9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Moderation Team
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SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

Event Description

On **June 21, 2021**, Queen's University hosted its first [17 Rooms](#) event, which brought together Queen's faculty, students, and staff to identify next steps for advancing the [UN Sustainable Development Goals (SDGs)](#) 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

Braulio Antonio	Janice Mady
Greg Bavington	James McLellan
Emily Červenka	Robert O'Connor (Facilitator)
Jessica Della-Latta	Alexandra Pedersen
Ali Etemad (Moderator)	Mina Rahmanian
Nancy Evans	Kristine Spekkens
Michael Green (Staff Facilitator)	Joshua Woods
Jean Hutchinson	Amy Wu
John Kabanda	Yuxi Zhang

Section 1: Discussion

Our group agreed that "enhancement of quality of life" should be the key metric to evaluate progress towards SDG 9.

To advance this SDG, there needs to be a **culture shift** at Queen's – everyone at the university should think about the impact of climate change on their infrastructure and reflect on how their projects and activities intersect with the SDG framework.

This culture shift raised the **issues of incentives** – how to we engage and incentivize the broader Queen's community to engage with the SDGs? The group agreed that SDGs need to be assigned value in our daily work. For example, research metrics currently value efficiency. Attaching funding to SDG relevance could act as an incentive.

The group stressed that **Indigenization must be a part of infrastructure initiatives** to make access equitable and incorporate the full diversity of knowledge at Queen's. There are opportunities to integrate Indigenous ways of thinking about resource maintenance and developing a circular economy, and Queen's should seek Indigenous stakeholders' input into how resources are used. Queen's should also live up to the principles in United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Queen's should **expand existing initiatives** that focus on the sustainability of materials, minerals, and plastics and foster a circular economy, creating opportunities to re-use materials whenever possible. The group identified some of **Queen's areas of strength** related to SDG 9, including (but not limited to):

- Renewables and recycling

- Low carbon infrastructure

- Digital transformation

- Health diagnostics

- Biomanufacturing

- Health-related technologies and AI

- Policy in resource development

- Sustainable finance

SDG 9 is closely related to other SDGs. For example, developing the supporting network for circular economy jobs pairs SDGs 8 and 9. There is significant overlap with SDGs 9, 11, and 12 when considering upcycling in industry and infrastructure.

Section 2: Proposed Actions

Room 9 brought together 18 individuals from across Queen's University to discuss approaches to addressing SDG 9. The group identified three areas for action.

1. Develop asset maps related to and foster collaboration on target indicators.

The university needs to identify the wide range of work being done on SDG 9. Non-restrictive definitions would help capture the full extent of the work, even though asset maps would consequently be large.

Queen's should foster collaborative spaces for regular conversations and develop funding opportunities that encourage trans-disciplinary, university-wide collaboration on the target indicators of this SDG.

2. Promote open access and open IP to mobilize knowledge, balanced with the need for commercialization.

Participants agreed that it is challenging for groups outside of Queen's to engage with knowledge and research produced at and with the university.

Queen's needs imaginative new solutions to sharing knowledge if it is to have impact but must also take a balanced approach to IP – investor perspectives and government conditions may impact some decision making.

3. Increase pan-university collaboration on the SDGs.

Queen's should provide ways for people to upcycle materials and participate in a circular economy on campus. Initiatives could include:

- **Create a pan-university workshop**, course, institute, or teaching initiative about a circular economy to engage campus partners. Use the digital teaching innovations developed during the pandemic.

- **Create a central website** for people to use materials.

- **Ensure sustainable finance concepts** are applied in the project.

- **Integrate Indigenous ways of thinking** and get Indigenous stakeholders input into how resources are utilized.

Section 3: Additional Recommendations

Additional recommendations discussed included:

- **Ask departments to reframe initiatives** to include a sustainability focus.

- **Integrate SDG indicators** into all pre-existing operations and programs.

- **Assess research infrastructure** and broadband access. Advancements are made when facilities are built to meet research needs.

- **Focus on personnel skills development** and enable talent with reliable funding, especially amongst those who experience barriers.