

Economics and Environmental Policy Research Network

Research Symposium

October 29th – 30th, 2018

Session Notes for Panel VI: Transitioning to a Circular Economy - System Dynamics and Challenges

1. Context of Discussion

This session sought to explore the key research gaps and policy needs for achieving a circular economy, as seen from the perspective of the system-wide transition that this will necessitate.

Key themes discussed in the session include:

- We still face fundamental struggles in building a common understanding of the concept of the circular economy. A shared definition would allow growth towards a common objective, would mobilize practitioners and scholars alike, as well as support the development of interlinkages between various issues and enable the confrontation of trade-offs. There is also a need for the development of metrics and indicators for circular economy, with such quantifiable measures allowing us to make more informed decisions.
- Many of the challenges encountered in the discussion about a transition to a circular economy are not just technical in nature, but require changes in consumer behaviour, centered around policy, culture, governance and regulatory reforms. There is a very real need for governance reform resulting in cohesive circular economy policy that considers not just current conditions, but also the needs of future demographics and how these will evolve over time.
- Given the complexity of the transition to a circular economy, it is unclear how individual efforts to the transition will be measured and their effectiveness assessed.
- Furthermore, the sectoral nature of the transition and the impacts of changes in one sector on other sectors will need to be examined closely.
- As with any large transition, there is a need to be aware of underlying power dynamics, including how to recognize and include marginalized and historically marginalized groups in the transition. It will be necessary to create dialogue and develop an understanding of the expected impacts on individual stakeholders.
- There exists a market economy problem with circular economy, in that everything we produce and consume is the result of a linear market. Currently many of the rules that determine our behavior support linearity e.g. using cheap, single-use plastics, which are then discarded. These habits are supported by institutional practices, subsidies for resource extraction & unpriced externalities, among other factors.
- There is a need to explore how best we can promote a circular economy in Canada, identifying the key drivers of change and how to implement them. It is likely that new rules and standards will need to be designed to create demand, which will require consideration of performance standards, necessary data, and other possible instruments that could be used to complete an initial market analysis.

- In the process of working towards cohesive circular economy policy, there is the potential for the concept of circular economy to serve as a unifying concept between policy makers and different stakeholders, as well as between Indigenous and Non-Indigenous peoples.

2. Research Questions Identified

- **What are different definitions of “circular economy” that are currently used?** Can we develop a shared definition of circular economy that all stakeholders are able to support? Would such a definition emphasize a reduced focus on transaction costs? The achievement of greater resource efficiency? Sector specific considerations? The role of communities?
- Different models of circular economy generate different proportions of benefits (e.g. reducing, reusing and/or recycling). **How can we identify the potential contributions of different circular economy models to each of these categories of benefits?**
- **Which metrics and indicators for the circular economy would be most useful in helping us to make more informed decisions?** E.g. Alternative measures of wealth; social indicators; broad-based criteria that go beyond resource efficiency alone. **What data would be needed to track these metrics and indicators over time?**
- **Given the complexity of the transition to a circular economy, how do we assess the contributions of individual organizations/initiatives to the overarching objective?** How are norms and social behaviour changing as a result of these efforts? How will governance roles and processes need to change to support this transition?
- **How do we conceptualize the “transition” to a circular economy?** What do we really mean by this, what are the dimensions of the transition and how we can measure/assess these?
- Given that a circular economy will require changes in many if not all sectors of the economy (e.g. housing, food, transportation, etc.) **what are the structural barriers to the transition to a circular economy in Canada?** (e.g. built infrastructure, tech lock-in, cultural norms, policy barriers, institutional inertia). **How will changes in each individual sector impact the transition in other sectors?** To what extent is it realistic to study individual sectors separately? **Should we approach the transition one sector at a time, or in an economy-wide manner? Or can we connect and complement existing regional players? What are the financial and policy instruments that work best in complex situations like this where there are many sectors with overlapping regulatory and policy environments?**
- Currently many of the rules that determine our behavior support linearity. **How do we instead incentivize behavior that supports circularity? How do you promote a circular economy?** What are the drivers of change and how do we implement them?
- **When new rules and standards will be most effective at creating demand for a circular economy?** What are appropriate performance standards and how do we measure and report them?
- **Can the transition to a circular economy and the development of a cohesive circular economy policy serve as a unifying concept between decision makers and different stakeholders?**

- **Can the impact of the circular economy on Indigenous and non-Indigenous peoples lead to a more common world view?**
- **How do you articulate the benefits of a circular economy to businesses (both Indigenous and non-Indigenous)? Specifically what are the benefits for indigenous communities?**
- **What is the best way to structure governance to allow the circular economy to develop?**
- **What are the ripple effects, both positive and negative, of a circular economy?**
- **Knowing the impact of the rebound effect following energy efficiency efforts, is this also a possibility in the circular economy? i.e. more resource efficient products result in people using more of them in total.**
- **How do we reconcile the concept of a circular economy and doing more with less, with the political desire to constantly demonstrate growth?**
- **How can we build on the experiences of diverse organizations (social economy, small and medium businesses, large businesses, etc.) in circular economy to replicate and disseminate circular economy models?**