



Infrastructure

The highly inefficient situation of the Palestinian infrastructure is compounded by the fact that the major share of the assets are not owned by Palestinians and the PA cannot access land in Area C that is crucial for infrastructure projects and power generation.



Housing & Construction

- As of June 2016, 15.2% of the **employed persons** in the WBGS were working in construction (WB: 10.7%, GS: 4.7%, Israel/settlements: 63.5%) (PCBS, *Labor Force Survey*, Q2-2016).
- In 2015, the average **number of rooms** per housing unit is **3.4**. Some 19.7% of households live in units with 1-2 rooms (PCBS, *Housing Conditions Survey 2015*, August 2015).
- In 2015, the average **housing density** was **1.7** persons per room (WB: 1.6, GS: 1.9). About 13.2% of the households had three persons or more per room (WB: 10.1%, GS: 19.3%) (*Ibid*).
- In 2015, 80.9% of tenants **owned** their houses (WB: 81.9%, GS: 79%), 7.8% **rented** it (WB: 8.9%, GS: 5.7%), and the 11.2% lived **without payment** (WB: 9.1%, GS: 15.2%). Some 1.1% of WBGS households live in a **villa**, 44.6% in a **house**, 53.7% in an **apartment**, and 0.6% **other units** (e.g., tents, rooms, etc.) (PCBS, *Housing Conditions Survey 2015*, August 2015).
- The **average monthly rent** for a housing unit (excl. Jerusalem) was 161 Jordanian Dinars in 2015 (WB: 179.9 JD, GS: 104.6 JD) (*Ibid.*).

Number and Area (in 1,000 m²) of Licensed Housing Units, 1997-2016

Housing Units (HU)	1997	2003	2006	2009	2013	2 nd Q. 2016
No. of New Licensed HU	13,230	8,152	6,909	5,874	13,566	3,712
Area of New Licensed HU	1,768	1,234	1,194	1,121	2,318	688.5
No. of Existing Licensed HU	2,759	1,671	3,301	1,501	3,394	990
Area of Existing Licensed HU	391.8	175.8	524.2	322.9	575.0	142.3

Source: PCBS, *Building Licenses Statistics 2nd Quarter 2016*; Refugee camps and Jerusalem are excluded.

- Construction contributed 7.6% to the 2nd Quarter 2016 **GDP** (excl. East Jerusalem) (WB: 7.1%, GS: 9%) (PCBS, *Quarterly National Accounts*, Q2-2016).
- The vast majority of issued **building licenses** is provided to **private owners** and for **residential** purposes (PCBS, *Building Licenses Statistics*).
- The World Bank estimates that at the current rate at which **construction material** is imported into **Gaza**, it will take about two years to rebuild and repair all housing units. Currently, only 9% of totally and 45% of partially damaged houses have been rebuilt, and 14,800 families continue to be displaced (World Bank, *Economic Monitoring Report to the Ad Hoc Liaison Committee*, April 2016).
- At the end of March 2016, over 75,000 individuals were still **displaced** as a result of the 2014 **Gaza** war, as only 17% (3,000) of the destroyed 11,000 homes and the 6,800 damaged homes had been **reconstructed** or **repaired**, while work on another 21% was ongoing and funding for reconstruction/repair of further 28% was confirmed (OCHA, *Humanitarian Bulletin*, March-April 2016).

- A recent study on Israel's **restrictions** of Palestinian use of **natural resources** (e.g., building stones, sand, phosphate and Dead Sea mineral resources, petroleum and natural gas) estimated the value of Israel's expropriation of **building stone** in Area C at about \$900 million annually (0.7% of GDP in 2015) (Mustafa W., *Palestine's Natural Resources: Potential and Limitations on Exploitation*, MAS, 2016, <http://mas.ps/files/server/20162404092052-1.pdf>).

Electricity & Energy

■ Overview:

The Oslo Accords limit Palestinian production and importation of energy, leaving the sector highly dependent on **energy imports** from its neighbors: 95% of the ~860 MW of power consumed annually is imported from Israel; the remaining 5% from Jordan (Office of the Quartet, *Report for the Meeting of the AHLC*, September 2016).

The West Bank's **electricity system** has no generation capacity or transmission network but consists of 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). Demand for **electricity** in the West Bank is expected to reach approx. 1310 MW by 2020 compared to today's available 860 MW. In 2016, Israel issued an in principle approval for the construction of the first conventional power station in the West Bank (Jenin Power Plant), connected to the Israeli natural gas network and with planned generation capacity of 450 MW (Office of the Quartet, *Report for the Meeting of the AHLC*, September 2016).

Solar power is particularly attractive due to the given high solar irradiation (approx. 3,000 sunshine hours annually), but the total installed solar PV capacity in the West Bank is less than 10 MW (compared to Israel's over 700 MW -with a target of 2.7 GW by 2020) (*Ibid.*).

The **Gaza Strip** is supplied with **electricity** from three main sources: the Israel Electricity Corp. (about 60% of the total supply), Egypt and the Gaza Power Plant. As a result of damage to Gaza's sole **power plant** during the Israeli military operation in 2014, as well as restrictions on the importation of critical inputs and spare parts, the power plant has been operating at less than half its capacity of 200 MW, while current demand is 450 MW (Office of the Quartet, *Report for the Meeting of the AHLC*, 2016). As a result, less than 45% of Gaza's electricity needs are being met, with rolling blackouts of 12-16 hours per day. Insufficient electricity means that 70% of Gaza's population only has piped water for 6-8 hours per day, every 2-4 days (UNSCO, *Report to the AHLC*, April 2016).

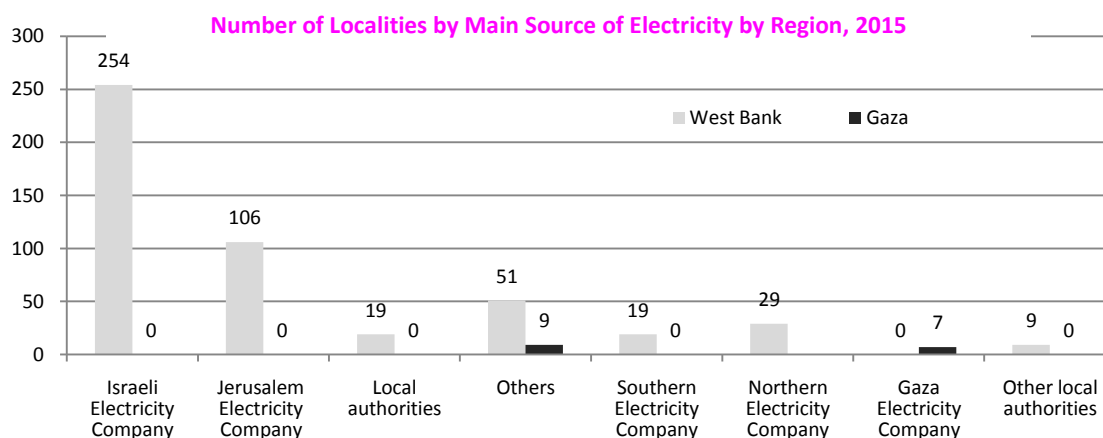
Fuel is supplied to the terminals in Nilin (for LPG) and Deir Kadiz (other fuel types) from where it is distributed through the Palestinian Petroleum Commission (PPC). Since there is no **storage capacity** for petroleum products in the WBGS, fuel is transferred on a day-to-day basis.

The G4G (**Gas for Gaza**) Task Force was set up in August 2015, and a month later, principally approved by Israel. To date, a technical feasibility study has identified possible pipeline routes in Israel and Gaza; commercial and legal feasibility studies were launched in July 2016. It is hoped that gas could be flowing into Gaza in 2019-20 (Office of the Quartet, *Report for the Meeting of the AHLC*, Sept. 2016).

On 13 September 2016, the Israeli and Palestinian governments signed an **agreement** to resolve outstanding electricity debts and **transfer authority** for the administration of the energy market in the WBGS to the PA (UNSCO, *Report to the AHLC*, September 2016).

■ Facts:

- Literally all Palestinian **households** - 99.9% - are connected to the **public electricity network** (PCBS, *Palestinian Population Status in Palestine 2015*, July 2015), with 58.3% of the households using a normal **meter** (WB: 38.2%, GS: 96.9%), the remainder a prepaid meter (PCBS, *Household Energy Survey*, 2015). Only 20 out of the total number of 557 Palestinian localities had no electricity network available (PCBS, *Local Community Survey 2015 – Main Findings*, Nov. 2015).
- In 2015, the majority of Palestinian localities **received** electricity from the Israeli Electricity Co. (254 of all localities), followed by the Jerusalem District Electricity Company (106) (*Ibid.*).



Source: PCBS, *Local Community Survey 2015 – Main Findings*, Nov. 2015.

- Average Palestinian household **consumption of electricity** was 306 kWh in January 2015 (PCBS, *Household Energy Survey*, 2015).
- The **main fuel** used for **cooking** (92% of all households) is LPG, for **baking** electricity (48.7%) (*Ibid.*).

Type of Energy Used

	Electricity	Wood	Solar Energy	LPG	Kerosene	Gasoline	Diesel
Average household consumption	306 KW/h	-	n.a.	22 kg	21 liter	95 liter	149 l
Usage by households (%)	99.9	33.9	56.5	97.3	2.6	17.1	8.3

Source: PCBS, *Household Energy Survey*, January 2015.

- Some 56.7% of Palestinian households had **solar heating available**, which was used by 30.7% of the households, while 60% of households relied on electricity for **water heating**. For general **heating**, 64.3% of households used a heater, 10.7% a fire place and 2% central heating (PCBS, *Household Energy Survey*, July 2015).
- Electricity, gas, steam and air conditioning supply contributed **1.4%** to the 2nd Quarter 2016 **GDP** (excl. East Jerusalem) (WB: 0.9%, GS: 3.1%) (PCBS, *Quarterly National Accounts*, Q2-2016).

Transportation & Roads

- As of June 2016, 6.2% of all **employed** Palestinians (WB: 6%, GS: 6.6%) were working in the field of transportation, storage and communications (PCBS, *Labor Force Survey*, Q2-2016).
- As of June 2016, the transport & storage sector contributed **2.1%** to the **GDP** (excl. East Jerusalem) (WB: 2.3%, GS: 1.4%) (PCBS, *Quarterly National Accounts*, Q2-2016).
- In 2015, 11,245 persons were **employed** in the field of transportation (WB: 8,432, GS: 2,813) marking a decrease over 2014 (=11,381) and 2013 (=12,157 persons). There was a total of 10,848 operating **vehicles** - 364 of them in **freight** transport and 10,484 in **passenger** transport (of which 88.6% in public and 8% in private vehicles) (PCBS, *Transport Survey - Outside Establishments 2015*).
- In 2015, there were 1,767 licensed **repair workshops** in the West Bank as well as 818 **vehicle trading shops** and 733 **spare parts stores** (PCBS, *Transportation & Communication Statistics 2015*, July 2016).
- In 2015, there were 342 **driving schools** in the WBGS (WB: 284, GS: 58), with 1,408 trainers (WB: 1,175, GS: 233) and 1,451 vehicles (WB: 1,269, GS: 182). In the West Bank, 31,730 **driving licenses** were issued (*Ibid.*).
- In 2015, 8,985 **road accidents** were registered in the West Bank (up from 8,177 in 2014), which left 110 people dead (up from 63 in 2014) and 6,015 injured (down from 8,563) (*Ibid.*).



■ **Vehicles** (licensed; excl. Jerusalem)

- In 2015, there were 175,118 **licensed road vehicles** in the West Bank (with no new figures available for Gaza), half of them driving on Diesel. Of the total 2.5 were new models (from 2015), while 39% were from before 2006 (PCBS, *Transportation and Communication Statistics 2015*, July 2016).
- In 2015, 19,563 road vehicles were **newly registered** in the West Bank, 37.7% of them in the Ramallah/Al-Bireh Governorate. Of the total, most - 15,453 - were **private cars** (*Ibid.*).

Licensed Road Vehicles		
Vehicle Type	West Bank (2015)	Gaza (2012)
Private cars	133,838	38,981
Trucks/commercial cars	27,190	11,091
Buses (public/private)	1,741 (781/960)	650 (289/361)
Taxis	8,995	2,160
Motorcycles/mopeds	904	16,735
Tractors	601	720
Trailers/Semi-trailers	1,490	605
Others/n.a.	359	1,944
Total	175,118	72,886

Source: PCBS, *Transportation and Communication Statistics 2015*, July 2016, and 2012.

■ **Roads** (excl. bypass roads)

Network Length of Paved Roads (km)	West Bank (2015)	Gaza (2014)
Main roads	656.7	76
Regional roads	1,120.9	122
Local roads	1,492.3	99
Total Length of paved roads (km)	3,674.6	297.0

Source: PCBS, *Transportation and Communication Statistics 2015*, July 2016 and 2014.

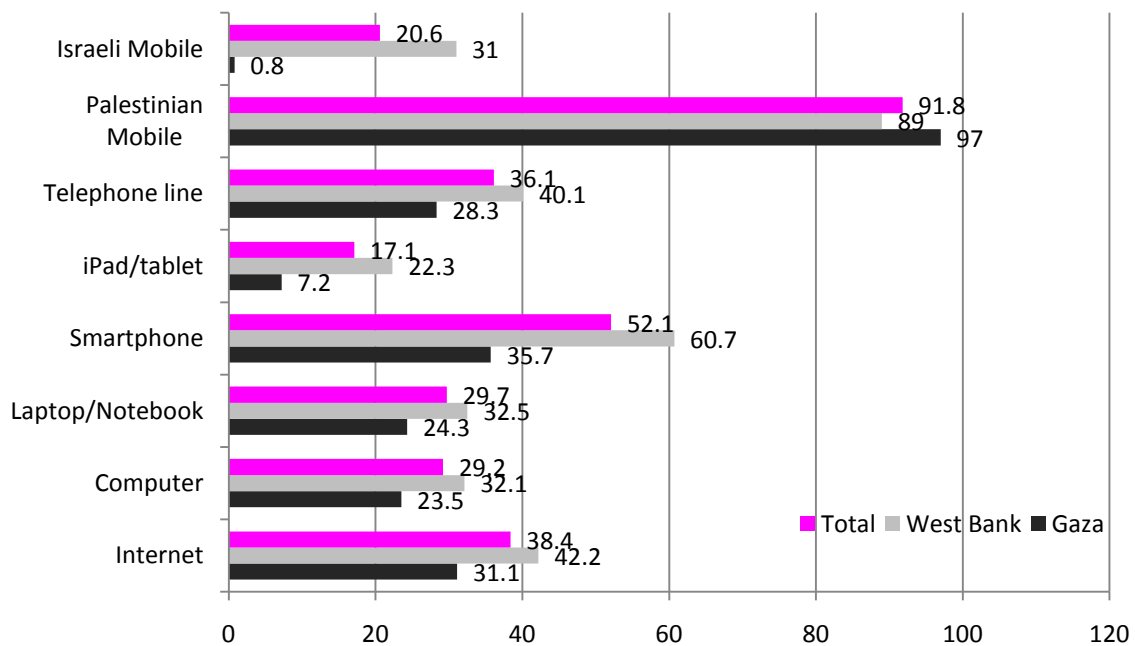
Communication

- Since 21 June 1999, the international dialing code **970** is valid for the WBGS.
- 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 telephone service launched in 1999), and the data operator/internet service provider **Hadara**. It also controls other companies, such as **Hulul**, the biggest local IT company and network integrator. Since Nov. 2009, **Wataniya Telecom** competes with the PalTel group, but has not been able to start its operations in Gaza due to Israeli restrictions.
- Growth in the **telecommunications** sector is mainly hampered by restrictive Israeli measures (e.g., not allocating necessary frequencies, restricting import of equipment and building of infrastructure, poor access to 60% of the West Bank (=Area C), unauthorized competition through Israeli operators, who offer services to settlers) and to a lesser extent by weak governance and regulation. Despite a 2015 agreement with Israel to release **3G** to the West Bank, Palestinian operators remain at a competitive disadvantage and 20% of West Bank customers use Israeli providers who offer high-speed internet capabilities (World Bank, *Telecommunication Sector Note in the Palestinian Territories: Missed Opportunity for Economic Development*, Feb. 2016).
- A recent World Bank report estimates the Palestinian mobile sector **revenue losses** (potential earnings) due to Israeli restrictions at up to over US\$1 billion in the last three years. The loss directly attributable to the absence of 3G is between US\$ 339-742 million and the total 2013-2015 VAT fiscal loss for the PA is between US\$ 70-US\$ 184 million (*Ibid.*).
- According to the Arab Advisors Group, in the first half of 2016 Israeli operators captured 63% of **new Palestinian cellular subscriptions**, giving them little incentive to weaken their position in the West Bank (PA Ministry of Telecommunication and World Bank staff quoted in World Bank, *Economic Monitoring Report to the Ad Hoc Liaison Committee*, September 2016).
- The Information and Communication sector contributed **5.6%** to the 2nd Quarter 2016 **GDP** (excl. East Jerusalem) (WB: 7.2%, GS: 0.5%). (PCBS, *Quarterly National Accounts*, Q2-2016).
- In 2015, 50 **internet companies** were operating and registered in the Ministry of Telecommunications: 40 specialized in WIFI, 6 in connections to the IP telephony (VOIP), and 10 in Broad Band Internet connection, while 40 companies imported communications equipment. (PCBS and Ministry of Telecommunications and IT, *Joint Press Release on the International Day for Information Society*, 14 May 2015).
- Some 53.7% of Palestinians aged 10 years and above use the **Internet**, mainly for communication and correspondence (38.3%) or leisure/entertainment (28.9%), to a lesser extent for educational purposes (18%), information on goods/services (7.5%) and reading books/magazines (6.8%) (*Ibid.*).



- As of Oct. 2016, **Al-Jawwal** had 2,935,000 **subscribers** in the WBSG and **Wataniya** had 754,000.
- In 2015, there were 406,442 fixed **phone lines** in the WBSG (WB: 279,481; GS: 126,961), 3,551,214 **mobile phone** subscriptions, and 274,500 ADSL lines (WB: 195,181; GS: 79,319) (PCBS, *Transportation and Communication Statistics 2015*, July 2016).
- In 2015, 84.8% of Palestinian **youth** (15-29 years) **owned a mobile phone** (WB: 88.1%, GS: 79.5%; males: 91.9%, females: 77.3% (PCBS, *Palestinian Youth Survey, 2015*, February 2016).
- As of June 2016, 6.2% of all **employed** Palestinians (WB: 6%, GS: 6.6%) were working in the field of transportation, storage and communications (PCBS, *Labor Force Survey, Q2-2016*).

Households by Available Equipment, 2015 (%)



Source: PCBS, *Housing Conditions Survey 2015*, July 2015.

Recommended Research Sources:

- <http://www.pcbs.gov.ps> (see Housing, Building, Transport)
- <http://www.mot.gov.ps>
- <http://www.sunegy.ps/en> (renewable energy)
- <http://www.paltel.ps>
- <http://www.penra.gov.ps> (Energy & Natural Resources Authority)
- <http://www.wataniya-palestine.com>
- <http://www.mtit.gov.ps> (Ministry of Telecommunications)
- <http://www.jawwal.ps>
- <http://www.mpwh.pna.ps> (Ministry of Public Works & Housing)
- <http://www.perc.ps> (Electricity)
- <http://www.rcreee.org/content/palestine>
- <http://www.quartetoffice.org/files/server/energy.pdf>