

**Implementation Guidelines for Resolution No. 15, 2018:
Energy Retrofits for Government Buildings in Ras Al Khaimah**

After perusal of the Resolution No. 15, 2018 (the “Resolution”) from His Highness Sheikh Saud bin Saqr al Qasimi, Supreme Council member and Ruler of Ras Al Khaimah, we hereby issue the following Implementation Guidelines:

Article 1. Definitions

- 1.1. For the purpose of the Resolution a Government Entity is defined as any local government organization and any local government owned company.
- 1.2. An Energy Audit is a walk-through analysis of the electricity and water consumption of a building. It describes the main electricity and water uses, the energy related features of the building envelope, and identifies the preliminary energy efficiency measures, with estimated potential savings, required investment and resulting payback time.
- 1.3. A Retrofit Plan is a document indicating a proposed timeline for the implementation of a retrofit project in a building or set of buildings, identifying the current electricity and water consumption, the main improvement actions to be taken and the expected electricity and water savings, investment and payback time, based on the energy audit results.
- 1.4. A Retrofit is a project involving significant improvements of electricity and water consuming equipment as well as insulation features of the building envelope, with the main objective of producing long term savings in electricity and water consumption. A retrofit project can be made for a building or a set of buildings.
- 1.5. Energy Management is the organizational process meant to reduce energy consumption of a Government Entity, encompassing measuring, monitoring and managing the energy use of energy consuming assets.
- 1.6. A Progress Report describes the current progress of activities against the Retrofit Plan, and the current status and plans for broader energy management actions.

Article 2. Energy Principal

- 2.1. All Government Entities shall nominate one (1) Energy Principal responsible to coordinate works for achieving the objective of reducing their electricity and water consumption by at least 20% by 2022.
- 2.2. The nomination of the Energy Principal by each Government Entity shall be communicated to the Energy Efficiency and Renewables Administration of RAK Municipality (the “EE&R”) by means of an official letter within one (1) month after issuance of these Implementation Guidelines
- 2.3. The EE&R has the responsibility of supporting Government Entities in achieving their objective through their Energy Principal.
- 2.4. The Energy Principal shall report yearly to EE&R on progress of implementation of the Resolution.
- 2.5. The EE&R shall prepare the reporting template to be used by the Energy Principal.

Article 3. Energy Audits

- 3.1. The Energy Principal shall identify all individual buildings related to the respective Government Entity, including:
 - Office buildings;
 - Customer service or other type of customer dedicated facilities;
 - Buildings specific for the activity, such as laboratories, workshops or others;
 - Staff accommodation or other type of residential premises;
 - Warehouses or other storage facilities;
 - Research facilities;
 - Any other type of buildings.
- 3.2. For each building, the Energy Principal shall collect the following information and report it to the EE&R:
 - Building owner;
 - Building location (GPS coordinates);
 - Number of floors;
 - Total gross floor area for the building (in sqm);
 - Year of construction of the building;
 - Contractual arrangements for the usage of the buildings:
 - Buildings owned and occupied by the Government Entity;
 - Buildings owned by the Government Entity but rented out to another public or private entity or individual;
 - Buildings rented by the Government Entity but owned by another public or private entity or individual.
 - Utility bills (electricity and water) for the last twelve (12) months;
 - Who is responsible for paying the utility bills (the Government Entity directly, other Government Entity on their behalf, or other public or private entity or individual).
- 3.3. The identification of the buildings, with the specified accompanying information shall be communicated to the EE&R within two (2) months from the issuance of these Implementation Guidelines.
- 3.4. The EE&R shall prepare a form template for building data collection and make it available to the Energy Principal to record all required information.
- 3.5. All buildings over 700 sqm of total gross floor area owned by Government Entities, except temporary buildings, shall be subject to an energy audit.
- 3.6. The EE&R shall be responsible to provide the energy audit for each building, in coordination with the Energy Principal, without any cost for the Government Entity.
- 3.7. The energy audit for each building shall be conducted within four (4) months after the issuance of these Implementation Guidelines.
- 3.8. The energy audit report shall be made available to the EE&R and the Energy Principal within five (5) months after the issuance of these Implementation Guidelines.

Article 4. Energy Retrofits

- 4.1. All Government Entities that own buildings shall develop a retrofit plan addressing all audited buildings for which the energy audit report shows electricity or water savings opportunities exceeding 20% of current consumption.
- 4.2. The EE&R will be available to provide all necessary support to the Energy Principal to prepare the retrofit plan, which shall include scope of works, potential savings, required investment and expected payback.
- 4.3. The retrofit plan shall be communicated by all Government Entities that own buildings to the EE&R within 8 (eight) months after issuance of these Implementation Guidelines.
- 4.4. The EE&R shall offer Government Entities support in executing the retrofit project, including support in the tendering process (through accreditation, tender preparation and selection of qualified Energy Services Companies, the "ESCOs"), and advisory support in the program management of execution with the selected ESCO.

Article 5. Energy Management

- 5.1. The Energy Principal shall develop a plan to improve the practices of energy management in the respective Government Entity.
- 5.2. The EE&R shall support the Energy Principal in developing such plan, providing templates, best practices, examples and references.
- 5.3. The energy management plan shall be developed within three (3) months after issuance of these Implementation Guidelines.
- 5.4. As a quick win, the Energy Principal shall ensure that in all office areas, the set point temperatures of air conditioning systems do not exceed 23°C during working hours, and 27°C after working hours.

Article 6. Public Awareness

- 6.1. Implementation of the Resolution demonstrates the commitment of the Government of Ras Al Khaimah to leading by example in the field of Energy Efficiency.
- 6.2. Government Entities shall contribute to generating public awareness of their achievement related to the implementation of the Resolution.
- 6.3. The EE&R shall promote implementation of the Resolution by Government Entities and shall support public awareness of the overall intent and progress in the implementation of the Resolution.

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