DA PROPOSALS ON ADRESSING PUBLIC INFRASTRUCTURE THEFT AND VANDALISM



1. Introduction

The impact of public infrastructure theft on the economy is multi-faceted, ranging from macro level negative outcomes on the export economy and deteriorating service delivery standards at local government level. With the South African economy driven by intersectoral and structural interdependencies, any disruptions caused by public infrastructure vandalism has a cumulative direct impact across the economic value chain.

Copper cable theft has always been the common theme in almost all DA communications on the subject of infrastructure vandalism for scrap metal purposes, and for a good reason. In October 2021, Eskom conceded that copper cable theft was costing the entity 5-7 billion rand annually, plus 2 billion rand a year to replace stolen cables¹. Relatedly, Transnet Freight Rail indicated that copper thefts had climbed 177% over the past five years and had risen particularly sharply during the COVID-19 pandemic.

Even as copper cable theft remains the primary target of public infrastructure vandals, rail stock theft is a close second. Metrorail's capacity to provide commuter rail transport has been severely undermined as a result of the wholesale looting of its infrastructure while Transnet Freight Rail was recently forced to declare force majure with coal miners due, partly, to vandalism of its infrastructure.

2. Impact of infrastructure theft and vandalism on the economy

2.1 Export economy

In a joint statement released in July 2021, Telkom, Eskom, the Passenger Rail Agency of South Africa and Transnet, revealed that the persistent challenge of cable theft and infrastructure vandalism was leading to a combined direct loss of R7 billion every year, with a R187 billion knock-on effect on the economy per annum². The competitiveness of export oriented companies that rely on rail infrastructure to transport their goods is substantially compromised, making it difficult for them to retain market share in foreign markets due to transportation bottlenecks.

Transnet Freight Rail's declaration of a force majure seeking to terminate long-term coal transportation agreements with coal producers, will have a direct impact on major players such as Exxaro and Thungela Resources' ability to maximise earnings from the prevailing resource price boom. Exxaro recently indicated that it had received requests from European countries wanting to sign supply contracts, after the European Union proposed sanctions on Russian coal. However, both Exxaro and Thungela pointed out that Transnet's issues constrain their ability to ramp up coal production to meet the new demand³.

¹ EXCLUSIVE How the illicit copper trade is sapping South Africa -

https://www.reuters.com/world/africa/exclusive-how-illicit-copper-trade-is-sapping-south-africa-2021-10-15/#:~:text=Power%20firm%20Eskom%2C%20which%20expects,year%20to%20replace%20stolen%20cables

² South Africa declares war on cable thieves - https://techcentral.co.za/south-africa-declares-war-on-cable-thieves/208191/

³ SA's Transnet declares force majeure on coal contracts, Thungela says - https://www.moneyweb.co.za/mineweb/sas-transnet-declares-force-majeure-on-coal-contracts-thungela-says/

Large-scale theft of copper cables, which has crippled Transnet's rail network, is partly responsible for coal and iron ore miner's inability to transport their minerals to port. In 2021, Transnet Freight Rail delivered 58.3 million tonnes of coal to the Richards Bay Coal Terminal, significantly underperforming its annual capacity of 77 million tonnes⁴. This was a loss of R15 billion in foreign revenue⁵.

Theft of Eskom infrastructure, which includes copper cables, overhead lines, transformers and conductors, places a huge cost burden on an entity which is already teetering on the brink and is currently saddled with a debt burden of over R390 billion. According to the Copper Theft Barometer by the South African Chamber of Commerce and Industry (SACCI), an industry body that represents some 17 000 companies, more than 70 large corporates, 25 sector associations and 50 local chambers, copper theft costs the economy between R5 billion and R7 billion a year⁶.

Replacing stolen copper cables, alone, costs Eskom in the region of R2 billion a year. With unemployment continuing to increase exponentially and organised criminal networks showing a willingness to use deadly force to get their way, Eskom's infrastructure is particularly vulnerable. The utility has a network that consists of 395 419 km of overhead lines, 11 018 km of underground cable and 351 297 installed transformers⁷.

2.2 Local Government Service Delivery

Public infrastructure vandalism at local government level, especially cable theft, has direct service delivery implications residents and local economies. In Johannesburg, the City's ability to provide reliable electricity is being severely undermined by extreme levels of cable theft from heavily armed roving syndicates.

What type of infrastructure is targeted by these syndicates? The vandalism is targeted at substations, where equipment such as bus bars, feeder boards, fuses and jumper cables are destroyed or stolen. In some instances, entire transformers and miniature substations are uprooted and stolen.

According to Michael Sun, Johannesburg's MMC for Environment & Infrastructure Services, since July 2021 to date, 1 456 cases of vandalism and cable theft have been reported to City Power, which cost the city R24-million in damages and repairs⁸. Worse still, City Power has lost more than R187-million as a result of copper cable theft and damage to electricity

⁴ SA's Transnet declares force majeure on coal contracts, Thungela says - https://www.moneyweb.co.za/mineweb/sas-transnet-declares-force-majeure-on-coal-contracts-thungela-says/

⁵ NEVA MAKGETLA: Links in the cable theft value chain hard to find, let alone break - https://www.businesslive.co.za/bd/opinion/columnists/2022-04-11-neva-makgetla-links-in-the-cable-theft-value-chain-hard-to-find-let-alone-break/

⁶ Copper theft remains a serious concern – Eskom: https://bit.ly/3xANj69

⁷ Cable theft is strangling SA's economy: can we escape the noose? - https://bit.ly/3jQ5xZe

⁸ Johannesburg's electricity infrastructure under siege from murderous criminals - https://mg.co.za/opinion/2022-04-07-johannesburgs-electricity-infrastructure-under-siege-from-murderous-criminals/

infrastructure in the past five years⁹. City Power has now been made to spend R100-million annually on security measures to protect its vulnerable infrastructure. This is money that could have been spent in improving service delivery outcomes elsewhere or providing temporary public works jobs for the unemployed.

Cable theft often results in affected communities not having electricity supply for days or even weeks. In turn, ratepayers and properties become vulnerable to crime as thieves take advantage of the unavailability of power to ramp up their operations. In addition, through a direct interference with the supply of internet connectivity as well as telephone communication, cable theft has a dire economic impact on communities as some businesses are unable to conduct operations while some residents are unable to work or learn from home¹⁰. Cable theft not only affects economic productivity but can also influence investor perceptions as it relates to investing in local economies, which can be detrimental to the country's economic progress.

2.3 Public Transportation

According to the Institute of Security Studies, cable theft interrupts the flow of traffic on the country's roads, the rail system and even air travel, resulting in increasing levels of public frustration and financial losses to businesses¹¹. The country's commuter rail services have all but ground to a halt following a cable theft epidemic and widespread vandalism that has prevented Metrorail services from operating across most of its network. This is partly due to the industrial scale looting of Metrorail infrastructure during the Covid-19 lockdown in major cities such as Johannesburg and Cape Town.

In Gauteng, hundreds of kilometres of overhead cables, signalling wires and catenary masts were stolen, affecting every Metrorail route in the province¹². Similar to Cape Town's Metrorail system, stations were destroyed on the commuter rail corridors around Johannesburg, with buildings reduced to rubble and platforms torn up by thieves looking for signal wiring. Compared to the pre-pandemic era where Metrorail was spending an average of R70 million per year¹³ on vandalism costs, PRASA indicated that the cost of vandalism to all train infrastructure will total just over R4 billion¹⁴.

In Cape Town, the Southern and Northern Metrorail lines are not working properly and the service on the Central line to Kapteinsklip and Chris Hani stations has been suspended since October due to vandalism and theft between Bonteheuwel and Nyanga.

https://ewn.co.za/2021/07/07/cost-of-vandalism-to-rail-infrastructure-stands-at-over-r4bn-says-prasa-ceo

⁹ Johannesburg's City Power under the gun as violence, vandalism and theft spirals - https://bit.ly/3jPKN46

Cable theft is not just a petty crime: How cable theft affects our communities - https://www.estate-living.co.za/news/cable-theft-is-not-just-a-petty-crime-how-cable-theft-affects-our-communities/

¹¹ Cable theft is strangling SA's economy: can we escape the noose? - https://bit.ly/3jQ5xZe

¹² Extensive cable thefts and looting halts South African rail services -

https://www.railjournal.com/infrastructure/extensive-cable-thefts-and-looting-halts-south-african-rail-services/

¹³ 13 Cable theft - https://www.westerncape.gov.za/general-publication/cable-theft

¹⁴ Cost of vandalism to rail infrastructure stands at over R4bn, says PRASA CEO -

When cables are stolen from the rail system, trains are delayed or cancelled altogether. This has a direct impact on commuters and businesses as it often leads to lower productivity and job losses. Commuters struggle to get to work, and have to use road-based public transport which is more expensive than passenger rail. With increased use of road based transport, congestion on roads becomes the norm resulting in further delays that impact on worker productivity.

3. DA's position on the scrap metal industry

While there is an urgent need for accountability and transparency in the scrap metal industry, the DA, as a matter of principle, must fight against Ebrahim Patel's protectionist policies that could essentially wipe out this segment of South Africa's primary steel industry¹⁵. The DA has consistently argued that the price preference system, which does not allow for scrap metal to be exported unless it has been offered domestically for local beneficiation for a defined period and at a price discount, will kill the downstream steel industry¹⁶. Jobs have already been lost in the scrap metal sector because of these onerous trade regulations which, ironically, seek to protect the monopoly of big players such as AccelorMittal, Scaw Metals and Cisco

The DA should clearly state its position and fight back against:

- A creeping habit by the International Trade Administration Commission (Itac) to ban scrap metal exports on a whim;
- Price preference system because it is breeding uncompetitive behaviour in the steel industry by protecting monopolistic players.
- An export tax against the scrap metal industry as this would add further red tape to an already over-regulated industry.
- Patel's localisation drive that is cannibalising small to medium sized scrap metal enterprises by forcing them to function in a market with price controls set by his Department.
- The flawed Steel Master Plan which seeks to concentrate the scrap metal industry and kill competition.
- The scrap metal industry contributes R15 billion annually to the South African
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¹⁵ As long as Ebrahim Patel remains minister, enterprise cannot be set free - https://www.businesslive.co.za/bd/opinion/letters/2021-02-22-letter-as-long-as-ebrahim-patel-remains-minister-enterprise-cannot-be-set-free/

¹⁶ ibid

4. International best practice to curb theft of public infrastructure

South Africa is not short on ideas of how to address public infrastructure theft, but what has been lacking over the year is the institutional and political will to implement them. For example, Eskom has long proposed that, in order to address cable theft, there is an urgent need to 17:

- replace copper conductors with aluminium;
- place unique markings on all Eskom aluminium conductors;
- replace all normal bolts on pylons with anti-theft bolts;
- engrave support lattices on steel pylons with Eskom's name on the steel;
- install alarms on overhead lines in such a way that if the line is cut or tampered with, the alarm goes off in the control room and the reaction unit is immediately dispatched to the location.

The government has also made several proposals to address the scourge of cable theft, chief among which is enacting a requirement that all metal traders be licensed, that they refrain from dealing in cash and be required to conduct due diligence on their customers and track the origins of their products¹⁸. What is missing are actionable plans on how these initiatives can be implemented.

This section is a summative analysis of how other countries have minimised the incidence of public infrastructure vandalism and cable theft.

4.1 United Kingdom

Copper cable theft is estimated to cost the British economy an average of £1 billion a year¹⁹. Even so, through targeted interventions aimed at addressing the problem, the UK has seen a steady decline in public infrastructure vandalism incidents.

In 2012, the British Transport Police (BTP) launched Operation Tornado to tackle the problem of metal theft, trace sellers of scrap metal and make it harder to pass on illegitimately obtained copper and other metals. A year later, BTP reported a 51% drop in copper cable theft year-on-year²⁰. Operation Tornado and the British government managed to achieve this success by:

- Requiring people who sold scrap metal to provide proof of their identity and address.
- Halting cash-in-hand payments for copper cable and scrap metal trades.

¹⁷ Copper theft remains a serious concern – Eskom: https://www.esi-africa.com/southern-africa/copper-theft-remains-a-serious-concern-eskom/

¹⁸ South Africa declares war on cable thieves - https://techcentral.co.za/south-africa-declares-war-on-cable-thieves/208191/

¹⁹ Dramatic drop in copper cable theft across the UK - https://www.bbc.com/news/technology-21229762 ibid

 Amending the Scrap Metal Dealers Act to tighten controls on how freely metals such as copper can be traded.

For British Telecoms (BT), where the vandalism of its infrastructure often resulted in internet or landline connection access disruption affecting emergency services and life-critical services, the company used SmartWater, a system which sprays thieves with an invisible solution.

Through a system called Rabit, BT is also able to pinpoint precise locations where a cable theft may be taking place allowing police to apprehend criminals at work.

4.2 Australia

The Australian government's strategy to addressing scrap metal theft, pursued through the Australian Institute of Criminology, advocates for:

- Multi-agency cooperation—the police and scrap metal recycling industries need to
 work together in order to pool resources and create a multifaceted approach to
 scrap metal theft. For instance, the police could instruct recycling personnel on how
 to identify suspicious sellers.
- Information sharing—sharing information between the police and scrap metal
 recycling industries helps to uncover crime trends and patterns that can assist in the
 efficient deployment of policing and security resources. Information sharing can be
 facilitated through a centralised and anonymous reporting point, such as a website
 like ScrapTheftAlert.com or telephone hotlines.
- Standardised transaction recording—the introduction of standardised practices,
 which require scrap metal recycling companies to record all transactions, can make it
 easier to track down stolen goods and offenders. Specifically, dealers would be
 required to keep comprehensive data on sellers, such as their name, address and
 driver's license number, as well as details of where they obtained the copper from.

Australia's approach is consistent with countries such as America, which place greater emphasis on inter-agency/law enforcement cooperation in addressing public infrastructure theft. For example, the Macon/Middle George Metal Theft Committee located in Georgia (United States) is comprised of representatives from local utilities and recycling plants, the construction industry and the police. The committee meets on a regular basis to train members on theft prevention techniques and swap information about local incidences of scrap metal theft. Within three months of its implementation, copper theft had been reduced by 90 percent.

5. DA proposals to address theft of public infrastructure

The DA is of the view that in order to address the escalating crisis of public infrastructure theft, an intergovernmental approach encompassing local, provincial and national spheres of government is needed to pursue a coordinated response. This will help to close the

compliance and law enforcement gaps that are currently being exploited by scrap metal syndicates.

5.1 Local government proposals

In addition to requesting that DA-run local governments formally adopt these interventions through the relevant council processes and include them in their budgetary considerations which are currently underway, the DA proposals include:

- Setting up specialised units within metro and town law enforcement authorities;
- Ensuring that indelible markings are placed on all electrical infrastructure;
- Installing anti-theft bolts and fasteners to infrastructure where possible;
- Investigating that the use of alternative metals to replace the use of copper;
- Creating information sharing networks between local law enforcement and metal recyclers;
- Installing alarm systems on infrastructure that is linked to local law enforcement authorities; and
- That electrical and infrastructure departments budget for the necessary security to patrol sites such as substations.

5.2 Provincial government proposals

At provincial government level, the DA proposes that:

- Provinces map out public infrastructure vandalism hot spot areas with a view to assisting law enforcement agencies on the allocation of security personnel to protect these areas;
- Provinces develop anti-vandalism infrastructure plans to coordinate their response to the challenge.

5.3 National government proposals

At national government level, the DA proposes:

- Proper implementation of the Second Hand Goods Law of 2009;
- Giving copper theft its own crime code and making the theft of it a priority crime at the SAPS;
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- Creating a Specialised SAPS Unit;
- Setting copper theft reduction targets at parastatals;
- Close cooperation between law enforcement and metal recyclers to assist in the tracking of illicitly-traded metals;

- Empowering the Non-Ferrous Theft (NFTCC) Combatting Committee through legislation and its own dedicated budget;
- Establishing a reward hotline;
- Eradicating the backlog of scrap dealer Licences;
- Multi-agency cooperation and information sharing; and
- Standardised transaction recording of scrap metal sales.

6. Conclusion

South Africa is currently faced with an unprecedented backlog in infrastructure maintenance due to years of neglect and corruption. This has led to a direct negative impact on South Africa's economic competitiveness and the robustness of the country's economic value chain. Add public infrastructure theft and vandalism to this grim outlook, and South Africa's prospects for improved economic growth look dim. This discussion document provides a clear plan on how to get the ball rolling in addressing infrastructure vandalism across the three spheres of government. Its main thesis is that, unless there is a coordinated approach between stakeholders in the scrap metal industry, government and law enforcement, a quick turnaround against public infrastructure vandalism will remain elusive.