AEOI details nuclear technology applications in agriculture, water, healthcare

Economy Desk

The Atomic Energy Organization of Iran (AEOI) is seeking to expand the use of nuclear technology in water and soil management, agriculture and healthcare, with applications ranging from improving crop yields and shelf life to supplying medical equipment, AEOI chief Mohammad Eslami said on Monday.

Eslami made the remarks on the sidelines of an exhibition of Iran's peaceful nuclear achievements at the holy shrine of Hazrat Abdol-Azim al-Hasani in Shahr-e Rey, south of Tehran, IRNA reported.

"The use of nuclear technology to improve water and soil quality, increase the productivity and shelf life of agricultural products, and supply equipment needed in the healthcare sector is on the agenda," Eslami said.

"Given the growing needs of the public and various sectors of the country, nuclear technology can play a role in addressing existing problems and challenges," he added.

Referring to the country's water and soil challenges, Eslami said Iran needed to reassess how these resources were consumed and their quality. He said measures to improve the quality and safety of these resources were being pursued.

"The use of nuclear technology in agriculture increases productivity and extends the shelf life of products, making it possible to store them for longer periods without exposure to pests," he said.

On healthcare applications, Eslami said nuclear technology could be used to irradiate disposable products, equipment and other items used in healthcare processes.

He described Iran's nuclear industry as an integrated chain extending from the initial stages of production to end use by consumers.

"The chain begins at the mine and extends all the way to the point of consumption and use by people in their homes. Today, the nuclear industry is serving the public," he said.

The exhibition was inaugurated on Monday at a hall of the Hazrat Abdol-Azim al-Hasani shrine, with Eslami in attendance.

He said exhibitions showcasing peaceful nuclear achievements were intended to promote the technology and familiarize different segments of society with its applications.

Such events provide an opportunity for the public to learn firsthand about achievements made for their benefit and put at the service of society, he added.



Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami (C) tours an exhibition of Iran's peaceful nuclear achievements at the holy shrine of Hazrat Abdol-Azim al-Hasani in Shahr-e Rey, south of Tehran, on November 9, 2026.
IRNA

South Pars fifth refinery unit expected to resume operations by December

Economy Desk

Part of Iran's fifth South Pars refinery, damaged during the US-Israeli war in March, is expected to be ready for a return to service by the end of December, Mehr news agency reported. The first train of Unit 103 at the refinery is expected to be ready for commissioning by December, as repair work on key equipment has reached 67%, the report said. The rehabilitation of damaged equipment at two trains of Unit 103 began following the signing of a preliminary agreement on August 25.

Specialized personnel and contractors have been deployed at the refinery to carry out the work around the clock.

The work is focused on rebuilding the first train of the condensate stabilization unit and preparing the infrastructure needed to restart the refinery's two gas trains, which have a combined production capacity of 1 billion standard cubic feet of gas per day.

Since September 23, a dedicated workshop for mechanical equipment repairs and instrumentation calibration has been operating at the site. Restoration work on 21 major damaged pieces of equipment has been launched, reaching 67% completion, the report said.

Construction of the heavy steel structures required for the units has been completed, and the necessary supports have been installed in the first train of Unit 103.



SHANA

In addition, all equipment and materials requiring long delivery times have been ordered, with manufacturing underway at domestic factories operating three shifts. The work is being carried out by Petropars Group.

The fifth South Pars refinery was damaged on March 18, 2026, during US and Israeli attacks on gas facilities in Assaluyeh. Refineries associated with phases 3, 4, 5 and 6 of the South Pars gas field were targeted in the attacks.

During a visit to Bushehr Province in southern Iran and a tour of the fourth refinery at the South Pars Gas Complex this week, Central Bank of Iran Governor Abdolnaser Hemmati said Iran's central bank and banking network would continue to provide financial support for the reconstruction of gas facilities damaged during the 40-day US-Israeli war.

The attacks had taken about one-third of Iran's gas production capacity offline.

The fourth South Pars refinery, described as the largest sour gas refinery in the Middle East, was also heavily targeted during the war that began in late February. However, following the early start of reconstruction work, 70% of its production capacity has now been restored, according to IRNA.

In the latest update on the recovery of gas production across the South Pars Gas Complex, Farrokh Alikhani, acting head of the National Iranian Oil Company, said last week that 100 million cubic meters of gas had been returned to the network. He said 20,000 tons of debris were cleared from refineries hit by missiles. He added that some of the remaining capacity would also be restored before winter. Attacks on the four South Pars gas refineries in March initially knocked out about 230 million cubic meters of daily gas production capacity.

According to the National Iranian Gas Company (NIGC), Iran was already facing a daily gas shortfall of about 300 million cubic meters before the war. With 100 million cubic meters of the initially lost production capacity restored, the remaining 130 million cubic meters of lost capacity has added to the country's existing supply constraints, underscoring the importance of efforts to curb consumption.

Iran holds about 34 trillion cubic meters of proven natural gas reserves, the world's second-largest after Russia, and accounts for about 17% of global proven gas reserves. Despite its vast reserves, a significant portion of the country's gas potential remains undeveloped because of sanctions-related constraints and insufficient investment.

Iran, Armenia discuss new bridge, border upgrades and cross-border energy links

Economy Desk

Iran and Armenia are seeking to expand economic cooperation in trade, transport and energy, with eight specialized committees meeting in Yerevan to discuss joint projects and prepare a cooperation agreement, Iran's state planning agency said on Monday.

Hamid Pourmohammadi, head of Iran's Plan and Budget Organization and leader of the Iranian delegation, are attending the 19th session of the Iran-Armenia Joint Economic Commission in the Armenian capital.

The eight committees are covering infrastructure, customs, trade, culture and the arts, healthcare, industry, mining and technology. The two-day meeting began on Monday, when the two sides are expected to sign a joint cooperation document, the organization said, according to Mehr news agency.

Transport infrastructure is among the main areas under discussion. Road construction from Jolfa to Nurdouz in Iran's East Azarbaijan Province is progressing, while Iranian contractors are also undertaking work on the Nurdouz-Yerevan route inside Armenia, Pourmohammadi said.



The 19th session of the Iran-Armenia Joint Economic Commission is held in Yerevan on November 9, 2026.
IRNA

Plans also include building a new bridge over the Aras River, expanding border terminals and increasing customs capacity to facilitate cross-border traffic and trade.

The two sides are also discussing measures to ease truck movements and increase travel by Iranian and Armenian tourists, he said.

In the energy sector, Iranian contractors are working on a power transmission line running through Armenia toward Iran. Iran's supply of petroleum products needed by Armenia is another potential area of bilateral cooperation, Pourmohammadi said.

The committees are also examining opportunities for cooperation in mining, industry, trade and technology, with both countries seeking to make use of their respective economic capacities.

Pourmohammadi is also scheduled to meet Armenian Prime Minister Nikol Pashinyan, as well as Armenia's deputy prime minister and the Armenian co-chair of the joint commission, to discuss bilateral issues and the outcome of the committee meetings.

Despite Republicans' setback ...

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Such an achievement could come through either war or an agreement. What matters most to Trump is securing a major result, regardless of the means. So far, he has presented his claim of having "prevented Iran from obtaining a nuclear bomb" as one of his achievements. However, this is not enough to convince public opinion in the United States or internationally.

Iran and the United States are currently pursuing two parallel tracks: military confrontation and negotiations toward an agreement. Either could materialize at any moment.

US officials have also sent conflicting signals about the state of negotiations. US Secretary of State Marco Rubio recently said there were no signs of an imminent agreement between the two countries. At the same time, Trump said he was highly unlikely to order fresh strikes against Iran if negotiations made progress and produced a strong deal.

As a result, we do not know the US administration's actual position on negotiations with Iran. If we assess the current situation in light of the pattern set by the previous two wars, the likelihood of a US attack on Iran appears greater than that of an agreement.

Although recent diplomatic exchanges and efforts by Qatari officials offer grounds for optimism, the Qatari prime minister and foreign minister's recent visit to Washington for meetings with Trump and Vice President JD Vance can also be compared to the visit by Oman's foreign minister, who met Vance in the middle of negotiations, just days before the US war against Iran began on February 28. From this perspective, the visit by the senior Qatari officials should be seen as a warning sign.

If a new war breaks out, are we likely to see a short but intense confrontation, or could the conflict develop into a prolonged war of attrition?

If a new war begins, we will probably face a short but intense and highly destructive confrontation, based on what foreign media outlets have reported, citing informed sources. Such a confrontation would be part of a broader strategy of prolonged military pressure by the United States and Israel against Iran. The aim would be to combine external political, military and economic pressure to push Iranian society toward unrest and confrontation.

What role will Israel play in shaping future developments? Given the domestic political changes following Israel's elections, can we expect a shift in Tel Aviv's approach toward Iran?

Israel is not merely an active player in this situation; it is the director behind the scenes. It appears to have successfully advanced its agenda by turning its war against Iran into a US-Iran confrontation and even a Trump-Iran conflict, while remaining outside the main theater and watching the clashes unfold among Iran, the United States and regional countries. Any party that suffers damage in this confrontation stands to serve the interests of Israel's right-wing government led by Benjamin Netanyahu. Israel regards the United States and regional countries, including those that have established relations with Tel Aviv, as either open or undeclared adversaries and welcomes any harm inflicted on them. From Israel's perspective, Iranian attacks on the United States also deepen tensions and widen the rift between the two sides.

Moreover, the US-Israeli disputes with Iran constitute two separate issues. Although they overlap on certain matters, including the nuclear and missile programs, they are not entirely identical. Therefore, even if Washington reaches a comprehensive agreement with Tehran, Israel will continue various forms of activity against Iran, including military and paramilitary operations, if the deal fails to meet its demands.

As for the impact of Israel's elections on the confrontation with Iran, if Gadi Eisenkot, leader of the Yashar party and the opposition camp against Netanyahu, succeeds in forming the next government, we could see several changes in Tel Aviv's approach.

First, Israel would be less inclined to act unilaterally against Iran and would operate more closely within the framework of US policy toward Tehran. This could increase the chances of a US-Iran agreement. Relations between Washington and Tel Aviv would also become closer, with greater alignment between the Israeli government and Trump on various issues, including Iran. With Israel's cooperation, Trump could more easily implement his peace plan for Gaza. At the same time, the prospects for closer Israeli relations with regional countries could improve.

Nevertheless, Israel's military and intelligence services will continue to pursue their plans against Iran, regardless of whether Netanyahu or Eisenkot serves as prime minister. The methods, tactics and timelines may differ.

It should also be remembered that Eisenkot, a former chief of the Israeli military, was himself involved in intelligence, military and operational activities against Iran across the region. He does not fundamentally disagree with Netanyahu over the view that Iran poses a threat and is an adversary that Israel must confront. Their differences lie in the methods and approach.

How should Iran adjust its strategic calculations under the current circumstances?

First, Iran needs to develop a thorough and realistic understanding of regional developments and update its priorities accordingly. It should strengthen its decision-making and executive institutions, prevent the formation of regional coalitions against it, and bolster both its military and diplomatic instruments, using them in parallel.

Iran should also work to prevent regional countries from moving closer to Israel while ensuring that its own allies do not drift away.

Does maintaining the current state of neither war nor peace serve the interests of the parties involved, or is the situation gradually moving toward an inevitable confrontation? What factors could change this equation?

Maintaining the current situation primarily serves Israel's interests because it allows the country to inflict the consequences and costs of war on Iran and regional states without having to engage in an actual war.

Trump, too, may support the continuation of this situation under certain circumstances, particularly in the Persian Gulf. His reasoning could be that such an arrangement would benefit US production and exports of oil, gas, petroleum products and other energy resources, while harming China's economy by restricting its access to cheaper oil and gas supplies.

The continuation of this situation could also be part of a broader strategy to weaken Iran, alongside economic containment and continued military strikes.