

Mode choice in urban transport, fuel use and emissions

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Outline

- 1. Without new mobility patterns transport is unlikely to decarbonize**
- 2. Investment alone is unlikely to contain the surge into individual mobility**
- 3. Comprehensive change is obtained if a broad reform agenda conveys social costs**
- 4. The historical record shows that countries have a choice**

Without new mobility patterns transport is unlikely to decarbonize

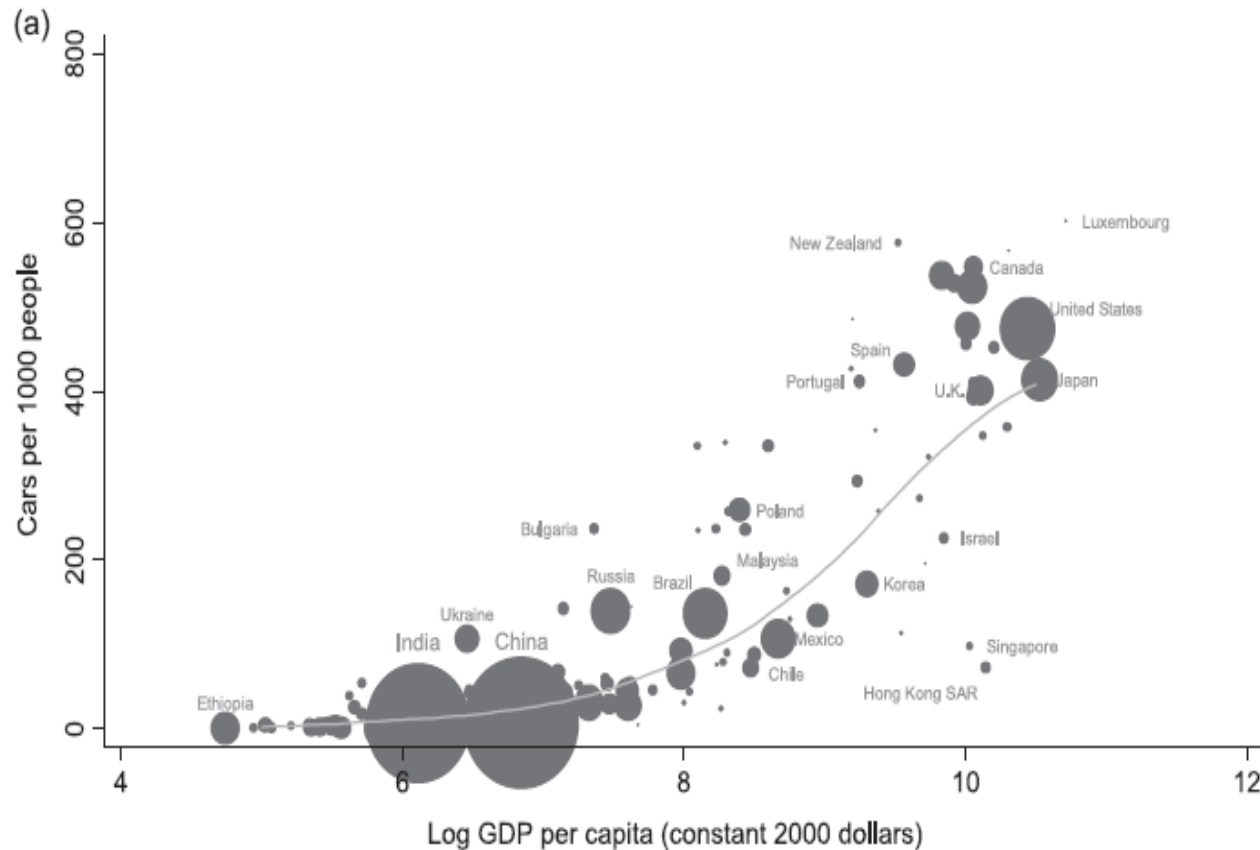
- Comparison of flagship scenarios IEA and DoE

Cutting energy-related emissions in half by 2050

Predicted Percentage to Be Removed by Sector			
Sector	World Energy Outlook	MiniCam (DoE)	
Power	-71	-87	
Building	-41	-50	
Transport	-30	47	
Industry	-21	-71	
Total	-50	-50	

Investment alone is unlikely to contain the surge into individual mobility

Motorization trend increases exponentially with development



Comprehensive change is obtained if a broad reform agenda conveys social costs

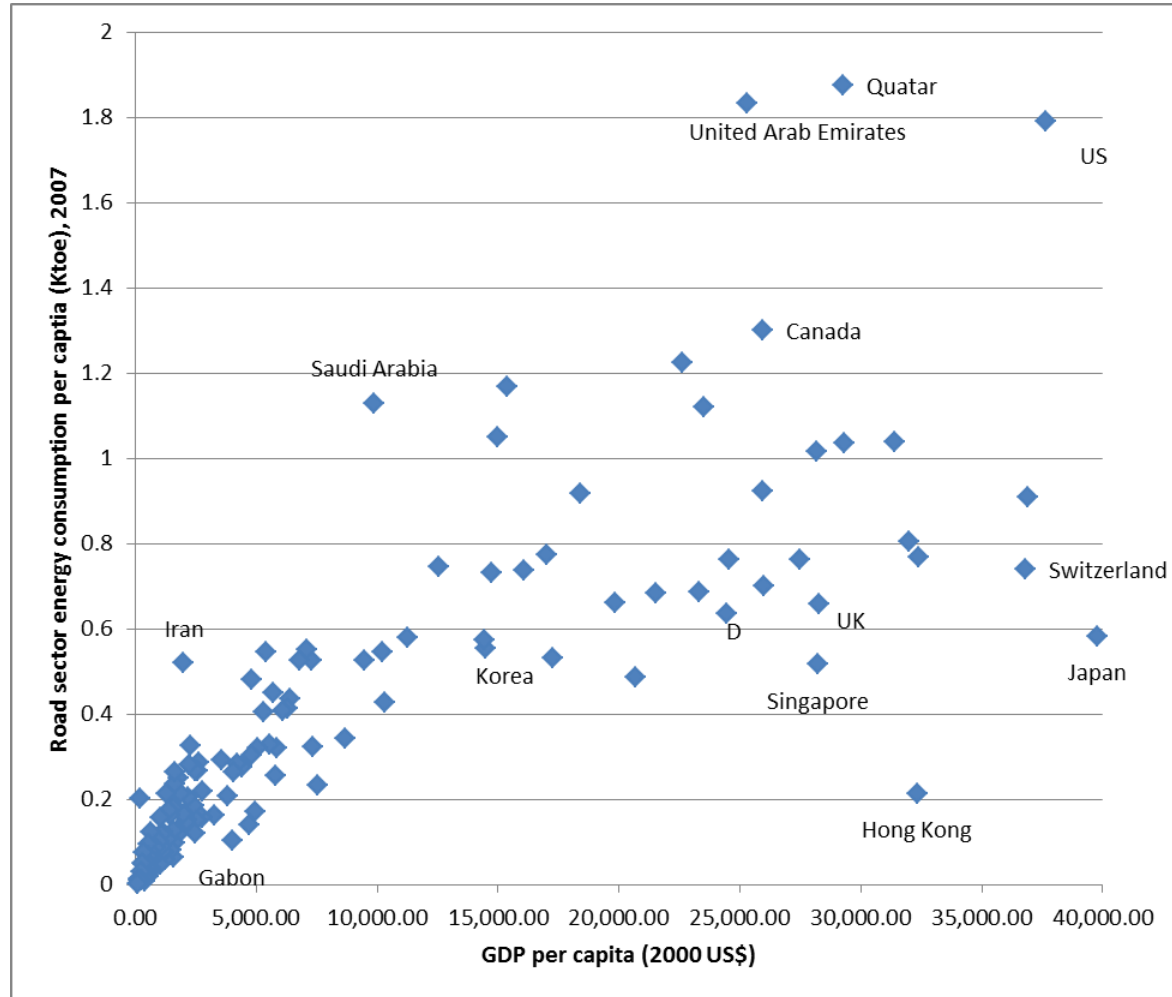
Summary of External Costs in Transport, Washington Example

Marginal external costs

<i>Fuel-related costs</i>	cents/gallon	cents/mile
Greenhouse warming	6	0.3
Oil dependency	12	0.6
<i>Distance-related costs</i>		
Local pollution	42	2
Congestion	105	5
Accidents	63	3

Source: Parry et al. 2007 (RFF)

The historical record shows that countries have a choice: High shares of mass transit (and rail) determine EE





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Thank you!