Cool Up

Key Facts of the Cooling Sector Status in 2023

Egypt

In Egypt, there is a mix of local and international brands in the air conditioning (AC) and commercial refrigeration market. The residential AC market is dominated by split systems which are mainly produced by national manufacturers. Most of the major international brands have national partners in Egypt that manufacture their products under international brands. A high custom duty on imported products (around 40% of the product value) promotes local manufacturing.

The snapshot focuses on the following three cooling sectors, air conditioning, commercial refrigeration, and refrigerants.

Air Conditioning | Commercial Refrigeration | Refrigerants

Air conditioning

Market drivers

- Economic growth
- Hot weather conditions
- Urbanisation and population growth
- New construction activities
- Increasing electricity prices
- Availability of new technologies

High market potential for cooling equipment sales is floor area in existing buildings that is not air conditioned yet.

7 800 000 **existing** AC systems in 2020

913 000 **sales** of AC systems in 2020

Residential sector

The AC market is strongly dominated by single split systems: 90% are single split systems (share of number of sold units) and are mainly sold to residential sector and small non-residential buildings.

73% of the floor area in residential buildings is not air conditioned

New buildings installing AC systems

Apartment buildings	90%

Non-residential sector

Central systems, including chillers are typically sold to large non-residential buildings, such as large hotels, shopping malls, and hospitals.

28% of the floor area in non-residential buildings is not air conditioned

New buildings installing AC systems

Retail	80%
Hotels, offices, healthcare buildings	90%-100%

Energy efficiency

Energy Efficiency Ratio (EER)

2.9–3.2 Average EER rating of installed AC systems → **Large potential for energy savings**

Commercial refrigeration

Market drivers

- Increasing urbanisation rate
- Increased construction of new supermarkets and corner stores which drives demand for refrigeration technologies such as reach-in refrigerators, freezers, and display cabinets in corner stores and (mini) supermarkets

The most important market segments for commercial refrigeration systems are corner stores, restaurants, and supermarkets.

65% **of plug-in systems** are sold to supermarkets. This is mainly used for display and food refrigeration.

Local manufacturers focus on technologies such as display cabinets, chest freezers and refrigerators, and fan coils. **They depend on imports for the compressors and control units** from major international manufacturers.

Refrigerant leakage

20–40% per year

Annual leakage rates are estimated to be in the range from **20%–40% in condensing units and centralised systems**.

Up to **100%** potential release

End-of-life management of refrigerants can be strengthened, as the absence of it can result in higher rates of release of the refrigerant into the atmosphere during disposal.

Refrigerants

100% of refrigerants **imported**

4600 MT **imported** in 2018

Air conditioning

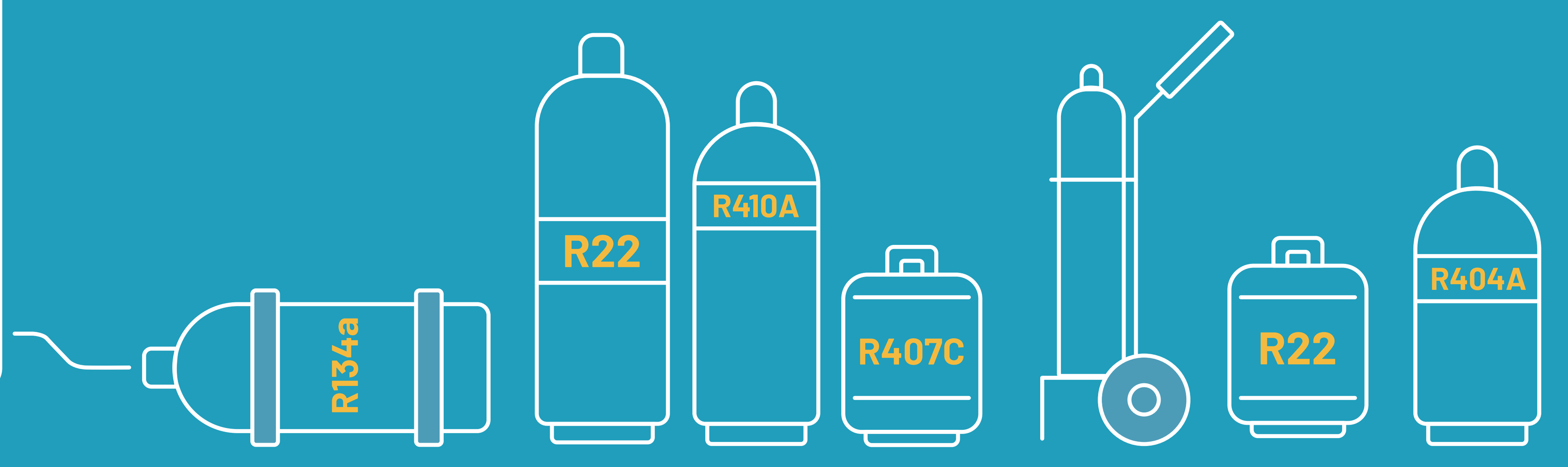
In the **AC sector**, the most used refrigerant in existing cooling appliances is **R22** (HCFC-22). Most new products are offered with HFC refrigerants (i.e. R410A).

Other HFC refrigerants in the market include the HFC blend R407C, R134a, and R32 which is becoming more available.

Commercial refrigeration

In the **commercial refrigeration sector**, the most used refrigerant in existing systems is **R22** (HCFC) for all system types (standalone systems, condensing systems, centralised systems).

In new systems, the typical refrigerants used are R134a and R404A (HFC).



More information

Main report

This snapshot is based on the report:

Cooling Sector Status Report Egypt:
Analysis of the current market structure, trends, and insights on the refrigeration and air conditioning sector
March 2022

To download the full report, click on the following link:
bit.ly/CU-CoolSecStat-E

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