



UNIVERSITY OF CALGARY
FACULTY OF ARTS
Calgary Institute for the Humanities



International Conference

Energy and Scale: Trans-scalar and multi-scalar interactions in energy transitions

Date: Wednesday, 18-21 September, 2019

Location: Calgary and the Banff Centre, Banff, Canada

Convened by: Energy *In* Society, Calgary Institute for the Humanities (CIH), University of Calgary, Calgary, Canada and the Max Planck Institute for the History of Science (MPIWG), Berlin, Germany

Call for Abstracts:

Abstract submission deadline: 15th January 2019

Length: 300-500 words

Please email to eis@ucalgary.ca

Conference Details:

On Christmas Eve 1968, U.S. astronaut William Anders took a photograph of the Earth from Apollo 8, the first manned spaceflight mission to leave the Earth's orbit and circle the Moon. His famous shot, known as "Earthrise," was the first color photograph of the Earth from space. Arguably, this extraplanetary view, transcending terrestrial perspectives, conveyed a sense of a closed but fragile planet moving in cosmic time. Over a century earlier, after the John Bull steam locomotive was first imported to North America, the Camden and Amboy Rail Road company suggested the train possessed a "power which has almost annihilated time and space." But with the deployment of railways, time and space were not so much destroyed as pluralized. In 1840, German physician Julius Robert Mayer undertook a voyage to the Dutch East Indies. Observing the blood of the ship's sickly crew, he discerned a relation between blood's colour, its oxygenation, and human metabolism, leading him to discern a unifying and indestructible force connecting man and nature: energy. Energy therefore both occupies and unifies distinct domains and has a transformative capacity and ability to bring about trans-scalar interactions.

Moreover, the human use and understanding of energy has transformed conceptions of scale. By the time of the Apollo mission, the mobilization of energy and matter had entered into what has become known in recent years as the "Great Acceleration," an unprecedented rise in the anthropogenic mobilization of energy and matter. As a result of this increased rate of environmental throughput, it has been argued that we have entered a new geological epoch shaped by human action, the Anthropocene. Scale is central to this idea, in so far as myriad individual actions at a local level have resulted in alterations to environmental dynamics at a planetary scale. If energy transitions are understood as social transitions and transformations of socio-technical systems, then views and narratives of what constitutes those systems are important in understanding how we address energy transitions at various temporal and spatial scales.

Energy transition studies has become a thriving field of research in the natural and human sciences. However, bridging different scientific traditions and sharing insights across disciplines has been challenging. Using the concept of scale may be one way of bringing together innovative research in the natural, engineering, and social sciences and the humanities. Scale can simply refer to the object of study or specific chronological and spatial arrangements that range from the microlevel to the planetary. Histories and geographies of energy transitions already include conceptions of timescale and place addressing multiple scales of economic and social activities. But scales are in themselves constructed and can be imagined or are the outcome of practices of scaling. Many scholars point out how our economic system requires the construction of scale in order to support global production, trade and consumption, which are often understood separately. Scales can also be political, in that they can (de)legitimize and (dis)empower different experiences (individual, group, nation, global) and settings (local, regional, planetary). In the natural sciences, scale is critical to modelling future energy transitions; scaling up or scaling down is an integral part of engineering practices, and of testing and operationalizing new energy technologies.

This two-day academic conference seeks to encourage dynamic interdisciplinary discussion in relation to scale and scalability in energy transitions. We ask participants to reflect on the meanings of scale, and are particularly interested in contributions that openly address the productive convergence of different approaches, different ends of the scale, as well as different dimensions of problems.

Broadly, we pose the following questions:

- How can concepts of scale facilitate cross-, multi- or interdisciplinary policy-relevant research on energy transitions?
- What are the different ways that scale can be understood and inform research on energy transitions?

Areas of interest include, but are not limited to:

- Energy and the Anthropocene
- Planetary energy histories
- Planetary energy futures
- Scalar relations
- Upstream and Downstream
- Technologies of scale
- Power and scale / politics of scale / scales of politics
- The everyday of the planetary
- Spatial reconfigurations and contexts, geographies of scale
- Micro /meso / macro levels of energy transitions, and scalar interactions, multiscalarity
- How are energy scales produced?

We invite proposals from all fields that examine energy transitions. Abstracts for 20-minute presentations should be about 300-500 words and accompanied by an extended bio (300 words). Accepted authors will be asked to pre-circulate extended abstracts (800-1000 words) with the aim of publishing contributions in an edited volume or special journal issue. Confirmation of successful abstract submissions will be sent out in February.

The conference starts with an evening event in Calgary (18th September) and continues (19th – 21st September) at the [Banff Centre](#), which is nestled in the Canadian Rocky Mountains. Transport from Calgary to Banff will be provided. We are applying for funding to cover conference fees and meals, but will not be able to pay for accommodation and flights. We have organized reduced rates for accommodation at the Banff Centre. A limited number of rooms will be available for an extra night at the reduced rate after the conference.

Website: www.energyinsociety.com