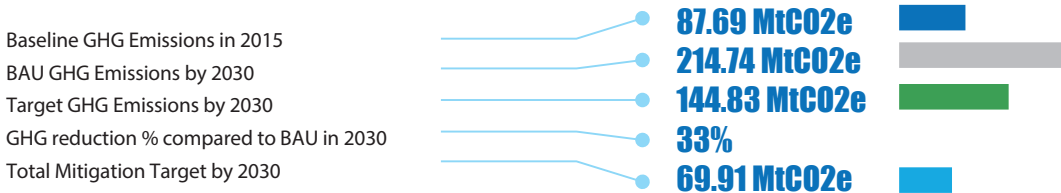






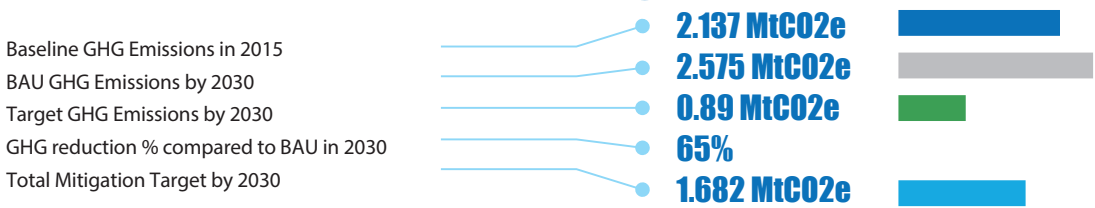
Paris Agreement has set a main goal to limit the increase in global surface temperature to 1.5° Celsius (above pre-industrial levels) by the end of the century, in which it requires each of the joined 192 countries (plus the European Union) to submit every five years an updated national climate action plan - known as Nationally Determined Contribution (NDC). Egypt recently submitted an updated NDC to the one released in 2015 that includes, for the first time, quantitative emission reduction targets by 2030 in three key sectors, namely electricity, oil & gas, and transport. Additionally, the document includes the progress in several key sectors since 2015 as well as the planned government adaptation and mitigation initiatives along with the conditional finance required till 2030.










Electricity Generation, Transmission, and Distribution



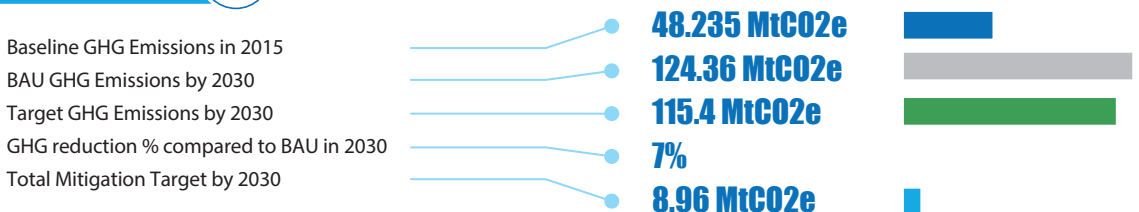
-  Additional renewable energy (RE) capacities to reach the electric power contribution target of **42%** by 2035.
-  Improve and upgrade the transmission and distribution networks including Extra High voltage substations, control centers, and smart grids.
-  Activation of the role of electricity distribution companies.
-  Maintenance, upgrade, and replacement programs for obsolete power plants.

Oil and Gas Associated Gases Subsector



-  **17** implemented projects and additional **36** projects planned up to 2030 to recover and utilize associated gases generated from crude oil fields to produce LPG, natural gas, and condensates.
-  The natural gas pipelines are planned to increase from **86** villages  to **180** villages  by 2030 serving **476,000** residents  under the Decent Life Initiative 'Hayah Karima'.
-  The government aims to reduce **5%** of the petroleum companies' energy consumption.
-  It is planned to produce medium-density wood panels (MDF) in Idku city at a design capacity of **205** thousand cubic meters annually from **250** thousand tons of rice straw.
-  Two planned programs to reduce plastic waste and increase the production of green petrochemicals:
 - Manufacture of **75,000** tons of biodegradable plastic bags annually
 - Converting plastic waste into oil to produce **30,000** tons of polyethylene
-  Production of alternative green fuels:
 - Extraction of **350,000** tons of algae oil annually to produce biofuels
 - Generation of **100,000** tons of bioethanol annually

Transport



Main Mass Transit Projects



National Road Project

Aims to develop new roads of 7,000 km and upgrade 10,000 km of current road infrastructure while utilizing modern asphalt recycling technologies



Expansion of Cairo Metro Network

Stage 3 of line 3 (17.7 km), line 4 (42 km), line 5 (25 km), and line 6 (35 km)



High-Speed Electric Rail

Includes three lines connecting 60 cities at a total length of about 2,000 kms



Cairo Monorail Project

New Administrative Capital monorail at the length of 56.5 km (22 stations) and 6th of October monorail at the length of 42 km (12 stations)



Electric Light Rail Transit (LRT)

At the length of 103 km running through 19 stations



Bus Rapid Transit (BRT) systems

Provide efficient routes to public buses in addition to transforming them to operate on lower carbon intensive fuels such as natural gas



Green Civil Aviation Sector

Introducing 2% biofuels to airplanes, converting passenger buses and other vehicles to operate on cleaner fuels, and installing PV in airports

Industry



- Low carbon roadmap for the Egyptian cement industry including alternative fuels partial substitution, lowering the clinker content in cement by up to **80%**, while decreasing the average specific energy consumption from **3,710** to **3,540** MJ/ton cement.
- Decrease in the average specific thermal energy consumption by **10%** for three energy intensive industries (iron and steel, fertilizers, and ceramic tiles industries).
- Replacing feedstock with **green hydrogen** to produce green ammonia and transition towards low carbon nitrogen fertilizer production.
- Promotion of **eco-industrial parks**.

Buildings and Urban Cities



Installation of rooftop PV panels for electricity generation, **5,300** solar water heaters, and expand the use of LED lighting in residential sector by 2030.



It is planned to develop **16,960** residential units according to green building standards by 2030.



Increasing green spaces and sustainable parks in new cities that are irrigated with treated wastewater to act as carbon sinks.



Expanding on energy efficiency labels and specifications for appliances program and eliminating non-energy efficient equipment.

Tourism



Promoting the use of renewable energy and solar water heating for domestic uses and swimming pools in touristic hotels, resorts, and solar water desalination.



Implementing LED lighting replacements, improved building envelope, employing efficient heating, ventilation, and air conditioning (HVAC) systems, and efficient water pumping.



Waste Management



It is planned to construct **215** water treatment facilities and sewage plants under three phases by 2030.



Upgrade the solid waste management infrastructure to improve collection efficiency from **55%** to **95%** by year 2025 through establishing fixed and mobile transfer stations, Mechanical and Biological Treatment (MBT) plants, and closure of uncontrolled dumpsites to be replaced with sanitary landfills.



Increase waste-to-energy contribution in solid waste management by up to **20%** of collected waste by 2026 through utilizing waste as an alternative fuel in cement sector, waste to biofuels, and generating electric power through incineration, pyrolysis, and other modern technologies.

Financial Support

Description

Conditional Finance Required*

Mitigation Programs	USD 196 bn
Adaptation Programs	USD 50 bn
Total	USD 246 bn

* The financial resources required to implement the updated NDC up to 2030 is estimated at a minimum of USD 246 bn. The financial estimates are derived from the required upfront capital expenditures, capacity building and technology transfer, and the human resources needed for implementation.