

\$1b investment needed to overcome Iran's power shortages: *Official*

Iran needs \$1 billion of investment in power stations to prevent power shortages, said the chairman of the Iran Power Plants Union.

Ali Nikbakht said in a press conference in Tehran that the country is expected to face a 26,000-MW power shortage next summer if no measure is taken with regards to Iranian electricity network, ISNA reported.

This year, the amount of electricity consumption reached 79,000 MW, the official said, adding that the country witnessed a deficit of 20,000 MW in some summer days.

Assuming that no power plant will be decommissioned across the country, there will remain between eight and nine months to adequately plan for the next year's peak of power consumption, Nikbakht warned. By optimizing and improving the efficiency of power stations, part of the electricity shortage can be compensated, he added.

Nikbakht put the average lifespan of power plants in the world at between 30 and 50 years, saying that in Iran the figure stands between 25 and 35 years for gas-fired power plants as steam power plants have 30 to 50 years of operational lifetime.

Role of renewables

Iran enjoys a high potential in the field of renewables and with its development the challenges can be solved to a great extent, Nikbakht said.

The abundance of renewable resources such as solar, wind, biomass and geothermal energy in Iran, where the national power grid is under growing pressure from runaway demand, is so great that its development and expansion is inevitable. Iran's Vision plan calls for introducing 10 gigawatts (GW) of renewable electricity into the national grid by the end of 2025, but data released by Iran's Renewable Energy and Energy Efficiency Organization (SATBA) in July showed the overall installed capacity stood just shy of 1.2 GW, Press TV wrote.

Iran faces annual electricity consumption increases of 5-7 percent. It experienced a peak shortage of more than 19.7 GW this summer as scorching heat wave persisted across much of the country which saw consumers crank up air conditioners.

The gap was the widest where demand hit an all-time high of 79.8 GW while total generation stood at 63-64 GW, according to Mo-

stafa Rajabi Mashhadi, head of Iran's power company TAVANIR.

Iran's hydroelectricity output falls at the steepest pace in the waning days of the summer when the water behind dams is chiefly saved for drinking and agricultural use. Temperatures normally drop in the run-up to the last month of the summer season, but the country suffered an unusually prolonged period of hot weather this year, where the mercury reached highs of more than 50 degrees Celsius in places such as southern Iran.

Nevertheless, electricity shortfall has become something of an endemic in recent years where production is a prerogative of the state and the contribution of private developers is sparse.

Experts have identified several factors contributing to the current situation, including inadequate investment in the power sector, a lack of power plant development and an aging production and transmission infrastructure. Part of the problem, how-

ever, relates to Iranian consumers who use up electricity three times more than the global average. Iranians also consume natural gas six times more than the global per capita average, according to official figures.

Experts attribute this to exorbitant subsidies doled out by the government. Iran's energy subsidies have fluctuated between \$30 billion and \$137 billion during the last decade, according to International Energy Agency (IEA) estimates. This vast variation is mainly driven by fossil fuel prices in the international markets.

Energy product subsidies in Iran are among the highest in the world. The subsidized energy system of Iran, with its high financial burden, has failed to achieve its intended economic goals, resulting in increased energy consumption and pollutant emissions. One recent phenomenon factoring clumsily in the shortfall is an out-of-bounds influx of Afghans, unofficially put in the upwards of several millions, which is painfully straining Iran's resources.

The cost of subsidies for renewables is a drop in the

ocean compared to the subsidies given to fossil fuels – a fact that has prompted the International Energy Agency to call for an end to fossil fuel subsidies.

Due to its rich resources and suitable geographical location, Iran can play an important role in the future of clean and sustainable energy in the region and the world. With more than 300 sunny days per year and an average annual solar radiation of about 5.5 kilowatt hours per square meter per day, there is 10 GW of capacity for solar power generation. The installed capacity of solar power plants in Iran stood at about 500 MW by the end of 2022.

Meanwhile, Iran's northwest, northeast and south coasts of the country have good potential for installing wind turbines, where available operation capacity and potential is estimated at 100 MW. In 2022, just around 300 MW of wind power capacity had been installed.

Iran's geothermal resources are mostly concentrated in its north-

west where its first plant is being built in Meshginshahr with a capacity of five megawatts. However, there is potential for 240 MW of geothermal power with more investment and development.

Biomass is another renewable energy type which uses organic matter such as agricultural, industrial and urban waste to make fuel or generate electricity. The share of biomass in Iran's energy mix is currently paltry and requires the development of related technology and infrastructure.

Nuclear energy is also one of the powerful and clean sources. Iran's nuclear energy production is on a continuous expansion trajectory where the first nuclear power plant, generating 1,000 megawatts (1 GW) of electricity, began operation in the port city of Bushehr in 2013. By 2041, the country seeks to produce 20 GW of nuclear energy.



Oman stresses expansion of port cooperation with Iran

Officials from the Sultanate of Oman expressed willingness to enhance port cooperation with Iran and take advantage of the commercial infrastructures of the Imam Khomeini Port.

An Omani trade delegation visited the loading and unloading operations of various types of goods and commodities at Imam Khomeini Port and signed a memorandum of understanding to expand port collaborations, Mehr News Agency reported. Also, the Omani delegation and Iranian officials stressed the need to boost cooperation be-

tween the private sectors of the two countries, according to the website of Iran's Ministry of Roads and Urban Development. The Special Economic Zone of Imam Khomeini Port is the largest commercial hub for grains in Iran.

The capacity of the port in terms of supply of goods, transit, possibility of re-export of goods and also the implementation of huge private sector investments in the zone were among the topics that attracted the attention of the visiting Omani trade and economic delegation.

Iran-Iraq strategic pact 'main achievement' of Pezeshkian's visit: *Envoy*



Iranian Ambassador to Baghdad Mohammad Kazem Al-e Sadeq said the agreement between the two neighboring states on preparation of a comprehensive pact is the main achievement of the recent visit of President Masoud Pezeshkian to Iraq. Talking to ISNA, the envoy added that it was decided to create committees to prepare the draft of the pact to be ratified by Tehran and

Baghdad. "The visit of Pezeshkian to the Iraqi cities of Irbil, Sulaymaniyah and Basra was historic as he received a very warm and friendly welcome from the officials and people of these regions," he noted. Iran and Iraq have agreed to set up a taskforce to discuss a comprehensive agreement that could further boost economic and trade relations between the two allied

countries.

Iranian President Masoud Pezeshkian said on Wednesday during a state visit to Iraq that he and Iraqi officials had agreed to start negotiations on a major economic and trade agreement between the two countries.

Pezeshkian made the comments in a meeting in Baghdad with businesses and economic figures from Iran and Iraq.

He said a main objective of his visit to Iraq, which is a first foreign trip since he took office last month, is to facilitate the work of Iranian businesses and manufacturing companies in the Arab country.

The Iranian president said better economic and trade relations between Iran and Iraq would positively impact the security situation in the region.

Annual trade between Iran and Iraq is estimated at \$12 billion while Iran is a major supplier of

natural gas and electricity to its western neighbor.

The Trade Promotion Organization of Iran (TPO) said last week that Iranian exports to Iraq had reached nearly \$4.5 billion in the five months to August 21, up 21% compared to the same period last year.

The TPO said exports to Iraq could hit a multi-year record this year as he estimated that shipments could reach well beyond \$10 billion in the year to March.

Iraq has been the second-largest importer of Iranian goods and products after China in recent years. Iranian exports to Iraq mainly include natural gas, steel, petrochemical products, construction material and food.

On the first day of the Iranian president's three-day visit to Iraq on Wednesday, the two countries signed 14 memoranda of understanding to further expand their bilateral relations.