Key water, power projects launched to ease shortages, drive 'sustainable growth'

Economy Desk

Iranian President Masoud Pezeshkian on Monday inaugurated four major water and power projects via video conference, calling for the use of advanced technology and "future-oriented planning" to ensure sustainable national development.

Speaking at the online ceremony attended by Energy Minister Abbas Aliabadi, Pezeshkian said water and power projects must be implemented with "modern knowledge and foresight" to build a reliable foundation for Iran's progress, president.ir reported.

He praised engineers and experts in the sector for their efforts to address supply imbalances and shortages.

"The enemy is trying to exploit internal differences," he warned, adding that they are seeking to take advantage of existing shortages in water and energy. The president said national unity and cohesion — as emphasized by Leader of the Islamic Revolution Ayatollah Seyyed Ali Khamenei — remain the keys to success.

"All government bodies must act in coordination to resolve these imbalances and work together for the dignity and progress of Iran," he said.

Iran, with its predominantly semi-arid and arid climate, faces water stress and crisis, and the supply of drinking water has become one of the country's biggest challenges. The country is also grappling with a worsening electricity shortage, marked by frequent blackouts.

According to the Renewable Energy and Electricity Efficiency Organization (SATBA), Iran's renewable plants generate about 2,700 megawatts a day — roughly 2.8% of total output — out of an installed capacity of around 95,000 MW. The Energy Ministry aims to boost renewables to 7,000 MW by March 2026 and to 11,000 MW by next summer.

During the Monday ceremony, the president inaugurated the Sahand combined-cycle power plant in East Azarbaijan Province, the Robat Karim wastewater treatment plant and its collection network in Tehran Province, the Taleqan Dam water transfer project to treatment plants in Alborz and Tehran provinces, and a 172-megawatt solar power plant.

He also ordered the launch of construction for an additional 745 megawatts of solar capacity and new power efficiency projects.

The Robat Karim wastewater facility, built on five hectares with a capacity of 21,288 cubic meters per day, will produce eight million cubic meters of treated water annually for use in agriculture, industry, and public services. It is expected to serve about 130,000 people, help protect groundwater resources, improve public health, and reduce unpleasant odors in the area.

The Taleqan Dam transfer line, extending 62 kilometers with an annual capacity of 150 million cubic meters, will secure drinking water for three million people in Tehran and Alborz. It replaces an aging pipeline with two-meter-diameter pipes, increases water transfer capacity in emergencies, and uses modern domestically-made equipment.

President Masoud Pezeshkian (C) inaugurates four major water and power projects via video conference in Tehran on November 3, 2025. president.ir

Energy Minister Aliabadi described the Taleqan project as "a major achievement," noting that it began in 2022 and now delivers five cubic meters of water per second to the two provinces.

He also urged citizens to help by saving energy and highlighted the importance of using "gray water" — treated wastewater — for industrial applications, such as wood production.

First bioethanol-based gasoline rolled out to curb pollution

Economy Desk

Iran produced its first bioethanol-based gasoline (E5) with an annual capacity of 1.2 billion liters, aimed at reducing pollution and expanding the use of green automotive fuel, Deputy Industry Minister Farshad Moqimi said on Monday.

Moqimi told Mehr News Agency that said the biofuel blend would lead to "a significant reduction in pollution and MTBE consumption."

Bioethanol-based gasoline, containing up to 10% bioethanol derived from plants such as corn or sugar cane, is part of Iran's plan to reduce reliance on fossil fuels and lower urban air pollution.

MTBE (methyl tert-butyl ether), a chemical compound used to raise octane levels in gasoline, has been a standard additive since the 1970s as a replacement for lead.

The bioethanol is produced by the private Zagros Green Fuel Development Co., headquartered in Kermanshah, western Iran. Zagros was officially inaugurated on May 15 by President Masoud Pezeshkian.

Moqimi, who is also CEO of the Industrial Development & Renovation Organization of Iran (IDRO), said that bioethanol-based gasoline containing the octane booster was produced at the Abadan refinery and distributed in Khuzestan province, where operational tests were successfully completed.

"So far, we have delivered over five million liters of bioethanol produced at Zagros to the National Iranian Oil Refining and Distribution Co. (NIORDC) and the Abadan refinery," he said.

The state fuel distributor NIORDC and the IDRO, a key arm of the Ministry of Industry, Mine and Trade, signed an agreement in late May to kickstart the production of bioethanol-based gasoline.

Under the deal, the two bodies work together to provide incentives for scaling up biofuel output and create a framework to enable refineries to easily purchase bioethanol.

Moqimi added that a second project was underway and would go online next year, doubling the annual production capacity of bioethanol-based gasoline to 2.4 billion liters.

"Plans are also in place to produce bioethanol in 30 additional units across the country."

The deputy minister noted that Zagros, Iran's first green fuel plant with a production capacity of 60 million liters of ethanol per year, could support the output of 1.2 billion liters of E5 gasoline annually.

Globally, bioethanol-based gasoline is recognized as E5 (5% ethanol) or E10 (10% ethanol).

It is expected to eliminate around 85 million liters of MTBE from gasoline production while boosting fuel octane levels, according to Moqimi.

Iran cranks out around 107 million liters of gasoline daily, while consumption stands at 134 million liters, leaving a deficit of about 27 million liters per day.

Since 2021, the government has spent over $3 billion annually on gasoline imports to plug the gap.

Officials hope the new green fuel initiative will ease pressure on both the supply chain and the national budget.

Tehran to invest $1.68b in AI to promote private sector role, digital ecosystem

Economy Desk

Iran plans to invest a total of $1.68 billion in artificial intelligence and the digital economy to accelerate growth and expand private sector participation, a senior communications official said on Monday.

Ehsan Chitsaz, deputy minister for ICT policy and planning at the Ministry of Information and Communications Technology, said that the new funding marks a major step toward strengthening the country's digital ecosystem.

Addressing the National Conference on Investment Opportunities in ICT, he said $1 billion of the investment will go to the digital economy and $680 million to artificial intelligence, with contracts currently being finalized.

Chitsaz said the government must ensure a predictable economic environment and provide security for investors.

He also noted that the ministry is undergoing "fundamental changes" in its approach to supporting the private sector, aiming to encourage more participation in the digital economy.

Communications Minister Sattar Hashemi said earlier that the ministry's goal is to raise the digital economy's share of Iran's gross domestic product to 10 percent, up from the current level of less than five percent.

Achieving this, he said on Saturday, would require major national and provincial initiatives.

Iran on doorstep of aircraft making with homegrown engine parts: *Official*

Economy Desk

Iran has taken its first steps toward joining global aircraft manufacturers with the development of its domestically built Simorgh cargo plane, a senior aviation official said, marking a milestone in the country's aerospace development goals.

Mohammad Reza Vaqefimanesh, director general of the Aircraft Design and Manufacturing Engineering Office at Iran's Civil Aviation Organization, told IRNA in an exclusive interview that the Simorgh transport aircraft was entirely designed and produced by Iranian specialists inside the country, with work on the design dating back about 15 years.

Iran on Tuesday began test flying its domestically made aircraft in the central province of Isfahan, aiming to meet the requirements for an airworthiness certificate from the Civil Aviation Organization.

Vaqefimanesh said the plane was developed based on the Ukrainian Antonov-140 model but features an indigenously designed tail and rear fuselage. The aircraft is larger than the Antonov, equipped with a bigger tail and a rear cargo door that allows loading of items such as vehicles the size of a jeep, aircraft engines, and other equipment.

"Powered by two 2,500-horsepower engines, giving it a total output of 5,000 horsepower, the Simorgh can carry six tons of cargo, has a maximum takeoff weight of 21.5 tons, and can fly up to 3,900 kilometers."

He also said the aircraft falls into the medium-size category among global transport planes and is also capable of carrying postal cargo.

"Iran has not yet achieved full technical know-how in building engines and auxiliary power units (APUs)," he said, "though the design and production of some engine parts have begun domestically."

Globally, countries seeking to design passenger aircraft typically start by developing components and gradually move toward modifying and redesigning existing aircraft models. To meet certification requirements, they must comply with at least 80% of the CS-25 heavy aircraft design regulations, Vaqefimanesh explained.

According to the official, the Simorgh must complete between 100 and 150 hours of test flights to meet Iran's heavy-aircraft airworthiness standards. So far, the aircraft is scheduled to undergo about 70 test flights to assess stability, control, performance, engine function, and load measurement, including one-engine-inoperative (OEI) tests to ensure it can safely continue flying with one engine off.

He said that the main flight tests will take about a year. If all tests are successfully completed and documentation finalized, the aircraft could receive a Supplemental Type Certificate (STC) from the Civil Aviation Organization by next year, authorizing it for operational cargo use.

Until now, global aircraft manufacturing had been dominated by giants such as Boeing, Airbus, and firms in Russia, China, Brazil, and Canada, along with a few smaller Eastern European companies. "Iran is now joining that club," Vaqefimanesh said.