

Regulation and Governance in Canada's Electricity Sector

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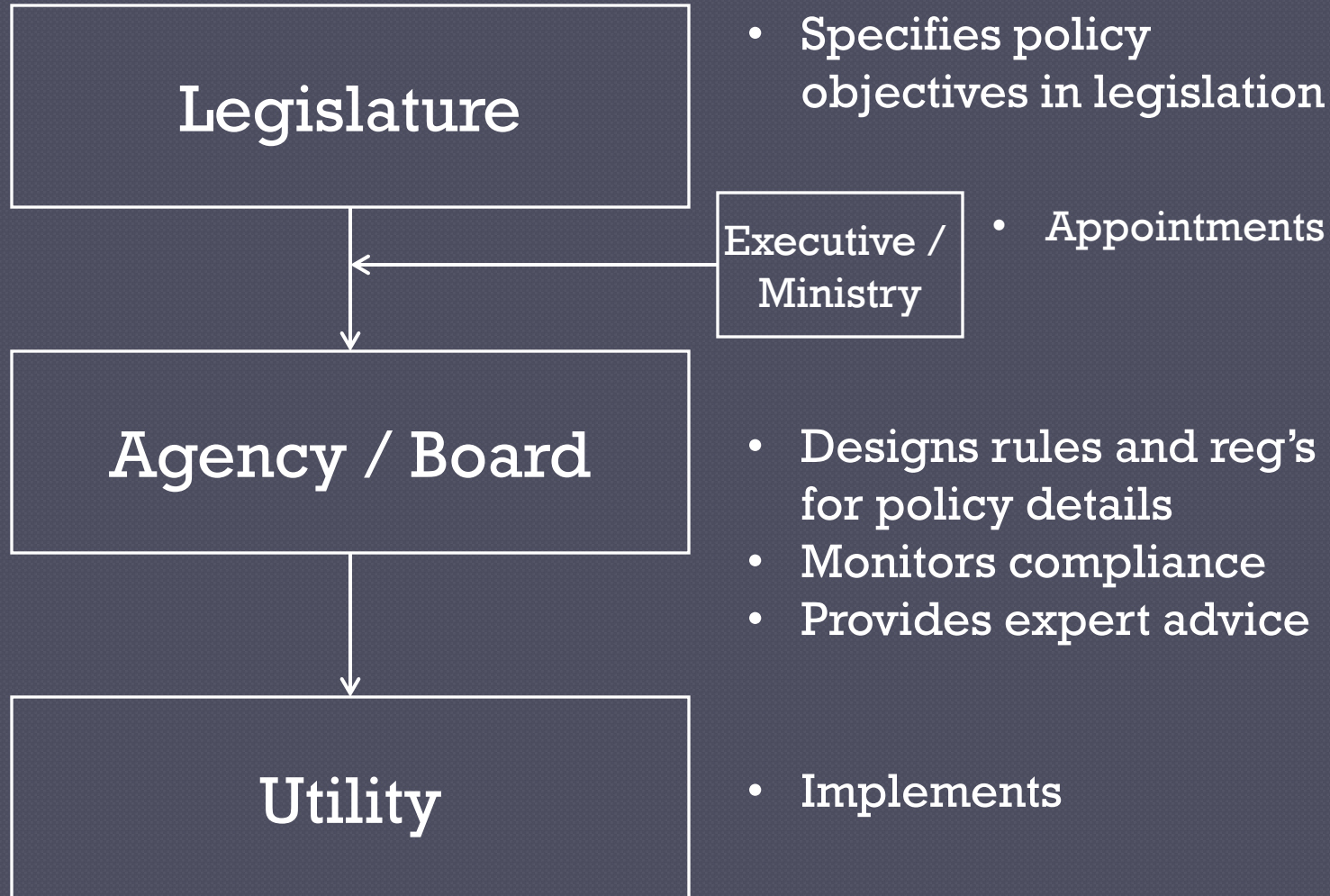
Issues for today's discussion

- How are electricity policy decisions made?
- Does it matter?
- Some ideas for reform

What is governance?

- ◉ *Who* makes policy decisions?
 - Legislature / minister / agency / utility / courts
- ◉ *How* are policies made?
 - Legislation / directives / regs
 - Initiation / approval / veto / appeal
 - Evidentiary & consultation requirements

A typical framework



Ontario: ministerial control



- Directive powers
 - Extensive
 - Unrivalled in other OECD countries
- Appointments of senior board / agency staff
 - Short-term



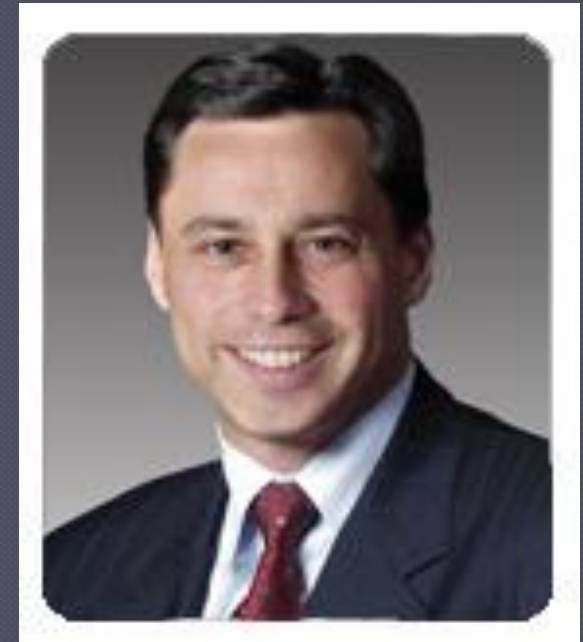
Significant usage of directives

- 2004 and 2009 Acts significantly expanded scope of ministerial directive power
 - New generation procurement
 - Renewable energy capacity, pricing, content
 - Competitive versus non-comp. processes
 - 46 directives to OPA since 2004, 11 in 2010
- Very flexible policy instrument
 - No public consultation, rationale, notice required
- Exposes policy to short-term political pressures

New minister / new policy

Average ministerial tenure ~ 12 months
A brief history of feed-in tariffs in Ontario

- Cansfield (2006) – implements RESOP
- Duncan (2007) – modifies RESOP to include small hydro
- Phillips (2008) – suspends RESOP
- Smitherman (2009) – reinstates RESOP for biogas only
- DuGuid (2010) – implements new FIT; axes off-shore wind; reduces rates for some solar



Does it matter?

Renewable energy companies rate *policy stability* as one of the worst aspects of Ontario's business climate

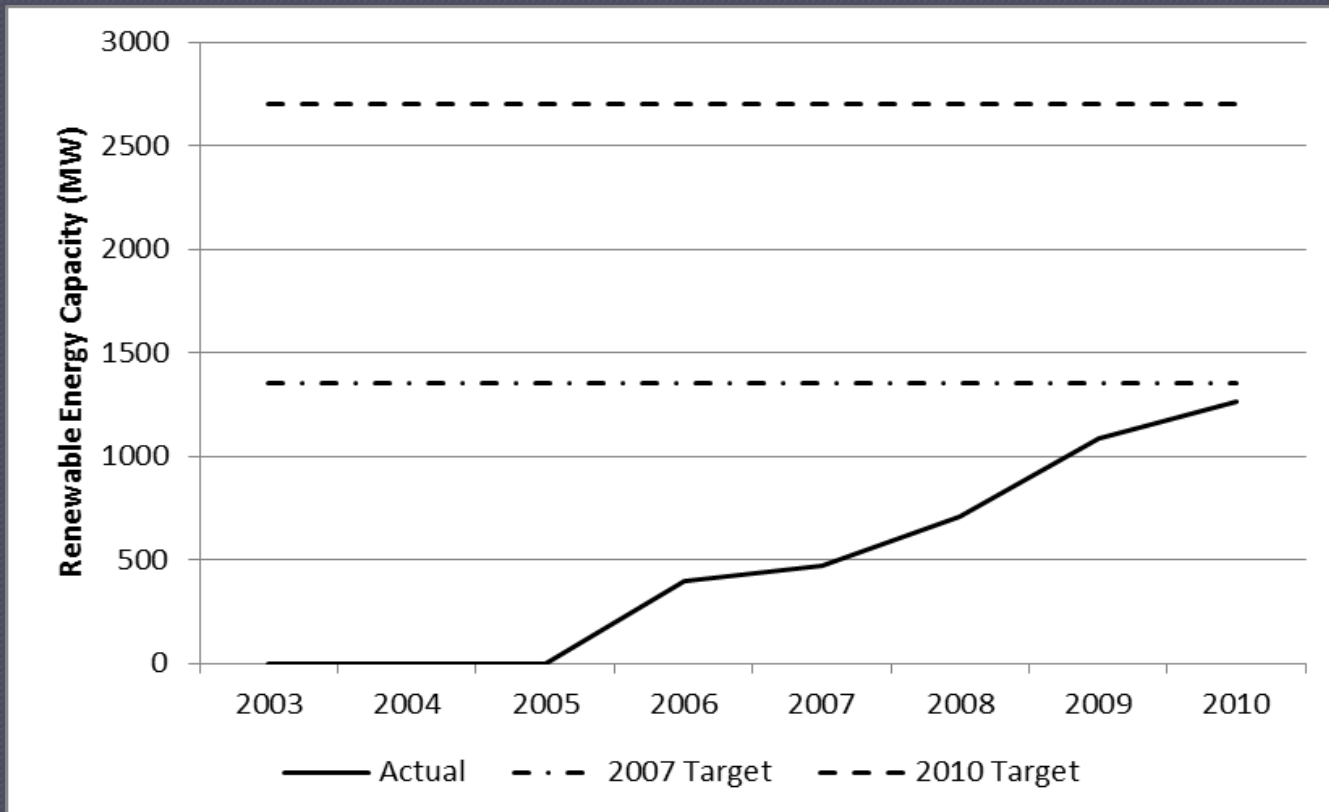
| | Wind firms (29) | Solar firms (8) | Technology manufacturers (15) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 highest rated criteria in Ontario | <ol style="list-style-type: none"> 1. Length of PPA 2. Transparency of PPA process 3. Availability of engineering and construction expertise | <ol style="list-style-type: none"> 1. Length of PPA 2. Ease of obtaining rights to land 3. Transparency of PPA process | <ol style="list-style-type: none"> 1. Cost of electricity 2. Proximity to transportation infrastructure 3. Availability of skilled labor |
| 3 lowest rated criteria in Ontario | <ol style="list-style-type: none"> 13. Ease of obtaining municipal approvals 14. Stability of the policy environment 15. Coordination between government-related bodies | <ol style="list-style-type: none"> 15. Availability of transmission cap 16. Stability of the policy environment 17. Presence of I-t gov' t target for renewable energy | <ol style="list-style-type: none"> 16. Presence of I-t gov' t target for renewable energy 17. Stability of public policy for renewable power generation 18. Cost of skilled labor |

Yet renewable energy firms rate policy stability as one of the most important factors in *location choice*

| | Wind firms (29) | Solar firms (8) | Technology manufacturers (15) |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 Most Important Criteria in Location decision | <ol style="list-style-type: none"> 1. Natural wind conditions 2. Stability of the policy environment 3. Transmission capacity availability | <ol style="list-style-type: none"> 1. PPA rate 2. PPA length 3. Stability of the policy environment | <ol style="list-style-type: none"> 1. Presence of I-t gov' t target for renewable energy 2. Manufacturing gov' t incentives 3. Stability of public policy for renewable power generation |
| 3 Least Important Criteria in Location Decision | <ol style="list-style-type: none"> 13. Investment / tax subsidies 14. Availability of engineering and construction expertise 15. Proximity to equipment manufacturers / suppliers | <ol style="list-style-type: none"> 15. Availability of engineering and construction expertise 16. Net metering 17. Proximity to equipment manufacturers / suppliers | <ol style="list-style-type: none"> 16. Cost of electricity 17. Proximity to research centres / universities 18. Prior experience in jurisdiction |

Does it matter?

Investment in renewable energy capacity has significantly lagged government targets



Reactions to policy risk

- 1. Lower investment levels and jurisdictional priority for Ontario**
 - Ontario is a “U.S. Production Tax Credit hedge”
 - U.S. independent power producer
- 2. Higher renewable energy project bid prices**
 - “For the first time in RES III, we’ve had to price in these risks...It’s very back of the envelope but it’s definitely priced”
 - Canadian independent power producer
- 3. Lobbying and government relations**
 - “Their [developers] futures will depend increasingly on political influence rather than business acumen”
 - Senior government official

Summary so far

- Governance structures permit short-term flexibility in provincial electricity policies
- The lack of long-term stability is a significant problem for the sector's performance

Some ideas for reform

- Creating a stable policy framework requires reform of governance structures – i.e. *how* policies are made, and by *whom*
- Insulating policy-making from short term political pressures will improve longer term stability and credibility

Some ideas for reform

- Broad industry stakeholder survey conducted in Fall 2010 identified several reform priorities
 1. “The principle of independence of agency decision-making should be formally stated in legislation.”

(93% respondents rated as High Importance)

Some ideas for reform

2. “Major policy objectives should be specified in legislation rather than in directives” (72%)
3. “Agency board members should be appointed for fixed, five year terms, with renewal limited to one additional term of five years” (72%)

Benefits of governance reform

- Reducing policy risk will enable governments to attract more private sector investment and *at lower cost* to consumers and taxpayers
- Stakeholder support possible from industry *and* consumers