

Middle East

Nuclear Industry in the Middle East



Overview

02

operating nuclear power plants

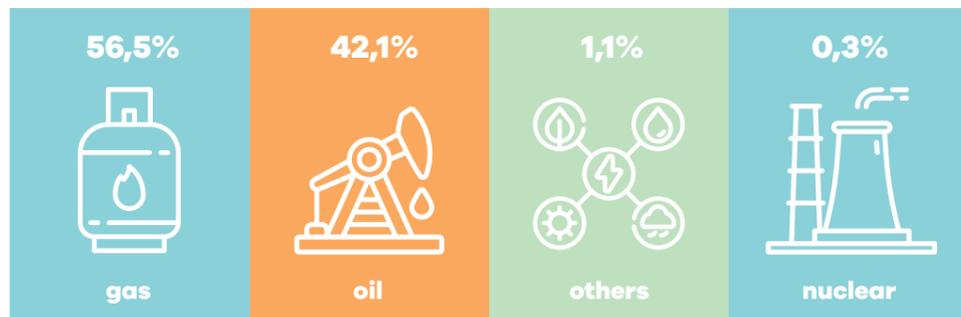
02

nuclear power plants under construction

15

nuclear reactors operating and under construction

Generation mix



Nuclear facts

04 countries of the region have operating NPPs or are building them

1961 Egypt's first reactor, the Experimental Training Research Reactor-1 (ETRR-1), achieved its initial criticality in 1961

10% 10% of Turkey's power consumption will produce Akkuyu NPP once fully operational

Viewpoint

by Egyptian Atomic Energy Authority

Today, the world is facing an unprecedented tipping point where climate change poses a real and imminent threat to the prosperity that so many enjoy today and what millions aspire to and work towards tomorrow. Climate continues to change due to emissions from burning fossil fuels, although many other important factors contribute to it. To mitigate climate change, we must reduce our consumption of these carbon-intensive fuels; as for renewable energies, they can and should be an essential part of this plan.

It is quietly known and noticeable in the Middle East in general that green and renewable energies are spreading and invading the fields of their non-renewable counterparts. We read this as an indicator of the growth of individual and institutional awareness at the different levels of Arab societies, and despite the multiplicity of issues that look apparently more urgent, energy crises have resurfaced again in the arenas of discussions and decision-making.

We find countries harnessing their deserts by planting solar cells with extended surfaces. Some countries have designated cities for the production of solar energy. We also see cells on the roofs of various homes and even car park canopies in a steadily increasing growth to harvest the sun's energy. At many sites throughout the region, there exists what is also known as wind farms, cylinders with turbines of carefully considered heights and sizes, welcoming air to pass through them to generate electricity.

And of course, we should mention nuclear energy that is the heart of the life of the future, though it is still unincluded in the list of the main energy resources in the Middle East countries for many reasons, foremost of which is the bad conception concerning the capabilities of this type of energy.

It is a continuous renewable energy which can reduce any negative impact on the environment, opening new

horizons for life in all its fields by raising the capacity of energy supply for homes, reducing the gaps between supply and demand for energy, and enabling industries at unprecedented levels.

We are thrilled to see that more and more Middle East countries choose nuclear to diversify and decarbonize their energy supplies. UAE are putting into operation one after another units of its Barakah plant. Russian nuclear giant Rosatom is preparing to build 4 units at El-Dabaa in Egypt. Saudi Arabia, Jordan, and other Arab countries are considering including nuclear in their energy balance.

And it should be emphasized that power generation is not the only application of peaceful nuclear technologies in the Middle East. With the assistance of the IAEA, the region is developing programs in nuclear medicine, agricultural radiology, water desalination and other areas important for the health and prosperity of society.

Hopefully, we will see the Middle East one day, pulsing with green energy from the lowest lands to the farthest. We hope that this day will come closer, that we will participate in its coming, through people's support, as every brick contributes to construction.

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