

CANADA-UK COLLABORATION

Virtual Workshop on Increasing Diversity and Inclusivity in the Nuclear Workforce



Executive Summary

On Wednesday, June 2, a group of 50 individuals from the UK and Canada met to discuss increasing diversity and inclusivity in the nuclear sector. The virtual event brought together participants from Canadian and UK government, industry, academia, civil society and Indigenous Peoples, for an informative and targeted discussion on the barriers and opportunities for collaboration to achieve mutual goals, such as the Equal by 30 and Nuclear Sector Deal initiatives.

Hosted by the Nuclear Skills Strategy Group on behalf of the Department for Business, Energy and Industrial Strategy (BEIS) and Natural Resources Canada (NRCan) the workshop explored the following topics:

1. Achieving gender parity in our nuclear workforce focusing on attraction and development/retention.
2. Looking beyond gender - inclusivity of, but not limited to, ethnicity, disability, and sexual orientation.
3. Utilising the principles of clean growth to support diversification of our workforce.
4. Importance of data and metrics .

The themes of the workshop align with priorities raised in the bilateral Canada-UK Nuclear Cooperation Action Plan, under the workstream for increasing diversity and inclusivity in the nuclear sector.



Introductory Session and Opening Address

The workshop began with remarks on broad policy commitments and initiatives, beginning with an introduction from Chris Bowbrick, Deputy Director of Nuclear Generation Policy, Sector Deal and International at BEIS and Annette Hollas, Manager, Energy and Environmental Policy Division, Natural Resources Canada (NRCAN). The UK's Nuclear Sector Deal (NSD) was noted as a key initiative, which aims to achieve a target of 40% women in the nuclear industry by 2030. Canada closed the session, highlighting the importance of building a more inclusive energy sector. This is an objective of Canada's Equal by 30 campaign, which aims to advance women's participation in the clean energy revolution and achieve 50% of women in the clean energy sector, including nuclear, by 2030. A notable theme during these remarks was the importance of recognising the historical and present-day relationships with Indigenous Peoples and racialised communities. Following a year of a global pandemic that further shed a spotlight on racial injustice and inequality, it is essential that the UK and Canada work together towards a shared goal for an inclusive energy future.

Key messages of the session:

- Research shows that greater diversity and inclusivity in the workforce has many social, economic and environmental benefits.
- Achieving both countries' common climate change objectives will be challenging without building a diverse and inclusive workforce.
- Data driven insights will be required to accelerate progress, build momentum, and take targeted action to create a more equitable and inclusive nuclear sector.



Chris Bowbrick,
Deputy Director of Nuclear
Generation Policy, Sector Deal
and International, BEIS



Annette Hollas
Manager, Energy and
Environmental Policy Division,
Natural Resources Canada



Nuclear Skills Context

The second session of the workshop began with an overview of the UK's Nuclear Sector Deal (NSD) by Corhyn Parr, Chair of Nuclear Skills Strategy Group (NSSG). The NSD announced a package of measures to support the sector as the UK develops low-carbon nuclear power and is about government and industry working in partnership. The deal includes a number of commitments to ensure the sector has access to the skills it needs throughout the UK, most notably the commitment to deliver 40% women working in the sector by 2030. One of the initiatives highlighted during this session was the Nuclear Sector Gender Roadmap. The Roadmap establishes a cross-sector ED&I working group to help implement and track progress, with a large focus on understanding data sets to reflect on areas where targets are not being met.

Rachna Clavero, Senior Director of Kinectrics, prompted a discussion on the need for greater diversity to maintain our nuclear skill set, highlighting the growth of Canada's nuclear sector over the past twenty years and the need for diverse perspectives. As the need for nuclear continues to grow and new nuclear technologies are being developed, skills and knowledge in the sector are being rapidly lost due to an aging workforce. To avoid this loss, we will need a diverse and adaptable workforce which can be accomplished through measures such as: targeted training, increasing the next generation's pathways into and awareness of the sector and committed leadership.

Key messages of the session:

- International collaboration will be key to improving ED&I. Leveraging shared experiences can be useful for identifying gaps and barriers that could be addressed through established best practices.
- A diverse workforce will be crucial and attracting multidisciplinary talent from different sectors, who can bring different skill sets, will help achieve this.
- Targeted training and development programmes will be essential and will help to attract a new generation and retain existing workers.
- Early education is important. The discussion identified a need to work with high schools and post-secondary academia to bring awareness to opportunities in the nuclear sector and develop the future experts.
- Commitment from leadership and company executives is necessary for promoting accountability and prioritising nuclear skills development.



Corhyn Parr
Chair of Nuclear Skills Strategy
Group (NSSG)



Rachna Clavero
Senior Director of Kinectrics

Achieving Gender Parity

The session on achieving gender parity was opened with keynote remarks from Rumina Velshi, President and CEO of the Canadian Nuclear Safety Commission. President Velshi shared her personal experience from her early career as a woman in nuclear, recalling how PPE in the 1980s was designed exclusively to suit the needs of men in the nuclear industry. She highlighted that with time, managers have begun to ask female employees “what can we do better”, a promising sign that the sector is adapting to the needs of a more diverse workforce. President Velshi commended the work of the Driving Advancement for Women in Nuclear (DAWN) initiative. She also signalled for greater allyship, emphasising that gender parity is not only a woman’s issue. Her call to action implored that the time to address the issues is now – let’s move beyond talking about them. Furthermore, the issue of women of colour making up a significantly lower percentage of the nuclear workforce was highlighted, a fact which would be discussed further in the following session on ‘Looking Beyond Gender’.

Women in Nuclear (WiN) UK outlined some of the key targets from the Nuclear Sector Deal such as 40% of women in nuclear by 2030, 50% of female apprenticeship starts by 2021 and 30% of female executive members by 2030. Kirsty Hewitson, WiN Strategy Director, outlined six key

actions within WiN UK’s strategic plan that aim to enhance representation of women in nuclear up until 2030 and beyond, including CEO engagement, mentoring programmes, leadership development, gender balance and pay gap analysis, engaging with younger generations by putting nuclear on the curriculum, and nuclear growth opportunities.

WiN Canada also pointed to key targets and commitments aimed at facilitating greater representation of women in Canada’s nuclear industry. Lisa McBride, President of WiN Canada, stated that the organisation is engaged in making real change. A recent survey revealed that women within the nuclear industry reported not feeling respected, valued or celebrated in the workplace in comparison to their male colleagues. However, when organisations had targeted development and mentorship schemes in place, the survey revealed that these views were less common.

Both speakers emphasised the importance of data collection and the use of data to create tangible change. A notable message during this session was that while gender parity is discussed within the workplace, it is not always put into practice. Both countries have much work to do in this area to close the gender gap, as reflected by the statistic that women only represent 22% of employees in both Canada and the UK.

Key messages of the session:

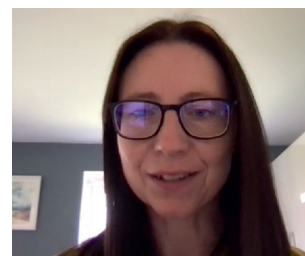
- Male allies are necessary for achieving gender parity, it is not only a women’s issue.
- Women can be motivated by careers that carry societal benefit. Framing the narrative around nuclear’s role in the fight against climate change is crucial in order to attract a diverse future workforce.
- A multi-pronged action-oriented approach will be key to driving change – for example by educating and engaging with the future workforce through primary and secondary school education, educating influencers i.e. teachers/parents, holding leaders accountable, etc.

“It is time for a
WIN’tervention.”

*Lisa McBride,
Women in Nuclear Canada*



Lisa McBride
President of WiN Canada



Kirsty Hewitson
WiN UK Strategy Director



Rumina Velshi
President and CEO of the
Canadian Nuclear Safety
Commission



Looking beyond Gender

The topic of looking beyond gender at ethnicity, culture, sexual orientation, Indigenous Peoples and intersectionality, was introduced by Marcia Ore, Equality, Diversity and Inclusion Partner at UK Atomic Energy Authority. Marcia delivered a passionate keynote address, which emphasised the influence of bias and stereotypes. This included the important distinction between equality and equity and the need for everybody to play their part in improving ED&I, not just senior leaders.

Dipak Arya, Group Head of Diversity and Inclusion, Nuclear Decommissioning Authority, reaffirmed the importance of collecting better data to create initiatives that look to enhance representation of race, culture, sexual orientation, disability, and other aspects of diversity. He highlighted that there needs to be a greater focus in the UK sector on data.

Mark McBride-Wright, Founder of Equal Engineers, highlighted the need to empower people to feel more confident and able to engage in discussions around LGBTQ2I+ matters. McBride-Wright noted that the nuclear

and engineering sectors report the highest rates of male suicide. One in five engineers have lost a work colleague to suicide and one in four engineers admit to experience pressure to conform to hyper masculinity. McBride-Wright noted that there is a disconnect between how we should experience inclusivity and belonging versus what individuals actually experience.

Desiree Norwegian, Chair of the Indigenous Advisory Board, Organisation of Canadian Nuclear Industries, closed the session with a presentation on the need for greater inclusion of Indigenous Peoples in the nuclear industry. Canada has a long-history of mistreatment of Indigenous People, including their forceful placement in residential schools until the late-1990s. This mistreatment has resulted in loss of culture, way of life and generational trauma, which continues to burden Indigenous communities today. Norwegian highlighted the need for greater education around nuclear energy, including its role in achieving our mutual climate change targets. This begins with educating young children so that they may build knowledge and challenge existing stigmas about nuclear.

Key messages of the session:

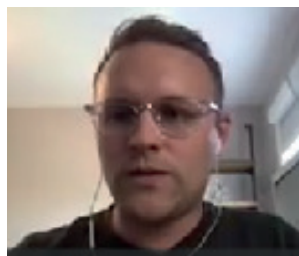
- Data collection across other areas of diversity, outside of gender, is lacking. A potential avenue to address this could be to work with trade unions to identify relevant data.
- We need to consider how we encourage inclusivity when there is little diversity within organisations and local communities.
- As an industry, we must challenge the misconception that improving diversity will have a negative impact on business. Are diverse and marginalised individuals aware of the opportunities that exist within the nuclear industry?
- We should help individuals in privileged positions understand their privilege and experiences to create a network of allies.
- We need to help diverse and marginalised individuals become more aware of the opportunities that exist within the nuclear industry.
- The location of an organisation or sector hub may also act as a barrier to attracting a diverse workforce. Some individuals may feel uncomfortable working in locations which are not ethnically diverse. We need to consider how we can address these concerns. Indigenous engagement on nuclear and clean energy is required to promote Indigenous participation in the nuclear industry. Partnerships, capacity building and education will be key to enable Indigenous Peoples to express interest in joining the nuclear workforce.



Marcia Ore
Equality, Diversity and
Inclusion Partner, UKAEA



Dipak Arya
Group Head of Diversity and
Inclusion, NDA



Mark McBride-Wright
Founder of Equal Engineers



Desiree Norwegian
Chair of the Indigenous Advisory
Board, Organization of Canadian
Nuclear Industries

“Our sector is around 15 years behind on some key inclusivity concepts.”
Dipak Arya, Nuclear Decommissioning Authority

“How do your blind spots and biases influence what you see when you look at me?”
Marcia Ore, UKAEA

Utilising the principles of clean growth to support diversification of our workforce

The final session of the workshop emphasised the importance of including nuclear in the clean energy discussion. This was presented as an opportunity for the UK and Canada to collaborate on rebranding nuclear as a socially responsible sector to work in. Social media will be a valuable tool to deliver this message to a younger audience. Arun Khuttan, COP26 Lead for the Nuclear Institute Young Generation Network (YGN) in the UK, highlighted the organisation's National School Speaking events. These events revealed that when

given the resources, students are able to make informed decisions and often understand the role that nuclear can play in achieving our climate change targets. Matthew Mairinger, North American Young Generation in Nuclear (NAYGN), noted key organisational changes aimed at enhancing diversity and inclusivity, including a recent ED&I audit and the formation of an ED&I committee board. Student, community and STEM outreach is a key initiative to improve how we communicate nuclear energy to young people.

Key messages of the session:

- It is important to speak to new audiences about the benefits of nuclear, and emphasise the narrative that nuclear is not separate from the clean energy discussion.
- Young people must be given the resources to make informed decisions about entering the sector.
- Partnerships and international collaboration are important to amplify messages around the benefits of nuclear and prevent duplication of efforts.



Arun Khuttan,
COP26 Lead for the Nuclear
Institute Young Generation
Network (YGN) in the UK



Matthew Mairinger
North American Young
Generation in Nuclear (NAYGN)

Summary and Closing Remarks

Following the final session of the workshop, Natural Resources Canada (NRCan) and the Department for Business, Energy and Industrial Strategy (BEIS) provided a summary of the event and identified a number of actions (Annex A) which were discussed with participants. The actions can be split into three levels at which Canada and the UK can partner to promote greater equality, diversity and inclusivity, these are:

- 1. Multilateral/International:** It is important to learn from the experiences of other countries/organisations and we should consider how can we encourage others to do more on ED&I. We should also be elevating the role of nuclear energy in the clean energy dialogue to help countries achieve their climate change objectives and communicating this to a non-nuclear audience at wider energy and climate change events. Communication strategies could be coordinated to broadcast a wider network to share experiences and create an open dialogue on best practices.
- 2. Social Acceptance/Domestic:** We need to consider how the UK and Canada can build upon the discussions at the workshop to improve ED&I in both our countries. We have data collection in both countries that could be more inclusive by looking at different aspects of diversity. We should take the opportunity to pool resources and challenge our existing data.
- 3. Individual/Community:** We need to be doing more to attract a diverse workforce and target marginalised groups that may be unaware of opportunities in the nuclear sector. Secondment and job shadowing opportunities have had some success. However, there is more work to be done to tailor those opportunities to marginalised groups who are underrepresented in the nuclear sector, including women, racial and ethnic minorities, persons with disabilities and LGBTQ2I+.

A large focus during the final discussion was the need to expand diversity beyond gender, with an intent to be inclusive and not exclusive. Without data and metrics beyond representation of women, an area where both Canada and the UK must focus on, we cannot understand the current situation and how to address the lack of diversity and inclusivity in the nuclear sector.

The next step will involve identifying country leads and timelines for each recommended action, including prioritising action items to be undertaken. Annex A (see below) provides a preliminary list of outcomes and recommended actions from the workshop.

Annex A. Workshop Outcomes and Recommended Actions

Multilateral/International Level

How can we learn from other countries/organisations and how can we encourage others to do more on equality, diversity and inclusivity?

<p>Action 1: Socialising the need for greater ED&I</p>	<p>Establish ED&I workshops with wider international audiences with the intent to learn about other experiences and programmes that have been successful in other countries. This would also serve to socialise the lack of representation in the workforce and the need for targeted action.</p>
<p>Action 2: Promoting diversity of thought and perspective at international events</p>	<p>Both Canada and the UK should promote greater diversity at international events. This could be aided by the development of a directory/inventory of diverse speakers.</p>
<p>Action 3: Looking beyond gender</p>	<p>Canada and the UK must work to leverage existing international commitments and expand those initiatives to include greater diversity and inclusivity beyond gender. (Equal by 30, Clean Energy, Education and Empowerment Initiative, etc.)</p>
<p>Action 4: Encouraging international collaboration on ED&I</p>	<p>Facilitate more ED&I workshops to aid countries struggling with the development of ED&I programmes and policies through best practice sharing.</p>

Social Acceptance/Domestic

How can we use the discussions at the workshop to improve ED&I across the different aspects of diversity within the UK and Canada?

How do we communicate the role of nuclear as a low carbon energy source to bring more diversity to the sector?

<p>Action 5: ED&I Inventory and Case Studies</p>	<p>Establish an inventory of different programmes in place in both countries. This could be used to form partnerships and create case studies which can be shared at ED&I events.</p>
<p>Action 6: Data Collection</p>	<p>Data collection must be improved outside of gender, to identify barriers and challenges facing other marginalised groups, in order to create initiatives aimed at enhancing representation in the nuclear industry beyond gender parity.</p>
<p>Action 7: Follow-up Workshops</p>	<p>Facilitate follow-up workshops on particular themes such as data collection methods, ensuring cultural competence, education and talent acquisition, etc. Examples include:</p> <ul style="list-style-type: none"> • Equal by 30 round table/workshop; • Nuclear Sector Gender Roadmap seminar; • Data-focused seminar.
<p>Action 8: Nuclear & Climate Change</p>	<p>Domestic and international collaboration to frame the nuclear sector as a socially responsible sector to work in as this can be a driver for some people, particularly women.</p>

Individual/Community

How can we attract a diverse workforce and target marginalised groups that may be unaware of the opportunities that exist within the nuclear sector?

<p>Action 9: Secondment & Job-Shadowing</p>	<p>Creation of more job-shadowing and secondment opportunities for marginalised groups in order to provide them with opportunities to experience and learn about a rewarding career in the nuclear sector.</p>
<p>Action 10: Cross-sector ED&I engagement</p>	<p>The nuclear industry should collaborate with other STEM industries on talent acquisition, training and development programmes and ED&I best practices.</p>