

Economics of Energy Demand Reduction

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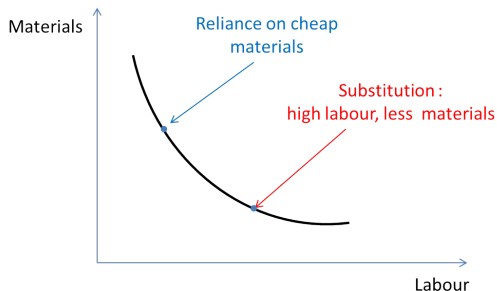
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Economics and Demand Reduction

Role of economics: framework for understanding policies

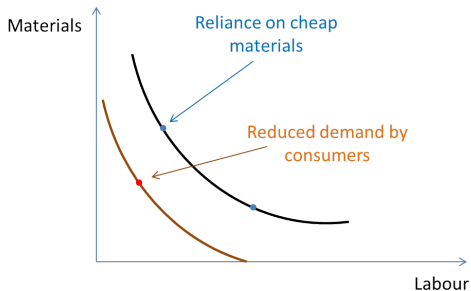
- Economics of reducing energy demand
 - ▶ Changing inputs in production: input substitution
 - ▶ Reducing consumer demand for goods: consumer shifting
 - ▶ Preferences or prices
- Policy Objectives: GDP, Well-being

Demand Reduction: Input Substitution



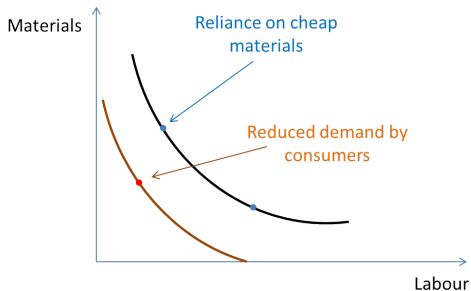
- **Principle of targetting:** directly change demand for energy by firms
- More costly to produce: less competitive. Outsourcing energy demand

Demand Reduction: Consumer Shifting



- Reduces both labour and materials. Indirect effect

Demand Reduction: Consumer Shifting



- Reduces both labour and materials. Indirect effect
- Desire for consumer shifting: **paternalism** vs **price of energy**.

Demand Reduction: Consumer Shifting

- Is the analogy **smoking**? or **congestion charge**?



Demand reduction and GDP

- Do GDP measures capture well being?
- No ...
- But does that matter?

Demand reduction and GDP

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- Problem with GDP: policy is based on GDP

Demand reduction and GDP

- Key issue: not that individuals are “maximising their consumption”
- Problem with GDP: policy is based on GDP
 - ▶ Part of benefit of supply-side innovation captured in GDP
 - ▶ **Costs** of demand reduction captured in GDP
 - ▶ How to evaluate **benefits** of demand reduction?