

DAILY TRACKER

NUCLEAR ISSUES

1. The creation of the Rolls-Royce Small Modular Reactor (SMR) business was announced following a £195m cash injection from private firms and a £210m grant from the government. It is hoped the new company could create up to 40,000 jobs by 2050. However, critics say the focus should be on renewable power, not nuclear. Currently, about 21% of UK electricity generation comes from nuclear power. Small modular reactors are nuclear fission reactors but are smaller than conventional ones.

Source: <https://www.bbc.com/news/business-59212983>

2. Nuclear fusion always appears just a few decades away from commercial viability. Refining the atomic reaction to generate more energy has foiled scientists for generations. Fusion, which occurs when two positively-charged nuclei merge, takes an immense amount of energy to produce in reactors, but only returns a fraction of that energy to create electricity.

Source: <https://qz.com/2086122/nuclear-fusion-startups-get-billions-in-funding-but-cop26-not-sold/>

3. Bill Gates' nuclear energy firm TerraPower and power company PacifiCorp — owned by Warren Buffett's holding company Berkshire Hathaway — teamed up in September 2020 to launch the Natrium project. It's about a small modular reactor they say will be commercially viable by 2030. Many countries are weighing smaller, so-called modular, nuclear reactors as a way of backing up low emission energy production during the transition from fossil fuel dependence to one based on renewable energy sources. The reactor - to be built by Bechtel - will be in Wyoming, the United States' top coal-producing state, Gates said. "We think Natrium will be a game-changer for the energy industry," he said.

Source: <https://frontline.thehindu.com/dispatches/scientists-pour-cold-water-on-bill-gates-nuclear-plans/article37395354.ece>

4. The European Union will likely face investor backlash if it includes natural gas and nuclear energy in its green rulebook, known as the EU taxonomy. The United Nations-convened Net-Zero Asset Owner Alliance, which is part of the wider finance industry's \$130 trillion climate agreement announced last week, wrote in a document that hasn't been finalized that it would oppose such a decision. Instead, fossil fuels should go into an extension or separate piece of legislation for transition technologies, the group said.

Source: <https://www.bloomberg.com/news/articles/2021-11-08/net-zero-alliance-plans-to-reject-gas-nuclear-as-green-assets>

5. This year, 11 March, marked ten years since the Fukushima-Daiichi nuclear power plant accident. In the ensuing days, weeks and months following the accident, the IAEA, alongside the nuclear community, sought to help the Japanese authorities manage the response and to ensure the safety of nuclear facilities globally. Now a decade later, the nuclear community is gathering to look back on lessons learned and actions taken, as well as to identify ways to further strengthen nuclear safety.

Source: <https://www.iaea.org/newscenter/news/10-years-after-fukushima-daiichi-international-conference-on-lessons-learned-begins-in-vienna>

6. At the COP26 meeting in Glasgow this week, India hinted that it would be able to meet its climate commitments better if it was allowed membership of the Nuclear Suppliers Group (NSG). It was a clever diplomatic ploy, and unlikely to succeed. India's nuclear challenges go beyond the climate crisis. India is at present a member of three of the four global non-proliferation regimes — Wassenaar Arrangement, Missile Technology Control Regime (MTCR) and Australia Group. The fourth one, the Nuclear Suppliers Group (NSG), however, continues to elude India, largely because of one country, China, whose opposition is couched in non-proliferation language.

Source: <https://timesofindia.indiatimes.com/blogs/globespottng/india-needs-to-take-a-harder-look-at-its-nuclear-liability-law/>

7. France's nuclear industry is prepared to construct additional third-generation EPR nuclear reactors within agreed costs and timelines should the government decide to do so, an official of state-owned utility EDF said on Monday. "The nuclear industry is transforming and will stand ready," Alain Tranzer, a senior engineer in charge of the EDF's nuclear quality management. Tranzer spoke to journalists as French President Emmanuel Macron is expected to announce the construction of up to six new pressurized-water reactors within the coming weeks.

Source: <https://english.alarabiya.net/News/world/2021/11/08/France-s-nuclear-sector-prepared-to-build-new-EPR-reactors-Official>

8. California should extend the life of the Diablo Canyon nuclear power plant to meet state climate goals, a report by academics and a consulting company said on Monday.

Source: <https://energy.economictimes.indiatimes.com/news/renewable/saving-nuclear-plant-could-help-california-hit-climate-goals-report/87600417>

9. It is absolutely true that nuclear power is cleaner than all fossil fuels. There is virtually no carbon footprint. But why are we discussing nuclear power to save the environment and thus the planet? It sounds great, but there is a huge problem: We have had more than 80 years to solve the problem of disposing of nuclear waste and have yet to find the solution. Sure, they are working on it right up the road in Hanford. That said, I do not believe moving from fossil fuels to dangerous nuclear power with no current method in place to dispose of radioactive trash is a good use of our technology.

Source: <https://www.seattletimes.com/opinion/letters-to-the-editor/fossil-fuel-alternatives-say-no-to-nuclear/>

10. Nearly five months after hardliner Ebrahim Raisi was elected president of Iran, the Islamic republic and western powers have finally agreed on a date on which to resume stalled talks in Vienna about reviving the nuclear deal. But days after last week's announcement of the November 29 talks, Iranian officials voiced serious doubts that negotiations with representatives from the UK, France, Germany, Russia and China over a deal that US president Donald Trump abandoned in 2018 would deliver much.

Source: <https://www.ft.com/content/5b47fbd4-3eb9-4076-9ef1-f1252da24e3c>

NUCLEAR PROLIFERATION

1. Cmde Arun Kumar, who played an important part in the growth of the submarine arm as the Principal Director of Submarine Acquisition steered the 30 year submarine building Plan at Naval Headquarters in his last appointment.

Source: <https://www.financialexpress.com/defence/nuclear-powered-submarine-for-the-strength-th-at-it-represents-is-an-essential-ingredient-of-navys-structure-former-submariner/2365746/>

2. Germany's acting environment and nuclear safety minister, Svenja Schulze, reiterated her opposition to nuclear power's inclusion in the EU's green finance taxonomy, saying the upcoming government coalition refuses being placed in front of a fait accompli. The European Commission is expected to table in the coming weeks a new set of implementing rules – or delegated act in EU jargon – that will clarify the status of nuclear and gas under the EU's green finance taxonomy. But according to Schulze, the future German government parties are becoming increasingly irritated by the move as

they are still stuck in negotiations over the formation of a “traffic light” coalition between the social democrat party (SPD), the Greens and the Liberals (FDP).

Source: <https://www.euractiv.com/section/energy-environment/news/germanys-schulze-reiterates-opposition-to-nuclear-in-eu-green-finance-rules>

3. IT should be a potentially life-saving event when big and small nations could meet in Glasgow to try to stall the march to mass extinction, by intervening against the senseless abuse of nature and the climate crisis thus incurred. There is a joined-at-the-hip twin of the evil extinction threatening us with a more abrupt end. The threat of mass annihilation with nuclear weapons has been seldom discussed by powers that own them and also threaten to use them.

Source: <https://www.dawn.com/news/1656916>

4. Arms control has become *passé*. Russian and U.S. leaders have cast aside treaties as inconvenient to their pursuit of freedom of action. Republican presidents produced great arms control achievements. At present, most Republican senators and aspirants for higher office denigrate arms control and treaty-making as a failed, unnecessary, and unwise pursuit. Arms control provided necessary guardrails in the past. Now, dangerous military practices are on the rise, especially in Ukraine and across the Taiwan Strait. U.S.-Chinese relations are trending toward crisis. Four nuclear-armed states in Asia — China, Pakistan, India, and North Korea — are increasing their nuclear arsenals. Every nuclear-armed competitor is relying increasingly on deterrence as the diplomacy of arms control is in the doldrums. If unaltered, these trend lines point toward tragedy.

Source: <https://warontherocks.com/2021/11/how-to-avoid-nuclear-war/>

5. Top House Republicans are calling on the Biden administration to provide the questions and answers to a survey in which U.S. allies reportedly expressed grave concerns about a potential policy shift limiting the conditions under which the U.S. might use nuclear weapons. Why it matters: The Biden administration is conducting a major nuclear posture review. It will have implications for both allies and strategic competitors like Russia and China, which are modernizing and expanding their nuclear arsenals. The big picture: The review, expected to conclude some time next year, will determine whether the U.S. will adopt President Biden's campaign position, which stated the "sole purpose" of the U.S. nuclear arsenal should be to deter or retaliate against a nuclear attack.

Source: <https://www.axios.com/biden-nuclear-posture-review-allies-first-use-452b6658-54e4-4b7b-bfd1-0192a6b1df43.html>

MISSILES/BIO WEAPONS

1. The word Qader translates to "able," Nasr to "success", and Qadir to "capable". The Qadir cruise missile is able to hit mobile and motionless targets 300 kilometers away. "The operation to destroy surface and subsurface vessels of the (mock) enemy was conducted by using Iranian-made Qader and Nasr cruise missiles," the drill spokesman Rear Admiral Mahmoud Mousavi stated. The coast-to-sea Qader missile, which was fired by the Navy at southeastern Makran coasts, hit the target at a distance of 200 kilometers, Mousavi explained. The Nasr cruise missile was also launched by a missile firing destroyer, he added. Mousavi went on to say the Army has abundant and different kinds of marine cruise missiles.

Source: <https://www.tehrantimes.com/news/466836/Iran-fires-300-km-range-missile-at-mock-enemy-target-in-sea>

2. In August, Russia officially marked the beginning of construction on two additional Borei-A-class submarines, with President Vladimir Putin attending their keel-laying ceremony via video. The boats, Knyaz Potemkin and Dmitry Donskoy, bring the total number of Borei-class nuclear-powered ballistic-missile submarines, designated SSBNs, under construction to five.

Source: <https://www.businessinsider.in/international/news/russia-is-building-2-more-ballistic-missile-sub-the-latest-in-a-long-line-of-boomers-that-worry-its-rivals/articleshow/87574697.cms>

3. The United States is developing a powerful laser weapon capable of blasting missiles and drones after China's latest "nuclear-capable hypersonic missile" test. Last month, Boeing and General Atomics Electromagnetics Systems (GA-DMS) was awarded a US Army contract to develop a 300kW-class solid-state "Distributed Gain High Energy Laser Weapon System."

Source: <https://zeenews.india.com/world/after-china-tests-hypersonic-missile-us-to-develop-powerful-laser-weapon-2408638.html>

4. A test-launch program of Russia's latest Sarmat intercontinental ballistic missiles (ICBM) has been re-adjusted and only one launch will take place this year instead of the previously planned two launches, a source in the country's military and industrial sector told TASS on Tuesday. "One launch is scheduled for this year in December with the frames of the flight tests," the source said. "Five launches are scheduled for 2022 with the frames of the flight tests."

Source: <https://tass.com/defense/1358929>

5. The Chinese PLA has launched precision strikes at “target ships” with DF-21D missiles making them completely useless. These anti-ship ballistic missiles (ASBMs) in China’s inventory can cover most of the Western Pacific, where US carriers are frequently stationed. However, this does not imply that aircraft carriers are obsolete; they continue to play a crucial role in the battlefield, which is why China is developing its third aircraft carrier for its own Navy.

Source: <https://eurasianimes.com/china-sinking-us-ford-class-aircraft-carrier-with-df-21d-missile/>

6. Israel has used it to intercept thousands of Palestinian rockets and mortars. Now the Iron Dome missile-defense system is being tested in Guam by U.S. military planners concerned about possible Chinese attacks.

Source: <https://www.wsj.com/articles/u-s-tests-israels-iron-dome-in-guam-as-defense-against-chinese-cruise-missiles-11636455224>

7. Turkey announced the test firing of its indigenously developed Siper air defense missile system on Saturday. The Siper is part of Turkey’s “long-range and multi-layered national air defense system” being developed to protect “strategic facilities” and is planned for induction in 2023. *TRT World* cited the head of Turkey’s Presidency of Defence Industries, Ismail Demir, as saying that the country will have “up to six different multi-layered air defense systems in a few years.”

Source: <https://www.thedefensepost.com/2021/11/09/turkey-test-fires-air-defense-system/>

UN Reforms

1. The success of multilateralism principally depends on the success of the General Assembly as the world is facing challenges related to sustainable development, security, migration, health and climate change, Minister in India's Permanent Mission to the UN Deepak Misra in a statement issued by General Assembly of the United Nations (UNGA) said on Monday. "The efficacy, relevance and durability of any institution lie in its dynamic character and its willingness to adapt itself to the changing times so that it does not only uphold the time-tested values but also addresses the emerging challenges of the day. The challenges confronting the world related to sustainable development, security, migration, health, climate change, etc cannot be addressed in isolation."

Source: <https://www.indiatvnews.com/news/india/india-at-unga-success-of-multilateralism-depend-s-general-assembly-success-744216>

2. The U.N. humanitarian chief urged Myanmar's military leaders on Monday to provide unimpeded access to the more than 3 million people in need of life-saving humanitarian assistance since government forces seized power on Feb. 1 "because of growing conflict and insecurity, COVID-19 and a failing economy." Martin Griffiths warned that without an end to violence and a peaceful resolution of Myanmar's crisis, "this number will only rise."

Source: <https://www.newindianexpress.com/world/2021/nov/09/over-3-million-in-myanmar-need-life-saving-humanitarian-aid-un-2381363.html>

3. The United Nations Undersecretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Martin Griffiths on Monday, 8 November raised serious concern over the worsening condition of the citizens in Myanmar, leading towards humanitarian catastrophe. Griffiths said the growing violence, instability, COVID-19 pandemic and collapsing economy have pushed nearly three million Burmese to edge as they require life-saving humanitarian relief to survive in Myanmar. In a statement the chief of the humanitarian affairs said, "The humanitarian situation in Myanmar is deteriorating" and this figure will only climb until the violence is stopped and Myanmar's conflict is resolved peacefully, as per a UN report.

Source: <https://www.republicworld.com/world-news/rest-of-the-world-news/un-raises-concern-over-surge-in-myanmar-violence-says-3-mn-burmese-need-life-saving-aid.html>

4. The head of the U.N. body investigating the most serious crimes in Myanmar said Friday that preliminary evidence collected since the military seized power on February 1 shows a widespread and systematic attack on civilians “amounting to crimes against humanity.” Nicholas Koumjian told U.N. reporters that the Independent Investigative Mechanism for Myanmar, which he heads, has received over 200,000 communications since the army takeover and has collected over 1.5 million items of evidence that are being analyzed “so that one day those most responsible for the serious international crimes in Myanmar will be brought to account.”

Source: <https://thediplomat.com/2021/11/un-investigator-crimes-against-humanity-under-myanmar-junta/>

5. Maharashtra Environment Minister Aaditya Thackeray on Tuesday announced the state's entry to the United Nations Race to Resilience campaign. Last year, the state government had incurred losses worth \$2 billion paid as compensation for those impacted by extreme weather events. "As India's most industrialised state, Maharashtra is a crucial voice in building climate resilience in the Global South. By joining the Race to Resilience, Maharashtra aims to be a leading example for regional governments, inspiring climate action and sustainable development," Thackeray told the media at the 26th Conference of Parties to the UN Framework Convention on Climate Change (COP26) in this Scottish city.

Source: <https://www.freepressjournal.in/india/cop26-maharashtra-environment-minister-aaditya-thackeray-announces-states-entry-to-uns-race-to-resilience-campaign>

6. The UN Security Council on Monday strongly condemned an assassination bid on Iraqi Prime Minister Mustafa al-Kadhimi and called on the perpetrators to be held accountable. In a press statement, the 15 members of the Security Council “condemned in the strongest terms” the weekend attack.

Source: <https://english.alarabiya.net/News/middle-east/2021/11/08/UN-Security-Council-condemns-attack-on-Iraq-PM-urges-accountability>

7. The U.N. humanitarian chief urged Myanmar's military leaders on Monday to provide unimpeded access to the more than 3 million people in need of life-saving humanitarian assistance since government forces seized power on Feb. 1 "because of growing conflict and insecurity, COVID-19 and a failing economy."

Source: <https://apnews.com/article/myanmar-united-nations-aung-san-suu-kyi-humanitarian-assistance-a825c7ba9972e20e27c9bc5a3bead5d2>

8. State environment minister Aaditya Thackeray, in an interview to COP TV (an arm of COP 26), announced that Maharashtra has joined the United Nations (UN)-backed 'Race to Resilience' campaign, which aims to facilitate sub-national governments globally in developing climate-resilient infrastructures to protect those who are most vulnerable to the impacts of climate change. It is a sister concern of the 'Race to Zero' campaign, which facilitates sub-national governments to reach 'net zero', or carbon neutrality.

Source: <https://www.hindustantimes.com/cities/mumbai-news/maharashtra-joins-un-backed-race-to-resilience-climate-campaign-101636464187437.html>

9. Police investigating allegations that Portuguese troops stationed with a UN peacekeeping force in the Central African Republic used military planes to smuggle diamonds, drugs and gold back into Europe have executed 100 search warrants and raided scores of addresses across Portugal. Monday's operation, which involved 320 officers from the country's judicial police, came almost two years after a commander was tipped off about the alleged smuggling network. The military has also stepped up checks and inspections of military flights from CAR.

Source: <https://www.theguardian.com/world/2021/nov/08/portuguese-un-soldiers-investigated-anti-smuggling-operation>