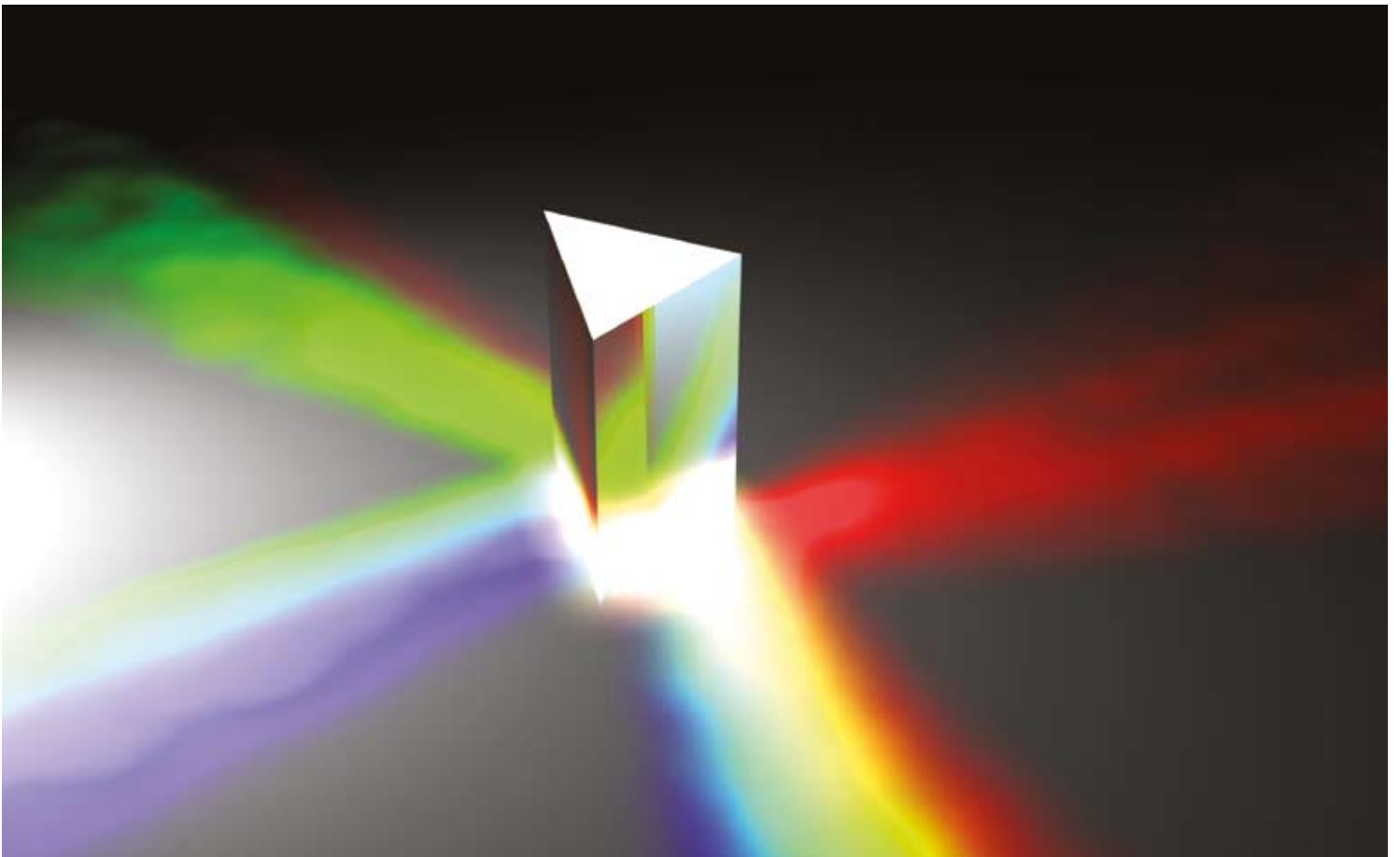


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A customer magazine  
of the ABB Group  
South Africa

# inTouch



## Laser measurement lift off

Technology pioneered in South Africa

### **Charging up car battery research**

ABB and GM collaborate on energy storage devices

### **Industrial energy efficiency**

More sustainable energy savings

### **Fighting HIV/AIDS**

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Rabelani Netshituni, Production Supervisor, K-TEK, pioneer in laser measurement technology (10)

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**Carlos Poñe**  
CEO and Country Manager  
ABB South Africa

#### Customer focus

Customer success stories give me much satisfaction in our business in South Africa. It is always pleasing to hear our front-end sales people talk about how they have helped our customers to implement solutions to increase energy efficiency, grid reliability and industrial productivity. I am also delighted when employees have gone out of their way to assist customers – such as with an urgent service call or by flying in a vital spare part to keep production up at a plant.

We never lose sight of our need to remain focused on serving customers. We understand that, above all, what our customers really want is solutions to their problems and superior service that goes with it.

Customer service includes many processes in our business. We have close to 30 concurrent projects running as part of our operational excellence programme to ensure our customers enjoy the highest possible quality from our local operations.

We have also increased our number of skilled people to support effectively our utility customers such as Eskom. We have appointed key account managers for customers in the utilities and the industry sectors. Our account management is important for understanding our customer needs and supporting them in their power and automation technology investments.

In our after-market service offering, which includes full service through to motor management, we have introduced consulting services for industrial plants. Consulting Services helps our customers to audit their plants for energy savings and optimising industrial processes.

This year in South Africa we have added to our range to better serve our customers by acquiring two companies that will broaden and strengthen our local offering to our customers. The first company is K-TEK (see the feature on this business on page 10), which is a level detection and laser technology business that will form part of ABB's Measurement Products business unit within ABB's Process Automation division. It is based in Longmeadow and has 30 employees. This acquisition will provide our customers in oil and gas, water and other industries with access to an expanded range of leading-edge instrumentation and sensing technologies.

The other acquisition is the mine hoist related business of local manufacturer Coilmech. We will add the business to our process automation portfolio for customers in the mining sector. These products are impor-

tant for upgrading and expansion of mining infrastructure to assist mines to use energy more efficiently. Coilmech's offering combines with ABB's existing mining electrical equipment. It will enable ABB to execute turnkey mine hoist projects for mining customers in South Africa and the southern Africa region. Coilmech, based in Ekurhuleni, Gauteng, employs about 30 people. The business will transfer to ABB's new head office, logistics and manufacturing premises at Longmeadow, Johannesburg. The acquisition is subject to customary regulatory approvals.

In this issue of *InTouch* magazine we cover ABB's stakeholder engagement session held recently at Longmeadow. The event was an opportunity for stakeholders – including customers, suppliers, employee representatives, tertiary institutions and not-for-profit organisations – to discuss their views of ABB in the country and to help influence the sustainability agenda at ABB South Africa. I attended this session and was encouraged by the constructive feedback and views from our stakeholders. We listened to their concerns about the need to step up promotion of our energy efficiency technology.

As I mentioned in the previous issue of *InTouch*, ABB addresses HIV/AIDS in the workplace as part of its overall employee wellness programme. ABB in South Africa runs an awareness and prevention programme related to HIV/AIDS. The programme includes presentations from external specialists, distribution of condoms, awareness campaigns and a nutritional programme for shop floor employees. Internal wellness programmes include awareness campaigns, support structures and voluntary counselling and testing.

ABB South Africa has been supporting organisations such as Noah and Starfish that care for orphans of HIV/AIDS for the past five years, investing close to R3-million in programmes to help build capacity in communities to take care of orphaned and vulnerable children. Capacity building takes place through training, infrastructure and financial support.

I would like to take this opportunity to wish all our customers, suppliers and stakeholders a safe festive season and prosperous New Year. Despite the economic difficulties, we will continue to work together to serve our customers in South Africa and the southern African region.

**Carlos Poñe**  
CEO  
ABB South Africa

# Power order for Ingula

ABB's electrical balance of plant solution will help to meet SA's ever-growing demand for electricity.

ABB will supply Eskom with a \$23-million electrical balance of plant (eBoP) solution for the Ingula Pumped Storage Scheme under construction on the provincial border between Free State and KwaZulu-Natal.

The Ingula plant will have the capacity to generate 1333 megawatts (MW) of hydropower for the South African grid when fully operational in 2014. It is estimated that South Africa will require an additional 40 000 MW of power by 2025.

As part of the turnkey eBoP solution for the power plant, ABB will be responsible for design, engineering, supply, installation and commissioning. Key products to be supplied include service and auxiliary transformers, dry-type distribution transformers as well as medium and low-voltage switchgear.

Ingula Pumped Storage Scheme has upper and lower reservoirs. The upper reservoir will have a capacity of 22.6 million cubic metres and an active storage of 19.3 million cubic metres. The lower reservoir will have a 26.3 million cubic metre capacity and active storage of 21.9.

The reservoirs, 4.5 kilometres apart, are connected by underground waterways to a subterranean generating plant with



ABB – leading supplier to hydroelectric and pumped storage plants.

four 333 MW pump turbines. During peak energy consumption, water will be released from the upper reservoir through the pump turbines to the lower reservoir to generate electricity. When energy consumption is low, the process will be reversed, and water will be pumped from the lower to the upper.

"ABB has a strong track record in providing power and automation solutions that enable pumped storage plants to operate at high levels of efficiency and reliability," said Franz-Josef Mengede,

head of ABB's global Power Generation business in the Power Systems division. "The Ingula project will generate a significant amount of renewable hydropower to help meet the growing demand for electricity in South Africa."

ABB has supplied solutions for more than 300 hydropower plants, ranging from small one or two megawatt installations to some of the largest hydroelectric and pumped storage plants in the world.

## Powering up the DRC

Medium voltage transformers help provide access to electricity and foster economic growth.

A transformer order worth \$8-million has been received by ABB from SNEL, the Democratic Republic of Congo's leading electric utility. SNEL is a state-owned company that has been given the mandate for major electricity development projects in the country.

The project is funded by the World Bank and will be carried out over the next 18 months. Its scope includes the supply and installation of medium voltage transformers for the city of Kinshasa – at the six main distribution substations

in Kinshasa, namely Limete, Lemba, Ndolo, Centre des Affaires, Devinière and Kinsuka.

"ABB power technologies support grid reliability and energy efficiency," said Carlos Poñe, CEO, ABB South Africa. "We are pleased to play our part in the development of the Kinshasa power infrastructure to meet electricity needs and support economic growth."

Kinshasa has severe energy shortages, mainly due to increasing demand and ageing equipment. Recent transformer

failures affected crucial power supply to the north-western part of the city.

ABB transformers meet strict parameters with respect to electrical system demands and functioning in areas with extreme climatic conditions.

# New substation for Botswana

A turnkey project will help provide access to electricity and foster economic growth in southern Africa.

ABB will build a new 400/220 kilovolt (kV) Isang substation for Botswana Power Corporation. The substation is about 40km from Gaborone, the capital of Botswana.

The substation will support the integration of electricity from the 600 megawatt Morupule 'B' power plant into the national grid. The goal of the development project is to electrify about 100 villages and boost supplies to several other villages that have access to electricity but suffer from severe shortages.

The turnkey substation project, funded by African Development Bank, includes design, supply, installation and commissioning. ABB will supply eight fully equipped 400kV and ten 220kV bays. The substation will be the first in the region to be equipped with an IEC

61850 compliant automation, control and protection system. IEC 61850 is an international communications standard that ensures inter-operability and open communications between substation devices and other grid installations.

The project is expected to be completed by 2011.

"We are pleased to play our part in the development of Botswana's power infrastructure to meet electricity needs and support economic growth," said Oleg Aleinikov, head of ABB's substations business, a part of the company's Power Systems division. "The substation will also help to strengthen the transmission network and improve grid reliability."

In 2008, nearly 80% of the electricity supplied in Botswana was imported from neighbouring countries. However, as a

result of energy shortages in the region, these countries are reducing electricity transfer to Botswana, leading to power cuts and load shedding.

"This is another example of ABB's continued success in the region and we are pleased to play our part in the development of Southern Africa's power infrastructure," said Carlos Poñe, Country Manager, ABB South Africa. "This project will facilitate greater self sufficiency and grid reliability for Botswana and help meet growing power needs."

Substations are key installations in the power grid, facilitating the efficient transmission and distribution of electricity. They include equipment that protects and controls the flow of electrical power. ABB is the world's leading supplier of air and gas-insulated substations, covering a range of voltage levels up to 1 100kV.

# ABB extends local capabilities with mine hoist business purchase

Acquisition expands product range, extends local engineering and manufacturing capabilities and demonstrates ABB's commitment to local mining market.

ABB South Africa will acquire the mine hoist related business of a local manufacturer, Coilmech (Pty) Ltd, for an undisclosed sum.

Mine hoists are used to transfer materials and people up and down mine shafts. ABB South Africa will add the business to its process automation portfolio for customers in the mining sector. These products are important for the upgrading and expansion of mining infrastructure and in assisting mines to use energy more efficiently. "This acquisition forms part of ABB's strategy to support the mining sector with local manufacturing and demonstrates our commitment to the local market," says Carlos Poñe, CEO of ABB South Africa.

"Current and future customers will benefit greatly from ABB's electrical and mechanical integration capabilities, as well as from ongoing improvements in quality and performance arising from ABB's far-reaching research and development efforts." ABB South Africa will expand distribution of the solutions through its India, Middle East and Africa (IMA) regional distribution channels and increase the product range. The business will also benefit from ABB South Africa's black economic empowerment credentials.

The Coilmech operation, currently based in Ekurhuleni, employs about 30 people. It will transfer to ABB's head office, logistics and manufacturing prem-

ises at Longmeadow, Johannesburg.

The acquisition is subject to customary regulatory approvals.

## PROFILE

# Benjamin Kabeya

Interviewed by Tamara Chetty

With ABB's strong focus on Southern Africa and recent orders including eight substations for the DRC, Tamara Chetty interviewed Benjamin Kabeya, Front End Sales Manager, Southern Africa Region, on his assessment of business in the past year and insights into what motivates him.



Benjamin Kabeya  
ABB's Southern Africa Region Front End Sales Manager

**Which city were you born in? Describe your childhood home and where it was.** Democratic Republic of Congo, Likasi. I am part of a family of 12 children, six brothers and six sisters, with me being the first son in the family. I studied at Likasi secondary school in Lubumbashi, majoring in mathematics and physics, then furthered my education in electrical engineering in Kinshasa.

**Share with us a memorable moment in your life, a time you will never forget.** The day I got married. My wife is my support and inspiration.

**Tell us about some successful projects in your region that you are**

**very proud of?**

At ABB Tanelec, Tanzania, there were extreme conditions, such as one telephone line, which was also used as a fax line. I managed to increase the export volume order numbers from \$1-million to \$9-million in one year.

ABB Uganda managed to increase the order numbers from \$280 000 to \$9-million in five years. Employee numbers increased from four to 14.

We also supplied 3 000 distribution transformers to the Ugandan market.

In the DRC, we received orders worth up to \$150-million, comprising of \$14-million in orders directly from South Africa and the others from Germany and Sweden.

**Tell us about your very first job after graduating from college.**

I was a maintenance manager for a company called Mecelco that manufactured wagons, doing mechanical and electrical maintenance for five years.

I moved to South Africa in March 1993 and worked for ABB Powertech Transformers from January 1995 to September 1995. From September 1995 to 1997, I worked at ABB Tanelec in Arusha. From 1997 to 2002 I was Country Manager in Uganda.

I'm currently the Front End Sales Manager: Southern African Region

**What do you do in your free time?**

I watch Formula 1 motor racing. I make sure I attend one Formula 1 event every year.

**What do you find yourself doing that you said you'd "never" do?**

Sales. I always thought that I would never be able to do sales and in the long run it has become one of my strongest points.

**Who is the person you most admire and why?**

My wife, she is my greatest motivation.

She found the vacancy for my job at ABB in the newspaper. I was not sure about getting the job, but she was confident I was the right person for it. And I guess she was right from the start. She made me believe in myself and develop a talent that I didn't even know I had within me.

My other inspiration was my father who taught me "Wherever you are, behave as if you were at home and make a success."

**What is something that you are really proud of and why?**

I am proud of the person that I have become and my standing within my community. I am also proud of my achievements within my career. I believe that I am the result of my own thinking.

I was a boxer for 10 years. One day I got knocked down but that day I realised that I could get up from my fall and be a champion in other areas of life and business.

**What are the goals you are still working toward?**

To triple the results in the region within the next three years.

**If you could take three things to a deserted island, what would they be and why?**

My wife, patience and determination...

# ABB still tops in DCS market

ARC study says services remain at the core of future growth.

ABB retained its leading international market position in the latest Distributed Control Systems Worldwide Outlook study, conducted by ARC Advisory Group.

The study says the distributed control system (DCS) market suffered more than anticipated in 2009, but ABB increased its share of this core automation sector.

The overall market for DCS declined by just under 7% between 2008 and 2009.

ARC forecasts accelerated market growth after 2011, but not to near the levels seen prior to the recession. The compound annual growth rate for the market through 2014 is predicted at 4%. Historically, the process automation market has experienced slow but steady growth.

The need for industry end users to reduce energy consumption and optimise raw materials costs remain among the top cost pressures affecting manufacturers today. ARC says integrating the automation and power/energy domains of the manufacturing process, and utilising the global IEC61850 standard to link intelligent electrical devices, can yield significant energy and operational cost savings.

"The worlds of automation and electrification are becoming increasingly entwined due to the substantial potential for energy savings, increased reliability and uptime, and reduced maintenance costs," says Larry O'Brien, Research Director for Process Industries at ARC. "ABB's ability to integrate the process control, process

electrification, and power distribution and management portions of a plant with System 800xA, leveraging the IEC61850 standard, offers end users significant operational benefits. Typical savings can result in a 20% reduction in capex (capital expenditures) and opex (operating expenditures)."

According to the study, ABB was also regional market leader for Europe/Mid-East/Africa (EMEA), and worldwide leader in key global verticals – including upstream oil and gas, pulp and paper, cement and glass.

More information on the Distributed Control Systems Worldwide Outlook, and other studies on the global automation market, is available at [www.arcweb.com](http://www.arcweb.com)

**"The study says the distributed control system (DCS) market suffered more than anticipated in 2009, but ABB increased its share of this core automation sector."**

# Wind farms blow in \$50-million for ABB

German contracts will ensure reliable transmission of renewable power from key North Sea installations.

ABB will provide maintenance services for the grid connections of offshore wind farms in the North Sea off the coast of Germany. The three-year contract worth more than \$50-million is with the German transmission system operator TenneT TSO (formerly transpower) and has extension options.

"Offshore wind power is becoming a key source of large-scale renewable energy, and makes a significant contribution to reducing emissions and lowering environmental impact," said Peter Leupp, head of ABB's Power Systems division. "Growth of our service business is a key focus area for ABB, and we are in a good position to support TenneT in maintaining the efficiency and reliability of these transmission links."

ABB is responsible for maintaining the HVDC Light (high-voltage direct current) connections of TenneT's BorWin1 and DoWin1 wind projects to the German grid on the mainland. ABB will maintain the land and sea-based HVDC converter stations connecting the wind farms, as well as the offshore platforms.

BorWin1 connects the world's most remote offshore wind farm to the German grid over a 200km-long underwater and underground cable route. The ABB-built link, including onshore and offshore HVDC converter stations, ensures that power harvested from the 400 MW BARD Offshore 1 wind park reaches German consumers.

DoWin1 will connect the 400 MW Borkum West II wind farm and other wind farms to be built nearby to the German grid. The 800 MW ABB-built link will include onshore and offshore HVDC converter stations and 165km of underwater and underground DC cables with a rated voltage of 320 kilovolts, the highest voltage level of extruded cable ever used for HVDC transmission.

# ABB and GM charge up electric car battery research

Collaborative project between the two companies will investigate turning used electric car batteries into energy storage devices.



01

ABB and General Motors have signed a non-exclusive memorandum of understanding to co-operate on a research and development project that will investigate uses for electric vehicle batteries once their useful life in the vehicle is over.

The project will examine the potential of reusing spent lithium-ion battery packs from GM's electric car, the Chevrolet Volt, as a means of providing cost-effective energy storage capacity, which will improve the efficiency of electrical systems as they evolve into smart grids.

"Future smart grids will incorporate a larger proportion of renewable energy sources and will need to supply a vast e-mobility infrastructure – both of which require a wide range of energy storage solutions," said Bazmi Husain, head of ABB's smart grids initiative. "We are excited to explore the possibility of employing electric car batteries in a second use that could help build needed storage

capacity and provide far-reaching economic and environmental benefits."

According to GM, the Volt's battery will still have significant capacity to store electrical energy, even after its automotive life.

"That's why we're joining forces with ABB to find ways to make the Volt batteries provide environmental benefits that stretch beyond the highway," said Micky Bly, Executive Director of Electrical and Hybrid Systems, who announced the partnership at the EV Battery Tech conference in Troy, Michigan. "Our relationship with ABB will help develop solutions that optimise the full life-cycle of the Volt battery."

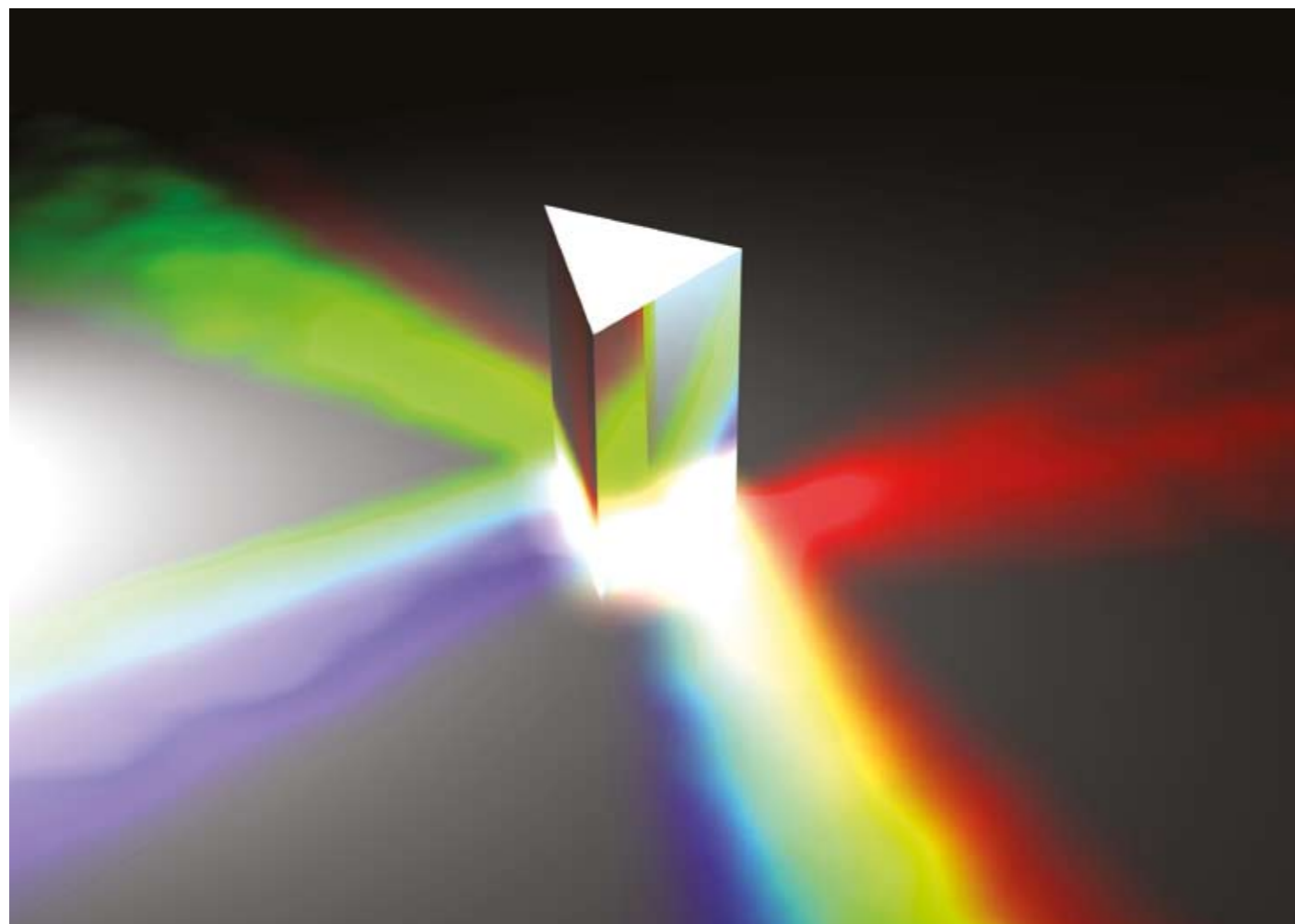
Economical grid storage is often identified as a key "enabler" technology of smart grids that will drive the wider use of a variety of applications, including:

- managing the intermittency of wind and solar resources
- mitigating spikes in electricity demand

- providing back-up power
- allowing cheaper off-peak power to be used during peak periods

ABB is currently at work on more than 20 projects around the world examining all aspects of the smart grid, from energy storage to network management, metering and communication, distribution automation and home automation systems.

01 ABB DC fast charge stations will allow rapid recharging of electric vehicles. Depending on the battery and vehicle type, a recharged range of greater than 100km in less than 10 minutes is readily achievable. As battery technology advances further, recharging will become available with the speed and simplicity of a fuel stop.



01

# K-TEK measures up to ABB

A new acquisition in the growing laser measurement market has boosted ABB South Africa's Process Automation division.

The international acquisition of instrumentation and measurement company K-TEK by ABB has a strong South African flavour as the use of laser technology to measure solids inside vessels was pioneered in Johannesburg by a company called Laser Measurement (Pty) Ltd, founded by professional engineer James Portman.

With a background in the mining industry, Laser Measurement was a wholly South African company that American firm K-TEK became interested in. Based in Louisiana, K-TEK specialised in level detection of liquids in vessels for the oil and petrochemical industry, and its interest was sparked by Laser Measurement's capability to accurately detect the level of solids in tanks, silos and other vessels.

K-TEK acquired Laser Measurement in the late 1990s for its solids detection capability based on laser non-contact technology able to interface with automatic control and SCADA systems.

KAB Instruments, also a Johannesburg-based company, was later acquired by K-TEK in 2008, primarily for its non-contact level measuring instrumentation based on ultrasonic technology.

These acquisitions gave K-TEK the capability to offer high-specification petrochemical markets liquid level instruments made in the US, high performance solids level measurement from Laser Measurements in South Africa and, where price was deemed critical, lower cost ultrasonic technology from KAB.

K-TEK, a global leader in level detection technology, has more than 350 000 insta-

llations worldwide, employs 250 people and has facilities in China, Netherlands, India and South Africa.

ABB now has all these product capabilities and service offerings through the international acquisition. In South Africa, K-TEK was conveniently located near the ABB headquarters in Longmeadow anyway and the company, its 40 employees and its equipment and stock have already been relocated to the ABB complex.

Internationally, ABB sees the acquisition as a means of providing its customers in oil and gas, water and other industries with access to an expanded range of leading-edge instrumentation and sensing technologies. There is also a lot of potential for synergy between ABB's extensive geographic reach and exposure to other industries and K-TEK's depth of

level detection technology.



02

level detection technology.

The acquisition is in line with ABB strategy to pursue growth opportunities that complement the company's product, technology and geographical portfolio.

Portman said he started Laser Measurement because he found laser technology fascinating and, from a business viewpoint, the technology potentially offered price-performance benefits unmatched by any other.

"We were able to take this exotic laser technology and tame it so that today laser is very competitive, whereas before it was regarded as expensive and fragile. We've managed to turn it into robust equipment that can handle the tough environment and rigours of the mining industry."

A graduate of the University of The Witwatersrand, Portman was originally inspired by a paper compiled by noted German physicist Walter Schottky in the mid-20th century on manipulating transistors to deliver very high levels of energy in a very short time. Laser Measurement devoted further study to the concept and was able to develop an extremely high power, very fast laser beam capable of accurately measuring levels. The laser equipment also had to be class one eye safe, a very rigid standard to achieve.

"What we came up with was absolute-perfect for measuring levels," said Port-

man. "Since then the technique has become common knowledge and is being used by other laser companies. What amazed me at the time was the fact that very few engineers knew about this particular paper of Schottky's or had tried to make use of the concepts in it."

K-TEK is growth-orientated, says Portman. "This growth is continuing in terms of both products and solutions which are tailored to follow the evolution of the markets we are servicing. Commodity prices are climbing because of demand, which means there is a need for high precision measurement as it becomes critical to the companies involved.

"ABB provides an infrastructure which offers resources that K-TEK in its entirety will really be able to use in the future to ensure successful ongoing business and the development of products to world-class standards. To have the clout of ABB behind us is a huge advantage. We now have access to other distribution channels and training programmes that in the past we could only dream about."

The South African division of K-TEK was a feeder factory for K-TEK globally. "Manufacturing took place here and the laser and ultrasonic products were then distributed globally," said Portman.

"This fits perfectly with the way that ABB operates. Up to 80% of what we



03

01 Global leader in laser technology.

02 Rabelani Netshituni, Production Supervisor, K-TEK, pioneer in laser measurement technology.

03 Laser products – designed for precision measurement.

made in South Africa was for export and it is highly likely this will grow further now that we are part of ABB. Our operation here was ranked the top supplier of laser equipment in the US, which was the biggest world market by far."

Portman added that the K-TEK Instruments South Africa structure and operation represented a great model to encourage local companies with a low-cost manufacturing base to think globally, way beyond just a focus on the local market.

"We were always export driven and it paid off for us. Our goals were all focused on designing products that meet the real needs of the markets. We always ensured our development team was strong and that the focus was on making products that solve problems for others. Meeting customer expectations and needs – that's what it is all about."

The fact that ABB has a measurement products division and a fairly broad portfolio of instruments, including flow meters and pressure, positioning, force, temperature, vibration and other sensors, as well as a broad footprint in many of the major industries that K-TEK was serving, offers additional synergies.

"The local amalgamation of K-TEK Instruments SA into ABB at Longmeadow offers synergy in logistics, synergy and communication," said Portman.

# Industrial energy efficiency – ABB has a unique approach



Edith Kikonyogo, Consulting Services

Edith Kikonyogo, Manager of Consulting Services in South Africa, explains how ABB can make a real difference.

With energy efficiency becoming vitally important to industry in South Africa, many service providers with different offerings have emerged on the energy management scene.

Services on offer range from raising awareness, through energy audits, to implementation and management of specific energy efficiency projects. The educational end of the spectrum tends to have either a theoretical/academic or legislative focus, while the project implementation end is typically focused on specific equipment or supplier products.

## Improves energy consumption

A standard approach of service providers in the energy efficiency field is to start off with an energy audit – an assessment of a customer's operations to establish a baseline of current energy usage and to find potential saving opportunities. The audit report typically includes, among other things, recommendations on how energy efficiency can be improved on the plant. In many cases, the customer is handed back the reins after submission of the energy audit report and must then try to implement the recommendations to achieve energy savings.

Another form of offering has a service provider implementing a specific project to improve energy consumption in a specific process or piece of equipment. In such cases, the scope of the initial assessment is typically bound by the service provider's area of expertise – covering only processes or equipment for which the service provider can supply the relevant equipment and/or systems to

upgrade the existing system to improve efficiency.

## What makes ABB's approach unique?

ABB's Industrial Energy Efficiency consulting programme is implementation-focused rather than audit-focused.

While the front-end of the programme's structure is similar to others – starting off with an Opportunity Identification study – the focus is on supporting customers beyond the audit phase, in attaining and keeping energy savings. We enable successful implementation of a programme of energy efficiency projects, following a road map that is tracked, to achieve savings.

Further, the programme focuses on practical recommendations to improve energy efficiency. The core deliverable from the first phase, the Opportunity Identification study, is a set of practical, implementable opportunities to attain quantifiable energy savings rather than a list of possibilities with unclear viability.

The ABB team can identify practical opportunities as most of the energy consultants have operating plant experience and an understanding of what works, practically, in a real industrial operation. The ABB approach is not theoretical, but well structured and focused on implementation of projects to deliver savings.

The other differentiator of ABB's Industrial Energy Efficiency consulting programme is that it offers a holistic approach in three key facets.

Firstly, it considers not just electrical energy but thermal as well. We assess all energy streams utilised on a plant, including those from sources such as coal, die-

sel, petrol, paraffin and gas.

Secondly, ABB considers all plant processes and utilities, rather than adopting a piecemeal approach focusing on specific components. Our approach is system-wide optimisation.

The third facet of ABB's holistic approach is that it is process and people-focused, rather than equipment-focused. While analysing specific equipment forms a central part of the programme, we also dedicate time to the process around the equipment, and the behaviours and practices of the users of that equipment.

## In-house strength

Another ABB strength is that the company's depth as a leading technology and solutions provider means great in-house process and technology knowledge can be accessed by the consulting team. In implementing specific technologies to improve energy efficiency, ABB can use a combination of expertise on leading energy efficient technologies used by our customers, such as drives, high efficiency motors, control and optimisation systems and power quality improvement solutions.

These differentiating factors have led to ABB's Industrial Energy Efficiency programme earning a track record in attaining sustainable energy savings for customers in the industrial sectors of minerals processing, metals, pulp and paper, power generation, and oil and gas processing.

# Building brand awareness and connecting with customers

Words Pamela Manda

Customer events are critical to marketing the ABB brand and products – and in engaging with current and future customers.

Throughout the year, ABB South Africa holds customer events and participates in various trade shows, exhibitions and conferences.

Corporate events represent a significant investment of time and money, and each one ties in with corporate goals and objectives and marketing strategy.

Whether an event is hosted at our facility, at a hotel, or at an external exhibition centre, it needs to be unique as competitors also hold events targeting the same prospective customers.

"One of the ways we achieve this is through our corporate identity which sets us apart from our competitors," says Nthabiseng Dube, ABB South Africa's Marketing and Communications Director. "After two years of hard work on refreshing our corporate identity, the benefits are showing fruit.

"The events we host and participate in are an important tool for building sustainable relationships with our customers," says Dube.

The Robotics Business unit recently exhibited at Electra Mining Expo, a key meeting and market place for stakeholders in the mining, construction, industrial and power generation industries. It is the second largest mining show in the world. Robotics had an interesting product display that attracted huge attention and interest. Three new welding applications and robots were introduced to the South African market.

"We have found these shows to be very effective vehicles to get good exposure for ABB, especially for our type of business," says Lars Mandal, Local Business Unit Manager for Robotics in South Africa. "This form of direct marketing



Nthabiseng Dube, ABB South Africa's Marketing and Communications Director.



Building sustainable relationships with customers.

ensures that we continue on working to create contacts in the market with new and existing customers."

Exhibitions help organisations learn about new trends, products and services in the industry and gauge opinions on their businesses.

Andrew Gough, Senior Sales Engineer in the Process Automation Division, recently participated in Africa Energy Week in Cape Town, an event that is a platform for the international oil, gas and alternative energy industry to gain insights into current developments and future opportunities in Africa. "We participated to create awareness about ABB's role and interests in the oil and gas market," says Gough. "It helped us to get insight and information into this industry's local and African market, as well as the advancements, prospects and industry players."

# Building a compliance and values culture

Integrity, compliance and unimpeachable ethics are not negotiable for ABB, writes Bobby Barua, General Counsel, Head of Legal & Compliance: ABB in Southern and Eastern Africa.

The sustainability and future success of multinational companies in the 21st century is grounded on several pillars: innovation, quality products and services, customer-focus and the hiring, retaining and developing of talent. Common to all these pillars is the requirement to ensure an ethical culture committed to compliance with laws and the company's own set of values and principles espoused in its code of conduct.

ABB has embarked on deep and considered introspection of what it means to do business with integrity. At the heart of this self examination is the realisation that "business as usual" is no longer usual and that the ethical demands of our society, and in particular the compliance demands of the laws and the authorities that enforce those laws, are of paramount consideration. Corporations draw their moral licence to progress and prosper from respecting the rules of the game. This is what informs the ethical culture at ABB.

The bedrock of ABB's ethical culture is the ABB Code of Conduct, which informs our employees about what the company expects from its employees. Employees, and indeed our business partners, have to subscribe to the same value system that ABB adheres to. This code deals with issues as diverse as trust, integrity, zero tolerance toward bribery and anti-competitive conduct to the protection of intellectual property rights, safety and health compliance and how we interact with the communities in which we operate.

At the same time, ABB recognises that an ethical culture has to be a "living" one and not just what passively exists on the pages of a booklet. To this end, ABB has

implemented a robust and active compliance programme aimed at being the voice, eyes and ears of the ABB ethical culture.

There are many components to this compliance programme:

- Training methodologies are actively utilised so that employees receive information on an on-going basis. Some of the training is online, followed by an online test so that employees get to test their knowledge.
- Face-to-face training requires all employees in each country to receive a classroom-style lesson on compliance and ethics issues affecting the company. In 2009, more than 1 300 employees received such face-to-face training in South Africa. The training includes topics such as the code of conduct, anti-bribery and avoiding conflicts of interest, as well as information on how employees can raise ethics concerns – including via a whistle-blowing hotline.

The purpose of the face-to-face training is to give employees the opportunity to actively participate in discussions on the various topics, to ask questions and give their comments and input on the company's ethical culture. Only through such active engagement with our employees can we cultivate a culture of respect for ethical business practices.

ABB has created a number of channels for communicating employees concern:

- Besides the obvious methods such as raising concerns with their managers, human resources and the compliance officers, ABB has established the



Advocate Bobby Barua, General Counsel

Ombuds programme whereby employees may, on a confidential basis, speak to the appointed Ombuds about any area of concern to them. The Ombuds is a pivotal sounding board and filter for directing employee concerns to the correct avenue for resolution and for actively ensuring that those concerns are dealt with.

- In addition, a 24-hour independently operated hotline is available to our employees and our business partners to confidentially raise their concerns with the company. Users of the hotline may also choose to remain anonymous.

ABB takes all compliance and ethics concerns seriously. Whether raised with managers, the compliance officer, the Ombudsman or the ethics hotline, all reports are fully and thoroughly investigated to ensure that the ethical culture of the company is protected.

ABB recognises the many challenges of doing business in modern times. But a company's reputation and integrity, and for that matter every individual's, is not a negotiable commodity – it is the essence, the DNA, the very fibre of ABB and its people.

# Fighting HIV/AIDS in the workplace

Words Eubulus Pillay

ABB South Africa has made significant contributions to creating awareness and educating employees and the community on challenges of the HIV/AIDS pandemic.

The impact of the AIDS epidemic in South Africa is reflected in a dramatic rise in mortality rates.

This rise is not necessarily due solely to HIV and AIDS. But young adults, the group most affected by AIDS, make up a significant proportion of the mortality statistics – which is a strong indicator that AIDS is a major, if not the principal, factor in the overall rising number of deaths.

With the rapid increase in infections, ABB has supplemented existing programmes to meet the needs of its workforce and community.

We prioritise investment in human capital, as employees are the fuel of our organisation. We create a safe and comfortable environment in which our 1 500 workers can flourish. Our commitment is to provide employees with all the information and support regarding life-threatening diseases such as HIV/AIDS and to promote a healthy lifestyle. A key objective of ABB's HIV/AIDS policy is to empower employees, through education and training, to prevent spread through education and training. We work through a service provider to run successful, confidential Voluntary Counselling and Testing (VCT) campaigns. And nutritious daily meals are provided in the canteen for all staff.

The VCT programme includes awareness and educational activities such as industrial theatre, talks by people living with HIV and support activities at our various sites.

We also engage with our suppliers through the supply chain. During sustainability audits, we ensure suppliers comply with ABB's sustainability requirements by encouraging their management to promote HIV/AIDS awareness programmes.

**HIV testing through our service provider**  
HIV testing is vitally important in order to access treatment, and knowledge of one's



An employee gets results of a voluntary test from a health professional.

positive status can lead to behaviour that protects other people from infection.

Our company policy is to treat HIV/AIDS like any other life-threatening disease. We encourage employees to volunteer to be tested, at company expense, and confidentiality is respected.

ABB has partnered with Reality Wellness, a national organisation that provides health management advice and is a subsidiary of the Swedish Workplace HIV/AIDS Programme (SWHAP). Through our service provider, we arrange on-site testing, psycho-social counselling and support.

If an employee tests positive for HIV, various support systems are in place to respond. Immediate counselling is provided, followed by CD4 testing, advice on anti-retroviral drugs (ARVs), nutritional information and family counselling. The service extends to medical aid advice and the availability of hospices.

At last year's AIDS Day testing and counselling sessions the success rate was very good, with 95%, 96% and 43% of employees at the Alrode, Botshabelo and Longmeadow sites respectively being tested.



HR Director Phindo Mohlala addresses employees on World AIDS Day.

## Peer educators

Selected employees are trained in advising colleagues about available support programmes at ABB. These employees have been selected using strict criteria, and are compassionate individuals who are infected or have been affected by HIV/AIDS. They are available for private sessions and can refer people to trained counsellors. The peer educators attend an HIV/AIDS conference three times a year to upgrade their skills through lectures, demonstrations, role-play and exercises.

**ABB Wellness Committees**

Our Wellness Committees focus not only on HIV/AIDS, but also tuberculosis, smoking and breast cancer. They adopt a holistic approach to wellness by providing valuable nutritional and overall fitness information.

Wellness Committees are present at the Longmeadow, Botshabelo and Alrode sites and are instrumental in co-ordinating the annual Discovery Wellness Day and World AIDS Day programmes.

**Supervisor Training Programme**

To help workers speak confidentially to people close to them in the workplace, we implemented a Supervisor Training Programme. This entailed the training of 40 line supervisors who oversee manufacturing facilities, equipping them with the necessary skills to advise employ-

ees on testing, counselling and treatment programmes available.

**Clinic**

HIV/AIDS counselling support is available on a daily basis from health professionals based at on-site clinics at Alrode, Botshabelo and Longmeadow.

**Canteen**

Good nutrition is a fundamental part of caring for people living with HIV/AIDS. Good nutrition, through a balanced diet, is a positive way to respond to the illness as it helps people live better, longer and more comfortable lives.

Reality Wellness provides practical knowledge about nutrition care and support for people living with HIV/AIDS. We have introduced a nutritional supplement

called e-pap at our canteen.

Through all these programmes, ABB is contributing to a healthy workplace where employees are aware of the dangers of HIV/AIDS and are empowered to deal with the challenges if they are infected or affected by the disease.

**“HIV/AIDS counselling support is available on a daily basis from health professionals.”**



Counselling and training at the ABB Discovery Health Wellness Day.



Employees undergo voluntary testing at the Wellness event.

**Special Message****Combating HIV/AIDS through empowering employees**

World AIDS Day is about raising money, increasing awareness, fighting prejudice and improving education. The theme for World AIDS Day 2010 is “Universal Access and Human Rights”. Global leaders have pledged to work towards universal access to HIV and AIDS treatment, prevention and care, recognising these as fundamental human rights.

The protection of human rights is fundamental to combating the global HIV and AIDS epidemic. By promoting individual human rights, new infections

can be prevented and people who have HIV can live free from discrimination.

ABB South Africa provides testing, counselling and treatment support to its employees, and this theme highlights our commitment to ensure we create awareness, educate and offer support.

We are committed to managing the impact of HIV and AIDS through an integrated and ongoing response. We continue to create sustainable community benefits through our corporate social investment programme.

ABB helps make a difference by making a positive contribution to the lives of our employees.

**Phindo Mohlala,**  
HR Director  
ABB South Africa

# Listening to stakeholder views

Words Chesney Bradshaw

**ABB South Africa recently held a stakeholder engagement session at its head office in Longmeadow, Johannesburg, to listen to and respond to a wide range of sustainability topics.**



Carlos Poñe, CEO of ABB South Africa.

**A**s a leader in power and automation technologies, with operations in 100 countries and including 117 000 people, ABB's philosophy is not only about maximising profit but ensuring that the company's activities benefit all stakeholders.

Sustainability is part of ABB's business and is embedded in its daily operations. For ABB, sustainability is about balancing economic success, environmental stewardship and social progress to benefit all our stakeholders.

Sustainability considerations cover how we design and manufacture products, what we offer customers, how we engage suppliers, how we assess risks and opportunities and how we behave in the communities where we operate and towards one another – while striving for excellence in ethical behaviour and health and safety performance.

Important in engaging with stakeholders to hear their views are stakeholder dialogues. The agenda for country-level stakeholder dialogues is set by the participants and focuses on ABB's activities in the country and the concerns of local communities. The outcome benefits ABB's awareness and strategic direction in the country and is fed back to the corporate sustainability affairs team to assess its relevance to the group.

ABB South Africa held a stakeholder engagement session at its head office, manufacturing and logistics centre in Longmeadow, Johannesburg, in August to discuss a range of sustainability topics. Such debates have been held over the past four years to engage stakeholders on key issues, such as energy efficiency, renewable energy and skills development.

Present at the workshop were more than 50 stakeholders spanning ABB's

suppliers, customers and corporate social investment (CSI) partners. The objectives were to provide a brief overview of what sustainability means in the corporate environment and the role of stakeholder engagement in that context. Also, participants were invited to give views on the main sustainability issues currently affecting ABB, or which could do so in future; how these issues translate into opportunities or risks for ABB, and how ABB is responding to these issues.

The issues were then categorised into five broad themes that were discussed in more detail in separate breakaway groups:

- Skills shortages (e.g. lack of technical skills, brain drain)
- Environment (e.g. water, recycling, waste management)
- Energy (e.g. energy efficiency, renewable energies, measurement systems)
- Ethics and governance (e.g. supply chain, product stewardship)
- Social investment and community engagement (e.g. job creation, communication and awareness)

Workshop participants were divided into five breakaway groups to discuss each of the selected themes in more detail, taking into account opportunities for ABB and the risks and challenges facing ABB (and potential actions to mitigate these).

In response to one issue raised by stakeholders, Carlos Poñe, CEO of ABB South Africa, said the need for skills development in crucial areas such as engineering is an issue not just for ABB as an individual company but for the country as a whole.

ABB's environmental responsibility extends beyond ISO14001 compliance to being an environmental leader. Its Long-

**“ABB's philosophy is not only about maximising profit but ensuring that the company's activities benefit all stakeholders.”**

meadow green building, which incorporates solar heating, rainwater harvesting and ABB's energy efficient technologies, is a model of environmental stewardship. The company has extended its environmental approach to its supply chain and to a youth-in-energy programme with the World Wildlife Fund (WWF).

ABB acknowledged the need to better communicate ABB initiatives in energy efficiency, as a wide range of initiatives was being implemented. More research was required into suitable renewable energy systems within the South African context, including how to strike a balance between cost and developmental needs to facilitate access and widespread use.

ABB South Africa will incorporate these views and insights into its sustainability and social development programme, which focuses on youth in energy, energy efficiency, minimising environmental impact and supporting communities.

# Our businesses

ABB is a global leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 109 000 people.

## Power Products



Power Products are the key components to transmit and distribute electricity. The division incorporates ABB's manufacturing network for transformers, switchgear, circuit breakers, cables and associated equipment. It also offers all the services needed to ensure products' performance and extend their lifespan. The division is subdivided into three business units.

## Power Systems



Power Systems offers turnkey systems and services for power transmission and distribution grids, and for power plants. Substations and substation automation systems are key areas. Additional highlights include flexible alternating current transmission systems (FACTS), high-voltage direct current (HVDC) systems and network management systems. In power generation, Power Systems offers the instrumentation, control and electrification of power plants. The division is subdivided into four business units.

## Automation Products



This ABB business serves customers with energy efficient and reliable products to improve customers' productivity, including drives, motors and generators, low voltage products, instrumentation and analytical, and power electronics. More than one million products are shipped daily to end customers and channel partners, spanning a wide range of industry and utility operations, plus commercial and residential buildings.

## Process Automation



The main focus of this ABB business is to provide customers with integrated solutions for control, plant optimisation, and industry-specific application knowledge. The industries served include oil and gas, chemicals and pharmaceuticals, pulp and paper, metals and minerals, marine and turbocharging. Key customer benefits include improved asset productivity and energy savings.

## Robotics



ABB has the world's largest installed base of industrial robots – also providing robot software, peripheral equipment and modular manufacturing cells for tasks such as assembly, painting and finishing, and machine tending. Key markets include automotive, foundry, packaging, material handling and consumer industries. A strong solution focus leverages thousands of successful applications for manufacturers worldwide.

In addition to ABB's automation activities directed at the oil and gas industries, ABB Lummus global continues to design and supply production facilities, refineries and petrochemical plants.



## Complete Mine Hoists Solutions from ABB

**ABB is your only supplier of complete mine hoist systems - both mechanical and electrical parts.** ABB has delivered a complete package of mechanical and electrical equipment including all shaft equipment such as skips, ropes, guide ropes, catch gear and over wind arrestors for mine hoist systems.

With over 60 years experience of producing advanced mine hoists and offers a complete range of hoist systems including single drum, double drum and friction hoists for use as auxiliary or cage hoists and for shaft sinking. Depending on the specific customer needs, the scope of supply is supplemented with power supply, remote diagnostics, etc. providing a complete hoisting plant.

**For further information, please call the ABB Mining and Minerals Business Unit on 010 202 5000. [www.abb.co.za](http://www.abb.co.za)**

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## Increasing energy efficiency by 25%?

A complete power and automation solution from ABB has helped the largest aluminum refinery in Europe to increase its energy efficiency by 25 percent, boosting productivity at the same time. With research and development geared toward improving performance and resource conservation, we're constantly working to save energy and money. And the environment. [www.abb.com/energyefficiency](http://www.abb.com/energyefficiency)

Certainly.