



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**



Please keep your
mobile phone on
silent/vibrate



Designated
smoking area in
the courtyard



There will be a
Q&A session at
the end



Please fill in a
feedback form
after the session

ENERGY WATER WASTE FORUM

A PARTNERSHIP FOR THE CAPE TOWN COMMERCIAL SECTOR

The Changing Business of Green Energy

Energy Directorate | 12 June 2025

Making progress possible. **Together.**

💬 Got Questions? We Want to Hear Them!

1. 📱 Scan the QR code
2. Go to **www.slido.com** and enter the event code: **1033554**
3. Submit your questions for the interactive dialogue
4. 👍 Vote for the questions you most want answered

Joining as a participant?

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The top-voted questions will be prioritized in the discussion!

Let's make this session as relevant and meaningful as possible — your voice matters!

ENERGY WATER WASTE FORUM

A PARTNERSHIP FOR THE CAPE TOWN COMMERCIAL SECTOR

Programme

Time	Item	Speaker
09:30	Welcome	Hoosain Essop Manager: Electricity Retail Management, City of Cape Town
09:35	Health and Safety	Godwin Blignaut Facility Manager, City of Cape Town
09:40	Keynote address	Kadri Nassiep Executive Director: Energy, City of Cape Town
09:50	Waste updates	Priscilla Booysen Head: Events and Partnerships, Stakeholder Engagement, City of Cape Town
09:55	The City Supporting Business Continuity in a Changing Energy Landscape	Rebecca Cameron Principal Professional Officer: Strategic Processes, City of Cape Town
10:20	The Energy Landscape: What's Changing in the Business of Green Energy	Ulrich Terblanche Expert Analyst, GreenCape
10:55	Tea break	



ENERGY WATER WASTE FORUM
A PARTNERSHIP FOR THE CAPE TOWN COMMERCIAL SECTOR

Programme

Time	Item	Speaker
11:15	Case Studies Panel: The energy transition in action for the commercial sector	<i>1. Commercial Energy Transition in Action: The Growthpoint Experience</i> Martjie Cloete, Sustainability Manager – Projects, GrowthPoint Properties <i>2. Green Electricity Market Insights</i> Joanna Anderson, Senior Professional Officer: NZC Buildings, City of Cape Town.
12:00	Interactive dialogue	Mary Haw Manager, Sustainable Energy Facilitation, City of Cape Town
12:30	Way forward, closing and thanks	Hoosain Essop Manager: Electricity Retail Management, City of Cape Town
12:40	Lunch and networking	

We want to hear from you!

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What is your main driver for green energy?

1. Cost saving
2. Emissions reduction
3. Corporate Reporting
4. Customer / Investor Demand
5. Carbon Tax
6. Other
7. We aren't going green



ENERGY WATER WASTE FORUM

A PARTNERSHIP FOR THE CAPE TOWN COMMERCIAL SECTOR

Keynote Address

Kadri Nassiep

Executive Director: Energy Directorate

Kadri holds a Master's Degree in Mechanical Engineering and has over 30 years' experience in the Energy sector.

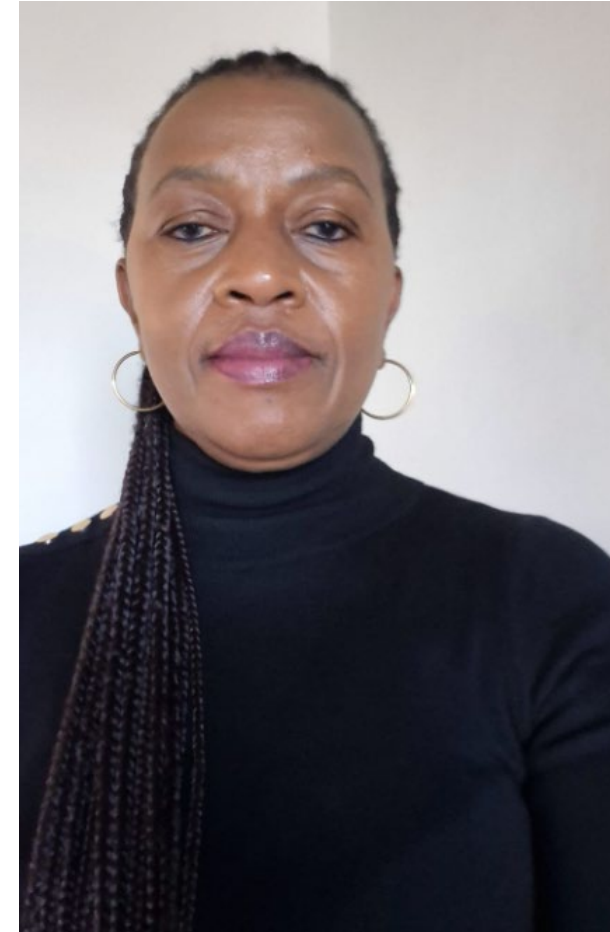
During his career he has been responsible for the development of policy, strategy, legislation and regulations supporting the implementation of energy efficiency and renewable energy.



Priscilla Booysen

Head: Events & Partnerships, Stakeholder Engagement, CCT.

Priscilla holds a B-Tech Degree and began her career with the City of Cape Town in 1995. Her work has centered around fostering collaboration across industries, government spheres, and growing communities to advance waste management practices in Cape Town.





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Presentation by: NP BOOYSEN
Integrated Planning & Waste Service
Urban Waste Management

Making progress possible. **Together.**

LANDFILL FEASIBILITY STUDY (2035 TECHNOLOGY FORECAST)

Waste Treatment Component	Option O (Baseline)	Option 1 *	Option 2 *
Material Recovery Facility Size	150 tons per day	225 tons per day	1 350 tons per day
Compost Facility Size	180 tons per day	180 tons per day	620 tons per day
Anaerobic Digestion Capacity	-	120 tons per day	480 tons per day
Construction & Demolition (C&D) Processing Capacity	185 000 tons per year	185 000 tons per year	330 000 tons per year
Incineration Capacity	-	-	1 200 tons per day
Pyrolysis Capacity	-	150 tons per day	-
Landfill Size for 30 year Lifespan	285 hectares	272 hectares	146 hectares
Landfill Diversion Percentage excluding C&D Waste	19%	25%	72%
Landfill Diversion Percentage including C&D Waste	40%	46%	84%
Total Cost	R3.5 billion	R4.3 billion	R9.8 billion

- Option 1 and Option 2 would require significant public private partnerships.
- Operational landfills Coastal Park and Vissershok end of life 2027 and 2036 respectively.

Thank You



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The City Supporting Business Continuity in a Changing Energy Landscape

Rebecca Cameron

Principal Professional Officer.
Energy Directorate, CCT.

Rebecca has worked across Africa on issues of energy, urban planning, and climate change with a range of local and national governments. She coordinated the development of the City's Energy Strategy and works with a range of stakeholders to address critical energy issues relating to energy security and navigating the energy transition.



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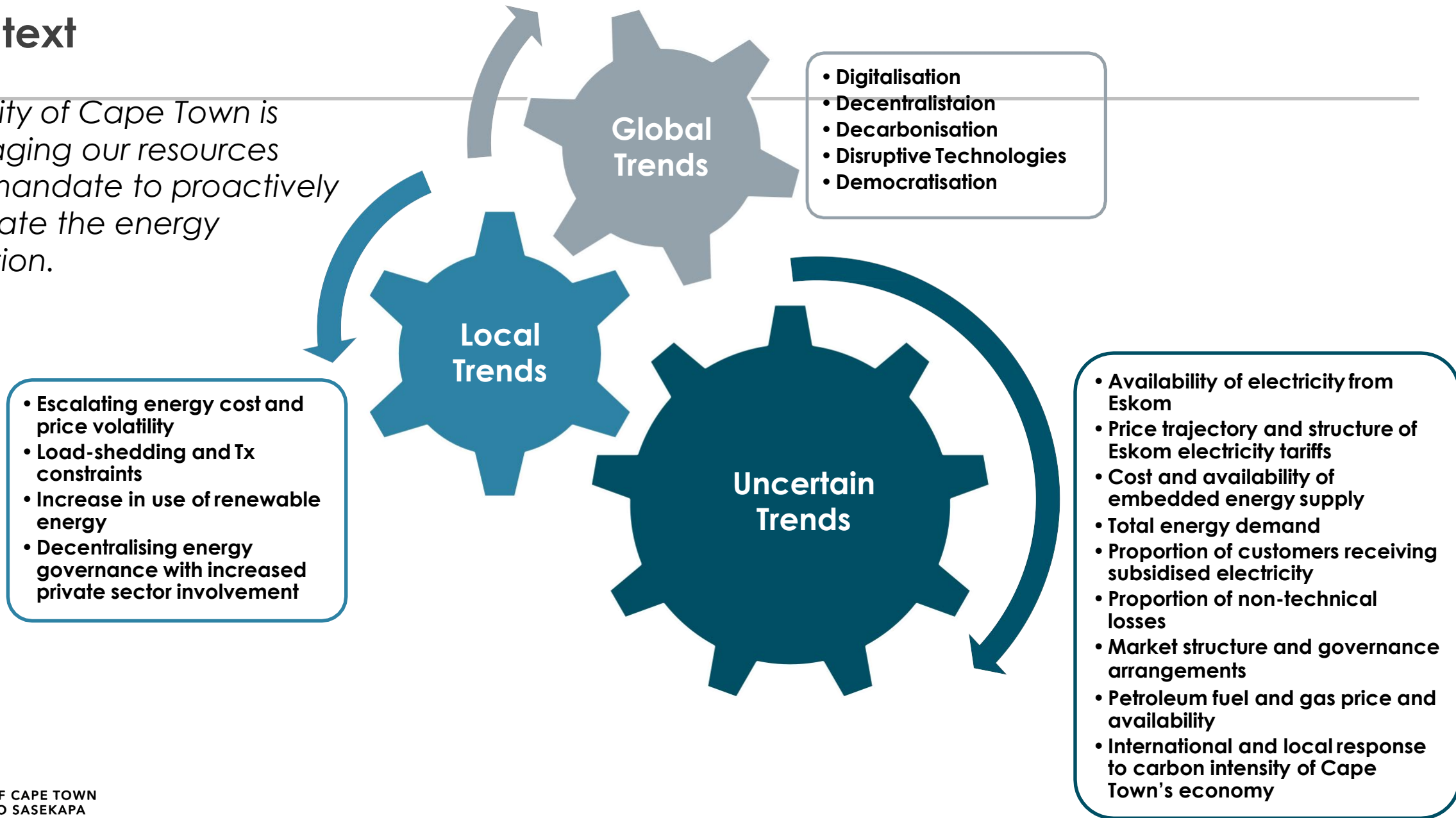
Our Shared Energy Future: The City of Cape Town's Energy Strategy

Energy Directorate

Making progress possible. **Together.**

Context

The City of Cape Town is leveraging our resources and mandate to proactively navigate the energy transition.



VISION

Energy security for a prosperous Cape Town. Together, we can build a resilient energy system where all residents and businesses have access to reliable, affordable, and carbon neutral energy.

PRINCIPLES

Reliability: Energy is available when it is needed

Affordability: Ability to pay without compromising other needs

Carbon neutrality: limiting greenhouse gas emissions

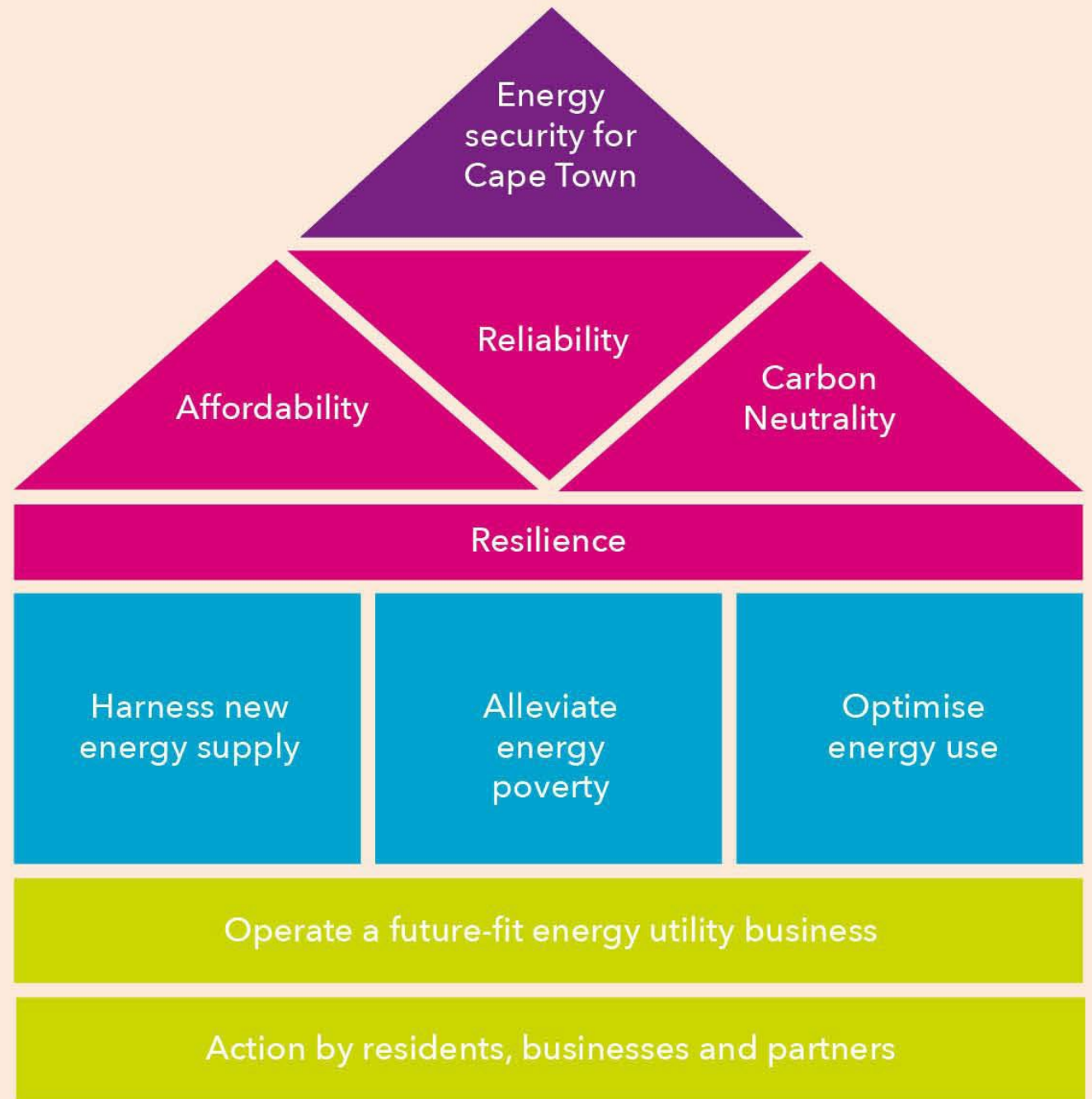
Resilience: The capability to adapt to change and disruption

COMMITMENTS

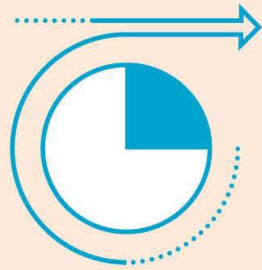
The City's commitments to deliver, enable and partner with stakeholders to build a resilient energy system to support social and economic development

ENABLERS

The ability to succeed in these commitments will depend on the actions by many people and corresponding changes made in how the energy utility operates.

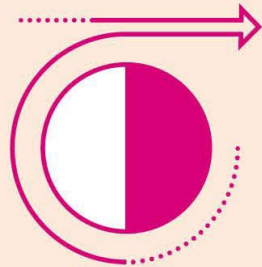


Prioritising Over Time



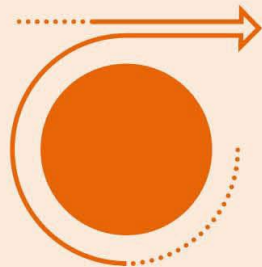
SHORT TERM (BY 2026): INCREASE CAPABILITIES TO MITIGATE UP TO FOUR STAGES OF LOAD-SHEDDING

Due to the current severity and frequency of load shedding and the devastating impact this is having on the economy, it is necessary to prioritise interventions and investments that will directly contribute to stabilising electricity supply in the short term.



MEDIUM TERM (BY 2031): REFORMS IMPLEMENTED TO MAINTAIN A MODERNISED AND FINANCIALLY SUSTAINABLE ELECTRICITY UTILITY

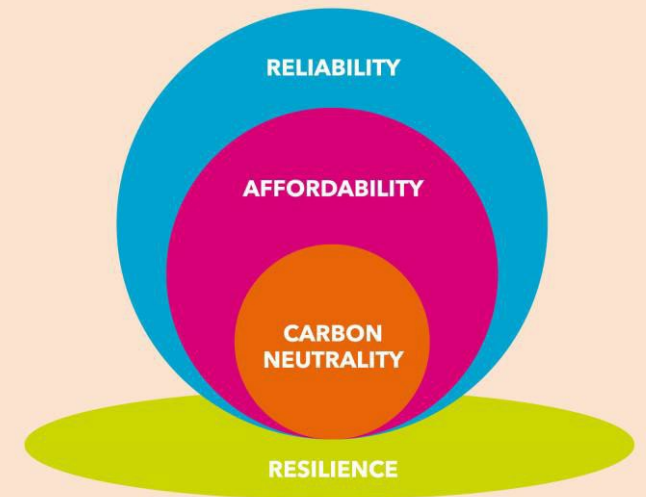
In the medium term, a modernised and financially resilient electricity utility is critical to ensure the long term financial sustainability of core utility services, such as network service provision and the continued provision of the energy social package to economically vulnerable households.



LONG TERM (BY 2050): TRANSFORMING THE ENERGY SYSTEM TO BE CARBON NEUTRAL

In line with global, national, and local climate commitments for carbon neutrality by 2050, it is critical that the carbon intensity of the energy system is reduced, as a major contributor to greenhouse gas production. This not only speaks to the sources of energy used, but also ensuring that the systems and value chains are in place to support a carbon neutral energy system.

The Prioritization Framework also provides guidance on the structured application of the four energy principles



The City's energy service delivery track record



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The Energy Directorate supports investment and business continuity

We make it easier for our customers to exercise choice in electricity supply by streamlining SSEG application processes, providing wheeling as a service, and exploring green electricity supply offerings.

We compensate customers for any electricity fed in to the grid (offset electricity bills and municipal accounts) and include a 25c / kWh incentive.

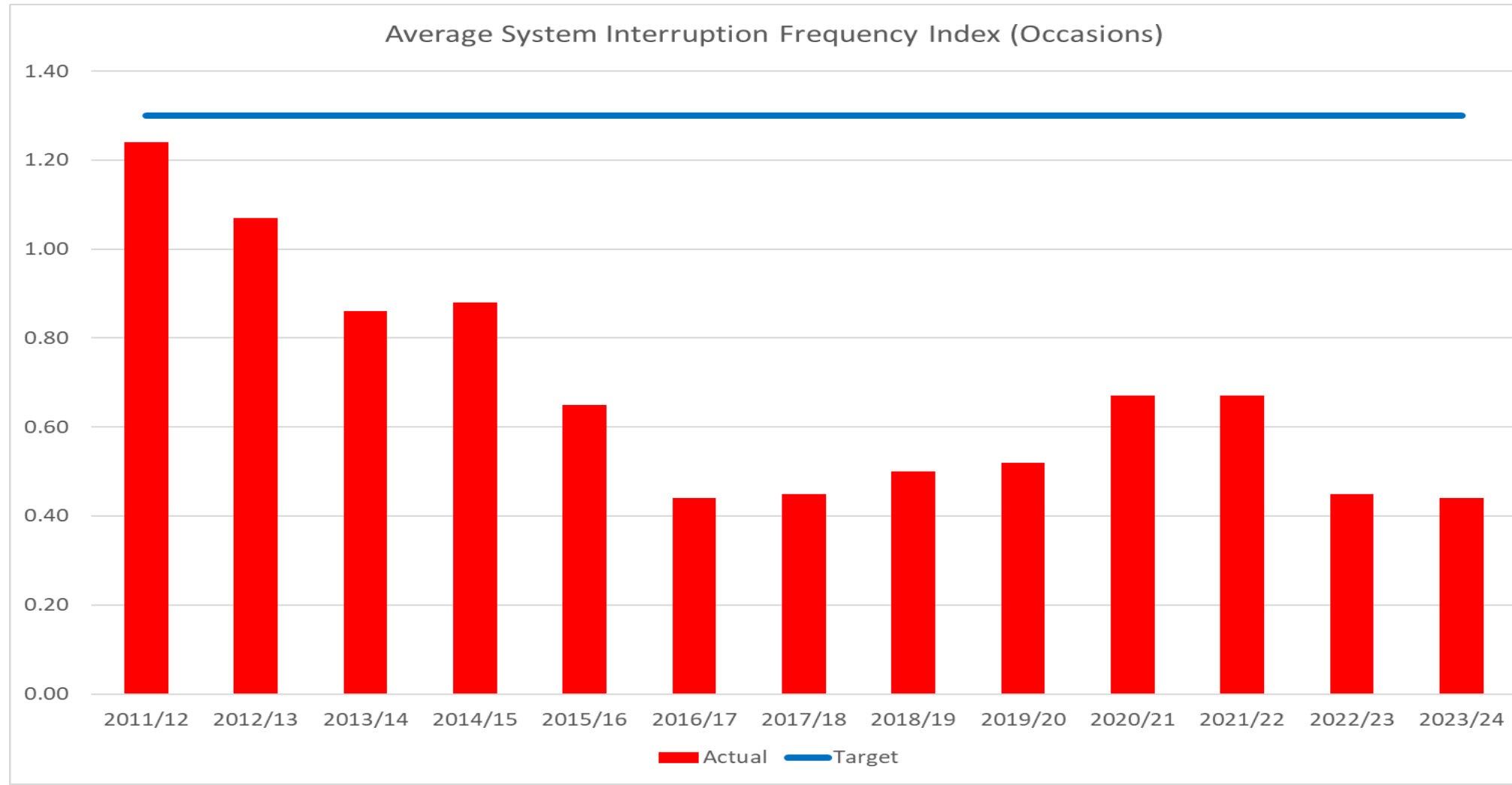
We pursue greater price predictability through aiming to procure from a range of electricity suppliers, our own generation and Independent Power Producers.

We attract competitive investment from a range of financial partners in to our energy projects due to our good credit rating and clean audits.



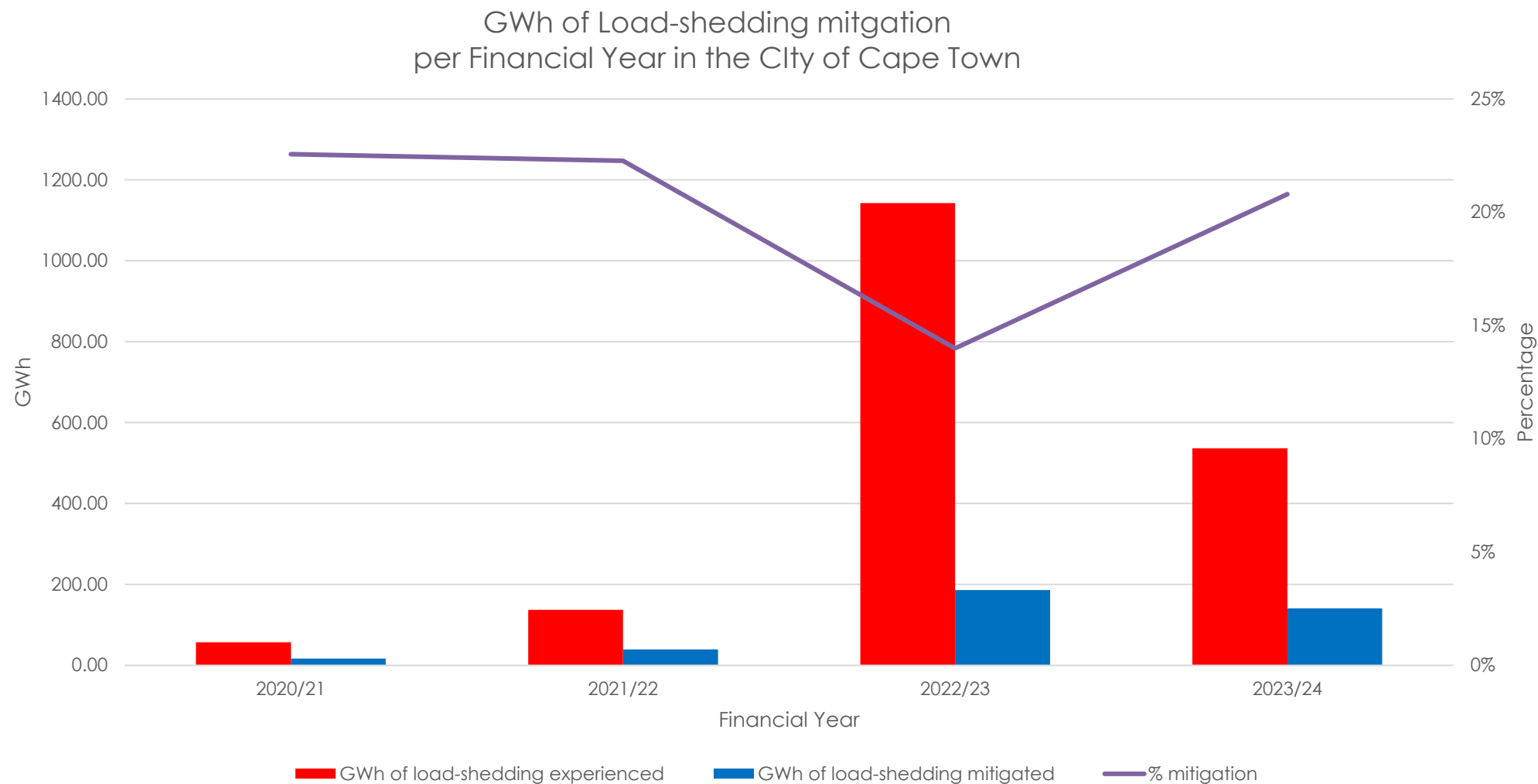
The Energy Directorate supports investment and business continuity

We do our best to prevent network outages and where these happen we respond as quickly as possible – having some of the best operational performance in South Africa.



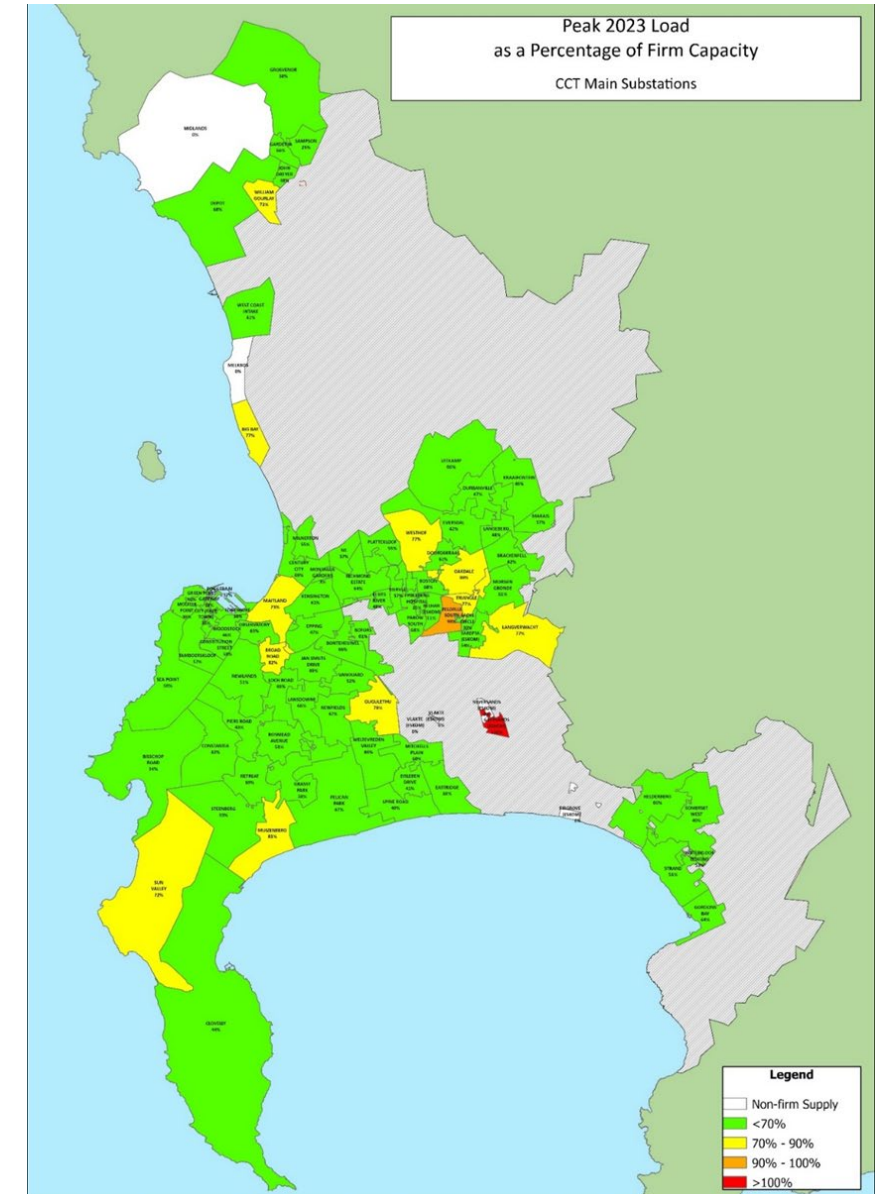
City of Cape Town Electricity Utility Trends

We mitigate loadshedding, with City Supply Area Customers experiencing up to 20% less load-shedding than the rest of the country.



Electricity Distribution Areas in the City of Cape Town

Invest in City Supply Areas (yellow areas) to ensure high quality electricity service delivery to enhance business continuity.



Implementing a more energy secure future

Commitment 1: Harness New Energy Supply

Goal: Cape Town's energy demand is met by a reliable and cost-effective supply of increasingly carbon-neutral energy from multiple energy suppliers, with new energy sources introduced to the benefit of residents and businesses.

Programme	City Role	Status
City-initiated Energy Generation	Deliver	Implementation in progress
Utility-scale Energy Storage	Deliver	Expansion of existing programme
Private Sector Embedded Generation	Enable	Implementation in progress
Wheeling and Trading	Enable	New (in planning)



Commitment 1 Prioritised Actions Over the Next 5 Years

- Power Purchase Agreements with **IPPs**
- Decommission and plan for repurposing of **Athlone Power Station Site**
- **Steenbras** Hydro Pumped Storage Scheme refurbishment
- New **Battery Energy Storage Systems** at critical City services
- **Streamlining** the **SSEG connection** registration process
- Enhance **financial and technical systems** for purchasing excess SSEG energy and ensure **fair charges for grid services**
- **Wheeling** contract management system, tariff, regulatory approvals and capacity



Commitment 3: Optimise Energy Use

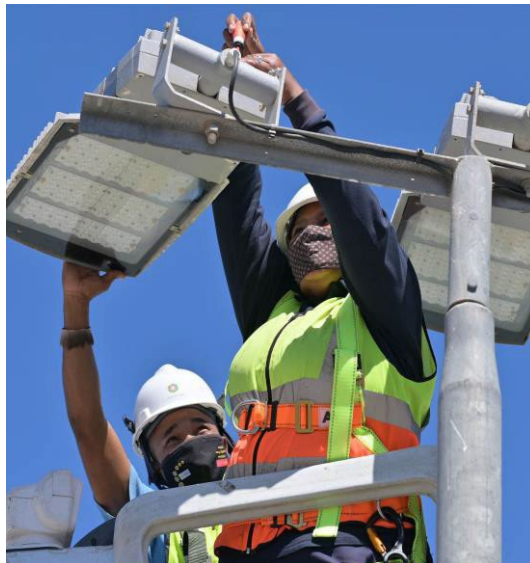
Goal: Businesses, households, and municipal services use energy efficiently and are supported to manage energy demand to allow for greater use of renewable energy and alternative fuel sources while contributing to balancing the electricity distribution grid.

Programme	City Role	Status
Energy-efficient City Services	Deliver	Expansion of existing programme
Improved Private Building Energy Performance	Enable	Implementation in progress
Enhanced Demand Response	Partner	Expansion of existing programme
Support Uptake of Electric Vehicles	Partner	New (in planning)



Commitment 3 - Prioritised Actions Over the Next 5 Years

- **Energy efficiency** in municipal buildings and facilities
- Engage and communicate with **micro-developers** on increasing **energy efficiency and thermal performance**
- **Energy performance baseline** per occupancy class for all privately owned buildings in Cape Town
- Utilize and expand **Large Power User Demand Response and Curtailment Programme**
- Procure service providers to act as aggregators of **demand response** in the residential and small power user customer base by 2024.



Cape Town Energy Data Sources and Helpful Resources

Cape Town's Customer Energy Portal

Please submit all energy queries via the [online form](#).

Cape Town's Energy Strategy

Cape Town State of Energy & Carbon Report

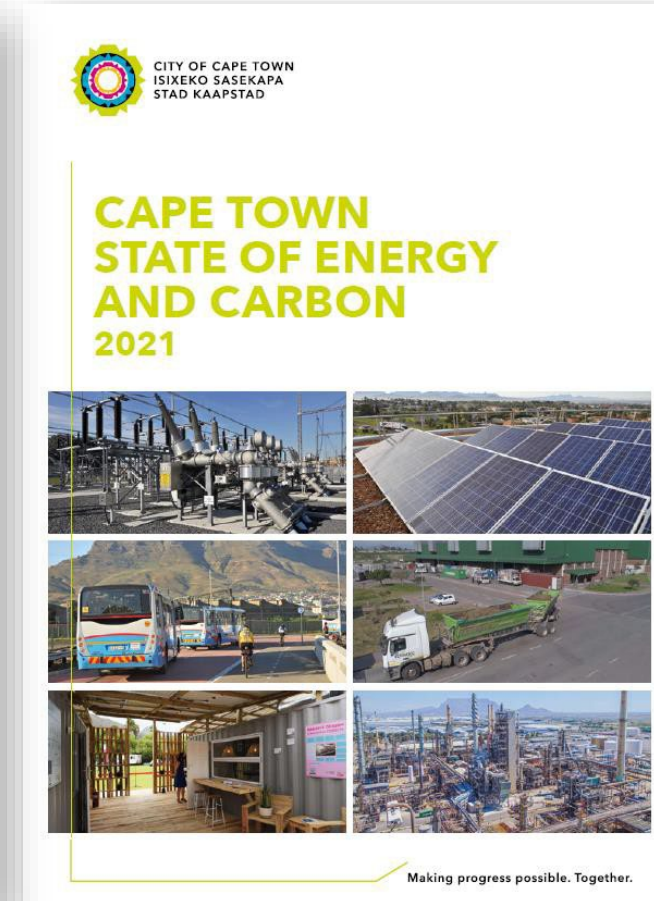
Open Data Portal

The State of Energy and Carbon Report Data

SmartOffice

SmartLiving

A useful website for energy matters across South Africa:
<https://www.cityenergy.org.za/>





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Thank You

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Are you thinking about implementing any other green energy options?

If yes, name them. For example:

- Self-financed Rooftop PV
- Energy efficiency retrofits
- Power Purchase Agreements
- Solar leases or financing options for SSEG
- Renewable Energy Certificates



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The Energy Landscape: What's Changing in the Business of Green Energy

Ulrich Terblanche

Expert Analyst
GreenCape

Ulrich has 11 years' experience in the energy sector, with a focus on renewable energy and sustainability. His current activities include market research, engaging in problem solving and collaborating with industry, academia and government to grow the renewable energy and component manufacturing industries in South Africa.



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The New Landscape

What's changing in the
business of Green Energy

ENERGY WATER WASTE FORUM

12 June 2025



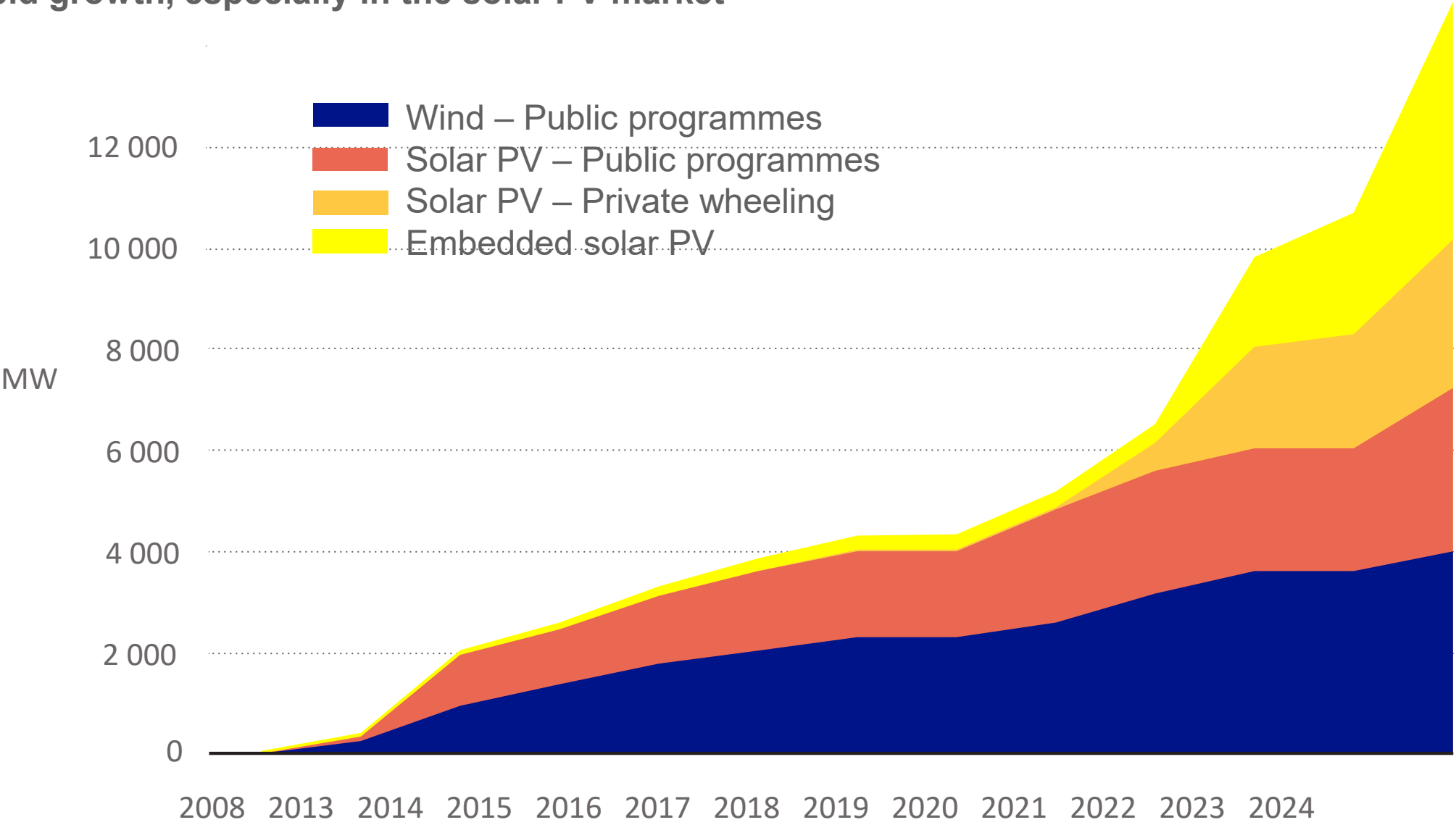
GreenCape



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Renewable energy growth

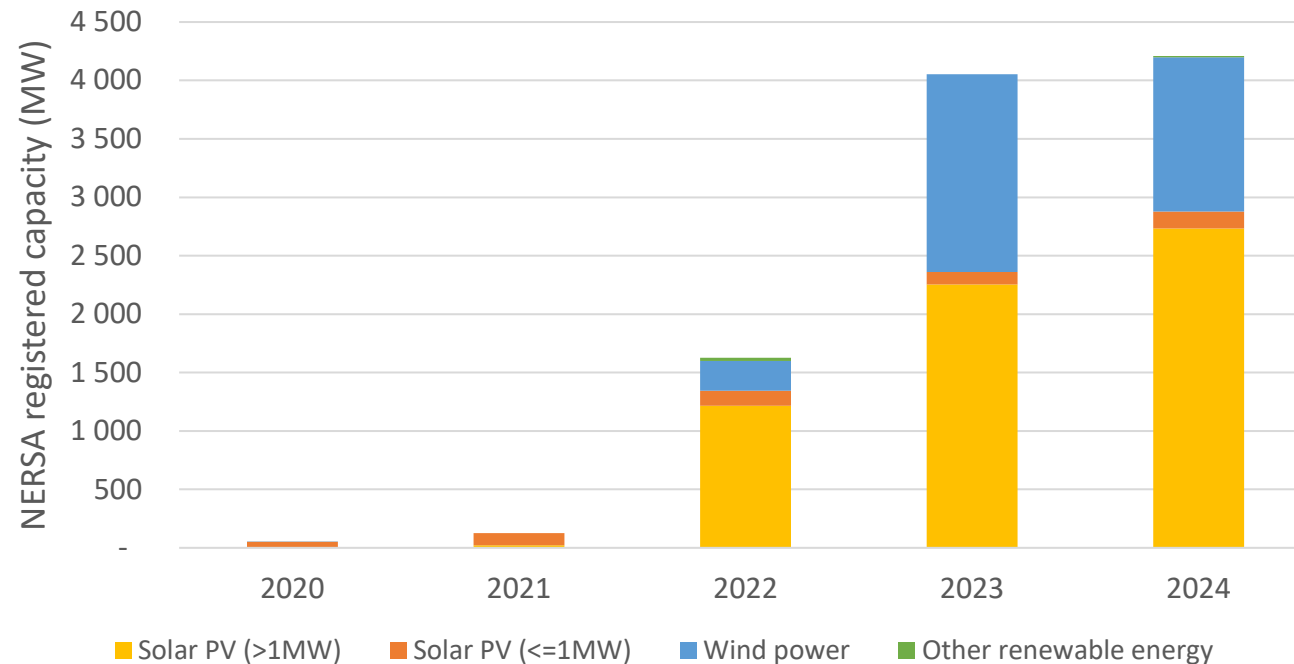
Rapid growth, especially in the solar PV market



Private renewable energy generation

Changing regulations stimulated private sector procurement led by solar PV

Registered renewable energy projects



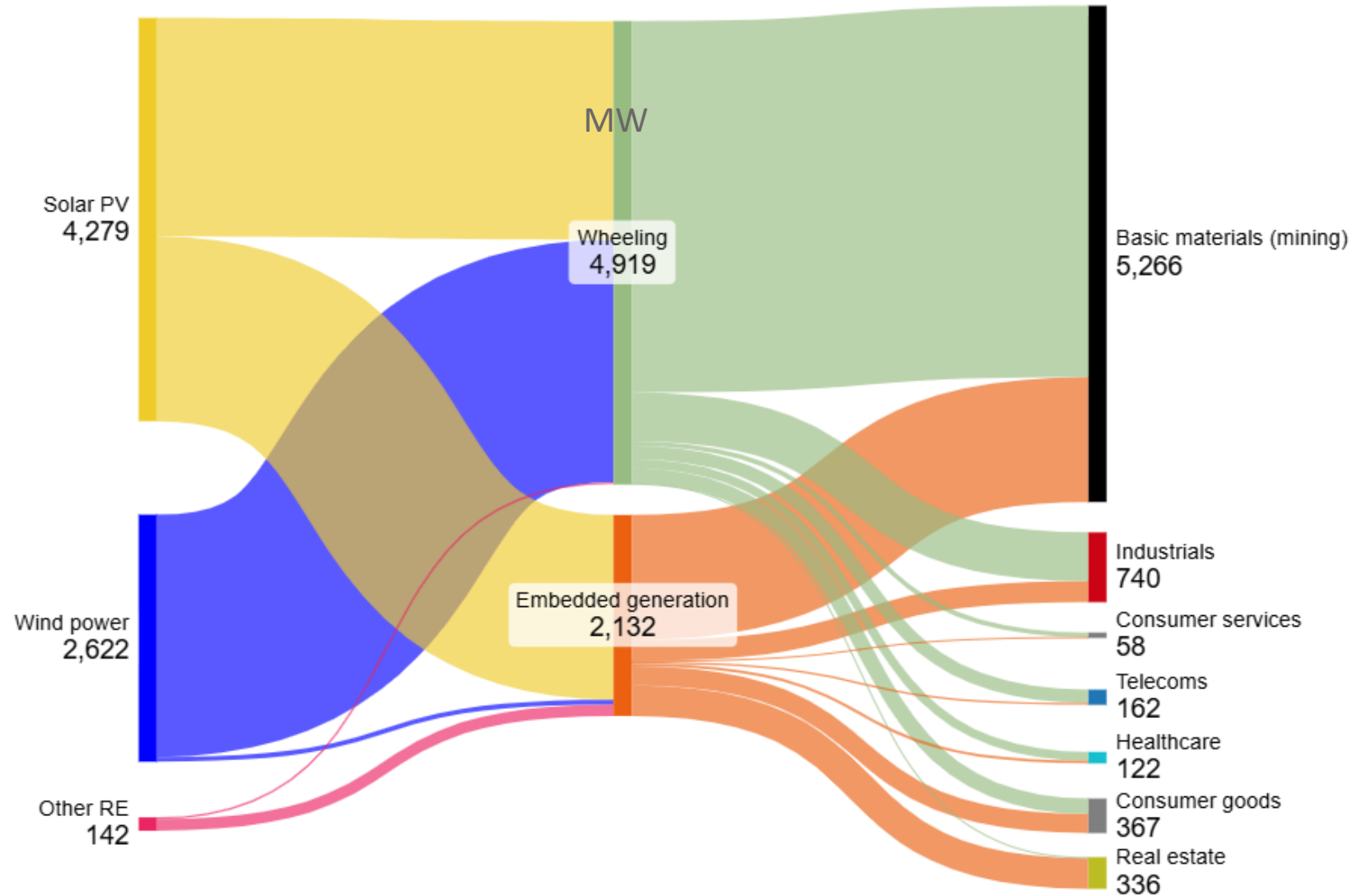
Comments

- Enabled through amendments to Schedule 2 of the Electricity Regulations Act (ERA) of 2006
- Most growth occurred in the large-scale solar PV sector
- Domestic solar largely driven by loadshedding
- Growth enabled through enabling wheeling on the Eskom network
 - Municipal wheeling is still challenging

Source: NERSA 2024

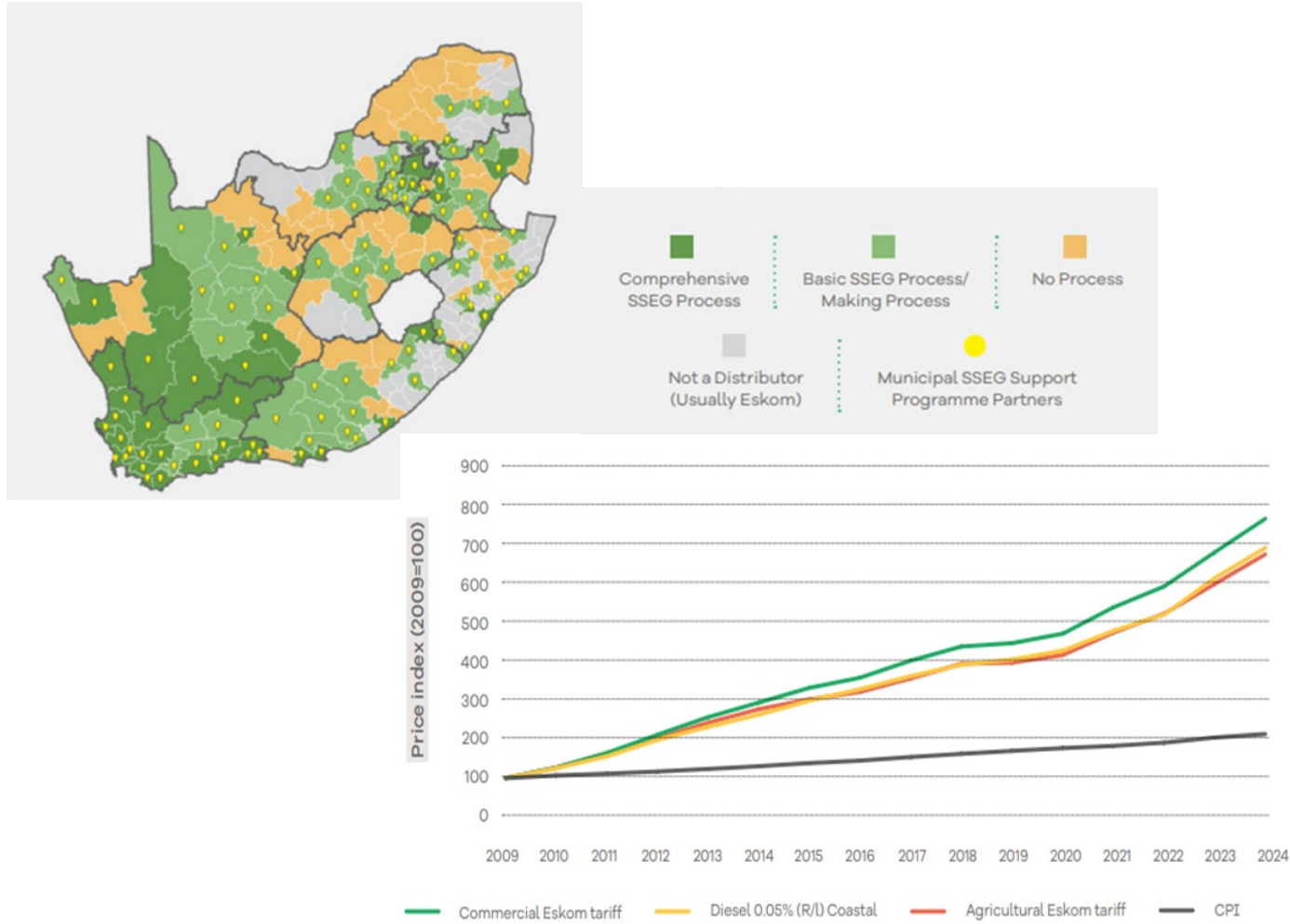
Renewable energy sourcing

Large industrial users are key drivers, shift occurring towards aggregation



Drivers

Improved cost competitiveness is key to the growth in the sector



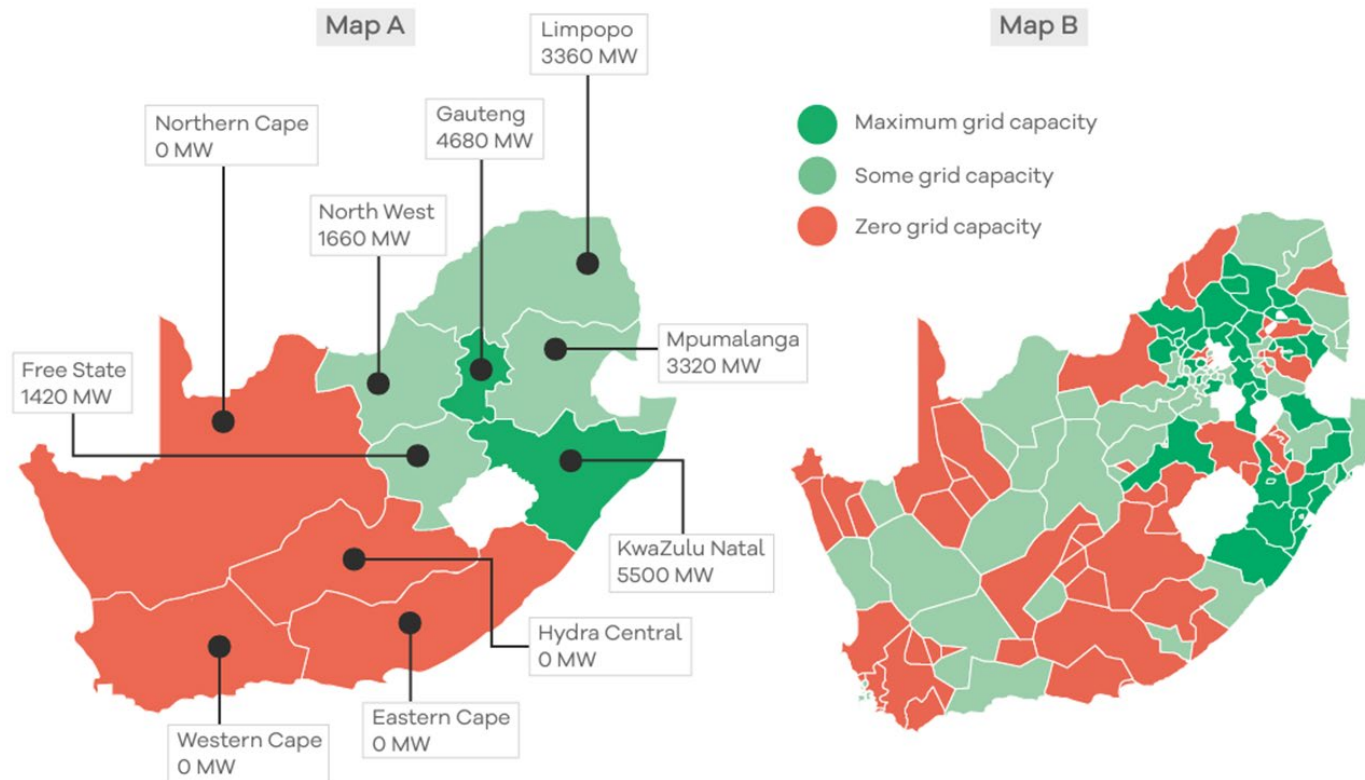
Source: SALGA 2023; Eskom Tariff Booklet 2024

Comments

- Enabling regulations continue to improve through the rollout of municipal SSEG tariffs and processes, as well as wheeling framework
- Continued above inflation Eskom tariff hikes expected to continue
 - 700% tariff increase since 2009
 - Eskom has debt and revenue challenges (municipalities owe Eskom >R100billion)
- Demand for carbon emission reduction in corporate sector
 - CBAM & ESG reporting
- Diverse financing mechanisms including commercial debt, power purchase agreements (PPAs) and lease agreements

Barriers

Grid capacity limiting both small and large projects



Note: Graph source: <https://www.eskom.co.za/eskom-divisions/tx/gcca/gcca-2025/>

Comments

- **Most available grid capacity has been allocated up to 2030** – affecting wheeling and embedded projects
- **Transmission buildout required to enable more grid connections**
 - Projects developed despite grid constraints, assuming grid buildout will occur
 - NERSA approved curtailment in Western Cape and Eastern Cape
 - BESIPPPP aim to support grid to enable more RE
- **Tariff structures changing to higher fixed fees and lower tariffs during daytime**
 - Long term threat to financial viability of solar PV projects
 - Driver for increased battery energy storage
- **Key challenge to access RE is municipal financial standing (wheeling limitations)**
- **Mid range (1 – 10MW project) compliance costs**

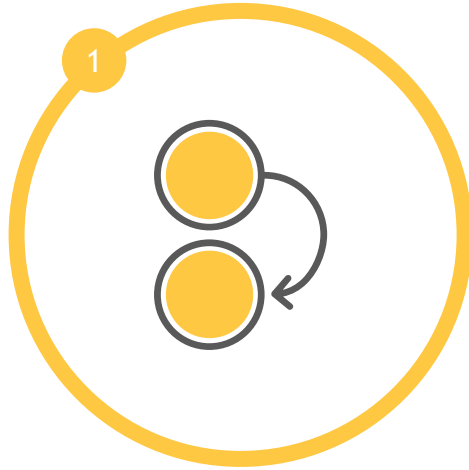
Financing models

PPAs drives developments

Financing option	Description	Term length	Running costs	Ownership
Outright purchase	The RE system is funded by the customer, the cost is high but in return the client gets ownership and all of the savings benefit. The client takes responsibility for the performance risk which can be mitigated via an O&M contract.	N/A	Low relative to capital expenditure	Full ownership
Debt finance	Similar to above, except the money is raised through a loan from a commercial bank. Instruments are secured against the value of either the asset or property and payments are amortized the term.	5 - 10 years	Fixed (depends on terms)	Borrower retains ownership
Lease-to-own (embedded solar)	The installation, maintenance and management of the solar panel and its components is paid for by the solar PV provider. The customer pays a fixed monthly lease payment for the duration of the lease term.	10 years	Fixed monthly lease fee	Provider retains ownership with option to hand-over the plant at the end of the term.
Power purchase agreement (PPA)	The installation, maintenance and management of the solar panel and its components is paid for by the solar PV provider. The customers pays for units of energy provided at a PPA tariff rate that is less than their distribution utility tariff. The provider is hence incentivised to ensure adequate system performance. The PPA can either be signed with the IPP or through a trader.	10 - 20 years	Predictable (subject to low risk of utility tariff structure change)	Owned by the generator

Carbon industry

Developing industry that still need to mature



Carbon credits



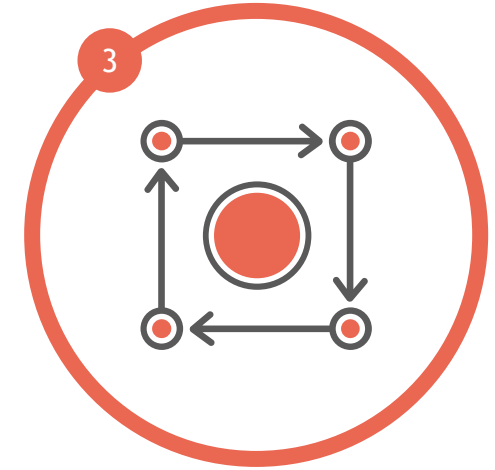
Carbon credit = 1 ton of CO₂
Allows hard to abate sectors to invest in carbon reducing projects to reduce emissions.
Carbon credits likely to track Carbon tax by 80% of the value.
Voluntary vs Mandatory.



SA Carbon tax



Business liable for Carbon tax are able to offset 10% through carbon credits.
Current tax rate = R230/ton
Emission allowance in place of 80%.
Only scope 1 emission are taxable!



Cross sector support



Carbon tax liable industries cannot generate credits.
Other industries are incentivised to produce carbon credits as parallel revenue stream.



Thank you

ulrich@green-cape.co.za

www.greencape.co.za

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The top-voted questions will be prioritized in the discussion!

Let's make this session as relevant and meaningful as possible — your voice matters!



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TEA BREAK : 10:45 – 11:00 (15 minutes)

Grab a beverage and snack whilst networking

We want to hear from you!

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2. Go to **www.slido.com** and enter the event code: **1033554**

Joining as a participant?

Enter code here



How confident are you that your business can adapt to the changing energy landscape within the next 3 years?

😞 - Not at all confident

😍 - very confident

Don't forget to: Submit your questions for the interactive dialogue and vote for the questions you most want answered



ENERGY WATER WASTE FORUM

A PARTNERSHIP FOR THE CAPE TOWN COMMERCIAL SECTOR

CASE STUDY PANEL

Growthpoint Properties and City of Cape Town

Case Study 01

Martjie Cloete

Sustainability Projects
Growthpoint Properties

Martjie is a registered Certified Energy Auditor with the Association of Energy Engineers (AEE) and has more than 10 years of experience in energy and water efficiency. Martjie won the South African Energy Efficiency Confederation's Female Energy Manager in 2019 and went on to win the Association of Energy Engineer's Sub-Saharan Energy Professional Development award in 2020.



COCT Energy Water Waste Forum

Commercial Energy Transition in Action

12 June 2025

GROWTHPOINT
PROPERTIES



Discovery, Sandton



Agenda

01

Innovation Strategy

- Introduction
- Targets
- Solar Journey
- Wheeling

02

Challenges

- Barriers
- Lessons Learned

03

Opportunities

- Development of REC Market
- Tenant benefits



01

Innovation Strategy





Introduction to Growthpoint

- South Africa's largest REIT with an international footprint
- Owns and manages a portfolio of office, retail, industrial, healthcare and student accommodation properties
- Pioneering sustainability initiatives in the real estate sector





Targets

01



- 40% of portfolio to be supplied by renewable energy by Dec 2028

02



- 60MWp of rooftop solar by June 2026

03



- 100% of all long-term hold buildings certified
- 20 net zero carbon buildings by FY28

Net Zero Carbon by 2050





Growthpoint PV Journey

1. Feb 2013: Lincoln on the Lake PV system (KZN) – Growthpoint First
2. June '25: >60MWp installed across the portfolio
3. June '26: On track to reach 68MWp (vs 60MWp Target)





Wheeling

- Growthpoint Properties total consumption for FY23 was 612GWh
- 195GWh annual renewable energy (Diversified generation profiles = near baseload supply)
- Our new PPA accounts for *32% of our total consumption
- Our first renewable electricity (Hydro) production expected by Q3 2025.
- All green attributes secured for Growthpoint
- RE sold to tenants as part of e-CO2 initiative

Energy mix





02

Barriers





Challenges & Lessons Learned

Challenge:

- SSEG Applications – COCT easier, but process is respected

Lessons Learned:

- Follow best practice project management principles from feasibility till close-out, ensure correct documentation is in place and handed over
- Plant management through online visibility which leads to improved response time
- SLAs to ensure proper maintenance post installation, this involves punitive clauses to ensure optimal solar performance



03

Opportunities





Renewable Energy Certificates (REC's)

- A Renewable Energy Certificate (REC) represents 1 MWh of verified renewable energy
- Types:
 - I-REC (International)
 - zaREC (South Africa)
 - Integrate with JSE Exchange – Increased liquidity
- Used for carbon accounting and ESG reporting
- Blockchain-based platform enables REC issuance, tracking, and retirement (Developed in Partnership with Fuel Switch)
- Ensures transparency, traceability, and integrity
- RECs issued to tenants participating in e-CO₂ – free of charge





Benefits

Tenant Benefit:

- Access up to 100% renewable energy via wheeling through the e-CO₂ program
- Receive RECs as proof of clean energy consumption
- Fixed escalation rates provide long-term cost certainty
- Supports ESG reporting and carbon-neutral goals

Growthpoint Benefit:

- Reduced vacancies
- e-CO₂ supports Growthpoint's own ESG/ Carbon Neutral strategy
- Eases pressure on the power grid

Thank you.

GROWTHPOINT
PROPERTIES



The Constantia Village

Case Study 02

Joanna Anderson

Senior Professional Officer
City of Cape Town

Jo coordinates the net zero pathways for building portfolios across the City. Her daily work includes capacitating City staff with metrics for better building performance, supporting energy efficiency and renewable energy solutions within the design and development of new buildings and advocating for greener energy solutions to decarbonize the grid for existing buildings.



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MARKET INSIGHTS | APPETITE FOR GREEN ELECTRICITY

SUSTAINABLE ENERGY FACILITATION

PROJECT OVERVIEW

Prepared by: Jo Anderson

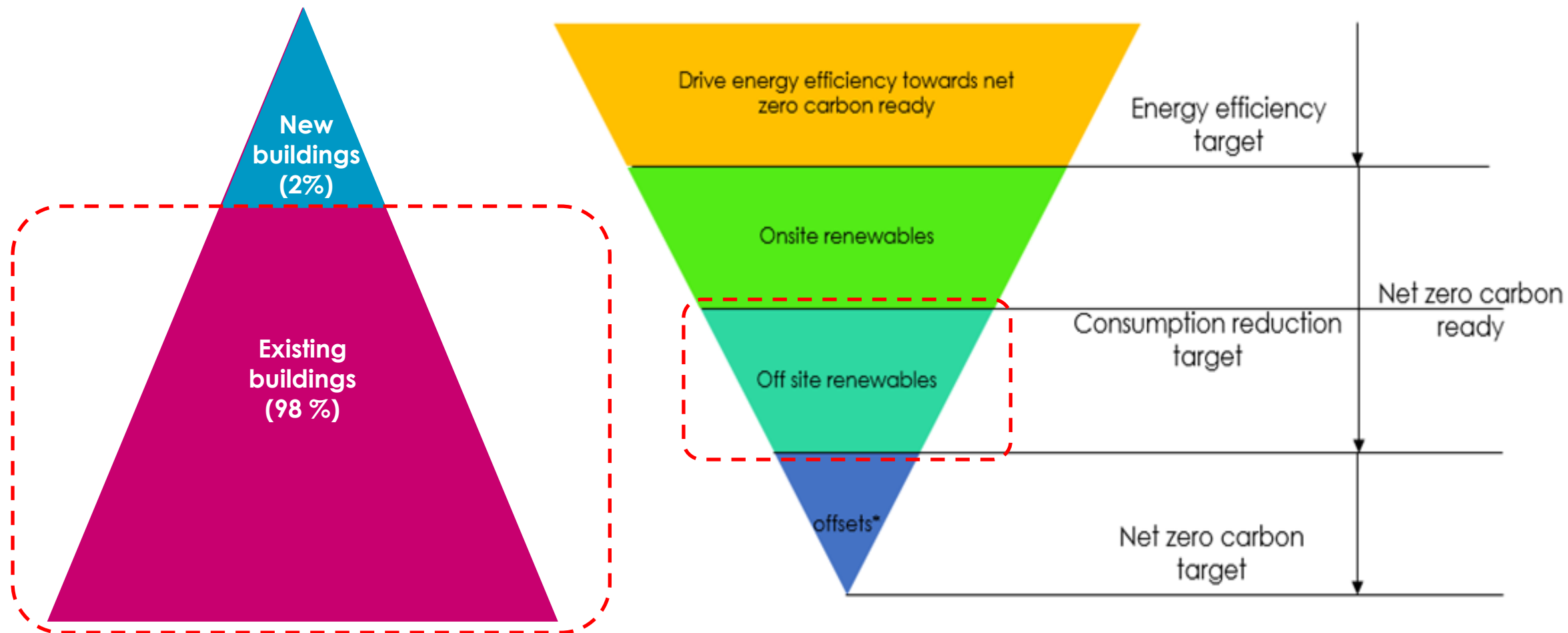
Making progress possible. **Together.**

Why we did this research

1. Supporting Manufacturing Industry potentially affected by CBAM
2. C40 Existing Buildings commitment (2050)
3. City owned renewable energy generation (utility & rooftop)
4. Keeping up to date with the market



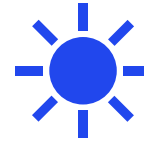
Pathways to net zero carbon



Project stakeholders & background



FUNDERS



There is a **growing demand for renewable energy** and its benefits, from both private sector and municipalities.



SERVICE PROVIDERS



South African municipalities face challenges to **maintaining primary income** from electricity sales due to an **eroding customer base and need to adapt to customer needs**. In particular, the City of Cape Town has committed to becoming carbon neutral by 2050.



SUSTAINABLE
ENERGY
FACILITATION

BENEFICARY



In response, the cities seeks to gather information about **market demand and customer willingness** to buy renewable energy from the **cities as a power utility**.



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Project objective: to assess market demand and customer willingness to purchase renewable energy from the City as a utility



The analysis will provide an understanding of:

1. The **market size and customer profile of those interested** in green electricity within the City;
2. **Market factors and customer willingness to pay** for green electricity from the City;
3. **Reporting and certification requirements** to meet market expectations; and
4. Market **preference to choose the City** over other providers offering similar services.



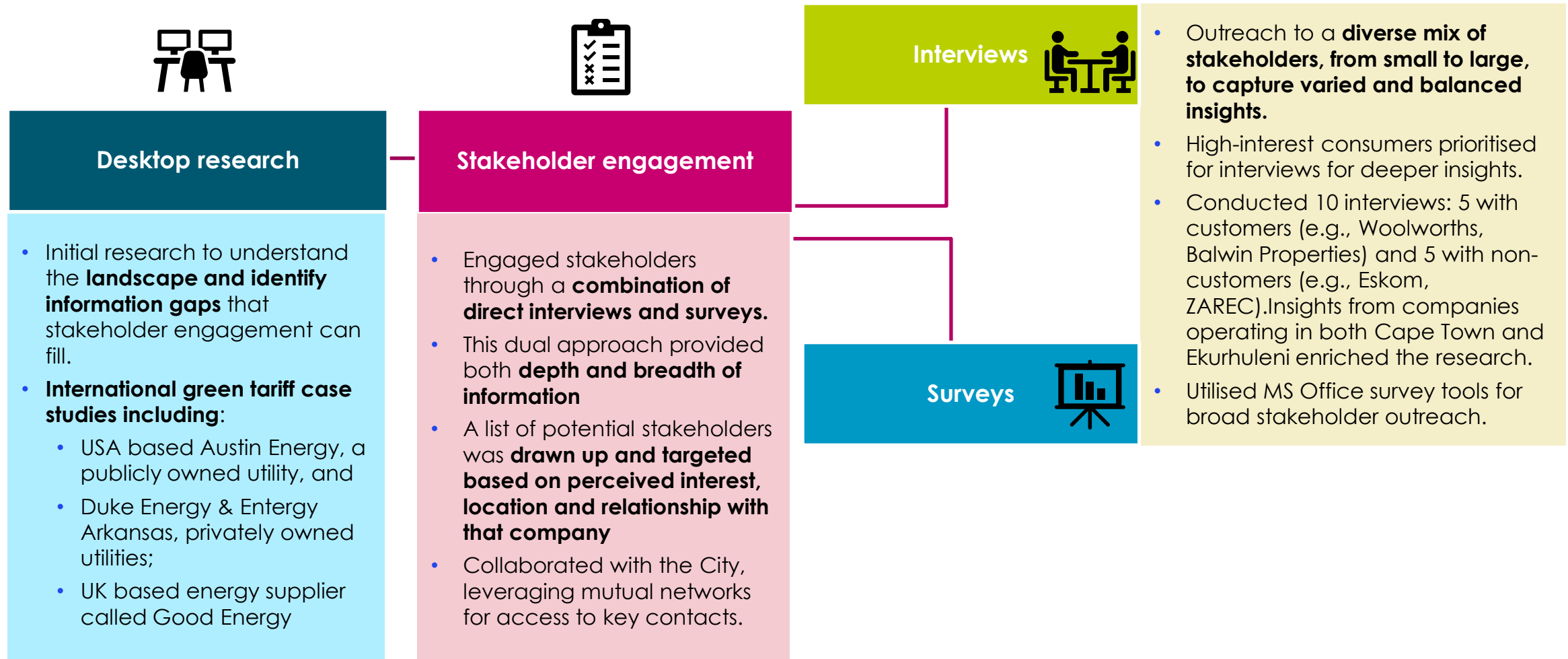
The findings of this market analysis will help to determine the **feasibility of developing** and implementing **a mechanism for the City to sell green electricity**.



The **design and practical implementation of selling green electricity are outside the scope** of this project.



Stakeholders were engaged through both surveys and interviews



1. Market size and customer profile

Majority of customers indicated that they would be interested in green electricity.

- 81% interested & 67% very interested.
- Interest was **subject to costs and energy mix.**
- **Lower interest in purchasing RECs:** 76% - interested of which 38% -very interested.
- Many indicated **preference against unbundled RECs, favoring more integrated solutions.**

Customer energy profile is typically that of retail or office facilities, with a large portion having 24-hour energy demands

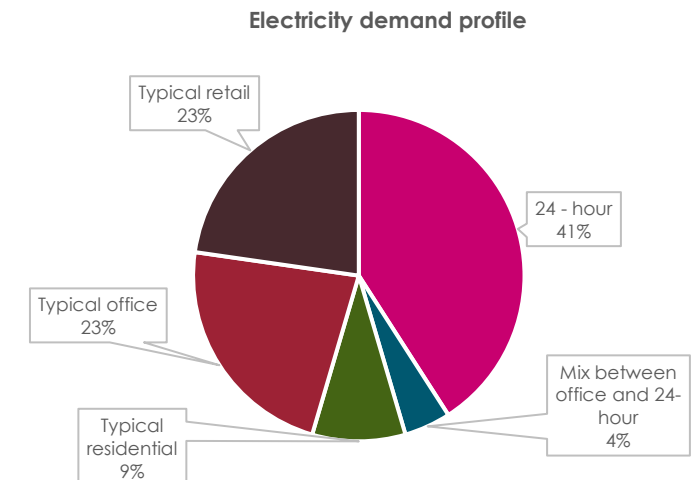
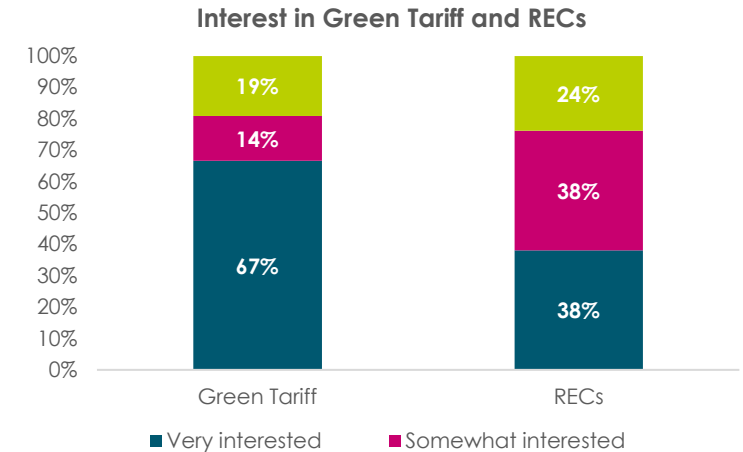
- Majority of **customers sited office buildings as main facility, followed by retail outlets, distribution centers and residential estates.**
- Majority of customers have **24-hour operations, followed by typical retail (9am – 8pm) and typical business (8am – 6pm)**
- Customers with **24-hour operations indicated that they would need a mix of energy sources i.e. solar and wind and given that 41% of customers are 24-hour facilities. This mix of RE sources is a key factor for the City to take into consideration.**

Majority of respondents have significant control over electricity choices, supported by smart metering

- **64%** of respondents have a **high degree of control and influence over how they purchase electricity** **64%** of respondents indicated they had a **smart meter in place**
- Medium/no control such as **businesses that lease sites are less likely customers** but can negotiate with landlords.

The **estimated market size for green electricity** is between **187 GWh and 450 GWh**

- The total electricity consumption of respondents who answered the question (a conservative estimate) ranged between 250–450 GWh.
- The most common consumption category reported was 40 GWh and above. This group includes companies with strong decarbonisation drivers, such as those impacted by CBAM, large manufacturers in Atlantis, and energy-intensive sectors like data centers.
- While **large electricity users showed significant interest in green tariffs, this interest was spread across different industries.**



2. Market drivers and customer willingness to pay

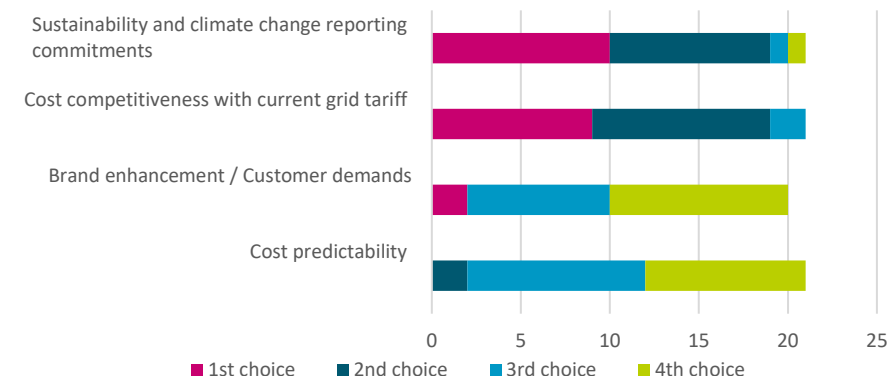
Question:

What drives your interest in purchasing green electricity?
What are the most important factors that you consider when purchasing green electricity?

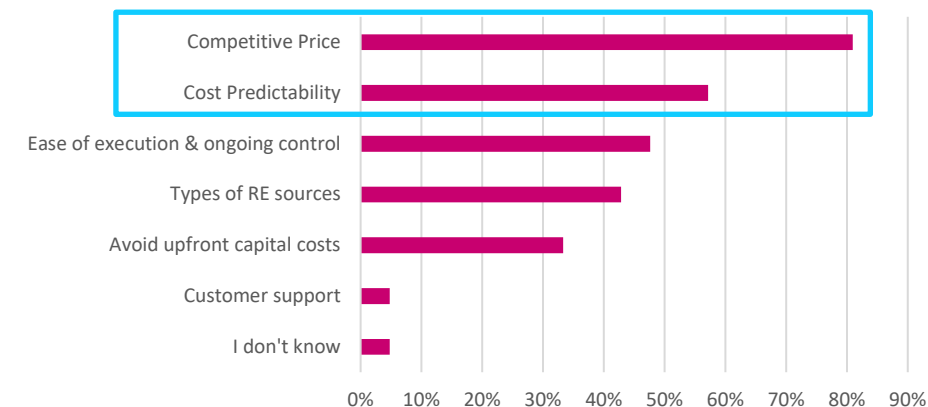
The primary driver for green electricity adoption is customers' **desire to lower electricity costs**

- **Interest driving decision** to purchase renewable electricity
 - 90% of respondents indicated **meeting sustainability and climate change commitments**, as well as the **cost competitiveness of green electricity with current grid tariffs** is the driver behind why they are seeking to use renewable energy.
 - The third driver is the **cost predictability** that is associated with purchasing RE from e.g. on-site solar PV and PPAs.
 - Companies that have **sustainability targets and export into Europe (CBAM)** are required to decarbonise their operations, hence the drive to use more green electricity.
- **Main factors considered** when purchasing renewable electricity
 - The primary factor influencing customer interest in purchasing green electricity is **cost competitiveness with current electricity prices**.
 - If the city wants to compete with the market, it needs to **be price competitiveness relative to the current cost of grid electricity**
- Based on engagement, customers indicated that they **are not willing to pay a premium for green electricity**.
 - Most customers are willing to pay **the same or slightly less for green electricity compared to their current renewable energy**
- Majority of respondent are on a **CoCT Large User LV TOU tariff** (61%)
 - Over **15% of respondents did not know what tariff they were on**.

What drives your interest in purchasing green electricity?



Most important factors customers consider when making a decision to purchase green electricity?



3. Reporting and certification requirements

Traceability and a robust audit trail are essential requirements for customers in their renewable energy procurement.

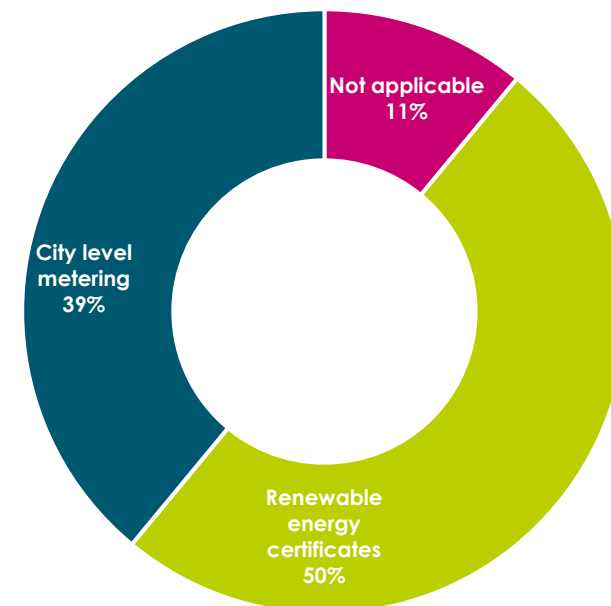
Robust verification and certification underpinning green tariffs or RECs are essential for **fostering customer trust and credibility in the green energy market.**

- **90% of respondents indicated that they would need some form of verification**, with **50% preferring Renewable Energy Certificates (RECs)**, while **40% are satisfied with city-level metering.**
- Companies that are being internally or externally **audited** on their non-financial metrics, such as sustainability KPIs, need to provide a **robust audit trail**. Customers **seek assurance that the green electricity is genuinely renewable, not subject to double counting or overestimation.**
- Some respondents, especially those **exporting to Europe**, highlighted the need for **rigorous verification due to the upcoming CBAM regulation.**
- **15% of respondents indicated that they would like timestamped renewable energy tracking**, whereby the **usage is matched to the generation**. However, this is **costly and requires advanced software.**
- **ZAREC under RECSA provides this audit trail** to allow for traceability

The City should consider adopting a robust certification process, leveraging existing mechanisms like ZAREC under RECSA, which is part of the global iREC system.

- **Industry is already using ZAREC**, a system that is set up to validate renewable energy, so there's no need to reinvent the wheel.
- **If the City were to create its own system, it would lack independence.**
- **All generators in South Africa should ultimately collaborate with RECSA for certification.**

VERIFICATION REQUIREMENTS



4. Market preference over competitors

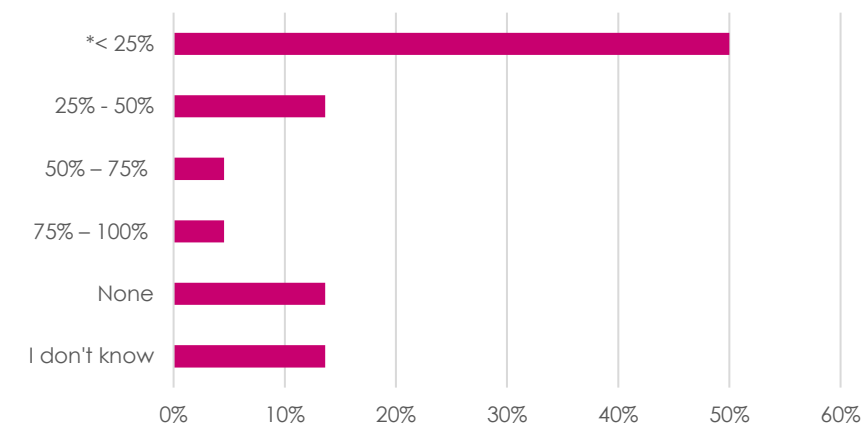
While **50% of respondents have on-site renewable energy**, space and structural limitations mean it only covers **<25%**

- **60% of respondents have on-site renewable energy installed**, but many report that it supplies **less than 25% of their electricity needs**. They face challenges such as **space constraints, roof structure limitations, load capacity, or being in leased spaces**.
- One **REIT respondent indicated that their renewable energy should meet 75 - 100% through their future PPA**; One domestic household respondent indicated that between **50 – 75% of their electricity demand** is met by RE, while 3 indicated that RE makes up **25 – 50% of total electricity** – this included a property developer, restaurant chain and heavy manufacturer.
- This highlights the **gap in the market that the City can make use of, supplying these companies with green electricity to help increase their renewable energy percentage use**.

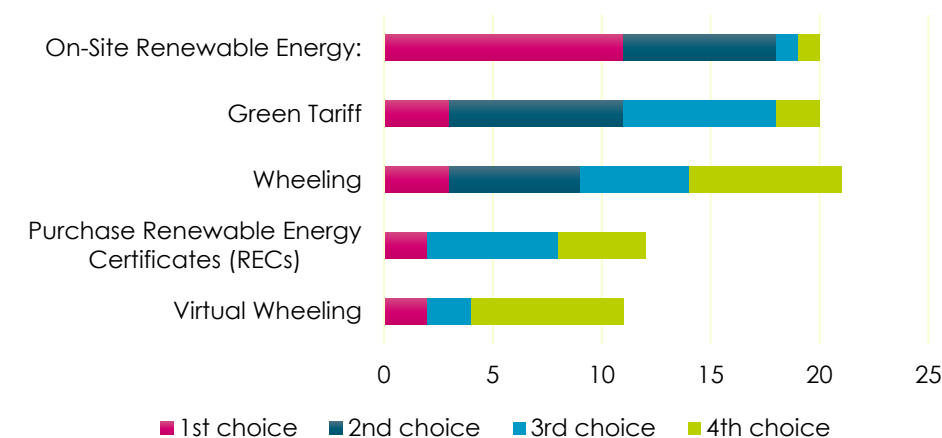
Strong customer preference for accessible, cost-effective renewable energy solutions.

- Respondents indicated that their **first preference would be to have on-site renewable energy**, given the benefits such as:
 - Cost savings
 - Energy security
 - Direct control over generation and reduced reliance on external providers
- The **second most popular choice among respondents was a green tariff, very closely followed by wheeling**.
- This preference highlights that many customers are **eager for an accessible, cost-effective way to source renewable energy directly from the City**, with a **simpler administrative process compared to other option**, but that the City will have competition against available wheeling mechanisms.

Current RE use



Through which mechanism would you prefer to procure RE?



A green tariff may offer various unique selling points compared to wheeling

- **Wheeling** would be the primary competitor to a green tariff. However, traditional wheeling has certain disadvantages, and with careful design, a green tariff could offer a unique selling point.
- **Wheeling** is more suitable for single, large sites and can present challenges within municipalities and for leased sites.
- Although **wheeling through a trader offers flexibility**, it remains **admin-intensive**, and **'take-or-pay' clauses are less appealing**.

Requirements to compete against existing RE procurement mechanisms

- **Cost competitive:** The green tariff must be cost-competitive with other renewable energy market mechanisms while also offering stable cost predictability
- **Verification:** There must be a certification element associated with the green energy to ensure its authenticity and credibility

Factors that could drive differentiation from existing wheeling mechanisms

- **Simplified access to renewable energy:** A green tariff from the City could streamline the procurement renewable energy, reducing the administrative burden on customers who may otherwise need to navigate complex renewable purchasing options or manage on-site installations.
- **Accessibility:** A key advantage of the City's green tariff could be its accessibility for customers on leased sites, allowing them to participate in renewable energy sourcing without requiring direct control over on-site installations.
- **Smaller sites:** Another advantage that a green tariff could offer is that green electricity could be provided to multiple and smaller sites.



Most respondents are highly ambitious, aiming to procure the maximum possible amount of green electricity

- Respondent feedback is **positive and optimistic**, with **60%** expressing an **ambitious sentiment to procure as much green electricity as possible to meet sustainability targets**.
- **30% of respondents were optimistic** and would like to procure green electricity should it align with their requirements **e.g. price and/or reporting standards**
- **10% of respondents were cautious** and would procure green electricity incrementally with time.

Some sentiments from the respondents are highlighted below:

"Exciting that the City wants to take an active role, we have been waiting a long time for Eskom to make this possible. good that the municipalities are shifting their thinking, and it will happen quicker and more transparently".

"Good initiative. Should be independent if there are other participants that can wheel to municipality – if the municipality can do it more efficiently and cheaper then they will win. There needs to be more energy distribution in the country, that is the end goal."

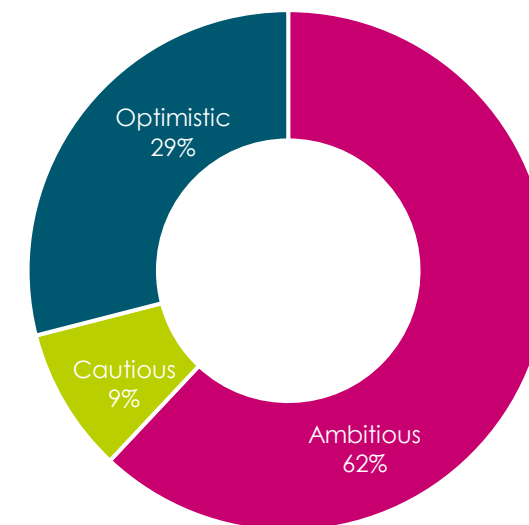
"Renewable electricity should be more affordable than current prices and they should reflect the generation, distribution and transmission costs only."

"We are private homeowners in Hout Bay and would ultimately like to be able to generate a portion of our own electricity needs by means of rooftop solar but find the initial capital investment required prohibitive."

"If a green tariff meets CBAM criteria, this is a win. If not, RECs become the only option. This needs to be cleared early in the process."

"When would these alternatives be available? Being owned by an EU company we have shorter timelines to achieve ESG targets."

Sentiments towards a green tariff





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Thank You

Making progress possible. Together.

Case Study Panellists



Martjie Cloete

Sustainability Manager -
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Senior Professional
Officer
City of Cape Town

Interactive Dialogue

Facilitated by Mary Haw

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- Subscribe <https://bit.ly/ewwfsub>





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