



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD



ELECTRICITY WHEELING

IN CAPE TOWN

May 2025

Making progress possible. Together.

Electricity Wheeling in Cape Town

Access all publically available electricity, land use and other data on our [Open Data Portal](#) and [Map Viewer](#).

Additional information is available in the [Cape Town State of Energy and Carbon Report](#), while the full data set is available on the [Open Data Portal](#).

Disclaimer: The City's Wheeling Bilateral Programme pilot has come to an end and is now open to the public. The City currently trialling a Wheeling Pooling Programme which aims to test the system and associated rules, which may change based on the outcome of the pilot.

This document is for information purposes only. While every effort is made to ensure the accuracy of the information shared, it is subject to change at the discretion of the City at any time. We do not exercise control over the content of any of the websites mentioned in this document, other than that on the City's website www.capetown.gov.za, and its related applications and websites.

Send any additional requests for information to:

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Wheeling information

What is wheeling?

Wheeling refers to the financial transactions representing the transportation of third party electrical energy (kWh) over the municipal/Eskom distribution network. It allows a third party supplier to sell this electrical energy to a customer at their point of supply. The sale is governed by a bilateral power purchase agreement (PPA) which exists within a market environment, as opposed to a regulated environment, as the price of the energy is set between the parties and not by the City/Eskom or the National Energy Regulator of South Africa (NERSA).

Wheeling pilot research project

After the successful completion of phase one of the wheeling pilot study and the introduction of bi-lateral wheeling in 2025, the City is continuing with phase two to test "Pool" wheeling i.e. one-to-many, many-to-one & many-to-many. This will continue for another year, and details on the outcomes of the pilot will be shared once they become available.

Wheeling tariffs

The wheeling tariffs are designed so that we charge customers the full network cost for their total usage, as well as the energy cost for deficit energy in the case of bilateral wheeling agreements. The relevant wheeling tariffs can be found in the [electricity consumptive tariffs guide](#).

Find out how this will be applied in Annexure A of the [wheeling rules](#) document.

Bi-lateral Wheeling

As of 1 March 2025, the City is introducing one-to-one wheeling across the City's electricity infrastructure at medium and high voltage levels. This involves the wheeling of electricity from one generator to one off-taker, via the City's network, subject to the following criteria:

- Customers must be at a medium or high voltage connection level i.e. 11 kV to 132 kV
- Customers must be on a "Time of Use" electricity tariff structure
- Generators must be at a medium or high voltage connection level i.e. 11 kV to 132 kV
- Generators may be embedded or outside the City's network
- Customers to whom energy is wheeled must enter into suitable supplemental Electricity Wheeling and Use of System contractual arrangement with the City
- The Wheeling Customers must pay the applicable Wheeling use of System Charges as set out in the City's Electricity Tariff Policy, as amended annually

A detailed [Wheeling FAQ document](#) has more information on the City's Bi-lateral Wheeling programme.

Relevant wheeling documents

- [Electricity Wheeling Implementation and Rules Guideline](#)
- [Consumptive tariffs](#) including wheeling
- [Electricity Wheeling Off-taker Use of System Agreement](#)
- [Municipal Grid Connection Agreement](#)
- [Electricity Wheeling Project FAQs](#)

General energy information

Key roleplayers in the energy system in Cape Town

- **City of Cape Town:** Generates electricity, purchases electricity from Eskom, manages the municipal distribution grid, and sells electricity to customers in its licensed area of supply.
- **Eskom:** Generates electricity, manages national transmission grid, manages regional distribution grid, supplies electricity in Cape Town to customers in its licensed area of supply.
- **National Energy Regulator of South Africa (NERSA):** Establishes national energy regulations, sets and approves tariffs, and issues licences.
- **Department of Mineral Resources and Energy:** Establishes national energy policy and legislation, coordinates national energy planning.

Legislation and policy governing municipal energy systems

A list of key laws and policies is provided below. This list is not intended to be exhaustive and there may be other relevant laws and policies to consult. A detailed policy review is available in the [State of Energy and Carbon Report](#).

National Legislation, Regulation and Standards:

- [National Energy Act, No. 34 of 2008](#)
- [Electricity Regulation Act, No. 4 of 2006](#)
- [Electricity Regulation Amendment Act, No. 28 of 2007](#)
- Updated Schedule 2 of the Electricity Regulation Amendment Act
- South African Grid Codes:
 - [South African Distribution Code \(all parts\)](#)
 - [South African Transmission Grid Code \(all parts\)](#)
 - [Grid Connection Code for Renewable Power Plants \(RPPs\) connected to the electricity Transmission System \(TS\) or the Distribution System \(DS\) in South Africa](#)
 - [Grid Connection Code for Battery Energy Storage Facilities \(BESF\) connected to the electricity Transmission System \(TS\) or the Distribution System \(DS\) in South Africa \(once promulgated\)](#)
- [National Environmental Management Act \(NEMA\), No. 107 of 1998](#)
- [NEMA Regulations](#)
- [Occupational Health and Safety Act, No. 85 of 1993](#)

City of Cape Town By-laws:

- [Electricity Supply By-law, 2010](#)
- [Electricity Supply Amendment Bylaw, 2017](#)
- All other [applicable municipal by-laws](#)

Electricity providers in the municipality

We are the distribution service authority for the full municipal area. However, the City and Eskom are both electricity service providers in their respective distribution areas. You can view the [map indicating each of the distribution areas on our Open Data Portal](#).

Map of the municipal distribution grid

Electrical grid spatial data can be requested on a case-by-case basis for a specific erf or collection of neighbouring erfs. Please note that a non-disclosure agreement may be required before we share this information.

Electricity distribution capacity

The information on the [Electricity Distribution Capacity](#) map includes details on our main substations and 11kV intake point supply areas. For each supply area the following attributes (among others) are provided:

- Amount of spare breakers at the 11kV connection point
- Installed network capacity
- Theoretical firm network capacity

The abovementioned map can be read in conjunction with the [Electricity Load Profiles](#).

You can also view a map of our [electricity regions](#): Areas east, north and south.

Tariff structure of the electricity purchased from Eskom (ZAR/kWh)

There are a number of [Eskom tariff categories](#) that apply.

Tariff structure of the electricity sold to local customers (ZAR/kWh)

There are a number of [City tariff categories](#) that apply. The relevant wheeling tariffs can be found in the [electricity consumptive tariffs guide](#).