

Towards sustainable automobility? Green industrial policy in Ontario and Michigan



'Traditional' Industrial Policy vs. Green Industrial Policy

Traditional Industrial Policy

- economic competitiveness/growth, job creation/retention
- address market failures
- French, German, Matrix styles
- High-road vs. low-road strategies
- Many recipes

Green Industrial Policy

- encourage development and adoption of sustainable innovations
- Address environmental externalities
- Innovation + environmental policy
- overcome technological and carbon lock-in
- System-wide restructuring
- Many recipes

What are key measures of green industrial policy?

- translation of technologies from experiments to mainstream;
- cost-reduction targets;
- cluster development and spill-over effects;
- flexibility of policy for niche development outside of traditional sectoral actors;
- policy rent management strategies;
- education/training high skilled workforce; just transition for workers in phoenix and sunset industries;
- integration into a coordinated and strategic plan for climate change and system-wide transition

A new partnership: Michigan and Ontario



How does Ontario's green industrial policy 'recipe' differ from Michigan's GIIP recipe? How much green industrial policy is in their policy mixes, and what are the goals?

Sample of Ontario and Michigan policies targeting sustainable technologies in the auto industry and/or the car-based transport regime, 2003-2016

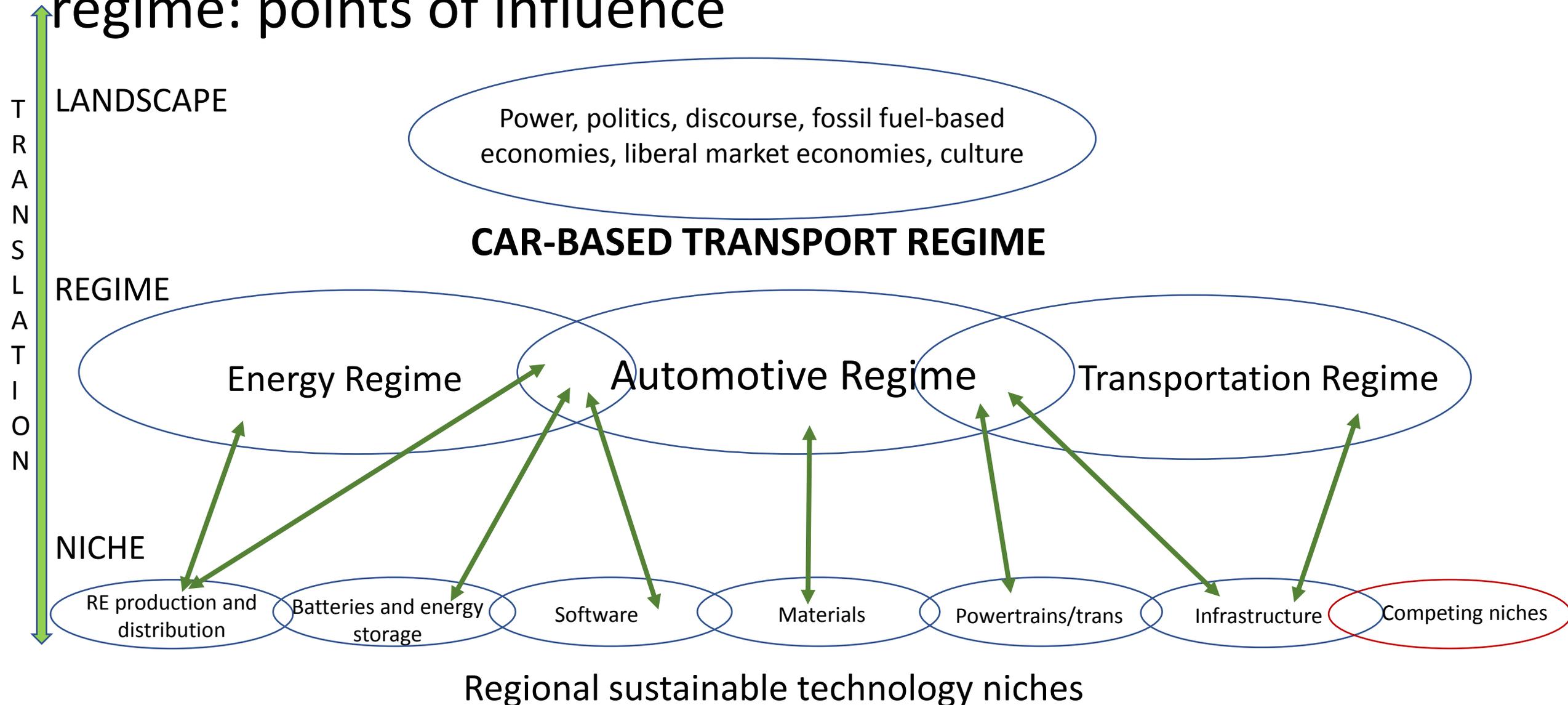
Michigan

- 21st Century Jobs Fund, 2005-2019 (\$2B)
- Michigan Strategic Fund
- Michigan Incentives Package, 2004 (\$43M)
- Michigan Battery Incentives, 2008 (\$280M to Detroit 3)
- MEGA Tax Credits, 2009 (\$2.45B)
- Advanced Battery Tax Credits, 2008 (\$700M)
- U of M Center for Excellence (batteries)
- Anchor Zones Tax Credits, 2008
- Green Jobs Initiative, 2009 (\$6M)
- Public Act 292: Incentives for jobs in batteries, 2011
- Clean Renewable and Efficient Energy Act, 2008

Ontario

- Auto Investment Strategy, 2004-9 (\$500M)
- Next Generation of Jobs Fund, 2009-14 (\$1.15B)
- Emerging Technologies Fund (\$250M)
- Auto 21 Centres of Excellence (\$151M)
- Smart Grid Fund, 2011 (\$50M)
- EV incentive program (up to \$13K/vehicle)
- Jobs and Prosperity Fund, 2015-16 (\$2.5B)
- Business Growth Initiative, 2016 (\$400M)
- Climate Change Strategy, 2016 (\$7B)
- Green Investment Fund, 2015 (\$325M)
- Climate Change Mitigation and Low Carbon Economy Act, 2016

Green industrial policy and the car-based transport regime: points of influence



Michigan

- pursued economic diversification strategies including renewable energy
- auto support focused on industry not wider landscape conditions
- funding packages for greening auto and energy funded by the ARRA
- tying job creation/retention to tax credits has not minimized policy rents, eg. MEGA tax credit program



Michigan

- most programs emphasize economic growth/competitiveness, job creation/retention, and cluster development
- ‘picked’ batteries to be the winner in sustainable auto innovation
- minimal evidence of linking environmental policy to innovation policy – no significant evidence of a green industrial policy



Ontario

- used a wider range of policy instruments than Michigan
- policies that target ‘innovation’ in automotive make job creation an explicit goal
- policies target innovation in sustainable technologies across sectors do not prioritize immediate job creation – except for the GEA



Ontario

- introduced policies to adapt car-based transport regime
- policies to encourage 'disruptive technologies' (technology-focused) and policies to manage the long-term disruption of energy and transportation (transition-focused)
- disruption of auto industry is inevitable – green industrial policy a strategy in part for managed disruption in Ontario
- environmental goals linked to innovation policies more explicitly than Michigan – green industrial policy



What does this suggest?

- auto investment priority in both, but diverge on adapting car-based transport regime
- neither strategy is bad – goals appear to be different
- automotive investment is one piece in a long-game plan off fossil fuel industries in Ontario
- management strategy important for green industrial policy rents
- Investing in auto sector to ensure short-term economic competitiveness and job retention are good reasons, but they may not be sufficient reasons

“We didn’t do it for the goodness of sustainability where we say ‘let’s buy a bunch of solar panels and wind turbines from *anywhere but here*’. Screw that. That dog wasn’t gonna hunt. So that’s why we had a policy that we said we will lead and we will benefit from that leadership. And I think *over time* we will”

-former Minister of Energy and Infrastructure George Smitherman on jobs, the local content requirement, and the feed-in-tariff, September 4, 2014

In what ways can an Ontario strategy for *local*, skilled jobs be integrated into green industrial policies – ‘the long game’ – targeting other sectors like auto?

END

NOTE: THE SLIDES THAT FOLLOW ARE AVAILABLE FOR QUESTIONS IF NEEDED