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ICAN

HIDDEN COSTS:
NUCLEAR WEAPONS SPENDING IN 2024

June 2025

International Campaign to Abolish Nuclear Weapons | REPORT

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REPORT

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International Campaign to Abolish Nuclear Weapons

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Executive Summary

In 2024, the nine nuclear-armed states spent $9.9 billion (11%) more on their nuclear arsenals than the year before, a total of $100.2 billion, or $3,169 per second on nuclear weapons. In the past five years, from 2020-2024, these countries spent $415.9 billion on their nuclear arsenals.

The United States had the biggest increase from 2023-2024, at $5.3 billion, and spent more than all of the other nuclear-armed states combined, at $56.8 billion. China remained second, at $12.5 billion, and the United Kingdom came in third, spending $10.4 billion.

These are not the only countries paying a price for nuclear weapons. Without any democratic oversight, and in opposition to public opinion, several countries host U.S. or Russian nuclear weapons at a secret cost.

In 2024, at least twenty-six companies working on nuclear weapons development and maintenance held significant contracts for their work. These companies earned at least $43.5 billion in the year and hold at least $463 billion in outstanding contracts. In 2024, new contracts worth around $20 billion were awarded to these companies.

The companies identified in this report paid lobbyists in France and the United States more than $128 million to represent their interests last year. They also had 196 meetings with high-level UK officials including 18 with the Prime Ministers' office in 2024.

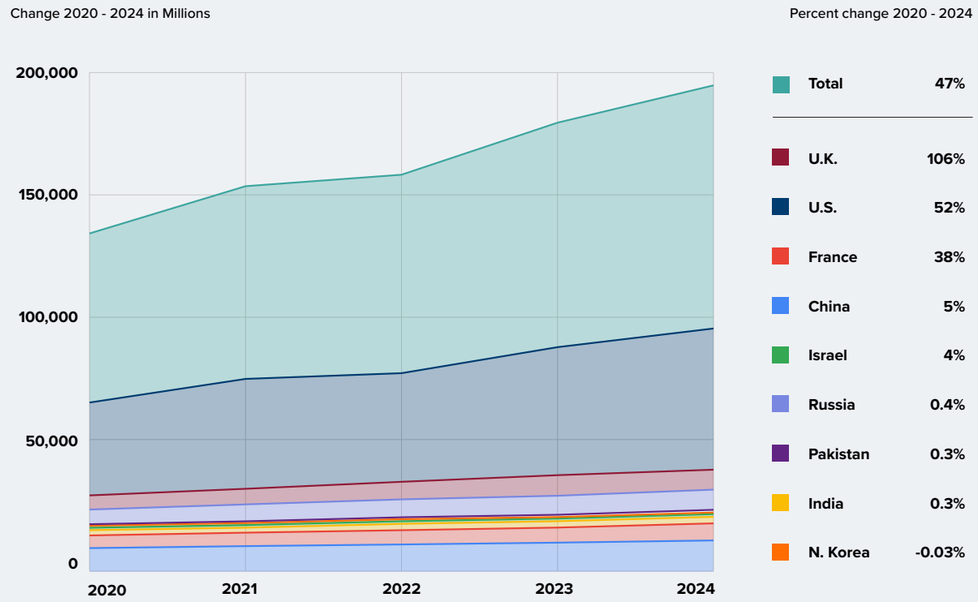
Nuclear-armed countries could have paid the United Nations' budget 28 times with what they spent to build and maintain nuclear weapons in 2024.[1] They could feed all of the 345 million people currently facing the most severe levels of hunger globally, including starvation, for nearly two years.[2]

While nine nuclear-armed countries spent more than $100 billion in 2024 on weapons of mass destruction, 98 countries have signed, ratified or acceded to the Treaty of the Prohibition of Nuclear Weapons (TPNW), banning all nuclear weapons activities and committing to work towards their destruction. It is up to each government, and the citizens of that country, to decide which path they will choose.

5 YEARS OF NUCLEAR SPENDING

COUNTRIES	TOTAL SPENT OVER 5 YEARS
China	$54.9 billion
France	$29.2 billion
India	$11.9 billion
Israel	$5.3 billion
North Korea	$3.7 billion
Pakistan	$4 billion
Russia	$35.7 billion
United Kingdom	$37.8 billion
United States	$233.6 billion
Total	**$415.9 billion**

5 YEAR CHART OF GLOBAL NUCLEAR WEAPONS SPENDING 2019 - 2024



HOW MUCH DID EACH COMPANY EARN FOR NUCLEAR WEAPONS WORK IN 2024

COMPANY	2023 NUCLEAR WEAPONS REVENUE (USD MILLIONS)	% OF TOTAL REVENUE
Airbus	$708	1%
Amentum	$5,312	63%
Babcock International	$1,273	37%
BAE Systems	$1,530	5%
Bechtel	$2,033	*unknown*
Boeing	$746	1%
BWX Technologies	$5,344	20%
Draper	$994	*unknown*
Fluor	$3,401	
General Dynamics	$2,782	6%
Honeywell International	$6,943	18%
Huntington Ingalls Industries	$1,747	15%
L3 Harris	$82	0.4%
Leidos	$857	0.5%
Leonardo	$144	1%
Lockheed Martin	$3,643	5%
Northrop Grumman	$3,197	8%
Peraton	$42	*unknown*
Rolls Royce	$29	0.1%
RTX (formerly Raytheon)	$710	1%
Safran	$545	2%
Thales	$455	2%

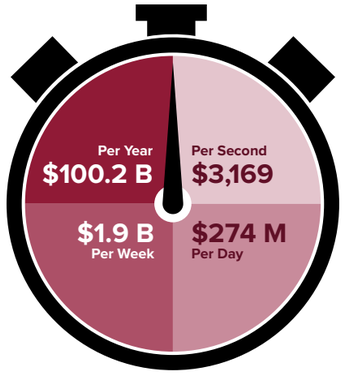
Introduction

As this report is published, around the world, the leaders of many countries, particularly in Europe and the Middle East, have embraced a renewed militarism, as evidenced by a historic surge in military spending.[3] Nuclear weapons spending by the nine nuclear-armed states has grown to over $100 billion in 2024, while commentators in some nuclear-armed countries have discussed developing nuclear weapons and a handful of leaders have suggested taking part in new nuclear sharing arrangements.[4] The threat of nuclear use persists, as several nuclear-armed countries wage wars and issue implicit and explicit threats to use these weapons of mass destruction. As one example, on 3 May 2025, Pakistan's Ambassador to Russia Muhammad Khalid Jamali threatened to use "the full spectrum of power – both conventional and nuclear" in response to an Indian attack.[5] And Russian President Vladimir Putin continues to issue thinly veiled threats about the possible use of nuclear weapons in Ukraine.[6]

There is no real democratic oversight of nuclear weapons plans, policies or spending - including in nuclear host countries, which (aside from Belarus) do not officially acknowledge the nuclear weapons stationed on their territory, let alone allow the public to have a say on the conditions of their use or their cost.[7] In fact, the majority of people in six European countries polled in April 2025 would oppose the stationing of U.S. nuclear weapons on their territories, including 59% and 63% of populations in current hosts Germany and Italy, respectively.[8] This report examines in detail what is known - and not known - about the costs to "host" foreign nuclear weapons in the six countries that did so in 2024.

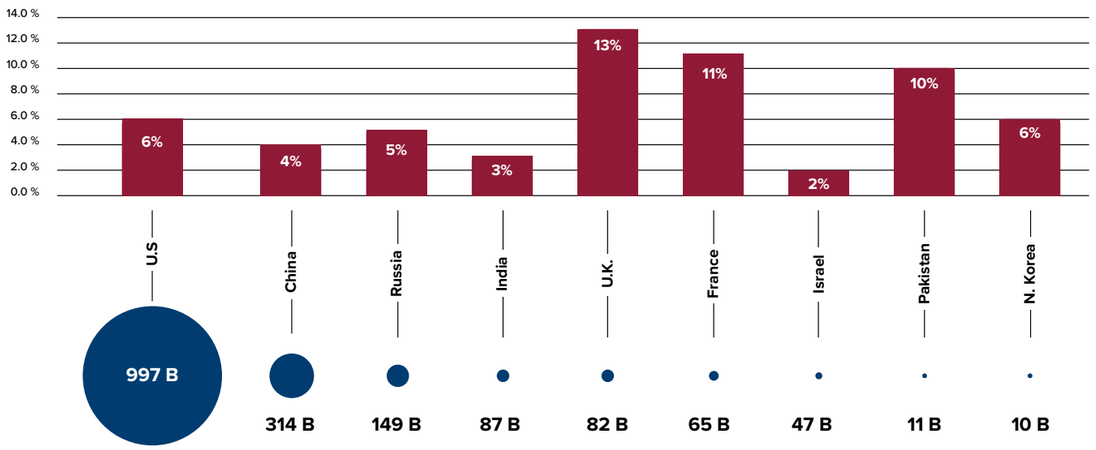
MONEY OVER TIME

The amount spent by nuclear-armed countries every moment of 2024.



MILITARY SPENDING

Percent of military spending dedicated to nuclear weapons



Total military spending per country (in USD billions)

Instead of the millions of people who would be impacted by any accidental or intentional use of nuclear weapons, it is the couple of dozen private companies that produce nuclear weapons, and earned $43.5 billion for this work last year, who have a say. They paid lobbyists in France and the United States more than $128 million to represent their interests and had 196 meetings with high-level UK officials including 18 with the Prime Ministers' office in 2024.

But this is still the story of the world's minority. Only nine of 195 countries (less than 5%) have chosen to develop nuclear weapons. By contrast, half of the world's nations (98) have signed, ratified or acceded to the TPNW and forswearing developing their own nuclear arsenal or stationing another country's nuclear weapons on their territory and have pledged to work to eliminate nuclear weapons. More than 700 organisations in over 110 countries have committed to work alongside them to get more countries to join this landmark instrument. It was during the height of the Cold War that one million people gathered in New York, on the sidelines of a meeting at the UN, to call for an end to the nuclear arms race. Now again, with nuclear tensions at an all-time high, civil society and the world's majority of governments are working to eliminate this threat once and for all.

COUNTRY SPENDING ON NUCLEAR WEAPONS IN 2024

COUNTRIES	ANNUAL TOTAL	CHANGE FROM PREVIOUS YEAR
The United States	**$56.8 billion** $107,772 / minute	10%
China	**$12.5 billion** $23,804 / minute	8%
The United Kingdom	**$10 billion** $19,800 / minute	26%
Russia	**$8 billion** $15,405 / minute	6%
France	**$6.9 billion** $13,039 / minute	13%
India	**$2.6 billion** $4,976 / minute	3%
Israel	**$1.1 billion** $2,110 / minute	2%
Pakistan	**$1.1 billion** $2,049 / minute	18%
North Korea	**$630 million** $1,195 /minute	7%
2024 Total	**$100.2 billion** $190,151 per minute	11%

China

$12.5 billion (¥90.2 billion)	
$883,724,421	

Nuclear arsenal overview

China has 600 nuclear weapons and can launch them from land-based missiles, aircraft, and submarines.[9] The Nuclear Ban Monitor estimates the Chinese nuclear arsenal explosive power to be the equivalent of 18,630 Hiroshima bombs.[10]

Nuclear weapons spending

There is no reliable public information about Chinese nuclear spending. Therefore, ICAN used a percentage of total military spending to calculate China's nuclear expenditure. ICAN estimated China spends 4% of its total military spending on nuclear weapons based on similar estimates in a 2020 Reaching Critical Will report and in a 2011 Global Zero estimate.[11] The Stockholm International Peace Research Institute (SIPRI) estimated that in 2024 China spent $313.6 billion on military expenditures, 4% of which is about $12.5 billion, or ¥90.2 billion, our estimate for Chinese nuclear spending in 2024.[12]

China increased its nuclear weapons spending by $884 million (¥6.4 billion) from 2023 to 2024.

The companies

The Chinese nuclear arsenal is produced by state-owned companies, primarily the China National Nuclear Corporation (CNNC) and China Aerospace Science and Technology. The CNNC works on all aspects of the nuclear fuel cycle, but on its website "sees itself as continuing in the spirit of those who developed the first atomic bomb, the first hydrogen bomb, and the first nuclear submarine".[13] CNNC is also known to be involved in the extraction of plutonium for nuclear weapons.[14] China Aerospace Science and Technology manufactures Chinese ICBMs, as well as dual-capable intermediate-range ballistic missiles.[15]

Nuclear weapon spending in context

For every minute of 2024, China spent $23,804 (¥171,129) on nuclear weapons. For every person living in China last year, the country spent $9 (¥64) on its nuclear arsenal.[16] China spent 26 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[17] In fact, China could have paid the entire budget of the UN 3.5 times with its nuclear weapon spending.[18] Chinese nuclear weapon spending could have saved the lives of 81 million people who were acutely food insecure, including those on the brink of famine, in 2024.[19]

China could have paid the entire budget of the UN 3.5 times with its nuclear weapon spending. Chinese nuclear weapon spending could have saved the lives of 81 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	1,419,321,278
Amount spent on nuclear weapons	$12,545,844,549
Amount per person (USD)	$9
Amount per person (own currency)	CNY ¥64

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$480,636,257
Amount spent on nuclear weapons	$12,545,844,549
How many times could they pay their UN contribution?	26

The Dongfeng-31 nuclear missile launcher is on display at the Military Museum of the Chinese People's Revolution, a themed exhibition commemorating the 90th anniversary of the founding of the Chinese People's Liberation Army. | CC 4.0

France

$6.9 billion (€6.4 billion)	
$811,688,312	

Nuclear arsenal overview

France has fewer than 300 nuclear weapons, according to French President Macron.[20] The Federation of American Scientists estimates that France has 290 nuclear weapons which can be launched from aircraft and submarines.[21] French nuclear-armed submarines carry M51 nuclear missiles, and French planes can launch ASMPA missiles. The Nuclear Ban Monitor estimates the French nuclear arsenal explosive power to be the equivalent of 1,993 Hiroshima-bombs.[22]

Nuclear weapons spending

The 2024 French defence bill increased the budget for nuclear weapons ("dissuasion") by €750 million ($812 million), to a total of €6.4 billion ($6.9 billion) in 2024.[23] This includes annual costs for nuclear warheads and renewal of nuclear-capable air-launched cruise missiles, submarine-launched missiles, and submarines.

In April 2023, the new Military Programming Law for the period of 2024-2030 was introduced, including 13%, or €53.7 billion ($58 billion) for the modernisation and renewal of all nuclear forces, demonstrating a plan to increase French spending on nuclear weapons by nearly 50% in the coming years, compared to the previous five years.[24] It should also be noted that this law launches funding for the third-generation nuclear-powered ballistic missile submarine programme. Four submarines will be produced, available between 2035 and 2050 (one every five years) and operational until 2090.[25]

Notably not included in the deterrence budget are costs associated with the Rafale aircraft, which can be used to launch nuclear weapons. Given that these costs are not publicly available, our estimate assumes that the nuclear weapons budget covers the bulk of French nuclear weapons spending, and we do not include these aeroplanes. France spent roughly 11% of its total military budget on nuclear weapons in 2024.[26] France increased its nuclear weapons spending by $812 million (€750 million) from 2023 to 2024.

The companies

These seven companies build French nuclear weapons earning around €2.7 billion for that work in 2024: Airbus, BAE Systems, Leonardo, Safran, Naval Group, TechnicAtome, and Thales. The French government does not report on full contract amounts, but detailed budget reports provide a list of prime contractors. The companies involved in the French nuclear arsenal are listed with estimated amounts based on an equal division between the number of companies (or their percentage in various joint ventures) and government agencies.

Airbus earned €24 million ($26 million) in 2024 for work related to French nuclear-armed submarines, Safran earned €73 million ($79 million), and Naval Group, TechnicAtome and Thales each earned €48.6 million ($52.6 million). Work on the next generation of submarines earned Naval Group and TechnicAtome €359 million ($389 million) each in 2024.

The nuclear-armed missiles designed for the submarines are produced by ArianeGroup, which is composed of Airbus and Safran, earning them each an estimated €431 million ($466 million) in 2024.

Air-launched cruise missiles are maintained by MBDA. MBDA is made up of Airbus and BAE Systems which each earned an estimated €199 million ($215 million) for this work in 2024 and the Italian company Leonardo which earned about €133 million ($144 million).[27] Thales also provided transmission system support for the French arsenal, earning an estimated €341 million in 2024.[28]

The companies listed in this report spent more than €3 million ($3.2 million) combined on lobby efforts in France in 2024. Airbus, which works on both the air and sea components of the French arsenal, spent €752,882 ($814,807) lobbying in 2024 (including their portion of what was spent by MBDA and ArianeGroup). BAE Systems spent €94,696 ($102,485). Leonardo spent €138,432 ($149,818). Naval Group, which works on the submarines, spent €256,989 ($278,127) on their lobbying efforts. The two largest spenders on lobbying were Safran at €915,887 ($991,220) and Thales at €831,204 ($899,571).[29]

France could have paid nearly twice the entire UN budget with its nuclear weapon spending. French nuclear weapon spending could have saved the lives of 44 million people who were acutely food insecure, including those on the brink of famine.

Nuclear weapon spending in context

For every minute of 2024, France spent $13,039 (€12,048) on nuclear weapons. For every person living in France last year, the country spent $103 (€95) per person on its nuclear arsenal.[30] France spent 51 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[31] In fact, France could have paid nearly twice the entire UN budget with its nuclear weapon spending.[32] French nuclear weapon spending could have saved the lives of 44 million people who were acutely food insecure, including those on the brink of famine, in 2024.[33]

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	66,548,530
Amount spent on nuclear weapons	$6,872,294,372
Amount per person (USD)	$103
Amount per person (own currency)	€95

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$136,055,287
Amount spent on nuclear weapons	$6,872,294,372
How many times could they pay their UN contribution?	51

COMPANY INFLUENCE EXPENDITURES

COMPANIES WORKING ON THE FRENCH NUCLEAR ARSENAL	TOTAL SPENT LOBBYING IN FRANCE IN 2024
Airbus	€752,882
BAE Systems	€94,696
Leonardo	€138,432
Safran	€915,887
Naval Group	€256,989
TechnicAtome	€0
Thales	€831,204

Youth in Paris discuss the involvement of BNP Paribas in financing nuclear weapons. Photo: ICAN France.

WEAPONS & FACILITIES AND THE COMPANIES THAT BUILD THEM

BOMBS AND MISSILES

ASMPA & ASN4G
MBDA (Airbus, BAE Systems, Leonardo)
$358,997,044 *

M51
ArianeGroup (Airbus, Safran), Thales
$1,380,037,784 *

SUBMARINES

SNLE 3G-class
Naval Group, TechnicAtome
$776,819,527 *

* Estimated 2024 earnings.

C/n unknown Military callsign F-UHIJ Operated by SPA79 'Tête de Loup', part of EC01.004 'Gascogne', a French Air Force nuclear strike unit based at Saint Dizier. | CC 2.0

India

$2.6 billion (₹ 219.5 billion)	
$64,990,523	

Nuclear arsenal overview

India is estimated to have 172 nuclear weapons and can launch nuclear weapons from land-based missiles, aircraft, and submarines.[34] The Nuclear Ban Monitor estimates the Indian nuclear arsenal explosive power to be the equivalent of 301 Hiroshima-bombs.[35]

Nuclear weapons spending

While little is officially published about Indian nuclear weapon spending, an October 2016 Stimson Center report looked at parliamentary oversight documents and created a methodology to calculate annual nuclear weapons spending.[36] The 2016 Indian parliamentary report stated that India spent 46% of the Defence Research and Development Organisation (DRDO)'s budget on its nuclear-capable delivery systems. Given that about half of the U.S. nuclear budget goes to nuclear delivery systems, the Stimson Center report assumed that India's total nuclear spending would follow the same pattern. ICAN's research thus follows the Stimson Center's methodology by taking 46% of the 2024-2025 DRDO budget (₹23,855 crore) to get ₹10,973 crore for delivery systems and then doubling it to reach ₹21,946 crore for the entire nuclear arsenal.[37] A crore is 10 million, so ₹21,946 crore is ₹219.5 billion. Converted into USD, this total is $2.6 billion, our estimate for Indian nuclear spending in 2024. This is roughly 3% of total Indian military spending in 2024.[38]

India increased its nuclear weapons spending by $65 million (₹5.4 billion) from 2023 to 2024.[39]

The companies

At least two companies build India's nuclear weapons - Bharat Dynamics Limited and Walchandnagar Industries Limited, but what they earned for this work is not clear. India's Defence Research and Development Organisation (DRDO) is the primary producer of the Indian nuclear arsenal[40], but Bharat Dynamics Limited is the prime production agency for Indian missiles, including the nuclear Prithvi and Agni series.[41] Walchandnagar Industries Limited is also involved in the production of the Agni series[42] and was a recognized contributor to the first nuclear-armed and nuclear-powered submarine, the 'Arihant'.[43] India has also acquired Rafaele fighter jets from the French company, Dassault Aviation, but it is unclear whether they are nuclear-capable.[44]

Nuclear weapon spending in context

For every minute of 2024, India spent $4,976 (₹416,412) on nuclear weapons. For every person living in India last year, the country spent $2 (₹151) on its nuclear arsenal.[45] India spent 80 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[46] In fact, India could have paid for nearly three quarters of the entire UN budget with its nuclear weapon spending.[47] Indian nuclear weapon spending could have saved the lives of 17 million people who were acutely food insecure, including those on the brink of famine, in 2024.[48]

India could have paid for nearly three quarters of the entire UN budget with its nuclear weapon spending. Indian nuclear weapon spending could have saved the lives of 17 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	1,450,935,791
Amount spent on nuclear weapons	$2,622,775,673
Amount per person (USD)	$2
Amount per person (own currency)	₹151

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$32,895,257
Amount spent on nuclear weapons	$2,622,775,673
How many times could they pay their UN contribution?	80

Agni-I Ballistic Missile successfully launched from Wheeler Island off the Coast of Odisha on July 13, 2012 | Government of India - Government Open Data License.

Israel

$1.1 billion (ILS 4.1 billion)	
$25,515,717	

Nuclear arsenal overview

Israel is estimated to have 90 nuclear weapons and is believed to be able to launch them from land-based missiles, submarines, and aircraft.[49] The Nuclear Ban Monitor estimates Israel's nuclear arsenal explosive power to be the equivalent of 165 Hiroshima-bombs.[50]

Nuclear weapons spending

There is no reliable public information about Israeli nuclear spending, given that it does not publicly confirm that it possesses nuclear weapons. Therefore, ICAN uses an average percentage of what nuclear-armed countries spend on nuclear weapons out of total military spending (5%) to assess Israel's nuclear spending. In 2014, Israel's Director General of the Defense told journalists that ILS 4.5 billion of that year's defence budget was allocated for "special means."[51] Israeli nuclear expert Avner Cohen explained in an editorial that "special means" is a veiled euphemism to refer to large unnamed defence projects, such as nuclear weapons. In 2014, ILS 4.5 billion was about 7% of total Israeli military expenditure, indicating that 5% is a reasonable estimate.[52]

However, in 2023 and 2024, Israeli military spending increased enormously, by 24% in 2023, and 65% in 2024, according to the Stockholm Peace Research Institute, who attributed the increase to "(t)he escalation of conflict with Hezbollah in October 2024, on top of the ongoing war in Gaza."[53] From 2017-2022, on average, Israel's military spending increased about 2.35% annually.[54] Although there is no information available about how Israel's current wars have impacted Israeli spending on nuclear weapons, we can assume that most increased military expenditures in 2024 were not related to the nuclear arsenal, as was the case with Russia's invasion of Ukraine. Therefore, to calculate 2024 Israeli nuclear weapons spending, we adjusted for increased military spending due to conventional wars by calculating a 4.7% increase from 2022 military spending and then finding 5% of that adjusted military spending total.

5% of ILS 82.3 billion ($22.2 billion) (our adjusted military expenditure for 2024) is ILS 4.1 ($1.1 billion), our estimate for Israeli nuclear spending in 2024.

Israel increased its nuclear weapons spending by $26 million (ILS 94 million) from 2023 to 2024.

The companies

Israel's nuclear weapons programme is exceptionally opaque, though media reports have indicated the possibility that Thyssenkrupp's subsidiary, Howaldtswerke-Deutsche Werft, built nuclear-capable submarines for Israel.[55] Thyssenkrupp is building the new DAKAR class of submarines, with the first one launched in 2024.[56]

Nuclear weapon spending in context

For every minute of 2024, Israel spent $2,110 (ILS 7,810) on nuclear weapons. For every person living in Israel last year, the country spent $118 (ILS 439) on its nuclear arsenal.[57] Israel spent 63 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[58] In fact, Israel could have paid for nearly one third of the budget of the UN with its nuclear weapon spending.[59] Israeli nuclear weapon spending could have saved the lives of 7 million people who were acutely food insecure, including those on the brink of famine, in 2024.[60]

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	9,387,021
Amount spent on nuclear weapons	$1,112,194,235
Amount per person (USD)	$118
Amount per person (own currency)	ILS ₪439

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$17,676,474
Amount spent on nuclear weapons	$1,112,194,235
How many times could they pay their UN contribution?	63

Dolphin II (AIP) class Submarine INS Tanin at the HDW shipyard in Kiel – Marco Kuntzsch | CC 3.0 Some rights reserved.

Israel could have paid for nearly one third of the budget of the UN with its nuclear weapon spending. Israeli nuclear weapon spending could have saved the lives of 7 million people who were acutely food insecure, including those on the brink of famine.

Nuclear Sharing Costs

Nuclear weapons stationed in Europe are there to be used in Europe.

Netherlands

15 Nuclear weapons hosted

Volkel Air Base

Belgium

15 Nuclear weapons hosted

Kleine Brogel Air Base

Italy

35 Nuclear weapons hosted

Aviano Air Base and Ghedi Air Base

Germany

15 Nuclear weapons hosted

Büchel Air Base

Belarus

?* Nuclear weapons hosted

Asipovichy and Lida Air Base are being prepared, but unclear if weapons have been transferred.

**Unknown number as of June 2025*

Türkiye

20 Nuclear weapons hosted

Incirlik Air Base

Nations Hosting Nuclear Weapons

NATO Member Countries

Nuclear Sharing Costs

U.S. nuclear weapons have been stationed in Europe since 1954[61], with a peak of about 7,300 U.S. nuclear warheads in Europe in 1971.[62] Historically, the United Kingdom and the Soviet Union also deployed their nuclear weapons in other countries.[63] Although not officially confirmed, experts assess, backed by leaked official documents, that as of 2024 there are U.S. nuclear weapons in five European countries (Belgium, Germany, Italy, the Netherlands and Türkiye).[64] Conversely, Russia claims that its nuclear weapons are deployed in Belarus, but some experts are unsure.[65]

Each NATO nuclear-sharing arrangement is governed by secret agreements, including the Atomic Stockpile Agreement which stipulates cost sharing between the United States and host nations.[66] There is little public information about the costs associated with current arrangements to host U.S. nuclear weapons in European countries, despite parliamentary inquiries into this very question, including in Germany and the Netherlands.[67] The German Federal Government told German parliamentarians in 2022 that "no information can be provided on the number, storage locations, handling and specifics of nuclear weapons and their delivery systems, nor on training, exercises and security measures."[68]As of the time of this publication, there is no information publicly available about costs associated with Belarus hosting Russian weapons. However, we have gathered some available information about the costs European governments may incur to host U.S. nuclear weapons, including in relation to the security of nuclear storage facilities, nuclear-capable aircraft, and the preparation to use the stationed nuclear weapons.

Guns, gates and guards

A declassified, but partially redacted, 2016 U.S. Department of Defense Manual provides some insights into the security measures in place around nuclear storage facilities, including the nuclear weapons stored in Europe.[69] The manual largely does not articulate whether the United States or the nuclear host country pays for such security measures, which may include double fencing, additional guard duty, strengthened alarm systems and more.[70] The weapons themselves are stored in special underground vaults, or weapons storage and security systems (WS3). The WS3 are guarded by U.S. soldiers, (a Munitions Support Squadron), while host nations provide perimeter security.[71]

The manual stipulates that "Where facilities are provided by a user or host nation of NATO, the standards and criteria specified in this manual will be used in negotiations to improve existing facilities and systems," without clarifying whether the security provisions under review would be paid for by the host nation or the United States.[72] Each system undergoes annual threat evaluations and must include multiple layered perimeter and facility boundary barriers (gates), daily visual inspections of the site (guards), and security forces with weapons qualifications (guns). Every nuclear weapons storage facility and location where warheads are mated to delivery systems, including at European sites, must have a physical security plan, "formally reviewed by the local security force commander at least annually."[73] A 2023 U.S. Defense Department budget document stated that "NATO funds infrastructure related to store special weapons within secure sites and facilities," and that NATO was concluding a 13 year $384 million project at storage sites in Belgium, Germany, the Netherlands, Italy, the UK and Türkiye "to upgrade security measures, communications systems and facilities," indicating that NATO members may share the cost burden for security measures, and other costs, at nuclear storage facilities.[74]
The 2016 manual is clear that host nations are responsible for providing personnel to guard the site. According to the 2016 document, "in NATO, security forces must be user- or host-nation military... and must consist of: "An area or movement supervisor"; "Alarm monitors"; "Entry controllers"; "Boundary sentries, if necessary"; and "Sentries on post armed with a firearm".[75]

The German Federal Government told German parliamentarians in 2022 that "no information can be provided on the number, storage locations, handling and specifics of nuclear weapons and their delivery systems, nor on training, exercises and security measures."

Nuclear-capable aircraft

Four of the five countries (Belgium, Germany, Italy and the Netherlands) hosting U.S. nuclear weapons are in the midst of acquiring F-35A Lightning II stealth fighters (also known as Joint Strike Fighters) certified to drop B61 nuclear bombs.[76] Greece and Türkiye also have dual-capable aircraft in reserve that could be used for NATO to launch nuclear weapons.[77] While these fighter jets are dual-capable, and therefore their cost cannot be solely attributed to nuclear weapons, European NATO countries have announced publicly that they have a "nuclear role."[78]

In 2022, Germany ordered 35 F-35s for a cost of €10 billion, and in 2024 was reportedly considering purchasing an additional eight planes.[79] In 2024, Italy decided to spend another €7 billion to acquire 25 additional F-35s, which would double the number of 15 F-35As, in the existing order of 90 F-35s.[80] In 2018, Belgium agreed to spend €3.6 billion for 34 F-35As, and announced in 2025 that it would procure an additional eleven.[81] In 2024, the Netherlands received 40 of the 52 F-35s ordered and announced it would order another six .[82] Dutch companies, including Fokker and Aeronamic are also profiting from the production of the F-35, with the Dutch government promising these companies will see production and maintenance contracts of €23 - 30 billion in the coming years.[83]

The host bases are undergoing a series of upgrades for security reasons as well as to ensure compatibility with the new weapons being deployed by the U.S. to Europe. In 2016, the US contracted Atlantic CommTech to "to modernize the Weapon Storage and Security System (WS3)" at the bases in which U.S. nuclear bombs are deployed,[84] and in 2022, they were contracted again to upgrade these WS3 facilities at the UK Lakenheath air base,[85] sparking concerns that the U.S. bombs would be returning to the UK.[86] There are also other upgrades taking place, for example, the Büchel base in Germany is undergoing significant modernisation in order to be able to fly Lockheed Martin's Joint Strike Fighter jets.[87]

Early estimates put the overall costs around €525 million, but due to cost overruns, expectations are that the German taxpayer will wind up with a bill closer to €1.2 billion.[88] The Belgium government also allocated €275 million in 2025 to modernise two air bases, including Kleine-Brogel where U.S. nuclear weapons are deployed.[89]

NATO nuclear weapons exercises

Every year a significant number of NATO allies prepare for the use of nuclear weapons in an annual training exercise known as Steadfast Noon. According to NATO, the 2024 exercise involved 2,000 personnel and 60 aircraft from thirteen countries.[90] In 2024, NATO practiced the use of nuclear weapons over Belgium and the Netherlands. This exercise is also an opportunity to test out new command, control and communications capabilities.[91] In addition to those providing dual-capable aircraft, at least six additional NATO members, including the Czech Republic, Denmark, Hungary, Poland, participate in Conventional Support for Nuclear Operations (CSNO, formerly known as the SNOWCAT mission).[92]

Collective training and exercises are funded through the NATO Military Budget, which was € 2.1 billion in 2024.[93] NATO members committed €3.8 billion in 2024 in direct contributions to fund the alliance, including the NATO Military Budget. This figure is not their total contribution to NATO, which also includes forces and capabilities held by each member country.[94]

Cost to democracy

The costs associated with nuclear weapons and preparations to use them in host and supportive states remains largely a secret and prevents democratic oversight. Scholars have pointed to the "democratic recoil" caused by nuclear secrecy in nuclear-armed states, suggesting that as states incorporate nuclear secrecy practices and policies, they exclude actors from decision-making and distort public information.[95] The lack of transparency about nuclear forces in Europe, and the decision to keep the U.S. nuclear weapons a "public secret" puts European citizens at greater risk by simultaneously making them nuclear targets and thwarting their ability to provide meaningful democratic oversight. Nuclear weapons stationed in Europe are there to be used in Europe, the full cost of which is incalculable.

North Korea

$630 million (KPW 567 billion)	
$39,808,100	

Nuclear arsenal overview

North Korea is estimated to have 50 nuclear weapons.[96] It is developing nuclear-capable missiles which can be launched from land and from submarines. The Nuclear Ban Monitor estimates the North Korean nuclear arsenal explosive power to be the equivalent of 307 Hiroshima-bombs.[97]

Nuclear weapons spending

There is very little public information about North Korean nuclear spending or its military spending overall. A military intelligence source told The Chosun Daily in April 2024 that North Korea spent up to KPW 6.8 billion (North Korean won) ($5 million) on a short-range ballistic missile launch and up to KPW 41 billion ($45 million) for an intercontinental ballistic missile launch.[98]

South Korea estimates North Korea's gross national income annually, placing the 2023 GNI at KRW 40.9 trillion (South Korean won).[99] North Korean military spending is largely unknown but in 2009 a South Korean think tank estimated North Korea spent $8.7 billion on its military, which represented about one-third (35%) of GNI at that time.[100]

Assuming North Korea continues to spend 35% of its GNI on its military, North Korea would have spent about KRW 1.43 trillion on its military in 2023. Global Zero estimated that in 2011 North Korea spent about 6% of its military budget on its nuclear programme.[101] Assuming that North Korea still spends 6% of its annual military spending on nuclear weapons, North Korea would have spent about KRW 858.9 billion on its nuclear program in 2023. When converted to North Korean won (KPW), that is KPW 566.7 billion or $630 million, our estimate for 2024 North Korean nuclear spending.

North Korea increased its nuclear weapons spending by $40 million (KPW 36 billion) from 2023 to 2024.[102]

The companies

As of the time of this publication, we were unable to find any information in the public domain about companies involved in the production of nuclear weapons for North Korea.

Nuclear weapon spending in context

For every minute of 2024, North Korea spent $1,195 (KPW 1.1 million) on nuclear weapons. For every person living in North Korea last year, the country spent $24 (KPW 21,384) on its nuclear arsenal.[103] North Korea spent 3,996 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[104] In fact, North Korea could have paid for nearly 20% of the entire budget of the UN with its nuclear weapon spending.[105] North Korean nuclear weapon spending could have saved the lives of 4 million people who were acutely food insecure, including those on the brink of famine, in 2024.[106]

North Korea could have paid for nearly 20% of the entire budget of the UN with its nuclear weapon spending. North Korean nuclear weapon spending could have saved the lives of 4 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	26,498,823
Amount spent on nuclear weapons	$629,621,457
Amount per person (USD)	$24
Amount per person (own currency)	₩KP21,384

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$157,545
Amount spent on nuclear weapons	$629,621,457
How many times could they pay their UN contribution?	3996

Hwasong-14 ballistic missile - North Korea Victory Day-2013 | Stefan Krasowski | CC 2.0

Pakistan

$1.1 billion (Rs 303 billion)	
$163,724,363	

Nuclear arsenal overview

Pakistan is estimated to have 170 nuclear weapons that it can launch from land-based missiles and aircraft, and it is developing the ability to launch them from submarines.[107] The Nuclear Ban Monitor estimates the Pakistani nuclear arsenal explosive power to be the equivalent of 226 Hiroshima-bombs.[108]

Nuclear weapons spending

Analysts in the past decade have estimated that Pakistan spends about 10% of its total military spending on its nuclear arsenal, confirmed in a 2016 parliamentary report revealing that Pakistan spent 9.8% of its official military budget on nuclear weapons that year.[109] 10% of Pakistan's 2024 military spending (Rs 3 trillion) is Rs 303 billion which converted into USD is $1.1 billion, our estimate for Pakistani nuclear spending in 2024.[110] Pakistan increased its nuclear weapons spending by $164 million (Rs 45.9 billion) from 2023 to 2024.

The companies

As of the time of this publication, we were unable to find any information in the public domain about companies involved in the production of nuclear weapons for Pakistan.

Nuclear weapon spending in context

For every minute of 2024, Pakistan spent $2,049 (Rs 574,112) on nuclear weapons. For every person living in Pakistan last year, the country spent $4 (Rs 1,204) on its nuclear arsenal.[111] Pakistan spent 301 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[112] In fact, Pakistan could have paid for nearly a third of the entire budget of the UN with its nuclear weapon spending.[113] Pakistani nuclear weapon spending could have saved the lives of nearly 7 million people who were acutely food insecure, including those on the brink of famine, in 2024.[114]

Pakistan could have paid for nearly a third of the entire budget of the UN with its nuclear weapon spending. Pakistani nuclear weapon spending could have saved the lives of nearly 7 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	251,269,164
Amount spent on nuclear weapons	$1,080,002,570
Amount per person (USD)	$4
Amount per person (own currency)	Rs1,204

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$3,592,011
Amount spent on nuclear weapons	$1,080,002,570
How many times could they pay their UN contribution?	301

An Indian Agni-II intermediate range ballistic missile on a road-mobile launcher, displayed at the Republic Day Parade on New Delhi's Rajpath, January 26, 2004. | Antônio Milena (ABr) | CC 3.0.

Russian Federation

$8.1 billion (₽ 753.8 billion)	
$466,436,131	

Nuclear arsenal overview

Russia has 5,449 nuclear weapons which it can launch from land-based missiles, submarines, and aeroplanes.[115] The Nuclear Ban Monitor estimates the Russian nuclear arsenal explosive power to be the equivalent of 63,532 Hiroshima-bombs.[116]

Nuclear weapons spending

A 2018 SIPRI report found that Russian nuclear weapons system spending cost about 13% of total defence expenditures in recent years (2010 and 2016). Therefore, in previous years, this report calculated 13% of total Russian defence spending to provide an estimate of nuclear weapons spending.[117] However, from 2022-2024, Russian military spending increased significantly beyond what was projected due to its invasion of Ukraine. SIPRI estimated Russian military spending at $149 billion in 2024, an increase of 38% from 2023.[118] These costs can be assumed to be largely, if not completely, associated with conventional weapons; in 2022, the first year of the invasion, the line item in the Russian budget dedicated to the "nuclear weapons complex" (which is just one component of our calculation of Russian nuclear weapons spending) remained unchanged from what was budgeted in 2022 to what was reported as enacted. Other allocations for conventional forces, for example for the Russian national guard, or for "mobilization and extra forces training" increased significantly.[119]

Nuclear weapons spending therefore would have likely been a smaller percentage of total military spending than before the invasion of Ukraine. Therefore, we calculated the increase in the "nuclear weapons complex" line item from 2021 to 2022 (6%) and applied this annual increase to our nuclear weapons spending calculation from 2021. Our estimate of Russian nuclear weapons in 2024 is therefore ₽754 billion or $8.1 billion, which is about 5% of Russian military spending in 2024.

Russia increased its nuclear weapons spending by $466 million (₽43.3 billion) from 2023 to 2024.

The companies

The Russian nuclear arsenal is primarily built by state-owned companies. Rostec State Corporation comprises 800 companies and is the most heavily involved, and produces the Iskander-M nuclear capable missile systems.[120] Another Rostec company involved in the production of missiles is SpecChemistry JSC.[121] United Aircraft Corporation, also part of Rostec, produces at least the Su-34 nuclear-capable bombers, and TU-95MS.[122] Belarus owns Volat (also known as the Minsk Wheel Tractor Plant Open Joint Stock Company), which produces the mobile launchers designed for Russian Topol missiles.[123]

Nuclear weapon spending in context

For every minute of 2024, Russia spent $15,405 (₽1.4 million) on nuclear weapons. For every person living in Russia last year, the country spent $56 (₽ 5,205) on its nuclear arsenal.[124] Russia spent 138 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[125] In fact, Russia could have paid for the entire budget of the UN more than twice with its nuclear weapon spending.[126] Russian nuclear weapon spending could have saved the lives of 52 million people who were acutely food insecure, including those on the brink of famine, in 2024.[127]

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	144,820,423
Amount spent on nuclear weapons	$8,119,153,727
Amount per person (USD)	$56
Amount per person (own currency)	5,205 RUB ₽

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$58,795,546
Amount spent on nuclear weapons	$8,119,153,727
How many times could they pay their UN contribution?	138

Test salvo firing of an intercontinental ballistic missiles "Bulava" from the lead SSBN "Yuri Dolgoruky". Source: Ministry of Defense of the Russian Federation.

Russia could have paid for the entire budget of the UN more than twice with its nuclear weapon spending. Russian nuclear weapon spending could have saved the lives of 52 million people who were acutely food insecure, including those on the brink of famine.

The United Kingdom

$10.4 billion (£8.2 billion)	
$2,161,054,023	

Nuclear arsenal overview

The United Kingdom has 225 nuclear warheads which can be used from submarine-launched ballistic missiles (the Trident II D-5).[128] These Trident missiles are also used by the US and are primarily produced by U.S. companies. They are currently deployed on the Vanguard-class submarines, but a new set of four submarines are being built in a £41 billion project coordinated by the Dreadnought Alliance.[129] The UK is also developing a new nuclear warhead.[130] The Nuclear Ban Monitor estimates UK nuclear arsenal explosive power to be the equivalent of 1,500 Hiroshima-bombs.[131]

Nuclear weapons spending

Our estimate for UK nuclear weapon spending is derived from total UK Defence Nuclear Enterprise (DNE) spending, with the costs for non-nuclear armed submarines subtracted.[132] The DNE encompasses all UK spending on its nuclear weapons, nuclear-armed submarines, missiles and related infrastructure, but also includes spending on its nuclear-powered conventionally-armed attack submarines.

Adding together capital, resource and administration costs for the Defence Nuclear Enterprise, as reported in the UK Ministry of Defence Annual Report and Accounts for 2023-24 results in a total of £9.4 billion ($12 billion).[133]

This total includes spending on the Dreadnought submarine programme in 2023/24, but also spending on conventionally- armed SSNs.[134] In response to a parliamentary question in 2022/23, the MOD said that the total cost of support and maintenance programmes for in-service submarines was £594 million ($759 million).[135] During that time, six of the UK's ten in-service submarines were conventional nuclear-powered submarines and the remaining four were nuclear-armed. Using those proportions to assign 60% of support and maintenance costs to the conventional nuclear-powered submarines gives a figure of £356 million ($455 million) for conventional nuclear-powered submarine support and maintenance costs. In addition, the UK is building two types of conventional nuclear-powered submarines: the Astute, and the SSN-AUKUS. The MOD's 2023/24 Major Projects Data states that £412 million ($526 million) was spent on the Astute programme that year and £495 million ($632 million) was spent on the SSN-AUKUS programme.[136] Bringing the costs together, we estimate that the UK spending on SSNs in 2023/24 to have been £1.3 billion ($1.6 billion).

Subtracting our estimate for SSN spending from Defence Nuclear Enterprise spending gives a final estimate for UK spending on nuclear weapons in 2023/24 of £8.2 billion, which converted into USD is $10.4 billion. This amounts to about 13% of the UK's total military spending.

The United Kingdom increased its nuclear weapons spending by $2.2 billion (£1.7 billion) from 2023 to 2024.

The companies

At least eleven companies are significantly involved in building UK nuclear weapons - Babcock International, BAE Systems, Draper, General Dynamics, Jacobs, L3 Harris, Lockheed Martin, Northrop Grumman, Rolls Royce, RTX, and Thales. In 2024, these companies earned at least $10 billion for their work on UK nuclear weapons related components, though not all from the UK directly as the UK partially finances the development of its nuclear weapons system, but relies on the US for maintenance and production, as part of the US-UK mutual defence agreement, which was extended indefinitely in 2024.[137]

Dreadnought submarines

In 2024, Babcock International, BAE Systems, Jacobs, Northrop Grumman, Rolls Royce, RTX and Thales earned $4.8 billion for their work on the Dreadnought-class submarines. The Dreadnought Alliance includes BAE Systems and Rolls-Royce.[138] BAE Systems holds a $1.9 billion contract for the Dreadnought delivery phase 3, which runs until 2033.[139] Rolls-Royce has $7.7 billion in related contracts.[140] Other companies include: Jacobs, which received a $132 million contract in 2024[141]; Babcock International with four contracts, valued at $3.5 billion[142]; Northrop Grumman has a $408 million contract[143], and; RTX with a $1.6 billion contract.[144]

Vanguard submarines

Babcock International is contracted by the UK for work on the entire submarine fleet, including support for the Dreadnought project, with outstanding contracts valued at about $3.5 billion.[145] In 2024, Babcock was awarded a $454 million contract to extend the service life of the HMS Victorious, one of the currently operating Vanguard-class of submarines.[146]

Trident missiles

In 2024, eight companies earned $5.4 billion for their work on the Trident system. The production of Trident nuclear missiles involves a process by which the US often contracts companies to build the key components for both the U.S. and UK systems, and then part of those costs are paid back by the UK government to the US. Most of the production work for the UK independent nuclear arsenal is done in the United States, however two British companies are involved- BAE Systems (though contracted by the US) and Babcock International (as a subcontractor to the U.S. firm General Dynamics).[147] The companies contracted to build necessary components for the Trident system include: BAE Systems ($740 million)[148]; Draper ($5.1 billion)[149]; General Dynamics ($1.8 billion)[150]; L3 Harris ($403 million)[151]; Lockheed Martin ($20.3 billion, with four new contracts awarded in 2024)[152]; Northrop Grumman ($1.7 billion, one new contract in 2024)[153], and; RTX ($145 million).[154] There are other contracts as well, but these are the most significant. Lockheed Martin's contracts include development support for the new nuclear warheads planned by the UK, the Astraea (A21/Mk7).[155] The UK does not pay the full amount of these contracts, and the amount they do pay is not always clearly indicated.

The companies involved in the UK nuclear arsenal also seek to influence policy and governmental decision making. The UK does not require lobbyists to register or make data known about what they spend, but Open Access does publish information on the number of meetings held by corporate representatives and key figures with the UK government. In 2024, Amentum (which took over nuclear weapons related work from both AECOM and Jacobs in recent years), Babcock International, BAE Systems, General Dynamics, Jacobs, L3 Harris, Lockheed Martin, Northrop Grumman, Rolls Royce, RTX (Raytheon) and Thales were all involved in these meetings. BAE Systems, Lockheed Martin, Northrop Grumman, RTX and Thales also held meetings with the Prime Minister's office.[156]

Nuclear weapon spending in context

The United Kingdom spent $19,800 (£15,503) every minute on nuclear weapons in 2024. The United Kingdom spent $151 (£118) per person on its nuclear arsenal in 2024.[157] The United Kingdom spent 76 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[158] In fact, the United Kingdom could have paid for the entire budget of the UN nearly three times with its nuclear weapon spending.[159] UK nuclear weapon spending could have saved the lives of 67 million people who were acutely food insecure, including those on the brink of famine, in 2024.[160]

The United Kingdom could have paid three times the entire UN budget with what it spent on nuclear weapons. UK nuclear weapon spending could have saved the lives of 67 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	69,138,192
Amount spent on nuclear weapons	$10,435,393,359
Amount per person (USD)	$151
Amount per person (own currency)	£118

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$137,851,293
Amount spent on nuclear weapons	$10,435,393,359
How many times could they pay their UN contribution?	76

Rally to US Permanent Mission to the UN | Photo: ICAN-Darren Ornitz

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WEAPONS & FACILITIES AND THE COMPANIES THAT BUILD THEM

BOMBS AND MISSILES

Trident II D5

BAE Systems, Babcock International, Draper, General Dynamics, L3 Harris, Lockheed Martin, Northrop Grumman, Perspecta (owns Analex), RTX (Raytheon)

$30,306,076,718 *

SUBMARINES

Dreadnought-class

BAE Systems, Babcock International, Jacobs , Northrop Grumman, Rolls- Royce, RTX (Raytheon), Thales

$23,994,805,235 *

Vanguard-class

Amentum, Babcock International, Rolls-Royce

$715,197,957 *

* Estimated value of outstanding contracts

COMPANY INFLUENCE EXPENDITURES TOTALS

COMPANIES WORKING ON THE UK NUCLEAR ARSENAL	HIGH LEVEL MEETINGS WITH UK OFFICIALS *	MEETINGS WITH UK PRIME MINISTER'S OFFICE
Amentum	1	
Babcock International	12	
BAE Systems	39	2
General Dynamics	1	
Jacobs	6	
L3 Harris	1	
Lockheed Martin	10	1
Northrop Grumman	3	3
Rolls - Royce	29	
RTX (Raytheon)	2	1
Thales	13	1

Trident II (D-5) missile underwater launch. Public Domain

United States

$ 56.8 billion	
$5,300,000,000	

Nuclear arsenal overview

The United States has 5,277 nuclear weapons which it can launch from land-based missiles, submarines, and aeroplanes.[161] The Nuclear Ban Monitor estimates the U.S. nuclear arsenal explosive power to be the equivalent of 59,644 Hiroshima-bombs.[162]

Nuclear weapons spending

The Department of Energy's semi-autonomous National Nuclear Security Administration (NNSA) and the Department of Defense divide responsibilities for the nation's nuclear weapons. The NNSA is responsible for the research, development, production, testing and dismantlement of the nuclear warheads, while the Department of Defense manages the development of warhead delivery systems, such as missiles, aircraft, and submarines. The Department of Defense also manages the deployment of nuclear weapons once they are produced, and any foreign storage facilities for deployed weapons.

The ICAN spending estimate combines U.S. Department of Defense and NNSA funding.[163] The U.S. Congress allocated $19.1 billion for the NNSA in 2024 to spend on weapons activities.[164] In 2024, the Department of Defense requested $37.7 billion for "Nuclear Enterprise Modernization," including the Ground Based Strategic Deterrent, Long Range Standoff Weapon, the B-21 bomber and Columbia-class ballistic missile submarine.[165] Adding $19.1 billion to $37.7 billion results in a total of $56.8 billion spent on nuclear weapons in the United States in 2024. This is roughly 6% of total U.S. military spending in 2024.[166]

The United States increased its nuclear weapons spending by $5.3 billion from 2023 to 2024.

The companies

At least nineteen companies are part of the U.S. nuclear weapons industry: Amentum, Babcock International, BAE Systems, Bechtel, Boeing, BWX Technologies, Draper, Fluor, General Dynamics, Honeywell International, Huntington Ingalls Industries, L3 Harris, Leidos, Lockheed Martin, Northrop Grumman, Peraton, Rolls Royce, RTX, and Textron. The U.S. has the most published information about contractors hired to work on its nuclear arsenal, and the facilities involved in its development, testing, manufacture and deployment.

ICBMs

The U.S. has about 400 deployed Minuteman III Intercontinental Ballistic Missiles (ICBMs). The US currently has contracts with: Boeing ($3.7 billion)[167], General Dynamics ($7.6 million)[168]; Honeywell ($74 million)[169]; L3 Harris ($64 million)[170]; Leidos ($51 million)[171]; Lockheed Martin ($630 million)[172]; Northrop Grumman ($11.3 billion)[173]; Peraton ($444 million)[174]; RTX ($1.2 billion)[175] and Textron ($106 million)[176] for work on these missiles. Other companies are involved, but with less significant contracts. A nearly $2 billion contract to BAE Systems was terminated in August 2024, citing consolidation efforts by the U.S. Air Force in the ICBM contracting structure.[177]

The US is developing a new ICBM system to replace the Minuteman III, called 'Sentinel'. Northrop Grumman holds the main $13 billion contract for developing Sentinel, with other companies including Lockheed Martin ($1.2 billion)[178] and Peraton ($443 million)[179] involved in its development and production. The Sentinel programme has been subject to an additional review by the U.S. Congress as a result of significant cost overruns and is currently in the process of being restructured. The review and restructuring are leading to delays impacting both Minuteman III and Sentinel ICBM programmes.[180] Further, the US Air Force has recently admitted that many new silos will need to be constructed for the Sentinel, further adding to runaway costs.

SSBNs

The US and UK use the same submarine launched ballistic missile system: Trident. Some of the outstanding contract costs are paid by the UK government, but the bulk of the spending is by the US with U.S. companies. However, two British companies are involved: BAE Systems and Babcock International (as a subcontractor to General Dynamics).[181] The companies contracted to build necessary components for the Trident system and the value of their outstanding contracts include: BAE Systems ($740 million)[182]; Babcock International ($70 million)[183]; Draper ($5.1 billion)[184]; General Dynamics ($1.8 billion)[185]; L3 Harris ($403 million)[186]; Lockheed Martin ($20.3 billion, with four new contracts awarded in 2024)[187]; Northrop Grumman ($1.7 billion, one new contract in 2024)[188], and; RTX ($145 million).[189]

The Columbia-class submarines armed with the Trident missiles are built by at least five major contractors. BAE Systems has a $25 million contract[190], Bechtel produces the nuclear propulsion components under a $2.5 billion contract[191]; BWX Technologies will contribute fuel and reactors, for an undisclosed amount, whereas Fluor also has a $16.5 million contract for the Columbia-class submarine's nuclear propulsion.[192] The biggest contract recipient however is General Dynamics subsidiary Electric Boat, which has $28.6 billion in outstanding contracts for the Columbia-class submarine.[193]

Air delivered nuclear weapons

The US also fields variations of the B61 gravity bomb, designed to be dropped by heavy bombers or from fighter jets. These are the weapons deployed across five European countries. In January 2025, the US produced the final upgraded B61-12 gravity bomb.[194] Boeing produced the tail-kit assembly for this bomb and has $187 million in contracts for B61 related efforts.[195]

The US is also planning to build more than 1,000 new air-launched cruise missiles, also known as the Long-Range StandOff, at an estimated cost of $14 million per missile.[196] Boeing has $131 million in outstanding contracts for the LRSO[197], while RTX holds a $2 billion contract for this weapon.[198]

The major facilities

U.S. nuclear weapons laboratories are involved in the design, maintenance and testing of nuclear weapons as well as warhead production and design. These include the Lawrence Livermore, Los Alamos, and Sandia National Labs, the Y-12 facility, Pantex Plant, Savannah River Site, Kansas City National Security Complex and the Nevada National Security Site. The management and operations contracts for these sites are with the U.S. Department of Energy, not defence, and are worth more than $202 billion.

In 2024, the contractor for the Pantex Plant, Consolidated Nuclear Security, was removed and PanTexas Deterrence was issued a 20-year contract in its place. Given the nature of the work, an overlap period between the two companies took place in 2024.[199]

FACILITY	CONSORTIUM/ JOINT- VENTURE	CONTRACT DURATION	CONTRACT VALUE (REFLECTS MODIFICATIONS MADE AFTER INITIAL SIGNING)
Lawrence Livermore National Laboratory	Lawrence Livermore National Security, LLC- Bechtel National, University of California, BWX Technologies, and Amentum.	2007 – 2031	$93,317,891,411[200]
Y-12 National Security Complex	Consolidated Nuclear Security LLC- Bechtel National, Inc.; Leidos; ATK Launch Systems; and SOC LLC	2013 – 2027	$49,832,858,385[201]
Sandia National Laboratory	National Technology & Engineering Solutions of Sandia, LLC (a wholly owned subsidiary of Honeywell)	2017 – 2027	$47,422,469,564[202]
Nevada National Security Site	Mission Support & Test Service, LLC (MSTS) - Honeywell International Inc., Jacobs Engineering Group Inc., and Huntington Ingalls Industries.	2017 – 2027	$10,429,273,919[203]
Los Alamos National Laboratory	Triad National Security, LLC – Battelle, Texas A&M University System, University of California	2018 – 2028	$39,956,121,420[204]
Pantex Plant	PanTeXas Deterrence- BWXT; Fluor; SOC LLC; and the Texas A&M University System.	2024 – 2044	$30,103,600,000[205]
Savannah River	Savannah River Nuclear Solutions LLC- Fluor and Huntington Ingalls Industries	2008 -2026	$36,074,960,733[206]

COMPANY INFLUENCE EXPENDITURES TOTALS

COMPANIES WORKING ON THE US NUCLEAR ARSENAL	TOTAL SPENT LOBBYING IN THE US IN 2024
Amentum	$400,000
Babcock International	$400,000
BAE Systems	$5,400,000
Bechtel	$760,000
Boeing	$14,590,000
BWX Technologies	$640,000
Draper	$0
Fluor	$5,205,433
General Dynamics	$15,682,500
Honeywell International	$11,720,000
Huntington Ingalls Industries	$6,498,294
L3 Harris	$2,843,000
Leidos	$5,267,500
Lockheed Martin	$14,025,164
Northrop Grumman	$9,355,000
Peraton	$600,000
Rolls Royce	$1,060,000
RTX (formerly Raytheon)	$16,200,000
Textron	$6,367,394

Lobbying in the US is done both by the companies themselves as well as by lobby firms they hire. We have identified that the U.S. companies which are significantly involved in nuclear weapons production reported $117 million spent on lobbying activities in 2024.[207] This does not include financing of political action campaigns or contributions to election campaigns.

Nuclear weapon spending in context

The United States spent $107,772 every minute of 2024 on nuclear weapons. The United States spent $164 per person on its nuclear arsenal in 2024.[208] The United States spent 74 times its assessed contribution to the United Nations on its nuclear arsenal in 2024.[209] In fact, the United States could have paid for the entire budget of the UN nearly 16 times with its nuclear weapon spending.[210] U.S. nuclear weapon spending could have saved the lives of 365 million people who were acutely food insecure, including those on the brink of famine, in 2024.[211]

United States could have paid for the entire budget of the UN nearly 16 times with its nuclear weapon spending. U.S. nuclear weapon spending could have saved the lives of 365 million people who were acutely food insecure, including those on the brink of famine.

HOW MUCH IS SPENT PER PERSON ON NUCLEAR WEAPONS?

2024 Population	345,426,571
Amount spent on nuclear weapons	$56,800,000,000
Amount per person (USD)	$164
Amount per person (own currency)	$164

HOW MUCH IS SPENT ON NUCLEAR WEAPONS COMPARED TO HOW MUCH IS SPENT ON THE UN?

Annual Assessed Contribution to the UN	$762,434,310
Amount spent on nuclear weapons	$56,800,000,000
How many times could they pay their UN contribution?	74

A U.S. Air Force F-35 Lightning II intercepts a Russian Tu-95 "Bear" strategic bomber over the Bering Sea, April 14, 2025hoto) | US Airforce.

WEAPONS & FACILITIES AND THE COMPANIES THAT BUILD THEM

BOMBS AND MISSILES

Sentinel
Lockheed Martin, Northrop Grumman, Peraton
$14,520,117,945 *

Minuteman III
Boeing , General Dynamics, Honeywell International, L3 Harris, Leidos, Lockheed Martin, Northrop Grumman, Peraton, RTX (Raytheon), Safran, Textron
$17,592,843,085 *

LRSO
Boeing , RTX (Raytheon)
$2,130,987,141 *

B61-12 gravity bomb
Boeing
$187,503,466 *

Trident II D5
BAE Systems, Babcock International, Draper, General Dynamics, L3 Harris, Lockheed Martin, Northrop Grumman, Perspecta (owns Analex), RTX (Raytheon)
$30,306,076,718 *

FACILITIES

Kansas City National Security Campus
Honeywell International
$18,327,667,475 *

Lawrence Livermore National Laboratory
Amentum, Bechtel, BWX Technologies
$4,665,900 *

Los Alamos National Laboratory
Fluor, Huntington Ingalls Industries
$15,982,448,568 *

Nevada National Security Site
Mission Support and Test Services LLC which consists of Honeywell International, Amentum and Stoller Newport News Nuclear, Inc., a subsidiary of Huntington Ingalls Industries
$10,429,273,919 *

Y-12 National Security Complex
Bechtel, Honeywell International, Leidos, Northrop Grumman
$38,584,037,490 *

Sandia National Laboratory
Honeywell International
$47,422,469,564 *

Pantex Plant
BWX Technologies, Fluor
$7,525,952,915 *

Savannah River Site and Savannah River National Laboratory
Fluor, Honeywell International, Huntington Ingalls Industries
$36,074,960,733

SUBMARINES

Columbia-class
BAE Systems, Bechtel, BWX Technologies, Fluor, General Dynamics
$47,656,827,376 *

* Estimated value of outstanding contracts

The nose assembly of a mock B61-12, mounted on an aluminum tube to replicate the body of the bomb, sits in a stand awaiting movement to Sandia National Laboratories' Davis gun, which fired the test assembly into a pool in one of a series of impact tests. Photo: US Department of Energy.

Key changes since last report

ICAN has produced annual reports on nuclear weapons spending for six years, and this report changes the format from previous editions. Instead of separating the country and company information, they are now combined to provide a better overall picture of the different nuclear arsenals and those responsible for their production. After several years of including connections between the nuclear weapons industry and think tanks researching and writing on nuclear weapons, the authors chose to discontinue this reporting.

Similarly, a decision was taken not to include information about specific individuals' connections across the nuclear weapons industry, financial sector and/or governments. For those interested, information the revolving door between the arms industry and governments can be found in the UK produced by the Campaign Against Arms Trade and World Peace Foundation[212], and in the US by Open Secrets[213] and Responsible Statecraft.[214]

We would also like to note that Surge: 2023 Global Nuclear Weapons Spending contained an error in the calculation of Indian nuclear weapons spending in 2023, which should have been 214 billion Indian rupees, or about $2.6 billion in 2024 dollars and North Korean nuclear weapons spending in 2023, which should have been 530.8 billion North Korean won, or about $590 million in 2024 dollars. The comparisons included in this report use the corrected figures.

Artists Against the Bomb collection in a walking exhibition at the Metropolitan Museum of Art and Central Park during Nuclear Ban Week 2025 | Photo: ICAN | Darren Ornitz.

 Embargoed until 13 June 06:00 CEST.

Methodology

Nuclear weapons spending

The estimates for country nuclear weapon spending include nuclear warhead and nuclear-capable delivery systems' operating costs and development where these expenditures are publicly available and are based on a reasonable percentage of total military spending when more detailed budget data is not available. When SIPRI Military Expenditure data is used for these calculations, we use the military expenditure calculation in local currency for the 2024 financial year.

Due to lack of reliable and consistent global information, these estimates do not include the costs to remediate the environment contaminated by nuclear weapons or to compensate victims of nuclear weapon use and testing, although these are also important markers of the added financial and human cost of nuclear weapons. A 2011 Global Zero cost estimate which added "unpaid/ deferred environmental and health costs, missile defences assigned to defend against nuclear weapons, nuclear threat reduction and incident management" found that this "full" cost of global nuclear arsenal was over 50% higher than just the cost of nuclear weapons system maintenance and development.

The methodology and sources used to calculate each country's spending on nuclear weapons in this report is detailed in each country section.

Currency calculations

Currency exchange calculations are based on annual averages, and yearly differences are calculated on a constant currency basis - meaning that the same exchange rate was used for all calculations into USD. For the five-year comparison, the original currency spending figures for each year were converted to USD at the last stage of the calculation. Exchange rates used in this report are based on an average currency conversion rate for 2024, as provided by the U.S. Internal Revenue Service,[215] except for North Korea and Pakistan which are an average of 2024 rates as listed on xe.com.

The exchange rates listed in this report are:

1 USD = 0.924	Euro
1 USD = 83.677	INR
1 USD = 899.999	KPW
1 USD = 280.166	PKR
1 USD = 7.189	Yuan
1 USD = 92.837	RUB
1 USD = 3.701	Israel New Shekel (ILS)
1 USD = 0.783	GBP

Companies

In places where multiple companies were included, the total contract value was divided equally across the number of companies, unless there is a clear ownership division published. This is an estimate to prevent double reporting. Information about contracts was sourced from media reports, company websites, government databases, and industry analysis. Sourced materials are clearly noted, and a full bibliography of sources used is available on request.

US contracts

Department of Defence (DoD) contracts pulled from contract websites may not include all contracts as only those over $7 million are reported. Additional contract information was researched using USASpending.gov, wherein searches by contractor name were performed. Media reports were also used to provide additional verification of contract awards (or changes). Subcontract listings were not included unless specifically noted. Potential award amounts were listed, as opposed to obligated amounts, to illustrate the agreed scope of the contract costs.

"Some countries are investing in new nuclear weapons and their means of delivery. Others are expanding their inventories of nuclear weapons and materials. Some continue to rattle the nuclear sabre as a means of coercion.....

But, having said that, there are also signs of hope. Last September, world leaders gathered in New York and adopted the Pact for the Future. The Pact reconfirms a basic truth. The nuclear option is not an option at all. It's a one-way road to annihilation. We need to avoid this dead-end at all costs."

UN Secretary-General António Guterres

U.S. Department of Energy contracts with consortiums (Consolidated Nuclear Security, MSTS, etc.) do not have details about the percentage of work done or fees accrued by each of the companies comprising the joint venture, so figures were equally divided among the relevant entities.

French contracts

The annual report on the results of the French Budget (Rapport annuel de performances) provides information on major contractors but not details about the specific contract awards. To get an estimate of annual earnings and recognising that some of the work on the different French nuclear weapons are done by government agencies, the amount spent per weapon was divided equally with an estimate of 40% of costs allocated to the government. As many prime contractors are joint ventures, the details included in this report are broken down into their parent companies.

Lobby Data

All US lobbying reports were taken either from the US Senate Lobbying Disclosures site (https://lda.senate.gov/system/public/), or the US House site (https://disclosurespreview.house.gov), where each lobbyist or defence contractor files quarterly reports, and the full list of referenced reports is available upon request. Each company was examined, as well as each individual lobbying firm listing that company as a client. The combined total of these expenses was included in the report. Some companies did not report any of their own lobbying activities and only hired external lobbying firms.

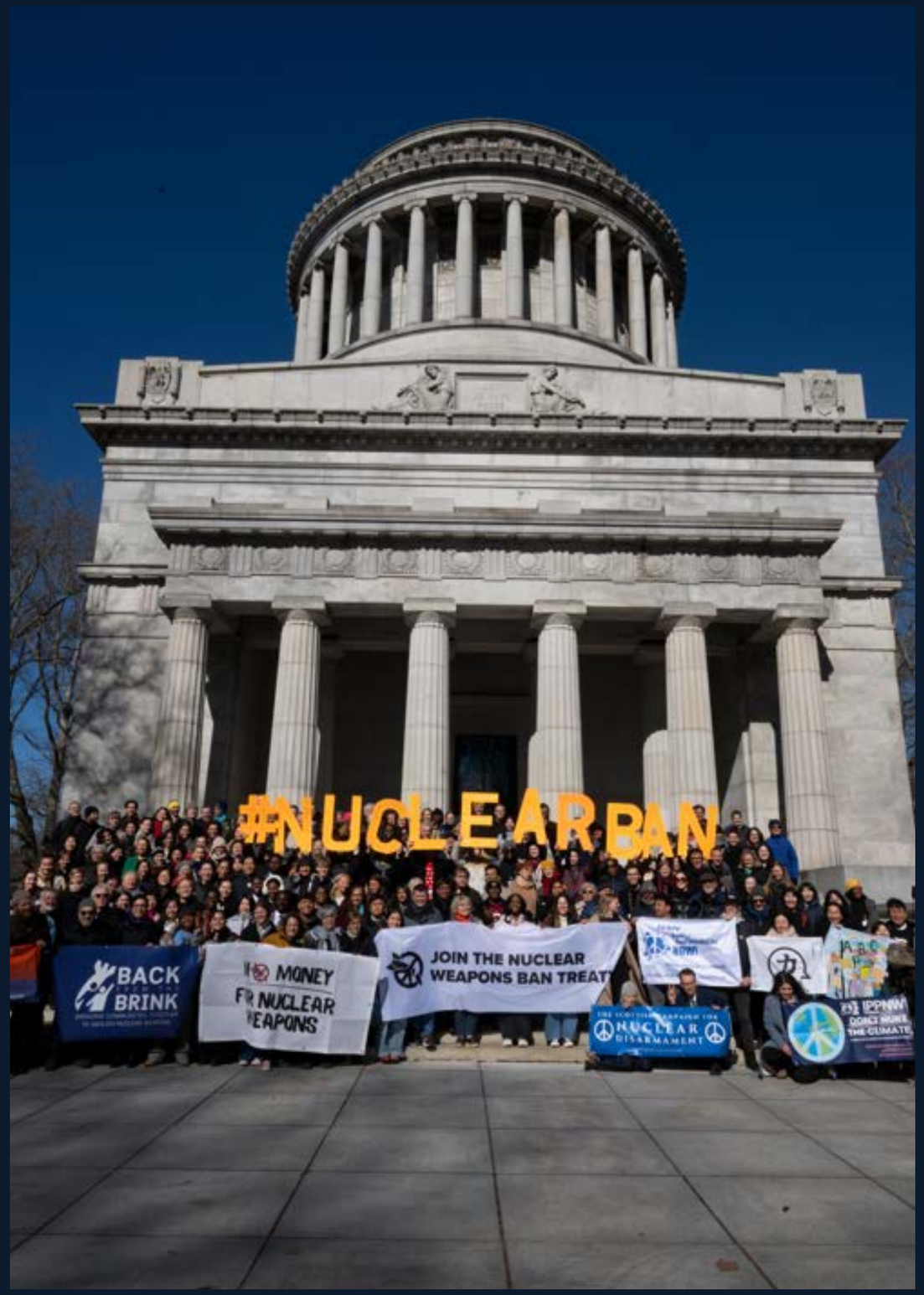
UK Lobbying information was obtained through the Transparency International UK data dashboard on lobbying activities: https://openaccess.transparency.org.uk/.

The French Transparency Register was the source of information on French lobby expenditures: https://www.hatvp.fr/. Estimates were required, as French lobbyists are not required to disclose per-client figures, so these figures are estimated based on the number of clients, and total reported amounts. The figures for the defence companies themselves are the median of the reported range.

 Embargoed until 13 June 06:00 CEST.

Photo: ICAN | Aude Catimel.

 Embargoed until 13 June 06:00 CEST.



ICAN Campaigner Forum at Riverside Church | Photo credit: ICAN | Darren Ornitz.

Conclusion

While we hope this report has helped to shed some light on the costs of nuclear weapons globally and the actors involved, truthfully, it raises more questions than answers. Some of our figures are estimates, based on the best publicly available data found through painstaking research. And yet, most of the public, and even elected representatives in nuclear-armed and allied governments, are unaware even of these estimates. As we have documented in our special section on the costs of nuclear sharing, there is even less information available in the countries that host U.S.' nuclear weapons given that it is still a (badly kept) state secret.

Research reports like this are one way to raise awareness of the costs of nuclear weapons, but there are many other important actions to take to bring more transparency to nuclear weapons policy decisions made by a select few on behalf of millions. Elected representatives in nuclear-armed and allied states have a special role to play, and thousands have already signed ICAN's parliamentary pledge to call on their government to join the TPNW.[216] Citizens can encourage their representatives to demand more information from their governments about what nuclear weapons cost, and why resources have been allocated towards weapons of mass destruction instead of more pressing security needs.

As an investor, member of a financial institution or an activist, people can work to cut the nuclear weapons industry's financial ties. A group of 131 institutional investors, representing over four trillion US dollars in assets under management, have expressed support for the TPNW, including through the ICAN- Etica SGR Nuclear Weapons Free Finance Initiative.[217]

These secret costs cannot remain secret much longer. Every citizen, politician and banker can choose to further the development and maintenance of nuclear weapons or demand their dismantlement.

Research reports like this are one way to raise awareness of the costs of nuclear weapons, but there are many other important actions to take to bring more transparency to nuclear weapons policy decisions made by a select few on behalf of millions.

About ICAN and the Authors

The International Campaign to Abolish Nuclear Weapons (ICAN) is a global campaign working to mobilise people in all countries to inspire, persuade and pressure their governments to sign and ratify the Treaty on the Prohibition of Nuclear Weapons. ICAN comprises more than 700 partner organisations in over 110 countries. More information about ICAN can be found at www.icanw.org. Alicia Sanders-Zakre and Susi Snyder co-authored this report.

Alicia is the Policy and Research Coordinator of ICAN where she directs and coordinates research on the Treaty on the Prohibition of Nuclear Weapons, the humanitarian impact of nuclear weapons and general nuclear weapons policy. Previously, she was a research assistant at the Arms Control Association and at the Brookings Institution and she has published over 100 news articles, editorials and reports on nuclear weapons, and is the author and co-author of previous ICAN reports on nuclear weapons spending. She can be reached with any comments or questions at alicia@icanw.org.

Susi is the Programme Coordinator of ICAN, her responsibilities include facilitating the development and execution of ICAN's key programmes, including the management of ICAN's divestment work and engagement with the financial sector. She coordinated the Don't Bank on the Bomb research and campaign while working for the Dutch organisation PAX since 2013. Susi was a Foreign Policy Interrupted/ Bard College fellow in 2020 and one of the 2016 Nuclear Free Future Award Laureates. Previously, Susi worked with PAX and before that served as the Secretary General of the Women's International League for Peace and Freedom at their Geneva secretariat. She was named Hero of Las Vegas in 2001 for her work with Indigenous populations against US nuclear weapons development and nuclear waste dumping. She can be reached with any comments or questions at susi@icanw.org

About the Treaty on the Prohibition of Nuclear Weapons

On 7 July 2017 – following a decade of advocacy by ICAN and its partners – an overwhelming majority of the world's nations adopted a landmark global agreement to ban nuclear weapons, the Treaty on the Prohibition of Nuclear Weapons (TPNW). The TPNW prohibits nations from developing, testing, producing, manufacturing, transferring, possessing, stockpiling, using or threatening to use nuclear weapons, or allowing nuclear weapons to be stationed on their territory. It also prohibits them from assisting, encouraging or inducing anyone to engage in any of these activities. A nation that possesses nuclear weapons may join the treaty, so long as it agrees to destroy them in accordance with a legally binding, verifiable, time-bound plan. Similarly, a nation that hosts another nation's nuclear weapons on its territory may join, so long as it agrees to remove them by a specified deadline. Nations are obliged to provide assistance to victims of the use and testing of nuclear weapons and to take measures for the remediation of contaminated environments. The preamble acknowledges the harm suffered as a result of nuclear weapons, including the disproportionate impact on women and girls, and on Indigenous peoples around the world. The TPNW entered into force on 22 January 2021.

Photo: ICAN

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