




Comments on Draft Report on Application of

UNFC and UNRMS:

The Role of Nuclear Energy in Sustainable Development - Entry Pathways

9th December 2020



Draft Report by UNECE Expert Group on Resource Management Working Group on the Application of the UNFC to Nuclear Fuel Resources, reviewed by IAEA, OECD-NEA and WNA (the Draft Report).

Bright New World is a not-for-profit environmental NGO based in South Australia. We believe that human prosperity and environmental conservation can work together rather than in conflict. Our core ethos is: Stable Climate, Rich Nature, Prosperous Humanity. Access to clean, affordable and sustainable energy is vital to meet these key tenets.

Bright New World welcomes the Draft Report and is grateful for the opportunity to provide comment on the public record. We agree that despite regular celebration around certain non-fossil electricity technologies, overall climate action is quantifiably not advancing at the speed or scale required. As the Draft states,

An essential understanding of the technologies that can lead towards a green recovery is needed.

“Green” has rhetorical associations that to many stakeholders do not extend to nuclear energy. Yet as consensus on the term has recently put it, a Green economy is “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive.”[1]

The Draft makes the convincing case, with high quality evidence, that the utilisation of nuclear technologies benefits humans, communities and societies while dramatically offsetting the impacts of traditional resource exploitation and energy production. Nuclear energy is as low carbon as new renewable sources, relatively materials un-intensive due both to the supreme energy density of the fuel and the longevity of the generating assets, and, as with any modern technology, is demonstrably socially inclusive when pursued in the right way.[2] The Sustainable Development Goals are comprehensively addressed with respect to the full spectrum of applied nuclear science.

Bright New World operates in Australia, well-known as the country with the largest known uranium reserves. We have noted the appropriate supporting detail describing the development of this mineral for nuclear fuel. South Australia features several dedicated uranium mines of the In-Situ Recovery type, benefiting from minimal surface disturbance while sharing the project benefits to the local community and indigenous groups.[3] The highly publicised South Australia Nuclear Fuel Cycle Royal Commission catalysed a dramatic increase in interest and knowledge around matters of nuclear technology, and explicitly concluded in its final report that the option of nuclear energy should at the very least be kept open in the face of a future of steepening emissions reductions. Since that process concluded, innovation in the international nuclear energy sector has surged, while three subsequent governmental



inquiries around Australia have not concluded otherwise. Bright New World continues to call for the removal of prohibitions on nuclear energy in Australia on the same fundamental bases elucidated in the Draft Report.

Other sections with which Bright New World is pleased to express agreement are:

- The anticipated timescale from policy decision to production of nuclear electricity is at least ten years, and involves significant planning and commitment. Unlike a number of African nations and others now considering engaging with the civilian nuclear sector to meet future energy demands, Australia is **not** a newcomer. Furthermore, adoption of nuclear energy primarily for the purpose of climate action (in contrast to rapid and successful historical efforts based on the goal of national energy independence, for example) may conceivably accelerate its methodical and efficient deployment.
- All low emission sources need to be on the table. Crucially, the full lifecycle emissions intensity ranges and values need to be considered, as well as their contributions to holistically evaluated system costs. Serious modelling exercises and related policy development needs to eschew simplistic metrics and inappropriate methodology.
- Public engagement and the earning of support is a prerequisite - this appears to be universal across the entire energy technology spectrum. The royal commission process revealed dramatic insights into the sort of careful and sustained effort that shows dramatic results in a relatively short timespan.[4] Best practice, voluntary community-led processes in the South Australian town of Kimba have empowered residents who are seeking to host the nation's low level waste facility, and are petitioning elected representatives to make it happen without further delay. Misinformation on radiation risk is, indeed, widespread, and needs to be countered within an effective strategy drawing on the most robust social science.
- The outsized role Australia can potentially play in our geopolitical region is multi-faceted. Along with leadership in security and operational best practice, Australia would benefit from, and can support, a drive to international harmonisation of regulation and licensing. This could be a component of our modern nuclear energy development process, benefiting neighbouring newcomer countries as well.

Bright New World congratulates the writers and reviewers on preparing a resource that summarises all of the relevant international organisations and requirements in one place for nations investigating the benefits of including nuclear energy to meet their needs sustainably and with virtually no climate impact. It is clear that interest in modern nuclear energy options and expansion of nuclear science methods has entered a new and accelerating era.

Bright New World commends the United Nations Economic Commission for Europe Expert Group on Resource Management Working Group for exploring the possible role for nuclear energy in the portfolio



of options supporting sustainable development, through such a diligently prepared and expertly reviewed Draft document.

- [1] <https://sustainabledevelopment.un.org/index.php?menu=1446>
- [2] for example, <https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/nuclear-energy-uranium/canadas-small-modular-reactor-action-plan/21183>
- [3] <http://nuclearrc.sa.gov.au//app/uploads/2016/03/SA-Chamber-of-Mines-and-Energy-03-08-2015.pdf> 1.12 Positive economic impacts
- [4] <http://assets.yoursay.sa.gov.au/production/2016/11/11/09/37/34/0c1d5954-9f04-4e50-9d95-ca3bfb7d1227/NFCRC%20CARA%20Community%20Views%20Report.pdf>