Barriers and solutions to the roll out of urban and regional rail in rapidly urbanizing developing countries

Shifting to more efficient public transport and increasing energy efficiency of vehicles

Nick Craven
craven@uic.org
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Rail is the most emissions efficient major mode of transport
UIC low carbon rail transport challenge

Energy & Carbon Targets

Energy / Carbon per TU (%) re 1990

- 50%
- 60%
- 75%

Energy Consumption
Carbon emission

1990 2010 2030 2050
Modal shift

- Passenger land transport modal share (passenger-km):
  + 50% by 2030 (relative to a 2010 baseline)
  + 100% by 2050 (relative to a 2010 baseline)

- Freight land transport:
  equal modal share with road by 2030
  +50% greater than the road modal share by 2050
## Urban Rail in developing countries

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