## **Comments on**

General Equilibrium Rebound from Energy Efficiency Policies by Derek Lemoine

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## Main Point

- Impact of energy policy (tax):
  - Engineering approach: increases energy efficiency and reduces energy use
  - Rebounds effect with economic approach:
    - Demand side effect or partial equilibrium: increase use of more efficient products (cars, lights,...)
    - ✓ Supply effect or general equilibrium: reduces the price of energy
- Analytical analysis with a simple general equilibrium model with
  - Limited labour supply
  - Increasing extraction cost of energy
- Main findings: always rebound effect and sometime backfire effect (more than 100% rebound)



## Comment

- Why choose a tax and not a standard on energy efficiency as a first approach?
- Reduced forms commented without being derived in the text: many of the implicit equilibrium solutions are hidden in the appendix but could be useful to understand the reduced forms and economic channels
- What are the main assumptions that drive the result and differ from other general equilibrium models?



- Welfare impact? Level of tax given the rebound effect?
- Negative rebound or "super-conservation" might occur with "behavioral consumers" who value environmental damage but were not aware of it before the tax



