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# BUILD\_ME Factsheet Lebanon: About the low-energy buildings sector

Updated: January 2021

## Recent developments

- The construction sector is affected by a diversity of crises in Lebanon: economic, financial, and political; in addition to the effects COVID-19 pandemic and the tragic explosion at the Beirut port.
- The solar ordinance is currently being finalised and will soon be adopted by the Government of Lebanon. New buildings and buildings under major renovation are required to install solar water heaters and/or heat pumps.

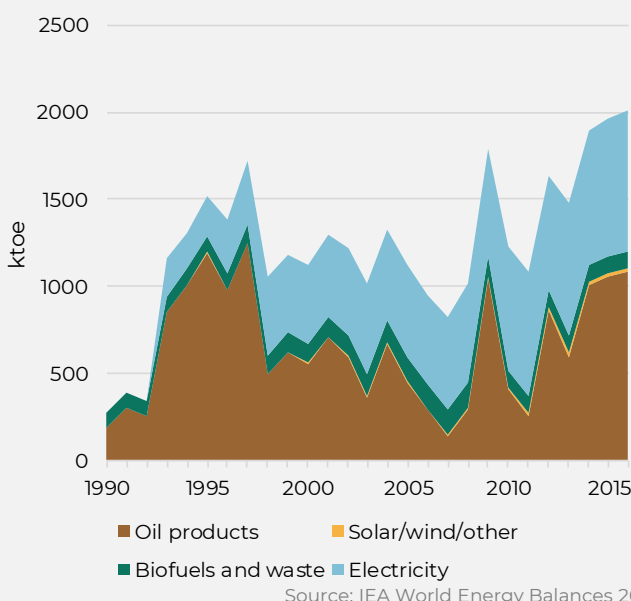
### Macro-economic Indicators

|                      |   |
|----------------------|---|
| <b>6.8 M</b>         | Inhabitants (2020) <sup>1</sup>               |
| <b>7.8 k\$</b>       | GDP per capita (2019) <sup>2</sup>            |
| <b>136.8%</b>        | Average inflation rate* (2020) <sup>3</sup>   |
| <b>0.12 USD /kWh</b> | Average electricity price (2020) <sup>4</sup> |

### Building Sector

|                               |  |
|-------------------------------|--|
| <b>-17%</b>                   | New construction rate** (2020) <sup>5</sup>                                      |
| <b>7.9M LBP/m<sup>2</sup></b> | Average cost of new construction (urban multi-family houses) (2017) <sup>6</sup> |
| <b>1.26 M</b>                 | Number of single/multi-family households (2019) <sup>7</sup>                     |
| <b>13,251 GWh</b>             | Energy consumption of the building sector (2018) <sup>8</sup>                    |
| <b>31%/69%</b>                | Dwelling ownership structure: Rented/owned (2019) <sup>9</sup>                   |

### Final Energy Consumption of the Building Sector



### Typical Energy Efficiency Measures

#### Residential

- 1) Double wall & double glazing
- 2) LED lighting
- 3) Solar water heater
- 4) Variable refrigerant flow (VRF) system
- 5) Energy Efficient Appliances

#### Non-residential

- 1) Variable refrigerant flow (VRF) system
- 2) Variable frequency drives (VFDs) and variable voltage variable frequency drives (VVF)
- 3) Heat Recovery (industrial sector)
- 4) Energy Efficient Equipment

To download this factsheet and find out more about the BUILD\_ME project, visit [www.buildings-mena.com](http://www.buildings-mena.com).

\*Yearly change between 10/2019 - 10/2020, based on consumer price index. \*\*Includes only permits issued by the orders of Engineers and Architects in Beirut from 09/2019 to 09/2020. Sources: 1) United Nations Population Fund 2) The World Bank. 3) Central Administration of Statistics 4) EDL 5) Bankmed 6) Lebanese Examiner 7) ILO 8) The First Energy Indicators Report of the Republic of Lebanon 9) ILO



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# BUILD\_ME Factsheet Lebanon: Project Activities

Last updated: January 2021

**CLIENT:** International Climate Initiative funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)

**DURATION:** 2016 - 2021

## CONTACT

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### BUILD\_ME highlights in Lebanon from the second half of 2020:

- Final report on the status quo of the energy efficiency building codes prepared incl. expert interviews; final review of the building typology for Lebanon
- Signed a Memorandum of Understanding with the Lebanon Green Building Council (LGBC).

## Policy Recommendations

- Currently assessing and reviewing policy recommendations for the NEEAP 2021-2026, also supporting the NREAP 2021-2026.
- Developed set of technical, financial, institutional and regulatory, capacity building and awareness recommendations to accelerate the implementation and enforcement of EEBCs.



## Tools

- Used the NEEREA database to assist in determining the building typology for new construction.
- Developed building typology for Lebanon with energy performance reference values
- The new demonstration projects database includes over 20 projects from Lebanon. To upload your own project, check out the project website [here](#).

## Dissemination & Trainings

- Two online seminars:
- 3 November: *Understanding the Context and Barriers in Egypt, Jordan, and Lebanon*
  - 26 November: *Tools to mobilise financing and accelerate energy efficiency*
- National workshop on 3 November

## Pilot Projects

- Collaboration with four pilot projects is ongoing, three of which are finalising the energy conception phase of technical assistance.
- In light of a struggling economy and reduced access to financing, investments for energy efficiency projects have become a challenge. As a result, two pilot projects have suspended their construction activities.



### Tabarja

- Kye Beachfront Resort

### Beirut

- Collège Notre Dame de Nazareth
- Arcade Suites II
- KLEOS
- Frames
- City Towers

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