

# NUCLEAR MONITOR

April 24, 2026 | Issue #937

A PUBLICATION OF WORLD INFORMATION SERVICE ON ENERGY (WISE)  
AND THE NUCLEAR INFORMATION & RESOURCE SERVICE (NIRS)

## WISE/NIRS

### Nuclear Monitor

The World Information Service on Energy (WISE) was founded in 1978 and is based in the Netherlands.

The Nuclear Information & Resource Service (NIRS) was founded in the same year and is based in the U.S. WISE and NIRS joined forces in the year 2000 to produce Nuclear Monitor.

Nuclear Monitor is published in English, 10 times a year, in electronic (PDF) format only. Back issues are published on the WISE website two months after being sent to subscribers ([www.wiseinternational.org/nuclear-monitor](http://www.wiseinternational.org/nuclear-monitor)).

#### SUBSCRIPTIONS

10 issues

NGOs / individuals 67,50 Euros

Institutions / Industry 235 Euros

US and Canada: Contact NIRS for details ([nirs@nirs.org](mailto:nirs@nirs.org))

All other countries: Subscribe via the WISE website

[www.wiseinternational.org](http://www.wiseinternational.org)

ISSN: 2542-5439

#### CONTACTS

WISE

[info@wiseinternational.org](mailto:info@wiseinternational.org)

[www.wiseinternational.org](http://www.wiseinternational.org)

NIRS

[nirs@nirs.org](mailto:nirs@nirs.org)

[www.nirs.org](http://www.nirs.org)

Nuclear Monitor

[monitor@wiseinternational.org](mailto:monitor@wiseinternational.org)

[www.wiseinternational.org/nuclear-monitor](http://www.wiseinternational.org/nuclear-monitor)

### Monitored this issue:

<b>Why Hiroshima rhymes with Fukushima</b> Marc Alexander	2
<b>Nuclear power plants related to 115,000 cancer deaths in USA</b> Jan van Evert, reporter WISE-Netherlands	10
<b>Taiwan's Nuclear Phase-out: (Almost) one year on</b> Chia-wei Chao, Yang Wei, and Benjamin Yang (Taiwan Climate Action Network)	11
<b>Evaluating SMRs in Canada</b> Susan O'Donnell and M. V. Ramana	16
<b>CNIC Statement: The geological disposal of high-level radioactive waste on Minamitorishima-island is fraught with difficult issues</b> Citizens' Nuclear Information Center	18
<b>Protests against nuclear transports in Germany</b> Jan van Evert, reporter WISE-Netherlands	20
<b>Chernobyl: 40 Years After the Disaster</b> Erik Plakman	21
<b>Nuclear News</b>	24
• World Nuclear Power Status	
• Pope Leo upholds Vatican opposition to nuclear weapons despite Trump's 'weak' critique	

# Why Hiroshima rhymes with Fukushima

Marc Alexander

## 0. Introduction

At date of publication of this article, we live between four important anniversaries, characterizing the atomic age. Two are “civilian” nuclear events, two other ones clearly military. We’re talking about 11/3 (Fukushima disaster), 26/4 (Chernobyl disaster), 6/8 (Hiroshima uranium atomic bombing) and 9/8 (Nagasaki plutonium atomic bombing). All four nuclear events have a common ground: they are the result of war-technology, first solely applied on atomic bombs in wartime, afterwards on the siamese twins nuclear power stations and atomic bombs in “peaceful” cold-war times.

During a long time, nuclear propagandists pretended that the “peaceful application of nuclear power” could be strictly separated from its siamese twin-partner of nuclear arms. This was the base of the NPT (Non Proliferation Treaty), stipulating that members, other than the unjustly privileged five nuclear armed powers (US, USSR, UK, France and China), would not produce or station nuclear arms, while having the fullest right to develop so called “peaceful” nuclear power energy.<sup>1</sup> This myth was maintained, even when the NPT did not prevent six other countries to become nuclear armed states (Israël, India, Pakistan, Northern Korea, as well as South Africa and Ukraine, which both later ended their nuclear weapon programmes), with a whole series of nations having more or less explicit nuclear arms ambitions.

---

1 NPT, <https://treaties.unoda.org/t/npt>

2 <https://www.elysee.fr/front/pdf/elysee-module-16825-fr.pdf>, p. 4

But times have changed. The denial of the intrinsic link between nuclear power and nuclear arms has been changing in propaganda for the real siamese twins of “energy and national safety”. Nuclear energy would provide so called clean and green energy, simultaneously with national military nuclear deterrent weapons and propulsion of submarines and aircraft carriers. It was president Macron who led this dance when he visited the Le Creusot factories in 2020, stating that there is “no military nuclear without civilian nuclear, and no civilian nuclear without military nuclear”.<sup>2</sup> Others followed suit, with both Anglo-Saxon regimes on either side of the Atlantic declaring and defending openly this two headed nuclear monster of Loch Ness, with the actual names of Trump and Starmer.<sup>3</sup>

## 1. Nuclear power, a relatively late spin-off of the atomic bomb and simultaneously source of more atomic bombs

Myths serve to preserve and extend in time privileges and power of aggressive lobby’s, even when the content of the myths change by time. But facts are what they are. The history and chronology of facts prove that there is and always has been a continuity between the production of the Tall Boy or Fat Man atomic bombs for Hiroshima and Nagasaki respectively, and the installation of “civilian” Nuclear Power Plants (NPP’s). The first uranium and plutonium producing facilities were military. The US developed a

3 <https://jonathonporritt.com/uk-nuclear-policy-risks/>

vast military atomic bomb producing infrastructure. There was no interest in the heat produced during this process. It was simply washed away in its plutonium production site at Hanford – as it was fanned away in the plutonium and tritium UK-production facility in Windscale.

The very first NPP was a (Russian) micro-reactor of 5 MWe in 1954, nearly fifteen years after the start of the US-Manhattan project <sup>4</sup>, and around a decade after the start of the USSR military nuclear program. It took still one more decade before the worldwide annual installation of NPP's exceeded 1 GW in 1964, more than two decades after the research start for the development of US atomic bombs.<sup>5</sup>

The first nuclear power stations were built accompanied by extensive propaganda for the “peaceful application of nuclear energy”. The Queen of Great Britain declared that the start of the first UK NPP in Calder Hall in 1956 would help to master this terrible nuclear power for peaceful means, with electricity production “too cheap to meter”.<sup>6</sup> Only years after this propaganda-speech, it was acknowledged that Calder Hall was primarily built to produce plutonium for the atomic bomb program.<sup>7</sup> Electricity production was in this case a mere and extremely expensive alibi. The same fate befell the first “larger”

---

4 <https://www.iaea.org/publications/15943/nuclear-power-reactors-in-the-world>, pdf, p. 19

[https://nl.wikipedia.org/wiki/Kerncentrale\\_Obninsk](https://nl.wikipedia.org/wiki/Kerncentrale_Obninsk)

5 <https://www.iaea.org/publications/15943/nuclear-power-reactors-in-the-world>, pdf, p. 19

6

<https://www.modernpowersystems.com/news/rip-calder-hall/>

7

<https://www.theguardian.com/uk/2003/mar/21/nuclear.world>

French NPP's 2 and 3 in Marcoule.<sup>8</sup> Nowadays we would call these reactors SMR's. Indeed, with 43 MWe, the size of these NPP's fell well below the SMR-limit of 300 MWe.

## 2. Every type of nuclear bomb is linked to specific nuclear power production

There are different types of nuclear reactors. Most of them – about 85 % in total of 412 worldwide reactors – are PWR (Pressurized Water Reactor, accounting for around 75 % of total number of reactors) or BWR (Boiling Water Reactor, a bit more than 10 % of total number of reactors).<sup>9</sup> All of them have different links to the military siamese twin-partner. The PWR was originally developed for submarine propulsion.<sup>10</sup> Later a “civilian” concept was developed. It became the most built type of reactor worldwide.

These reactors and their chain deliver both the same materials used in the Hiroshima and Nagasaki atomic bombs. The Hiroshima bomb was a gun-type fissionable **uranium-235 atomic bomb** with subcritical uranium-235. A preliminary conventional explosion within the atomic bomb shoots a highly enriched but subcritical uranium “bullet” with extreme force into another subcritical highly enriched uranium-235 part. This creates a supercritical situation, in which a super-quick nuclear chain reaction creates the atomic explosion.

8 Alexander Glaser, Military Fissile Material Production and Stocks in France, Department of Mechanical and Aerospace Engineering, Princeton University Engineering Quadrangle, Olden Street, Princeton, NJ 08544, pdf, p.4

9

<https://pris.iaea.org/pris/worldstatistics/operationalreactorsbytype.aspx>

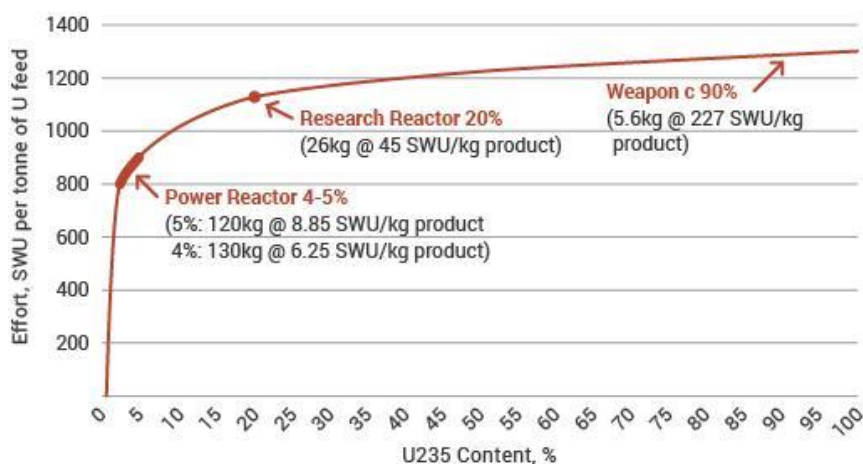
10

[https://en.wikipedia.org/wiki/Pressurized\\_water\\_reactor](https://en.wikipedia.org/wiki/Pressurized_water_reactor)

This uranium-235 is exactly the same material used in both PWR and BWR reactors. Nowadays, civilian uranium enrichment facilities produce exactly the same uranium-235 in lower concentrations (usually to 3-5% uranium-235), making it suitable for nuclear power plants. This concentration of uranium-235 is called LEU, Low Enriched Uranium. But they can very quickly increase the concentration of this uranium-235 to levels suitable for atomic bombs. There is no technical limit for these plants to do so. It is only regulation in the NPT-framework – if applied – that leads to the production of lower concentrations. The enrichment is following an exponential logic. In the figure<sup>11</sup> below is indicated how much effort is needed to create different kinds of enriched uranium. We see that the effort-curve is decreasing and flattening for higher enriched uranium-235. This means that relatively more effort is required in the production phase of LEU (Low Enriched Uranium, up to 5%), compared to the production phase of HEU (High Enriched Uranium, 20% or more).

URENCO (Uranium ENrichment Company), with four plants in Europe (Gronau in Germany, Almelo in the Netherlands, Capenhurst in the UK) and the USA (Eunice), produces enriched uranium. Controversy exists about eventual future policies of the kind of enriched uranium that URENCO is going to produce. There is increasing pressure to produce concentrations higher than 3-5% needed for nuclear power stations. The production of concentrations between 5-20% uranium-235 (HALEU, High Assay Low Enriched Uranium) is needed for fuelling SMR's, both civilian and military. Of 58 concepts of SMR's listed in detail by NEA, more than half would use HALEU.<sup>12</sup> And it is known that uranium-235 concentrations higher than 20% (HEU, Highly Enriched Uranium) are needed or used for SMR's in nuclear propulsion military submarines or aircraft carriers. It is disturbing and frightening that regulation has made an opening for URENCO to concentrate uranium-235 to degrees higher than 20%.<sup>13</sup>

Uranium Enrichment and Uses



11 via NUCLEAR MONITOR, August 31, 2020 | Issue #889; <https://world-nuclear.org/information-library/nuclear-fuel-cycle/conversion-enrichment-and-fabrication/uranium-enrichment>

12 NEA, Nuclear Energy Agency (OECD), 2024, The NEA Small Modular Reactor Dashboard: Second Edition, NEA No. 7671

13 Urananreicherungsanlage Gronau und Zentrifugenforschung Jülich Gefährdung für Atomausstieg und Frieden, SOFA, Münster, März 2022, p. 27



What is even more scaring is that scientists concluded that a nuclear bomb could already be made from a 10%-uranium-235 concentration onwards.<sup>14</sup> Even when such a bomb would be very unpractical to be made – a lot more uranium is needed to make such a bomb – it is not impossible according to these USA-scientists. This makes every uranium enrichment facility, even the actual production of LEU and HALEU, a potential direct producer for atomic bombs material.

### 3. Plutonium at the core of atomic fission and thermonuclear fusion bombs

The same types of nuclear power stations (PWR, BWR, but also gas-cooled reactors like Magnox and AGR, as well as most SMR designs) don't only use atomic weapon-usable uranium-235 (when produced in higher concentrations in the uranium-enrichment facilities). Another element is created during the nuclear fission in their reactor cores. Natural uranium consists of 0,7 % uranium-235, and 99,3% uranium-238. The first is partially "consumed" during the fission process to unleash the heat needed for boiling water to high-pressure steam, needed for the production of electricity. But while the concentration of uranium-235 is decreasing, the concentration of plutonium-239 is rising. The neutron-bombardment that is splitting uranium-235, is also creating another element. Uranium-238 is not a fissile material. But it is a fertile element, that evolves to fissile plutonium-239 by absorbing one free neutron.

This plutonium-239 is usable for two types of atomic bombs. One type is the fissionable **plutonium-239 atomic bomb**, like the USA

used to bomb Nagasaki on 9 August 1945. Any country producing plutonium in its NPP's is able, if reprocessing is applied, to separate the plutonium-239, and use it for the production of Nagasaki-like atomic fission-bombs. Such bombs are more complicated than the uranium-bombs. They rely on a perfectly shaped subcritical plutonium-sphere, that needs to be compressed by a perfectly simultaneous conventional inner explosion around it. This implodes the plutonium-sphere, making it supercritical so that it explodes.

Another type is the thermonuclear fusion bomb, also called the **hydrogen fusion bomb**. This bomb is far more powerful than the uranium-235 or plutonium-239 fission atomic bombs. But it is also much more complicated to make. Such a bomb is simultaneously a "fission" (nuclear reactive) and fusion bomb, with a multi-phase explosion. A plutonium-239-explosion creates in a "first phase" a fast neutron bombardment, producing fusionable deuterium and tritium from lithium deuteride (LiD) inside the bomb. The present deuterium undergoes in a "second phase" fusion with the present tritium, which is creating the enormous heat and power of this type of bomb.

### 4. Does fusion and thorium create nuclear power with no or less proliferation risk?

This supercritical fusion process in a hydrogen fusion bomb, is related to the critical process of a fusion NPP, just like the supercritical fission atomic bombs are related to the critical processes in fission-based NPP's. Both fusion processes are based on the fusion of two isotopes of hydrogen, being deuterium and

---

14 Untitled declassified document ("Commissioner Action"), 14 February 1978, pdf, p. 7/8; Brown, A., Glaser, A., On the Origins and Significance of the

Limit Demarcating Low-Enriched Uranium from Highly Enriched Uranium, pdf, p. 4

tritium. Saying that there is no link, is denying declarations of US and UK officials, who confirm that successful testing with fusion processes is good for “national defence and the future of clean power”<sup>15</sup> – the same sentence they use for fission applications.

The same applies for another “hype”, the disinformation around thorium reactors. One of the arguments used by its propagandists is that thorium is not fissile, and thus can’t be used for nuclear bombs at all. When confronted with the argument that fertile thorium-232 evolves to the fissile uranium-233 (which doesn’t exist in nature) when it is bombarded with neutrons, the argument is that it is much more difficult to acquire this material. This is not fact-proof. The USA has tested a **uranium-233 fission bomb** on 15 April 1955, which exploded with a strength exceeding the Hiroshima-bomb power with around 50 %.<sup>16</sup> The US also has maintained a stockpile of around two tons of uranium-233.<sup>17</sup> They considered it as a highly usable fission-type atomic bomb, but preferred the further development of the already much more settled plutonium-chain. They didn’t see the necessity to develop parallel production chains of plutonium-239 and uranium-233. Also India has tested a thorium/uranium-233 bomb.

In 2012, Stephen Ashley and others pointed out<sup>18</sup> that thorium reactors produce pure protactinium-233, as in not polluted by other protactinium isotopes. This protactinium can be separated chemically and then decay into pure uranium-233, without pollution of uranium-232 from the thorium decay.

---

15 <https://www.power-technology.com/news/scientists-achieve-second-nuclear-fusion-breakthrough/?cf-view&cf-closed>

16 <https://nuclearweaponarchive.org/Usa/Tests/Teapot.html>

Thorium reactors can also be used to breed plutonium by mixing uranium-238 in the fuel feed.

## 5. Conventional weapons and weapon systems with radioactive waste

Beside nuclear or atomic explosion bombs, we see that decades long, different armies in the world have developed conventional weapons and weapon systems with radioactive material integrated into them. The USA seems to be the absolute champion in this respect. They have a great variety of ammunition strengthened with depleted or polluted uranium. One of the best known and efficient **weapon systems using depleted or polluted uranium** is the A-10 Warthog, also called “tank killer”. It is equipped with a fast firing canon using uranium-hardened ammunition, penetrating the armour of enemy armoured vehicles and tanks. This material results in the ammunition penetrating the armour, sharpening itself when doing so, and igniting at very high temperatures. This has as a consequence that eventual ammunition present in the enemy armoured vehicles or tanks explode, destroying them completely. When burning at very high temperatures, the uranium in the hardened ammunition doesn’t melt, but evaporates in very tiny particles, being blown away where the wind carries them, contaminating soldiers, civilians and the environment at large. This uranium is sourced from different civilian/military installations. Uranium enrichment facilities concentrate uranium-235, but concentrate at the same time the waste to even more pure uranium-238, from 99,3 up to 99,7%. Other facilities

17 <https://thebulletin.org/2014/05/thorium-the-wonder-fuel-that-wasnt/#post-heading>

18 <https://www.nature.com/articles/492031a> –

See also:

<https://thebulletin.org/2018/08/thorium-power-has-a-protactinium-problem/>

are reprocessing plants, who separate remaining uranium-235 and plutonium from spent nuclear fuel. While doing so, they create another type of waste. It is also a kind of uranium-238, but then polluted with transuranic elements, like plutonium-239 and americium-241.<sup>19</sup> That's why we name this polluted uranium, rather than depleted uranium.

nuclear facilities), where they can obtain nuclear materials and waste.

In the table below you can distinguish four different types of atomic fission or fusion bombs, completed with two conventional DU and dirty conventional ammunition and bombs – and how they are related to different types of actual and “new” types of nuclear power.

Table of types of atomic bombs and conventional weapons with nuclear material/waste

Name	Nuclear process	Raw material	Type explosion	Type NPP/chain
Uranium atomic bomb	Fission	Uranium-233 (from thorium-232)	Atomic explosion	Thorium reactors
	Fission	Uranium-235	Atomic explosion	Uranium-235 reactors
Plutonium atomic bomb	Fission	Plutonium-239 (from uranium-238)	Atomic explosion	Different reactors with uranium-238
Nuclear fusion (hydrogen) atomic bomb	Fusion	Deuterium, tritium (from lithium)	Atomic explosion	Fusion reactors
Dirty bomb	Radioactive material or waste	Radioactive material or waste	Conventional explosion	All reactors
Armour or ammunition with depleted/polluted uranium	Radioactive material or waste	Depleted or polluted uranium	Conventional impact or ignition	Fission reactors, enrichment, reprocessing

Last but not least, nuclear power contains radioactive materials in every step of its chain. When terrorist groups succeed in obtaining nuclear material or waste, by theft, on the black market or by any other means, they could be able to make a **conventional dirty bomb**, integrating in it radioactive material. When this bomb explodes, it creates a terror effect, because of the invisibility of radioactive contamination. The longer the civilian or military nuclear chain, the more steps (including the many transports in between

## 6. Military grounds for the craze of SMR's and MMR's

The next myth that nuclear propagandists use, is that SMR's would solve nearly all problems, including proliferation problems. But exactly the opposite is true. SMR's worsen nearly all existing problems from traditional reactors. An important one is the characteristic that most need heavier fuels, and thus create also more hazardous waste. Both elements are source for even worse proliferation problems.

19

<https://www.who.int/publications/i/item/WHO-SDE-PHE-01.1>, hfst 1-3



Heavier fuels mean for example the broader use of HALEU. This means that the production of nuclear fuel itself is nearing weapon-usable grades of this kind of concentrated uranium, since there is, as shown above, already risk for weapon-usability with 10% concentrated uranium-235. The same applies for waste. An American study, published in PNAS, concludes that three different types of SMR's (Nuscale-iPWR, Toshiba-SFR, Terrestrial Energy-IMSR) create 5 to 35 times more waste per KWh, compared to their plus 1 GW-“big brothers”.<sup>20</sup> More waste means also more potential proliferation risk, because the content of the waste changes a lot compared to actual reactors. There will also be more depleted uranium, because more uranium ore is needed to obtain higher enriched uranium-235.

Why then do some advertise SMR's as part of the future? They are not alone, but they are numerous and very powerful: military lobbyists. They work hard to extend the use of SMR's and MMR's (Micro Modular Reactors, reactors up to 20 MWe) for military use. When a parallel civilian SMR-sector is developed, then science on SMR's increases and some costs can be passed on to the civilian sector (see further). And the ambitions go far. Not only are around 200 SMR's already active in different navies, most of all in the US Navy. But programmes want to expand SMR's for the propulsion of nuclear powered aircraft carriers and submarines in quantity and quality. The AUKUS program is one example of expanding nuclear fleets, even in countries

---

20 <https://www.pnas.org/doi/pdf/10.1073/pnas.2111833119>

21 [https://www.mo.be/analyse/wereldmachten-spielen-zeeslag-indische-en-stille-oceaan?utm\\_campaign=emo&utm\\_medium=newletter&utm\\_source=email](https://www.mo.be/analyse/wereldmachten-spielen-zeeslag-indische-en-stille-oceaan?utm_campaign=emo&utm_medium=newletter&utm_source=email)

that never had it before, like Australia.<sup>21</sup> But it is not limited to that. Military planners want new nuclear weapons and weapon-systems. One example is the Russian nuclear-powered and nuclear armed Poseidon torpedo.<sup>22</sup> Or the Russian nuclear powered (and armed?) Burevestnik Cruise missile with a nearly unlimited range.<sup>23</sup> The US dreams already for long of nuclear powered and nuclear armed strategic bombers, giving them a near unlimited range as well. Also other fixed or mobile SMR's and MMR's are developed for military use. It is no coincidence that from the 58 detail concepts mentioned in the NEA study, 20 are US American<sup>24</sup>

## **7. Ordinary people pay a heavy toll for increased corporate profits**

Some will profit heavily from these evolutions, like oil and gas companies, the nuclear branch, the military-industrial-financial-political complex. And others will suffer enormously from these evolutions. It will cost people much more when these evolutions are not stopped and reversed. First of all are the rising costs, in a context where life conditions for ordinary people are already painfully challenging. Energy prices go up directly and indirectly, when nuclear energy is expanding its expensive production. But the siamese twins civilian and military nuclear increase these costs even more. A study from the University of Sussex concludes that passed on costs from military nuclear, especially the nuclear submarine fleet, on civilian nuclear energy production, together with missed

22 <https://nautique.nl/artikel/668537/rusland-presenteert-geheime-onderzeeer-die-een-tsunami-kan-veroorzaken>

23 <https://businessam.be/rusland-test-nucleaire-kruisraket-burevestnik/>

24 NEA, Nuclear Energy Agency (OECD), 2024, The NEA Small Modular Reactor Dashboard: Second Edition, NEA No. 7671

lower renewable energy prices, cost the UK-electricity consumers around 5 billion £ every year.<sup>25</sup>

There is even worse. Climate policies undermined and neglected by expanding nuclear will worsen living conditions most for those who have the least responsibility for climate warming. The nuclear dangers for public health because of permitted nuclear emissions, (extreme) nuclear accidents and possibly terrorist and military attacks on vulnerable nuclear installations, all threaten life conditions, health and even life itself. The last applies even more for war, especially nuclear war, a possibility that can not be excluded. Particularly not with the actual European war-mongery-policies in place of peace building and diplomacy. It is definitely not the rich and powerful that will go to war. While they incite ordinary people to go to war, they are privately building wealthy shelters with plenty supplies.<sup>26</sup> At the end, blood of ordinary people will be shed for private interests of the few.

### **8. Abusing the climate degeneration and undermining climate policies**

One of the most cynical things is that nuclear dares to present itself as a solution for the climate degeneration. Together with other lobbies like the fossil and agrochemical lobby, they rely on a dangerous myth concerning climate degeneration: we should reach so called "climate neutrality". Nuclear can contribute to that, they argue. Nuclear is a so called carbon-poor energy form, and can thus help reach the illusion of climate neutrality.

---

25

<https://www.worldnuclearreport.org/IMG/pdf/wnr2024-v2.pdf>, p. 333-336

26

[https://www.bbc.com/news/articles/cly17834524\\_o](https://www.bbc.com/news/articles/cly17834524_o)

But this "goal" is not what IPCC is presenting as necessary policy. They motivate with ample arguments that we need a policy of *net capture and utilisation or storage of greenhouse gases*. In the last report AR6, IPCC indicates that in order to realise or to return to a maximum 1,5°C warming, we must capture and use around (or even more) than 300 billion tons of atmospheric and oceanic CO<sub>2</sub> before 2100.<sup>27</sup> This is what neither fossil gas even with CCS, nor nuclear can do. Only a good mix of renewables and accompanying measures like energy-efficiency and -sufficiency, storage, demand side management and interconnection can realise this.

Furthermore, nuclear is highly incompatible with flexible renewables. If we need complementary energy to variable renewables, it has to be a highly flexible complementary energy as well, easily to switch off and on, without the dangers that such policies would lead to dangerous nuclear wear-off when heating-cooling-heating nuclear installations could endanger fatal flaws in the installations. In reality, nuclear tends to deliver baseload power, a concept that doesn't fit with renewable flexibility. On top of this, nuclear is so expensive and slow to realise, that less renewables can be paid for, and that we need a much longer period to use fossil gas as so called "transition fuel". It is not by chance that fossil gas enterprise Centrica has invested in UK-Sizewell C. When this development goes on, Centrica Gas is guaranteed to deliver much longer expensive and climate degenerating fossil gas.<sup>28</sup>

27

<https://www.ipcc.ch/report/ar6/wg1/figures/summary-for-policymakers/figure-spm-4;>  
[IPCC AR6 WGI SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/figures/summary-for-policymakers/figure-spm-4.pdf), p.13

28

<https://www.theguardian.com/environment/2025>

## 9. We need a strong anti-nuclear peace and climate movement

It is becoming ever clearer that both civilian and military nuclear are strongly intertwined. This leads to a series of devastating consequences. Socially just renewable and climate-positive energy policies are undermined, and replaced by more expensive and slower to realise nuclear energy, especially with the passed-on costs of military nuclear. The latter increases the costs further. The danger for either a climate apocalypse or nuclear armageddon, or a combination of

both increases when we do nothing and let it happen.

So we have a choice: we become fatalistic, discouraged or hopeless. Or we stand up and resist these evolutions. The numerous battles led for solidarity with Vietnam, Palestine or South Africa, or against the threat of nuclear war, have led to victories that should not be underestimated. Let's make links between all of us and other groups in resistance.

The successful result of the campaigns against the intermediate missiles in the eighties proves that it is possible.

# Nuclear power plants related to 115,000 cancer deaths in USA

Jan van Evert

A new study revealed that people living in counties near a nuclear power plant in the USA had higher cancer mortality rates. Over the eighteen year study period, the researchers estimate that approximately 115,000 cancer deaths nationwide were associated with living closer to nuclear power plants. Especially older people showed an increased risk of developing cancer. It is the first nationwide study of the 21<sup>st</sup> century to examine the link between proximity to every nuclear power plant and cancer mortality across all U.S. counties. The study was performed by the Harvard T.H.

Chan School of Public Health and published in Nature Communications on February 23<sup>rd</sup> 2026.

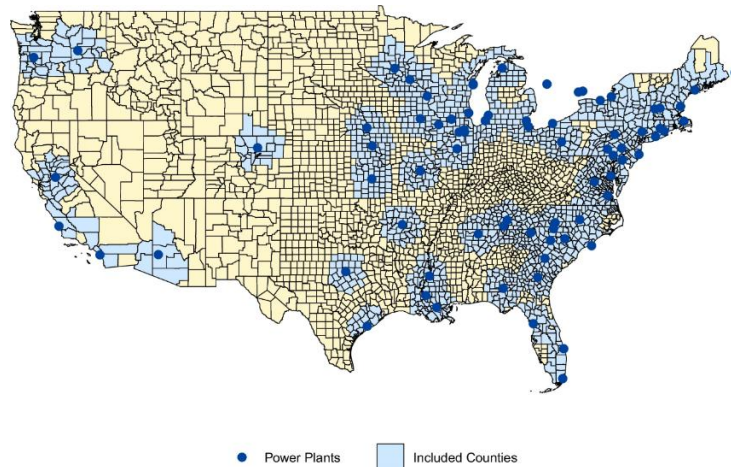
The team noted that the findings align with results from a previous study they conducted in Massachusetts, which found higher cancer incidence among people living closer to nuclear facilities. They found that 20,600 of all deaths caused by cancer (3.3 %) were related to living closer to nuclear power plants. The risk of developing cancer strongly decreased at a distance larger than thirty kilometres. The study used data from 1980 to 2018

---

[/nov/28/after-a-career-as-an-environment-writer-heres-what-i-have-learned;](https://www.centrica.com/media-nov/28/after-a-career-as-an-environment-writer-heres-what-i-have-learned)  
<https://www.centrica.com/media->

[centre/news/2025/completion-of-investment-in-sizewell-c/](https://www.centrica.com/news/2025/completion-of-investment-in-sizewell-c/)

Fig. 5: Geographic distribution of nuclear power plants in the United States and counties within 200 km of a plant operational for at least one year between 1980 and 2018.



Map illustrating the locations of all nuclear power plants (dark blue circles) and U.S. counties located within 200 km of any operational plant (light blue shaded areas) during the study period. County boundaries are outlined in black. *Source data are provided as a Source Data file.*

Full report: <https://www.nature.com/articles/s41467-026-69285-4>

## Taiwan's Nuclear Phase-out: (Almost) one year on

Chia-wei Chao, Yang Wei, and Benjamin Yang (Taiwan Climate Action Network)

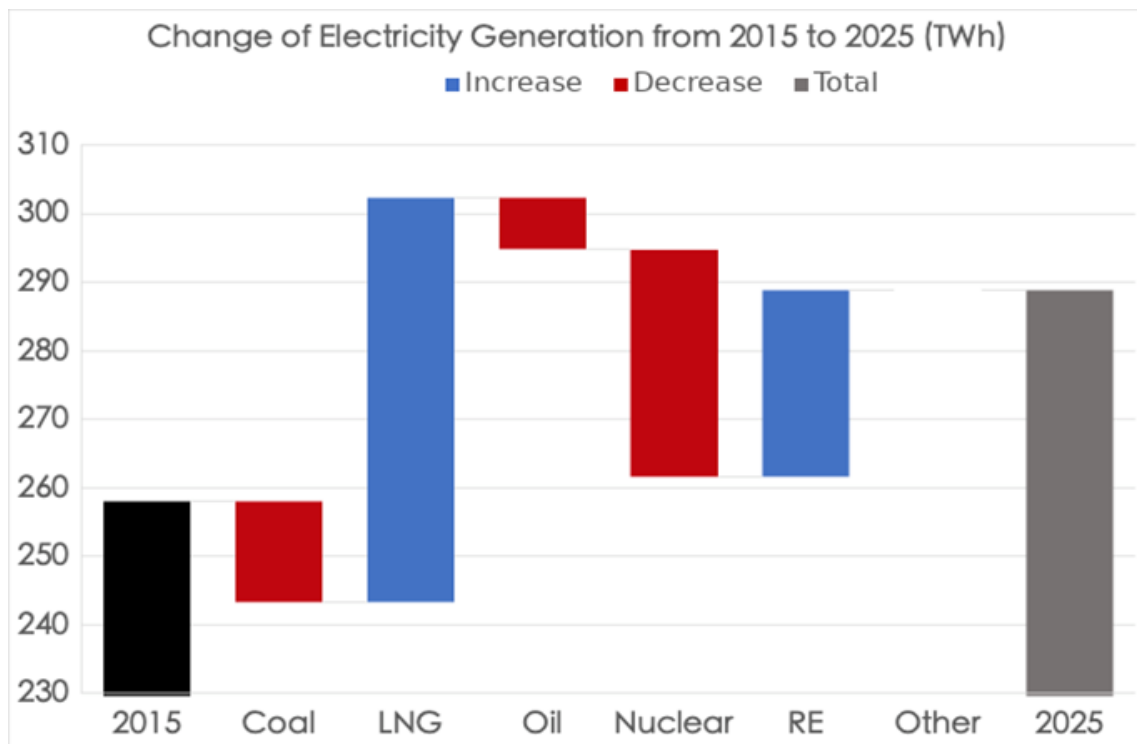
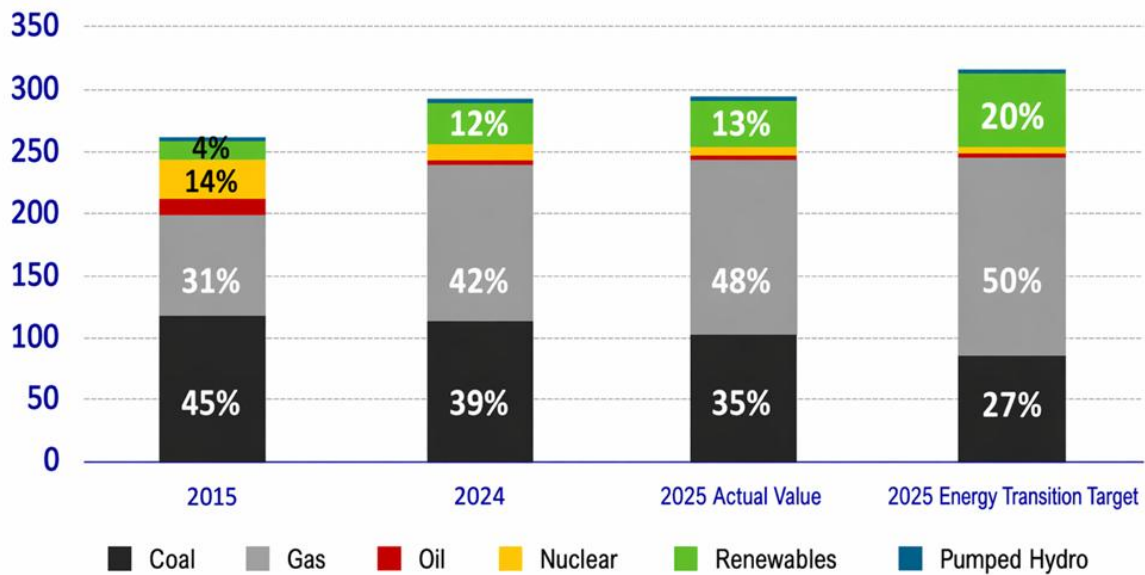
At precisely 10 p.m. on May 17 2025, Taiwan's last operational nuclear reactor, located at the Maanshan Nuclear Power Plant, was quietly taken offline. While there was no media spectacle or elaborate celebrations declaring triumph, this moment was undoubtedly a significant one. For a nation whose energy policy has been highly politically contentious for as long as, if not longer than, its democratisation, this marked a milestone in Taiwan's energy transition and what seemed like the definitive end of an era.

When Taiwan's ruling Democratic Progressive Party (DPP) initiated this energy transition in 2016 upon regaining power, the country's electricity generation was dominated by coal,

which accounted for 45% of total supply. Six nuclear reactors contributed around 14%, whereas wind and solar barely reached 1% combined in 2015.

Nine years later, under the government's planned phase-out where nuclear reactors were decommissioned as their 40-year operating licenses expired, nuclear's share dwindled to just 1.3% before the Maanshan shutdown. Coal's share also declined to 35%, as renewables, primarily solar and wind, saw a significant jump to around 13%. Liquefied natural gas (LNG) now plays a central role in electricity generation, accounting for roughly 48% in 2025.

## Change in Electricity Generation Mix (TWh)



Renewable power generation is now 3.6 times higher than in 2015, with its share of the electricity mix reaching 13%. Yet compared with the original targets of 20% and 61.7TWh, the achievement rate stands at only about 60%. The main reason is the lag in ground-mounted solar development, which has left the original 20GW solar target at just 15GW.

Had the original target for cutting coal use in the power system been met, Taiwan could have reduced national coal consumption by 34%. Instead, the reduction so far is only 20%. The growing reliance on natural gas to fill the power gap had little effect on costs before 2022, when gas prices were relatively low.

Since then, however, Russia's invasion of Ukraine and the crisis in the Strait of Hormuz have driven up gas costs, underlining the national security risks of this approach. It has also fuelled renewed questions over Taiwan's nuclear-free homeland policy.

This transition, while still incomplete, reflects a profound reimagining of the nation's energy landscape, with implications well beyond the energy system itself, on sovereignty, economic competitiveness, and resilience to both the climate crisis and geopolitical shocks.

It has not been a smooth one either. Since 2018, there have been a whopping total of six energy-related nationwide referendums. The sixth one, held in August 2025 on a proposal to restart the Maanshan nuclear power plant, was defeated as the votes in favour fell short of reaching the 5 million threshold.

As Taiwan's nuclear phase-out approaches its one-year anniversary, however, how much longer the country's energy system will remain nuclear-free remains a question as contentious and uncertain as ever.

### ***From Nuclear-free homeland to the Three Principles: Driving forces behind the Lai administration's nuclear restart plan***

Even well before the Maanshan referendum took place last August, public opinion on the government's nuclear phase-out, or what is more often dubbed "nuclear-free homeland" policy, had begun to turn.

Among the popular narratives favouring a return to nuclear, anxieties surrounding the need to power Taiwan's world-leading artificial intelligence (AI) and semiconductor industries, often referred to as the "sacred mountain" protecting the nation, are perhaps the most prominent. The European Union's framing of nuclear as a key contributor to

decarbonisation has had a spillover effect as well, as nuclear proponents posit it as a stabler means to combat the climate crisis compared to intermittent renewables and as an alternative to using LNG as a bridge fuel. Energy security challenges highlighted by the looming threat of a Chinese maritime blockade and the present Strait of Hormuz crisis, plus several bottlenecks in renewable energy development in recent years, have also prompted some DPP supporters to reconsider their historically anti-nuclear stance.

All these factors have translated into an apparent willingness among voters across party lines to accept nuclear power as an option in Taiwan's future energy mix, according to recent opinion polls.

In what has been the government's most emphatic declaration yet, President Lai Ching-te announced in March 2026 to a room of entrepreneurs that the state-owned utility, Taipower, is set to submit its plans for restarting the Maanshan and Kuosheng plants, the latter of which was decommissioned in 2023, to the Nuclear Safety Commission (NSC) for formal review, following the green light from the Ministry of Economic Affairs (MOEA). Lai cited rising electricity demand driven by AI and data centre developments, new decarbonisation requirements such as the European Union's Carbon Border Adjustment Mechanism (CBAM), and the ever-evolving geopolitical risks as factors informing this decision. He also emphasised that **any restart would hinge upon three principles: nuclear safety, solutions for nuclear waste management, and public consensus.**

What each of these three principles exactly entails, however, leaves room for interpretation: supporters of the restarts see them as hurdles to clear, while opponents take them as evidence of just how difficult and costly it is to reconsider nuclear.

Take **nuclear waste management** for instance, Taiwan has yet to find potential sites for final disposal repository facilities for either low-level or high-level radioactive waste, nor are there laws for siting a final disposal site for high-level waste. Opponents would contend that without such regulatory framework, let alone any clear pathway or timeline to siting a disposal repository, this condition will not be met; others have suggested that completing dry interim storage facilities that enable the spent fuel rods to be moved out of on-site cooling pools, which both the Maanshan and Kuosheng plants are in the process of doing, checks the box.

What constitutes **public consensus** is another thorny matter. The NSC plans to hold two information sessions in Hengchun, where Maanshan is located, with an aim of bringing local government authorities, representatives, and residents together to solicit feedback on the restart plan. It is unclear if these sessions would offer any indication of a consensus, but attempts to interpret them as such would not go unchallenged. Polls show that although around 60% of the public support an increase in the share of nuclear power, the proportion of those that consider nuclear power to be dangerous and those who cannot accept having a nuclear power plant in their own village or neighbourhood both exceed 60% as well.

More notably, only a quarter of the public has a correct understanding of the percentage of nuclear power in Taiwan's total power generation, indicating the need for increased information integrity to serve as the basis for building any type of consensus.

That leaves us with **nuclear safety**, which is what the NSC's ongoing reviews are set out to do. Taipower's restart plans that Lai mentioned only cover basic information such as the current status of the sites and units and schemes on workforce allocation and training, facility inspection and maintenance, and quality verification and auditing. By law, Taipower will have to submit at least five more documents for the NSC's review prior to any potential restarts:

1. **Integrated Aging Assessment and Aging Management:** Review the plant's past experience to conduct aging management assessments on systems, structures, and components (SSCs) and implement aging management programs.
2. **Time-Limited Aging Analyses (TLAAs):** Conduct analyses and aging effect assessments for essential systems, structures, and components to evaluate whether they can maintain their normal functions during the extended operation period.
3. **Amendments to the Final Safety Analysis Report (FSAR) and Technical Specifications (TS):** Revise the Final Safety Analysis Report and Technical Specifications based on the overall assessment results.
4. **Assessment and Verification of Radiation-Related Issues:** Evaluate the radiation impact of restarting and extending operations on the public, workers, and the environment, as well as the management of radioactive waste.
5. **Seismic Safety Assessment Description:** Evaluate the original seismic design of the plant and the enhanced seismic safety measures to be implemented during continued operation.
6. **Other documents designated by the competent authority.**

The NSC has not given a timeline for when it will be able to complete these reviews, but MOEA has indicated to legislators that Maanshan could be cleared for restart by 2028 the earliest if all goes smoothly, citing the average review time of license renewal applications abroad.

But given the Maanshan plant's history of various incidents and violations, ranging from fires to blackout events, and that it is located next to the Hengchun Fault, whether these reviews and subsequent upgrades can guarantee system safety, even with reinforced seismic resistance values, remains unknown.

### **A solution for energy resilience?**

While the government and pro-nuclear opinion leaders have posited energy security as a key reason for at least considering restarting Taiwan's nuclear plants, it is worth scrutinising how this argument runs and whether it holds up.

In recent years, Taiwan has faced escalating pressure from the United States to retain nuclear energy as a core component of its power grid. This "strategic urging" is primarily driven by Washington's concerns over regional security and the stability of the global semiconductor supply chain.

Through the American Institute in Taiwan (AIT) and various security think tanks, U.S. officials have argued that Taiwan's heavy reliance on LNG constitutes a critical defense weakness, as it is highly vulnerable to maritime blockade. From this perspective, nuclear power is framed as an essential "strategic buffer" that enhances national security by providing a carbon-free, on-site energy source capable of sustaining the island's economy in the event of such crises.

However, when contrasted with the harsh realities of modern warfare, this U.S.-backed definition of "resilience" appears flawed. True energy resilience is defined not by gross generation capacity, but by a system's flexibility and its ability to recover rapidly from extreme shocks. The war in Ukraine has shown that we can no longer assume nuclear plants will be safe during a conflict, with sites like Zaporizhzhia being weaponised for "nuclear blackmail." An aggressor does not need to strike a reactor directly to create a crisis; simply disrupting external cooling or power lines to trigger a potential meltdown deters intervention through the threat of disaster.

Similar threats against the Bushehr and Barakah plants in the current Middle East conflict confirm that nuclear facilities are high-value strategic targets rather than protective shields. For Taiwan, restarting aging reactors is

akin to "drinking poison to quench thirst." Rather than providing security, these rigid, centralised assets become ticking time bombs that impose a massive defense burden and the risk of a radiological catastrophe in a conflict scenario.

### **An alternative pathway forward**

Given the intense pressure of limited resources and a narrowing window of time, Taiwan must be precise in how it allocates its energy investments. Hoping for a nuclear restart may seem like a quick fix, but it fails to address the core vulnerability of being an island nation. Re-investing in nuclear diverts capital and resources away from the more cost-effective and ready-to-deploy renewable energy and storage solutions that help decentralise the grid and ensure reliable, localised power in times of crisis.

The European Union's experience with the REPowerEU plan offers a compelling blueprint. Following the energy crisis triggered by the Russian invasion of Ukraine, countries like Denmark and Germany have demonstrated that integrating high levels of wind and solar power, supported by advanced battery storage and smart grid technology, creates a system that is far harder for an adversary to disable than centralised power plants. In the United Kingdom, aggressive investment in domestic offshore wind is now viewed as a primary defense against geopolitical volatility. These nations are moving toward models of energy democracy, where localised microgrids and distributed production ensure that even if one part of the network is compromised, the rest of the country can continue to function.

Ultimately, a centralised nuclear asset in a war zone is not a reliable source of power, but a high-stakes liability that deepens national insecurity. The way forward for Taiwan lies in a rapid shift toward a distributed and decentralised energy system. To achieve true resilience, national security, and meet the net-zero target, the strategic focus must stay on accelerating renewable energy development

alongside enhanced grid infrastructure and energy storage.

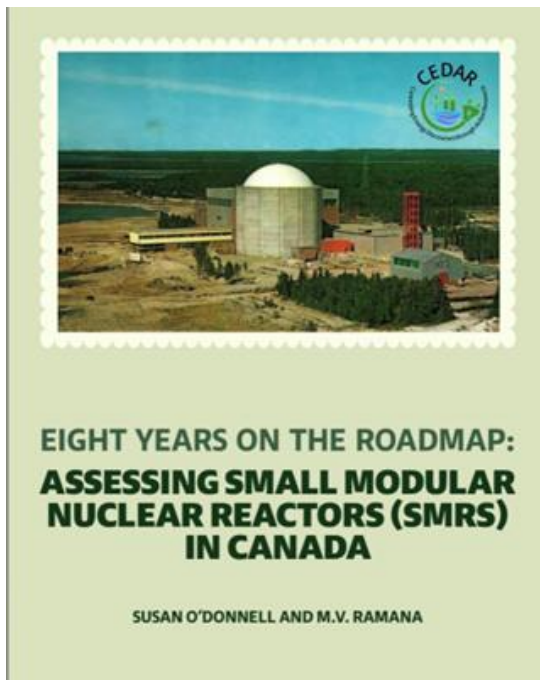
Pursuing nuclear restarts incurs a heavy opportunity cost, as the massive capital and political energy required for nuclear power

drain resources away from more effective renewable solutions. By localising energy production and reducing dependency on imported fuels, Taiwan can build a grid that is not only low-carbon but strategically robust and truly resilient against external pressure

## Evaluating SMRs in Canada

Susan O'Donnell and M. V. Ramana

Canada has emerged as a major proponent of small modular nuclear reactors (SMRs). Canadian energy policy makers position SMRs as necessary to meet climate action targets. For example, the net zero by 2050 scenario in the energy regulator's recently released [Canada's Energy Future 2026](#) report involves SMRs operating in three provinces currently without nuclear reactors. Nuclear proponents also envision Canada exporting SMRs to many other countries. But are Canada's decarbonization and export goals for SMRs realistic?



Our [new report](#) assessing SMR development in Canada found that such reactors are unlikely

to either be built domestically or exported. Canada's federal government and various provincial governments have so far provided around \$4.5 billion for SMR activities, with underwhelming results.

A key official document, the 2018 [SMR roadmap](#), "expected" that "one or more SMR demonstration [projects would be] constructed and in operation by 2026." In this milestone year, we followed up on SMR designs expected to be operating.

The "Micro Modular Reactor" (MMR) was to be the first SMR demonstration project, at the Chalk River nuclear site in Ontario. Back in 2019, the project proponents [applied to the Canadian Nuclear Safety Commission](#) (CNSC) to prepare the site for construction. In 2024, however, the CNSC "[paused all work](#)" on the MMR project. Later that year, the lead company, Ultra Safe Nuclear Corporation, [filed for bankruptcy protection](#) in the United States, leaving unpaid debts of more than \$16 million, including \$641,307 to the CNSC and lesser amounts to dozens of Canadian small businesses.

In a different province, New Brunswick, the federal government gave more than \$97 million to develop two SMR designs planned for the Point Lepreau nuclear site; the provincial government added another \$31 million. Yet in late 2025, [New Brunswick's](#)

[Energy Minister said](#) the government would no longer wait for the two SMR designs because the province cannot take on the risk of first-of-a-kind reactors. The millions in public money were effectively funnelled into highly paid [positions at two start-up SMR companies](#).

Of the 10 SMR designs in Canada reviewed in our independent report, only one is in development. Most of the public funding for SMRs – \$4.025 billion – has been spent on this reactor design, the BWRX-300, at the Darlington nuclear site on Lake Ontario. In September 2025, the federal government [designated the Darlington New Nuclear project](#) as a potential project of national interest.

Four billion dollars is a lot of money, but nowhere near enough to pay for the four BWRX-300 reactors planned for the site. Even the first BWRX-300 reactor is expected to cost more—\$6.1 billion—and the whole project will cost [at least \\$20.9 billion](#). It could cost far more—the vast majority of nuclear power projects have [historically overrun initial cost estimates](#). Perhaps for these reasons, [banks and other sources of private capital have shown little interest in SMRs](#).

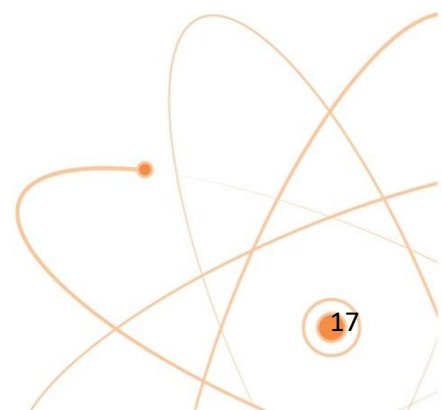
In addition, the high costs for the Darlington SMR means that any electricity it produces would be expensive. [Estimates by Australia’s Commonwealth Scientific and Industrial Research Organisation](#) show that each unit of electrical energy from SMRs would be far more expensive than a corresponding unit from solar and wind power plants, even when the cost of measures to deal with the variability of renewables are included. Their high cost, expensive electricity, and need for

public funding suggests that future SMR development in Canada will be limited. What about exports? The [World Nuclear Industry Status Report estimates](#) that the global investment into all nuclear power projects remains small—below US\$35 billion per year (including major refurbishment). Yet Canada's 2018 SMR Roadmap [estimated the “total global export potential of SMRs”](#) to be “approximately CDN\$150 billion per year for 2030 to 2040,” adding the caveat that the estimate was “based on conservative assumptions.” Clearly not conservative enough.

The Canadian government appears intent on exploring export possibilities. Global Affairs Canada, for example, [funded two researchers to examine the potential market for SMRs in ten Indo-Pacific countries and economies](#), as part of its “Regional Connectivity Envelope.”

Ignored in this effort is that SMRs have very unfavourable characteristics for potential customer countries. An analysis of what [developing countries are expecting from SMRs found that SMRs will not meet these expectations](#). SMRs produce costly electricity and there are no proven models. Finally, many developing countries want to use the acquisition of nuclear reactors to build up their technical and engineering capabilities—but the economic model for SMRs involves building these in centralized factories. As a result, developing countries are unlikely to purchase SMRs in large numbers, whether from Canada or other countries.

All told, the Canadian roadmap for SMRs appears to be more of a dead end.



# CNIC Statement: The geological disposal of high-level radioactive waste on Minamitorishima-island is fraught with difficult issues.

[Citizens' Nuclear Information Center](#)

On April 13, Shibuya Masaaki, Mayor of Ogasawara Village, Tokyo, stated at a public briefing regarding the government's request to conduct a literature survey on Minamitorishima that "a decision should be made under the government's responsibility," indicating that he would accept the proposal. This was the response to a request from the Ministry of Economy, Trade and Industry (METI) to Ogasawara Village on March 3 to accept the implementation of a literature survey, the first phase in the selection of a final disposal site for high-level radioactive waste, on Minamitorishima. However, many doubts remain at this point whether or not Minamitorishima is a suitable location for a final disposal site.

In a statement issued on March 3, CNIC pointed out that, although Minamitorishima has geological stability, being positioned sufficiently far away from plate boundaries on the Pacific Plate, there are safety risks such as the difficulties in constructing both surface and underground facilities for the final disposal site due to the island's small size and the steepness of the seabed, the necessity of long-distance transportation, and the possibility of flooding due to sea-level rise, all of which could lead to an increase in disposal cost.<sup>[1]</sup> In addition, difficulties can easily be foreseen in environmental monitoring after the closure of underground facilities and in responding to potential leaks.



Minamitorishima Source Wikipedia

In recent years, research results have suggested that even Minamitorishima may not be able to avoid the effects of volcanic activities. The study shows that “petit-spot volcanoes,” which arise from the bending of the oceanic plate, have occurred in the vicinity of Minamitorishima. [ii] The volcanic field, which was confirmed to have been active in the last 3 million years, is located, at the shortest distance, approximately 46km from Minamitorishima. [iii] Since this research is still in its early stages, it cannot be ruled out that the future studies may reveal volcanic activities at even closer distances to the island.

The government and the disposal operator, the Nuclear Waste Management Organization of Japan (NUMO) held total of four briefings for residents in Chichijima Island and Hahajima Island on March 14 and 21. However, these issues were not mentioned in the explanatory materials provided by the government and NUMO. Perhaps, the government and NUMO are taking that position that they wish to conduct a literature survey because they are not aware of the issues. Yet, the layout of the surface and underground facilities of the disposal site in the NUMO document shows that they are aware of the small size of Minamitorishima.

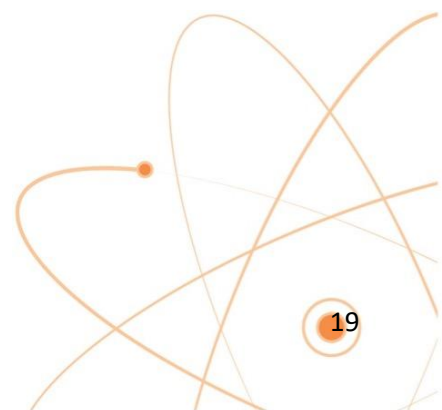
Furthermore, there is also a fact that was not fully addressed during the briefings. As we pointed out in our previous statement, regarding the disposal plan for Minamitorishima, an alternative disposal method called Deep Borehole Disposal, which involves burying waste at a depth of several to 10km, has been proposed besides the currently considered methods of geological disposal at depths of 300m or more. This is because Minamitorishima is a small island with a steep seabed structure, and moreover, limestone, which has a high water permeability, has been deposited to a depth of more than several

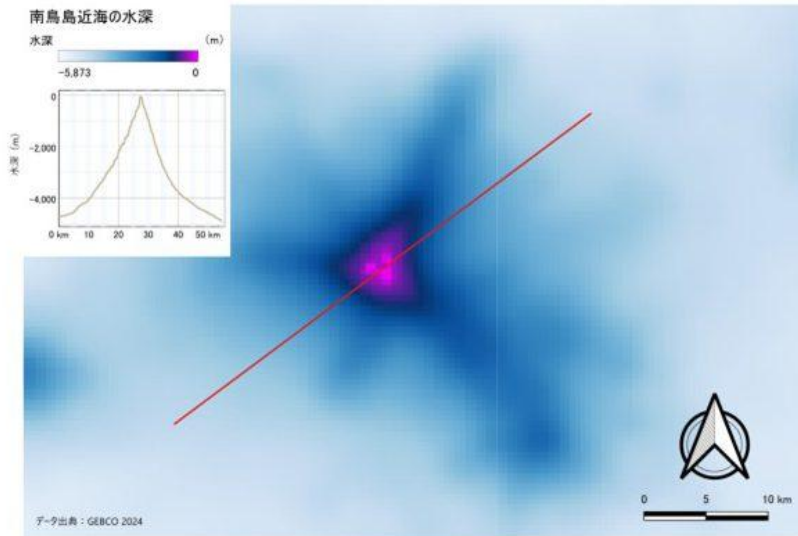
hundred meters, making it difficult to ensure safe and secure burial. At the same time, if Deep Borehole Disposal is to be selected, as this method differs from the currently considered geological disposal approach, it will be necessary to establish the design and safety measures of the disposal site from scratch. If the government is to propose a literature survey on Minamitorishima, wouldn't it be a matter of integrity to inform the residents that such a consideration could be raised in the future?

Since there is very little literature regarding Minamitorishima, the findings from a literature survey will not amount to much. It is therefore quite possible that a final feasibility assessment cannot be made without proceeding to a preliminary survey which involves a drilling investigation, and possibly to a detailed investigation. With Minamitorishima, that poses many difficult challenges as a potential final disposal site. Keeping the option of Minamitorishima on the table indefinitely could lead to a waste of valuable time and resources.

Documents listing questions raised by residents at the briefing suggest that consensus among the residents is still far from being reached. In the past, in the municipalities named as candidate sites for the final disposal of high-level radioactive waste, the debate over whether to accept the survey has caused deep divisions among residents. It is not yet too late; we call for a prudent judgement that takes into account the diverse perspectives of both residents and experts.

**Reference: Ocean depth around Minamitorishima**





[i] [cnic.jp/english/?p=8967](http://cnic.jp/english/?p=8967) (in English)

[ii] [www.tohoku.ac.jp/en/press/a\\_new\\_petitspot\\_in\\_the\\_pacific.html](http://www.tohoku.ac.jp/en/press/a_new_petitspot_in_the_pacific.html) (in English)

[iii] [chibatech.jp/english/news/r9arg100000003zt-att/onkyoutannsaEN.pdf](http://chibatech.jp/english/news/r9arg100000003zt-att/onkyoutannsaEN.pdf) (in English)

## Protests against nuclear transports in Germany

Jan van Evert

In the evening of March 25<sup>th</sup> the first transport of high radioactive nuclear waste was carried out from an old research reactor in the German city Jülich, about 40 kilometres west from Cologne, to Ahaus, roughly 180 kilometres to

the north. Both cities are located close to the Dutch border. The material is transported in so-called Castor containers. A total of 152 containers have to be moved to the new location.



The convoy comprises a hundred vehicles and was accompanied by a massive police force: a total of 2400 police officers were employed to protect the transport. It is the largest transport of nuclear waste in Germany in decades. The licence for the transports was granted in the summer of 2025 and is valid for two years. Various anti-nuclear groups have been demonstrating against the shipments, both in Jülich and in Ahaus. There were repeated minor attempts to block the road but they were unsuccessful. The waste had to be moved because the license to store it in Jülich already expired in 2013. The costs for the transport added up to 90 million Euros. This does not include the cost of the police that were needed. A spokesman of the police union had already described the transports in advance as a “pointless mammoth task”.

A plan to build a new storage in Jülich was cancelled because the costs appeared to be too high. Anti-nuclear activists in Germany criticized the transport arguing that the construction

plans for a new storage in Jülich have not been investigated properly. They are not alone: even the government of the state of Nordrhein-Westfalen is against the transports. The state government has even reserved a plot and a budget to build such a storage. But they were overruled by the federal government that has the authority in this case.

The federal government states that it has not terminated the plan for a new storage in Jülich but their opinion is that it takes too long to build. Moving the nuclear waste is a quicker solution.

The biggest problem remains unsolved: the storage in Ahaus is one of sixteen temporarily storage facilities in Germany. The licence already expires in 2034; Germany is still searching for a location for the permanent storage of nuclear waste. A process that is expected to last at least another fifty years at best according to the German Öko-Institut. (See Nuclear Monitor 918).

## Chernobyl: 40 Years After the Disaster

**Erik Plakman**

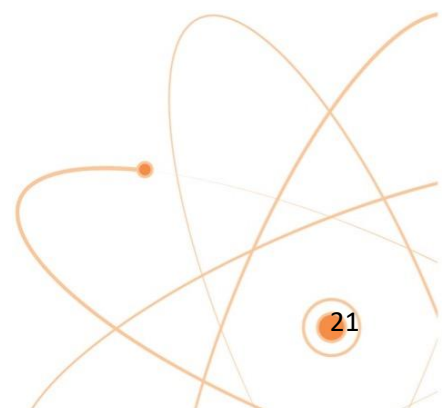
Sunday, April 26 marks the 40th anniversary of one of the worst man-made disasters in history, which occurred at the Chernobyl nuclear power plant.

Reactor 4 of the plant exploded following a failed test, and large quantities of radioactive material were released into the air by the ensuing fire.

The contamination was global. Caesium-137 alone contaminated more than twenty European countries.

In recent days, there has been extensive (media) coverage worldwide of the 1986 Chernobyl disaster.

Below is a small selection





An April 1986 photo of the Chernobyl nuclear power plant after one of the reactors exploded. (AP Photo)

#### **Ukraine**

##### **Chernobyl, 40 Years Since Disaster: Five Things to Know**

It comes four years into the Russian invasion that has put the plant once again under threat and raised risks of another radioactive catastrophe.

<https://www.kyivpost.com/post/74633>

#### **France**

Réseau Sortir du nucléaire

##### **Tchernobyl année 40** (in French)

[https://www.sortirdunucleaire.org/Tchernobyl-annee-40?origine\\_sujet=LI202604](https://www.sortirdunucleaire.org/Tchernobyl-annee-40?origine_sujet=LI202604)

#### **Japan**

##### **Chernobyl first responder says few survive 40 years on**

<https://www.japantimes.co.jp/news/2026/04/21/world/chernobyl-40-years-on/>

#### **Australia**

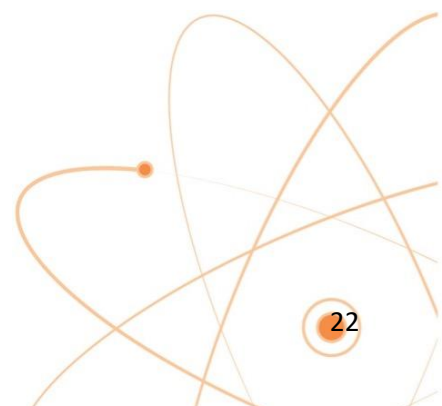
##### **40 years after Chernobyl we face a new nuclear risk — this time as a weapon of war**

<https://www.abc.net.au/listen/programs/bigidea/40-years-after-chernobyl-we-face-a-new-nuclear-risk-as-weapon/106530928>

#### **United Kingdom**

##### **Fears over new Chernobyl 'nuclear accident' as Vladimir Putin risks catastrophe**

<https://www.mirror.co.uk/news/world-news/chernobyl-nuclear-accident-russia-ukraine-37054847>



## Germany

Heinrich Böll Stiftung

### Dossier

#### Chernobyl: 40 Years After the Disaster

Nuclear Power in Eastern Europe

Forty years after the Chernobyl/Chornobyl reactor disaster, Russia is once again jeopardizing nuclear safety in Eastern Europe through direct attacks on nuclear power plants in Ukraine.

Other countries seem largely unfazed, clinging to nuclear power and planning new reactors. Our dossier highlights how selected countries look back to this historical turning point and deal with nuclear energy today.

<https://www.boell.de/en/chernobyl-40-years-after-disaster>

5 articles on [theconversation.com](https://theconversation.com)

#### Chernobyl at 40: the lies, the loss and why we can't let go

<https://theconversation.com/chernobyl-at-40-the-lies-the-loss-and-why-we-cant-let-go-280369>

#### Chernobyl's wildlife: the real story isn't the presence of radiation – it's the absence of humans

<https://theconversation.com/chernobyls-wildlife-the-real-story-isnt-the-presence-of-radiation-its-the-absence-of-humans-281084>

#### Research at Chernobyl and Fukushima shows how radioactive materials move in the environment

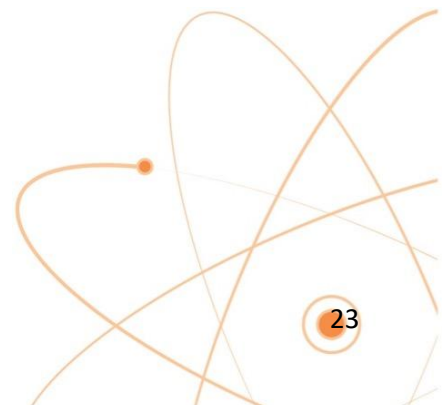
<https://theconversation.com/research-at-chernobyl-and-fukushima-shows-how-radioactive-materials-move-in-the-environment-280007>

#### Chernobyl at 40: Secret Stasi files reveal extent of Soviet misinformation campaign over nuclear disaster

<https://theconversation.com/chernobyl-at-40-secret-stasi-files-reveal-extent-of-soviet-misinformation-campaign-over-nuclear-disaster-274930>

#### Forty years after the Chernobyl disaster, its legacy still resonates

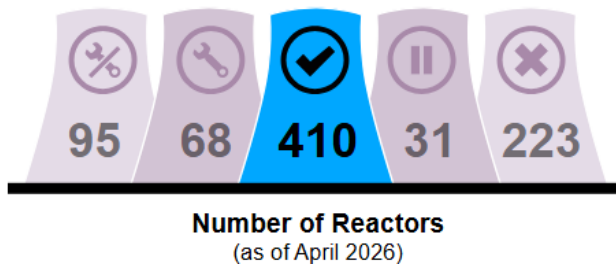
<https://theconversation.com/forty-years-after-the-chernobyl-disaster-its-legacy-still-resonates-279715>



# NUCLEAR NEWS



## World Nuclear Power Status



## Pope Leo upholds Vatican opposition to nuclear weapons despite Trump's 'weak' critique

In his Sunday screed against Pope Leo XIV, President Donald Trump twice portrayed the head of the Catholic Church as soft on the issue of nuclear weapons.

"I don't want a Pope who thinks it's OK for Iran to have a Nuclear Weapon," Trump wrote in the lengthy, evening post April 12 on his Truth Social platform. He later characterized Leo as "Weak on Crime, Weak on Nuclear Weapons."

Weeks earlier, the first U.S.-born pope devoted his prayer intention for the month of March for the Catholic Church's 1.4 billion members to disarmament and peace, including a world without nuclear arms.

<https://www.ncronline.org/vatican/vatican-news/pope-leo-upholds-vatican-opposition-nuclear-weapons-despite-trumps-weak>

