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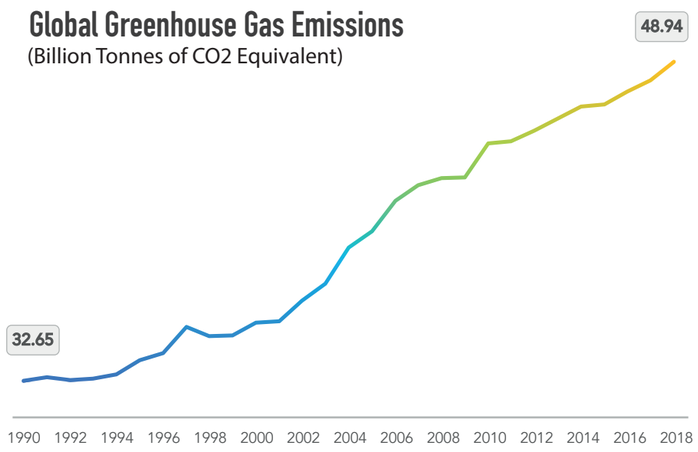
CLIMATECHANGE | THE GLOBAL THREAT.....

Climate change is affecting every country on every continent and is disrupting national economies and affecting lives. And despite the increase in Nationally Determined Contributions and companies' Net Zero Pledges announced in COP26, they are still insuffecient in tackling global warming. COP26 kept the 1.5°C by 2030 target alive but fell short in the pledges and NDCs that can achieve this. On the positive side there were pledges that can contribute significantly to lowering emissions, examples; deforestation and use of methane, however the current global risks (e.g., inflation, and Ukraine-Russia war…etc.) could affect the momentum that was positively created in Glasgow.

Global Greenhouse Gas Emissions

(Billion Tonnes of CO2 Equivalent)

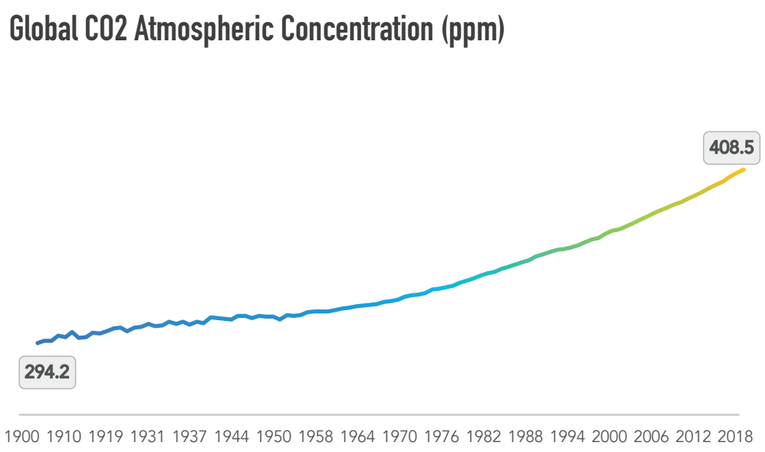


Source: CAIT Climate Data Explorer via Our World In Data

The climate crisis continues largely unabated. Concentrations of greenhouse gases continued to increase even in 2020 (A pandemic-related economic slowdown year), reaching new record highs. The world remains woefully off track in meeting the Paris Agreement target of limiting global warming to 1.5°C above pre-industrial levels and reaching net-zero carbon dioxide (CO2) emissions globally by 2050.

Source: UN. The Sustainable Development Goals Report-2021.

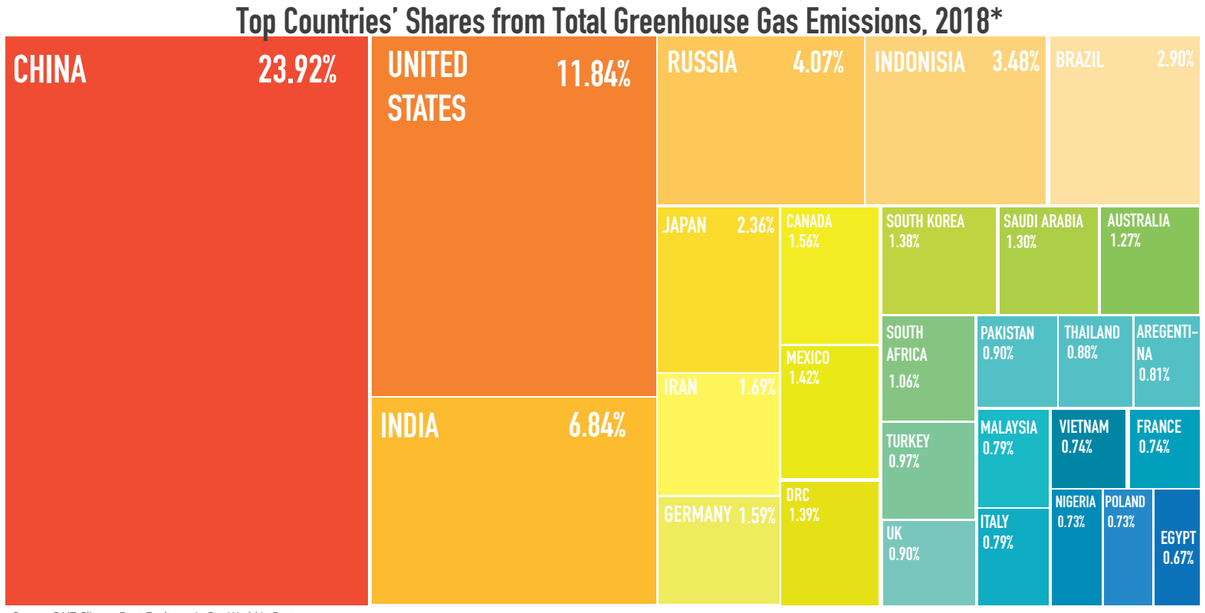
Global CO2 Atmospheric Concentration (ppm)



Source: NOAA/ESRL Global Monitoring Division via Our World in Data

Top Countries' Shares from Total Greenhouse Gas Emissions, 2018*

The wealthy nations of the world are responsible for most carbon emissions



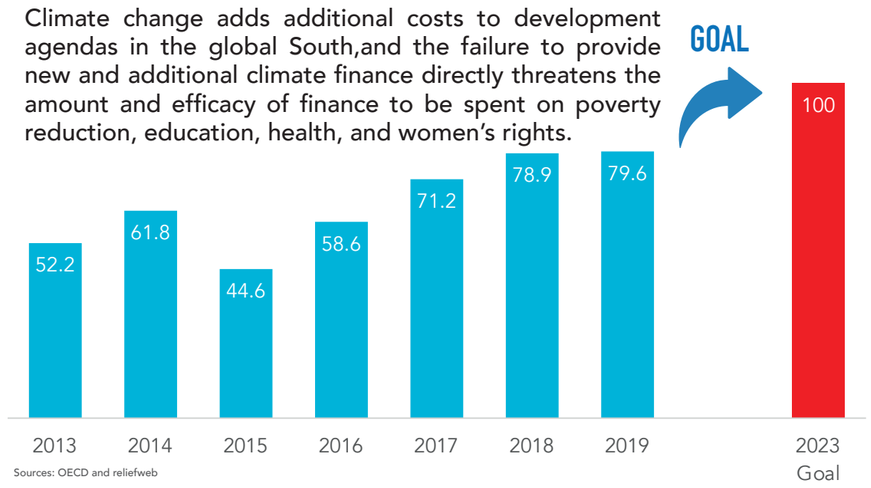
Source: CAIT Climate Data Explorer via Our World In Data

* This includes all GHG, and Land use, land-use change, and forestry (LULUCF).
GHG Definition: Greenhouse gases (GHGs) are a group of substances that contribute to global warming. They include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulphur hexafluoride (SF6), perfluorocarbons (PFCs) hydrofluorocarbons (HFCs) and many other compounds listed by the IPCC
LULUCF Definition: defined by the United Nations Climate Change Secretariat as a "greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use such as settlements and commercial uses, land-use change, and forestry activities

Developed Countries Mobilized Climate Finance (USD bn)

In 2019 the OECD reported that rich countries had provided and mobilised a total of $79.6 billion of climate finance, well short of the $100 billion pledged in 2009.

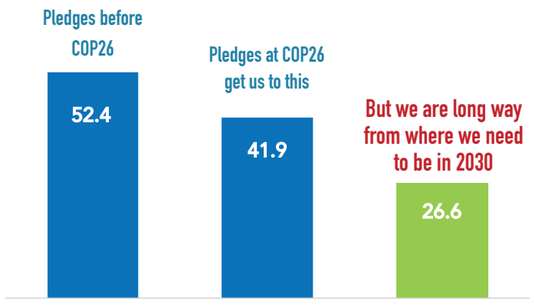
Climate change adds additional costs to development agendas in the global South,and the failure to provide new and additional climate finance directly threatens the amount and efficacy of finance to be spent on poverty reduction, education, health, and women's rights.



Sources: OECD and reliefweb

Projected Greenhouse Gas Emissions in 2030

(Gigtonnes)

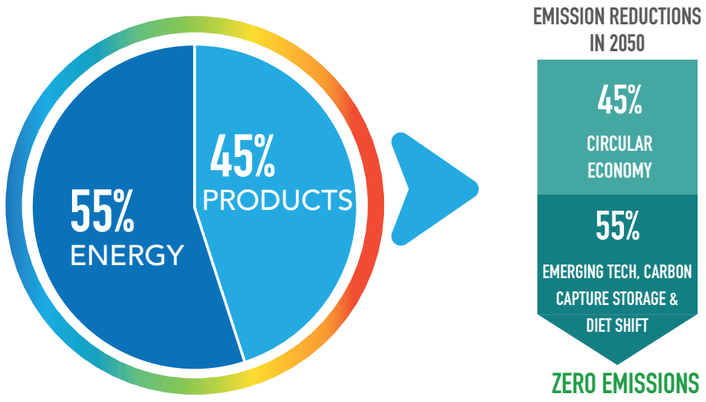


Source: Energy Transitions Commission & BBC

With 1.5C of warming, much of the world will likely see staggering sea-level rise, record-breaking drought and floods, and widespread species loss. Big emissions cuts still needed to limit warming to 1.5°C. The efforts are now moving towards tackling all sources of emissions, including the "overlooked" production emissions. Companies are the ones most responsible for emissions. Countries try to set targets, but it's up to companies to meet them.

Source: Ellen MacArthur Foundation

Sources of CO2 Emission & Ways of Tackling the Products Emissions



Source: Ellen MacArthur Foundation

.....AND THE LOCAL EFFECT, IN LIGHT OF EGYPT'S COP27 PREPARATIONS

Climate change continues to hit the world, Egypt is a typical example of a developing country which is highly vulnerable to the phenomenon which faces numerous threats to its economic, social, and environmental sustainability. Egypt is considered highly vulnerable to climate change due to its primary dependence on the Nile River, which serves needs for potable water, agriculture, industry, fish farming, power generation, inland river navigation, mining, oil and gas exploration, cooling of machinery and power generation. This dependence on the Nile River's water makes the country vulnerable to rising temperatures, reduced rainfall for the upper Nile Basins as well as the reduction of rainfall on the east Mediterranean coastal zone.

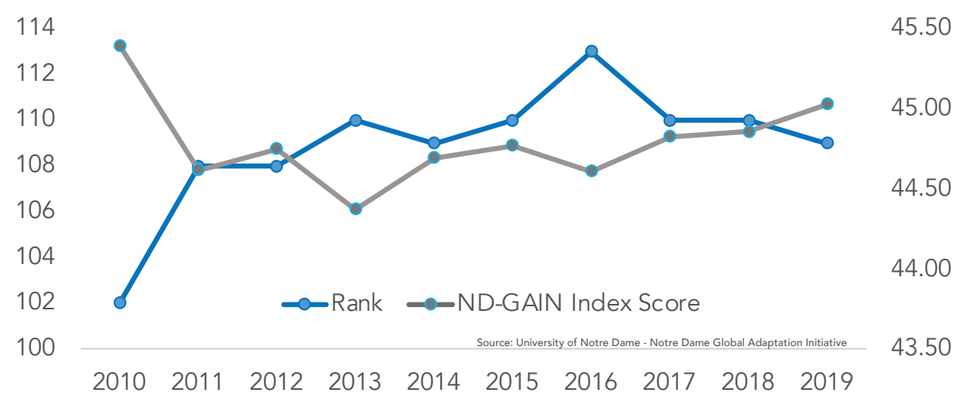
Source: World Bank

Egypt's Vulnrability & Readiness to Climate Change Effects

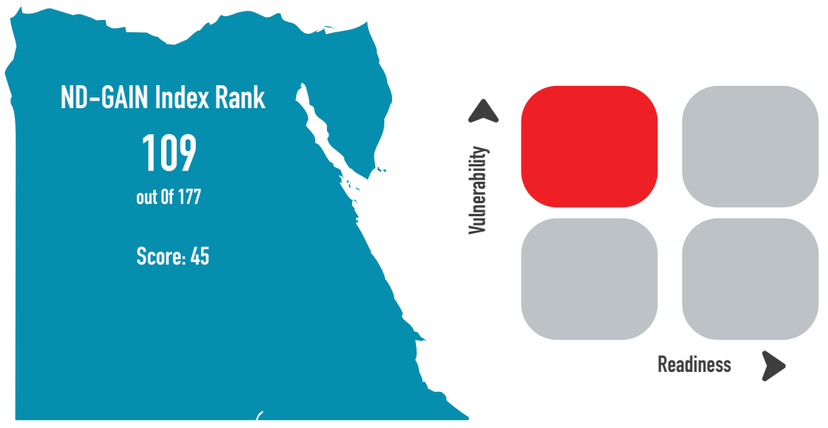
The high vulnerability score and low readiness score of Egypt places it in the upper-left quadrant of the ND-GAIN Matrix. It has both a great need for investment and innovations to improve readiness and a great urgency for action. Egypt is the 79th most vulnerable country and the 63rd least ready country.

Source: University of Notre Dame - Notre Dame Global Adaptation Initiative

Egypt's Rank in ND-GAIN Index



Source: University of Notre Dame - Notre Dame Global Adaptation Initiative



Source: University of Notre Dame - Notre Dame Global Adaptation Initiative

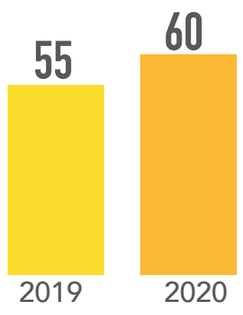
The ND-GAIN Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. It aims to help governments, businesses and communities better prioritize investments for a more efficient response to the immediate global challenges ahead.

Egypt's CO2 Emissions

Carbon emissions in Egypt are estimated to have increased from 55 million tons in 2019 to 60 million tons in 2020, with no noticeable effect caused by the pandemic. Estimates of per capita CO2 emissions show a decrease from 2.59 per capita metric tons in 2017 to 2.46 per capita metric tons in 2019, a near 5% drop.

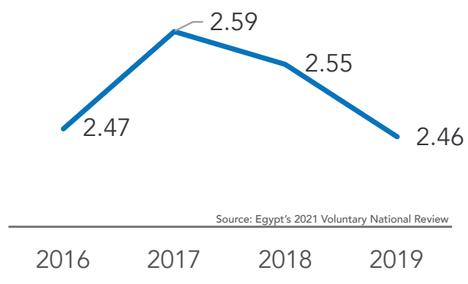
Source: Egypt's 2021 Voluntary National Review

CO2 Emissions (mn Tons)



Source: Egypt's 2021 Voluntary National Review

Per Capita CO2 Emissions (MT Tons)

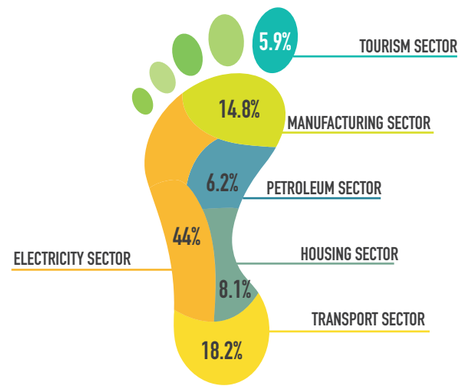


Source: Egypt's 2021 Voluntary National Review

Egypt's Carbon Footprint
CO2 Emissions by Sector (2018/2019)

The electricity sector is the highest emitter of CO2, followed by the Transportation sector, and Manufacturing. It is worth noting that Manufacturing, specifically the energy-intensive cement and fertilizers industries, is among the top consuming sectors for natural gas in Egypt and the second largest electricity consuming sector (26% of total consumption) after the residential sector (44% of total consumption / year 2014/ 2015).

Source: UNIDO PCP Report



Source: CAPMAS

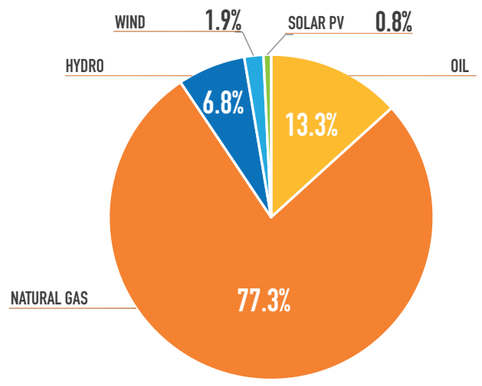
Egypt's Energy Mix & Emissions' Reduction Efforts

Egypt is committed to the widespread deployment of renewable energy technologies. As specified in the ISES to 2035, the Egyptian government has set renewable energy targets of 20% of the electricity mix by 2022 and 42% by 2035.

The 2021 edition of the New and Renewable Energy Authority's harvest report revealed that the renewable energy projects under development amount to 3,570 MW with investments amounting to $3.5bn, 78% of which is for solar energy and 22% for wind energy.

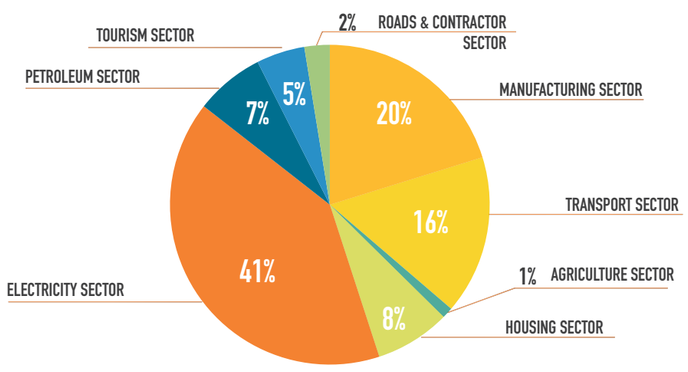
Source: IRENA and Daily News Egypt

Total Electricity Supply in Egypt by Source, 2019



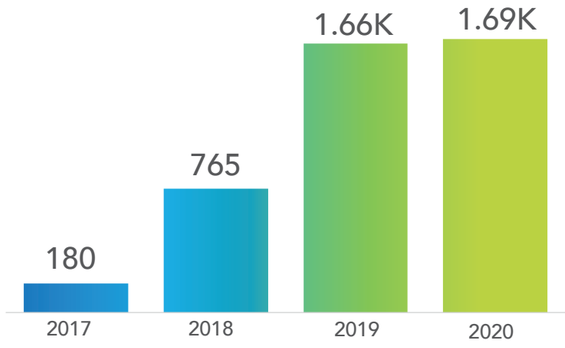
Source: International Energy Agency (IEA) - World Energy Balances

Consumption of Petroleum Products & Natural Gas by Sector 2018/19



Source: CAPMAS

Total Solar Energy Installed Capacity in Egypt (MW), 2021



Source: IRENA Renewable Energy Statistics 2021