

DAILY TRACKER

NUCLEAR ISSUES

1. Candu Energy of Canada will prepare the licencing basis for two new Candu pressurised heavy water reactors at Romania's Cernavoda nuclear power facility under a year-long contract worth CAD8.4 million (USD6.6 million). Romanian and Canadian governments, as well as the United States, attended the signing ceremony.

Source: <https://www.world-nuclear-news.org/Articles/First-contract-signed-for-Cernavoda-completion>

2. The International Atomic Energy Agency stated during a recent Climate Change meeting in Glasgow that nuclear power produces more than a quarter of the world's clean power. Tamil Nadu has the most nuclear power capacity of any state. India's entire nuclear power capacity is 6800MW, with Tamil Nadu accounting for 2440MW. Tamil Nadu has 35% of the country's total nuclear power capacity in percentage terms.

Source: <https://thefederal.com/analysis/atn-may-soon-be-the-largest-source-of-nuclear-energy-in-indiaanalysis-tn-may-be-the-largest-source-of-nuclear-energy-in-india-soon/>

3. According to a report by New Atlas, the Korea Institute of Fusion Energy has achieved a new record by running at one million degrees and keeping super-hot plasma for 30 seconds, exceeding its own previous record by 10 seconds.

Source: <https://interestingengineering.com/a-korean-artificial-sun-reactor-broke-a-nuclear-fusion-record>

4. Despite decades of uranium mining, most springs and wells in a broad region of northern Arizona famed for its high-grade uranium ore fulfil federal drinking water standards, according to US scientists. The highest uranium concentrations were discovered at numerous locations within Grand Canyon National Park, downslope from an abandoned mine. The US Geological Survey said more research is needed to determine whether the contamination is linked to the Orphan Mine.

Source: <https://www.latimes.com/world-nation/story/2021-11-26/study-finds-uranium-not-high-in-water-samples-around-grand-canyon>

5. Uranium Energy Corporation (UEC) has entered into an agreement with Russia's Uranium One Investments Inc., a subsidiary of Uranium One, to purchase all issued and outstanding shares of Uranium One Americas, Inc. (U1A) for a total purchase price of \$112 million in cash and the replacement of \$19 million in reclamation bonding in a move that could mean a huge upswing in uranium mining in Converse County and Wyoming. Uranium One is a subsidiary of Russia's State Atomic Energy Corporation, Rosatom, and is the world's fourth largest uranium producer.

Source: https://www.wyomingnews.com/rawlinstimes/news/uranium-sale-expected-to-boost-wyoming-production/article_d97fa882-0d14-5a9e-a646-4bc414a308be.html

6. Kazatomprom, Kazakhstan's national nuclear business, has inked a framework agreement with Genchi Global to invest in the newly formed ANU Energy OEIC Limited physical uranium fund, allowing it to commence operations. Meanwhile, Kazatomprom has exercised an option to purchase uranium from Yellow Cake plc.

Source: <https://www.world-nuclear-news.org/Articles/Kazakhstan-based-physical-uranium-fund-begins-oper>

7. The Nuclear Regulatory Commission (NRC) of the United States has issued a draught safety evaluation report confirming initial acceptance of Kairos Power's source term technique for their fluoride salt-cooled high temperature reactor (KP-FHR). Kairos submitted the topical report to the NRC in June 2020, and it is the first of its kind to be assessed by the agency.

Source: <https://world-nuclear-news.org/Articles/NRC-indicates-acceptance-of-Kairos-safety-evaluati>

8. Last week, an international team of experts from the International Atomic Energy Agency (IAEA) completed a follow-up nuclear security advice mission to the Czech Republic. A examination of the legislative and regulatory framework for the physical protection of nuclear material, associated facilities and activities, including transportation, was part of the two-week International Physical Protection Advisory Service (IPPAS) mission.

Source: <https://world-nuclear-news.org/Articles/Czech-nuclear-security-regime-is-robust,-says-IAEA>

MISSILES/ BIO WEAPONS

1. China's Missile Program Far Exceeds Capabilities Demonstrated So Far by the US and Russia - US Intelligence Report Russian Defense Minister Sergei Shoigu said on Tuesday that Russia and China have increased their combined military training at sea, in the air, and on land this year. He had a video call with his Chinese counterpart, Wei Fenghe, earlier in the day.

Source: <https://eurasianimes.com/chinas-missile-program-far-exceeds-the-capability-demonstrated-by-us-russia-so-far-us-intelligence-report/>

2. As China equips its J-20 stealth jets with the lethal PL-15, the US Air Force is testing the 'very secretive' AIM-260 BVR missile. The US Air Force (USAF) has released data that sheds light on the Joint Advanced Target Missile (JATM) programme, which is expected to begin in 2019. The AIM-260, a long-range missile developed by Lockheed Martin in partnership with the US Air Force and Navy, is a successor to the AIM-120 Advanced Medium-Range Air-to-Air Missile (AMRAAM).

Source: <https://eurasianimes.com/us-air-force-testing-highly-secretive-aim-260-bvr-missile/>

3. Experts say a Chinese hypersonic test flight including a high-speed missile launch is a significant step forward, but Beijing's ability to utilise the advanced technology in warfare is still in doubt. The discovery that a Chinese hypersonic glider around-the-earth test flight in July culminated in the discharge of a missile in mid-flight at more than five times the speed of sound over the South China



Sea has frightened the American defense establishment, according to media sources.

Source: <https://www.thedefensepost.com/2021/11/24/china-hypersonic-stuns-west/>

4. The Unification Ministry in Seoul said on Friday that South Korea is closely monitoring North Korea's nuclear and missile operations in close cooperation with the US. According to Yonhap News Agency, the declaration comes following reports that the North appeared to be continuing to operate a nuclear reactor at its flagship Yongbyon plant.

Source: <https://ahmedabadmirror.com/seoul-monitoring-nkoreas-nuke-missile-activities/81812091.html>

5. The Saudi led coalition released a video showing the destruction of the Houthis' TEL Vehicle as it prepared to launch a ballistic missile.

Source: <https://twitter.com/defensearab/status/1464607060897767439>

6. Spokesperson of Pakistan Armed Forces Major General Babar Iftikhar tweeted that Pakistan tested the Shaheen-1A surface-to-surface ballistic missile in flight.

Source: <https://twitter.com/OfficialDGISPR/status/1463877665258094595>

7. Japan's Cabinet authorized a 770 billion yen (\$6.8 billion) request for an extra defense budget until March to speed up the procurement of missiles, anti-submarine rockets, and other weaponry amid growing worry over China, Russia, and North Korea's military activities.

Source: <https://timesofindia.indiatimes.com/world/rest-of-world/japan-seeks-extra-defense-budget-amid-china-n-korea-concern/articleshow/87931593.cms>

8. Fumio Kishida, Japan's prime minister, has stated that he will consider "all alternatives" to fight China. With North Korea continuing to test ballistic missiles while improving its capabilities, and China pursuing a military expansion and increasingly assertive activities in the region, the situation is becoming increasingly tense. As a result, Japan will update surface-to-air missile launchers on islands near the East China Sea's coast, as well as Patriot PAC-3 missile batteries elsewhere, which serve as the final line of defence against any incoming North Korean warheads.

Source: <https://www.wionews.com/world/japanese-pm-fumio-kishida-vows-to-consider-all-options-to-counter-china-432300>

NUCLEAR PROLIFERATION

1. After a lengthy break that cast doubt on the future of the landmark agreement, indirect talks between Iran and the US to restore the nuclear deal are due to resume next week. While a breakthrough is unlikely, observers believe the talks, which begin on November 29 in Vienna, will reveal how Tehran would approach diplomacy under conservative President Ebrahim Raisi, whose government has raised Iranian demands in preparation for a return to the agreement.

Source: <https://www.aljazeera.com/news/2021/11/24/what-to-expect-as-iran-nuclear-talks-resume->

[next-week](#)

2. A carbon dioxide leak at the Asco nuclear power plant in the Spanish region of Catalonia has resulted in one death and three hospitalizations, according to local emergency services on Wednesday.
Source: <https://www.indiatoday.in/world/story/dead-injured-carbon-dioxide-leak-nuclear-power-plant-spain-1880507-2021-11-25>
3. On Friday, Japanese broadcaster NHK reported that an ice wall limiting groundwater flow at Tokyo Electric (TEPCO Fukushima)'s Daiichi Power Station may have partially melted. TEPCO will begin work on reinforcing the wall as early as early December, according to the article, and will evaluate subsequent actions. The ice wall was built to prevent the contamination of groundwater at the wrecked nuclear power plant.
Source: <https://news.cgtn.com/news/2021-11-26/Ice-wall-at-Fukushima-nuclear-plant-may-have-partially-melted-NHK-15vbBjLFRFS/index.html>
4. Foreign Minister Hossein Amirabdollahian said on Friday, three days before nuclear talks resume in Vienna, that Iran expects verifiable relief from economic sanctions.
Source: <https://www.reuters.com/world/middle-east/top-iran-diplomat-calls-lifting-sanctions-days-before-vienna-nuclear-talks-2021-11-26/>
5. According to the South China Morning Post, China's space programme has created a prototype design for a powerful nuclear reactor. The gadget is being developed by the country's space programme to keep up with other space agencies that have also drawn up plans to become nuclear, such as NASA, which recently issued a request for private companies to construct a nuclear fission system to power missions on the Moon within ten years.
Source: <https://interestingengineering.com/chinas-new-space-nuclear-reactor-might-be-100-times-powerful-than-nasas>
6. The UN's atomic agency warns that time is running out to reinstall cameras at an Iranian workshop that builds parts for advanced centrifuges, claiming that its inspectors would soon be unable to "ensure" that equipment there isn't being diverted to a secret nuclear programme.
Source: <https://www.rferl.org/a/iran-nuclear-grossi-visit-inconclusive/31577016.html>
7. The International Atomic Energy Agency's (IAEA) director-general, Rafael Grossi, told a quarterly meeting of the agency's board that negotiations held in Tehran on Tuesday were "inconclusive," despite being "constructive."
Source: <https://www.timesofisrael.com/on-eve-of-renewed-iran-talks-un-nuclear-watchdog-chief-says-no-progress-made/>
8. IAEA Director General Rafael Mariano Grossi addressed the 35-member Board of Governors with his latest report on verification and monitoring in Iran today, saying that extensive conversations with Iran to address remaining nuclear verification issues "proved inconclusive."
Source: <https://www.iaea.org/newscenter/news/high-level-meetings-in-iran-inconclusive-iaea-director-general-tells-board>
9. The United States cautioned on Thursday that if Iran continues to obstruct UN nuclear watchdog efforts to oversee its nuclear programme, the stakes in international pressure on the Islamic Republic would



rise. "If Iran's non-cooperation is not immediately addressed," US Chargé d'Affaires in Vienna Louis Bono stated at the International Atomic Energy Agency's Board of Governors Meeting, "If Iran's non-cooperation is not immediately remedied... the Board will have no choice but to reconvene in extraordinary session before the end of this year in order to address the crisis."

Source: <https://www.timesofisrael.com/us-says-itll-amp-up-pressure-on-iran-if-it-does-not-start-cooperating-with-iaea/>

UN REFORMS

1. Just days before discussions on restoring the 2015 Iran nuclear deal resume, the UN nuclear watchdog said there had been "no progress" in talks with Tehran over disputes about monitoring Iran's atomic programme.

Source: <https://www.ndtv.com/world-news/no-progress-on-eve-of-iran-nuclear-talks-un-atomic-agency-2623670>

2. India has been actively contributing to finding mutually acceptable solutions to international and regional concerns since joining the UN Security Council as a non-permanent member in January this year, says India's external affairs minister Dr. S. Jaishankar at RIC Summi.

Source: <https://twitter.com/WIONews/status/1464186351935361026>

3. Vice-President M Venkaiah Naidu stressed the need for reforms in the United Nations Security Council and other key international organisations on Thursday, in order to make them more reflective of current reality and capable of dealing with current difficulties.

Source: https://timesofindia.indiatimes.com/india/asem-summit-vice-president-naidu-calls-for-reforms-in-un-security-council/articleshow/87914324.cms?utm_source=twitter.com&utm_medium=social&utm_campaign=TOIDesktop

4. With the violent protests in Solomon Islands capital Honiara, the UN Secretary-General Antonio Guterres has called for an end to the violence and the protection of hard-won peacebuilding gains, his deputy spokesman, Farhan Haq, said.

Source: <https://www.siasat.com/un-chief-follows-unrest-in-solomon-islands-with-concern-2231911/>

5. Almost 40 vehicles carrying humanitarian aid, including food, left Semera, the Afar city, for Tigray — the first convoy since October 18. Meanwhile, in Semera, vehicles carrying fuel and medical supplies are still awaiting approval. At a weekly news briefing, Farhan Haq informed media that 500 trucks of humanitarian supplies are needed.

Source: <https://news.un.org/en/story/2021/11/1106522>

