

**On the Energy Humanities:
Contributions from the Humanities, Social Sciences, and Arts to Understanding
Energy Transition and Energy Impasse**

SSHRC Imagining Canada's Future initiative
Knowledge Synthesis Grants: Energy and Natural Resources

FINAL REPORT

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ON THE ENERGY HUMANITIES

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ON THE ENERGY HUMANITIES

A. KEY MESSAGES

1. A genuine and comprehensive shift in energy usage today requires more than just the adoption of renewable, ecologically sustainable energy sources. Energy transition from fossil fuels to other, cleaner forms of energy also necessitates a wholesale transformation in contemporary petroculture: the political structures, built environments, social dynamics, gendered realities, educational systems, discursive modes, and everyday values, practices, habits, feelings, and beliefs that have developed in relation to and as a result of the shaping force of fossil fuels. The most illuminating and incisive scholarship on energy transition and energy impasse—those social forms and forces that inhibit energy transition—aims to more fully understand and analyze energy as a comprehensive social and cultural relation. The developing field of the “energy humanities” increasingly plays a key role in understanding how energy shapes modern social practices, and so identifies the social and cultural changes necessary for viable energy transition.
2. Three crucial considerations regarding energy impasse and transition involve the role of **Indigenous communities**, the use of **social media**, and the place of **research-creation**. Research in this synthesis project shows that significant gaps exist regarding these topics within current scholarly literatures on the energy question—gaps that will need to be addressed through further primary research.
3. Indigenous communities are among the most deeply affected by the failure to transition to new forms of energy, and they have been among the most powerful advocates for this change. Indigenous philosophies of energy may provide a strong basis for guiding the process of energy transition on a large scale, but much research remains to be done in order to ensure that such guiding work would be accurate, ethical, and respectful of Indigenous communities. The humanities provide several methodologies useful for this work of “Indigenizing energy”.
4. Though social media is widely used to further arguments for and against energy transition, the function and outcome of social media in public debates about energy futures has not yet been adequately analyzed. Corporate interests and other groups aiming to inhibit transition for as long as possible tend to use social media to “narrowcast” their position that technological solutions can enable the continuation of the status quo with respect to fossil fuel usage. On the other side of the spectrum, activist groups seeking to propel transition have employed social media to emphasize the need for socio-political changes to enable viable energy futures.
5. Research-creation fruitfully combines academic and artistic investigations to create a discursive site framed topically rather than along disciplinary lines, thus enabling new ways of approaching the problems of social mobilization with regard to energy transition. Despite the usefulness of this emerging approach for fostering humanities discourse about energy transition, very little material of this sort currently exists. Creating and expanding the category of “energy research-creation” would be one significant step in instigating wide-ranging public discourse on the cultural challenges of energy impasse.

B. EXECUTIVE SUMMARY

What social, cultural and political changes are necessary to facilitate a full-scale transition from fossil fuels to new forms of energy? Making the shift from today's energy systems to new ones will require not only technological developments and public policy innovations, but also significant transformations in the core principles and practices that govern our everyday lives. A founding premise of this SSHRC Knowledge Synthesis Project (KSP), "On the Energy Humanities" (OEH), is that the dominant form of energy in any given era shapes the characteristics and capacities of societies in an *essential* way; energy is a key aspect of the fabric of our social experience, and not just a neutral input that helps run the engines of our economies and societies. Since the advent of the fossil fuel era, societies have shaped and developed their practices, beliefs, expectations and desires around the capacities and capabilities engendered by cheap, energy-rich fossil fuels. Transitioning away from fossil fuels will necessitate a more thorough understanding of the social forces they have unleashed, and an understanding, too, of shifts in social practices that will be important for real and sustainable energy transition.

In addition to providing a fuller picture of the socio-cultural dimensions of *energy transition*, a second aim of this KSP is to understand the many types of *energy impasse* that have impeded and continue to impede energy transition. Here again, our focus is on the socio-cultural aspects of impasse—those habits and practices of being, believing and belonging—that stand in the way of the energy transition we will need to undertake this century as we move to a post-fossil fuel world. For example, physical mobility has become a value connected with both individual and social freedom and autonomy. Citizens of developed countries have come to expect to be able to drive to work and to fly to distant places for vacations or to visit family; citizens of developing countries have come to connect the process of development to (among other things) the expansion of capacity and opportunity for personal mobility. Mobility is prized. Insofar as mobility is deeply connected to fossil fuel use, it is a value that might well impede energy transition. For despite hopes and expectations that technology will allow expanded levels of mobility for an ever-greater proportion of the planet's population *without* the use of fossil fuels (for instance, via electric cars), it is more likely the case that energy transition will require changes to *how* we are able to move about in space, and *how much we want and expect* do so.

The developing field of the "energy humanities" (Boyer and Szeman; Szeman and Boyer) has begun to map the complexities of energy transition and energy impasse. Given that this field is a new one dealing with a large topic that extends across the disciplines, our KSP has:

- (1) engaged in a survey and synthesis of current research in the humanities, social sciences, and arts on the socio-cultural and socio-political dimensions of energy impasse and energy transition; and
- (2) focused on three existing gaps in research, providing a narrative description of the importance of these areas of research, an overview of existing research, and an account of the need for new research in the identified fields.

The three gaps identified by this synthesis project are:

- (a) research on **Indigenous communities**, energy impasse and energy transition;

- (b) specific attention to the role played by **social media** in propelling or inhibiting energy change; and
- (c) contributions made by projects of **research-creation** to the investigation and communication of energy impasse and transition.

(a) Indigenous Communities and Energy Impasse/Energy Transition

Indigenous people have enacted many forms of resistance against modern energy practices, but in addition to this role of objection and critique, Indigenous communities also continue to employ alternative philosophies of energy use that could be crucial models for guiding the process of energy transition on a broad scale. In such a project of “Indigenizing energy,” one significant challenge is finding ways to engage with Indigenous communities and knowledge keepers respectfully so as to maintain community control of Indigenous knowledge and avoid the histories of appropriation and distortion that have plagued past research into Indigenous cultures. While there is already a large body of work by Indigenous creators that is imbued with traditional teachings about the relationship of humans to the environment—in the form of oral stories, literature, nonfiction and film, among other genres—there is a need for much more study of this work in order to better understand the practical and philosophical implications of Indigenous energy cultures. The humanities can play a significant role in this work, by providing the tools for nuanced and culturally sensitive understandings of Indigenous teachings, and by enabling critical self-reflection upon the process of energy transition itself.

(b) Energy Transition and Social Media

The specific role of social media in propelling or inhibiting energy transition remains unclear due to the absence of research about the effects of social media on the public’s perception of energy transition. However, it is evident that groups on both sides of the debate surrounding energy transition are using social media extensively in the attempt to sway public opinion. Despite the gap in research on social media and energy transition, existing studies on the potential of social media to foster change are useful. The concepts of “politics of awareness,” which replace the politics of participation, and “slacktivism”/“clicktivism” are particularly helpful because they point out that social media can limit any real action being taken on either side of an issue. Whether social media is creating any palpable change or not, proponents *for* and *against* energy transition seem to be divided along the lines of sociological and technological frameworks. Activist groups who seek to propel transition often advocate a broader socio-political understanding of what energy is and does. However, industry and interest groups who seek to inhibit this transition, but still acknowledge that some form of transition is necessary, repeatedly argue for a technological solution that will allow the continuation of current energy industry practices and whatever economic benefits these allow. This is a *strategic* misreading or misunderstanding of what energy is for and what it does on a socio-cultural level. Despite the strategies employed by those seeking to inhibit transition, the sociality of social media appears to favour the framing of the discourse of energy transition within a socio-political context.

(c) Research-Creation and Energy Transition

The hybrid category of research-creation engages the issues of energy transition and impasse through the integration of intellectual and artistic practices. Although SSHRC and other agencies have a vested interest in research-creation projects, our investigation has revealed a dearth of such projects dealing with energy transition. Nevertheless, the material that does exist reveals a narrative and aesthetic conflict about how energy production and petroculture are represented. While energy corporations and others resistant to energy transition depict energy as an abstract element of the economy, proponents of research-creation projects provide strong counter-aesthetics and narratives. Examples of research-creation in photography, film, literature, and collectivist art press the issue of energy transition by presenting current energy production as harmful and alienating. Curation of research-creation projects dealing with energy has become a site of connection for a range of artistic practices. These projects represent some of the earliest critiques of petroculture and facilitate future, wide-ranging discussions of energy transition and impasse. Just as “energy humanities” is emerging as a unique category of investigation between and across ecology, environmentalism, and activism, “energy research-creation” provides a framework to integrate academic and artistic practices surrounding energy transition. Research-creation may currently be a significant gap in our knowledge about energy transition, but it is also a site of great potential to increase the visibility of the cultural discourse around energy.

SSHRC’s “Imagining Canada’s Future” initiative poses a key question for researchers across the humanities and social sciences to address: “What effects will the quest for energy and natural resources have on our society and our position on the world stage?” As our findings in each area of the following research synthesis will indicate, “On the Energy Humanities” has focused its energies on the first part of this question in particular. Within this overarching larger question, our synthesis project has paid attention more specifically to sub-questions (b), (c), (d) and (g) (drawn from the text of the KSG competition call):

- What could be the cultural, social, economic and environmental impacts of disruptive technologies for accessing and developing natural resources (e.g., fracking, deep-sea drilling, drones, genetic modification)?
- How can Canadian natural resources be developed in such a way as to respect the rights, experiences and aspirations of Aboriginal Peoples; create sustainable benefits for Aboriginal communities, entrepreneurs and businesses; and encourage reconciliation and positive engagement between Aboriginal and non-Aboriginal Canadians?
- What effects might the development—or halted development—of Canadian energy, natural resources and alternatives have on governance and regulatory systems, public opinion, the economy and decision-making? *and*
- Historically, how are Canada’s values and cultures linked to its natural resources, and how might upcoming changes affect these, including as reflected in the arts and literature?