

### **Tracking SDG 7: Energy Progress Report 2019** Arab Region

## Highlights

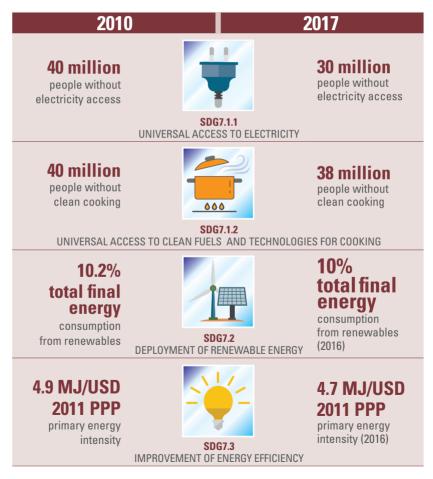






### Affordable and clean energy

Ensuring access to affordable, reliable, sustainable and modern energy for all (Sustainable Development Goal 7 (SDG 7)) is a key condition for reducing inequalities, poverty eradication, advances in health and education, sustainable economic growth, and the principle of "leaving no one behind", in addition to climate action.



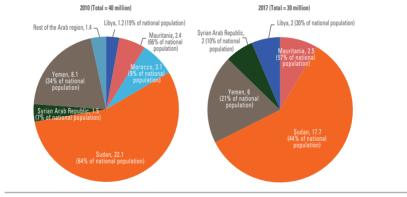
Tracking SDG7 in the Arab region: The 2019 Energy progress report shows that while substantial progress has been made in past decades in the areas of electrification and access to CFTs, large populations are still being left behind in the Arab LDCs. Furthermore, meeting SDG targets will require significantly scaled-up progress in integrating renewable energy into Arab countries' energy mix, and in decoupling regional growth from energy consumption through improved energy efficiency.



### SDG7.1.1 Electrification

Access to electricity is to a large degree a bright spot in the Arab region's sustainable development agenda. The region's electrification rate rose from 88.4% in 2010 to 92.5% in 2017, at an average annual electrification rate of 0.7 percentage points., making it the most electrified regional group of countries in the developing world.

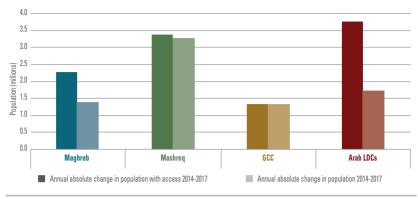
By 2017, electrification access was virtually universal in all but three Arab countries. Encouragingly, the decline of the region's access deficit has been accelerating in recent years. The region's population without access to electricity fell from some 40 million in 2010 to some 30 million in 2017. The escalation of conflict in the Arab region has also had far-reaching effects on energy access in affected countries.



### The Arab region's electrification access deficit in population numbers, 2010 and 2017

Overall, the Arab region is on track with its target of achieving universal access to electricity by 2030.

Throughout the Arab region, additional population with electricity access grew faster than population growth between 2014 and 2017.

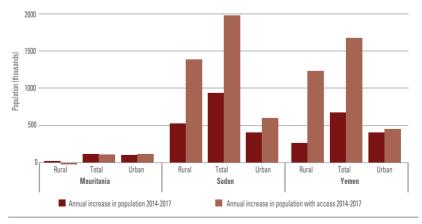


### Annual incremental access and population growth, 2014–2017, by Arab subregion

The Arab region's remaining electricity access deficit is predominantly a rural problem. Some 88 percent of Arab LDCs' urban population, but only around 50 percent of its rural population, had access to electricity in 2017.

# As a result of much higher access rates in urban areas, the pace of urban-access expansion in Arab LDCs has been almost constant, whereas rural access has grown fast in the Sudan and Yemen, albeit from very low rates to begin with.

In Yemen, 98% of urban population have access to electricity versus 69% in rural areas. In Sudan, these numbers are 82% for urban access versus 43% in rural areas; while the Mauritanian population in rural areas suffer from no access at all.

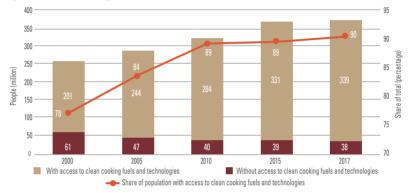


### Annual incremental increases in population and population with access to electricity, 2014-2017



### SDG 7.1.2 Clean Cooking

**Overall, access to CFTs is encouragingly high in the Arab region.** In 2017, 14 out of 19 countries had access rates above 95%. Region-wide access to CFTs virtually stagnated, with very modest growth from 89% in 2010 to 89.4% in 2015 to 90.3% in 2017.

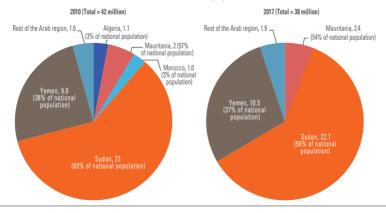


#### Progress in clean cooking access from 2000 to 2017

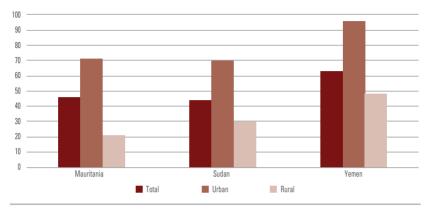
Access to CFTs lags behind progress made in the area of electrification, implying considerably more dedicated efforts to target CFTs are required than has been the case in the past.

Arab LDCs account for virtually the entire region's access deficit. Some 38 million people lacked access in the Arab region in 2017, most of them in Arab LDCs.

### The Arab region's clean cooking access-deficit in population numbers, 2010 and 2017



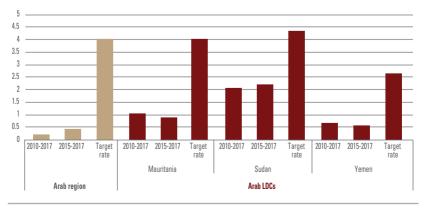
Access to CFTs is far more pronounced in rural areas than in cities. In key deficit countries such as Mauritania, Sudan and Yemen, rural access lags behind urban access by a third.



Share of population with access to CFTs in Arab LDCs (percent), 2017

### Closing the Arab region's CFT access deficit has become larger rather than smaller.

The annualized growth rate will need to speed up more than seven-fold over the period until 2030 to close this gap and achieve SDG 7.1.2. Mauritania's growth rate along with Yemen need to quadruple; while Sudan's growth rate needs to double in order to reach their target rates.



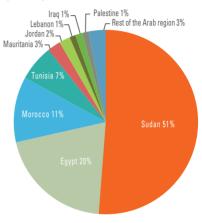
# Average annual increase in access rate to clean cooking (percentage points), Arab region and Arab LDCs

### SDG 7.2 Renewable Energy:

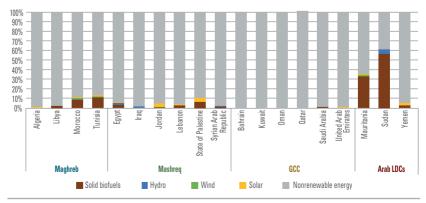
# "By 2030, increase substantially the share of renewable energy in the global energy mix"

The contribution of renewable energy to the region's energy mix remains marginal. As of 2016, renewable energy accounted for around 10 percent of the Arab region's energy mix, the lowest share in any of the world's regions. A handful of countries account for virtually all of the region's renewable energy consumption, leaving substantial scope for further uptake, given the region's plentiful renewable energy resources.

Much of the Arab region's solid biofuel use is traditional, largely for use in cooking, heating and lighting; with low levels of efficiency and high levels of associated indoor air pollution.



## Total Arab renewable energy consumption by country, 2016

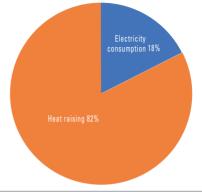


## Share of individual renewable energy sources in total final energy consumption, by Arab region country, 2016

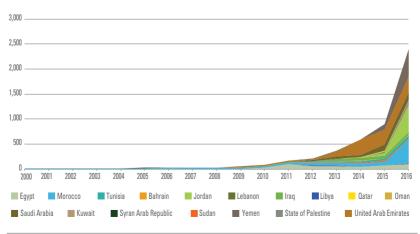
The dominant use of renewable energy remains in heat raising . Other renewable energy technologies for use in heat are growing but remain small in comparison with traditional uses of biomass.

Only 18 percent of the Arab region's renewable energy consumption is accounted for by electricity generation. The three largest regional consumers of renewable energy for electricity generation in 2016—Egypt, Morocco and the Sudan—together account for over 80 percent of the region's total. Hydropower remains an important source of electricity supply in all three countries, although wind and solar become increasingly important alternative resources for electricity generation, in particular in Egypt and Morocco.





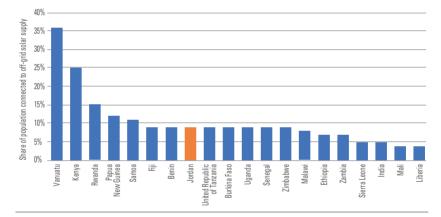
The fastest growth in electricity generation from renewable energy sources by contrast has been seen in solar and wind technologies.



### Electricity generation from solar energy in the Arab region (GWh), 2000–2016

The years 2014–2017 saw significant cost reductions for solar power utility-size projects, driven by Arab countries. GCC members Saudi Arabia and the United Arab Emirates have set consecutive world low-price records for utility scale solar PV and CSP in 2016 and 2017, making solar PV cost-competitive with every other fuel on the market. Wind parks in Egypt, Morocco and Jordan have been producing highly competitively priced electricity for several years now. Effective policy design to remove market barriers and encourage private investment has been key to help drive up the deployment of solar and wind power in the Arab region.

Jordan's case highlights the potential of dedicated government policy in successfully promoting use of decentralized solar-based systems.

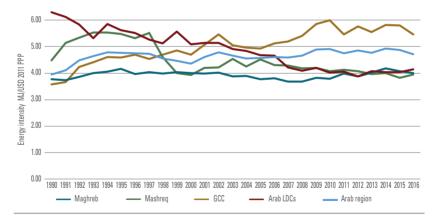


#### Top 20 countries (globally) with the highest share of solar lighting systems (below Tier 1) in 2017

# SDG 7.3 Energy Efficiency

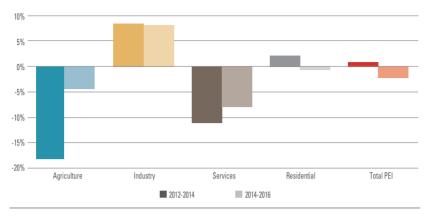
The Arab region is not on track with the global energy efficiency targets. Regional energy intensity rose during the 1990s and has only started to decline slowly since the beginning of the 2010s. in 2016, aggregate regional energy intensity stood at around 4.7 MJ/USDppp2011, a decline of around 3% over the six year period.

**2030 target:** Arab countries lag behind in dedicated investment in energy efficiency. The region has yet to implement energy efficiency at sufficient scale and speed to meet SDG 7.3 target. Most countries in the Arab region still need to transpose energy efficiency ambitions and plans into largely implemented measures and measurable energy efficiency progress.



### Arab subregion energy intensity trends from 1990

**Sectoral trends.** Regional averages of the sectoral energy intensities based on sectoral final energy consumption improved by –8.2 per cent CAGR and –3.9 per cent CAGR between 2010 and 2016 for the agricultural and service sectors respectively. The industrial sector's energy intensity increased slightly (+0.2 per cent CAGR) and the residential sector intensity also increased (+1.7 per cent). These trends have been observed across all Arab countries, except for Egypt, Iraq, Morocco and Jordan, which also had their industrial sector energy intensity improve.



### Change in sectoral energy intensity in the Arab region (per cent), 2012-2016

**Energy intensity trends differ between sub-regions and countries.** Within the Arab region there is a clear distinction between the GCC countries where the aggregate average of the energy intensity peaked at 6.0 MJ/USD2011ppp in 2010 and moved to 5.5 MJ/USD2011ppp over the past six years, and the other three regions which have converged over the past 10 years to 3.9-4.1 MJ/USD2011ppp, below the Arab region average of 4.7 MJ/USD2011ppp.

There are some signs that economic activity is starting to decouple from energy use. Few countries in the region have continued their general trend to increasing energy use as they develop.

GCC countries shift structure and advance energy efficiency. Structural shifts in GCC energy markets have a profound impact on regional energy intensity due to the size and relative weight of their energy markets.

Growth rate (percentage) of energy intensity by sector in the Arab region, 2010-2016

