

**nwmo**

NUCLEAR WASTE  
MANAGEMENT  
ORGANIZATION

SOCIÉTÉ DE GESTION  
DES DÉCHETS  
NUCLÉAIRES

# Moving Forward Together

**Summary**  
**Triennial Report**  
**2008 to 2010**





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## Overview

The Nuclear Waste Management Organization (NWMO) is pleased to issue its first Triennial Report.

A requirement of the *Nuclear Fuel Waste Act (NFWA)*, the *Triennial Report 2008 to 2010* reports to Canadians on the NWMO's achievements over the past three years in implementing Canada's long-term management plan for used nuclear fuel. Consistent with the requirements of the *Act*, the Triennial Report also presents the NWMO's forward-looking perspectives as set out in its strategic plan for the 2011 to 2015 period.

Following the Government of Canada's decision in 2007, selecting Adaptive Phased Management (APM) as Canada's plan for the long-term care of used nuclear fuel, the NWMO developed and confirmed through public review seven strategic objectives that would serve as the foundation of strategic plans for the important first phase of work in implementing the approach.

It is against these seven strategic areas that the NWMO presents both its achievements for 2008 to 2010 and its plans for the 2011 to 2015 period in the Triennial Report.

Highlights of past progress and plans for APM implementation are presented in summary form in the sections that follow. A detailed account of the NWMO's activities and plans are provided in individual chapters and appendices of the Triennial Report.

### STRATEGIC OBJECTIVES 2010

The NWMO will:

- » Build sustainable, long-term relationships with interested Canadians and Aboriginal peoples of Canada and involve them in setting future directions for the safe, long-term management of used nuclear fuel.
- » Implement collaboratively with Canadians the process for siting a deep geological repository for the safe, long-term management of used nuclear fuel in an informed, willing host community.
- » Refine and further develop the generic designs and safety cases for a repository for used nuclear fuel in both crystalline and sedimentary rock formations, and conduct technical research and development to ensure continuous improvement, consistent with best practices.
- » Ensure funds are available to pay for the safe, long-term management of Canada's used nuclear fuel.
- » Adapt plans for the management of used nuclear fuel in response to new knowledge, international best practices, advances in technical learning, evolving societal expectations and values, and changes in public policies.
- » Maintain an accountable governance structure that provides confidence to the Canadian public in the conduct of the NWMO's work.
- » Build and sustain an effective organization with the social, environmental, technical and financial capabilities for the safe, long-term management of Canada's used nuclear fuel.

**Since receiving Government direction in 2007 to proceed with implementing Adaptive Phased Management,** the NWMO has made significant strides in moving forward Canada's plan for the long-term care of used nuclear fuel. Throughout the 2008 to 2010 reporting period, building and nurturing relationships with those potentially affected by the NWMO's work has remained an important focus, with the ongoing invitation to interested organizations and individuals to contribute to the shaping of implementation plans for the APM project. Important foundations for the APM site selection process were laid through the collaborative development of a process to identify a safe site in an informed and willing host community. A further milestone was marked with the initiation of the site selection process in 2010 and the invitation to communities to learn more about the APM project. In parallel, refinements to the technical reference designs and safety cases for the deep geological repository continued, supported by a breadth of design and development work in collaboration with international partners. The framework for financing the APM program in the future was elaborated through the funding formula developed by the NWMO and subsequently approved by the Minister of Natural Resources. All work progressed through the important lens of adaptive management, as the organization sought to stay abreast of evolving developments and expectations that may impact on future activities. The NWMO itself developed and expanded in recent years, as it transitioned into a larger implementing organization with the range of skills, oversight and governance required to capably deliver on the NWMO's mandate and earn the confidence of Canadians.

**Looking to the next phase of implementation,** the five-year plan proposes advancement in all seven strategic areas established to guide APM. The strategic plan for 2011 to 2015 is guided by a set of underlying reference planning assumptions. In particular, the five-year plan focuses on supporting the evolution of the APM site selection process initiated in 2010. The site selection process is, by design, a community-driven process in which potentially interested communities elect to put themselves in the process of learning more, initial screenings and feasibility studies. Such processes will necessarily evolve on timelines determined by communities, rather than schedules prescribed by the NWMO. For planning purposes, the organization has set out activities and budgets for the next five years to ensure that the NWMO is in a state of readiness to work with communities as they elect to move forward through different phases of the site selection process. As the NWMO gains experience with the site selection process, it will adapt processes as appropriate in light of new learning. Design and development of the repository will continue along with the iterative development of the safety case. As the NWMO takes the next steps in implementing APM, the organization will seek to carry forward the spirit of the plan originally proposed by Canadians and to reflect in future phases of work the NWMO's core values of integrity, excellence, engagement, accountability and transparency.

## Strategic Areas of APM Implementation: Progress and Plans

### Building Relationships

Adaptive Phased Management (APM) was developed with Canadians for the long-term management of Canada's used nuclear fuel. Through ongoing engagement of communities, governments, Aboriginal peoples and a diversity of interests, the NWMO continues to work collaboratively to develop and refine its plans and activities at each stage. Over the last three years, the NWMO has sought input on strategic objectives, policy and communications documents, and the collaborative development of the APM site selection process. More than 7,000 people engaged in the design of the site selection process, contributing important and diverse perspectives through such activities as public information sessions, citizen panels, multi-party dialogues, Aboriginal dialogues, e-dialogues and national surveys. The development of plans, community engagement and communications benefited from the important guidance of a forum of municipal associations and the NWMO Elders Forum and its working group, Niigani. A Youth Roundtable was convened to develop a basis for youth outreach. The NWMO met regularly with representatives and staff of the federal government and provincial governments of nuclear fuel cycle provinces to keep them informed of our plans and activities.

During 2011 to 2015, the NWMO's engagement, education, outreach and capacity-building initiatives will be expanded. An important focus will be relationship building with communities and regions potentially interested in, or affected by, the APM site selection process and the transportation of used fuel. The NWMO will work with the Elders Forum, Municipal Forum, and interested Aboriginal and community-based organizations. Working with the Canadian Nuclear Safety Commission (CNSC) through a pre-project agreement signed in 2009, the NWMO will stay abreast of evolving regulatory requirements. The NWMO will fulfill its ongoing statutory responsibility to consult Aboriginal peoples and other responsibilities outlined in its agreement with Natural Resources Canada. Engagement with regional, provincial and federal departments will be broadened to address policy and regulatory frameworks relevant to APM site selection. Ongoing involvement of citizens will ensure policies and plans continue to meet needs and expectations of Canadians. In developing and maintaining relationships, the NWMO will continue to seek and maintain confidence in the NWMO as the implementing organization for APM.

## APM Site Selection Process

The NWMO developed the decision-making framework for the selection of a safe site in an informed, willing community through a two-year collaboration and dialogue in 2008 and 2009. Building on the objectives and principles advanced by the many Canadians contributing to this work, the road map outlines a community-driven process through which potentially interested communities may elect to learn more about the project, request initial screenings and participate in feasibility studies and community dialogue as they consider potential interest in hosting the repository, the centre of expertise and associated facilities. The site selection process was initiated in May 2010 through an awareness-raising program and an invitation to communities to learn more about the project. By year-end 2010, a number of communities had requested information on the project. Some had requested initial screenings of potential geotechnical suitability for the repository and initiated activities to engage community members in a discussion of the project.

Through the 2011 to 2015 period, the NWMO will continue to work with communities that come forward to understand the project and request initial screenings of potential site suitability. For communities meeting initial screening requirements and electing to continue in the process, the NWMO will work in partnership with them in the delivery of preliminary site assessments over one to two years, examining the feasibility of sites against geoscientific safety criteria and community well-being considerations. The NWMO will work with communities to conduct regional studies and expand dialogues to include surrounding communities, Aboriginal peoples and regions that may be affected by the siting of the APM project or the transportation of used nuclear fuel to that location. The NWMO will provide resources to communities engaged in the process and those in potentially affected surrounding areas to support their consideration of the project and participation in dialogues as they explore the project fully against long-term visions for their communities and the regions. From a planning perspective, as early as 2013, the NWMO will be resourced and prepared to initiate detailed site characterization work, should one or more willing, strong candidate sites be selected to advance in the multi-year process.

## Design and Safety Case for APM Deep Geological Repository

The technical research and development program is advancing to support stepwise decision-making and implementation of APM. The technical research program has two principal areas of focus: updating reference designs and safety cases for a used fuel deep geological repository and transportation system; and further increasing confidence in the deep geological repository safety case and enhancing scientific understanding of processes that may influence repository safety. Work in geosciences, repository engineering and safety assessment is underway both in-house and in collaboration with specialists and universities in Canada and with international organizations to address these two principle areas of focus. The program is reviewed annually by the Independent Technical Review Group (ITRG) that provides valuable external expertise and counsel to ensure that we adopt the best technical practices available in Canada and internationally. Work is well advanced on updating APM conceptual designs for repositories in both crystalline and sedimentary rock formations. Work has been initiated toward a pre-project review by the CNSC. This will continue in the 2011 to 2015 period, along with preparation of engineering design options for used fuel container and packaging plant technology.

## Financial Surety

Canadians expect that the money necessary to pay for the long-term care of used nuclear fuel will be available when it is needed. As required by the *Nuclear Fuel Waste Act*, Ontario Power Generation (OPG), New Brunswick Power Nuclear (NBPN), Hydro-Québec (HQ) and Atomic Energy of Canada Limited (AECL) have established trust funds and make annual deposits in support of their cost shares of the APM plan. The NWMO must maintain estimates of the costs of the APM program and determine the amounts of annual contributions to trust funds required by each company. An important milestone in support of financial surety was reached with the development of a funding formula, approved by the Minister of Natural Resources in 2009, which forms the basis of trust fund contributions by industry. An update of the life cycle APM program costs is underway and will be completed by 2012. The NWMO will maintain the cost estimates and adjust the funding formula as required over time.

## Adapting Plans

Adaptive processes that take into account new information and learning and provide for program flexibility are at the core of Canada's plan for used nuclear fuel. Over the past three years, the NWMO has monitored and reported regularly on the evolution of knowledge in a number of areas that may be important for future planning: evolving energy policy, technical developments on nuclear waste management, and societal expectations. Looking to the next five years, the NWMO must continue to monitor, review and discuss the potential implications of any emerging industry plans for reactor refurbishments and new nuclear units for the volumes and types of used fuel to be managed. Over the last three years, the NWMO has continued to learn from the experience of others through examination of case studies and conversations with people involved in similar processes, both in Canada and abroad. We have engaged a wide variety of specialists to explore a range of perspectives on key issues. We have also explored the expectations of Canadians through public attitude research.

Moving forward, the organization will continue its exploration of best practices in engagement, capacity building and community well-being, and will seek to build its understanding of how to interweave Aboriginal Traditional Knowledge and other bodies of knowledge into the implementation of APM. The organization will continue to be an active participant in committees of the Nuclear Energy Agency of the Organization for Economic Co-operation and Development, and contribute to an exchange internationally in areas of mutual interest. In the five-year planning period, the NWMO will advance its learning on such issues as retrievability, monitoring and intergenerational knowledge transfer. The NWMO will continue to engage citizens, specialists and potentially affected communities to test and confirm the social acceptability of the site selection process and other plans and processes.



## Governance

The NWMO submits annual and triennial reports to the Minister of Natural Resources Canada, who maintains oversight of the NWMO as set out under the *Nuclear Fuel Waste Act (NFWA)*. The NWMO's founding Members – Ontario Power Generation, New Brunswick Power Nuclear and Hydro-Québec – maintain a membership agreement setting out roles and responsibilities in respect of the NWMO. Over the reporting period, the NWMO's Board of Directors was expanded, and three new Board committees were established to reflect the organization's evolving work program. The NWMO Advisory Council provided advice to the organization on an ongoing basis and provided independent comment on the NWMO's work. The Board expanded Council membership, adding expertise in geosciences, Aboriginal Traditional Knowledge, health physics and communications. In 2008, the Board established an Independent Technical Review Group, comprising specialists from Canada, Sweden, Switzerland and the United Kingdom, to advise on whether the APM technical program is based on appropriate scientific approaches and is consistent with best international practice. Policies, procedures and management systems have been elaborated, and quality management plans and audits instituted. Over the next five years, the NWMO will interact with the CNSC consistent with the terms of the service agreement that identifies CNSC's early involvement in the APM project prior to the NWMO submitting a licence application.

## Building the Organization

Over the last three years, the NWMO made the transition from a small organization into an implementing agency with a range of capabilities required to implement the APM program. On January 1, 2009, the NWMO became an employer in its own right with the necessary supporting infrastructure including finance, legal services and human resources. Staffing levels increased from 27 at the end of 2007 to 81 a year later, with further increases to 120 by year-end 2010. The NWMO continues to recruit in a wide range of disciplines.

Over the next five years, the organization will continue to ensure resource capacity and expertise are in place to provide the foundation for progressing through each phase of planning, design and site assessments. It is anticipated that some hiring of regionally based staff will be required to support communities engaged in the APM site selection process.

## Other Activities

On January 1, 2009, OPG contracted the NWMO to provide technical services and other support in order to obtain the regulatory approvals for OPG's proposed Deep Geologic Repository Project for the safe, long-term management of Low and Intermediate Level Nuclear Waste from OPG-owned or operated reactors. A second agreement (reached in February 2011) will see the NWMO design and construct the project subject to necessary regulatory approvals.

A significant benefit of the arrangement is the opportunity it provides for the NWMO to acquire direct experience in the planning and development of a deep geologic repository.

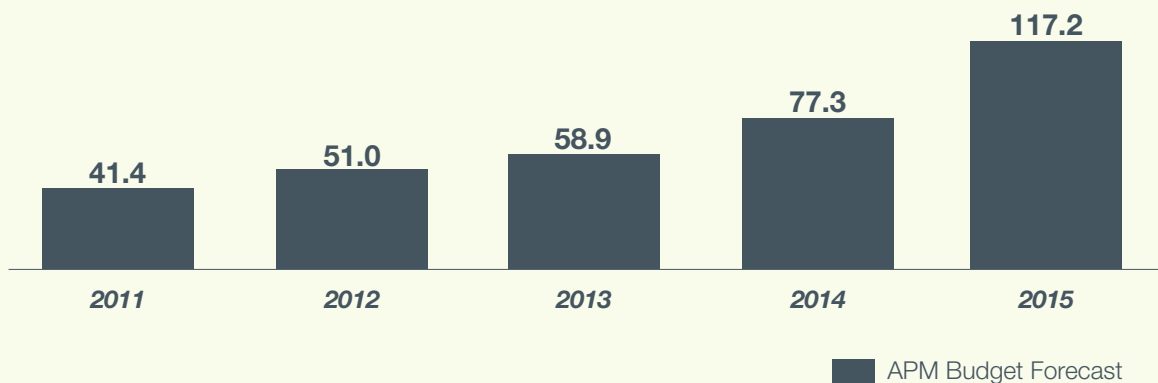
## Five-Year APM Budget Forecast

In support of the strategic plan for APM implementation, a budget forecast has been prepared for 2011 to 2015.

The forecast assumes a gradual ramping up of activity as potentially interested communities elect to proceed through the phases of the site selection process. The year-over-year increases are based on the assumption that communities will, over the planning period, request to move through different phases of learning and capacity building, initial screenings and feasibility studies. The budget also makes provision to initiate work associated with detailed site characterization, should the process evolve to that stage.

The budget forecast reflects the NWMO's desire to be prepared and well-resourced to work with communities as they engage in the site selection process. Actual costs incurred will be determined by a number of factors, including the timing and nature of community involvement in the site selection process over this period. Planning assumptions underlying the budget estimate are outlined in Chapter 8 of the Triennial Report, *Budget Forecast 2011 to 2015*. These annual operating costs are cost-shared by the owners of used nuclear fuel: Ontario Power Generation, Hydro-Québec, New Brunswick Power and Atomic Energy of Canada Limited.

### » 2011–2015 Budget (\$ million)



## Trust Funds

The *Nuclear Fuel Waste Act* requires that nuclear fuel waste owners establish and make annual deposits to trust funds that will address future financial costs of implementing APM, following receipt of a construction licence. As required by the *Act*, contributions have been made annually beginning in 2002.

Trust fund balances as of December 2010 are outlined below for each company. Each year, the NWMO must establish the level of trust fund deposits for each company for the upcoming year. The required level of 2011 deposits are also presented below.

Total Trust Fund Deposits: **»»**  
Year 2011

	Trust Fund Balances as at December 2010 (\$ million)	2011 Deposits to Trust Funds Required by Waste Owners* (\$ million)
Owner	Dec 2010	2011
OPG	1,950	139
HQ	70	7
NBPN	77	5
AECL	33	2
<b>Total</b>	<b>2,130</b>	<b>153</b>

\* Annual trust fund deposits are required to be made within 30 days of the submission of the Annual Report.

## APM MILESTONE ACHIEVEMENTS 2008 TO 2010

### ***Building Relationships***

- » Engagement activities that sought input on NWMO plans and policies and strategic objectives for APM.
- » Engagement of a cross-section of Canadians (more than 7,000 people) in developing the APM site selection process through public information sessions, citizen panels, multi-party dialogues, Aboriginal dialogues, national surveys and other activities, providing a range of perspectives.
- » Establishment of a Municipal Forum and stronger liaisons with municipal associations.
- » Expanded work and collaboration with national and provincial Aboriginal organizations, NWMO Elders Forum and the Niigani working group.
- » Expanded relationships with all levels of governments.
- » Expanded suite of communication materials to support general public outreach, including enhanced website, APM exhibit on repository concept, DVDs, backgrounders and fact sheets. DVD on site selection process available in English, French and nine Aboriginal languages.
- » Youth Roundtable convened to advise on future outreach and engagement.

### ***Site Selection***

- » Two-year dialogue with Canadians (2008, 2009) to collaboratively develop a process for identifying a safe, secure location in an informed and willing community to host the deep geological repository.
- » Initiation of APM site selection process (May 2010) supported by a broad-based program of activities to raise awareness of the APM project.
- » Early interest expressed by communities in 2010 in engaging in the Learn More phase. Communities initiated participation in programs to build their understanding of APM.
- » Initial screenings requested by communities as part of this period of learning more about APM and the siting process.
- » Materials on APM and public kiosks provided to support early community information and dialogue.

### ***Design and Safety Case for APM Deep Geological Repository***

- » Update of APM conceptual designs for repositories in both crystalline and sedimentary rock formations. Work initiated towards a pre-project review by the CNSC.
- » Collaboration on technical research program with Canadian universities and international partners in Sweden, Finland, Switzerland and France.

### ***Financial Surety***

- » Approval by Minister of Natural Resources (2009) of the funding formula proposed by the NWMO, to ensure that those who benefit from nuclear energy pay for the management of used fuel and financial burdens are not passed on to future generations.
- » Initiation of process to refine and update the total cost estimate for the APM project.

## ***Adapting Plans***

- » Tracking of opinions and expectations of Canadians for APM project.
- » Tracking of emerging technologies, used fuel inventory projections and potential impacts of new nuclear build on APM program.
- » Tracking of best practices in engagement, and potential social, economic and cultural effects of APM.
- » Continued work to understand the values and ethical considerations of APM implementation.
- » Continued work to understand opportunities to interweave Aboriginal Traditional Knowledge.

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## ***Accountability and Governance***

- » Expansion of Board of Directors and its committee structure.
- » Expansion of Advisory Council membership. Advisory Council provided ongoing advice to the NWMO and developed independent comments.
- » Establishment of the Independent Technical Review Group (ITRG) to review APM technical program. Annual ITRG reviews confirm that full range of relevant scientific topics is covered by the NWMO.
- » ISO 9001 certification and expanded quality assurance and management systems.
- » Agreement with CNSC signed outlining areas of pre-project review on APM design and safety case.
- » Memorandum of Understanding with Natural Resources Canada signed on consultation with Aboriginal peoples.
- » Initiation of five-year strategic plans for APM implementation.

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## ***Building the Organization***

- » The NWMO became an employer in its own right with supporting legal and financial infrastructure.
- » Significant strengthening of the NWMO's capabilities through recruitment of a highly qualified, experienced multidisciplinary team: the NWMO grew from 27 employees in 2007 to 120 employees by the end of 2010.

## APM STRATEGIC PLANNING MILESTONES 2011 TO 2015

### ***Building Relationships***

- » Communications and media relations programs to raise awareness of APM project.
- » Engagement, education, outreach and capacity-building initiatives to support multi-generational involvement in APM project.
- » Relationship building with communities and regions potentially interested in, or affected by, the APM site selection process and the transportation of used fuel.
- » Collaborative work with, and advice sought from, the NWMO Elders Forum, Municipal Forum, community-based organizations, and national and provincial Aboriginal organizations.
- » Developing and maintaining relationships with federal, provincial, regional and local governments.
- » Involvement of a cross-section of citizens, including youth and interested organizations, to ensure NWMO policies and plans continue to meet needs and expectations.

### ***Site Selection***

- » Collaborative work with communities interested in learning more about APM project.
- » Initial screenings and preliminary feasibility studies upon request of communities.
- » Regional engagement and studies with potentially interested communities and their surrounding communities, Aboriginal peoples and others potentially affected by the project or transportation of used nuclear fuel.
- » Tailored communications and public engagement activities to support regional dialogue.
- » Refined tools and methods for detailed geoscientific assessments in both crystalline and sedimentary rock, and environmental, social, cultural and economic assessment.
- » As may be appropriate, selection of one or two candidate communities to progress to detailed site characterization work and establishment of centres of expertise.

### ***Design and Safety Case for APM Deep Geological Repository***

- » Completion of APM conceptual designs, cost estimates and safety cases for used fuel deep geological repositories for both crystalline and sedimentary rock and transportation system.
- » Preparation of engineering design options for used fuel container and packaging plant technology, as well as underground layout of a deep geological repository.
- » CNSC pre-project review of reference repository designs and safety cases.
- » Continued NWMO involvement in joint research activities and repository development and demonstration programs with partners in Sweden, Finland, Switzerland and France.

### ***Financial Surety***

- » Completion of updated life cycle cost estimate for APM program.
- » Incorporation of new total cost estimate into APM funding formula.
- » Identification of implications for funding formula of potential new reactors or owners.
- » Establishment of level of trust fund deposits by waste owners required annually.

## ***Adapting Plans***

- » Reporting on projected used fuel inventories, emerging technologies and potential implications of new nuclear reactor units for APM plan.
- » Tracking of citizen priorities and societal expectations for APM.
- » Tracking of expectations of citizens, including youth and interested organizations, to ensure site selection process continues to meet needs and expectations; adapting process as may be required as experience is gained.
- » Monitoring best practices in community well-being, including management of social, economic and cultural impacts.
- » Interweaving Aboriginal Traditional Knowledge in APM program implementation.

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## ***Accountability and Governance***

- » Oversight by NWMO Members, Board of Directors and Board Committees.
- » Advice and independent comment by Advisory Council.
- » Review of APM technical program by the Independent Technical Review Group.
- » Interaction with CNSC for regulatory information and pre-project reviews for APM.
- » Submission of annual and triennial reports to Minister of Natural Resources and the public.

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## ***Building the Organization***

- » Further development of staffing capability, contractor capability, and business systems and processes. Intern program to engage young people.
- » Hiring of regionally based staff and local information offices as required to support communities engaged in the site selection process.

## What We Heard as We Engaged Canadians

Over the last three years, the NWMO has had an ongoing conversation with Canadians; a conversation focusing on the values, principles and priorities that need to shape the processes and plans being developed. The input received has served to shape the NWMO's implementation activities on behalf of Canadians to date and will inform the organization's future phases of work.

Some highlights from these dialogues are provided below. A full review of the input received through public engagement and dialogue over the last three years is outlined in Chapter 9 of the Triennial Report, *What We Heard on Implementing Adaptive Phased Management*.

As the NWMO invited input to guide development of its strategic plans, a number of themes emerged as people identified priorities and challenges for the NWMO's approach to its work. The organization was encouraged to provide for the early and sustained involvement of citizens, communities, Aboriginal peoples, and interested individuals and organizations. Many encouraged continued efforts to build a broad awareness and understanding of the NWMO and its APM plan. The NWMO heard that it must, on a daily basis, seek to earn and maintain the trust and confidence of citizens, and demonstrate accountability as it protects the public interest. A recurring theme of responsibility continues – underscoring that this generation should assume the social and ethical responsibility for putting the plan in place for used fuel that has been created. People spoke of used fuel management as an important intergenerational issue, encouraging the NWMO to consider the long-term issues. The NWMO was urged to learn from the wisdom of Elders while engaging and building the capacity of young people to carry on this important work in the future. Staying abreast of such priorities and expectations of Canadians for how the NWMO delivers on its mandate will continue to be important as the organization carries forward its strategic planning for future phases.

Much of the public dialogue in the last three years focused on the collaborative development of the APM site selection process. These multi-year discussions yielded a richness of guidance and direction that have shaped both the APM site selection process published in 2010 and the NWMO's engagement of communities now underway. Through these dialogues emerged principles and objectives to guide site selection, such as shared decision-making, inclusiveness, transparency, provision for independent review – and a preeminent focus on safety. Respect for Aboriginal rights and treaties was emphasized, and the commitment to seek an informed and willing community confirmed. The NWMO was encouraged to continue to learn from Aboriginal Traditional Knowledge along with other knowledge and science as it proceeds. Many spoke of the need for an early and prominent role for regulatory authorities and provincial governments in overseeing the siting process. The transportation of used fuel was identified as an important issue for the public, and one on which the NWMO is encouraged to direct significant attention as it engages with potentially affected communities and regions. Dialogues advanced important discussion on the range of potential effects of the APM project on a community's way of life and on its social, cultural or economic aspirations. This input helped to shape the emphasis on community well-being now embedded in the site selection process. The NWMO was encouraged to provide assurance that the community that ultimately hosts the project will benefit from it, and to consider a regional focus





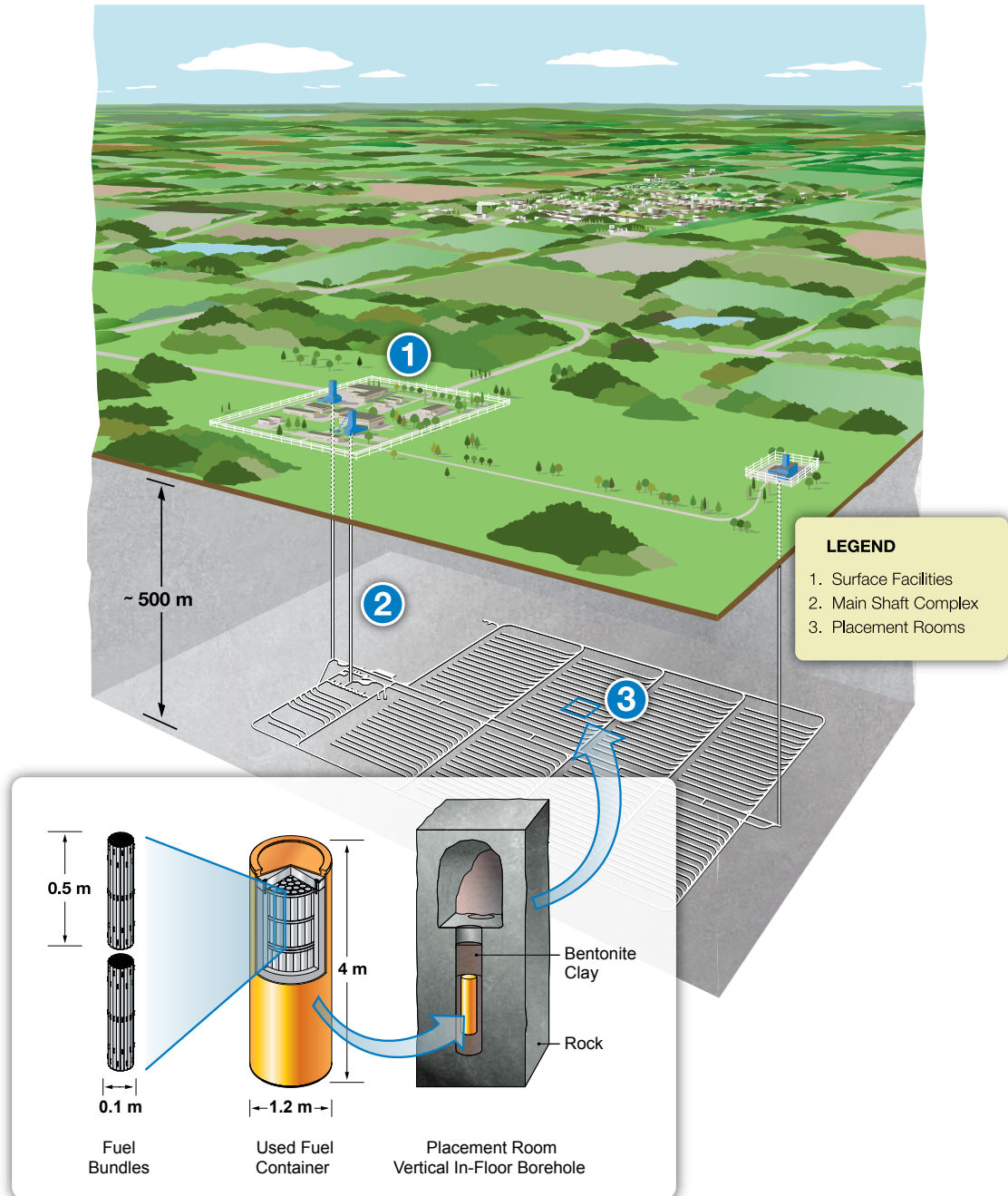
for the assessment of sites and distribution of benefits. There was much discussion of the need for capacity-building resources, including credible information on risk, for communities and the region early in the process. Integrity of the site selection process requires that all those who are potentially affected must be involved in decision-making and have the resources required to enable their participation in a direct and sustained way in the APM site selection process.

There was much common ground identified over the course of these engagement activities. Important differences in view also came to light as people discussed how best to proceed. These differences must continue to be examined and discussed as new decision areas are considered, and the existing processes and plans are reviewed for their continued alignment with the values, priorities and concerns of Canadians.

Throughout the NWMO's dialogues with Canadians, support was voiced for the concept of adaptive management. Adapting plans and processes to embrace advances in knowledge and evolving policy and societal expectations is seen as a vital requirement of the APM plan. Many spoke of the importance for the site selection process to be adaptive in order to take advantage of new knowledge and expertise from around the world. The NWMO is committed to this continuous learning. While the APM site selection process is in its early days, the organization is actively learning from communities, Elders, municipal associations and governments in Canada, as well as organizations in other countries with important experience to share. The NWMO is honoured to be part of this mutual learning as Canada takes the next step in planning for safeguarding its used nuclear fuel. The commitment to move forward through collaboration, and with the humility to embrace change and adapt plans, will be at the forefront of implementing APM.

## Illustration of APM Deep Geological Repository

The deep geological repository is a multi-barrier system that will be constructed at a depth of approximately 500 metres. Used nuclear fuel bundles will be packaged in corrosion-resistant containers and placed in boreholes drilled into the rock where they will be sealed by a layer of bentonite clay.



**Nuclear Waste  
Management Organization**

22 St. Clair Avenue E.  
Sixth Floor  
Toronto, Ontario  
M4T 2S3 Canada  
Tel 416.934.9814  
Toll Free 1.866.249.6966  
[www.nwmo.ca](http://www.nwmo.ca)

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