



Water, Energy and the Failures of Governance

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A Society Designed to Pursue Economic Growth



- ✦ **Our society is institutionally designed with a single purpose - to pursue economic growth**
 - Ÿ ie. “the increase in our ability to alter our environment to suit our needs and our tastes”.
- ✦ **We do this using tools and energy ... but it is energy that does the work.**
- ✦ **So energy plays an “existential” role in society. Without it nothing works!**
 - Ÿ And humans cannot survive without food... energy fit for human consumption.

Nexus Between Energy, Water and Existential Risk



- ✦ **Potable water is equally essential to human life.**
- ✦ **Water and energy also have a deeply intertwined relationship:**
 - Ÿ **Water power – use directly or turn into electricity;**
 - Ÿ **Water used in food production and biofuels for transport;**
 - Ÿ **Thermoelectric power plants – (use water for steam and then for cooling – nuclear, fossil fuels, some solar applications);**
 - Ÿ **Water used in resource extraction and processing (eg. oil sands and oil and gas hydraulic fracturing of shale);**
 - Ÿ **Water contamination because of extraction, processing and transporting of energy resources; and,**
 - Ÿ **With enough cheap energy we can desalinate and transport water over long distances.**

Nexus Between Energy, Water and Existential Societal Risk



✦ **Existential social risks related to:**

- Ÿ **Geopolitical conflict (including war) over the control of water and energy (eg in Middle East);**
- Ÿ **Atmospheric warming and climate change thanks mostly to our use of fossil energy and destruction of forests for agriculture threaten everything (through heat and drought, melting glaciers and rising oceans) .**



✦ **Why do our public institutions**

- **Often underinvest in critical infrastructure;**
- **Underprice water , electrical energy (as well as other forms of energy) and many public insurance programs;**
- **Allow public debt and other unfunded liabilities to accumulate;**
- **Make commitments with low front-end or initial costs and high back-end costs;**
- **Underinvest in research and development and the deployment of new technologies;**
- **Seem to respond only to an actual or perceived crisis ?**



- ✦ The same society that single-mindedly seeks economic growth produces a society that is largely governed by “crisis” management (actual or manufactured crisis).
- ✦ This is the case because our key decision-makers have little or no incentive to deal with developing problems *before* they become a “clear and present danger.”
- ✦ In fact, they punt all really difficult and complex problems into the future - into someone else’s watch (someone who does not get a vote, just yet).



✦ **Usually when this happens it is because of “moral hazard”.**

ÿ ie the rewards of a risky behavior are privatized but the downside costs are socialized.

✦ **This happens in our political decision bodies because of some unique features of the political marketplace:**

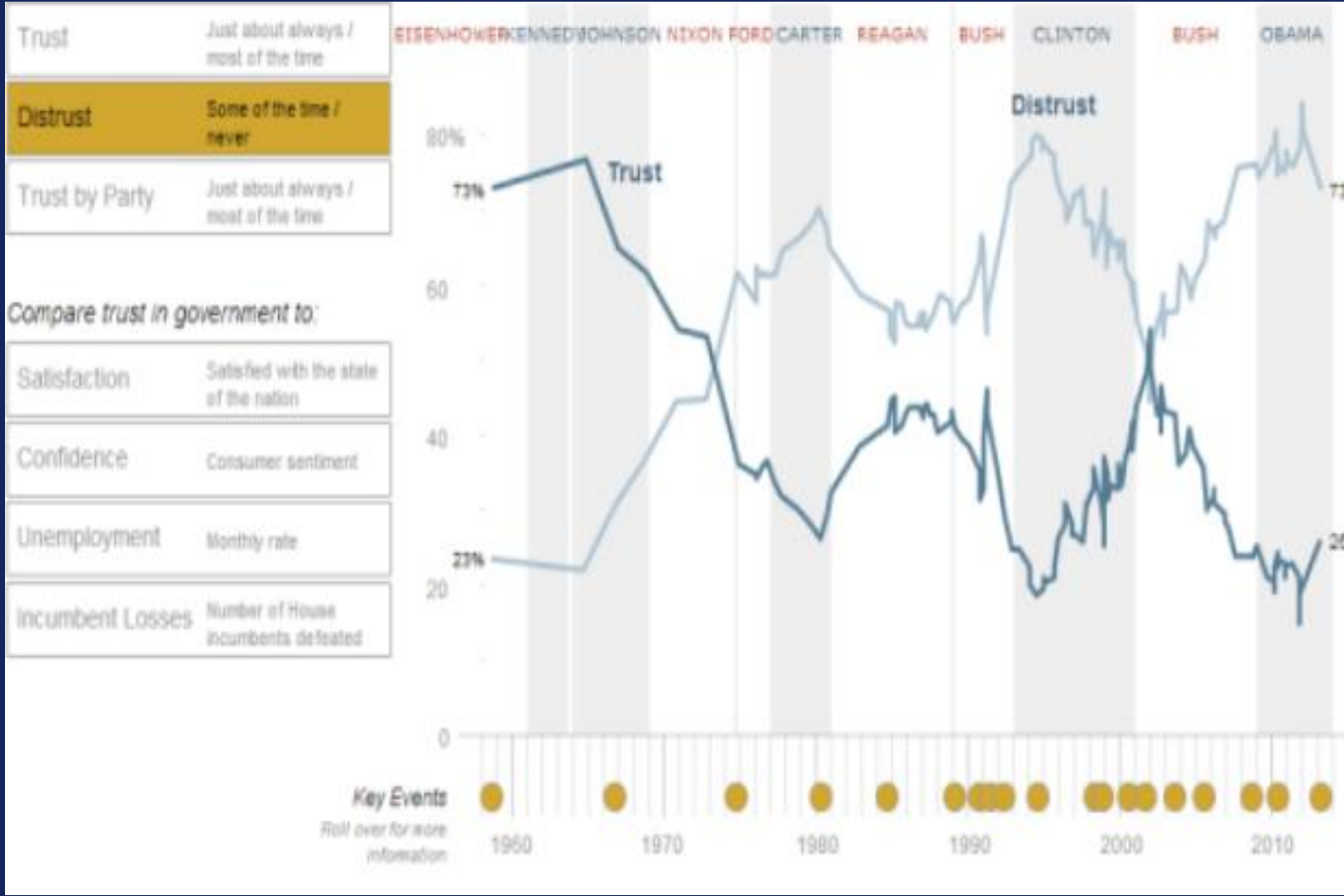
ÿ An electorate “rationally ignorant” of policy issues and options.

ÿ But rationally focused on the “character” of politicians.

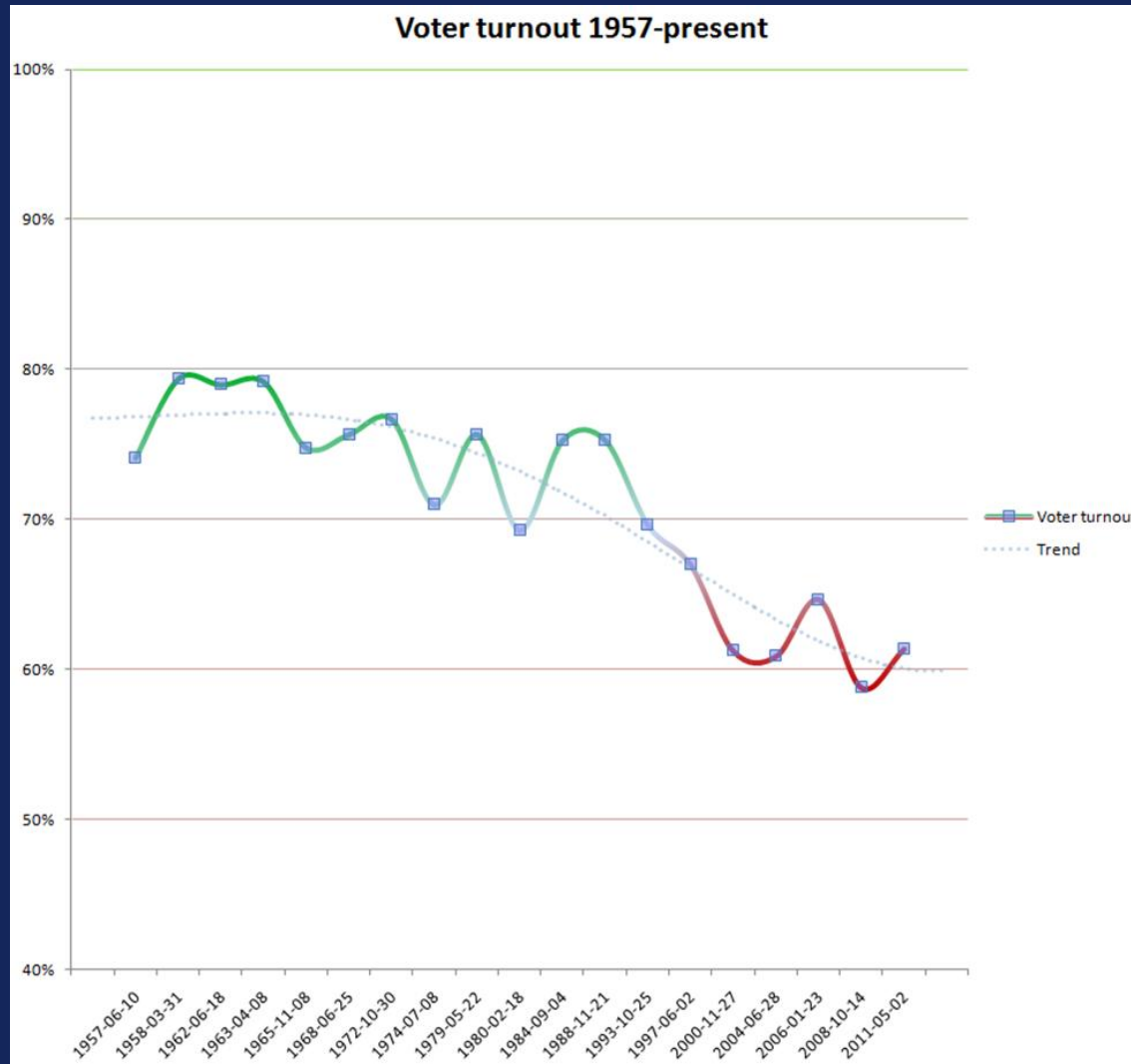
ÿ So politicians engage in “character assassination” and party “branding”.

ÿ “Branding” typically underscores a deep ideological divide in society [the individual (Right) vs. the community (Left)].

Collapse in Trust (Pew Research Centre)



Canadian Voter Turnout in Federal Elections: 1957 – 2011 (Source: Wikipedia)



Political Competition Drives Out Inconvenient and Complex Truth



- ✦ **This puts the “middle, non-aligned” voters in play.**
 - ÿ Every politician may be well intentioned, but they cannot do “good” if they do not win;
 - ÿ No independent regulator of political competition or political speech. Almost anything goes.
- ✦ **As a result, the “bad” political competitors drive out or at least “mute” the “good”.**
- ✦ **This tendency is highly reinforced in the presence of significant income inequality.**
- ✦ **Therefore our governments allow societal risk to accumulate.**
 - ÿ Eventually we not only hope for the best, we need it.

An Added Complication: Federalism and Decision Paralysis, Except...



- ✦ **North America is not three homogeneous nation states, but federations with profoundly different regional economies (and energy and water resource bases).**
- ✦ **The U.S. Senate and the Canadian provinces represent a powerful regional antidote to democratic national majorities.**
- ✦ **Especially difficult to socially engineer in Ottawa or Washington large scale regional redistributions of income.**
 - ÿ This is particularly important with respect to energy issues (eg. climate change).
- ✦ **Again, the federal governments of U.S. and Canada can only act in response to a “clear and present danger”.**

So What Does All This Mean for You?



- ✦ **Reach out and align with *energy and agriculture industry organizations*;**
- ✦ **Focus on those communities *already in crisis* (especially First Nations domestically and international crisis situations as part of a service or technology export opportunity);**
- ✦ **Recognize the *compound-complex* nature of governance problems. It is not enough to focus on just one aspect of a problem.**
 - ÿ **Think and act horizontally and vertically across Canada's governmental hierarchy – municipal-provincial-federal governments and their agencies; and,**
 - ÿ **Always do an analysis of impacts on jobs and income distribution. Look for potential offsets.**