Annual Report 2024
Adaptive Phased Management (APM) Project
Environment Review Group (ERG)

26 June 2025



Photo 1: *The ERG: Suzanne Livingstone, Tammy Tremblay and Bill Ross on a visit to Ontario Power Generation's Nuclear Sustainability Services Western Waste Management Facility, July 2024.*

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1 Message from the Chair

Aanii, boozhoo! I would like to begin by acknowledging Mother Earth, and the lands and waters we rely on. Let's acknowledge the indigenous communities and their traditional territories involved in the final stages of the NWMO's site selection process; Wabigoon Lake First Nation and Saugeen Ojibway Nation (Chippewas of Nawash Unceded First Nation and Saugeen First Nation).

I am humbled to share that this was my third term as Chair of the Environmental Review Group. I could not ask for a better team. Thank you to my fellow ERG members, Bill and Suze for their ongoing support and brilliant work as we continue to advise the NWMO with the on-going biodiversity studies and impact assessment.

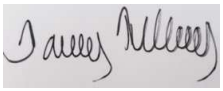
In April, I had the opportunity to represent the ERG at the spring meeting of the Council of Youth and Elders. It was wonderful to be able to reconnect with the group, learn from them and reintroduce the Environmental Review Group. We welcome any opportunity to participate in future meetings and workshops relating to this group, indigenous knowledge and reconciliation

The annual NWMO - ERG Workshop was held in the traditional territory of Saugeen Ojibway Nation in July. The highlight of this workshop was the tour of the Western Waste Management Facility, which is part of the Ontario Power Generation's Nuclear Sustainability Services and is located within the existing Bruce nuclear site. This was a unique opportunity to learn and see exactly how Canadian nuclear waste is currently managed and stored. Being there in person really put things into perspective about the role of a deep geological repository.

The year ended on a high note; Wabigoon Lake First Nation and the Township of Ignace, both expressed their willingness to move forward into the regulatory approvals process following a community-led process. The NWMO then selected Wabigoon Lake Ojibway Nation and the Township of Ignace as the location as the potential site for Canada's deep geological repository for used nuclear fuel. This is a significant achievement for the NWMO. Congratulations to all the communities, NWMO staff and all the contractors and consultants for all the hard work and efforts throughout the years to reach this goal. Now the real work begins for the NWMO.

Miigwetch

Tammy Tremblay (Chair of the ERG), MG KWE Consulting, Ontario, Canada



Bill Ross, Emeritus Professor of Environmental Design, University of Calgary, Calgary, Canada



Suzanne Livingstone, Senior Principal Consultant, The Biodiversity Consultancy, Cambridge, UK



2 About the ERG

The Environmental Review Group (ERG), established in late 2018, provides independent expert advice and guidance on environmental programs and impact assessment to the Nuclear Waste Management Organization (NWMO). The group contributes to the establishment of a transparent process to ensure environmental and biodiversity aspects of the Adaptive Phased Management Project (the safe, long-term management of used nuclear fuel with a deep geological repository) are in line with both national and international best practice.

We understand impact assessment is not solely a scientific and technical process, and believe it is essential for the NWMO to engage with both Indigenous and non-Indigenous communities who are affected by the proposed project (their livelihoods, their lifestyles, their rights and their desires for sustainability). For this reason, we not only provide technical input, but strategic advice on the importance of early, pro-active, and transparent engagement with communities, and on the development of effective, trusting and long-lasting relationships.

The NWMO can use a combination of western science and Indigenous knowledge to provide reliable information enabling them to continually improve the sustainability of the APM Project. The NWMO can use strong community relationships effectively to create mutually beneficial outcomes for both the NWMO and stakeholders and rights-holders.

The ERG is composed of three members, each with a different, but complementary expertise: impact assessment professional practice, biodiversity assessment and management, and the integration and balancing of Indigenous knowledge and western science. As appointed individuals, we are expected to use our professional judgement and serve in an independent capacity. We conduct our input based on four core principles:

- **Independence:** We will retain our independence from the NWMO to provide unbiased guidance. We act as individuals within our specialist fields but respond to the NMWO as one voice to offer multidisciplinary oversight.
- **Transparency:** We ensure opinions and advice given to the NWMO are transparent and justified, based on expert opinion, and backed by science/Indigenous knowledge.
- **Inclusivity:** We will ensure inclusion of Indigenous knowledge and the social aspects of the project when providing guidance on environmental issues.
- **Integrity:** We will approach all requests from the NWMO with an open mind and will carry out our work with diligence and integrity.

Our aim is to ensure that the information gathered through environmental programs and in preparation for the impact assessment will be of the highest quality. Only then, we believe, will the NWMO be able to use that information to improve the project and to prepare a truly effective and inclusive impact assessment. In short, our advice to the NWMO is intended to enable it to create a sound, sustainable and just APM project.

3 ERG activities

Important context for this report: Until late November 2024, there were two potential siting regions in the site selection process. In late November, the NWMO announced it had selected the WLON-Ignace site. The ERG work reported on in this annual report was completed before that announcement. Accordingly, ERG provided advice throughout 2024 on the basis that both sites remained in consideration.

3.1 Meetings and workshops

3.1.1 Virtual meeting with NWMO (7th March 2024)

Content: This meeting included an update from NWMO to the ERG on recent planning for Impact Assessment and site selection activities, and to discuss the ERG 2024 work plan. This included discussions on the NWMO's early planning for preparation of the Initial Project Description and licensing requirements of the CNSC and the impact assessment expectations of the Impact Assessment Agency post site selection. Also under discussion was how Indigenous Knowledge would be aligned with the IA, and what an "Indigenous led assessment" might look like. The topic of cumulative impact assessment was discussed, and Bill Ross shared a paper on future baselines and cumulative effects with suggestions for the NWMO. Discussions also involved a possible MOU involving the Canadian Nuclear Safety Commission (CNSC), the Impact Assessment Agency of Canada (IAAC) and the NWMO.

ERG comments/advice: The ERG is looking forward to seeing the progress towards site selection with the decision planned towards the end of the year. Also, to supporting the NWMO on developing the more detailed plans for the site description and towards impact assessment. The ERG strongly encouraged continuing discussions with the CNSC and with IAAC as the relations with those two organisations will be of great importance during the IA process.

3.1.2 Council of Elders and Youth – Spring Meeting – April 22-24, 2024

Content: The Chair of the ERG attended the meeting to reintroduce our group and share what we do and how we advise the NWMO. The NWMO provided an indigenous engagement update with the communities in the siting areas. We heard about indigenous led impact assessment and the potential decision-making processes. This meeting was the first time that Council of Youth and Elders extended the invitation to the broader SON membership. It was nice to have new voices at the gathering.

ERG comments/advice: The ERG posed a question at the end of the presentation. "What, from an Indigenous perspective, are the most important matters to learn about in doing an impact assessment for the Adaptive Phased Management project?" The Council shared that they would reflect on the question over the course of the gathering and future events.

3.1.3. Lessons learnt from Dublin IAIA meeting (virtual meeting) (29 May 2024)

Video Conference with the NWMO

Content: Some presentations from the annual conference of the International Association for Impact Assessment had a bearing on the work of the ERG and, possibly, on pre planning work underway in preparation for the impact assessment for the APM Project. These involved:

1. Biodiversity risk screening. The key message is the importance of finding out about project-related interactions early in the process and acting, in a timely manner, on risks (following the mitigation hierarchy) and opportunities.
2. Regional assessments (such as the Ring of Fire assessment currently under way in Northern Ontario) could also be somewhat useful as a source of information.
3. Indigenous leadership in impact assessment was prominently mentioned, including processes that have been applied for projects proposed within Treaty 3 territory. The potential WLON-Ignace site is located within Treaty 3.
4. "Nature Positive" is an emerging theme in biodiversity impact assessment, both in terms of on-the-ground effort and at a corporate policy level.

3.1.4. ERG Annual Workshop, Bruce County, ON (July 2024)

Content: This annual ERG visit with the NWMO took place in SON traditional territory and included meetings at the Teeswater NWMO office, at our place of accommodation (Post and Beam), a tour of Ontario Power Generation's Western Waste Management Facility located at the Bruce Nuclear Generating Station, and a field excursion to Inverhuron Provincial Park to observe local biodiversity. The annual workshop was the most substantial ERG activity of 2024.

3.1.4a. NWMO Office in Teeswater (23rd July 2024)

Content: We were briefed on recent activities and plans by the NWMO dealing with risk-based screening of potential effects of the APM Project and the application of mitigation or enhancement measures. We were advised that the goal of studying effects was: "to provide a sufficient level of detail to allow the Agency to issue genuinely tailored guidelines that focus the impact assessment on matters of consequence." The results of the study would be contained in the Initial Project Description to be submitted to the Impact Assessment Agency of Canada.



Photo 2: The ERG and key NWMO staff meeting at the Teeswater office.

ERG comments/advice: When describing the mitigation/enhancement measures that are inherent in the project, it will be important to document *why* it is expected they will achieve their intended outcomes specifically in relationship to the APM Project. The evidence these measures will perform should be carefully presented in the IPD and should apply both IK and western science perspectives in the description. Uncertainty must be explained in a transparent and straightforward way. This is especially true for mitigations/enhancements that are complex, recently developed or deployed in other contexts, or untested. In other words, the NWMO should not guild the lily on the assumed effectiveness of mitigation/enhancements. There are many known circumstances where mitigation has failed to control project impacts or promised benefits do not materialize. It was suggested that the IPD would need to describe an adaptive management plan that accounts for the mitigation/enhancements used to screen out potential effects from further consideration.

3.1.4b. Tour of Ontario Power Generation's Western Waste Management Facility (24th July 2024)

The ERG along with some NWMO staff visited the Western Waste Management Facility (WWMF), operated by Ontario Power Generation and located within the Bruce Nuclear site. This involved learning about the interim storage of spent fuel from the Bruce A and B generating stations, intermediate level nuclear waste, and low-level nuclear waste, as well as environmental monitoring programs at the site.



Photo 3 & 4: *The ERG and NWMO staff on a visit to Ontario Power Generation's Nuclear Sustainability Services Western Waste Management Facility, July 2024*. The photo on the right shows dry storage containers for used fuel.

ERG comments/advice: It was very useful and interesting to learn more about how intermediate and low-level waste as well as used fuel is currently managed at this facility.

3.1.4c. Discussion of credible temporal assessment boundaries (NWMO Teeswater office, 24th July 2024)

This discussion involved establishing temporal boundaries for a project like the APM Project, which will be very long lived (150+ years of activities plus isolation of the used fuel from the biosphere in perpetuity). A report provided by economic impact assessment consultants provided some advice, noting that a confident prediction of what would happen during that time is simply not available or credible. Discussions covered the use of scenario analysis for the purpose of identifying a credible range

of possible effects, the importance of using IK to inform the assessment (including the choice of scenarios).

ERG comments/advice:
We suggested that using scenarios (specific to the VC) would be wise and helpful to identify the range of possible effects. It would also be wise for the NWMO to establish the principles and processes the NWMO would follow to deal with environmental surprises. This is a very sound way to proceed. This approach would identify the state of the environment in the distant future (some decades from now – what the NWMO called "future baselines"); it would also be a helpful way of describing to affected communities how the NWMO would behave in the future. This could productively be combined with the use of scenario analysis to identify future development possibilities and hence result in a credible range of likely predictions. The ERG also noted that commitments for effective monitoring are needed so action could be implemented sufficiently quickly to address a measurement that triggers adaptive management of impacts.

3.1.4d. Update on environmental media and biodiversity programs (25th July 2024)

The NWMO provided an update on the Environmental Media and Biodiversity program studies being conducted at both sites.

ERG comments/advice: The ERG continues to emphasize the need for integration across social and environmental impact studies. The ERG also advised on the importance of ensuring the project design team (engineering) receives information about the biophysical environment derived from the on-going studies so that it can be adequately considered as the project description advances. The ERG reminded the NWMO to remember the need to address positive changes/enhancement opportunities and not only work to address adverse project effects through effective and timely collaboration between the impact assessment team(s) and the engineering design team.

3.1.4e. Pitcher's Thistle

While at Inverhuron Provincial Park, there was a discussion about possible project (indirect) effects on the Pitcher's Thistle. Pitcher's Thistle is listed as Endangered on Schedule 1 of the federal *Species at Risk Act* (*SARA*). In Ontario, this species is listed as Endangered on the Species at Risk in Ontario list under the *Endangered Species Act, 2007* (*ESA 2007*). In Canada, the Pitcher's Thistle is found only in Ontario where it is believed to be restricted to 30 sites; three on the Lake Huron shoreline south of the Bruce Peninsula, two on the Lake Superior shoreline and the remainder in the Manitoulin region[1].

If the SON-South Bruce site were to be selected for the APM Project, there is a potential for a project-related increase in visitors to Inverhuron Provincial Park, who could damage the dune habitats to which this plant is restricted. We discussed the circumstances under which it would be necessary for the biodiversity impact studies to be expanded to include this species-at-risk and attributes of a suitable location of an offset (if needed).

[1] https://www.ontario.ca/page/pitchers-thistle




Photo 5: *Pitcher's Thistle (Source: Pitcher's Thistle | ontario.ca)*
Photo 6: *ERG visit to Lake Inverhuron Provincial Park, July 2024*

ERG comments/advice: The ERG advised that excellent information sharing between the social studies and the biodiversity studies will be necessary to determine what, if any, non-negligible project-related indirect impact could occur to Pitcher's thistle within the park. If studies find that an indirect impact would be likely, then it is recommended that the NWMO seeks measures to mitigate/restore/offset the impact in partnership with the provincial and/or federal specialists responsible for managing Pitcher's thistle populations in Ontario and the SON Environment Office. The location of potential offset sites for the plant, should they be needed, was also discussed. It was recommended that the offset and conservation efforts should be located at a different known site for the plant, away from sites likely to be impacted by project-related increase in visitors.

3.1.4 f. Relationship between future baseline conditions and cumulative effects assessment
There was a very lively discussion on the process for establishing a "baseline" reflective of the APM Project timeline. This session of the workshop was based on ideas developed by the NWMO to make predictions of effects over many decades as credible as possible and would update the "baseline" for predicted effects several times, in effect conducting a cumulative effects assessment. As this is generally at odds with standard impact assessment practice, (None of the members of the ERG were aware of a single project impact assessment, in Canada or abroad, that applied the process proposed by the NWMO. Further, it was postulated that the Impact Assessment Agency of Canada might not be receptive to such a deviation from their guidance.), a consensus on how best to do the impact predictions was not reached. However, further deliberations after the meeting led to some common understanding involving the importance of understanding how systems influencing VCs work.

ERG comments/advice:
Regarding assessing cumulative effects on a VC for the Deep Geological Repository project, we advise (inter alia) the following:

1. First, follow any direction provided by the Agency in the Tailored Impact Statement Guidelines. As this is required under the Act, it virtually goes without saying.
2. Deal with any past or present projects for which there is a continuing effect on that VC. Again, this is a requirement. We understand that forest harvesting (past and present project) could affect several VCs and historical release of mercury from a pulp and paper mill (still found in the

sediment of affected water bodies) could affect water quality. These would be relevant only for the WLON-Ignace site, which we used because the baseline study there was more advanced at the time.

Because predicting the likely foreseeable future projects over such a long time is simply not credible even if some understanding of the state of the VC is important input for decision makers, there should be some suggestion about the range of possible effects and the conditions that may lead to which effects within that range. The best way of dealing with this is to use scenario analysis – to select a diverse set of scenarios that will likely provide bounds for the effects on the VC. Then, at least, a range of likely effects can be provided. In addition, the ERG suggests that the NWMO should provide, to both the regulators for the project and to the rights holders and stakeholders, commitments to deal with (or, at least to help deal with) the effects should the cumulative effects later be determined to be beyond an acceptable range (an environmental surprise). The ERG believes that there are several ways of dealing with such environmental surprises.

3.1.6. ERG only meetings (virtual)

The ERG holds virtual meetings throughout the year (of approximately 1 hour duration) to check in with each other, to discuss issues and new information provide by the NWMO, to prepare reviews and reports and plan visits. The details of these meetings are not shared, but a record of when these meetings took place with high level description of content are presented below:

- ERG Meeting – 14th Feb 2024 (ERG check in, preparation of 2023 annual report)
- ERG Meeting – 8th May 2024 (ERG check in, discussion of recent correspondence with NWMO, preparation for July field visit)
- ERG Meeting – 25th July, part of annual visit with NWMO (ERG check in, discussion on information shared during the site visit in South Bruce).
- ERG Meeting – 21st November 2024 (ERG check in, finalisation of document review, preparations of 2024 annual report).

3.2 Review of documents

3.2.1. Review of the Environmental Baseline Program Design (for the Wabigoon Lake Ojibway Nation and Ignace area) (November 2024)

Content: The ERG reviewed the document: *Environmental Baseline Program Design (for the Wabigoon Lake Ojibway Nation and Ignace area) (October 2024).* The ERG review indicated that overall, the report prepared by Canada North Environmental Services (CanNorth) in association with Zoetica Environmental Consulting Services (Zoetica), Geosyntec, and Independent Environmental Consulting Services, was technically sound and comprehensive, but areas for improvement and where additional study and collaboration are needed were noted. Key findings were that there was no mention of the concern that draining (dewatering) aquifers during the construction of the deep geologic repository could alter water flows and hence affect biodiversity in downstream waterbodies; there was inadequate attention to positive effects of the APM Project, a requirement of the Impact Assessment Act; and there appeared to be inadequate information flow from the environmental baseline design consultants to other impact assessment consultants contracted by the NWMO to carry out work on interrelated technical disciplines (and vice versa); for example, health studies and geoscientific studies. Fish use for country foods or for traditional purposes was described as “beyond the scope” of the baseline studies and hence could not be communicated to the appropriate consultants but surely would be required in the impact

assessment. Another example involves likely requirements of the Agency through its Guidelines template that were not included but described as covered because data provided would "inform those metrics" (ERG could not determine how) or where an apparently important issue of resuspension issues in waterbodies is "beyond the mandate" of the baseline studies but would need to be covered in the IA.

ERG comments/advice: The most important matters identified throughout the report were a lack of information flow between and among those responsible for the work – the environmental baseline program design consultants, additional consultants who will undertake other aspects of the IA and the sections of the NWMO doing parts of the work (e.g., the Geosciences and Safety Assessment teams). Frequently, the report noted that important information was outside the scope of the studies being carried out under the umbrella of the environmental baseline program. We suggested that an effective communication plan could be very beneficial for the work needed. It should be noted that this task (review of the environmental baseline program) is not yet completed. Our comments have been submitted but the response from the NWMO and the consultants has not yet been provided. We are hopeful that subsequent discussions could resolve some of these concerns.

3.3 Challenges Encountered

Last year, we reported that the Supreme Court of Canada found some aspects of the Impact Assessment Act to be unconstitutional and that the Government of Canada had committed to make needed revisions to the Act. The changes have now been made and, while important, appear to have little consequence for the (soon to be proposed) Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project.

Previous attempts for a second meeting (the first was in 2019 before two current members of the ERG had been appointed) between the ERG and WLON have been postponed due to unforeseen circumstances. The ERG is hopeful that a meeting with WLON can take place in 2025, but only if it is in the best interest of WLON and if WLON requests such a meeting.

4 Key Advice and comments from the ERG

This section of the report states the consolidated advice from the ERG to the NWMO, considering the work carried out over 2024:

Shortly after the July workshop, we were advised that "the Impact Assessment Agency of Canada (IAAC), the Canadian Nuclear Safety Commission (CNSC), and the Nuclear Waste Management Organization (NWMO) have signed a protocol that will guide them throughout the integrated impact assessment process for the proposed deep geological repository project". In view of the requirement under the Impact Assessment Act that "The impact assessment conducted by a review panel … is the only assessment that the Canadian Nuclear Safety Commission may use for the purpose of issuing the licence referred to in the panel's terms of reference," this protocol is expected to enable the (future) impact assessment to proceed more smoothly and constructively. While the ERG has consistently been urging the NWMO to meet with the CNSC and the IAAC we cannot claim credit for this desirable outcome. The NWMO should be congratulated for this achievement.

The long lifetime for the APM Project (150+ years of activities plus isolation of the used fuel from the biosphere in perpetuity) would be a challenge for effective impact assessment, especially for identifying the future projects that should be considered in the (required) cumulative effects assessment. We offer the following advice to the NWMO regarding how to deal with that challenge. This advice was included

above for the ERG annual visit:

Regarding assessing cumulative effects on a VC for the DPR project, we advise (inter alia) the following:

1. First, follow any direction provided by the Agency in the Tailored Impact Statement Guidelines. As this is required under the Act, it virtually goes without saying.

2. Deal with any past or present projects for which there is a continuing effect on that VC. Again, this is a requirement.

3. Because predicting the likely foreseeable future projects over such a long time is simply not credible even if some understanding of the state of the VC is important input for decision makers, there should be some suggestion about the range of possible effects and the conditions that may lead to which effects within that range. The best way of dealing with this is to use scenario analysis – to select a diverse set of scenarios that will likely provide bounds for the effects on the VC. Then, at least, a range of likely effects can be provided.

4. In addition, the ERG suggests that the NWMO should provide, to both the regulators for the project and to the rights holders and stakeholders, commitments to deal with (or, at least to help deal with) the effects should the cumulative effects later be determined to be beyond an acceptable range (an environmental surprise). The ERG believes that there are several ways of dealing with such environmental surprises.

Over the last few years, the ERG has repeatedly expressed concern with the need for better and more timely sharing of information among the several parties doing the impact assessment work (or preliminaries to the IA work). This year, we found the same problem with little sign of improvement. We advise the NWMO to implement better information sharing among the NWMO groups and the consultants hired to do the work we have been evaluating. This will be essential if the impact assessment required for the Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project is to be sound, with nothing falling through the gaps.

5 Potential activities for 2025

This section makes suggestions of potential ERG activities for 2025. These may be subject to change and are based on current knowledge and input from the NWMO.

- Virtual meeting in May. Topics to include: (a) NWMO major restructuring post site selection; (b) IA/licensing progress.
- Strategic review and input to the Initial Project Description being drafted.
- Review of dispositions of ERG comments on the updated environmental baseline program (from 2024).
- A visit with WLON (due to being unable to meet with them in recent years) but only if it is in the best interest of WLON and if WLON invites us.
- Seeing evidence of information exchange amongst the NWMO (Geosciences and safety assessment), and the biodiversity/environment and social teams preparing the IA documentation.
- Offer support on NWMO's process to establish spatial and temporal boundaries for Cumulative Effects Assessment (CEA).

- Continue to provide sound recommendations on the impact assessment process, including support on any updates to the Impact Assessment Act of Canada.

6 Appendix 1: Bios of current members of the ERG

Tammy Tremblay BSc (ERG Chair)

Tammy Tremblay (Monedo Giizhigo Kwe) is a member of Sagamok Anishnawbek First Nation and part of the Marten (waabzeshi) Clan (doodem). Tammy is a mother, grandmother and a trapper. Ms. Tremblay is the Founder and operator of MG Kwe Consulting, an independent consultant that provides expertise on building healthy relationships with Indigenous people and the land. Tammy brings over 10 years of experience within First Nations Environmental and Natural Resource Management in the Robinson Huron Treaty and Treaty 9 territories. Tammy has limitless experience with boots on the ground and strives towards balancing traditional knowledge and western science. Tammy is a strong believer in collaboration through all forms of communication that is needed to build healthy relationships amongst First Nations, supporting organizations, government, and industry. Tammy values the 3R Principle (Respect, Reciprocity, Responsibility) and believes this principle should be applied to all projects and initiatives.

Dr. Bill Ross

Dr. Bill Ross is an emeritus professor of Environmental Design at the University of Calgary. His scholarly expertise is the professional practice of impact assessment. He has been teaching impact assessment since 1973 and has served on eight Canadian environmental assessment panels from 1978 to 2015. Dr. Ross taught impact assessment training courses around the world, has many papers and professional publications, and has received awards including the Lifetime Achievement Award from the International Association for Impact Assessment. From 1997 to 2015, he served on the Independent Environmental Monitoring Agency, an independent watchdog for good environmental management at the Ekati Diamond Mine in Northern Canada. In 2019, Bill was appointed to the Technical Advisory Committee of the Impact Assessment Agency of Canada. In 2020, he was appointed to the Technical Advisory Committee of the Indigenous Centre for Cumulative Effects, serving in that capacity until 2023 and in 2022, he was appointed to the External Advisory Committee for the Tŝilhqot'in National Government to help with the development of an Indigenous led Impact Assessment Process; this advisory committee completed its work in 2023.

Dr Suzanne Livingstone

Suzanne has 25 years' experience in global biodiversity conservation and has been working in the field of biodiversity and business since 2011. She has extensive experience working internationally with large development projects (particularly mining and renewables) in both terrestrial and marine environments. Suzanne specialises in ecological and environmental impact assessment, specifically to understand and manage biodiversity risk. Her expertise includes navigating IFC PS6 and other international best practice standards. She has considerable practical experience in biodiversity risk profiling, critical habitat assessment, strategic baseline survey design and management, biodiversity action plans, offset design, strategy, feasibility assessment and implementation planning, as well as monitoring plans. She also has experience of working directly with lenders on E&S due diligence. Suzanne is skilled at technical delivery and project management of the biodiversity-related risks and opportunities of large infrastructure projects, providing strategic advice and guidance to clients. Prior to TBC, Suzanne worked for the IUCN Red List Unit and several international NGOs, including Conservation International and WWF. In these roles, she developed conservation programmes on the ground in the Caribbean and Africa, resolving conflicting demands of diverse stakeholder groups.