Town.

Eskom’s Group Chief Executive was one of the representatives that pledged and slept on the pavement.



Mr Brian Molefe, Group Chief Executive of Eskom, preparing for his night on the pavement.

Mpophomo Intermediate School, Waterfall in KwaZulu-Natal

The school was established in 1972 at a farm called Waterfall (Mpophomo) in isiZulu near Van Reenen’s Pass. It started using stables as classrooms with only 12 learners. The school principal approached the son of Mr Dillon, who was the owner of the farm, to build a new school. In 1990 the new school was built next to the road and opened in 1993.

The school caters for Grades R to 9 and is registered with the Department of Basic Education. It has eight educators, one admin clerk and a gardener. Currently the school has a roll of 181 learners and most of the learners live within

walking distance from the school. It also provides a feeding scheme for the learners.

The school was in need of off-road bicycles, helmets, reflectors and pumps in order to help learners who live further away to access the school premises on time. Their safety and visibility on the road is very important. Using reflectors and helmets as part of learners’ road safety is paramount.

The learners now get to school on time and absenteeism has dropped.

Sector performance

Employee volunteerism



The Eskom Guardian i-Volunteer (GiV) programme, launched in 2009, is an initiative by the Foundation to encourage groups of employees to become involved in a registered community programme, based on a different theme selected annually. The aim is to inspire and in turn create a desire to assist, develop and contribute to the betterment of other people’s lives.

Guardian i-Volunteer projects



Guardian i-Volunteer (GiV)

The Sinobuntu employee volunteer programme provides a platform for employees to give back to the community. Employees are encouraged to adopt a charity as a team, and to support the charity throughout the year. Volunteers register their employee volunteer teams and the charities they support and submit feedback on the support provided to the charity.

An adjudication process to identify the best volunteer projects is undertaken as part of the Chairman’s Award process, under the “Sinobuntu” category. The winning and runner-up volunteer teams receive a cash donation for their selected charities.

The number of entries grew – from 13 teams in 2013 to 23 registered teams in 2015. This is as a result of repeat communication to employees, including reminders and ideas on how employees (Guardians) can become involved in giving.

The volunteer teams’ activities are mainly centred around mentoring learners through Saturday classes, with a strong focus on mathematics and science tutoring, old age homes, orphanages, community development initiatives, fundraising events, personal contributions and Mandela Day activities.

The following teams came out to take the top three spots in 2015:

First place: Group IT

As part of living Sinobuntu, Group IT has formally embarked on a number of Guardian i-Volunteer initiatives, taking IT and education to the poor rural areas of their country. To this end, a number of creative fund-raisers took place throughout the year, and they received donations and pledges from a number of IT staff and suppliers. This won them first place in the Sinobuntu adjudication.

Group IT decided to assist the government to bridge the IT skills gap in their society by establishing sustainable computer centres in rural areas near Eskom strategic sites. With the assistance of local authorities, they selected the Abatungwa-Kholwa site near Ingula for their first community computer laboratory, which was officially launched in March 2015. A second computer laboratory was established at Sillasville Primary School in the Eastern Cape. Group IT CSI procured 10 desktop computers from the funds it had raised. Group IT employees also provided support to the community computer centres, which are currently used by various local schools and the community at large for printing and faxing services and periodically provide training to local teachers to enable them to train the learners.

Employee volunteerism

continued

Group IT leadership has, furthermore, challenged their departments to actively support local orphanages and vulnerable children's homes.

Team Strategy and Architecture has adopted the Village Safe Haven, a cluster foster care facility acting as a place of safety to orphans and abandoned and abused children. In 2014/15, they hosted a Christmas lunch and procured bunk beds, mattresses, chests of drawers, pots, cutlery, and crockery to the value of R37 780 for the home.

Team Solution Delivery provided a Christmas lunch at Leratong Joy for One, which looks after approximately 20 children aged between 8 and 16 and who come from indigent families. They also procured a washing machine to the value of R8 700 for them.

Tshwaranang Orphans and Vulnerable Children (OVC) is the charity selected by **Team Application Development Maintenance and Support**. The team hosted a Christmas lunch, donated educational toys worth more than R25 000, and procured a refrigerator, a microwave oven, 10 single-bed mattresses, and three gas bottles valued at R27 237.

Likewise, Buhlebezwe OVC received a donation of a four-plate stove, a microwave oven, a twin-tub washing machine, cutlery, lunch boxes and cleaning material to the value of R16 052.



Second place: System Operator

The Young Professionals (YPs) are a group of 25 enthusiastic employees at Transmission's System Operator who aim to encourage experiential learning of young professionals in and around System Operator at Eskom Simmerpan through additional training and workshops organised and presented by seniors. They also endeavour to give back to the surrounding community through charitable acts and networking in the business environment.

This group, supported by employees, has been involved in fund-raising to achieve the goals and objectives set by the YP Committee for various charitable causes. On 8 June 2015, the committee

and Simmerpan employees visited the iKhona Children's Home in Germiston to drop off lunches and toys. The biggest challenge faced by the women working at the orphanage is ensuring a constant supply of bread.

The YPs and Simmerpan staff have tried to find ideas on how to help in this regard. The committee members, with the help of some of the talented colleagues on the fourth floor, baked show-stopping and delicious creations, whose sale was well-supported and raised R1 555.90. Over and above the weekly mathematics and science lessons that a dedicated team of "teachers" from System Operator give the Grade 10 and 11 learners at the Fumana Secondary School in Katlehong, the YPs enabled learners to attend an Open Day at Wits University by contacting the municipality to sponsor transport and fruit packs for the learners.

System Operator employees contributed cash and sandwiches to give the learners a healthy lunch. At Eskom's head office, Megawatt Park and at Simmerpan, the Young Professionals have also been involved in a sanitary wear drive for girls from disadvantaged backgrounds, which is an ongoing event throughout the year.



Third-place citation: Auxiliary and Chemical

Auxiliary Plant Engineering prides itself on making a difference to its working environment and surrounding communities. Team building is encouraged, with a focus on fund-raising and making a difference in the lives of those less fortunate. During the 2014/15 financial year, Auxiliary Plant Engineering participated in numerous fund-raising initiatives to fund various charitable drives. In the previous financial year, Auxiliary Plant Engineering had registered the Frederic Place Old-age Home as its charity as part of the GiV programme.

It bought groceries to the value of R2 000 per month and hosted a monthly tea party at the Old Age Home. During 2014/15, Auxiliary Plant Engineering again bought groceries to the value of R10 000. Employees made the time to do the grocery shopping, deliver the goods, and spend some time at the old-age home. In October 2014, R4 375 was spent making up Diwali hampers for Glenview Primary School in Chatsworth, Durban. The school is located in a poverty-stricken community, where the use of drugs is very prominent.

The school principal indicated that most of the children came to school without eating breakfast and even supper the previous night. The school tries to get sponsors for breakfast to ensure that the children eat at least one good meal a day. Auxiliary Plant Engineering contributed food hampers made up of rice, beans, sugar, milk, porridge, and cake flour. In October 2014, the team contributed towards sponsoring and packing 15 000 food hampers for underprivileged children for the Stop Hunger Now

Foundation. Apart from actually packing these food parcels, they contributed a total of R41 250 to buying all the items for the food parcels.

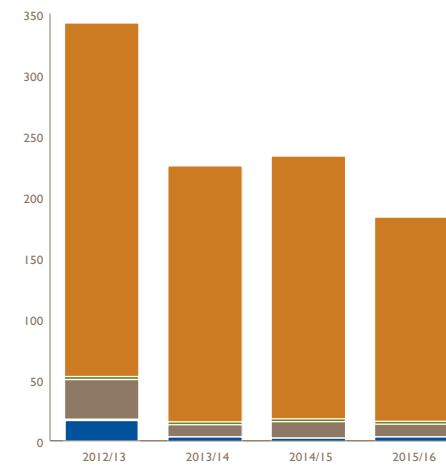


Supplementary information

- 49 Graphs: overview of activities
- 53 Full list of beneficiaries

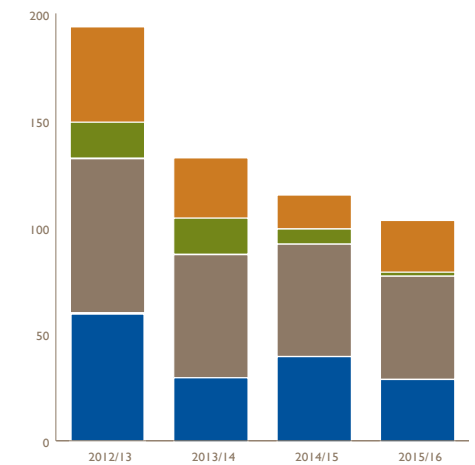
Graphs: overview of activities

Sector performance



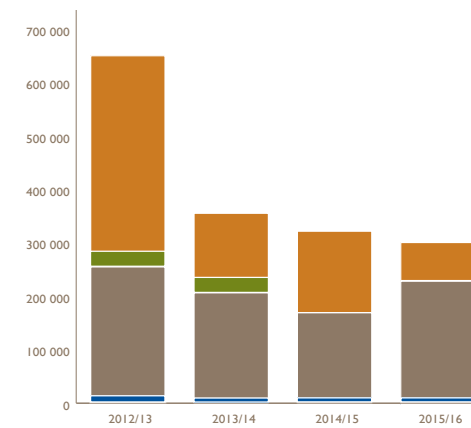
Number of projects

- Enterprise development
- Social development
- Health
- Philanthropy and welfare



Approved funds, R million

- Enterprise development
- Social development
- Health
- Philanthropy and welfare



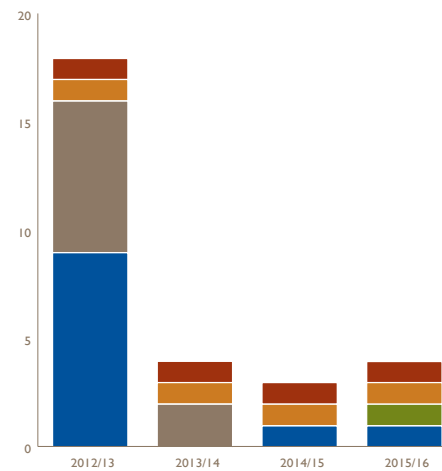
Number of beneficiaries

- Enterprise development
- Social development
- Health
- Philanthropy and welfare

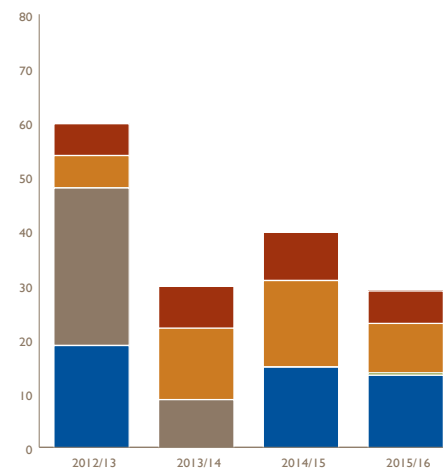
Graphs: overview of activities

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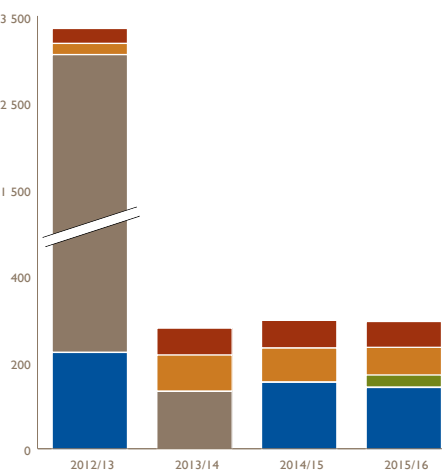
Enterprise development



Number of projects



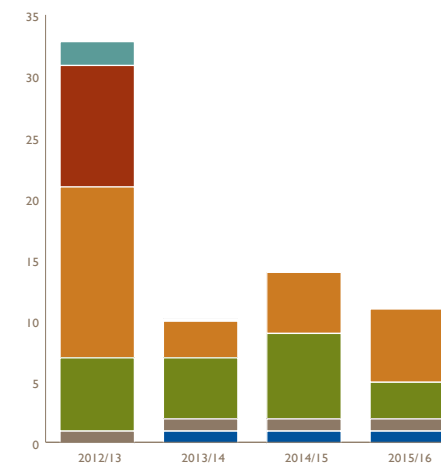
Approved funds, R million



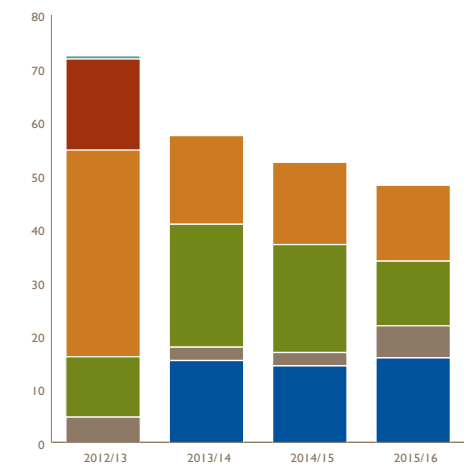
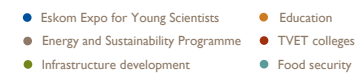
Number of beneficiaries



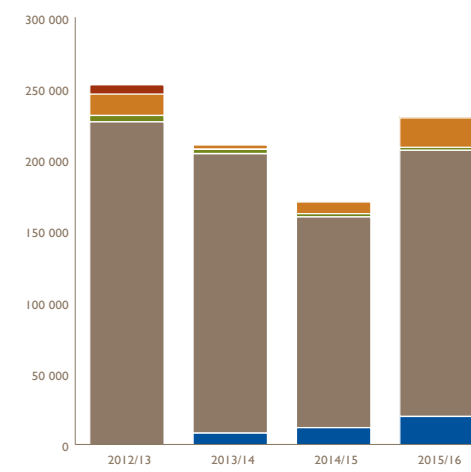
Social development



Number of projects



Approved funds, R million



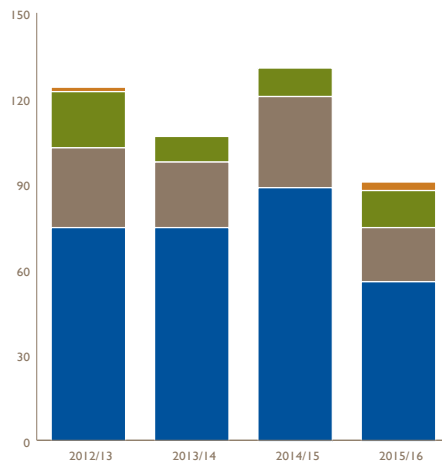
Number of beneficiaries



Graphs: overview of activities

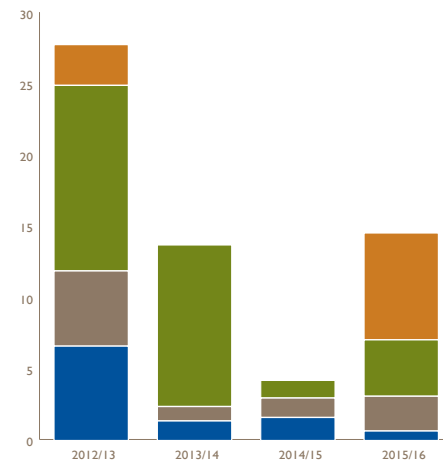
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Education



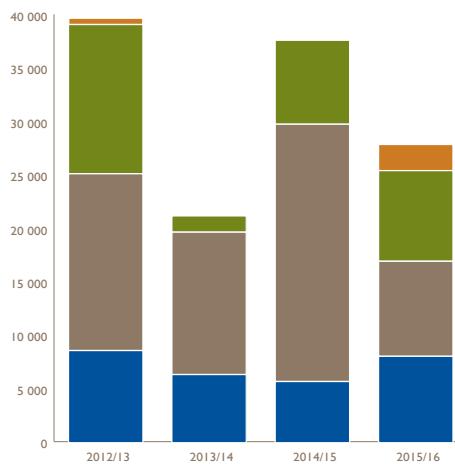
Number of projects

● Early childhood development ● Secondary
● Primary ● Tertiary



Approved funds, R million

● Early childhood development ● Secondary
● Primary ● Tertiary



Number of beneficiaries

● Early childhood development ● Secondary
● Primary ● Tertiary

Full list of beneficiaries

Project name	Location	Province
Adonai Daycare Centre	Botshabelo	Free State
Africa Unite	Cape Town	Western Cape
Afrika Tikkun	Diepsloot	Gauteng
Alberton Methodist Care and Relief Enterprise	Alberton	Gauteng
Alexandria Lower Primary School	Bushbuckridge	Mpumalanga
Amersfoort Primary School	Amersfoort	Mpumalanga
Amy Biehl Foundation	Cape Town	Western Cape
Anchor (The)	Cape Town	Western Cape
Andziani Drop-in Centre	Tzaneen	Limpopo
Arise and Shine Project	Durban	KwaZulu-Natal
Ashrafun-Nusrah the Noble Helpers Organisation	Kimberley	Northern Cape
Association for Educational Transformation	Mowbray	Western Cape
BK Matlala Commercial High School	Bakone	Limpopo
Barkly West Child Welfare	Barkly West	Northern Cape
Bergzicht Training Centre	Stellenbosch	Western Cape
Bloemfontein Tuberculosis Association	Mangaung	Free State
Boetse Secondary School	Polokwane	Limpopo
Bopanang Stimulation Centre	Phuthaditjhaba	Free State
Bophelong Disability Centre	Bothaville	Free State
Bosabosele Outreach Project	Dobsonville	Gauteng
Bosele Handicraft Centre	Sekhukhune	Limpopo
Bosmanpan Primary School	Hendrina	Mpumalanga
Bright Kid Foundation for Mteteli Preschool	Butterworth	Eastern Cape
Bright Kid Foundation for Ntshalleng Le Bana	Rustenburg	North West
Bulembu Lower and Higher Primary School	Buffalo	Eastern Cape
Business Entrepreneurship & Franchise Expo	National	Flagship
CS Medical and Relief Services (Bethesda Project)	George	Western Cape
Capoeira Educational Youth Association	Hout Bay	Western Cape
Carel du Toit Centre, Trust Fund for the Rehabilitation of Children	Tygerberg	Western Cape
Caring Hearts	Kimberley	Northern Cape
Cee-Jay Teleka Educare Centre	Bloemfontein	Free State
Child Welfare SA	Emalahleni	Mpumalanga
Colville Community Project	Kimberley	Northern Cape
COPESSA	Mondeor	Gauteng
Creating Effective Families	Mossel Bay	Western Cape
Cwakeme High School	Hluhluwe	KwaZulu-Natal
Die Heuvel Play School	Calitzdorp	Western Cape
Dihlabeng Development Initiative	Bethlehem	Free State
Dirang Mmogo Business Enterprises	Jouberton	North West
Doctors for Life Project Care	Tugela Ferry	KwaZulu-Natal
Douglas Aids Action Group	Douglas	Northern Cape

Full list of beneficiaries

continued

Project name	Location	Province
Dumezweni Primary School	Delmas	Mpumalanga
Ebongo Daycare Centre	Mankuranwe	Northern Cape
ECD Programme	Hendrina	Mpumalanga
Ekukhanyeni Youth Centre	Grootvlei	Mpumalanga
Ekurhuleni East TVET College	Kempton Park	Gauteng
Emtfonjeni Primary School	Kabokweni	Mpumalanga
Enkosi Crèche	Colesberg	Northern Cape
Entokozweni Primary School	Kabokweni	Mpumalanga
Enkhokhweni Primary School	White River	Mpumalanga
Eskom Business Investment Competition	National	Flagship
Eskom Expo for Young Scientists	National	National
Ethembeni Children Daycare Centre	George	Western Cape
False Bay College	False Bay	Western Cape
Fifth Avenue Daycare Centre	Athlone	Western Cape
Fumani Altein Drop-in Centre	Fumani	Limpopo
Gateway Educare Centre	Mbombela	Mpumalanga
Genesis Community Projects	Mossel Bay	Western Cape
Global Jewellery Academy	Lenasia	Gauteng
Goitlamela Early Childhood Development Centre	Barkly West	Northern Cape
Good Samaritan Child and Youth Care Centre	Buffalo	Eastern Cape
Great com. Youth Platform	Daveyton	Gauteng
Ha! Qua Youth Project	Riversdale	Western Cape
Happy Child Care Centre	Tzaneen	Limpopo
Heavenly Promise 48	Vredendal	Western Cape
Help2Read	Rosebank	Western Cape
Hendrick Nthambeleni Secondary School	Dzanani	Limpopo
Henneman Victim Empowerment Forum	Phomolong	Free State
Hope Cape Town Association/Trust	Bellville	Western Cape
Hope Orphanage Shelter	Benoni	Gauteng
Hopewell Day-care Centre	Perdekop	Mpumalanga
House of Hope	Vredenburg	Western Cape
Ikageng Community Crèche	Kimberley	Northern Cape
Iketsetse Itumele Crèche	Bethlehem	Free State
Ikgomotseng Orphans' Care	Soutpan	Free State
Ikhayaletu Care Centre	Pietermaritzburg	KwaZulu-Natal
Informed Kids Care	Thokoza	Gauteng
Inkululeko Day-care Centre	Katlehong	Gauteng
Isiseko Educare Centre	George	Western Cape
Ithemba Lobomi	George	Western Cape
Ithembaletu Aged Club	Mossel Bay	Western Cape
Itlhokomeleng Association for Aged and Disabled	Alexandra	Gauteng

Project name	Location	Province
Itumeleng Sechaba Home-based Care	Duduza	Gauteng
Ixabiso Iemfundo	Philippi	Western Cape
Jabulani Primary School	Mbombela	Mpumalanga
Jahari Christian Academy	Benoni	Gauteng
James House	Hout Bay	Western Cape
June and Andrew Mlangeni Foundation	Johannesburg	Gauteng
Kamva Educare	Philippi	Western Cape
Karabo: I am the Solution	Alberton	Gauteng
Karooop Primêre Skool	Piketberg	Western Cape
Kathorus Epilepsy Self-help Organisation	Katlehong	Gauteng
Khaloni Development Agency	Phalaborwa	Limpopo
Khayalabantwana Bebamisene Organisation	Boksburg	Gauteng
Khothalang Mental Health	Thabong	Free State
Kingsway Secondary School	Benoni	Gauteng
Klaarstroom Primary School	De Rust	Western Cape
Koekenaap Primary School	Koekenaap	Western Cape
Kopanang Vaalkop Drop-in Centre	Polokwane	Limpopo
Kopano – Tshwaragano Blind and Disabled Group	Barkly West	Northern Cape
Kouga Schools	Uitenhage	Eastern Cape
Kwanda Educare Centre	Kraaifontein	Western Cape
Laerskool Grootvlei	Grootvlei	Mpumalanga
Lechabile Special Needs Care Centre	Bloemfontein	Free State
Lephalele Whole-school Development Programme	Lephalele	Limpopo
Lesedi Daycare Centre	Windserton	Northern Cape
Lesedi Youth Empowerment	Hoopstad	Free State
Lethipele High School	Acornhoek	Mpumalanga
Letlotlo Primary School	Seshego	Limpopo
Lifeline Free State	Thabong	Free State
Lightening Lakhanya Project	Knysna	Western Cape
Lindley High School	Lindley	Free State
Lindulwazi Oluhle Crèche	Katlehong	Gauteng
Lithalethu Educare Centre	Stellenbosch	Western Cape
Lithe-taa Educare Centre	Philippi	Western Cape
Little Angels Day-care and Preschool	Soweto	Gauteng
Lokohtwayo Primary School	Mandini	KwaZulu-Natal
Luckhoff Kabouterland crèche	Luckhoff	Free State
Lukhanyo Educare Centre	Port Elizabeth	Eastern Cape
Lwazi Primary School	Gugulethu	Western Cape
Maakere High School	Acornhoek	Mpumalanga
Mahlatjane Primary School	Mafefe	Limpopo
Majuba Further Education and Training College	Newcastle	KwaZulu-Natal

Full list of beneficiaries

continued

Project name	Location	Province
Majuba Rail/Pixley ka Seme ECD Programme	Ermelo	Mpumalanga
Majuba Rail/Pixley ka Seme Paediatric Mobile Unit	Ermelo	Mpumalanga
Makahlule Multipurpose Centre	Giyani	Limpopo
Makhahlela Primary School	Kabokweni	Mpumalanga
Manger Care Centre (The)	Benoni	Gauteng
Mangqakaza BC School	Mandini	KwaZulu-Natal
Mantheke wa Bakwena Creche	Bochum	Limpopo
Making Child Welfare crèche	Kroonstad	Free State
Maqabela Primary School	Kabokweni	Mpumalanga
Margaret Maltman Crèche	Kwathema	Gauteng
Masibambisane Home-based Care and Support Group	Mdantsane	Eastern Cape
Masimanyane Project	George	Western Cape
Masincedisane Crèche	Mossel Bay	Western Cape
Masindezama Community Development Project	Franschhoek	Western Cape
Masingita Children's Ministry	Endicott	Gauteng
Masiphuhlise	Kraaifontein	Western Cape
Masungulo Educare Centre	Levubu	Limpopo
Matjhabeng Rape Intervention Care Centre	Welkom	Free State
Matsetseng Primary School	Lephalale	Limpopo
Matsulu Primary School	Nelspruit	Mpumalanga
Mhlangazane Primary School	Dundonald	Mpumalanga
Mhlwazini High School	Bergville	KwaZulu-Natal
Mkhuhlu Community Home-based Care Centre	Bushbuckridge	Mpumalanga
Mlilo Primary School	Kabokweni	Mpumalanga
Mnambithi TVET College	Ladysmith	KwaZulu-Natal
Moalosi Crèche	Tweeling	Free State
Moeketsi Daycare Centre	Fouriesburg	Free State
Moholoholo Secondary School	Acornhoek	Mpumalanga
Moreipuso Home Community-Based Care	Bushbuckridge	Mpumalanga
Mossel Bay Care Centre	Little Brak River	Western Cape
Mothergoose Day-care Centre	Welkom	Free State
Moutse Primary School	Moutse	Mpumalanga
Mphephu Orphan and Vulnerable Drop-in Centre	Dzanani	Limpopo
Mpumalanga Agri Skills Development and Training	Dundee	KwaZulu-Natal
Mpumalanga Agri Skills Development and Training	Mbombela	Mpumalanga
Mpumalanga Agri Skills Development and Training	Sekhukhune	Limpopo
Mudimeli Secondary School	Nzhelele	Limpopo
Mvula Trust (Ramotsinyadi Community Water Project)	Polokwane	Limpopo
Mzam'Omhle Educare Centre	Kraaifontein	Western Cape
Nala Organisation	Orange Farm	Gauteng
National Association of Child Care Workers	Cape Town	Western Cape

Project name	Location	Province
Neo Daycare Centre	Bloemfontein	Free State
New Beginning Crèche	Koffiefontein	Free State
New Life Advice and Counselling Community Centre	Soweto	Gauteng
New Millennium Educare Centre	Khayelitsha	Western Cape
New Orlies Drop-in Centre	Malamulele	Limpopo
New Women's Movement	Bellville	Western Cape
NG Kerk Kinderhuis	Danielsrus	Northern Cape
Nigel Caring Community	Nigel	Gauteng
Njabulo Preschool and Crèche	Sharpeville	Gauteng
Nobandla Nursery and Preschool	New Brighton	Eastern Cape
Nolungile Educare	Gugulethu	Western Cape
Nolusapho Preschool	Zwide	Eastern Cape
Noluthando Pre-primary School	Zwide	Eastern Cape
Noluthando Women's Project	George	Western Cape
Nomthandazo Educare Centre	Brackenfell	Western Cape
Nomsa Crèche	Luckhoff	Free State
Nondzame Educare Centre	Cape Town	Western Cape
Norvalpont Primary School	Arlington	Free State
Ntataise Daycare Centre	Dewetsdorp	Free State
Nyeleti's Children's Home	Benoni	Gauteng
Oqondweni Primary School	Mbazwana	KwaZulu-Natal
Othandweni Daycare	Nigel	Gauteng
Paballong Educare Centre	Heilbron	Free State
Pacaltsdorp Secondary School	George	Western Cape
Phakani Primary School	Kabokweni	Mpumalanga
Phaphama Crèche	Koppies	Free State
Phaphaphani Child Welfare and Resources	Dzanani	Limpopo
Phendulani Senior Secondary School	Acornhoek	Mpumalanga
Phenyo Community Health Development Project	Tzaneen	Limpopo
Philippi Children's Centre	Philippi	Western Cape
Phomolong Youth Development Centre	Hennenman	Free State
Phumzile Crèche and Preschool	Katlehong	Gauteng
Plettaid Foundation (The)	Plettenberg Bay	Western Cape
Poppy Joy Daycare	Duduza	Gauteng
Progress crèche	Pampierstad	Northern Cape
Protec Programme for Technological Careers	Spruitview	Gauteng
Ranisi Community-based Project	Kraaifontein	Western Cape
Ratang Maqheku Day-care Centre	Parys	Free State
Reach the Children	Thabong	Free State
Realistic Rebuilding and Life Training Centre	Cape Town	Western Cape
Reamogotse Early Learning Centre	Kuruman	Northern Cape

Full list of beneficiaries

continued

Project name	Location	Province
Reiketseditse Disabled Day Centre	Hennenman	Free State
Rekgotsofetse Educare Centre	Sasolburg	Free State
Rikona Nga Lufuno Home-based Care & Care-givers Project	Sandton	Gauteng
Roadside Community Project	Vrede	Free State
Roima Drop-in Centre	Thohoyandou	Limpopo
Rosemore Home for the Aged	Rosemoor	Western Cape
SA Medical & Education Foundation – Wesfleur Hospital	Muizenberg	Western Cape
SA Red Cross Society – Ethekwini Municipality	Durban	KwaZulu-Natal
SA Red Cross Society – Amaoti/Zwelisha	Amaoti	KwaZulu-Natal
SA Red Cross Society – Dassenhoek	Dassenhoek	KwaZulu-Natal
SA Red Cross Society – Kwanyuswa	KwaNyuswa	KwaZulu-Natal
SA Red Cross Society – Mnambithi Municipality	Ladysmith	KwaZulu-Natal
SA Red Cross Society – Ntuzuma Municipality	Ntuzuma	KwaZulu-Natal
SA Red Cross Society – Port Alfred	Port Elizabeth	Eastern Cape
SA Red Cross Society – Umlazi Municipality	Umlazi	KwaZulu-Natal
Sakhingomso crèche	George	Western Cape
Sakhisizwe Home-based Care	Katlehong	Gauteng
Salvation Army Crèche (The)	Galeshewe	Northern Cape
Sange Development Project	Khayelitsha	Western Cape
Sasolia Primary School	Kinross	Mpumalanga
SEDA Agricultural and Mining Tooling Incubator	Bloemfontein	Free State
Sekhukhune Technical and Vocational Education Training (TVET)	Sekhukhwe	Limpopo
Sibongile Crèche	Duduza	Gauteng
Sibongile Early Learning Centre and Preschool	Katlehong	Gauteng
Sibongujeza Primary School	Hibberdene	KwaZulu-Natal
Sifunlwati Daycare	Kanyamazane	Mpumalanga
Sikhula Sonke Early Childhood	Khayelitsha	Western Cape
Simunye Educare Centre	Philippi	Western Cape
Sinako Educare	Gugulethu	Western Cape
Sinethemba Educare Centre (Joe Slovo Village)	Mossel Bay	Western Cape
Sinethemba Educare Centre (Old Crossroads)	Crossroads	Western Cape
Sinethemba Support Group	Dunnottar	Gauteng
Sinomonde Educare Centre	Zwide	Eastern Cape
Siyabathanda Educare	Kraaifontein	Western Cape
Siyakhula Children's Home	Orange Grove	Gauteng
Siyanihanda Disabled Child-care Centre	Groot Brakrivier	Western Cape
Siyathemba Primary School	Balfour	Mpumalanga
Siyazama Educare Centre	Delft	Western Cape
Sizabantu Support Centre	Boksburg	Gauteng
Somerset Hospital	Green Point	Western Cape
Sonqoba Aids Programme Trust	Eshowe	KwaZulu-Natal

Project name	Location	Province
Sophakama Hospice Centre	Mossel Bay	Western Cape
Soshanguve Manufacturing Technology Demonstration Centre	Soshanguve	Gauteng
South African Chemical Technology Incubator (Chemin)	Durban	KwaZulu-Natal
Star Daycare Centre	Kempton Park	Gauteng
Stellenbosch University (SciMathUs)	Stellenbosch	Western Cape
Step by Step Preschool	Khayelitsha	Western Cape
Sterkstroom Drop-in Centre	Thohoyandou	Limpopo
Sunbeam Speelgroep	Melkhoutfontein	Western Cape
Teach SA	Lephalale	Limpopo
Tebogo Home	Orlando	Gauteng
Thabang Information Centre	Hartswater	Northern Cape
Thabiso	Warrenton	Northern Cape
Thabo Mofutsanyana Health District	QwaQwa	Free State
Thantaswa Educare Centre	Nyanga	Western Cape
Thatohatsi Crèche	Springfontein	Free State
Theewaterskloof Agency for Social Transformation and Economic Development	Riviersonderend	Western Cape
Thembaletu Daycare Centre	Jacobsdal	Free State
Thusanang Advice Centre	Phuthaditjhaba	Free State
Thusanang HIV/Aids Relief Project	Roodepoort	Gauteng
Tina Nursery and Preschool	Kwazakhele	Eastern Cape
Tiny Tots Kids and Community Development Centre	Daveyton	Gauteng
Tjhabatsohle Primary School	Vereeniging	Gauteng
Tlhokomelo Home-based Care	Soweto	Gauteng
Toise Secondary School	Buffalo	Eastern Cape
Trinity Deliverance Ministries	Nigel	Gauteng
Tshana High School	Mandini	KwaZulu-Natal
Tshepanang Children's Fund	Welkom	Free State
Tshepo Foundation	Bloemfontein	Free State
Tshikosi Primary School	Thohoyandou	Limpopo
Tshireletso Secondary School	Lephalale	Limpopo
Tshireletso Victim Empowerment Centre	Hoopstad	Free State
Tshuxekani Drop-in Centre	Namakgale	Limpopo
Tshwaraganang Old Age Centre	Delporshoop	Northern Cape
Tumahole Self-help Association for Disabled	Parys	Free State
Tygerberg Hospice Trust (The)	Bellville	Western Cape
Ubuntu Unwasted Crafts	Mossel Bay	Western Cape
Universe Theatre	Landsdowne	Western Cape
Uthaka Secondary School	Volksrust	Mpumalanga
Vhembe Further Education and Training College	Thohoyandou	Limpopo
Vision Afrika	Stellenbosch	Western Cape
Vredendal Dienssentrum	Vredendal North	Western Cape

Full list of beneficiaries
continued

Project name	Location	Province
Vuka Early Childhood Development Centre	Bultfontein	Free State
Vukuhambe Association for the Multi Disabled	Worcester	Western Cape
Vusisizwe Educare Centre	Mossel Bay	Western Cape
Vuyiswa Home for Adult Handicapped	Orange Farm	Gauteng
Western Cape Primary Science Programme Trust	Landsdowne	Western Cape
Wisani Primary School	Bushbuckridge	Mpumalanga
World Focus Victim Empowerment	Thohoyandou	Limpopo
Wynberg Society for the Aged	Retreat	Western Cape
Xikukwani Development Organisation	Giyani	Limpopo
Yellowwoods Farm School	Port Elizabeth	Eastern Cape
Yu Blessed Deng Daycare Centre	Ladybrand	Free State
Zanethemba Kidz Haven	Philippi	Western Cape
Zenzele YWCA Preschool	Kroonstad	Free State
Zimisele HIV/Aids Care	Kwamashu	KwaZulu-Natal



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