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### Energy Losses Management Programme Eskom Distribution

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#### Abstract

*As part of its Energy Losses project, Eskom Distribution has launched a social marketing campaign (SCM). The primary objective of this campaign is to engage customer in a targeted and focus manner and attempt to influence this behaviour with regard to illegal electricity usage. The key components of the SMC are, reporting of illegal electricity usage, prosecution of offenders, encouraging legal usage, investigating the rollout of amnesty, social mobilisation and forming partnerships with organised business and civic society.*

*Key Words: Energy losses, Social marketing, Reporting line, social mobilisation, organised business, prosecutions and amnesty.*

## 1 Overview of Eskom's Energy Losses Management Programme

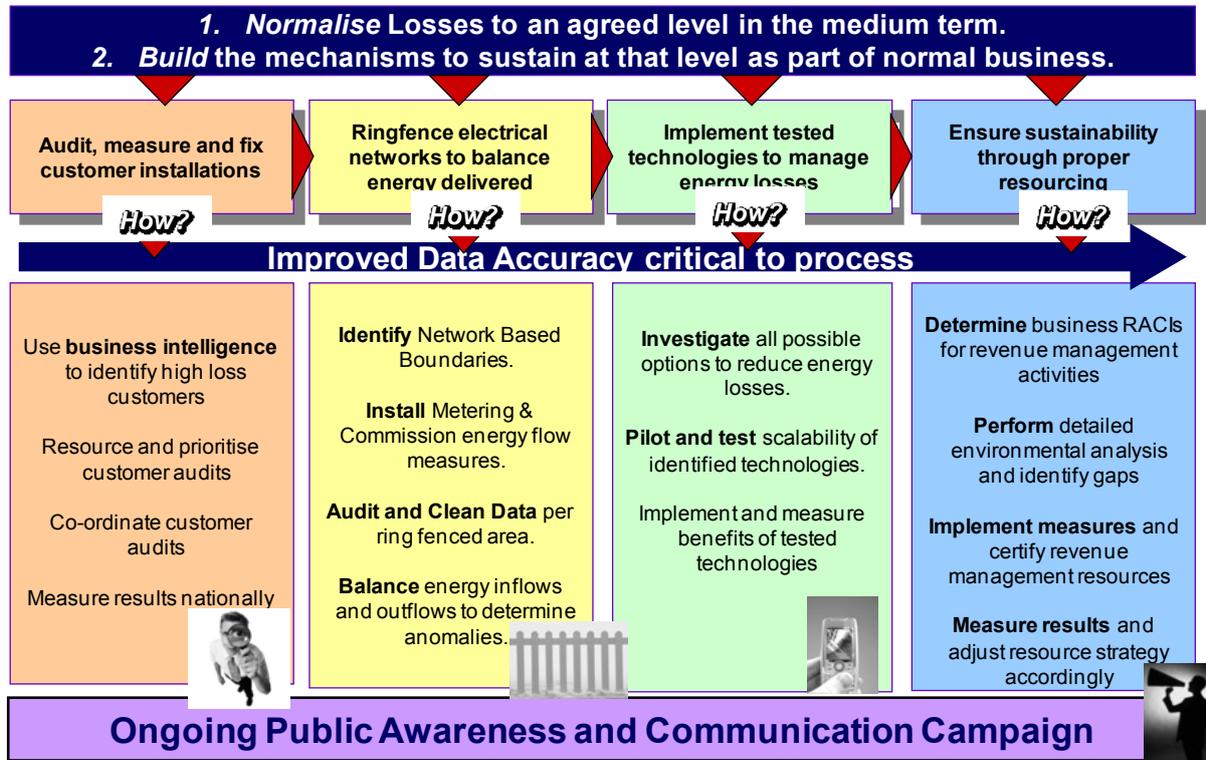
Eskom Distribution defines 'Energy Losses' as the difference between energy purchased, as measured at the Transmission networks and energy sold to all Distribution customers (measured or estimated). This includes both technical energy losses (energy lost in the electrical networks due to the flow of current or energisation of the system) and non-technical energy losses (caused by various factors such as: energy theft, incorrect or faulty metering, billing, etc.). This excludes non-payment or debt management.

Over the four years between 2002 and 2005 Distribution's energy losses increased from 4% to roughly 6%. Although this is still significantly lower than the losses experience by many global utilities, Eskom Distribution launched the Energy Losses (Management) Programme (ELP) to address the issue. In financial terms, Distribution's 2006 energy losses cost approximately **2,4 billion Rand**, of which almost half could be attributed to non-technical losses.

At the outset the ELP developed a strategy based on three key objectives:

- Arrest the increasing energy losses trend
- Reduce energy losses to an acceptable level
- Ensure sustainability of effective losses management in the future.

The strategy objectives were implemented via a project management office consisting of five work streams. Figure 1 below summarises the key components of the work streams.



**Figure 1: ELP Work Streams**

The ELP is focused on enhancing the energy losses management process internally through the up-skilling of employees to improve the measurement of energy losses and increase the efficiency and effectiveness of meter audits. Significant progress has been made in these areas. In-line with and in support of these improvements Eskom Distribution launched a Social Marketing Campaign (SMC) to address challenges related to energy losses in the external environment.

## 2 The reasons for the SMC

At the outset of the ELP it was recognised that once the internal challenges had been addressed, it would be necessary to launch a public communication campaign to engage with customers.

The SMC is not designed to change the behaviour of all customers, rather the underlying philosophy states that 15% of people are inherently bad, 45% are easily swayed and 40% generally do the right thing. Thus the campaign seeks to reinforce the correct behaviour of those customers who are legal users and to influence the behaviour of the 45% that are easily swayed.

A guiding principle of the SMC is the Broken Window theory espoused by James Wilson and George Kelling (1982). Their central argument is that urban decay and criminal behaviour are contagious—that people are more likely to defy social norms if there is evidence in plain view that others are engaging in the same behaviour. They go on to argue that the

prevention of minor crimes is essential to ensuring that communities do not get caught up in a cycle of crime.

The theory is named from the observation that "if a window in a building is broken *and is left unrepaired*, all the rest of the windows will soon be broken" (Wilson and Kelling, 1982: 3) leading to more vandalism and, eventually, to break-ins. The tendency for people to behave in a particular way can be strengthened or weakened depending on what they observe others to be doing.

In not addressing the illegal use of electricity Eskom is in effect condoning it and this encourages otherwise good citizens to engage in illegal behaviour.

The main issues which the SMC intends to address are as follows:

- Meter tamperers
- Meter by-passes
- Illegal connections
- Purchasing from ghost Credit Dispensing Units
- Unsafe illegal connection and by-passes
- Non-payment.

The idea is not to imply that these types of behaviour are bad in terms of energy losses and revenue; rather, the messaging is intended to speak to the customers directly. It will be centred around safety, and on the negative effects of electricity theft on the country and the development of communities.

A core failure in the past has been that legal users were isolated and made to feel like the exception. Through the SMC, a clear message will be delivered: Eskom is able to detect illegal users, Eskom is able to take action against illegal users, and legal users should continue to do the right thing.

### **3 What is Social Marketing and what does it do?**

#### **3.1 Social Marketing is all about behaviour change**

Social Marketing is one of the fastest growing phenomena in the communications field and can change behaviour and lives. It is defined and described as follows:

"Social marketing is the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programmes designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of their society." (Kotler, 2005)

"...a process that applies marketing principles and techniques to create, communicate and deliver value in order to influence target audience behaviours that benefit society as well as the target audience." (Dann, 2007)

"In short, it's the difference between persuading someone to buy a Ferrari and persuading them to drive it within the speed limit all the time." (Hastings, 2007)

Social marketing is, therefore, all about behaviour change. This requires a sound understanding of where people are in the process of change and what the barriers and incentives for the required behaviour change are, in addition to ensuring that the behaviour change is sustained. The challenge of changing consumption behaviour is a big issue facing power utilities across the world, due to the worldwide energy crisis and depleting resources.

In order to attain this level of behaviour-change partnerships are critical, as is an understanding of the legislative and policy environment, and the politics of the day. It is evident from various studies conducted into Social Marketing that behaviour change does not happen overnight, it is a process of change that can only be attained through all the role-players working together towards the same goal—changing behaviour.

Leading academics Kotler and Stanford found that Social Marketing is one of the surest ways to have a measurable impact on a social issue, because it actually increases the number of people who act in a way that benefits society. Social Marketing campaigns are best when they're based on a dovetailing of interests between what society needs and a company's goals and objectives—and thus is an ideal fit for Eskom.

Social Marketing and the concept of behavioural change has roots in psychology, sociology, political science, communication theory and anthropology (Mintz, year).

Studies on Social Marketing and behavioural change have also been applied in the utility industry with success (Dholakia, R., Dholakia, N., Firat, 1983; Cai, Jiang, 2007).

### **3.2 What does Social Marketing do?**

Social Marketing highlights a social issue such as electricity theft, shows target audiences the impact and risk of that social issue, and also highlights the benefits that would be realised by addressing the issue. It empowers target audiences through partnerships and mobilisation, in order to change their current behaviour (e.g., using electricity illegally) to a desired behaviour (e.g., using electricity legally). Electricity theft is a problem that affects the whole of South Africa and will impact on the reliability and sustainability of electricity supply in the future. Without action, these crimes will continue to spiral—as it currently stands, electricity theft has become an acceptable social norm in many parts of South Africa's society. Eskom, despite its best efforts, cannot stop this type of crime without the assistance of employees, contractors, customers, organised business and civil society, stakeholders and the general public. The ELP SMC gives Eskom a platform to forge partnerships with all these target audiences to address electricity theft through a joint problem-solving approach. It provides South Africans with a means to assist Eskom, as well as their communities in combating the scourge of electricity theft.

### **3.3 How is Social Marketing applied in Eskom's ELP?**

Eskom's ELP has initialised a SMC to reduce its electricity losses due to illegal connections. This campaign provides the opportunity not only to run a traditional public communications campaign, but to run a campaign with substance and sustainability through Social Marketing, aimed at making a lasting difference in society.

A behaviour-change approach is needed to obtain the desired behaviour towards people and organisations being legal electricity users. The campaign further holds the opportunity for Eskom to partner with various corporates and organisations, extending its reach and leveraging resources.

The campaign uses all three realms for driving behaviour-change: Education, Social Marketing and the power of the law.

The **objective** of the Eskom ELP SMC is to influence the voluntary behaviour of consumers to be legal users by the following means:

- Reducing the number of illegal electricity consumers
- Mobilising citizens to report and to prevent illegal connections
- Building partnerships to deal with illegal electricity consumption.

The **target audiences** identified include:

- Eskom employees and contractors
- Large Power Users and Non-residential Small Power Users (business and commerce)
- Residential Small Power Users and Prepaid Power Users
- Various stakeholders and partners such as:
  - Organised business
  - Organised civil society
  - The media
  - Municipalities
  - All tiers of government
- The general public.

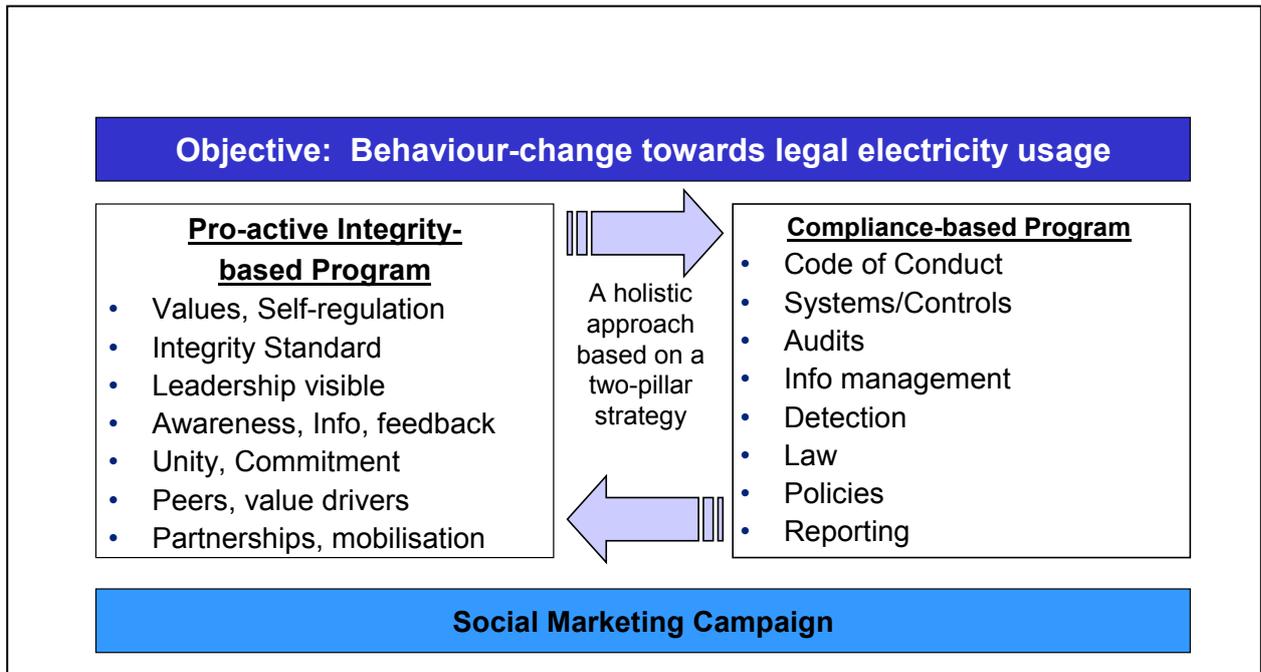
The **behaviour-changes** required from the target audiences are:

<b>Present behaviour</b>	—	<b>New behaviour required</b>
Illegal use, tampering	—	Become legal users
Non-compliant	—	Become compliant
Passive	—	Report (active), positive peer pressure
Powerless	—	Become advocates for legal use

The ELP SMC is built on **two integrated pillars** aimed at achieving a sustainable strategy with substance and impact:

1. A **pro-active integrity-based pillar**, focusing on aspects such as values, prevention, self-regulation, partnerships, etc.
2. A **compliance-based pillar**, focusing on the **hard issues** such as enforcement, systems, policies, etc.

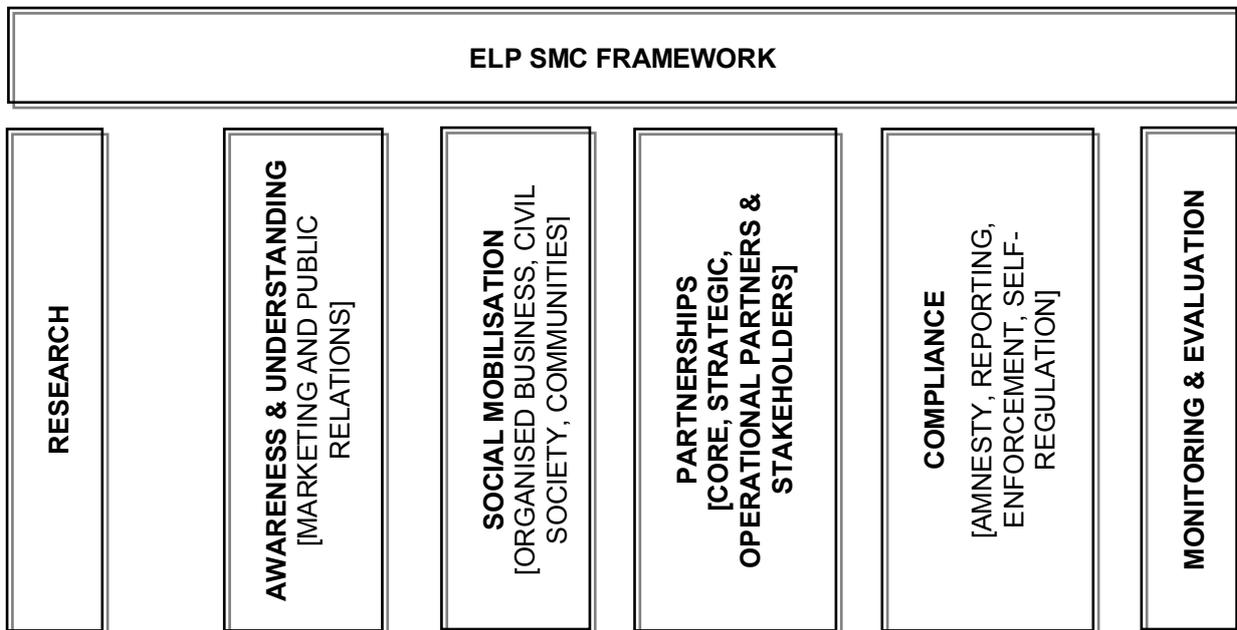
The two pillars are illustrated in the Figure 2 below:



**Figure 2: Pillars of the ELP SMC**

The **central idea** of the campaign is to show target audiences the impact and risk of illegal use and the benefits of legal use, and to empower them through partnerships and mobilisation. The campaign will also position itself within broader energy efficiency and electricity safety education.

The **campaign framework** includes the pillars shown in Figure 3:



**Figure 3: The ELP SMC Framework**

## **Research**

National research has been conducted to analyse and develop a thorough understanding of attitudes toward electricity theft and to identify the drivers that will trigger and sustain behaviour-change. The outcomes inform the development, refinement and implementation of the ELP SMC. The findings also form a baseline for future studies/research and enable the impact of the campaign to be tracked. The Social Marketing approach is based on the premise that an in-depth understanding of the attitudes, perceptions and behaviours of the target audience is required in order to change behaviour.

## **Awareness and Understanding**

The campaign has a strong focus on driving awareness, education and information sharing on the extent, impact and consequences of electricity theft and the need to stand for legal power use. National, regional, community, social marketing channels and public relations tools will be used to this end. The campaign is further working to affirm legal users, to encourage reporting of illegal users and publicise a reporting line, to publicise action taken against defaulters and Eskom's ability to detect illegal users, etc. The campaign will also promote the 'right thing to do', the values and conduct of a socially responsible organisation/community, and the country's need for energy efficiency and safe use of electricity.

## **Social Mobilisation**

A strong feature of the campaign is mobilising South Africans across all spheres of life for legal power use. This includes securing buy-in and commitment from communities, business, industry and commerce, civil society and the general public to advocate and agitate for an end to electricity theft.

## **Partnerships**

Eskom cannot drive such comprehensive societal behaviour-change on its own. The SMC will thus forge partnerships with key players such as organised business, organised civil society, the media and municipalities to drive the campaign. This drive will include on-boarding various stakeholders such as sector bodies and individual organisations to carry the voice of the campaign through their member structures.

Carefully identified potential campaign partners (ranging from the media, through local government to organised business) were targeted to be main co-branding partners of the SMC. The campaign gained powerful support from Primedia, Primedia's Crimeline, Business Against Crime South Africa, the South African Local Government Association and Business Unity South Africa, who all confirmed their partnership with the campaign.

Other strategic and operational partnerships are being forged. Among others, Agri SA, the National Prosecuting Authority (NPA) and the South African Police Service (SAPS) have agreed to throw their weight behind the campaign. The continued support of these types of associations and private sector partners will bring credibility and much needed external support for this public engagement initiative.

## **Compliance**

Various criminology studies have found that the primary deterrent for deviant behaviour is the fear of being caught, followed by the fear of being punished. However, both these deterring factors need to be in place in order to deal with deviant behaviour. This is typically attained by mobilising people to report suspected criminal behaviour, ensuring rapid response to such reports, enhanced detection and effective prosecutions.

The compliance pillar of the SMC therefore encompasses four elements: Enforcement, Reporting, Amnesty and Self-regulation. The intent is to:

- Ensure enhanced **enforcement** effectiveness through targeted prosecutions of perpetrators of electricity theft, tight case management and a focused approach in partnership with the NPA and the SAPS.
- Address a critical aspect of mobilising South Africans (and build the perception of a high chance of getting caught), by offering a reputable, anonymous **reporting** facility with a strong feedback mechanism of action taken and results achieved. Primedia Crimeline has established itself over the past three years as such a facility—it enjoys the trust of the public, is anonymous, is backed by one of South Africa's biggest media houses, gives regular feedback to the public of results, and has strong relations with the SAPS. Eskom partnered with Primedia Crimeline and the anonymous 32211 SMS line is being used as the primary reporting facility for the ELP SMC. Process design and integration steps have been taken to enhance Eskom's readiness to respond to electricity crime reports.
- Explore an **amnesty** offering to defaulters to 'come clean'. Such an amnesty programme has the potential to give good impetus to identifying illegal users and then getting them registered on Eskom's system. This approach can work well in the South African context—the South African Revenue Service recently implemented an amnesty for small businesses that was very successful. International and South African case studies were analysed and consultation with various stakeholders in Eskom took place in order to establish if amnesty is a feasible option for Eskom. It was found that an amnesty campaign would have benefits to Eskom and its customers as well as other defaulters. Detailed planning is being conducted in collaboration with various Eskom stakeholders to structure the Amnesty Programme. Such an Amnesty Programme will be a once-off offering, and does not equate to a debt write-off—the only 'pardon' will be that criminal charges will not be pressed against defaulters who come clean of their own volition, provide information and take steps to normalise and legalise their affairs with Eskom.
- Drive **self-regulation** by organisations and individuals to ensure that they are legal power users. Such self-regulation ranges from contacting Eskom to come and conduct an audit so as to be certified as a legal power user, through to engaging with organised business and civil society to push self-regulation. This could be done by, e.g., encouraging and/or requiring a body's members to be legal power users, and/or by organisations requiring their suppliers to demonstrate legal power use in order to be accepted as a supplier (in the same way that a tax clearance certificate or BEE certificate is required).

The compliance pillar ensures that laws and policies in South Africa will be used to the full advantage of the SMC.

### **Monitoring and Evaluation**

The SMC will be monitored and evaluated to track its outputs, impact and outcomes. The tracking will take place through the following four measurement categories:

- ELP Scorecard measures that track audit results and energy losses in terms of, e.g., illegal connections, tampered and bypassed meters, and revenue lost
- Media measurement by independent assessors to track impact and effectiveness of media channels used, such as recall of advertisements, likeability of advertisements, levels of awareness, etc.
- Attitudinal, perceptual and behavioural KPIs will be tracked to measure behaviour-change (an independent survey house will conduct national research to track these)
- General campaign Indicators will be tracked to measure results. Some of these include:

- Increased reporting of illegal electricity use
- Increased number of people coming clean as part of the Amnesty Programme
- Increased levels of understanding of the issue
- Increased positive perceptions on the issue
- Increased levels of awareness of the issue
- Number and effectiveness of partnerships developed.

## 4 Looking ahead and Conclusion

Following months of analysis, planning, preparations, creative design and production, April 2010 saw the start of the phased roll-out of the energy losses public engagement initiative, aptly branded: **Operation Khanyisa, the power is in your hands.**

The word 'Khanyisa' means 'to give light' or 'to enlighten'. The name is ideally suited to the campaign, which is aimed at enlightening people about the need for all South Africans to become legal power users. The campaign will also address the impact and consequences of electricity theft for all South Africans. Operation Khanyisa will entice audiences to 'wise-up' to legal, safe and energy-efficient electricity use.

The campaign follows a subversion and edutainment approach aimed at turning that which people know on its head and to entice and intrigue people to receive the various campaign messages. A first wave of campaign material has been developed, inclusive of brochures, pamphlets, leaflets, posters, DVD clips, radio advertisements, print advertisements, billboards and murals, and reporting cards. Other channels such as digital, cellular, social media and industrial theatre and activations will be used as well.

Operation Khanyisa commenced roll-out at the end of April 2010 and will see a series of activities kicking in through to December 2010 to engage various target audiences and business sectors. Among the first activities were Employee blitz awareness events: Eskom's tough stance on dealing with customers, contractors, employees and 'street electricians' who are caught stealing electricity was emphasised through a mock arrest by SAPS, DVD clips following an edutainment approach, and an industrial theatre production. The results of these events were very positive in that employees showed passion and willingness to participate in the SMC.

Following the introduction to staff, the SMC was presented to the agricultural sector during the National Maize Producers' Organisation (NAMPO) annual harvest exhibition in Bothaville, Free State. NAMPO attracts farmers and agricultural suppliers from across the country and was a perfect opportunity to roll-out Operation Khanyisa to the estimated 64,000 visitors during May 2010. The stand at NAMPO was supplemented by live slots and radio advertisements on Radio Sonder Grense and OFM, internet banners on OFM's news pages, and various radio and print interviews.

Next, Operation Khanyisa rolled out in Soweto at the end of May through a three-week radio advertisement campaign, supplements in the Sowetan and Daily Sun, taxi rank blitzes, mall activations and industrial theatre road shows, and some 40 billboards, spaza billboards and wall murals going up for a period of three months. The aim of this roll-out was to clearly position this campaign as the real Operation Khanyisa and launch the drive for communities to stand together and promote legal power use. The roll-out created a first wave of awareness of the campaign and issued a call to action to report illegal electricity use by anonymous SMS tip-off to Primedia Crimeline at 32211.

A national launch and roll-out of various sub-campaign legs across all Eskom customer groups, stakeholders and partners will take place over the next six months.

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