CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

INDEPENDENT POWER PRODUCER (IPP)

PROCUREMENT PROGRAMME

Making progress possible. Together.

IPP Frequently Asked Questions

This document is expected to be used by Independent Power Producers (IPPs), renewable energy and energy service project developers, as well as financiers who would like to implement projects in Cape Town.

Access all publically available electricity, land use and other data on the 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: *Please note that this document provides information for planning purposes, and will be updated as and when required by the City of Cape Town. While every effort is made to ensure the accuracy of the data shared, the network and its related data, is subject to change at the discretion of the City at any time. Furthermore, no network capacity can be reserved for any particular development or renewable energy, and will only be made available to applicants as and when applications and payment for new or upgraded connections are received. 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 not publicly available to:
electricityipp.enquiries@capetown.gov.za

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IPPs in the City of Cape Town

The City views the IPP sector as a crucial pathway towards energy security for Cape Town and a cleaner, more sustainable future. Procurement from IPPs also forms a key part of the City's plan to mitigate the effects of load-shedding and ultimately end it over time.

The City's IPP programme consists of both embedded and dispatchable energy procurement. An embedded IPP tender (250F/2021/22) was issued in February 2022 for 200MW of renewable energy supply over a 20 year contract, and closed in June 2022. This specifically targets lower-carbon energy projects located within the City's electricity supply area, no smaller than 5MW.

There is an additional tender for 500MW of dispatchable energy, issued in April 2023 and closing December 2023 (tender number 331S/2022/23). Successful bidders will enter into 10 year Power Purchase Agreements (PPAs) with the City to purchase electricity from power generation plants comprising of dispatchable technologies such as gas-to-power and battery storage. The tender does not specify the generation source (i.e. it is technology agnostic) and may be located outside of the City's supply area, however bidders will be required to generate power for a significant portion of the day to support the City's load-shedding mitigation efforts.

If you would like to apply for future power procurement tenders that may be issued, keep an eye on the Procurement Administration Portal.

To respond to a tender, you have to be registered as a vendor with the City. Once registered, you will be added to the Central Supplier Database (CSD), where you will receive updates about new tenders issued.

General city information

- Area (in sq. km): 2445.49 (2021)
- Population (estimated): 4 679 483 (2021)
- Map of the municipality: View a GIS map of the city. You can also download relevant information from this site.
- The Energy Directorate in the City of Cape Town has two departments: Sustainable Energy Markets and Electricity Generation and Distribution.
- Municipal land ownership (over 1 ha): Site-specific requests for land ownership data can be requested on a project-specific basis from the City.
- Find out more on process guidelines to buy or lease City-owned land.

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 licenses.
- **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. Please note that this list is not intended to be exhaustive and there maybe 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
- Municipal Planning By-Law, as well as the Amendment By-law, with land-use zoning requirements:
- All other applicable municipal by-laws

City of Cape Town Standards:

- EEB 705: Technical Standard for the Interconnection of Embedded Generation
- Embedded Generation Schematic Drawings Guideline

Electricity providers in the municipality

The City is 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 the City's 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 this information is shared by the City.

Electricity distribution capacity

The information on Electricity Distribution Capacity map includes details on the City's main substation and 11kV intake point supply areas. For each supply area the following attributes (among others) are provided:

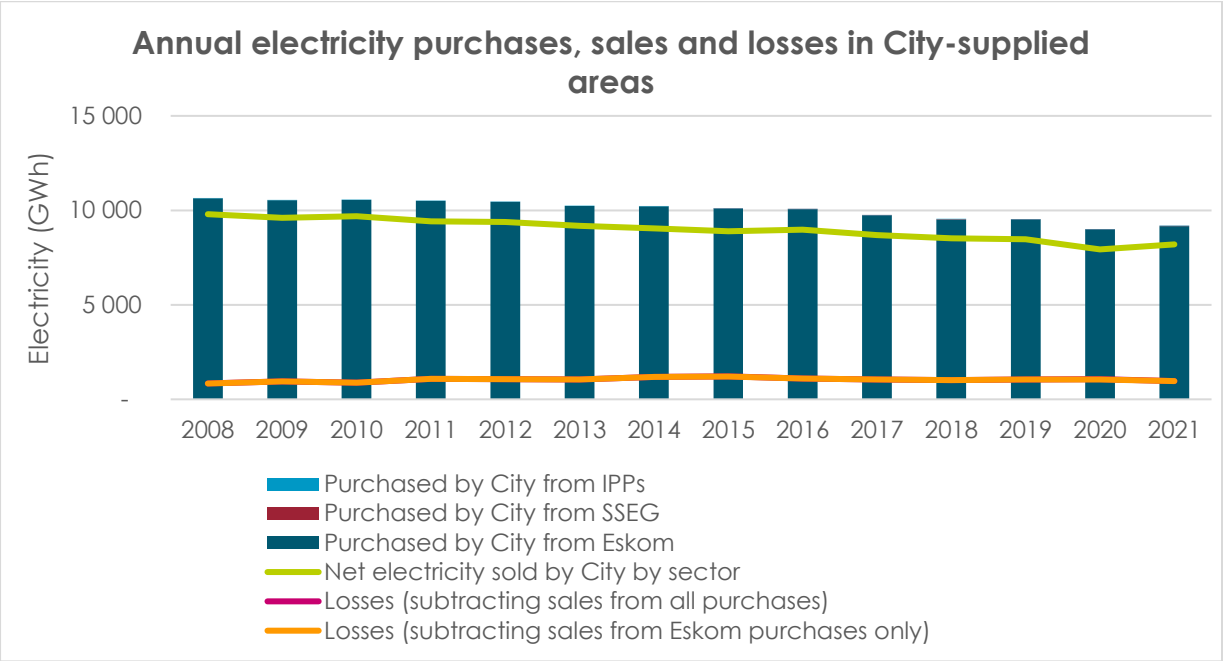
- Amount of spare breakers at the 11kV connection point
- Installed network capacity
- Theoretical firm network capacity

The abovementioned map can be read in conjunction with the Electricity Load Profiles.

You can also view a map of the City's electricity regions, Areas east, north and south.

Annual electricity purchases, sales and losses in City-supplied areas

Electricity (GWh)	Purchase – Eskom	Purchase – SSEG	Purchase – IPPs	Sales	Losses (subtracting sales from all purchases)	Losses (subtracting sales from Eskom purchases only)
2008	10635	-	4.70	9797	842	838
2009	10545	-	4.36	9602	947	943
2010	10561	-	7.07	9685	883	876
2011	10505	-	7.07	9423	1089	1082
2012	10448	-	7.77	9386	1070	1062
2013	10233	-	3.64	9181	1056	1052
2014	10223	0.01	5.13	9043	1185	1180
2015	10096	0.15	8.07	8888	1216	1208
2016	10070	0.78	6.60	8972	1105	1098
2017	9740	1.89	6.64	8694	1054	1046
2018	9528	2.89	4.85	8517	1019	1011
2019	9523	4.09	1.71	8475	1054	1048
2020	8988	7.65	1.66	7934	1063	1054
2021	9169	10.35	1.59	8208	973	961



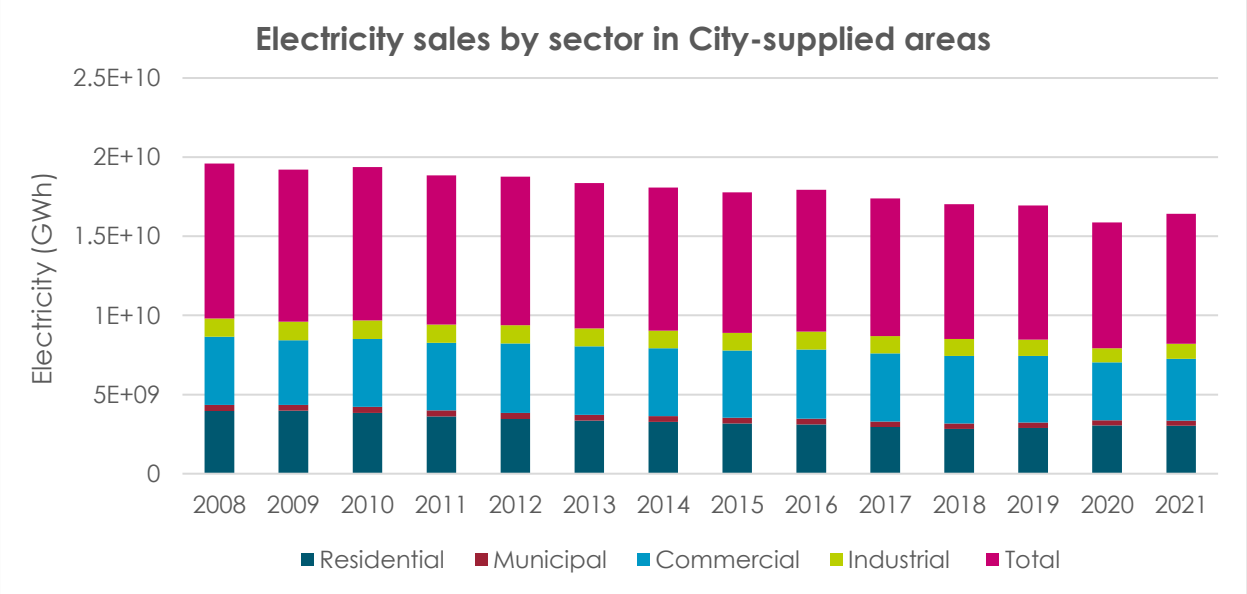
Annual peak electricity demand in City-supplied areas (MW)

Year ending	Fin Year Max Actual [MW]	Forecast [MW]	Growth [%]
Jun-01	1494		
Jun-02	1616		8.2%
Jun-03	1623		0.5%
Jun-04	1736		6.9%
Jun-05	1773		2.1%
Jun-06	1818		2.5%
Jun-07	1839		1.1%
Jun-08	1880		2.0%
Jun-09	1920		0.0%
Jun-10	1871		0.0%
Jun-11	1950		0.0%
Jun-12	1876		-0.7%
Jun-13	1919		-0.7%
Jun-14	1924		-0.7%
Jun-15	1832		-0.7%
Jun-16	1840		-0.7%
Jun-17	1898		-0.7%
Jun-18	1765		-1.5%
Jun-19	1742		-2.0%
Jun-20	1782		-2.0%

Year ending	Fin Year Max Actual [MW]	Forecast [MW]	Growth [%]
Jun-21	1728		-1.5%
Jun-22	1719	1720	-1.0%
Jun-23	1786	1789	4.0%

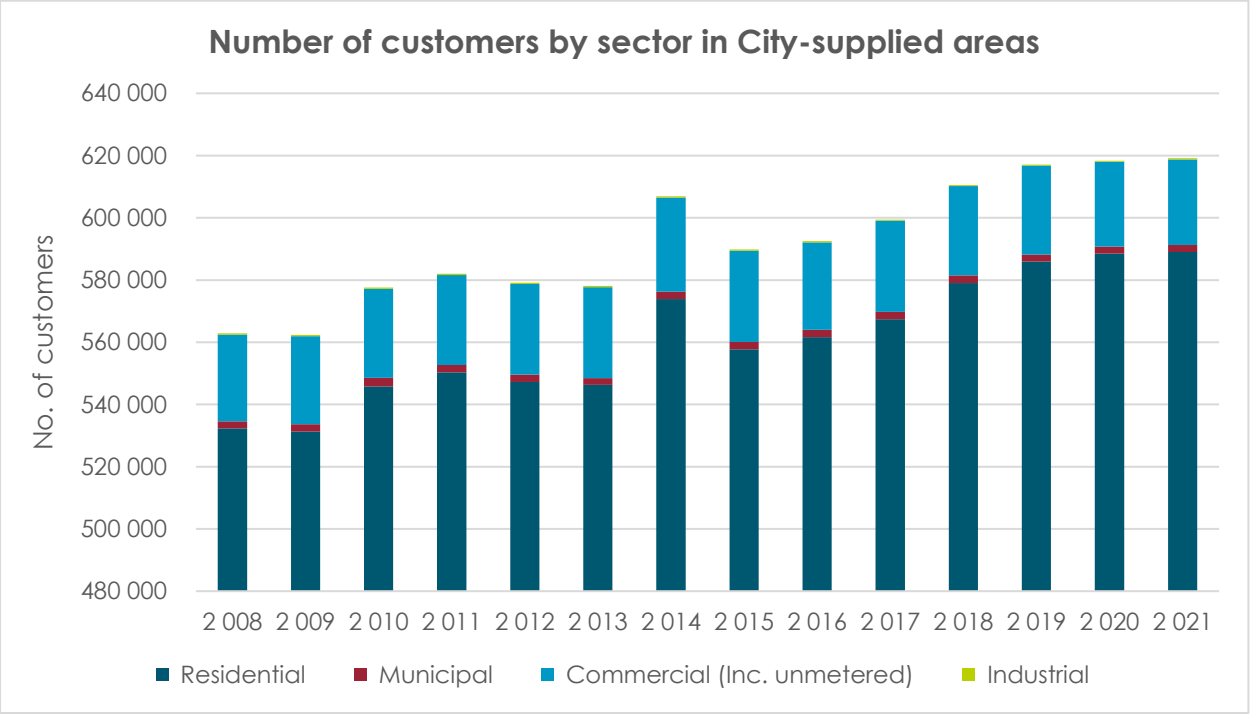
Electricity sales per sector in City-supplied areas

Total electricity sales by sector (GWh)	Residential	Municipal	Commercial	Industrial	Total
2008	3959	383	4309	1146	9797
2009	3982	370	4079	1171	9602
2010	3845	387	4281	1172	9685
2011	3620	378	4280	1145	9423
2012	3461	375	4392	1158	9386
2013	3349	370	4325	1137	9181
2014	3265	374	4286	1118	9043
2015	3173	366	4242	1107	8888
2016	3110	361	4367	1135	8972
2017	2942	355	4303	1094	8694
2018	2828	345	4266	1077	8517
2019	2881	343	4207	1045	8475
2020	3053	323	3666	893	7934
2021	3027	323	3916	943	8208



Number of customers by sector in City-supplied areas

	Residential	Municipal	Commercial	Industrial
2008	532276	2272	27922	405
2009	531338	2320	28311	397
2010	545747	2785	28651	398
2011	550374	2363	28906	416
2012	547211	2387	29143	412
2013	546309	2205	29198	407
2014	573862	2426	30174	399
2015	557698	2373	29356	397
2016	561675	2369	28090	400
2017	567439	2376	29227	389
2018	578987	2493	28691	374
2019	585962	2221	28556	365
2020	588441	2310	27248	350
2021	588980	2305	27483	344



Average monthly demand of household users (residential customers) (kW)

The City implements three residential tariffs, with the average annual values provided in the table below.

Average monthly expenditure and usage per customer for Lifeline and Domestic customers (2021/2022)	Expenditure (Rands per month)	Usage (kWh per month)
Domestic customers (middle to high income)	1046.69	433.29
Lifeline (60kWh FBE) customers (low income)	206.71	256.20
Lifeline (25kWh FBE) customers (low income)	404.35	312.26

Reactive power purchased by municipality (kVAr)

This information can be made available on request and after signing a non-disclosure agreement. Please email electricityipp.enquiries@capetown.gov.za

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

There are a number of Eskom tariff categories which apply.

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

There are a number of City tariff categories which apply.

Existing and planned City-owned power plants

Name of power plant	Size (MW)	Status
Steenbras Hydro Pumped Storage	180 MW	Operational and in use
Athlone Gas Turbine	40 MW	Operational, but not in use
Roggebaai Gas Turbine	40 MW	Operational, but not in use
Atlantis ground-mounted photovoltaic system	7 – 10 MW	Under development and should be commissioned during the course of 2024/25
Paardevlei ground-mounted photovoltaic system	30 – 60 MW	Feasibility assessments underway
Ground-mounted and rooftop solar PV power plants of various sizes	< 1 MW each	Under development and should be commissioned annually.

Financial information

Budget for electricity projects

To view the latest City budget, visit www.capetown.gov.za/Budget

Legislation and policy governing municipal finances

- Municipal Financial Management Act
- Municipal Systems Act
- Policy Framework for Municipal Borrowing
- Preferential Procurement Policy Framework Act

Guidance on environmental considerations for energy projects

Biodiversity network

The biodiversity network maps provide a useful guide to critical biodiversity areas and other areas of ecological value (terrestrial and water bodies) in Cape Town, and a prioritisation of indigenous vegetation remnants:

- Terrestrial biodiversity
- Wetlands
- Open watercourse

National screening tool for environmental impact assessments

The environmental screening tool is a geographically based application. It allows you to submit an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended, to screen the proposed site for any environmental sensitivity.

The tool also provides site-specific EIA process and review information, for example, it may identify whether an industrial development zone, minimum information requirement, environmental management framework or bio-regional plan apply to a specific area.

Additional resources

Renewable energy and energy services market intelligence reports, GreenCape.