Getting from here to resilience:

Emergence of sustainable markets

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Emergent Systems

:How to scale up social and technical innovations?

How to design policies to encourage the "dormant capacities" of individuals and create institutions that generalize these dormant capacities"?

(Tom Paine via Hilary Wainwright)

How to Learn and Act

across scales

and jurisdictions?

“the lifecycle of emergence:

how living [social-economic-political] systems begin as networks, shift to intentional communities of practice, and evolve into powerful systems capable of global influence” (Margaret Wheatley and Deborah Frieze, 2006)

(www.evolutionarynexus.org/node/620)

Using policies to reshape incentives and markets

- Food
- Energy

Markets are what the rules shape them to be

Braudel:

material life (all social forms)

markets (complex societies)

capitalism (predatory on the others)

Food: Public Procurement

- “Power of the Public Plate” (Morgan and Sonnino, The School Food Revolution)
- Municipal purchasing: the rules game

Hospital Food: the New Frontier

Recovering not just sustainable markets but also

- Skills
- Meaningful Work

Better Work and Life: Interstitial Possibilities

From Global Corporate hospital food systems particularly suited to cook-chill and cook-serve applications

To…

Good Work along a values-based institutional supply chain

Building skills, collaborative infrastructure and alliances for the future—funded by "the power of the public plate" (Morgan and Sonnino)

Chef Joshna Maharaj with stock and staff learning knife skills

Energy: Feed In Tariff (aka CLEAN in US)

Individuals and Groups Become producers of Sustainable Energy

Utility connects producers to the grid and pays an incentive price for a guaranteed period (Ontario 20 years)

“To take innovation to scale”

- more than 60 places across the world have adopted feed-in tariffs.
- In Germany, the share of renewables Increased from 5 percent in 1991 to 20 percent in 2011,
- and created hundreds of thousands of green jobs
- Solar photovoltaic increased more than 100-fold, from 2 megawatts to nearly 25,000 megawatts.

And encourage capacities of people

Scaling up demand for PV and windmills

Incrementally, one person, one roof and one farm at a time

MEANS

Tapping best qualities of people: initiative, cooperation, and meaning

The Story of Innovation in Ontario:

Individuals,

social movements,

and government

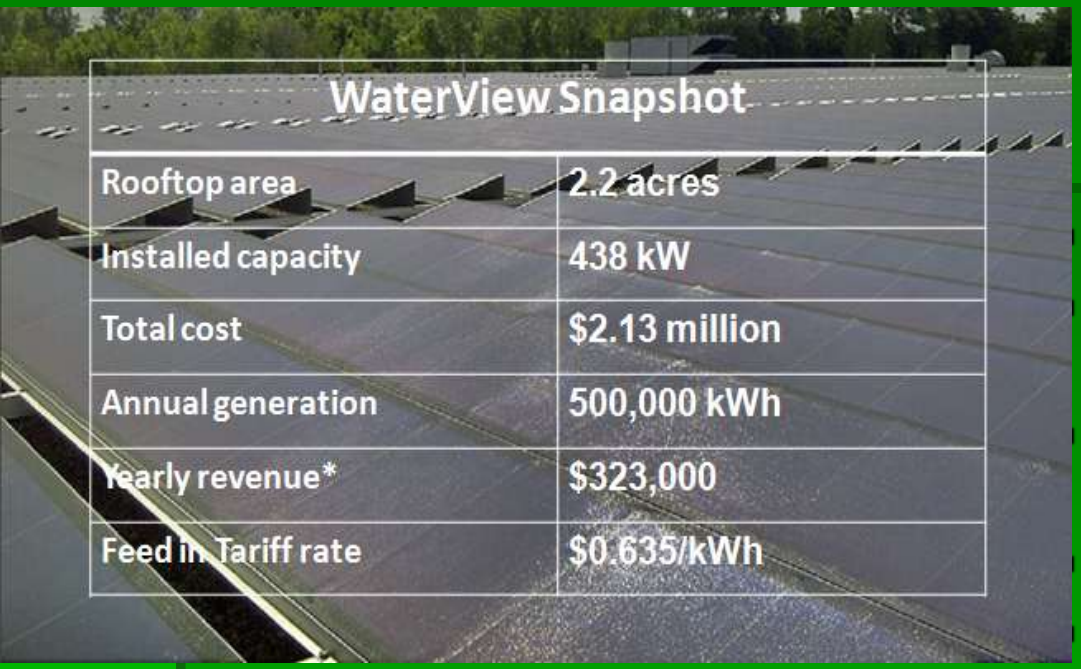
FIT is community building

FIT works On any scale

There's Daimler Benz…

With a 2.5 acre roof contracted with a solar cooperative (SolarShare)

SolarShare's WaterView Project



WaterView Snapshot	
Rooftop area	2.2 acres
Installed capacity	438 kW
Total cost	$2.13 million
Annual generation	500,000 kWh
Yearly revenue*	$323,000
Feed in Tariff rate	$0.635/kWh

- Hosted by Daimler Buses North America, the project spans 2.5 acres of previously unused industrial roof-top.
- SolarShare has entered into a 20-year fixed-price roof lease agreement with Daimler and has secured a 20-year FIT contract with the Ontario Power Authority to sell all of the electricity generated.

How much power is that?

Enough to power over 50 homes

Offsets over 300 tonnes of CO2

Or, the energy of:

Driving 437,000 kilometers in an average vehicle

- Using 302 barrels of oil or almost 4,000 (20 Lb) tanks of propane
- Planting 36,000 acres of forest

And there's me!

Not really my house but on my street. Same type of roof (flat at back). Seven PV panels.

Opportunity for Individuals to be part of transformative change

And to form cooperatives

Finance: Solar Bonds

Skills: Engineers and lawyers

Meaning: Being part of the change you want in the world

An environmental lawyer

- a post-carbon economy will not easily be implemented with top-down laws, but with individuals, communities and businesses voluntarily making choices that collectively reduce our carbon footprints…

- - Robert Wakulat, Principal, Wakulat Law

A solar engineer (who gets to do his good work)

- Solar Bonds are an innovative solution for those who cannot directly own their own project but still want to help the environment and invest their money safely.
- - Khalid Grant, Solar PV Designer & Engineer, Solsmart Energy Solutions

A Natural Health Practitioner

- I invest in renewable energy in order to offset my household and my practice's consumption.
- I believe in cooperatives and our ability to work together towards a better, healthier, more just, world"
- - Tracey Tief, CNHP, Annarres Natural Health

A farm family

-
- “…an excellent opportunity to diversify the existing farm business and also the right thing to do”
- - Brubacher Family, Carlotte Farms

Not “alternative” but

Collaborative

Social

Intentional

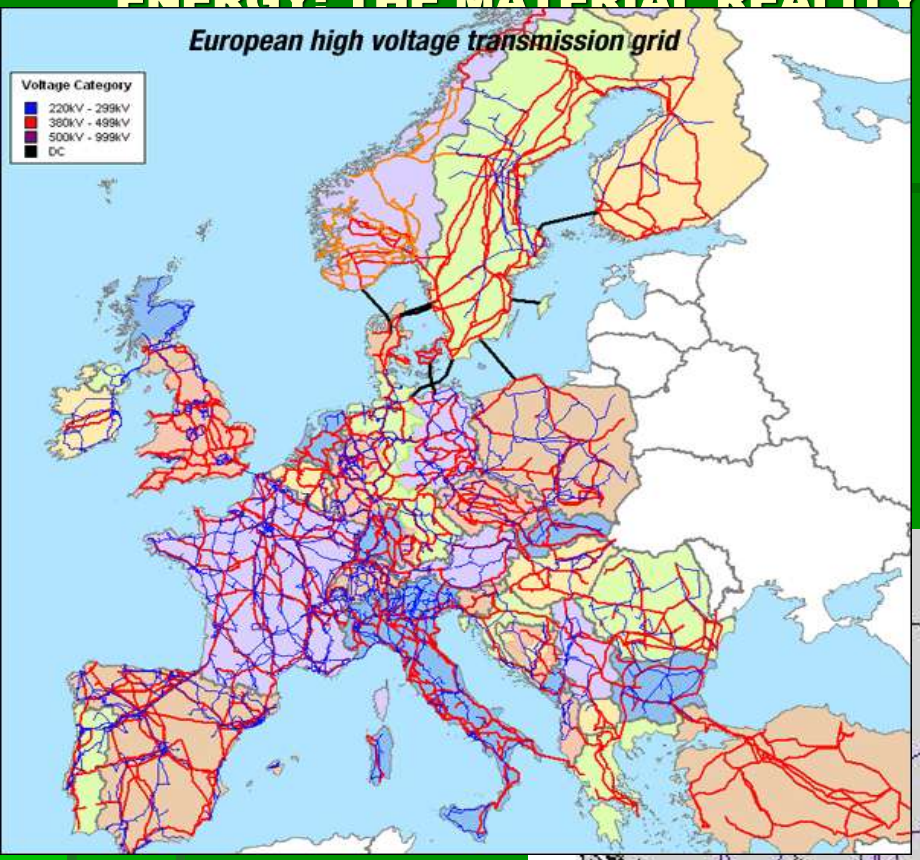
Provisional (Ontario has cut back)

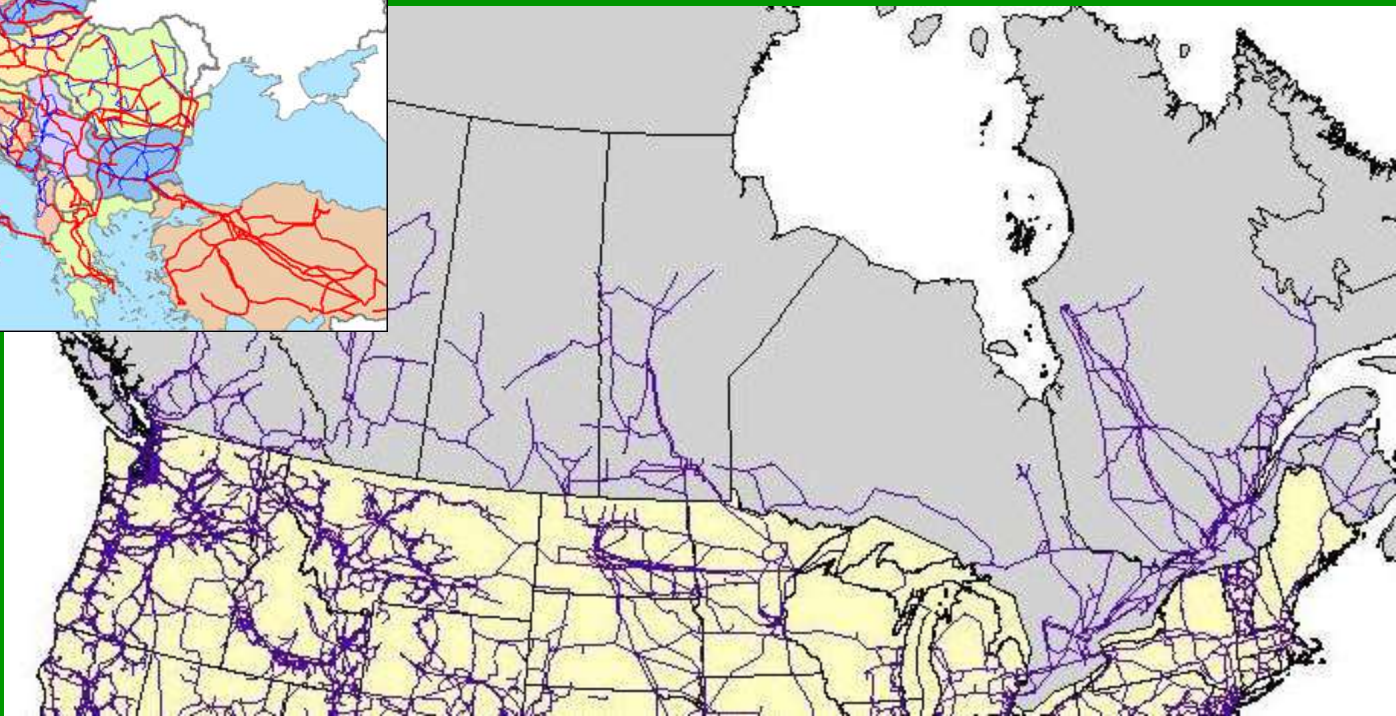
But suggest a tipping point

Grids and Foodsheds

Rethinking Territory

ENERGY: THE MATERIAL REALITY crosses NATIONAL BORDERS





An Ecological Model for Governance

Foodsheds and Bioregions

Grids and transport networks

Climate and atmosphere

Lessons from the European Experiment

Renogiating Sovereignty

Subsidiarity

Precautionary Principle

And More…

Common Pool Resources (Ostrom)

Bounding collaborative use of resources

Open Source Knowledge

Channeling competition

Making Money Serve Social Goals

The wisdom of the Wizard…

we just have to know we can