

Infrastructure

- Palestinian infrastructure (water, electricity, transportation and telecom, airports, seaport, industrial parks) continues to suffer from Israeli restrictions on access to land, water, and power (generation). In 2021, **expenditure** in the infrastructure sector totaled NIS 534.5 million – a mere 3.3% of the total PA budget, of which 47.5% was for development and 31.2% salaries and wages (Palestinian Ministry of Finance, monthly report for Dec. 2021).



1. Housing & Construction

- Palestinian urban population has almost tripled in the past 25 years and the **land area under artificial surfaces** increased from 1.4% to 4.3% (UNEP, *State of Environment and Outlook Report for the OPT 2020*).
- The Ministry of Public Works & Housing estimates that **13,000 new houses are needed per year** to accommodate the population growth (UNEP, *State of Environment and Outlook Report for the OPT, 2020*).
- As of June 2022, 17.7% of the **employed persons** in the WBGS were working in construction (WB: 12.1%, GS: 5%, Israel/Settlements: 51.5%) (PCBS, *Labor Force Survey, Q2-2022*). Palestinian construction is **constrained by access to raw materials and building supplies**, especially in Gaza.
- In 2021, a total of 11,201 **building licenses** were issued (WB: 11,017, GS: 184), 90.4% of them for residential purposes, and 99.2% for private owners (PCBS, *Housing Unit Conditions, 2021*).
- The average **housing density** was **1.5 persons per room** (WB: 1.4, GS: 1.7) in 2021. In 6.6% of the households **three persons or more** lived per room (WB: 5.2%, GS: 8.9%) (*Ibid.*).
- The average **number of rooms** per housing unit was **3.6**; 13.8% of households live in 1-2 room units, while 17.9% have 5+ rooms (*Ibid.*).
- In 2020, 45.8% of households lived in a **house or villa** (WB: 62.2%, GS: 21.2%) and 53% in an **apartment** (WB: 36.3%, GS: 77.8%). Most tenants (78%) **owned** their homes and 6.8% **rented** it (PCBS, *Housing Unit Conditions, 2021*).
- **Construction** contributed 4.4% to **GDP** in mid-2022 (excl. East Jerusalem) (WB: 4.3%, GS: 5.2%) (PCBS, *Quarterly National Accounts, Q2-2022*).

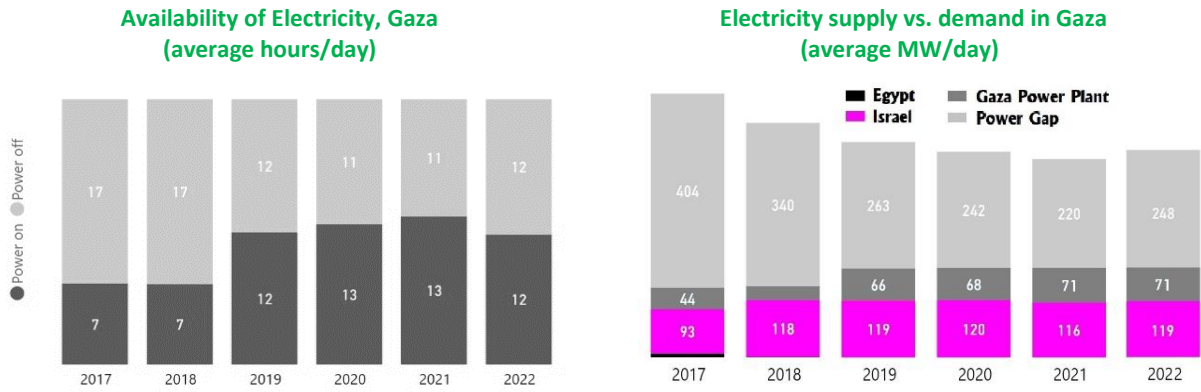
2. Electricity & Energy

■ Overview:

The Oslo Accords severely limit Palestinian energy production, leaving the sector highly **dependent on imports**. **Solar energy** is the only significant **renewable resource** in Palestine with great potential, but hindered by Israeli restrictions in Area C.

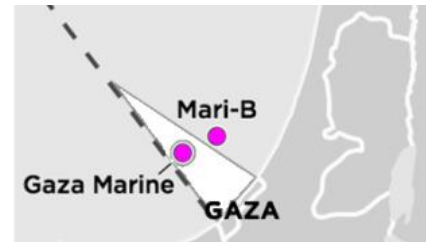
The **West Bank's electricity system** works through numerous isolated distribution systems to which power is supplied by the Jerusalem District Electricity Company (JDECO), Hebron Electric Power Co. (HEPCO), Southern Electric Co. (SELCO), and Northern Electricity Distribution Co. (NEDCO).

In the **West Bank**, **electricity demand** has grown to 1,200 MW (up from 930 MW in 2020); 95% of the current supply is imported from Israel. Jordanian imports increased from 40 to 80 MW in July 2022. Demand in **Gaza** ranges between 435-500 MW, while **supply** is only around 190 MW, 63% of which comes from Israel, the remainder from the Gaza Power Plant (Office of the Quartet, *Report to the AHLC*, September 2022). In **Gaza**, a huge **electricity gap** remains in place:



Source: OCHA, Data – Electricity in the Gaza Strip, September 2022.

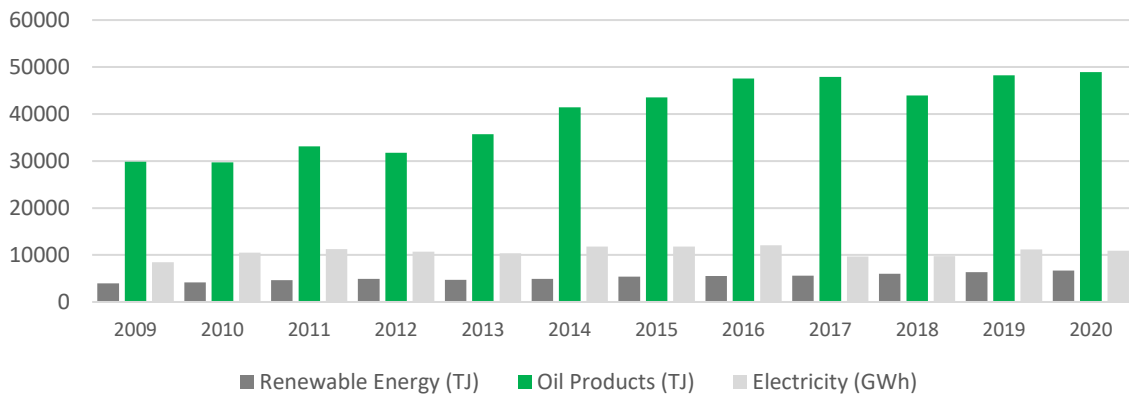
The Gas for Gaza (G4G) project involves the construction of a natural gas pipeline from the offshore **Marine gas field** to Gaza, which will not only solve the ongoing energy crisis and dependency but also reduce Palestinian carbon emissions by 6% (Office of the Quartet, *Report to the AHLC*, September 2022).



Facts & Figures:

- **Electricity, gas, steam, and air conditioning supply** contributed **1.0%** to the **GDP** in mid-2022 (excl. East Jerusalem) (WB: 0.6%, GS: 3%) (PCBS, *Quarterly National Accounts*, Q2-2022).

Total Energy Supply by Year and Type, 2009-2020 (Terajoule, Gigawatt hours)

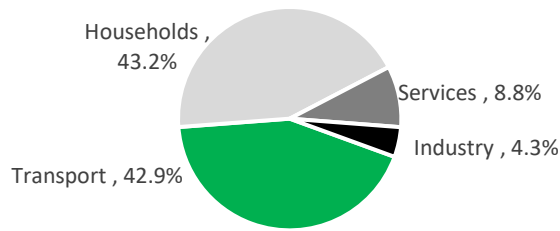


Source: PCBS, *Energy Statistics*, 2020.

- **99.9%** of Palestinians have **access to electricity** in 2020. Some **88.6%** of their **electricity** was imported from Israel, **3.4%** from other sources, and **8%** was purchased from the Palestine Electric Company (PCBS, *Energy Statistics*, 2020).
- The share of **renewable energy** in the total energy consumption was **10.9%** in 2020 (*Ibid.*).
- The **annual per capita electricity consumption** was **1,269.5 KW/h** in 2020 (*Ibid.*).



Energy Consumption by Sector



Source: PCBS, *Energy Statistics*, 2020.

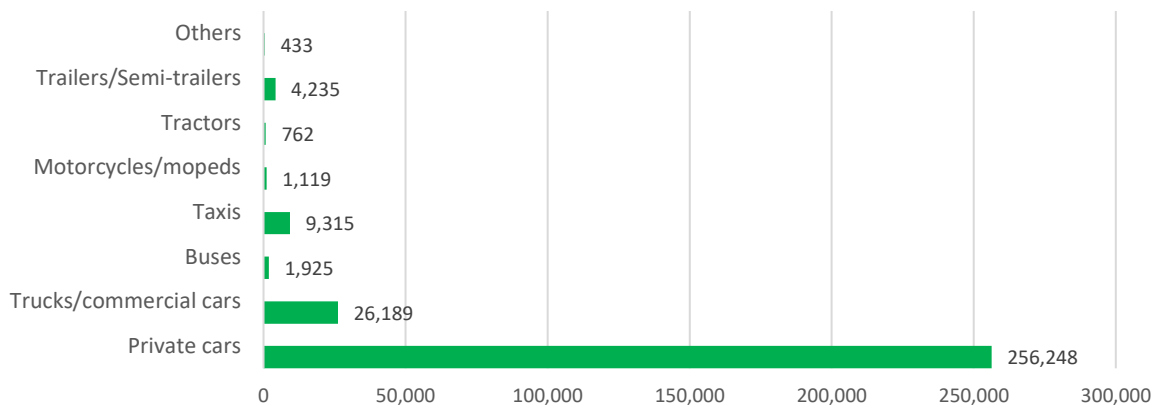
3. Transportation & Roads

- As of June 2022, 5.5% of all **employed** Palestinians (WB: 4.9%, GS: 8.2%, Israel/settlements: 3.6%) worked in the field of transportation, storage, and communications (PCBS, *Labor Force Survey*, Q2-2022).
- By mid-2022, the transport & storage sector contributed **1.5%** to the **GDP** (excl. East Jerusalem) (WB: 1.6%, GS: 1.4%) (PCBS, *Quarterly National Accounts*, Q2-2022).
- In 2021, there were 388 **driving schools** in the West Bank with 1,445 trainers and 2,044 vehicles, and 69,213,236 **driving licenses** were issued (PCBS, *Transportation & Communication Statistics 2021*, July 2022).
- In 2020, there were 1,039 licensed **repair workshops** in the West Bank, as well as 968 **vehicle trading shops** and 1,751 **spare parts stores** (*Ibid.*).

■ Vehicles

- In 2020, there were 300,226 **licensed road vehicles** in the West Bank (the latest figures for Gaza - 72,886 - are from 2012), marking an 8% increase over 2020. Most - 85.4% - are **private** cars:

Types of Licensed Road Vehicles in the West Bank, 2021 (excluding East Jerusalem)



Source: PCBS, *Transportation & Communication Statistics 2021*, July 2022 & 2012.

- Of the licensed road vehicles in the West Bank, 53.4% drove on **Diesel**. Most were in the Ramallah/ Al-Bireh governorate (37.8%), followed by Hebron (16.8%) and Nablus (13.8%). **New models** (built in 2021) accounted for 1.64% of all vehicles, older ones (from before 2012) for 40.86% (*Ibid.*).
- In 2021, registered **road accidents** in the West Bank increased by 28.5% over 2020 to 14,105, with 11,176 **casualties**, including 133 fatalities (*Ibid.*).

■ Roads (excl. Israeli bypass roads)

Network Length of Paved Roads (km)	West Bank (2021)	Gaza (2014)
Main roads	681	76
Regional roads	1,157	122
Local roads	1,628	99
Unpaved Roads	461	
Total	3,927	297.0

Source: PCBS, *Transportation and Communication Statistics 2021*, July 2022.



4. Communication

The main network operator is the **PalTel** group (Palestinian Telecommunications Co.), a public shareholding company in which the PA has a 10% stake and which includes fixed-line operations, **Jawwal** (first Palestinian cellular phone service launched in 1999), and the data operator/internet service provider **Hadara**. It also controls other companies, such as the IT company **Hulul**. Since 2009, **Ooredoo Palestine** (formerly **Wataniya Telecom**) competes with the PalTel group.

The ICT sector is one of the fastest growing sectors in the Palestinian economy, but remains at a **significant competitive disadvantage** due to Israel's restrictive measures regarding frequencies, import of equipment, and infrastructure, poor access to 60% of the West Bank (=Area C), and unauthorized competition through Israeli operators who offer services to settlers. Currently, only **2G** is available in **Gaza** and **3G** in the West Bank, while Israel, has **5G** since 2020. Rolling out 4G in the WBGS by the end of 2023 was announced as a key US supported initiative during US President Joe Biden's July 2022 visit. However, in August 2022, Israel informed the Palestinians that only some spectrum can be allocated for 4G deployment, while the remaining spectrum will not be allocated before end of 2025 and that it will not include Gaza (Office of the Quartet, *Report to the AHLC*, September 2022).



Palestine has 37 **incubators** and 2 **accelerators**, which is a lot for the size and maturity of the ecosystem and is likely driven by high levels of donor funding (Portland Trust, *The Palestinian Tech Ecosystem*, March 2022).

■ Facts & Figures:

- The Information and Communication sector contributed **3.0%** to the **GDP** in mid-2022 (excl. East Jerusalem) (WB: 3.5%, GS: 0.6%) (PCBS, *Quarterly National Accounts*, Q2-2022).
- As of June 2022, 5.5% of all **employed** Palestinians (WB: 4.9%, GS: 8.2%, Israel/settlements: 3.6%) worked in the field of transportation, storage, and communications (PCBS, *Labor Force Survey*, Q2-2022).
- In 2021, there were 11,202 **post boxes**, 87.3% of them in the West Bank, and 197 **Mail Service Centers** (PCBS, *Transportation and Communication Statistics, 2021*, July 2022).

- At the end of 2021, there were 485,830 **fixed phone** lines, 75.1% of them in the West Bank and 85% of them in private households. There were also 4,362,778 **cellular phone** subscriptions and 405,013 **ADSL subscriptions** (PCBS, *Transportation and Communication Statistics, 2021*, July 2022).
- Some 91% of households had private **access to internet** and 71% of the population aged 10 years and above owned a **smartphone** (WB: 82%; GS: 56%) (PCBS & Ministry of Telecom & IT, *Press Release on World Telecommunication and Information Society Day*, 17 May 2022).
- The **average internet speed** was 13.5 Mbps at the end of 2021 (*ibid.*) In comparison: Israel: 34.97 Mbps, global average: 29.79 Mbps (<https://www.cable.co.uk/broadband/speed/worldwide-speed-league/>).

Recommended Research Sources:

<http://www.pcbs.gov.ps> <https://www.mot.ps/site/> (Transport Ministry)
<http://www.mpwh.ps/> (Public Works & Housing Min.) <http://www.quartetoffice.org/>
<http://www.mtit.gov.ps> (Ministry of Communications & IT) <http://www.perc.ps> (Electricity)
<http://www.penra.gov.ps> (Energy & Natural Resources Authority) <http://www.sunergy.ps/en> (renewable energy)

Badil, *The EU-Egypt-Israel Gas Memorandum: Pillage and Denial of Palestinian Self-Determination*, Position Paper, September 2022.

Ersoy, S. R., J. Terrapon-Pfaff, I. Brik, *Sustainable Transformation of Palestine's Energy System*, FES, June 2022.

Fratto, Chiara & Elisa Giannone, *Market Access and Development of the ICT Sector in the West Bank*, Policy Research Working Paper, World Bank Group, October 2020.

Portland Trust, *The Palestinian Tech Ecosystem*, March 2022.

Startup Genome, *Assessment of the Palestine Startup Ecosystem*, 2021.

Startup Genome & IPSD, *State of the Palestinian Startup Ecosystem*, 2021.

Taweel, R., Y. Khalidi & H. Hin, *The Gradual Sustainable Energy Transition in Palestine: An Enabling Environment to Attract Local and International Investment*, Ramallah: MAS, 2022.

World Bank, *Palestinian Digital Economy Assessment*, 2021.