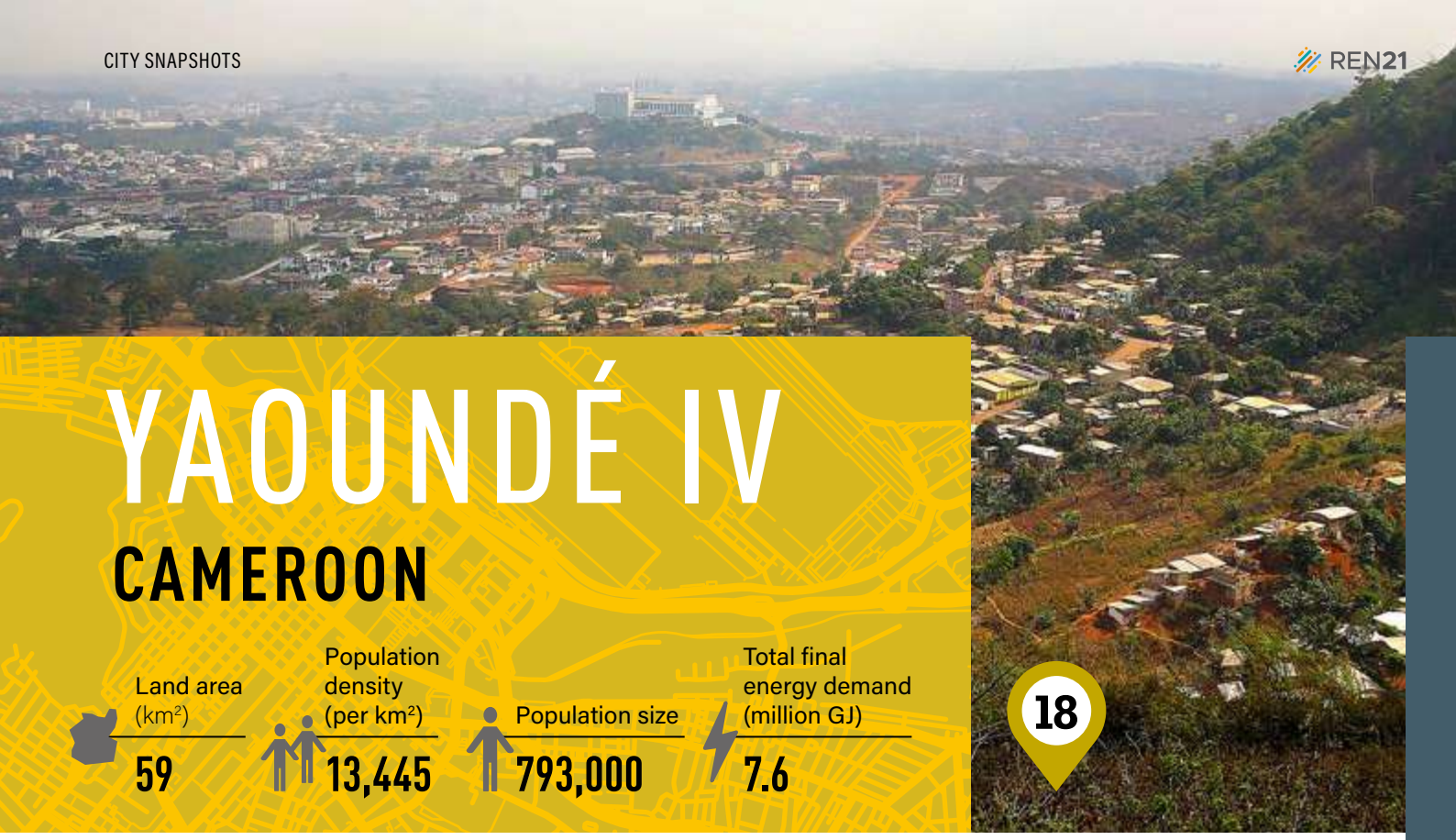

YAOUNDÉ IV

CAMEROON

Land area (km²)	Population density (per km²)	Population size	Total final energy demand (million GJ)
59	13,445	793,000	7.6

Yaoundé IV is one of the seven communes of Yaoundé (Cameroon), with an estimated 793,000 inhabitants in 2018 spread over an area of around 59 square kilometres. Yaoundé IV is primarily a service-oriented city, with a major informal economy that includes unlicensed street vendors (locally referred to as "sauveteurs") and small neighbourhood boutiques. This translates to a low annual economic output (GDP) of around USD 1,632 per capita, comparable to the Sub-Saharan African average of USD 1,585 per capita.

Renewable energy (exclusively from hydropower) makes up 73% of the power generation mix in both Cameroon and Yaoundé IV, with oil and gas constituting the remaining 27%. Based on the national Economic Emergence Plan 2035, the country has ambitions to deploy increasing amounts of renewable energy, particularly hydropower and solar PV, to reduce its greenhouse gas emissions by 32% by 2035.

Although the national government does not allow municipalities to undertake electricity generation and distribution projects, a number of decrees provide local authorities with the ability to receive technical and financial support towards climate action.

Yaoundé IV's residential sector is the second most energy-intensive sector (accounting for 30% of total final energy consumption) after transport (35%). An estimated 86% of households cook and heat their water with LPG, which represents 51% of the total residential final energy use. Household electricity consumption averages 507 kWh per capita per year, above the national average of 280 kWh, and is used mostly for lighting and water heating services.

As a signatory city of the Covenant of Mayors in Sub-Saharan Africa, Yaoundé IV in 2020 adopted its short-term energy and climate action plan (Plan d'Action Communal en faveur d'un Accès à une Energie Durable et du Climat, or PACAEDC), which sets out the municipality's ambitions to reduce greenhouse gas emissions and increase energy access by 2030. As part of the plan, the city aims to increase the renewable energy share through multiple cross-sectoral actions, such as installing 3,000 solar streetlights in the 65 neighbourhoods, installing distributed rooftop solar PV on 30 municipal buildings, distributing 3,600 solar kits to poor households and incentivising increased adoption of electric motorcycles (to 5% by 2030, running mostly on electricity from the hydropower-dominant grid).

The city aims to increase renewable energy, installing 3,000 solar street-lights and distributing **3,600 solar kits** to poor households.

Motivated by studies suggesting that switching to biogas to offset just 20% of household LPG use could reduce residential greenhouse gas emissions by more than 12%, the municipality (through the PACAEDC) rolled out a demonstration project in 2019 to build nine micro biogas plants, each with a capacity of 20 cubic metres. As of 2020, six of the systems were operational, meeting the cooking energy demand of 135 low-income households with biogas. The success of the project has paved the way for similar programmes, notably ENERGIE PLUS, a municipal energy programme which in collaboration with relevant national entities and international donors seeks to build an industrial-scale biogas plant to supply electricity to Yaoundé IV and its environs.

Source: See endnote 101 through 114 in the *Feature: Renewable Energy in Sub-Saharan African Cities* chapter.

RENEWABLE ENERGY POLICY NETWORK FOR THE 21st CENTURY

REN21 is the only **global renewable energy community** of actors from science, governments, NGOs and industry. We provide up-to-date and peer-reviewed facts, figures and analysis of global developments in technology, policies and markets. Our goal: enable decision makers to make the shift to renewable energy happen – now.

The most successful organisms, such as an octopus, have a **decentralised intelligence** and "sensing" function. This increases responsiveness to a changing environment. REN21 incarnates this approach.

Our more than **2,000 community members** guide our co-operative work. They reflect the vast array of backgrounds and perspectives in society. As REN21's eyes and ears, they collect information and share intelligence, by sending input and feedback. REN21 takes all this information to better understand the current thinking around renewables and change norms. We also use this information to connect and grow the energy debate with non-energy players.

Our annual publications, the *Renewables in Cities Global Status Report* and the *Renewables Global Status Report*, are probably the world's most comprehensive crowd-sourced reports on renewables. It is a truly collaborative process of co-authoring, data collection and peer reviewing.

ABOUT REC 2021

REN21's *Renewables in Cities Global Status Report (REC)* series provides an overview of the status, trends and developments of renewable energy in cities, using the most up-to-date information and data available. The REC's neutral, fact-based approach documents in detail the annual developments in policies, markets, investments and citizen action, with a particular focus on renewables in public, residential and commercial buildings as well as public and private urban transport. The REC complements REN21's *Renewables Global Status Report*, which covers renewable energy market, industry and policy trends. Jointly, these reports contribute to making renewable energy visible in the global debate, drawing decision makers' attention to renewables and continuously providing better data and tracking to inform energy decisions worldwide.

REC 2021 is the result of a collaborative effort, building on REN21's unique data and reporting culture, with more than 330 data contributors and peer reviewers and over 30 individual interviews from around the world. The report is endorsed by an Advisory Committee of more than 20 organisations, including major renewable energy players and city networks. In this collaborative process, data are collected on hundreds of cities, ranging from mega-cities to small and medium-sized cities and towns. Collectively, this report aims to inform decision makers and to create an active exchange of views and information around urban renewable energy.

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
of the Federal Republic of Germany

Covenant of Mayors in Sub-Saharan Africa

This programme is co-funded by

European Union

german cooperation
DEUTSCHE ZUSAMMENARBEIT

MINISTERIO DE ASUNTOS EXTERIORES, UNIÓN EUROPEA Y COOPERACIÓN

aecid