This e-dialogue involved young Canadians from youth and academic organizations, organized into four e-round tables, later joined by some audience members. The e-round tables were co-moderated by Jamie Doyle, Senior Project Manager, Jacques Whitford, Environment Ltd; Lenore Newman, Post-Doctoral Scholar, RRU Canada Research Chair in Sustainable Community Development; Doug Seeley, Professor, Science, Technology and Environment Division, and Nancy Averill, Director of Research, Public Policy Forum. The e-panelists applied the Assessment Framework developed by the Nuclear Waste Management Organization to the three storage options now under consideration—storage at reactor sites; centralized storage and deep geological storage to determine its robustness for decision-making and to identify any gaps.

**Group #1 -- Applying the NWMO Assessment Framework, Determining the Gaps**

**Dialogue**

**Ann Dale**

Thank you for participating in this dialogue. We appreciate your time and commitment to engaging in one of the critical public policy issues affecting Canadians today.

I look forward to a dynamic discussion in which we can explore questions, share ideas, solutions, and visions of new sustainable futures. We have an opportunity to influence the sustainable management of nuclear waste by applying the proposed framework of values and strategic objectives to the three disposal options.

The two questions we will be addressing are:

1. Is the assessment framework comprehensive and balanced? Are there gaps, and if so, what do we need to add?

2. Are there specific elements that you feel must be built into an implementation plan? What are your thoughts on what a phased approach must include?
Nancy Averill

Hi Everyone. I am Nancy Averill and I will be your moderator for this group. Let's start with introductions. I am Director of Research at the Public Policy Forum and formerly with the National Roundtable on the Environment and the Economy.

Greg Wilburn

Hi everyone. My name is Greg Wilburn and I am a policy advisor at the Canadian Environmental Assessment Agency, and a student in the Masters Environment and Management Program at Royal Roads.

I have been working in the field of environmental policy for 18 years, and specifically on strategic environmental assessment of policy for the last 5.

Nancy Averill

Hi Greg!

Greg Wilburn

I like the Agenda that you have posted Nancy - I think it is very functional. I'd be pleased to know if others agree - in the interests of laying out some structure for our dialogue.

Anna Stanley

Hi, My name is Anna Stanley. I am a PhD Candidate in the geography dept. at the U of G. (sorry I am a bit late logging on) I am studying the NFW management policy discourse with an eye to social justice.

Rodney McDonald

Hi everyone. My name is Rodney McDonald. I am the Sustainability Strategist at the Centre for Indigenous Environmental Resources, and a student in the Masters Environment and Management Program at Royal Roads.

I work in the areas of sustainability, sustainable development and green building.
Nancy Averill

Hi Rodney!

Nancy Averill

I think that we have a few more joining us. Let's start. You have all received some material in advance including the NWMO Assessment Framework. Is the assessment framework comprehensive and balanced? Are there gaps, and if so, what do we need to add?

Anna Stanley

I find the assessment framework rather vague and am wondering what others think. To take the first objective for example: "fairness- to ensure fairness in the distribution of costs benefits etc..." is an admirable goal, but there is very little in the discussion to explain what that really means in terms of siting a facility or in terms of deciding on the particular approach and method to be used.

I am interested in seeing consideration of specific and likely fairness issues: how will fairness address the treaty and aboriginal rights of First Nations and other Aboriginal peoples, how will fairness include the experiences of communities with parts of the nuclear fuel cycle, how will it decide what knowledge or experience or claims to rights to exclude or exclude in decision making or not? I think this kind of questioning can be applied to the other objectives as well.

Rodney McDonald

I am impressed with the assessment framework and I do think is comprehensive and balanced, in terms of generalities. I have two initial comments:

1) I would like to see the word dialogue as part of the inclusion value. Perhaps replacing 'engagement' with 'dialogue' would do the trick.

2) Perhaps I've missed it, but I don't see reference to the decision making process.

From what is written I understand that the public will be engaged, but I don't understand how decisions will be made. I like shared multi-stakeholder decision making processes and think this is an appropriate decision making process for this issue.
Greg Wilburn

I have reviewed the framework in some detail. The emphasis is on the management of the problem with existing possible solutions, and I am not sure that it appropriately recognizes the potential of additional research over time to address the nuclear waste storage issue. For example, the documentation notes that Canadians have expressed an interest in re-use and recycling. This notion does not appear to be well captured in the framework.

There is mention of adaptability and knowledge in the citizen values section and adaptability is identified as one of the core objectives, but the emphasis is somewhat passive (must build in capacity to respond to new knowledge) as opposed to an active interest to ongoing improvement, innovation, research and development. Such an objective could have a significant impact on the choice of management options.

Ann Dale

Does the framework include holistic and systems thinking?

Greg Wilburn

I am not sure that the framework does support systems thinking. I think that it is comprehensive in some respects, but once again, I am not sure that it places an appropriate emphasis on the need to recognize that knowledge, capacity, management options, may evolve considerably over time. I am concerned that in the interest of "solving" the problem that this framework may favour, unintentionally, one method of disposal over another.

We have seen in the management of solid waste a predisposition to "burying the evidence" of our over-consumption as opposed to other more sustainable solutions - such as re-use, energy reclamation from waste, among others.

Rodney McDonald

Neither the values nor the framework reflect holistic and systems thinking. Although I understand the need for the NWMO to remain focused on the issue of management of spent fuel, from a systems perspective I think it is impossible to have this discussion without taking about our demand for and use of energy as humans. Also, how can we talk about the management of a waste without the prevention of further amounts of that waste?
Anna Stanley

I am not sure how this would be added, but I think that the mandate of the NWMO does not exclude them from considering the management of the waste production, and I would think that systems thinking would support a more serious consideration of how and whether to deal with the production of the waste rather than just focus on isolating the end product. I think this would be in the interest of fairness as many groups that I have spoken to, including several First Nations organizations, are adamant that waste cannot be managed without attention to its production.

Greg Wilburn

I think that Citizen Values might be amended to include Innovation - We must build in capacity to allow/support continued innovation in the management of nuclear fuel wastes.

Adaptability should perhaps be amended to read: To ensure capacity to adapt to and "benefit from" changing knowledge and conditions over time. The selected management approach should be able to be modified to fit new or unforeseen circumstances, "including the possible benefits of additional research into the management of nuclear fuel waste". The approach should provide flexibility to future generations "to support improved management options"; changes decisions, and not place burdens or obligations on future generations that will constrain them. The approach should be able to function satisfactorily in the event of unforeseen surprises, "and allow future generations to benefit from the development of improved management options."

Rodney McDonald

When I wrote, "... I understand the need for the NWMO to remain focused on the issue of management," I was referring to (1) the NWMO Web site, which states "The NWMO is a new organization created to recommend a long-term approach for managing used nuclear fuel produced by Canada's electricity generators," and (2) by making this statement I get the impression that the NWMO does not want to deal with the question of waste creation because it then opens a Pandora's box that forces us to question nuclear power generation. This is clearly outside the limited scope of the NWMO. Thus, taking a holistic systems thinking approach is impossible.

Greg Wilburn

The framework seriously limits the discussion of waste production - and yet that is the key issue here. I am not sure how this framework could be amended to address that issue, however, in the absence of a serious recognition at the federal/provincial level
that a dialogue on energy production/consumption is long overdue.

Anna Stanley

I think that the energy policy issue is very, very important and one that arises in my research continually. Throughout the 30 plus year history of nuclear waste management policy making, many citizens groups have called for reviews of energy policy to come before decisions about nuclear fuel waste management, and for the production of the waste to be considered. Though it is expedient and efficient for the NWMO to focus on only the waste, I do not think it reflects holistic values, or systems thinking. I think that the framework needs to be amended so as to be open to this issue, and that this is possible within their mandate. Otherwise, I think that the words 'holistic' and 'systems' approach must be removed from the framework, as it is misleading.

Related to citizens' values: I think citizens' values must be amended to include specific consideration of the experiences and rights of Aboriginal peoples. This was a question that was being considered in the first phases of their work on the framework (the 10 questions) and was later dropped.

Rodney McDonald

What could be added to the framework?

A national dialogue on dialogue on energy production/consumption, and the production of nuclear waste.

Nancy Averill

Could 'stewardship' encompass recycling and innovation?

Greg Wilburn

It might, Nancy, but not as it is currently defined within the framework. Stewardship is characterized as "responsible use and conservation". Stewardship, however, might also be viewed as a commitment to the ongoing safe management of substances from cradle-to-cradle. In this instance, the argument could be effectively made that innovation could support improved management/stewardship.

It might also be a function of responsibility - adaptive management is "responsible" since it provides for managers to predict possible strengths, weaknesses, threats and opportunities, and to put in place mechanisms for innovation, monitoring, follow-up, and adaptation.
I have strong feelings about the issue of responsibility, however. I am not sure that it is "responsible" to make use of a resource if one cannot handle the fallout of its exploitation. Pardon the pun.

Anna Stanley

Regarding "stewardship", I think the term is a bit too fuzzy, as are the terms "sustainable development" and "engagement". I think that these terms can mean anything to anyone. My feeling is that it is best to deal with specific criteria and examples, which I think goes back to my original point about "fairness" and the other objectives in the framework.

Rodney McDonald

I agree with Anna.

Nancy Averill

If the terms in the Assessment Framework are 'fuzzy', what specific criteria should replace them?

Rodney McDonald

Thank you for the opportunity to participate in this e-dialogue.

Nancy Averill

Thank you for joining us, Rodney.

Greg Wilburn

[quoting: Rodney McDonald] wrote:
When I wrote, "... I understand the need for the NWMO to remain focused on the issue of management," I was referring to (1) the NWMO Web site, which states "The NWMO is a new organization created to recommend a long-term approach for managing used nuclear fuel produced by Canada’s electricity generators," and (2) by making this statement I get the impression that the NWMO does not want to deal with the question of waste creation because it then opens a Pandora's box that forces us to question
nuclear power generation. This is clearly outside the limited scope of the NWMO. Thus, taking a holistic systems thinking approach is impossible.

I agree with Rodney on this point wholeheartedly. The creation of this body with its limited scope was quite deliberate.

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**Nancy Averill**

What would be a more comprehensive mandate? What would this national body look like?

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**Greg Wilburn**

I am not sure that this framework can be amended to deal with the issue of waste generation. As with many government mechanisms, they are structured deliberately to focus debate on a given aspect of an issue, rather than to focus on the "systems" that resulted in the creation of a problem in the first place. The issue of energy policy is one that carries a disproportionate amount of political baggage in this country. One cannot discuss nuclear energy without discussing coal/oil, hydro and wind generation. One cannot discuss power generation without examining demand. One cannot deal with generation choices without issues of federal/provincial jurisdiction becoming a sticking point. Which brings me to my main criticism of Canada’s overall approach to energy policy and sustainable development - in the absence of any clear idea of what sustainable development is in a Canadian context, how can we even begin to speculate on what reasonable resource requirements might be? The NWMO is probably the appropriate mechanism to deal with the issue it has been asked to address - but in the absence of clearer commitment nationally to sustainable development the value of the work is compromised.

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**Anna Stanley**

I am not sure about replacing these terms, but I think it is important for the NWMO not to stop at just referencing them. I would like to see them being quite specific and using examples to allow us to see how they are thinking through each of the terms. It is difficult to review a document that refers vaguely to principles of fairness, or stewardship when it is unclear how or whether these principles can even be applied to nuclear waste management as they are conceptualizing it.

RE: a more comprehensive mandate, I think the NWMO’s mandate might be interpreted more generously to allow them to review and host discussions and debate about the management of the sources of the waste and, necessarily energy policy. This re-interpretation would then allow them to modify their framework. Certainly as it stands, the framework must be modified to do this and is not adequate. If this is impossible,
then perhaps the NWMO should be required to be up-front about where it's mandate and interpretation of it's mandate derive.

Re: a national body- I do not think that the current make up of the NWMO (owners and producers of nuclear power and waste) is appropriate. This also has been the source of a long series of controversy in the policy debates. I think perhaps revisiting the Seaborne panel recommendations to have an interdisciplinary group of diverse community and expert representatives would be appropriate.

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**Greg Wilburn**

Just a little clarification of my last point - the government approach to dealing with thorny issues like nuclear waste may be compared to a misguided community's attempts to deal with a serial arsonist. Continually sending out firefighters to deal with the arsonist's handiwork is one approach, but you need the police and investigators to catch the fire-starter if you really want stop the problem.

Sometimes, when everyone knows who the arsonist is or accountability is very diffuse, there is a reluctance to manage the issue the way that it needs to be managed.

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**Nancy Averill**

What would be your advice to government as they consider the public input form this exercise?

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**Anna Stanley**

What do you mean by "this exercise": the e-dialogue, the NWMO's engagement activities, or the exercise of considering energy policy?

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**Nancy Averill**

..the NWMO's public engagement exercise.

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**Greg Wilburn**

The organization's mandate is very clear - It's purpose is to study approaches based on three methods: deep geological disposal, centralized storage or storage at nuclear waste sites. While it is possible to attempt to initiate a discussion of broader energy issues, it seems clear that there is no interest in broadening the scope. If this is the case, the existing framework is quite comprehensive. I believe that trying to broaden the
debate to include other energy issues might compromise the value of a process that could generate useful information and policy.

I remain concerned about the need for a debate on national energy policy, but it may not be worthwhile to suppose that a body with this limited a scope could be used to begin a debate of the magnitude required for reform of national energy policy. Particularly given the review participants (who favour nuclear over all other options).

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**Nancy Averill**

We are almost out of time. The nuclear waste management decision-making process is challenging because no one knows what the future may bring and everyone has different views on what the most important considerations are. What final advice would you have for the NWMO on their assessment framework?

**Greg Wilburn**

That is an interesting question, Nancy. I am not really sure. Assigning a weight to one form of analysis over another is a complicated issue that I deal with daily. Striking a balance among stakeholders, economic, social and environmental issues, while recognizing that we live in a political system, is an incredible challenge. My recommendation would be that the analysis, including public input, be fairly and transparently reported and that all of the analysis be clearly reflected in whatever final options are recommended.

**Greg Wilburn**

Another recommendation would be to deal with the possibility of innovation more comprehensively. Presuming that a problem of this nature can be permanently and conclusively dealt with using only our current knowledge is leaving out a large part of the equation. Using a "permanent" deep geologic disposal option might limit efforts to seek more sustainable options over time.

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**Anna Stanley**

I am not sure what to say here except to extend a caution. In my review of the NWMO's public engagement exercises I have found that there has been an emphasis on public opinion polls and other similar types of research where the focus has been on gathering the opinion of the public. These activities have also focused on unaffiliated people selected at random (for example the citizens dialogues). I think it is indicative of the quality of their public engagement that the people they engaged were not aware of the problem or the activities of the NWMO, but supported their mandate. I would caution that the engagement activities have not been designed to consult, listen and react to
groups that focus and represent public opinion on this matter: for example several women's groups, nuclear awareness groups, environmental groups, and aboriginal communities and groups that have been involved in this process for many years.

Re: the organization's mandate. I think that the NWMO can interpret its mandate to examine methods to manage waste that do not exclusively focus on isolating the waste. I think there is room to argue that storage and disposal require consideration of volume of waste and continual replacement of waste and therefore, at least require the NWMO to deal in some way with the production of the waste. At the very least the NWMO should be required to state its position on this.

My final advice would be to re-integrate specific consideration of the knowledge, experiences and rights of aboriginal peoples into the framework. It is not clear to me why it was removed. I think that there may be constitutional arguments about why it is necessary to include this, as well as right's based arguments.

I am sorry, but I have to leave the dialogue now to run to another engagement. It has been nice (meeting?) you all online. Thanks.

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**Greg Wilburn**

Thanks Anna, Ann, Nancy, and an absent Rodney. I have to leave for another obligation. Thanks for the moderating Nancy - it was thoughtfully managed. I am looking forward to seeing the results of the other groups.

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**Nancy Averill**

Thank you, everyone for participating today. A report from this dialogue will be posted on the Royal Roads University Website within the week.