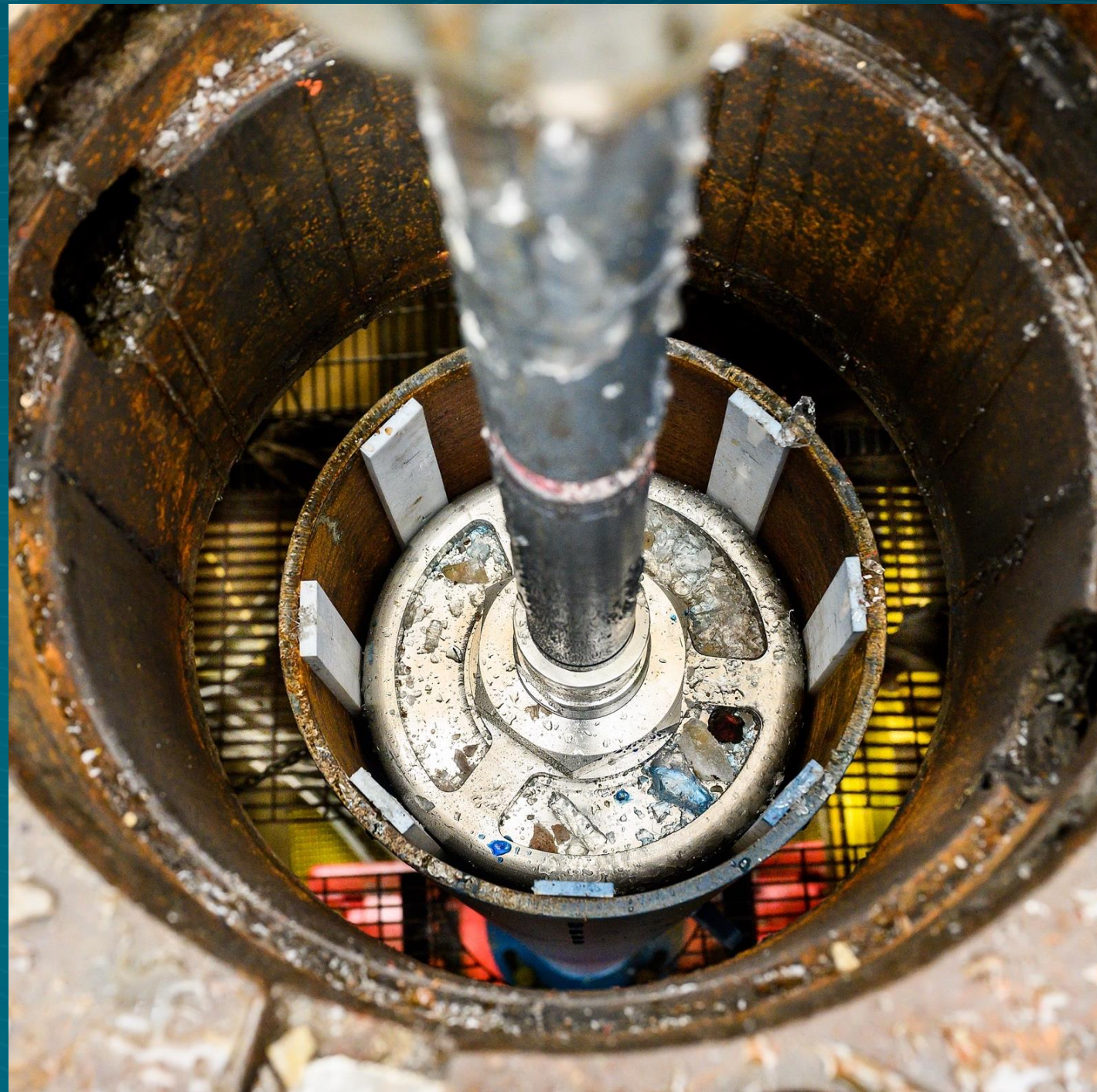




# Deep Isolation Enercom Presentation

August 2025





# CERTAIN DISCLOSURES & DISCLAIMERS

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This presentation includes forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements relate to, among others, our plans, objectives and expectations for our business, operations and financial performance and condition, and can be identified by terminology such as “may,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “will,” “could,” “project,” “target,” “potential,” “continue” and similar expressions that do not relate solely to historical matters or actual results. Forward-looking statements are based on management’s belief and assumptions and on information currently available to management. Although we believe that the expectations reflected in forward-looking statements are reasonable, such statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by forward-looking statements. The forward-looking statements are subject to risks which include, but are not limited to, the risk factors included under the caption “Risk Factors” in the Company’s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 28, 2025.

Moreover, we operate in a highly regulated environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the future events and trends discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance, or achievements. We undertake no obligation to update any of these forward-looking statements for any reason after the date of this presentation or to conform these statements to actual results or revised expectations, except as required by law.

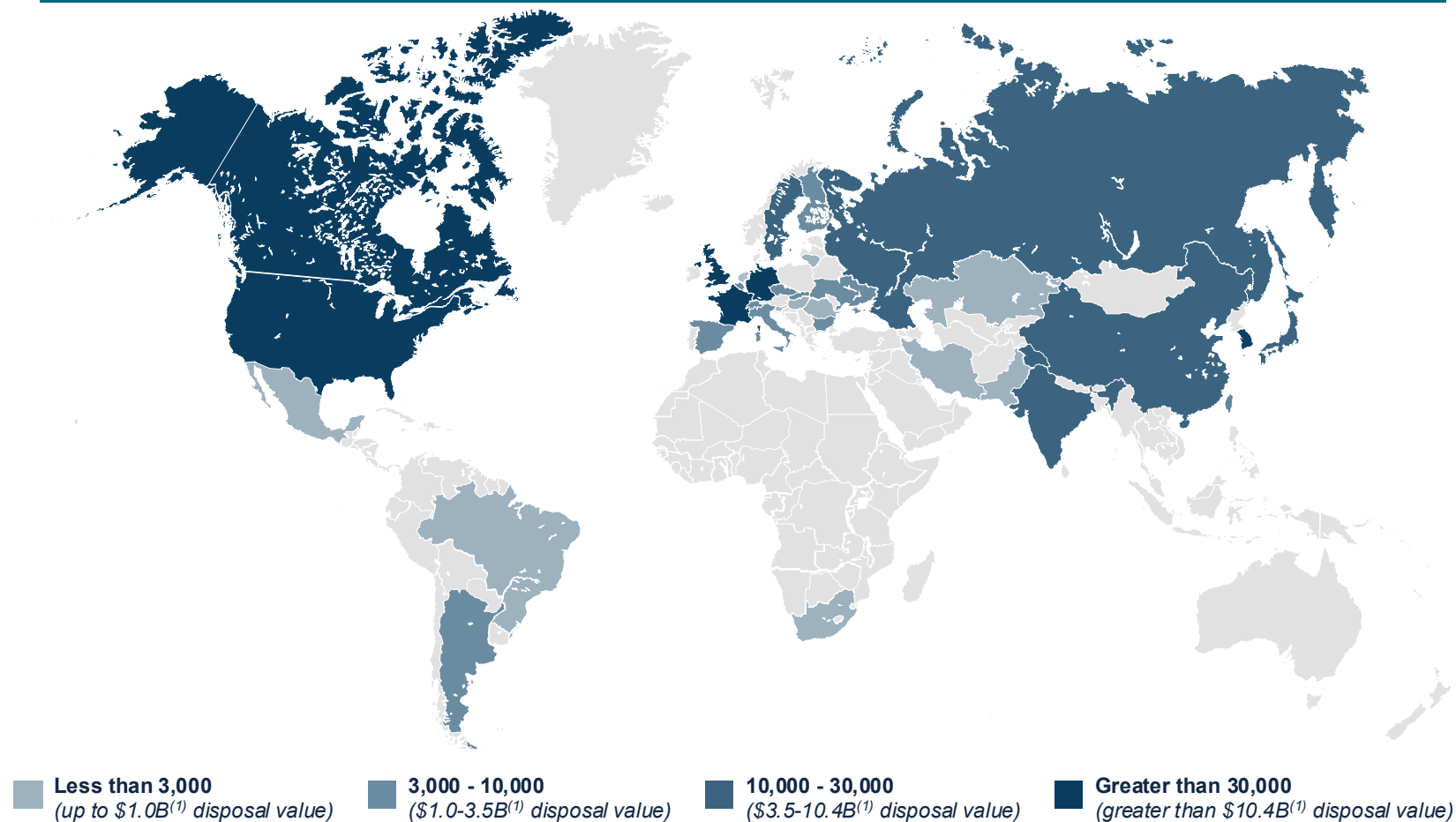
# The State of Nuclear Waste Disposal

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# A REALISTIC SOLUTION FOR PERMANENT WASTE DISPOSAL IS FUNDAMENTAL TO THE ROLLOUT OF NEW NUCLEAR

The world has not yet permanently disposed any of the spent fuel it has created over the last seventy years

Estimated Size of Existing Spent Fuel Inventories (MTHM)



Sources: IAEA, Deep Isolation Financial Model.

1) Estimates the potential disposal value to Deep Isolation, assuming a weighted average cost of disposal of \$348k/MTHM based on \$424k/MTHM and \$170k/MTHM for unprocessed and reprocessed waste, respectively, per the Deep Isolation Financial Model. Assumes 30% of global waste is reprocessed, while remaining 70% is unprocessed. See the section titled "Risk Factors" in the Company's Form 8-K, filed with the SEC on July 28, 2025.

“

***“To move the next generation of nuclear reactors forward, the industry needs to be able to tell investors and the government that we have a solution to the waste.”***

– Rod McCullum  
Senior Director, Used Fuel and Decommissioning  
at Nuclear Energy Institute

“

***“...This issue has to be resolved. The communities that raised their hand to put nuclear facilities in their geographic boundaries did not raise their hand to store permanently, the spent nuclear fuel, and we are seeking to get a solution to that sooner rather than later.”***

– Jennifer Granholm  
Former U.S. Secretary of Energy

# THE CURRENT NUCLEAR DISPOSAL APPROACH IS NOT WORKING

The world's current nuclear waste management model is nearly unanimously unpopular, resulting in the continuous cycle of delays in permanent disposal and indefinitely recurring storage costs

## Mined Repository: *the expensive and unpopular option*

### Why is this option so unpopular?

- **Community Opposition** – most citizens do not want nuclear waste transported through their communities
- **Cost** – most expensive solution for SNF disposal *plus* many more years of interim storage costs
- **Safety** – requires transportation of radioactive waste over long distances; repository requires constant human intervention underground



## Above-Ground Interim Storage: *the “kick-the-can” option*

### Why is this option so unpopular?

- **Cost** – billions of dollars are paid by taxpayers each year for a solution that does not include the inevitable bill for permanent disposal at some point in the future
- **Timing** – SNF is being stored above-ground decades longer than anticipated and, in most countries, with no permanent solution on the horizon
- **Safety** – risks include natural disasters, cask degradation, accidents, terrorist attacks, etc.



# The Deep Isolation Approach

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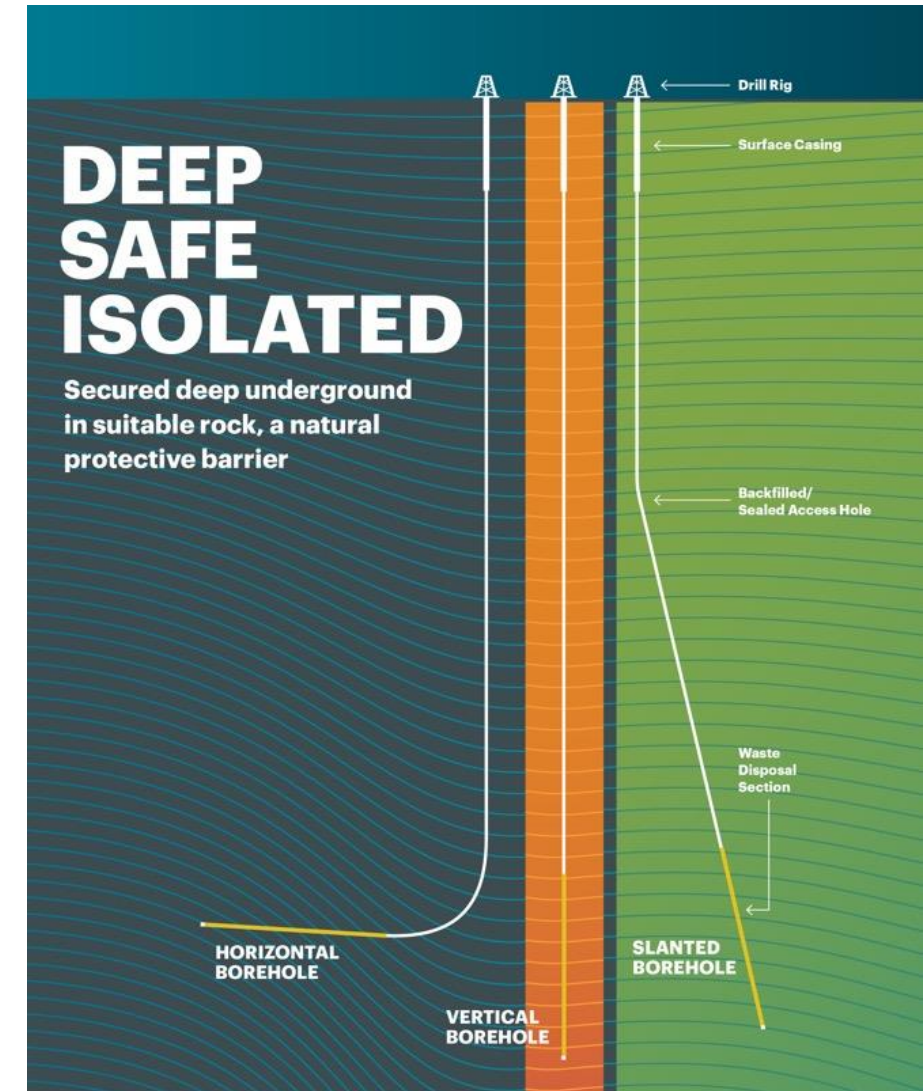


# THE DEEP ISOLATION SOLUTION

Deep Isolation's mission is to provide the world's safest and most cost-effective solution for the permanent disposal of nuclear waste, becoming the dominant solution across the world

## Our Solution

- Deep Isolation's solution places corrosion-resistant canisters containing waste in deep boreholes, greater than 1 kilometer below the surface – far deeper than is feasible with a mined repository
- Boreholes terminate in stable geological formations that have been out of contact with the biosphere for millions of years
- Key features of the solution include:
  - ✓ **Inexpensive Proven Drilling:** Remarkable advances in directional drilling technology have made such deep boreholes reliable and relatively inexpensive; leverages existing technology
  - ✓ **Permanent Isolation:** Our corrosion resistant canisters serve as an engineered barrier – and the billion metric tons of rock above them create the final impermeable barrier
  - ✓ **Time to Implement:** The technology and know-how exist and are ready to be deployed quickly
  - ✓ **Remote Handling:** Deep borehole emplacement does not require human involvement underground
  - ✓ **Minimal Transportation:** Disposal can take place at or near sites where nuclear waste is produced and currently stored, minimizing the cost and risk associated with waste transportation

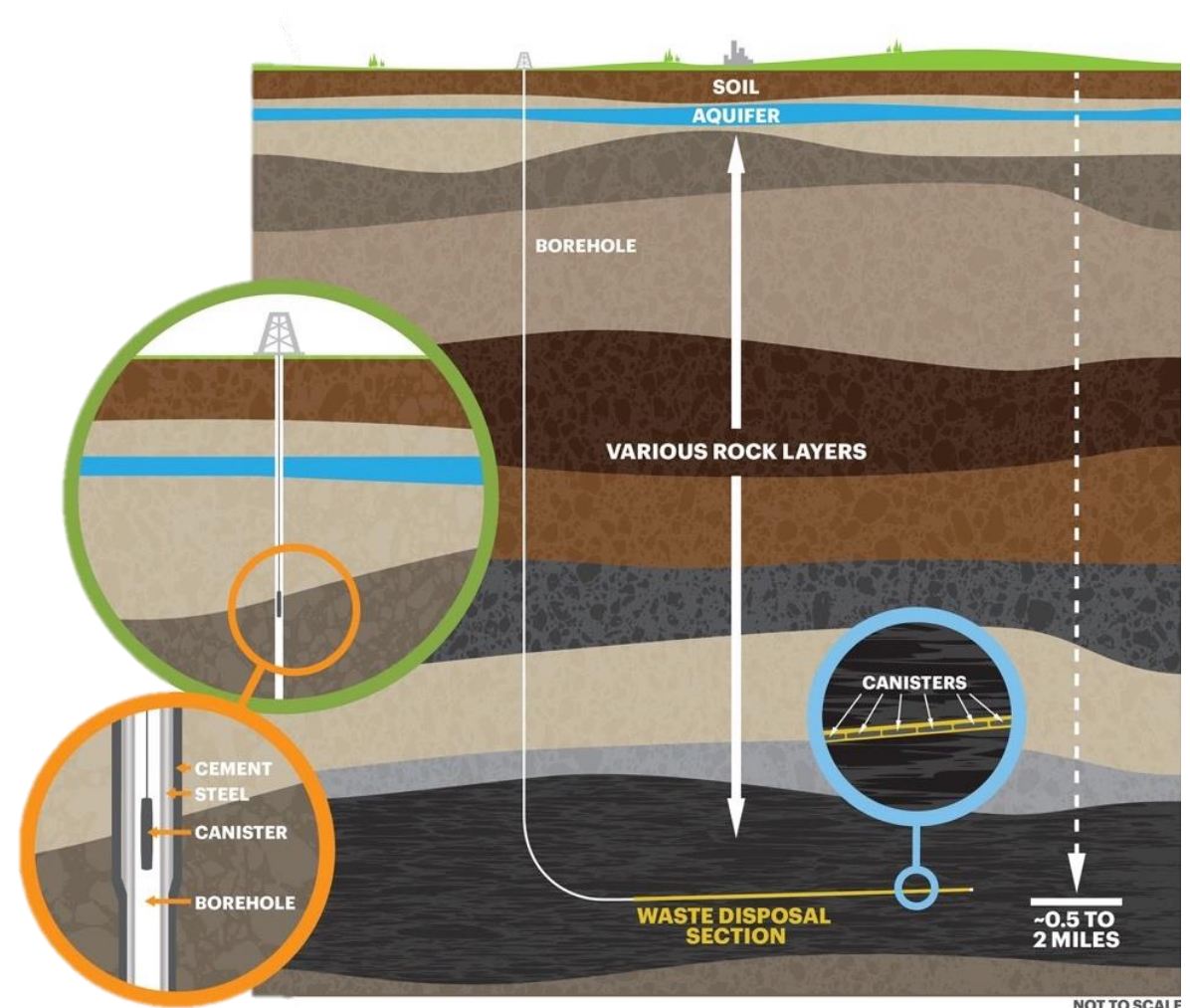


# HOW DOES HORIZONTAL BOREHOLE DISPOSAL WORK?

Deep Isolation's repeatable process leverages proven technology and has been successfully tested and demonstrated

The disposal process consists of six stages:

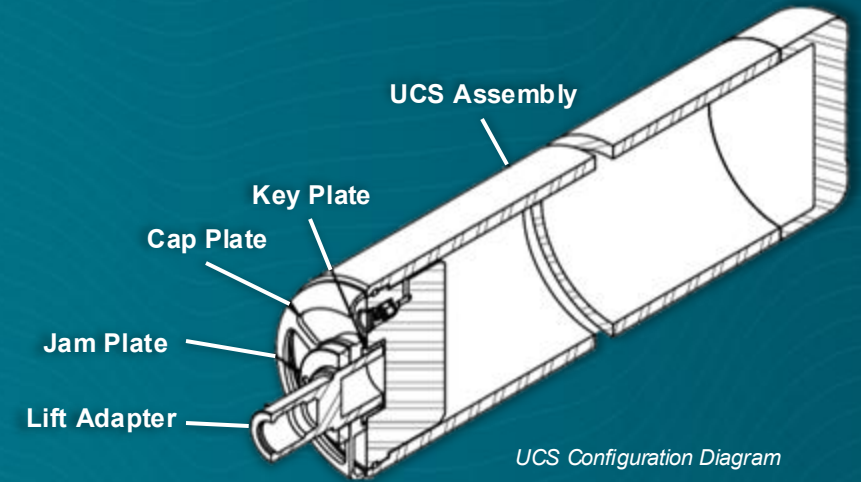
1. **Vertical Access:** Drill a vertical hole to a suitable depth and then gradually curve the direction until the drillhole is approximately horizontal. The horizontal section is the disposal region.
2. **Casing Installation:** Line the drillhole with a carbon-steel pipe known as casing. Because the curved section is so gradual, the steel casing bends easily around it.
3. **Canister Preparation:** Place the nuclear waste in corrosion-resistant canisters.
4. **Canister Emplacement:** Lower canisters into the hole and push them into the disposal region. This process is completed using standard oil and gas industry practices.
5. **Release:** Release canisters, withdraw the conveyance mechanism, and repeat.
6. **Seal / Plug:** Seal the vertical hole with rock and bentonite clay after removing the casing, or use temporary plugs for interim storage.





# UNIVERSAL CANISTER SYSTEM (UCS)

- The UCS is a **Deep Isolation patented family of canisters** that:
  - i. Are engineered in a range of sizes (to accommodate a wide variety of advanced reactor waste forms) and thicknesses (to provide structural stability in a range of different disposal depths)
  - ii. Share common, standardized features, including closure designs and lifting attachments designed for interoperability with emplacement technologies used on a daily basis in the oil and gas industry
- Designed to **accommodate all major current and advanced nuclear waste streams**
- **Only triple-purpose canister system in the world** – integrates with (i) transport systems, (ii) interim dry cask storage and (iii) disposal (in deep boreholes or mined repositories)
  - Enables waste to be packaged once, avoiding costs and risks associated with future repackaging – even when a disposal path is uncertain
- Significant government support and investment from the U.S. and UK, with **\$7.1 million of government grant contracts to date**
- Preliminary safety evaluations were performed for design-limiting conditions to develop a canister design sufficient to **satisfy established and anticipated regulatory requirements**

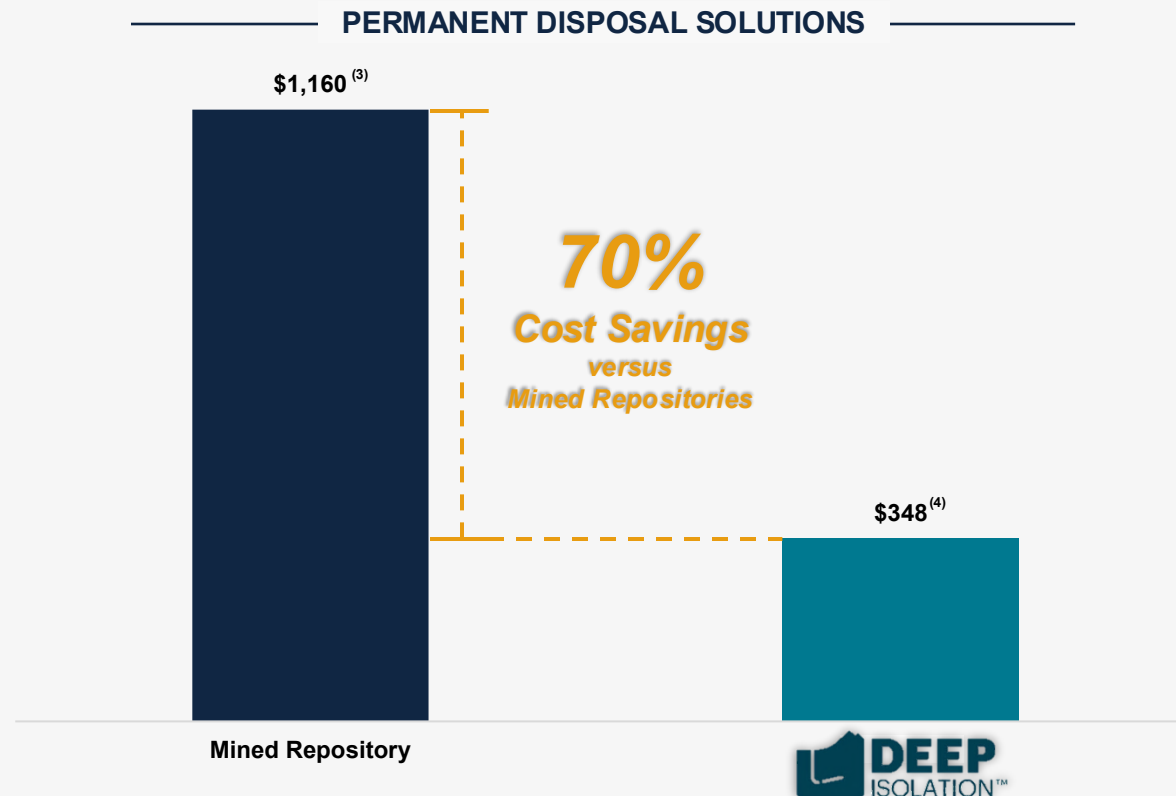


UCS prototype design, measuring about 16 feet in length and weighing over 4,000 lbs (Nuclear AMRC, United Kingdom, circa 2024)

# NUCLEAR WASTE MANAGEMENT COST ANALYSIS

Deep Isolation's borehole solution is far more economical than mined repositories or the current status quo – temporary storage before ultimate disposal

## Disposal Cost Comparison (\$000s per MTHM)<sup>(1,2)</sup>



## “KICK-THE-CAN” OPTION

- By Deep Isolation's estimates based on DOE data, the ongoing annual cost of storage is ~\$23k / MTHM / year
  - This means that Deep Isolation's deep borehole disposal solution is equivalent to 18 years<sup>(5)</sup> of temporary storage costs in the U.S.**
- Inevitably, the waste stored in these dry casks must ultimately be disposed of permanently in either mined repositories or deep boreholes
- When considering the combined costs of (i) permanent disposal canisters, (ii) waste repackaging, (iii) any necessary transportation and (iv) ultimate disposal, the status quo temporary storage option quickly becomes the most expensive and burdensome option

Sources: Amentum (published white paper); Deep Isolation Financial Model.

1) Does not incorporate costs of spent fuel transportation.

2) Values represented in real 2024 U.S. dollars.

3) Considers global average mined repository and does not include costs of spent fuel transportation.

4) Weighted average cost of disposal based on \$424k/MTHM and \$170k/MTHM for unprocessed and reprocessed waste, respectively, per the Deep Isolation Financial Model. Assumes 30% of global waste is reprocessed, while remaining 70% is unprocessed.

5) This assumes that U.S. spent nuclear fuel is disposed of at the Deep Isolation's average unit cost for direct disposal (\$424k/MTHM), with none reprocessed first as shown in the lower blended rate at Footnote (4).

# EXTENSIVE PATENT PORTFOLIO & STRONG BARRIERS TO ENTRY

Deep Isolation has developed an expansive portfolio of IP, which has created significant barriers to entry for any competitor who tries to enter the market with a similar solution while also creating significant licensing opportunities

## IP Portfolio Overview

Large and growing IP portfolio of inventions, processes, designs and other specifications related to:

- ✓ Formation Suitability
- ✓ Repository Design
- ✓ Canister Design
- ✓ Emplacement
- ✓ Monitoring

- Deep Isolation is the only serious player in deep borehole disposal
- Deep Isolation patents cover multiple techniques for deep horizontal borehole disposal in many, if not most, countries dealing with the nuclear waste disposal issue
- Most patents support all borehole architectures, while some are specific to borehole shape (vertical, slant, or horizontal) and some are specific to storage formation geology
- Our UCS canister designs are patented and can be used for temporary storage as well

87  
U.S. or International  
Patents Issued

48  
Patents in  
Development

## Licensing Opportunities

Collaboration through licensing agreements can help to facilitate the global adoption of the Deep Isolation disposal solution



Licensing options from reselling to delivery for commercial operators

- e.g., Licensing Partnership with **amentum**
  - Premier global technical and engineering services leader
  - Strengthens collective positions in the global nuclear waste market
  - Initial targets for joint work include countries in Europe and the Pacific that represent a combined addressable market worth more than \$30 billion



Licensing options available when governments need to use their own local supply chain



# WIDESPREAD SUPPORT FROM THE GLOBAL NUCLEAR COMMUNITY

Nuclear stakeholders across the globe have expressed formal support of Deep Isolation and our waste management solutions



“

“Kairos Power is excited to see the progress made by the Deep Isolation team in advancing the Universal Canister System and looks forward to continued collaboration. Together, Deep Isolation and Kairos Power are setting a precedent for innovation, safety, and sustainability in the safe and effective management of spent fuel from high temperature reactors.”



“

“Deep borehole disposal is an important alternative option for us to consider in Slovenia... [the study is] helpful in highlighting the potential benefits, the increasing maturity of, and required next steps for deep borehole disposal”



“

“Fermi Energia’s reference solution for spent fuel disposal ... is provided by Deep Isolation. The solution includes packaging our SMR spent fuel in the Universal Canister System and then emplacing it in a deep borehole repository.”



“

“By joining forces with Deep Isolation, we’re not just addressing a critical need for effective nuclear waste management; we’re spearheading an era of innovation and responsibility in the nuclear industry.”



“

“[Deep Isolation’s study for ERDO] confirms ERDO’s own published assessment that deep borehole disposal could be a viable and cost-effective option for disposal... offering significant potential savings compared to conventional mined repositories.”



“

“Deep borehole disposal is a technology that offers huge potential benefits to Norway... so [we are] delighted to be working with Deep Isolation and the Deep Borehole Demonstration Center to demonstrate this technology here in Norway.”

Actively Engaged NGOs

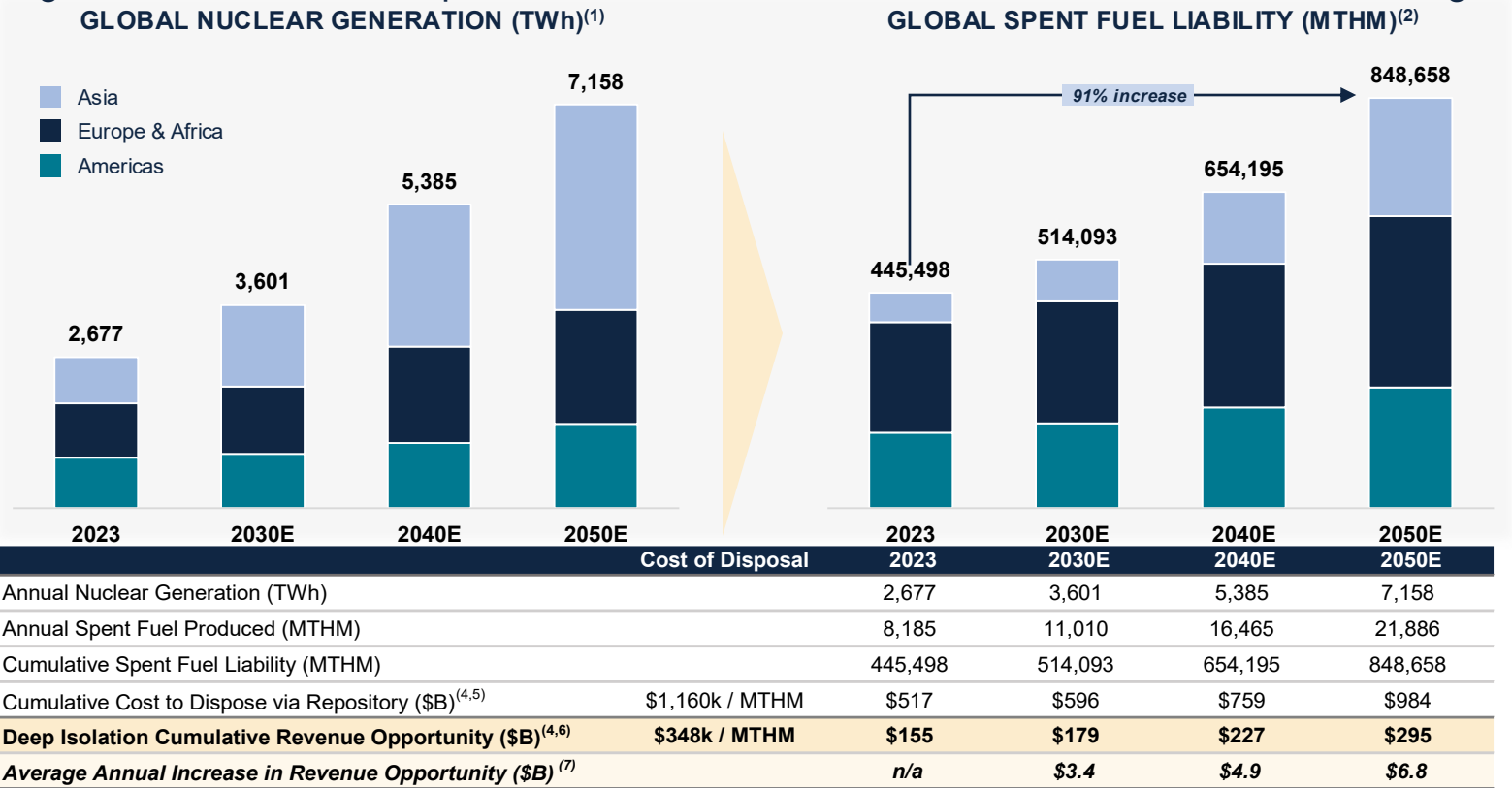


# The Deep Isolation Business Model

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# OUR GLOBAL TOTAL ADDRESSABLE MARKET

The global market for nuclear waste disposal is almost entirely unclaimed, representing an opportunity for Deep Isolation to capture significant market share expected to be worth hundreds of billion of dollars over the coming decades



~\$1 Trillion

Cumulative Cost to Dispose via Mined Repositories by 2050<sup>(3,4)</sup>

~\$295 Billion

Cumulative Addressable Market with Deep Isolation's Solutions by 2050<sup>(3,4)</sup>

~70%

Global Cost Savings, Before Additional Transportation Savings

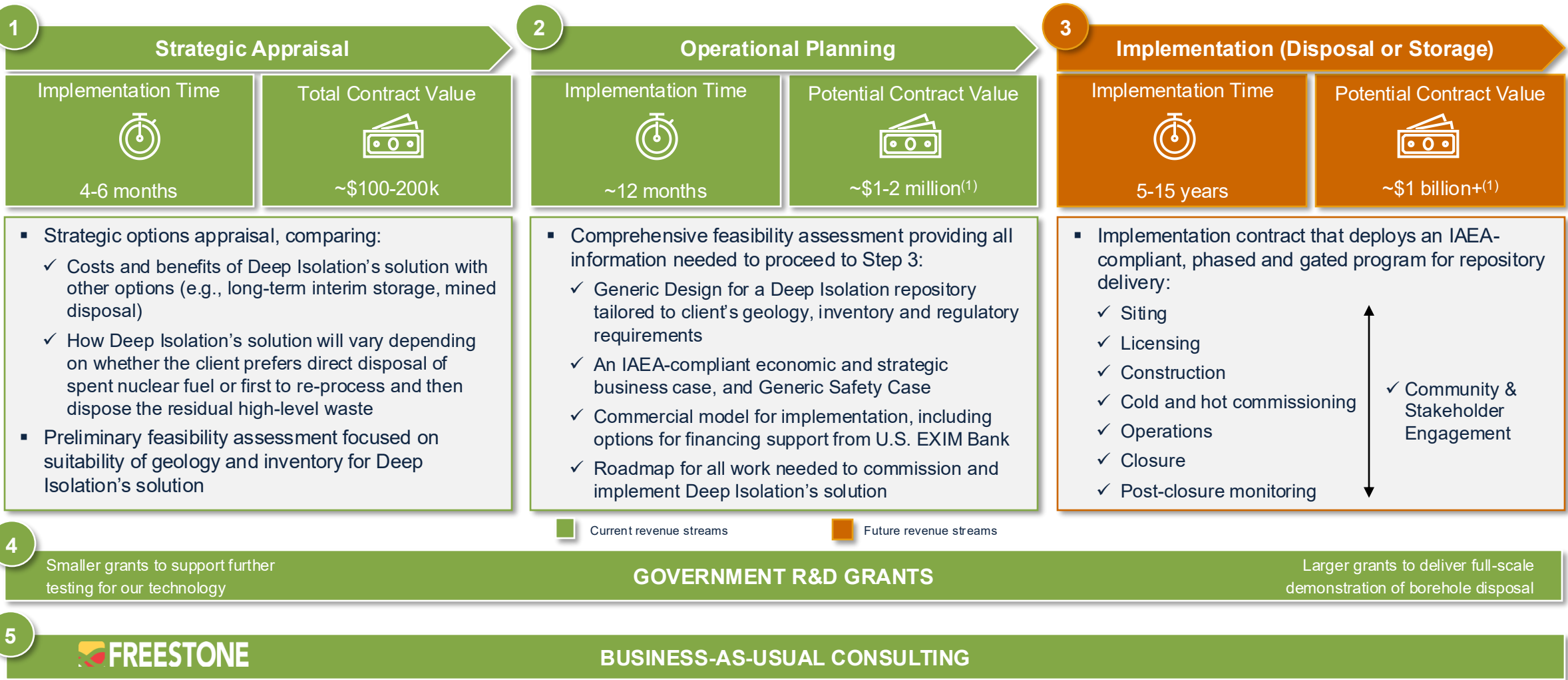
Sources: IAEA, EIA, U.S. DOE, World Nuclear Association, Amentum, Deep Isolation Financial Model.

- 1) Based on IAEA's high case for annual global nuclear power generation. Addressable market assumes government authorization of Deep Isolation's disposal process via deep borehole disposal.
- 2) Average MTHM generated per TWh of energy production is implied by historical U.S. commercial nuclear production and existing U.S. commercial spent fuel stockpiles. Includes existing inventory in both wet and dry storage, and does not separately incorporate cool-down timing in wet storage. Values displayed assuming no spent fuel has reached final disposal.
- 3) Does not incorporate costs of spent fuel transportation.
- 4) Cumulative values represented in real 2024 U.S. dollars.
- 5) Considers global average mined repository and does not include costs of spent fuel transportation.
- 6) Weighted average cost of disposal based on \$424k/MTHM and \$170k/MTHM for unprocessed and reprocessed waste, respectively, per the Deep Isolation Financial Model. Assumes 30% of global waste is reprocessed, while remaining 70% is unprocessed.
- 7) Represents annual increase in total addressable market between current and previous year highlighted in the table (e.g. \$3.4B average annual increase between 2023-2030).



# DEEP ISOLATION PRODUCT LINES

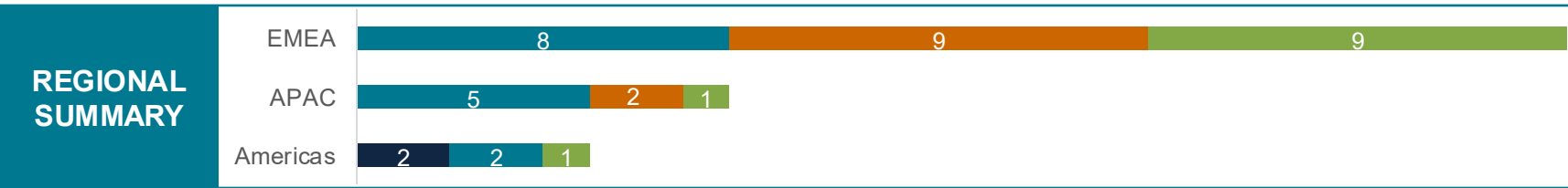
We do not expect our customers to commit to implementation of the Deep Isolation solution in one single decision. Instead, we offer a ladder of engagement that builds confidence from the client while also generating early income for Deep Isolation



1) Based on Management's assumptions and projections. For further detail, see the Company's Form 8-K filed with the SEC on July 28, 2025.

# DEEP ISOLATION IS ENGAGED IN ALL MARKETS WITH COMMERCIALIZATION POTENTIAL GLOBALLY <sup>(1)</sup>
























Deep Isolation manages prospective clients through four phases of engagement, each with specific actions and stage-gates



1) Countries with commercialization potential excludes six countries with current or planned nuclear that are not being considered at this time for geopolitical reasons (China, Iran, Israel, Kazakhstan, Pakistan and Russia), as well as France and Sweden, who have both been disqualified as potential clients due to their commitment to geological mined repository solutions.

# OUR CLIENTS HELP FUND OUR BUSINESS DEVELOPMENT

Our awards & contracts have led to advances in deep borehole disposal technology, follow-on work and new opportunities

COUNTER-PARTY	PARTNERS	COUNTRY	KEY FINDINGS / ACHIEVEMENTS	NEXT STEPS
	     		<b>Several awards granted, totaling over \$6 million</b> – expanding the capabilities of deep borehole disposal to small modular reactors, advanced reactors, and reprocessed fuels – and expand Deep Isolation’s solution from disposal to address storage and transportation as well	 <p>Current pipeline of DOE projects in our sales pipeline is &gt; \$100 million. Secretary Wright has publicly named Deep Isolation as one of ARPA-E’s foremost innovators</p>
	N/A		<b>Deep boreholes offer potentially significant savings and flexibility</b> compared to geologic disposal facilities for the UK’s high-heat generating radioactive waste	 <p>The UK Government has invested in a UK supply chain for our canister. Amentum has negotiated exclusive rights to market our technology for use in the UK’s disposal program.</p>
	N/A		<b>“Deep borehole disposal is an important alternative option</b> for us to consider in Slovenia...[the study is] helpful in highlighting the potential benefits, the increasing maturity of, and required next steps for deep borehole disposal” <i>– Leon Kegel, Head of Planning and Development at ARAO</i>	 <p>Initial study led to two follow-on pieces of work. Currently in discussion on UCS deployment at Krsko NPP, and long-term disposal</p>
			<b>“It confirms our view that borehole disposal offers a suitable and cost-competitive alternative</b> for spent nuclear fuel, high-level radioactive waste and long-lived low- and intermediate-level radioactive waste for the ERDO countries” <i>– Håvard Kristiansen, Sr. Advisor R&amp;D at NND</i>	 <p>ERDO have become founding members of Deep Borehole Demonstration Center. Follow on projects with Croatia and Slovenia already delivered, more in the pipeline.</p>
			<b>Deep Isolation boreholes could be a safe and flexible option for all regions in Estonia</b> , with the northern coastal areas providing the most suitable locations	 <p>Fermi Energia has adopted Deep Isolation as its disposal solution. The Estonian Government has now also become a client, working with us via State Dept’s FIRST program</p>



# PROACTIVE SUPPORT FROM THE U.S. GOVERNMENT

Deep Isolation has garnered significant support from the U.S. Government from multiple federal agencies through direct contracts and formal Advocacy for Deep Isolation's solutions internationally

## Team USA



INTERNATIONAL  
**TRADE**  
ADMINISTRATION



- The Advocacy Center of the U.S. International Trade Administration ("ITA") has identified Deep Isolation as a unique part of the U.S. offer in nuclear export markets, suitable for formal Advocacy by the Federal Government to overseas governments.
- Initial Advocacy status has already been granted in the Philippines. ITA is now encouraging Deep Isolation to submit further advocacy applications in Europe, the Middle East and Asia.
- U.S. Department of State's FIRST program has appointed Deep Isolation as its Spent Fuel and Waste Management Consultancy provider in Central and Eastern Europe.
- Deep Isolation is supporting FIRST as an expert advisor on spent fuel and waste management for new-to-nuclear countries looking to deploy SMRs.



Study tour to DBDC by Czech Government, December 2024, funded by State Dept FIRST program

## Co-investment in R&D



- Department of Energy is investing over **\$6 million** in Deep Isolation technology through ARPA-E and Small Business Innovation Research contracts - supporting collaboration with Argonne National Lab, Berkeley National Lab, Idaho National Lab, and companies including Kairos Power and Oklo.



Secretary of Energy Wright with Deep Isolation Team at ARPA-E Summit, March 2025

## Financial support from USTDA and ExIm



- In December 2024, the U.S. Trade and Development Agency announced grant support of \$1.2 million for Deep Isolation Feasibility Study in Bulgaria:
  - ✓ A delivery plan with supporting commercial model for siting, design, licensing, construction & operation of a deep borehole repository for: existing waste at Kozloduy NPP, new waste from two AP-1000s and future SMR waste.
  - ✓ In positive dialogue with U.S. Export-Import Bank to provide 22-year financing to support capital expenditure by Bulgarian government (and other governments) on Deep Isolation technology.



Enoh Ebong (Director of USTDA) and Sergey Tzochov (Head of the Board of Directors for State Enterprise Radioactive Waste) signing Deep Isolation Grant Agreement on December 13, 2024

# DEEP BOREHOLE DEMONSTRATION CENTER

An independent, nonprofit, science-driven organization funded on a multinational, public-private-partnership basis

## Inception and Overview

- In 2021-2022, Deep Isolation (in partnership with The University of Sheffield) conducted a survey of international stakeholder views from the regulatory, policy and waste management communities
- Study found that 4 out of 5 participants would welcome greater international collaboration on deep borehole disposal
- The Deep Borehole Demonstration Center was founded in direct response to that demand, with the aim of advancing the maturity of the safety case for DBD and the technical readiness levels of the disposal concept

## DEEP BOREHOLE DEMONSTRATION CENTER

The Deep Borehole Demonstration Center has been actively testing Deep Isolation's technology in Texas since January 2023



Initial full-scale PWR canister test on 23 February 2023

Study tour to DBDC by Czech Government, Dec 2024



Class 1 UCS prototype, at Deep Isolation's fabricator (RV Industries in Philadelphia), prior to shipping to DBDC for testing



Corrosion testing at pressures and fluid chemistry of disposal depths, at Halliburton facility in Carrollton, TX

# Thank You

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