

## Energy Justice

Imre Szeman

Five years ago, the **[Slide 2]** Petrocultures Research Group was established at the University of Alberta, with the aim of developing a sharper understanding of the ways we use (and abuse) energy. Its immediate intention was to examine the social, cultural and political implications of Canada's turn-of-the-twentieth-century leap into the ranks of the world's oil superpowers. Our interest in energy arose in part as a result of working at the research university closest to the Athabasca tar sands. In Edmonton, it's hard not to see oil everywhere, and not only in the physical infrastructure of refineries, but also in its social costs and consequences: labour dislocation, inflated housing prices, alcohol and drug abuse, and rates of sexual violence and family dysfunction.

Very quickly, however, Petrocultures scholars also began to grapple with other, larger questions. **[Slide 3]** What is energy for in our society? How does the availability of relatively cheap energy effect how we socialize and relate to one another? What are the inequalities that come with fossil fuels, and what is stopping renewables from carrying those same inequalities forward? Petrocultures began investigating how energy in the 20<sup>th</sup> century made a number of other, seemingly unrelated things possible. We moderns tend to image energy as a largely neutral aspect of social life, as little more than a dead input into the motors of a society whose form and rationale originates at a distance from coal mines and oil fields. But in fact the forms of energy we use, and how we use them, shapes society through and through, and not just how we work (in factories instead of fields) or how we move around (using horsepower instead of horses).

This is what we mean by "petroculture," the term that gives our group its name. Petroculture is the global culture we find ourselves in today. **[Slide 4]** It is the name for a society

that has been organized around the energies and products of fossil fuels, the capacities it engenders and enables, and the situations and contexts it creates. It's not just that our physical infrastructures depend on oil and gas, or that our social and economic practices have been organized around easy and cheap access to fossil fuels. The relationship to our dominant energy form is deeper, pervasive, and constitutive: to say we inhabit a "petroculture" is to say we are fossil fuel creatures all the way down. Our expectations, our sensibilities, our habits, our ways of being in and moving across the world, how we imagine ourselves in relation to nature, as well as in relation to one another—these have all been sculpted by, and in relation to, the massively expanded energies of the fossil fuel era. To give but one example: in the potential shift from gas- to electric-powered cars now promised us, what is never questioned is necessity of the automobile itself. As inhabitants of a global petroculture, we have all come to expect the mobility, freedom and autonomy of mechanized movement by land, sea and air. **[Slide 5]** Those parts of the world that don't yet have a car in every garage see it as an index of economic and social progress -- a sign of having joined the modern community because, at long last, they are able to use energy at the same level of those in the global North.

Energy is a key part of our social infrastructure—something fundamental to who and what we are, but whose broad cultural and social significance we have been unable to recognize. Understanding energy this way has become important because of the direct link between energy use and the environment. In the modern era, the rapid expansion of the population from 1 billion in 1800 to 7.4 billion in 2016 was animated by the growth in the availability and accessibility of energy. And this—more people each using more and more energy—has had a decisive impact on the state of the environment. The principal cause of global warming has been the emission of CO<sub>2</sub> produced by burning large quantities of fossil fuels. The need to transition from fossil fuels

to forms of renewable energy is driven by the environmental implications of petrocultures and the (still halting) attempt to mitigate the worst consequences of global warming.

Over the course of this century, we will need to undergo an energy transition—a shift from an economy and society based on energy derived from fossil fuels, to an economy and society based on a mix of energy forms. This transition will constitute the greatest social experiment in human history: a planned, plotted, and predetermined shift from one kind of society—the petrocultures we inhabit today—to another. At Petrocultures, we see this energy transition as an opportunity—an opportunity for a transition to the kind of the society many of us have long wanted: collective, equitable, and just in all of its practices and principles.

We tend to imagine energy transition as a technological issue – something for the scientists to figure out. But new technologies or sources of energy alone won't change the ways in which the energy riches of the past two centuries have influenced our relationships to our bodies and molded human social relations. Politics that imagine the easy substitution of one source for another, without changing the fabric and capacities of society, amount to more of the same: the use of the planet for profit. Real energy transition has to involve social, political and cultural transition, too, with attention to how energy has shaped us and the importance of energy to human collectivities. Those of us critical of the use of fossil fuels shouldn't imagine that we carry out our duty by asserting that we all stay away from the dirty stuff and hope scientists come up with lots of clean stuff--which, the thinking seems to go, simply by virtue of being clean will also be equitably distributed).

How might we better imagine energy transition and energy justice?

**[Slide 6] Proposition 1: Energy distributes inequalities**

The way we produce, circulate, and consume energy is deeply connected to social justice. There is a direct link between access to energy and levels of development. **[Slide 7]** Per capita energy use in Canada is close to *twenty* times greater than in Benin and Haiti and *twenty-five* times greater than the Democratic Republic of Congo. The colder climate in Canada doesn't begin to account for these differences in energy use, which are connected instead to histories of colonialism, underdevelopment and global political and economic power. Such wide discrepancies in energy use are as true within nations as between them. **[Slide 8]** Elites everywhere use more energy per capita than poorer members of societies. While some elites have no doubt transitioned from fossil fuels to solar energy to power their homes, the use of animal energy, wood, and coal continues to fuel societies around the world. In Canada, some First Nations and Inuit communities still depend on diesel fuel to generate electricity, even if others have converted almost entirely to solar or wind; in either case, the per capita energy use in these communities is much lower than that of Canadian suburbanites. **[Slide 9]** The attention to the environment in existing plans for energy transition has meant that difficult questions of social justice in relation to energy have been obscured, sometimes quite deliberately.

For environmental reasons, energy transition needs to involve a shift from fossil fuels to forms of renewable energy. **[Slide 10]** But it also needs to include strategies to produce energy equality across the globe. This is a genuine political challenge that the left has not even begun to ponder. The average global per capita use of energy in 2013 was 1,640 Watts (W); in Canada, we used close to 10,000 W per capita in that year. If everyone on the planet used the same energy as a Canadian, total planetary consumption would be 74 terawatts per year – *six times* the energy as we currently consume on the planet. The figure of 1,640 W per capita is close to current energy use in places such as Uruguay and Iraq, and even this figure is too high given the need to limit

energy use further, due to increases in population and, of course, cumulative impact on the environment.

Energy is social capacity and we want to provide equal social opportunity to everyone on the globe. This means restricting energy for some and increasing it for others -- a political challenge that isn't going to be solved by technical innovations in energy production or shifts in distribution alone.

**{Slide 11} Proposition 2: Energy is habit and habitat**

The more difficult changes that we point to are those that are hard to see, name or grasp: those zones of experience and expectation generated by our energy systems that we take as equivalent to normal life. And yet, it is here we need to turn our attention as surely as to developing new or more efficient forms of energy, or better ways of capturing or sequestering carbon. Without changing who and what we are, we will never manage to make the shift from petrocultures to other cultures—cultures whose way of being in the world requires, and expects, less energy than we have used up to this point in history.

**[Slide 12]** The task is nothing less than to reimagine modernity, and in the process to figure ourselves as different kinds of beings than the ones who have built a civilization on the promises, intensities and fantasies of a particularly dirty, destructive form of energy. **[Slide 13]** This means building political habits grounded in an eco-imperative to protect both the environments in which we find ourselves, and social groups and communities that we do not directly encounter on a daily basis. Instead of building a politics of energy grounded in jobs or growth, we will need to look to reconfigure the habits and habitats generated by energy. **[Slide 14]** We will also need to develop ways of *redistributing* energy along socially equitable lines,

along with the economic wealth that usually comes with the flow of energy. In breaking the ties between economic growth, human exploitation, and environmental degradation, the multiple habits that have come to cloud our imagination will become further grounds for transition.

Mobility, for instance, will look radically different on the other side of an energy transition premised on left principles. **[Slide 15]** The luxury and privilege of global mobility for some, and the curse of increasingly massive commutes for trans-provincial and trans-regional workers will wither amidst a new politics of energy pricing, distribution, and consumption. If we don't need to drive to work or to shop at massive department stores, a car is less important. We can move around using car share networks, work in local economies that support sustainable scales, and create a politics of energy that puts power in the hands of communities. We have to re-imagine all of our energy based freedoms and begin to prioritize the *freedoms from* that will come with a left transition—**[Slide 16]** freedom from exploitation, social alienation, long commutes, toxic air, and indirect destruction of the landscapes upon which we depend for life.

More jobs, electric cars, and monopoly owned solar panels that put profits in the hands of property owners will not lead to the freedoms *from* that are necessary for a new politics of energy. What will?

### **A New Politics of Energy**

I would like to propose an idea for a different kind of energy system, which we can develop in two phases:

**[Slide 17]** *Phase 1: reduction of energy use*

**[Slide 18]** Let's build a network of local energy councils that use the model of participatory budgeting at the neighbourhood level to self-determine collective energy quotas. Energy councils can consist of already existing neighbourhood associations, school boards, municipal councils, and so on, and would take as their mandate a collectively negotiated transition strategy. Councils can reduce the cost of energy by abandoning the individuated relation to energy that is imposed on us by utilities. Think of the energy council as a social union, rather than a labour union. Energy councils and labour unions can mutually support one another, but membership in the former won't depend on a labour market. Local energy councils can prop up amidst any number of already existing, community based institutions: your local library, public park, or watershed. What would it mean for energy to be a service managed like a library manages its resources? How would a collective structure like a watershed become a figure for how we might reshape our relation to energy?

**[Slide 19]** *Phase 2: Regionalize and ecologize energy*

Scaling up from energy councils to regional leagues of energy councils, a newly-politicized relationship to energy and the environment can ground a new form of co-operative politics. Once the distribution of energy is collectively managed rather than individually purchased, political momentum built into the energy council can translate into a new direction for regional energy systems. This phase will mean moving from a profit-standard of measuring value towards an ecological metric for energy production, circulation, and consumption, so that the elimination of externalities (against both human and non-human actors) becomes the glue across which councils make decisions. **[Slide 20]** Treating utilities like private corporations is a logical, political, and environmental catastrophe. Breaking with the market driven flow of power, energy councils will

be empowered to chart new forms of social involvement, environmental protection, and forms of community. Since users of energy benefit economically, socially, and ecologically from an average reduction in utilities costs, the metric of growth-driven profit will no longer lock us into high-energy futures.

Energy can be a politics by other means. It is a way of enacting and enabling left principles of social equality and environmental responsibility in relation to a new set of discourses and co-ordinates. Real energy transition opens the way for social and political transition, and does so on the basis of equality of social capacity and a commitment to protecting the planet.

**[Slide 21]** Might a left energy transition be a way to achieve left ideas and ideals in a manner that attends to the very real material realities and limits of the world we inhabit? And might it be an opportunity for the left to rediscover its purpose and energies, in a manner perfectly suited to the challenges we face in this century?