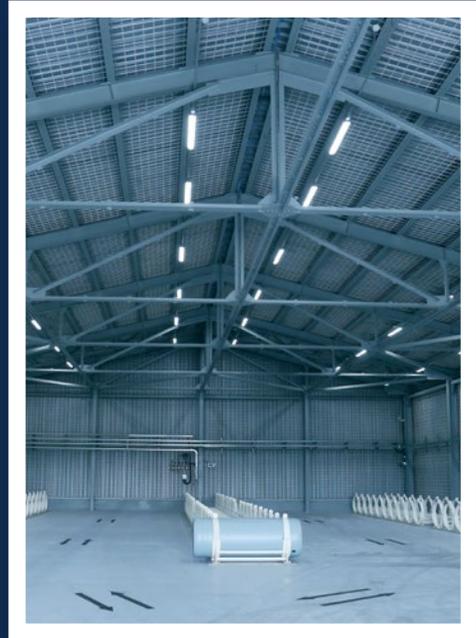


# THE IAEA LEU BANK

AN INVESTMENT IN A  
More Secure Future





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ON AUGUST 29, 2017, I was privileged to join Kazakhstan President Nursultan Nazarbayev, IAEA Director General Yukiya Amano, NTI Co-Chairman Sam Nunn and colleagues from the Nuclear Threat Initiative in Astana, Kazakhstan for a momentous and inspiring event: the launch of the IAEA's new low-enriched uranium bank.

A project jump-started by NTI more than a decade ago with an extraordinary investment from Warren Buffett, the bank is the result of an unprecedented international effort to reduce nuclear dangers and make the world safer—now and for future generations. Its physical reserve will give countries investing in nuclear energy an assured supply of fuel for peaceful purposes without incurring the significant costs of developing indigenous enrichment capabilities and without adding to the risks of global proliferation of nuclear technology, materials and weapons. Its launch was a great success, and the IAEA LEU Bank now stands as a vivid example of what can be accomplished when countries come together to address global security risks.

The world owes a particular debt of gratitude to the IAEA and its leaders, including former IAEA Director General Mohamed ElBaradei, and to Kazakhstan, long a global model of nonproliferation, which volunteered to host the bank. A number of countries, including the United States, helped finance development of the bank, and Russia and China have signed important transit agreements crucial to its operation. In the United States, the George W. Bush and Barack Obama administrations endorsed and promoted the bank.

How the bank came together—from 2006 when Sam Nunn proposed the idea to the IAEA to the launch this year in Astana—is a remarkable story. In many ways, it exemplifies what NTI does best: develop ambitious ideas, build international coalitions and facilitate action on a large scale.

This is the exactly kind of work NTI plans to continue. And it's possible because Sam Nunn, Ted Turner, Charlie Curtis, Joan Rohlfing and the team they built at NTI are recognized worldwide as independent and trusted partners with unparalleled expertise. I am honored to join them in advancing the important work of this exceptional organization.

I hope you will find this story, *The IAEA LEU Bank: An Investment in a More Secure Future*, as inspirational as I do.



Ernest J. Moniz  
Co-Chairman and CEO  
Nuclear Threat Initiative

NUCLEAR THREAT INITIATIVE

A nonprofit organization working to reduce the global threat from nuclear, biological and chemical weapons  
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# On a frigid December day in 2010,

Charles Curtis and Corey Hinderstein of the Nuclear Threat Initiative (NTI) sat in an empty office at the headquarters of the International Atomic Energy Agency (IAEA) in Vienna, intently listening to a live audio feed of a meeting of the IAEA Board of Governors elsewhere in the very same building. They were waiting for the 35-member board to take up “assurance of nuclear fuel supply,” the rubric under which it would consider a proposal that NTI had set out four years earlier: to create an international “bank” of low-enriched uranium (LEU) so that countries interested in nuclear energy wouldn’t feel the need to develop their own uranium-enrichment capabilities, further spreading the technology that also can be used to build nuclear weapons.

NTI had offered \$50 million for the project, with two key conditions. One or more IAEA member states had to come up with an additional \$100 million to fund the bank, and the IAEA had to take “the necessary actions to approve establishment of this reserve.” The financial condition already had been met. The board vote that Curtis, NTI’s president, and Hinderstein, vice president for international programs, were monitoring would satisfy the second.

It was clear to them that the proposal would be approved, but the goal was not just to gain a simple majority. For a vote like this, which represented a new kind of undertaking for the IAEA, it was important that the board reach consensus—but in the run-up to the December vote, some countries had

continued to raise questions and objections about the plan for the LEU Bank. Curtis and Hinderstein had spent months meeting with delegations whose votes were uncertain; the U.S. government and other countries contributing to the bank also made it a priority.

One potentially sensitive issue was the unusual role of NTI, a nongovernmental organization, and whether its proposal was trespassing into the domain of IAEA member states. That’s why Curtis and Hinderstein, even though they had credentials to be inside the board’s meeting room, elected to listen to the proceedings remotely.

When the vote finally came, the board had approved the proposal without a single dissenting vote—28 yeases, six abstentions and one absence.

For a vote like this, which represented a new kind of undertaking for the IAEA, it was important that the board reach consensus.

◀ *The IAEA is based on Vienna, Austria. Both current Director General Yukiya Amano and former Director General Mohamed ElBaradei have played critical roles in making the LEU Bank come to fruition.*



# A “BIG IDEA”

At the time of NTI’s founding in 2001, the concept of multilateral fuel-cycle facilities had been a topic of discussion for decades amid growing concerns about the proliferation of nuclear materials and technology and ongoing controversy over Iran’s uranium-enrichment program. But the international community had not yet taken action.

At the IAEA, Director General Mohamed ElBaradei was among the proponents of a multilateral approach, and he was developing plans for an enhanced nuclear nonproliferation regime. In 2003, he wrote a piece for *The Economist* outlining his plans, with multilateral fuel-cycle facilities playing a prominent role. Two years later, ElBaradei and the IAEA would share the Nobel Peace Prize for their “efforts to prevent nuclear energy from being used for military purposes and to ensure that nuclear energy, for peaceful purposes, is used in the safest possible way.”

Meanwhile, in the United States, NTI advisor Warren Buffett had told his friend NTI Co-Chairman and CEO Sam Nunn not to be reluctant to come to him with “a big idea”—something that could help minimize the existential threat posed by nuclear weapons that had concerned Buffett since he read about the detonation of nuclear bombs over Hiroshima and Nagasaki in copies of *The Washington Post* he delivered as a boy.

After careful study and discussions with his NTI colleagues, the former U.S. Senator from Georgia went to Buffett with a proposal to jump-start development of an international LEU Bank, estimated to cost \$150 million to open with enough LEU for three reloads of a 1,000-megawatt nuclear power plant, along with associated costs. Buffett agreed to the plan.

A year later, in September 2006, Nunn traveled to Vienna. Before his meeting with ElBaradei, he called Buffett again—to negotiate the final \$50 million investment.



Nunn had a long-established global reputation as a visionary leader on nuclear security issues, and his speech to the IAEA conference came 15 years after passage of the Cooperative Threat Reduction Program (commonly called the Nunn-Lugar program after Nunn and Richard Lugar, his Senate partner on the legislation) to secure and remove vulnerable nuclear and other dangerous materials from former Soviet states after the fall of the Soviet Union.

Now, Nunn was calling on the IAEA and governments to tackle another risk.

“Today, there is—around the world—a rising interest in using nuclear power to generate electricity,” Nunn told the IAEA.



“

We must find new and better answers to the imperative of the nuclear age: how to maximize the value of nuclear power and minimize proliferation dangers.

”

— NTI CEO  
SAM NUNN

◀ *President Barack Obama and former NTI vice presidents, Laura Holgate (who served as U.S. Representative to the Vienna Office of the UN and the IAEA) and Corey Hinderstein who all helped advance the IAEA LEU Bank.*

“Experts have predicted that energy demand will grow by 50 percent in the next 20 years, and even more in developing countries. As energy needs rise, as oil and gas prices surge, as the pace of global warming increases, nations will look more and more to nuclear power.... As more nations seek nuclear energy to meet their development needs, more nations will weigh available options to determine what for them will be the most secure, and most economical way to ensure a reliable supply of nuclear fuel. Some countries will consider building indigenous fuel cycle facilities—a costly choice that would spread these capacities throughout the world and add to the proliferation risks that are inherent to these technologies. Other states will prefer—for economic and security reasons—to import nuclear fuel from other suppliers. I believe it is in our collective security interest to ensure that states have confidence in electing this second path.”

Nunn closed by calling on governments to fulfill the promise of the LEU Bank.

“We are all here at this conference with a high purpose. We must find new and better answers to the imperative of the nuclear age: how to maximize the value of nuclear power and minimize proliferation dangers. In truth, this challenge is the responsibility of governments, but after decades of debate on this issue, action remains elusive. We believe these dangers are urgent and that is why we at NTI are stepping forward. It is now up to governments to act, and to act decisively.”

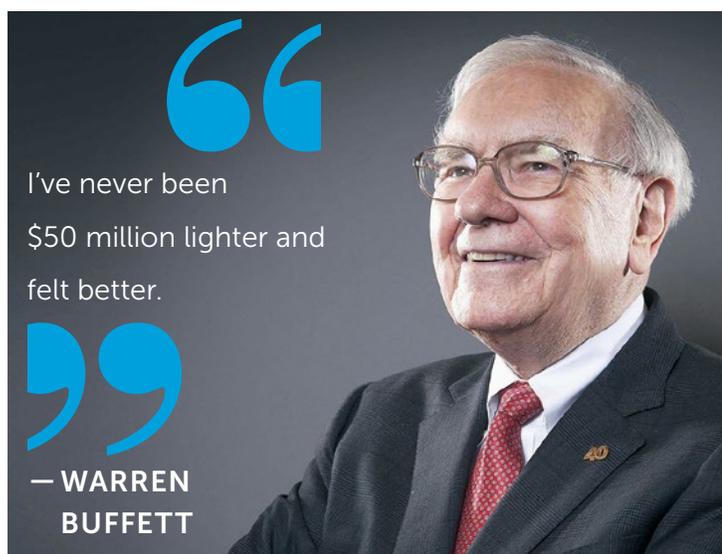
# DEADLINES AND DETAILS

**Buffett and NTI also insisted that the IAEA act expeditiously, and they imposed a deadline for funding of the bank and a requirement that it win approval from the IAEA’s Board of Governors.**

According to Laura Holgate, who was deeply involved in the early stages of the LEU Bank proposal as NTI’s vice president for Russia/New Independent States programs, the two-to-one funding match requirement was “critical” to Buffett. (Nunn initially proposed a one-to-one match.) Buffett wanted countries to do more than express their support for the proposal. He wanted them to show it in a visible and tangible way.

Buffett also insisted that the offer not be open-ended; it would expire in two years if the additional funds couldn’t be raised. As Curtis and Hinderstein put it, the deadline was important because without it, there would have been no pressure for countries to act, and the \$50 million from Buffett, along with funds from countries that made early pledges, couldn’t be tied up indefinitely. Besides, Hinderstein said, there was a “problem that needed to be solved.”

At the same time, Buffett recognized that governments tend to move slowly. He was willing to extend the deadlines, as long as NTI staff could make the case that there was progress toward the ultimate goal. They did—and he agreed to three one-year extensions.



Meanwhile, the money was coming in.

In the 2½ years following Nunn’s announcement at the IAEA, countries made financial commitments that added up to the needed \$100 million. The United States was first, with the George W. Bush administration pledging \$50 million in December 2007, and Kuwait pushed the total over the threshold with a commitment of \$10 million in March 2009. In between, Norway pledged \$5 million; the United Arab Emirates (UAE) pledged \$10 million; and the European Union, comprised of 27 countries, pledged up to €24.4 million.

In the 2½ years following Nunn’s announcement at the IAEA, countries made financial commitments that added up to the needed \$100 million.



The [LEU Bank] new facility should once and for all remove the main excuse that has been advanced, sincerely or not, for building and maintaining homegrown enrichment capability.



—GARETH EVANS

Ambassador Kåre Aas, then-Norway’s representative on the IAEA Board of Governors, said it was “not a difficult decision” for Norway to make the financial commitment for an LEU Bank. A mechanism that reduces incentives for new uranium-enrichment programs while providing assurances of fuel supply to those developing nuclear power programs amounts to a “win-win,” he said. He noted that discussions about the new bank were playing out against the backdrop of the Iran

controversy and amid indications that some other countries were considering pursuing their own national uranium-enrichment programs. That would have represented a potential proliferation challenge. Although some countries still had reservations about the proposal, Norway views “engaging with countries on difficult and sensitive issues” as one objective of its diplomacy, Aas said. He added that his government’s comfort level was enhanced as it already was familiar

## IAEA LEU Bank Donors

DONOR	PLEGGED	RECEIVED & ACCEPTED
 Nuclear Threat Initiative (NTI)	\$50 million	\$50 million
 United States of America	\$49.54 million	\$49.54 million
 European Commission	Up to €24.4 million <sup>1</sup>	€22.8 million
 World Nuclear Transport Institute (WNTI)	€10,000	€10,000
 Kuwait	\$10 million	\$10 million
 United Arab Emirates	\$10 million	\$10 million
 Norway	\$5 million	\$5 million
 Republic of Kazakhstan	\$400,000	\$400,000 <sup>2</sup>

1. Of this sum, €20 million is dedicated to purchase LEU for the IAEA LEU Bank and €4.4 million for safety and security related upgrades.
2. This voluntary contribution is in addition to Kazakhstan’s in-kind contribution to host the IAEA LEU Bank.

with NTI through their work together on phasing out the use of highly enriched uranium in civilian commerce.

Hamad Alkaabi, the UAE's ambassador to Austria and permanent representative to the United Nations and international organizations in Vienna, said his country contributed to the LEU Bank because it dovetails with the nonproliferation principles that are part of UAE policy on nuclear energy as it pursues its own nuclear power program by relying on the international fuel market. Although countries are not required to forswear developing indigenous enrichment capabilities to be eligible to receive LEU from the bank, the UAE has ruled out the option. Alkaabi said that because some of the early concerns

The UAE, as a Middle East country with a nuclear-energy program, hoped its support for the bank would give momentum to the project.

that the LEU Bank proposals would have required countries to disavow their own enrichment, there may have been a residue of "mistrust" around the 2006 proposal among some countries. The UAE, as a Middle East country with a nuclear-energy program, hoped its support for the bank would give momentum to the project and help counter initial concerns that the proposal was part of an agenda to take away countries' nuclear rights, said Alkaabi, who also is the UAE's special representative for international nuclear cooperation.

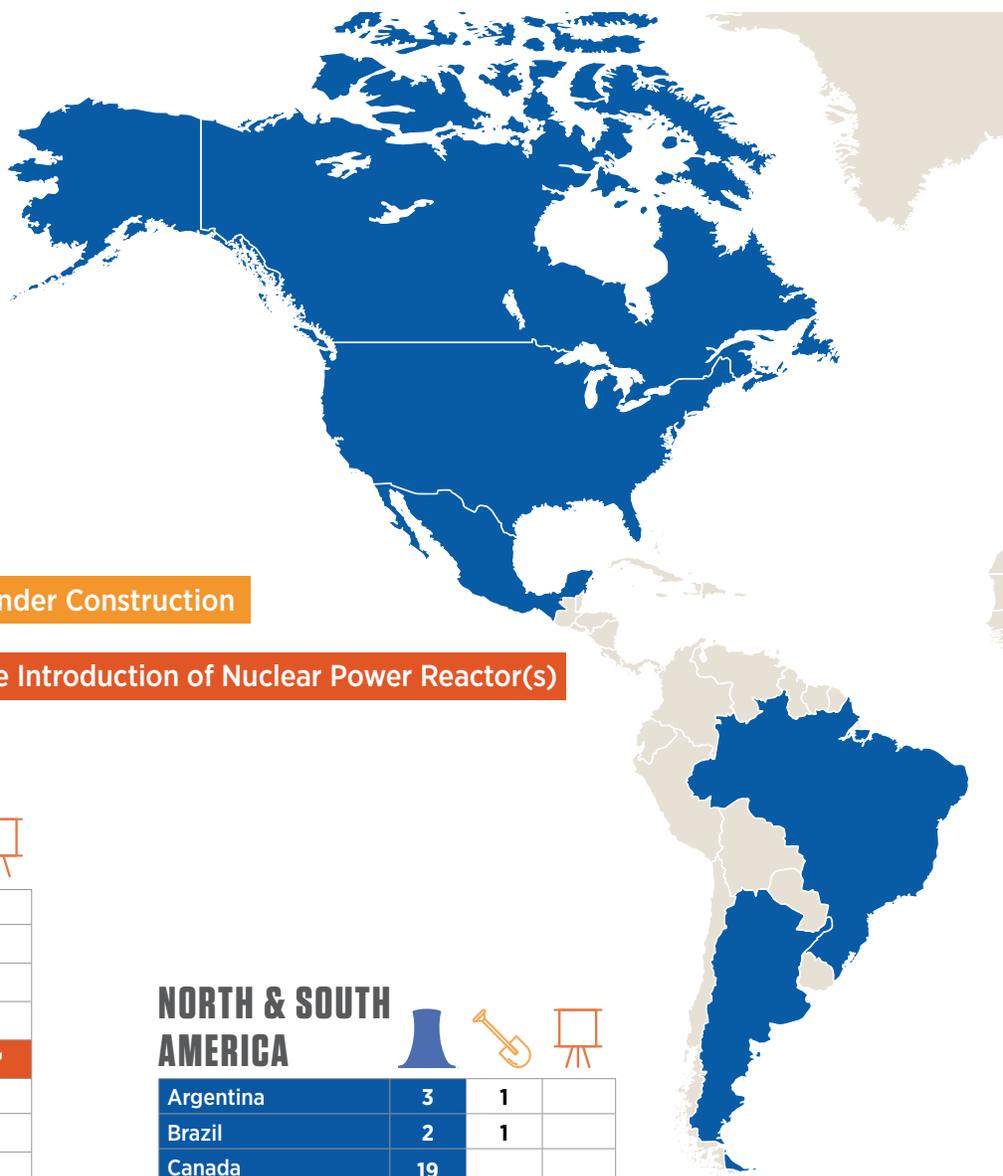
## GETTING TO YES

**On issues related to setting up the bank, it was up to the IAEA to act. Central to NTI's proposal was that the IAEA would have sole responsibility to determine the eligibility criteria, the structure and location of the bank and all other issues relating to the bank itself.**

But first, with the contributions lined up, advocates of the LEU Bank worked on multiple fronts to secure the approval of the IAEA Board of Governors—the second of the two NTI conditions.

A January 2010 document issued by the IAEA Secretariat reflected the

breadth and depth of concern about the bank proposal. The detailed question-and-answer document addressed a host of issues that had been raised by IAEA member states, including concerns about states' sovereign right to enrich. The document stated, "The IAEA LEU bank proposal recognizes that the



## KEY



Operating Reactors



Nuclear Power Reactors Under Construction



Planned or Considering the Introduction of Nuclear Power Reactor(s)

## EUROPE



Country	Operating Reactors	Under Construction	Planned/Considering
Belarus		2	
Belgium	7		
Bulgaria	2		
Czech Republic	6		
Estonia			✓
Finland	4	1	
France	58	1	
Germany	8		
Hungary	4		
Latvia			✓
Lithuania			✓
Netherlands	1		
Poland			✓
Romania	2		
Russia	35	7	
Slovakia	4	2	
Slovenia	1		
Spain	7		
Sweden	8		
Switzerland	5		
Turkey			✓
Ukraine	15	2	
United Kingdom	15		

## NORTH & SOUTH AMERICA

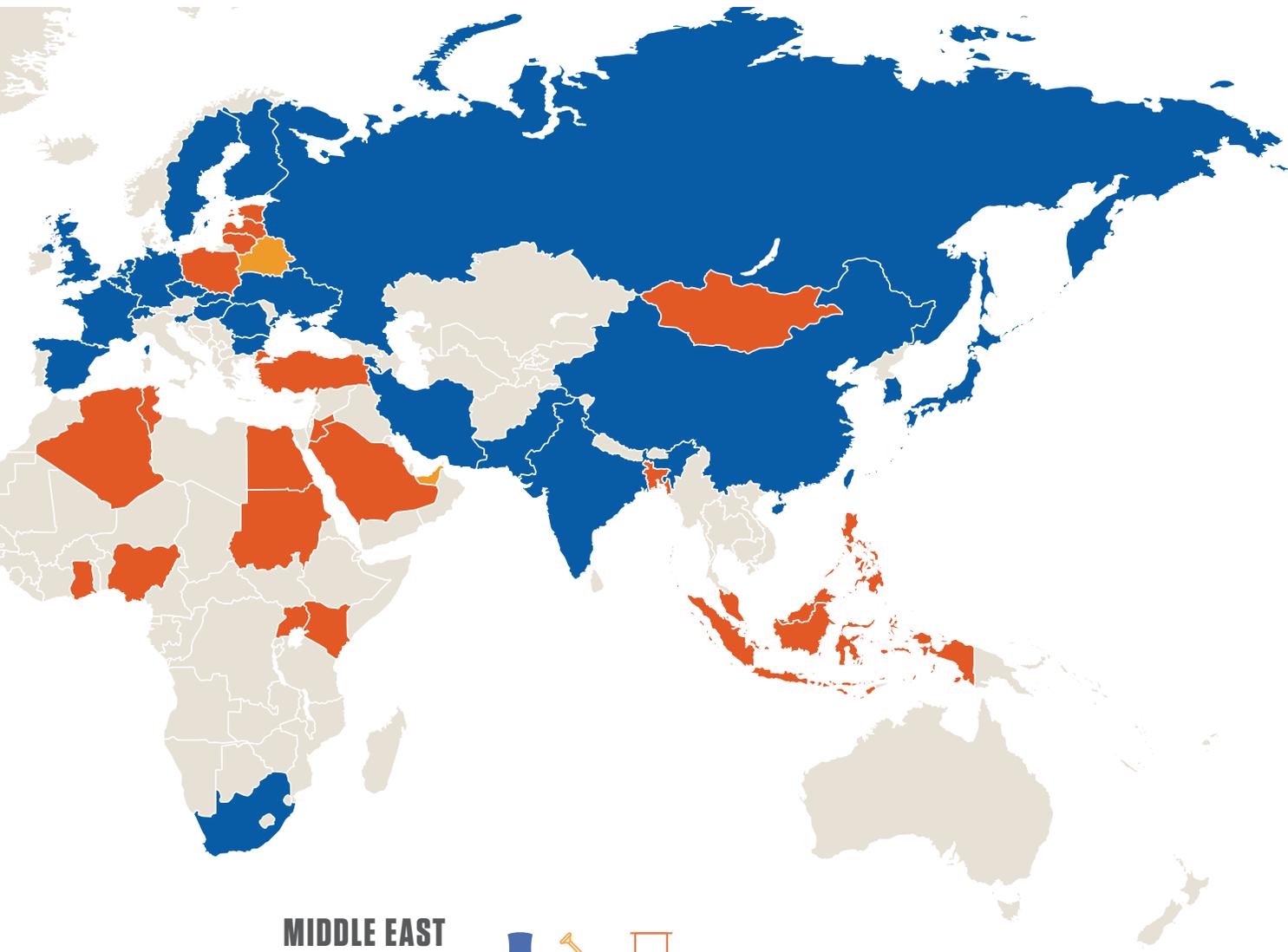


Country	Operating Reactors	Under Construction	Planned/Considering
Argentina	3	1	
Brazil	2	1	
Canada	19		
Mexico	2		
United States	99	2	

## AFRICA



Country	Operating Reactors	Under Construction	Planned/Considering
Algeria			✓
Egypt			✓
Ghana			✓
Kenya			✓
Nigeria			✓
South Africa	2		
Sudan			✓
Tunisia			✓
Uganda			✓



## MIDDLE EAST & ASIA



Armenia	1		
Bangladesh			✓
China	37	20	
India	22	6	
Indonesia			✓
Iran	1		
Japan	42	2	
Jordan			✓
Malaysia			✓
Mongolia			✓
Pakistan	4	3	
Philippines			✓
Saudi Arabia			✓
Republic of Korea	24	3	
Taiwan, China	6	2	
United Arab Emirates		4	

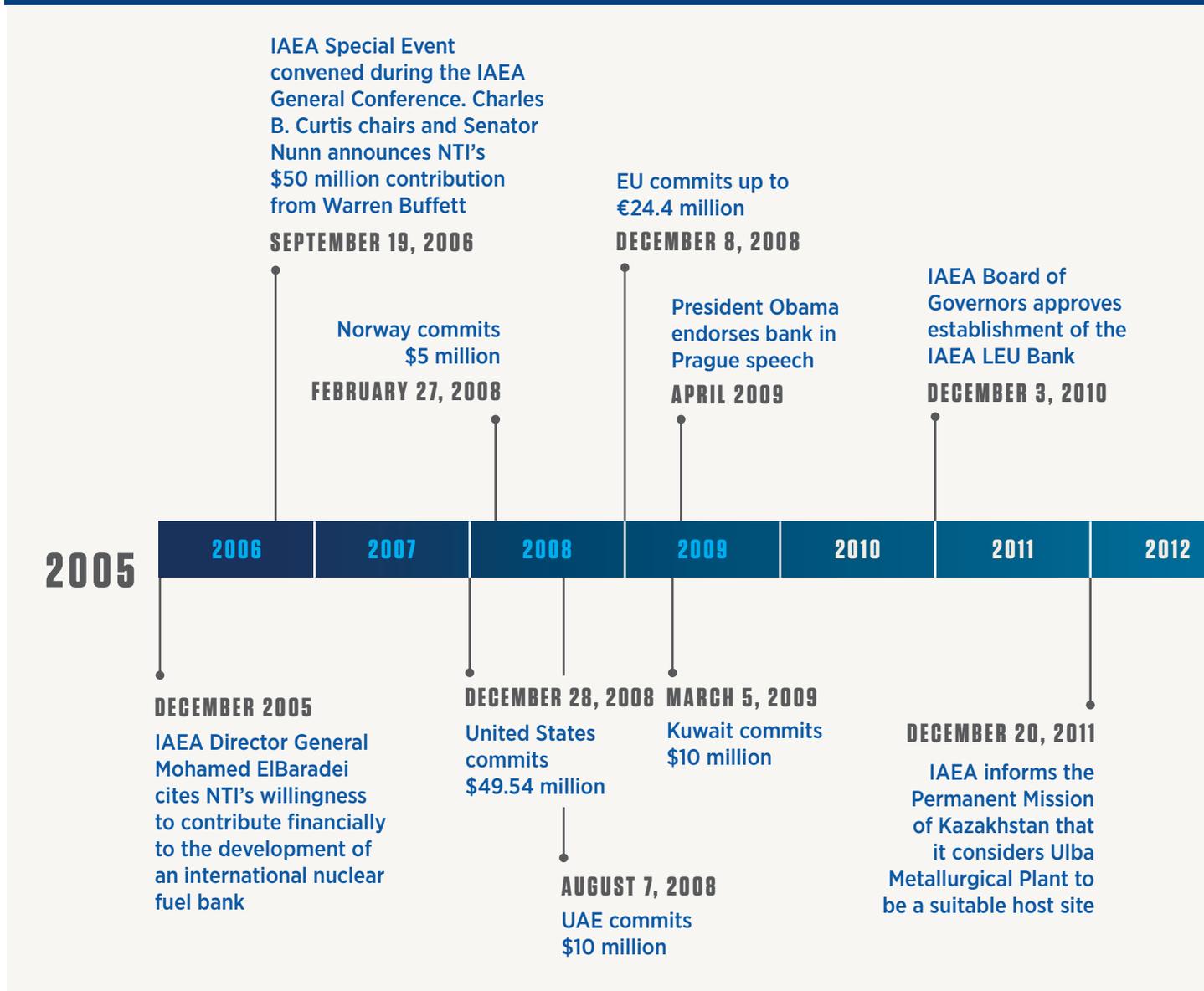
Countries considering nuclear power need to make a decision about whether to pursue their own enrichment capacity. The LEU Bank creates an important option for countries that want the benefits of peaceful nuclear energy, without the significant costs of uranium enrichment and without the risks of proliferation.

rights of Member States, including that of establishing or expanding their own production capacity in the nuclear fuel cycle, should remain intact and should not in any way be compromised or diminished by the establishment of international assurance of supply mechanisms. Having the right to receive LEU from the guaranteed supply mechanisms

would not require a State giving up the right to establish or further develop a national fuel cycle.” Among numerous other issues, the document also cited provisions in the IAEA’s statute as providing the legal basis for a mechanism such as the LEU Bank.

By summer, as some IAEA member states continued to ask questions and

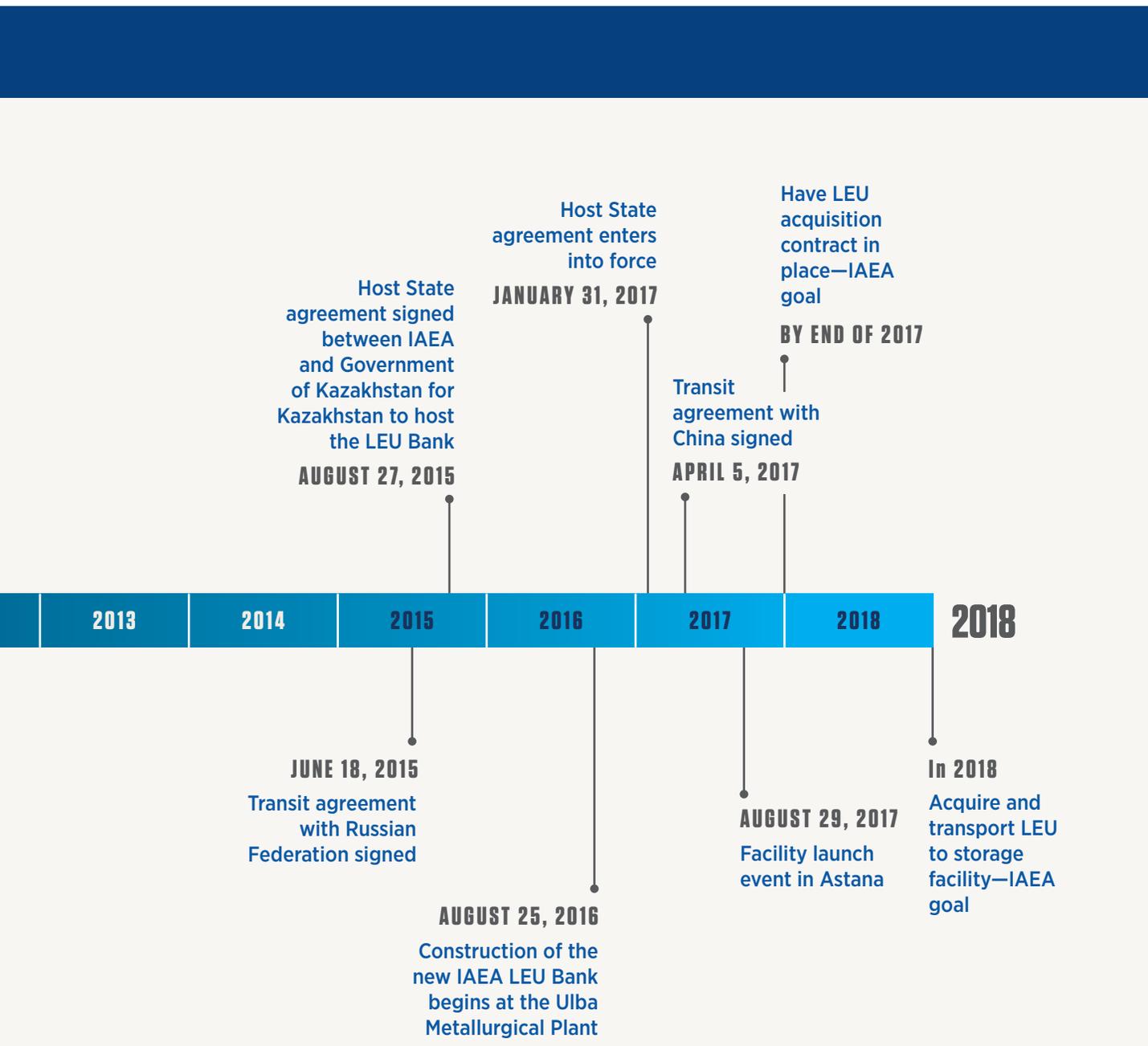
## IAEA LEU Bank Key Milestones



express reservations, Nunn and the staff at NTI were growing increasingly concerned. Although President Barack Obama in 2009 had endorsed the LEU Bank in a historic speech in Prague in which he outlined his vision for key steps to be taken toward a world without nuclear weapons, Nunn was worried that there had been no formal discussion of the proposal at

the IAEA in months. In August, as he encouraged U.S. officials at home to press for progress on the proposal, Curtis and Hinderstein returned to Vienna for meetings with supporters.

A month later, Nunn sent a somewhat optimistic update to Buffett. He wrote that Curtis and Hinderstein were



reporting “a new resolve on the part of supporting countries” with regard to the LEU Bank proposal; he also praised “strong US State Department leadership” on the issue. Before Curtis and Hinderstein’s Vienna trip, he had put the odds at 50–50 that the IAEA Board would approve the proposal in the next year; now he

said the chances were 60–40 “for a breakthrough this year.”

Momentum continued through the fall, and on December 3, 2010, the Board of Directors approved the LEU Bank. Buffett quipped to the *New York Times*: “I’ve never been \$50 million lighter and felt better.”

## KAZAKHSTAN VOLUNTEERS



▲ *Sam Nunn and President Nursultan Nazarbayev confer at a meeting after the signing of the agreement between the IAEA and the Government of Kazakhstan.*

Now that the bank was approved, where to put it? Discussions about a home for the bank had been underway for quite some time, and Kazakhstan was viewed as a prime candidate from the start, in part because it already had the necessary nuclear infrastructure in place. It also had impressive nonproliferation credentials.

After the dissolution of the Soviet Union, it—along with Belarus and Ukraine—voluntarily relinquished the arsenal of nuclear weapons it had inherited on its now-independent soil and joined the Nuclear Non-Proliferation Treaty as a non-nuclear-weapon state. It also closed the Semipalatinsk nuclear test site and forcefully called for an end to nuclear weapons testing.

Nunn knew Kazakhstan President Nursultan Nazarbayev quite well from his work in the Senate addressing the post-Soviet nuclear arsenals and from a separate project that NTI had undertaken with Kazakhstan. Even before NTI made its 2006 offer on seed funding for the LEU Bank, Nunn raised the idea with Nazarbayev when he was seated next to him at a dinner in Washington.

In 2011, Kazakhstan formally offered to host the bank—the only country to do so. The IAEA accepted the offer later that year.

From there, Kazakhstan and the IAEA had to work out the details of the arrangement—everything from how much LEU would be stored and in what type of facility to what kind of safety and security standards it would meet, the latter being the source of some concern among those involved.

This process lagged to the point that Nunn in July 2014 penned an op-ed in *The New York Times* publicly urging the IAEA and Kazakhstan to resolve outstanding questions about development of the LEU Bank and tied the bank to the ongoing negotiations with Iran over its nuclear program. An IAEA LEU Bank, Nunn noted, “could support and reinforce an agreement with Iran” as it would provide assurance to any country developing a nuclear power program that it could access the ingredients for nuclear fuel in the event of an interruption in their commercial supply.

A little more than a year later, the talks between IAEA Director General Yukiya Amano and Kazakhstan Foreign Minister Erlan Idrissov culminated in an agreement. It was signed on August 27, 2015.

Amano laid out the plan for the bank clearly in an op-ed for *The Astana Times*. It read, in part:

The IAEA LEU Bank will be owned and controlled by the Agency, but operated by Kazakhstan. While its safety and security will be governed by Kazakhstan’s legal and regulatory requirements, the IAEA LEU Bank will meet all applicable



There are still politicians and public leaders in this world who are not only prepared to go against the global flow, but are also capable of reversing it. President of Kazakhstan Nursultan Nazarbayev deserves credit for his strategic vision.



— FORMER RUSSIAN FOREIGN MINISTER AND NTI BOARD MEMBER IGOR IVANOV

IAEA nuclear safety standards and security guidance. The IAEA LEU will also be subject to IAEA safeguards.

How will the IAEA LEU Bank work? If an IAEA Member State is unable to obtain low enriched uranium, it can ask the IAEA for a supply as a last resort. Such a request would have to meet certain criteria, such as a disruption of LEU supply to a nuclear power plant or an inability to secure LEU on the commercial market or through State-to-State arrangements.

The country would also need to have a comprehensive safeguards agreement with the IAEA in force and no issues relating to safeguards implementation in that country under consideration by the IAEA Board of Governors. It would pay the cost to restock the IAEA LEU Bank and could use the LEU only for the peaceful purpose of making reactor fuel. Further enrichment, reprocessing or retransfer would not be allowed without the prior agreement of the IAEA.

One guiding principle of the IAEA LEU Bank is that it must not distort the commercial market. Nor does it affect the right of an eligible recipient country to develop its own nuclear fuel cycle facilities.

In a separate article published the same day by the *Bulletin of the Atomic Scientists*, Kairat Umarov, Kazakhstan’s ambassador to the United States, described the LEU Bank as part of his country’s effort to “strengthen global nuclear security, reduce the risks associated with dissemination of sensitive fuel cycle technologies, and create a safer world.”

Curtis called Kazakhstan’s decision to host the LEU Bank a “very generous act.”

Under the signed agreement, the LEU—up to 90 metric tons in up to

60 cylinders—is to be stored at the Ulba Metallurgical Plant site in the city of Oskemen. The initial period of the agreement is 10 years, and it renews automatically for subsequent 10-year periods unless either party terminates it. Kazakhstan agreed to pay to build a new facility on the Ulba site for the LEU and to pay “all costs directly relating to the storage of the IAEA LEU.” The IAEA is paying Kazakhstan one euro per year.

The IAEA has since signed transit agreements with Russia and China to allow the bank’s LEU to be transported to and from points around the world. The final piece needed to bring the bank into full operation is procurement of the LEU—a complex technical, legal and political process that doesn’t disrupt the commercial market. The IAEA plans to have a contract or contracts in place before the end of 2017 so that the bank can receive material in 2018.

Andrew Bieniawski, NTI’s vice president for material security and minimization, said Kazakhstan “has provided the resources, expertise and political will to make the bank a reality—a real contribution to a safer world.”

The next step will be to open the bank for business—though it’s possible there will be no customers. And that’s OK. As the designers and proponents of

“

Kazakhstan’s president formally announced his country’s readiness to host the LEU Bank... during the April 2009 joint press conference with Iranian President Mahmoud Ahmadinejad... to show the international community that Astana hoped that countries like Iran would make use of the fuel bank.

”

— US NEWS & WORLD REPORT



▲ Kazakhstan Foreign Minister Erlan Idrissov and IAEA Director General Yukiya Amano after signing the IAEA LEU Bank agreement to site the bank in Ust-Kamenogorsk, Kazakhstan.

the bank have emphasized from the start, the goal is to provide assurance. If a country decides not to develop a uranium-enrichment capability because the bank gives it confidence that it always will be able to acquire the LEU it needs and then that country subsequently is able to meet all its fuel needs from the commercial market, the bank will have done its job.

As Holgate said, “No one loses if the LEU is not used.”

# THE ROAD AHEAD

## The successful establishment of the IAEA LEU Bank in Kazakhstan opens the possibility for additional multilateral arrangements.

“It wasn’t an easy process to get where we are today, but the LEU bank is an example of what can be accomplished through hard work and cooperation,” said NTI President Joan Rohlfing. “We are so proud to have had a role in its development and enormously grateful for the commitment of Warren Buffett, the IAEA, Kazakhstan and the contributing countries to taking this important step to making it a reality.”

Some supporters—and early critics—of the LEU Bank said the arrangement should have included an associated

fuel-fabrication capability rather than requiring countries to rely on commercial enterprises to turn the LEU into fuel. Others made the point that because there is a wide variety of fuel types, a fabricated-fuel bank would be less useful, and maintaining a stockpile for all fuel types would be a much more ambitious and expensive task than maintaining a bank of LEU. Further, because LEU is a material that can be used in the vast majority of currently operating reactors worldwide, it gives the fuel bank maximum flexibility.



◀ President Nazarbayev addressed the officials gathered at the August 29, 2017, launch of the IAEA LEU Bank.

Tariq Rauf, coordinator for the IAEA's activities in association with the LEU Bank and other fuel-supply assurances from 2003 to 2012, added that uranium enrichment is considered a proliferation-sensitive part of the fuel cycle, while fuel fabrication is not. In pursuing multilateral arrangements for the nuclear fuel cycle, he said, fuel fabrication could come next, but it is not possible to take more than "one bite at a time."

Curtis, like many experts in the field, said the so-called back end of the nuclear fuel cycle, is "ripe" for multilateral arrangements. The back end, which deals with the disposition of the spent fuel that reactors produce, is an issue that is vexing many countries. Curtis also raised the possibility of regional facilities, rather

than a single international facility, for LEU and other stages of the fuel cycle. More broadly, Hinderstein said she hopes the establishment of the LEU Bank "opens minds and keeps minds open" to considering innovative solutions to preventing proliferation and to cooperating across organizations and governments to bring them to life.

For Nunn, such work has always been an imperative for global security.

As he said after the IAEA Board of Governors' vote in 2010: "If every country interested in nuclear energy also chooses to pursue uranium enrichment, the risk of proliferation of dangerous nuclear materials and weapons would grow beyond the tipping point."



▲ Workers at the Ulba Metallurgical Plant in Ust-Kamenogorsk, Kazakhstan, at the IAEA LEU Bank facility.

# IAEA LEU BANK LAUNCH AUGUST 29, 2017

On August 29, 2017, dignitaries gathered in Astana, Kazakhstan, to celebrate completion of the IAEA LEU Bank facility in Ust-Kamenogorsk and approval by the IAEA that all safety and security requirements had been met. Sam Nunn and Ernest J. Moniz participated in the ceremony, accompanied by past and current NTI staff involved in the development of the Bank.



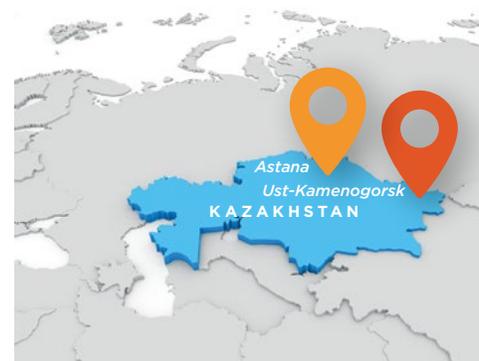
◀ *Alexandr Khodanov, who oversees the IAEA LEU Bank for the Ulba Metallurgical Plant, and NTI's Andrew Bieniawski at the site as it made preparations for the August 2017 launch.*

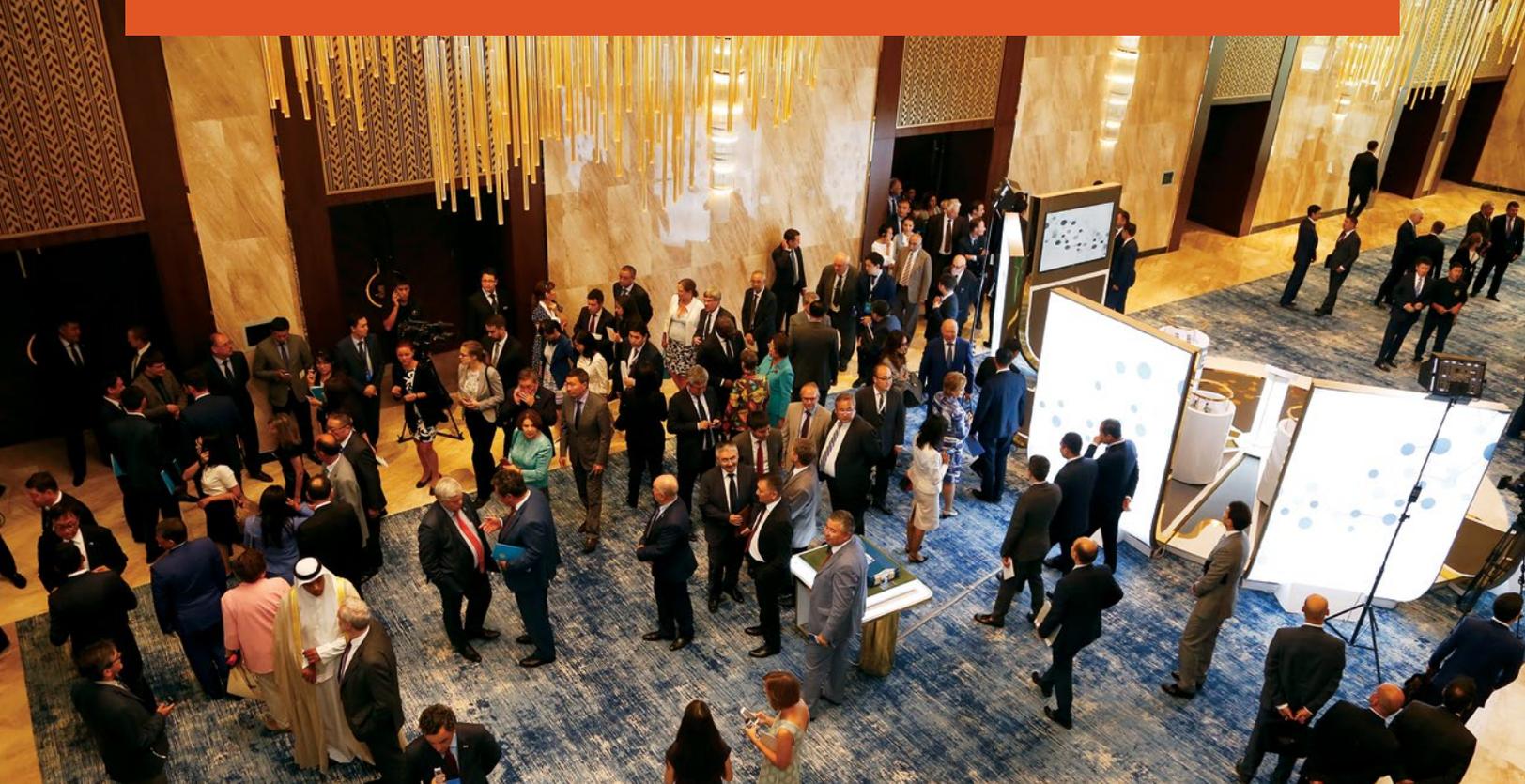
▼ *The Ulba Metallurgical Plant, located in Ust-Kamenogorsk, is a former Soviet nuclear facility.*



## SITE VISIT

Before the ceremony, NTI staffers visited the site for final briefings. The IAEA LEU Bank is located at the Ulba Metallurgical Plant in Ust-Kamenogorsk, Kazakhstan. Originally a secret Soviet facility that was once known as “Mailbox 10,” the Plant is a producer of uranium and beryllium products and has the safety and security infrastructure to house the LEU Bank.





► *President Nazarbayev gave Director General Amano a symbolic key to the bank.*



## THE CEREMONY

The ceremony opened with officials from the IAEA announcing—via live video feed from Ust-Kamenogorsk—that the facility met all safety and security requirements and was ready to accept low-enriched uranium. President Nazarbayev gave a symbolic key to Director General Amano. Nunn spoke at the ceremony, and both Nunn and Moniz participated in the press conference afterward.



▲ *Sam Nunn, NTI Board Member Ambassador Hamad Alkaabi, and Ernest J. Moniz at the August ceremony.*



▲ *Mark Bassett, the IAEA LEU Bank project executive, announces that the facility has met all safety and security requirements.*



▲ Sam Nunn at the podium at the August 2017 ceremony.



▲ Andrew Weber, Corey Hinderstein, Laura Holgate and Jack Edlow at the August ceremony.



▲ Ernest J. Moniz answering a question at the press conference in Astana.



▲ Director General Amano, Energy Minister Kanat Bozumbayev, and Sam Nunn speaking to reporters about the LEU Bank.

▲ President Nazarbayev speaking to officials in Astana, Kazakhstan.

# ATTENTION FROM AROUND THE WORLD FOR THE #LEUBANKLAUNCH

**The Washington Post**

**A uranium bank just opened in Kazakhstan to stop the spread of nukes**



Inside the IAEA Low Enriched Uranium Bank in IMK Plantinginsk, Kazakhstan. (Courtesy of IAEA/IEA/WHO)

By David Welna and Jody Wernick August 28

ASTANA, Kazakhstan — Arms control advocates Tuesday celebrated the opening of an internationally supported repository for nuclear reactor fuel that its backers believe will dissuade

وكالة أنباء الإمارات | Emirates News Agency

Home News Bulletin Emirates Multimedia World



Wed 30-08-2017 00:00 AM

UAE officials attend opening of partly-funded IAEA Low Enriched Uranium Bank in Kazakhstan



This is an investment in humanity. You can't roll the dice on humanity's survival.



— WARREN BUFFETT (NATIONAL PUBLIC RADIO)

**npr**

ASIA

**Warren Buffett Backs Nuclear Fuel Bank In Kazakhstan**

August 28, 2017 - 4:32 PM ET  
Hosts Of All Things Considered

DAVID WELNA

An unusual bank will open Tuesday in Kazakhstan. The deposits will be nuclear fuel, low-enriched uranium. The customers withdrawing low-enriched uranium will be nations which lack enrichment facilities. The idea is to convince such nations not to build their own. Warren Buffett is among the bank's founders.

Transcript

ARI SHAPIRO, HOST:

North Korea's missile launch took place on the same day as a very different kind of launch, a new initiative aimed at avoiding precisely the kind of nuclear weapons program North Korea is pursuing. NPR's David Welna reports on a nuclear fuel bank financed in large part by Warren Buffett. It made its debut today in Kazakhstan.

DAVID WELNA, BYLINE: This is a peculiar bank. Its only deposits are some 90 metric tons of low-enriched uranium, the kind of fuel used by most nuclear power

NTI @NTI\_UWMO

Today #nuclear policy gets a critical win. We say 🇰🇿 from KAZ where we're celebrating the #LEUBankLaunch. [nti.org/LEU-bank](http://nti.org/LEU-bank)



7:19 AM - 29 Aug 2017

111 Retweets 143 Likes

新华网 XINHUANET Friday, Sept

**IAEA opens nuclear fuel bank in Kazakhstan**

Source: Xinhua | 0017-08-30 09:06:03 | Editor: yan

Facebook Twitter Weibo Wechat Xinhua App

ASTANA, Aug. 29 (Xinhua) — The International Atomic Energy Agency (IAEA) opened a Low Enriched Uranium Bank (LEU) in Kazakhstan on Tuesday, and Kazakh President Nursultan Nazarbayev said the opening of the bank is a very important event for Kazakhstan.

The LEU bank, aiming at safe, secure and peaceful uses of nuclear science and technology, is going to use the facility worth 150-million U.S. dollars to discourage new states from enriching the nuclear fuel.

"As a state possessing large volumes of uranium-containing raw materials, we contribute to the peaceful use of atomic energy," President Nazarbayev said at the opening ceremony.



“

In the midst of a gloomy international environment the LEU bank is a reminder of what we— governments, civil society and international organizations— can achieve together through international cooperation based on vision, equity and trust.

”

—NOBEL LAUREATE AND FORMER IAEA DIRECTOR GENERAL MOHAMED ELBARADEI





[The IAEA LEU Bank is] an important element of the international effort not just in nonproliferation but also in the sphere of expansion of the countries that are putting nuclear energy to good use. In some ways it's a direct derivative of long-standing U.S.-Russian cooperation on these issues.



— **RUSSIAN DEPUTY FOREIGN MINISTER SERGEI RYABKOV**  
*(THE WASHINGTON POST)*



A nuclear fuel bank, backed by Warren Buffett and more than a decade in the making, will open next week in Kazakhstan, marking a milestone for both international nuclear power and nonproliferation efforts.



— **E&E NEWS**

## BuzzFeedNEWS

### Getting Ready For Withdrawals

A UN agency bank for nuclear fuel will open next week. It aims to keep developing nations from building uranium factories.

Posted on August 23, 2016, at 3:52 p.m.

**Dan Vergano**  
BuzzFeed News Reporter



You Retweeted

**Ted Turner** @TedTurner11 · Aug 29

Global security takes a leap forward thx to @WarrenBuffett's investment in reducing nuclear risk: nti.org/LEU-bank. #LEUBankLaunch

9 22 35

**NTI** @NTL\_WMD · Aug 29

Replying to @NTL\_WMD @iaeaorg and 5 others

After 10 yrs. \$150M + a feat of multilateral cooperation. @IAEAorg countries now have imp option for peaceful nuclear power. #LEUBankLaunch



1 6 3



It is increasingly clear that the future of nuclear energy lies in enhanced non-proliferation, security and safety. Nuclear fuel banks, multilateral enrichment centres, and assurances of supply will remain key to the continued reliance and future expansion of nuclear energy.



— **TARIQ RAUF**  
*(IN-DEPTH NEWS)*

# THANK YOU

NTI extends its deep gratitude to the many who have made the IAEA LEU Bank a success.

- Warren Buffett for his generous \$50 million investment and commitment to reducing global nuclear dangers
- Director General Amano and the IAEA Board of Governors, along with the entire IAEA team, for leadership, tenacity and commitment
- Former IAEA Director General ElBaradei, whose courage, outstanding leadership and vision initiated this effort
- President Nazarbayev and the Government of Kazakhstan for hosting the LEU Bank and for outstanding leadership in reducing nuclear dangers
- The countries that matched the NTI-Buffett contribution: the European Union, Kazakhstan, Kuwait, Norway, the United Arab Emirates and the United States
- The NTI team, including Sam Nunn, Charlie Curtis, Laura Holgate, Joan Rohlfing, Corey Hinderstein and Andrew Bieniawski
- Presidents George W. Bush and Barack Obama and their administrations for helping advance the LEU Bank
- Former Sen. Saxby Chambliss, sponsor of the Senate bill, S. 1700 International Nuclear Fuel for Peace and Nonproliferation Act of 2007, which enabled the U.S. contribution to the LEU Bank
- The members of the U.S. House of Representatives who cosponsored the International Nuclear Fuel for Peace and Nonproliferation Act (H.R. 885) introduced by Congressman Tom Lantos in 2007, which enabled the U.S. contribution to the LEU Bank: Rep. Brad Sherman, Rep. Adam Schiff, Rep. Sander Levin, Rep. Eliot Engel, Rep. Ileana Ros-Lehtinen, Rep. Gary Ackerman, Rep. David Hobson, Rep. Howard Berman, Rep. John Linder, Rep. Robert Wexler and Rep. Thaddeus McCotter
- NTI Board Member Ellen O. Tauscher who co-sponsored the bill and later was integral to the IAEA LEU Bank process as U.S. Under Secretary of State for Arms Control and International Security



**IAEA**  
International Atomic Energy Agency

Астана, Қазақстан. 2015 жылғы 27 тамыз

Astana, Kazakhstan. 27 August 2015



Атом энергиясы жөніндегі халықаралық агенттіктің  
Төмен байытылған уран банкіні құру туралы келісімге қол қою рәсімі

Ceremony of Signing of the Agreement on the Establishment  
of the IAEA Low Enriched Uranium Bank



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