Metrics for sustainability governance

Call for participation in a multidisciplinary workshop

# Event details

This workshop will take place on 17 February, 13:00-16:00, Redpath Museum, room 106.

# Target audience

The target audience is researchers – faculty, post-doctoral fellows, and graduate students – who work with sustainability metrics and the problem-solving and decision-making contexts in which they are relevant. It is anticipated that 25-30 participants will attend.

# Objectives

* Bring together diverse researchers who conduct research on metrics such as goals, targets, and indicators, particularly those that are relevant to sustainability governance;
* Provide an opportunity for researchers to share insights across disciplines and perspectives;
* Brainstorm on ideas for one or more follow-up events to broaden and deepen the network of researchers and promote collaboration.
* Develop a network of researchers interested in sustainability metrics and provide an opportunity for networking and development of collaborative projects;

# Event description

As we seek to engage with our environments in more complex ways, the mass of information that must be processed – by individuals, firms, governments, and many other actors – to make decisions increases apace. Facing problems such as poverty and income inequality, biodiversity loss, and climate change requires the observation and analysis of dense, tangled networks of cause and effect. Increasingly, the frames available to us to understand and address problems obscure rather than reveal interactions and feedback loops that could help in the identification of novel problem-solving pathways and approaches. Addressing sustainability challenges involves heavy reliance on a range of expert knowledge systems in the sciences and social sciences. Yet these issues also have very important political and social implications, so it is important to keep fora for discussion, debate, and decision open to a wide range of actors and not just experts.

One response to these myriad challenges is to package data into formats that are readily taken up by political authorities and other actors that need to make decisions under conditions of complexity and uncertainty. Metrics such as indicators are well suited to this need. They can convey large amounts of information on complex phenomena in a simplified form that lends itself to ready comparison across time, space, and contexts. However, the process through which metrics are created is opaque to most of the actors that rely on them. Lack of understanding of how metrics are constituted can lead to a variety of problems: use of metrics in contexts to which they are ill-suited; excessive reliance on metrics to the detriment of other sources of information and other problem-solving approaches; and simplistic assumptions about the nature of the relationships between metrics and the phenomena which they represent. These and other weaknesses and limitations are increasingly being explored by scholars in the social sciences and humanities.

Critics of metrics point to a tendency on the part of decision-makers to treat multi-dimensional problems as essentially technical, sidelining important political, social, and cultural dimensions that are not readily incorporated into metrics; privileging certain forms of knowledge over others, to the detriment of non-expert forms of knowledge, as well as the expertise of Aboriginal nations whose relevance may not be recognized; and flattening and homogenizing problem contexts to facilitate ranking and other forms of comparison. Of particular concern to many observers is the facility with which metrics can be used to create commodities such as carbon credits, raising concerns that complex ecosystems such as forests can be reduced to monetary units. To other observers, this is a strength of metrics, permitting the alteration of incentive structures and steering behaviour in more sustainable directions.

Scientists and other experts implicated in the development and application of metrics benefit from hearing these critiques. In some cases, scientists may be in a position to allay concerns by better explaining the processes they engage in to develop and apply metrics, or presenting more clearly the ends to which their metrics can usefully be put and the limitations of their applications. On other occasions, critiques may not be so easily addressed, and those involved in making and applying metrics may decide to rethink their processes, the metrics which they produce, and the ways in which they are deployed. Critics of metrics stand to benefit by better understanding the means through which metrics are developed and deployed, and learning more about their authors’ own reservations about them and the means to which they are put, as well as the processes and standards already in existence or under development to improve the robustness of metrics.

This workshop aims to bring together a range of expertise and perspectives on metrics and their use in sustainability governance, and problem-solving more generally. Participants will discuss what makes a good metric, from a number of different perspectives, in order to shed light on the strengths, weaknesses, contributions, and dangers posed by metrics. Among the issues to be raised are the following:

* Evaluation of metrics: inputs, process of construction, and application
* Standards and criteria for creating and applying metrics
* What is left behind: incorporating the unquantifiable
* Forms of knowledge: incorporating non-expert knowledge
* Forms of knowledge: Traditional Ecological Knowledge
* Means for making metrics and their applications more transparent
* Acknowledging and addressing uncertainty

# Registration

If you are interested in attending, please send an e-mail to [mssi@mcgill.ca](mailto:mssi@mcgill.ca) and provide your name, status, and unit.