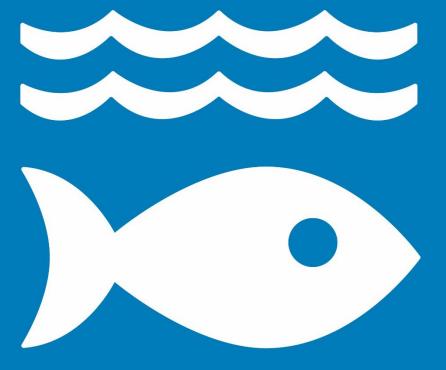
14 LIFE BELOW WATER



Moderation Team

Tom Gallini Ryan Mulligan Laura Swatridge **SDG 14:** Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

Event Description

On **June 21, 2021**, Queen's University hosted its first <u>17 Rooms</u> event, which brought together Queen's faculty, students, and staff to identify next steps for advancing the <u>UN Sustainable Development Goals (SDGs)</u> at the university.

Participants were divided into 17 virtual rooms, one per SDG, and asked to identify actions that Queen's University could take in the following 12 to 18 months to advance their specific goal.

Rooms participants were also asked to identify:

- The most important issues related to their SDG that Queen's should address,
- Connections and common themes amongst these issues,
- How their SDG connects with reconciliation/conciliation, decolonization, and Indigenization,
- How their SDG connects with other SDGs.

Each room had two hours to brainstorm ideas before presenting their recommended actions to all participants. Following the event, each room's moderation team authored a summary report.

Room Participants

Aleksandra Balyasnikova-Smith Kristen Lowitt

Simon Coppard Ryan Mulligan (Moderator)

Brian Cumming Athena Murray

Sandra Dusolt Sonia Nobrega

Dixia Fan David Rival

Tom Gallini (Staff Facilitator) Elisabeth Steel

Aimee Hopton Laura Swatridge (Student Facilitator)

Anne Johnson Yuren Xia

Section 1: Discussion of Issues Related to SDG 14

The SDG 14 group's discussion emphasized how multifaceted SDG 14 is, necessitating multi-, inter-, and trans- disciplinary thinking for Queen's to meet SDG targets. There are many issues impacting our waters, including pollution, climate change, and over-exploitation of fishing resources, all of which impact natural environments, coastal communities, and the sustainability of the fishing industry.

Meeting targets for SDG 14 will benefit from knowledge-sharing with, and will have impacts on and be impacted by, other SDGs including Goal 6 (Clean Water and Sanitation), Goal 13 (Climate Action), Goal 15 (Life on Land).

Contributing to the discussion were a range of individuals with a variety of perspectives and backgrounds including civil, mechanical, geological, and mining engineering, social science, law, and biology.

The key issues identified in our discussions include:

1. Addressing seafood-related sustainability and marine pollution at Queen's

The group identified that Queen's current sustainability policies need to be expanded, or complemented by a new policy, to ban all single-use plastics on campus beyond the list announced by the federal government in Fall 2020, many of which can find their way into water systems with devastating effect.

Additionally, the group identified the importance of sustainably sourced seafood at Queen's. While efforts are already in place at the university (e.g., in Dining Services) to <u>focus on sustainably sourced food</u>, participants suggested there is both a need for more awareness of these efforts and to build on existing practices to improve responsible sourcing.

2. Outreach and Education

Participants emphasized the importance of increasing awareness of actions already in place at Queen's to achieve SDG 14 targets and of enhancing communication with students and the broader community about key issues impacting our waters.

There is a need to promote stewardship in the community, encouraging students, staff, and faculty to take individual action by empowering them to inform the development of policy that will protect water resources.

Achieving this will require:

- Education and research on the drivers of ecosystem degradation of marine and fresh-water environments (e.g., climate change, invasive species, habitat change, over-exploitation, pollution).
- Student involvement and hands-on activities related to SDG 14 such as field trips, beach clean-ups, and biodiversity monitoring, along with field courses and/or experiential learning.
- Activities and programs promoting stewardship for students and the community.
- Opportunities for student research projects related to water issues.
- Public engagement opportunities involving the Kingston community and local high schools.
- Awareness of the Queen's University Biological Station, limited resources, and a lack of funding for more widespread engagement.
- Awareness of sustainability efforts at Queen's.

3. Interdisciplinary Issues

One of the main issues discussed was the lack of interdisciplinary research on water related topics. As SDG 14 relates to many fields, it is essential that work at Queen's in this area makes use of a variety of perspectives.

Participants concluded that Queen's has a very strong base in water research. However, more collaboration between different disciples is needed to effectively make progress towards sustainable use of the water resources.

The discussion determined there is a lack of:

- Educational opportunities with multiple perspectives, such as courses cotaught by representatives from different faculties.
- Interdisciplinary research on the topic of "Life Below Water" and limited support for interdisciplinary action, creating a barrier for sharing knowledge.
- Communication between students/faculty/staff/community groups, limiting their ability to build off preestablished ideas.

- Additionally, there is a lack of known coalitions to promote sharing between the different groups within Queen's and the community.
- Interdisciplinary field work opportunities.
- Entities (units of expertise) to encourage cross faculty participation.
- Opportunities to publish interdisciplinary research.

Section 2: Action Details

Room 14 brought together 16 individuals from across Queen's University to discuss approaches to addressing SDG 14. They identified three areas for action.

1. Address food-related sustainability and marine pollution at Queen's

Through coordinated policy changes and educational initiatives, Queen's should build greater awareness of the impact of human behaviour on rivers, lakes, and oceans, and in doing so effect positive behavioural change in its community members, with lasting impacts beyond the campus itself.

Participants discussed options for reducing the environmental impact of the Queen's community in ways that address SDG 14. Many suggestions related to improving existing policy or implementing new policy.

The following policy enhancements were proposed:

- **Banning of single use plastics on campus**, reducing the use of products that are made of virgin polymers, and reducing microplastics.
- **Promoting responsible sourcing of seafood**, by collaborating with local fisheries and Indigenous fisheries in the region, as well as by raising awareness of product labeling to allow for informed consumption.

These actions would require coordination between different groups on campus such as Facilities, Hospitality Services, and VPFA as well as the Sustainability Office, which should be expanded to ensure sufficient capacity for this work.

2. Improve Outreach and Education

Queen's should nurture students and community members as stewards of the environment and global citizens who value and champion sustainability.

The group's recommendations focus on the need to teach the community to be concerned about these issues and why they are important, as well as how to make responsible choices that support efforts at Queen's.

The following actions were proposed:

- Deliver experiential learning and digital workshops about the impact
 of human behaviour on our rivers, lakes, and oceans in a way that is
 accessible across the Kingston community. For example, a workshop
 about the effects of washing on clothing degradation and its impact on
 water systems, and practical tips for individuals to use. This could involve
 guest speakers from different faculties and community groups.
- **Promote stewardship**, on campus and when Queen's students travel abroad, to improve awareness of environmental issues globally.
- **Support student groups** that already do the work to achieve SDG 14 on campus by spreading awareness of these groups, connecting them to faculty members or research groups, and encouraging collaboration.
- **Develop an interdisciplinary course**, focusing on topics related to SDG 14, co-taught with the intention of bringing together a range of disciplines. Final projects could develop community outreach materials.
- Provide more education opportunities outside of the classroom for various groups including students, Kingston community members, elementary and high school students (for example field trips or workshops) that allow hands-on experience related to SDG 14 targets and foster an interest in the topic.
- Support science communication writing to share research results and topics in an accessible way to a widespread audience.

These initiatives would require additional resources, including new and ongoing community partnerships and collaborations (centered in but not limited to Kingston), including with Indigenous groups where relevant.

3. Incentivize and foster research by reducing barriers to interdisciplinary water research.

As SDG 14 is such a broad topic, with a large range of interconnected and overlapping ideas, participants felt that one of the main barriers to achieving progress was the lack of interdisciplinary research.

Within the Queen's community, there are a multitude of research interests and topics focused on water related issues, but there should be more platforms to allow collaborations between different disciplines to find the existing knowledge gaps.

By de-siloing research, Queen's would be able to leverage connections between fields such social science, engineering, and biology as well as community groups (ex. Indigenous communities, the BISC community) to design innovative and value-driven responses to challenges identified in SDG 14.

To achieve this, the discussion generated the following ideas:

- Create platforms to share interdisciplinary research, fostering collaboration between different research groups, as well as with Indigenous communities, to discuss water management.
- Implement more funding opportunities, such as a new funding mechanism for cross disciplinary SDG research and seed funding (small 5-10k grants) to support collaborations in initial stages.
- Encourage more guest lectures in classes from different departments.
- Better promote the <u>Beaty Water Research Centre</u>, and expand its mandate to bring it above the faculty level to help foster interdisciplinary collaboration and situate it as a cross-campus centre of expertise.

Queen's needs to create ongoing opportunities for interested community members to connect and develop proposals, accompanied by seed grant funding, and partnerships with Indigenous communities and municipalities (e.g., fisheries).

Section 3: Connections with Reconciliation/Conciliation, Decolonization, and Indigenization

Proposed actions align with key recommendations from <u>Yakwanastahente'ha</u> <u>Aankenjigemi Extending the Rafters</u> including:

- **Continue to develop** relationships with Indigenous communities.
- **Recognize and support** Indigenous scholarship and traditional knowledge.
- Raise awareness of Indigenous research at Queen's.
- **Recognize the unique challenges** of conducting research with and by Indigenous communities.
- Thoroughly integrate Indigenous knowledge into curricula across academic programs.

These projects present opportunities to decolonize our research and actions by highlighting the importance of a framework that values and embraces Indigenous knowledge and communities as full partners in the co-creation of research, process, policy, and activities.

Furthermore, we should work together in sharing in the acquisition, analysis, and dissemination of knowledge, with outputs that meet the needs of Indigenous communities.