

Mitigation Potential towards achieving global 2°C Stabilization Target: Assessment for India

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COP19 Side-event Organized by: Low Carbon Asia Research Network (LoCARNet) , IGES and NIES

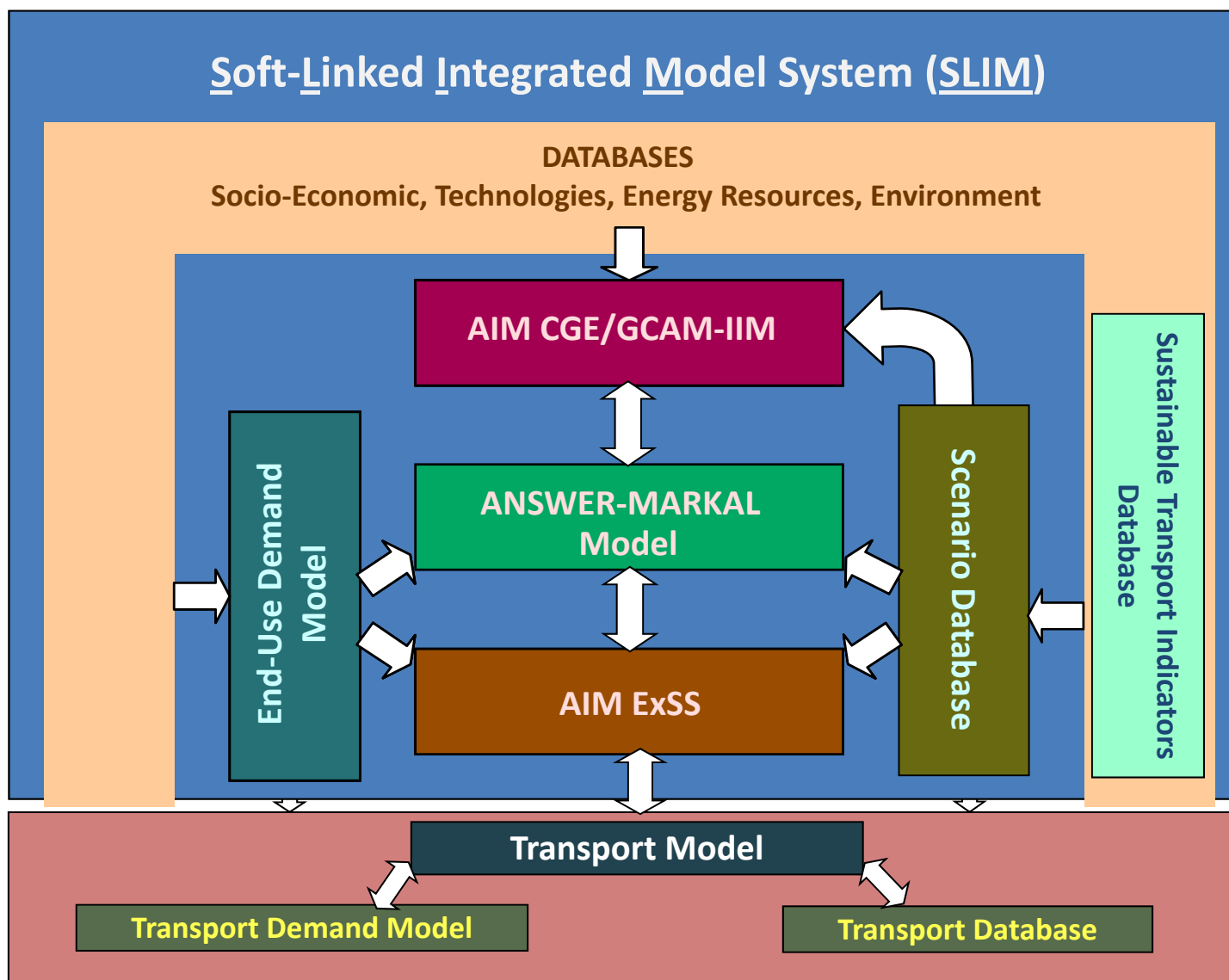
GHG Emissions Reduction Potential in Asia for the Two Degree Target

November 15, 2013 (16:30 to 18:00 hours)

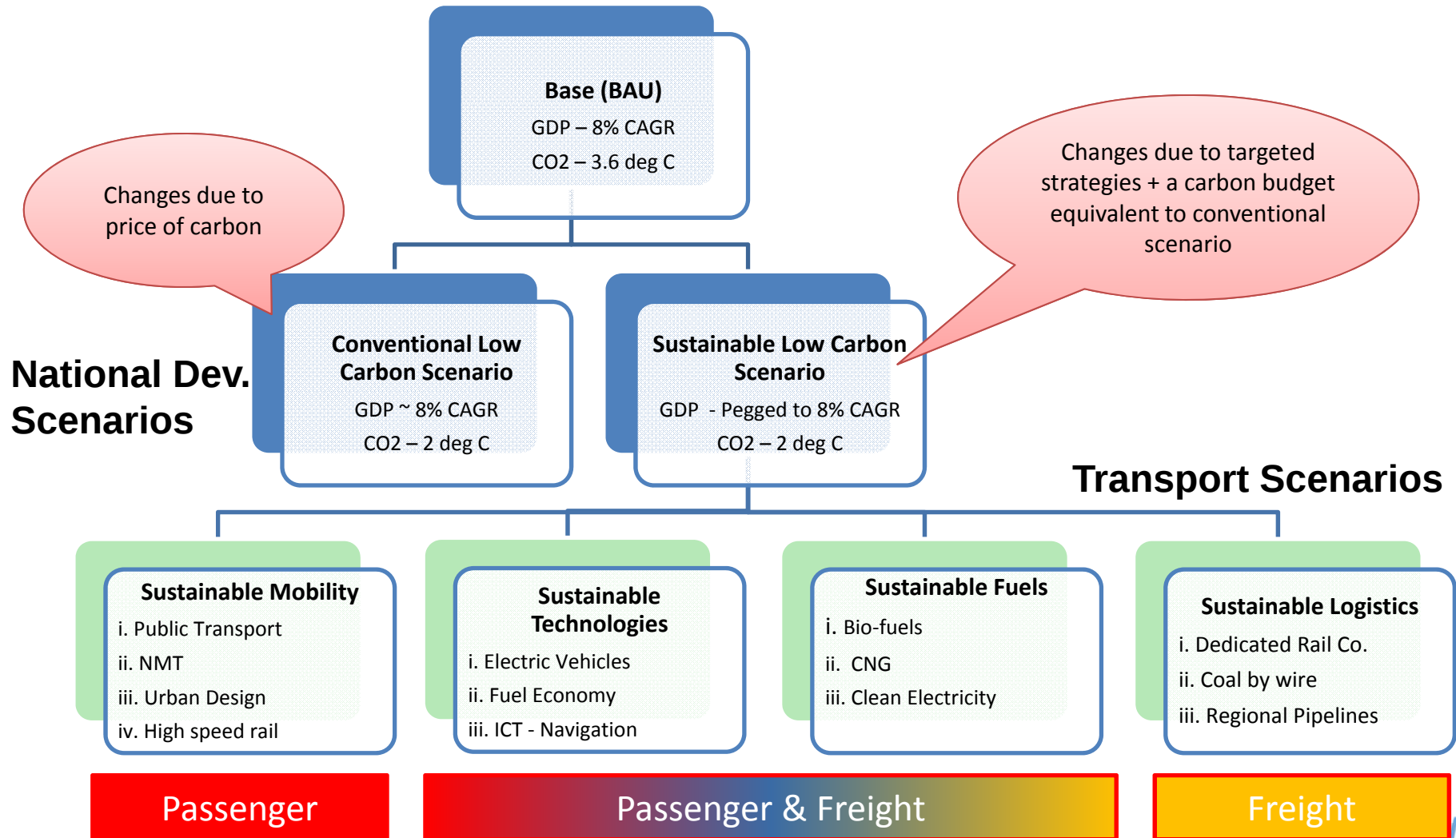
Warsaw, Poland



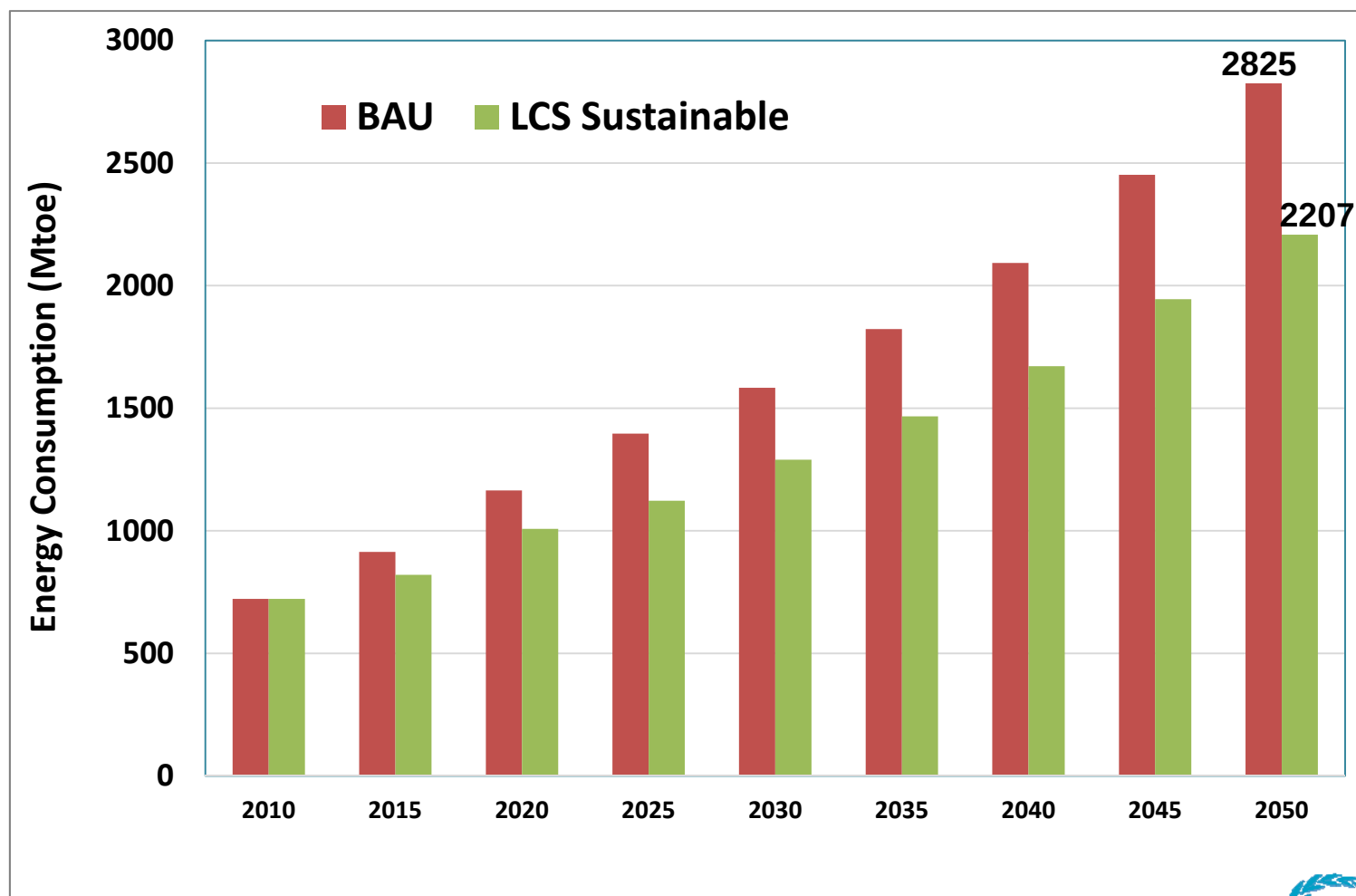
Soft-Linked Integrated Model



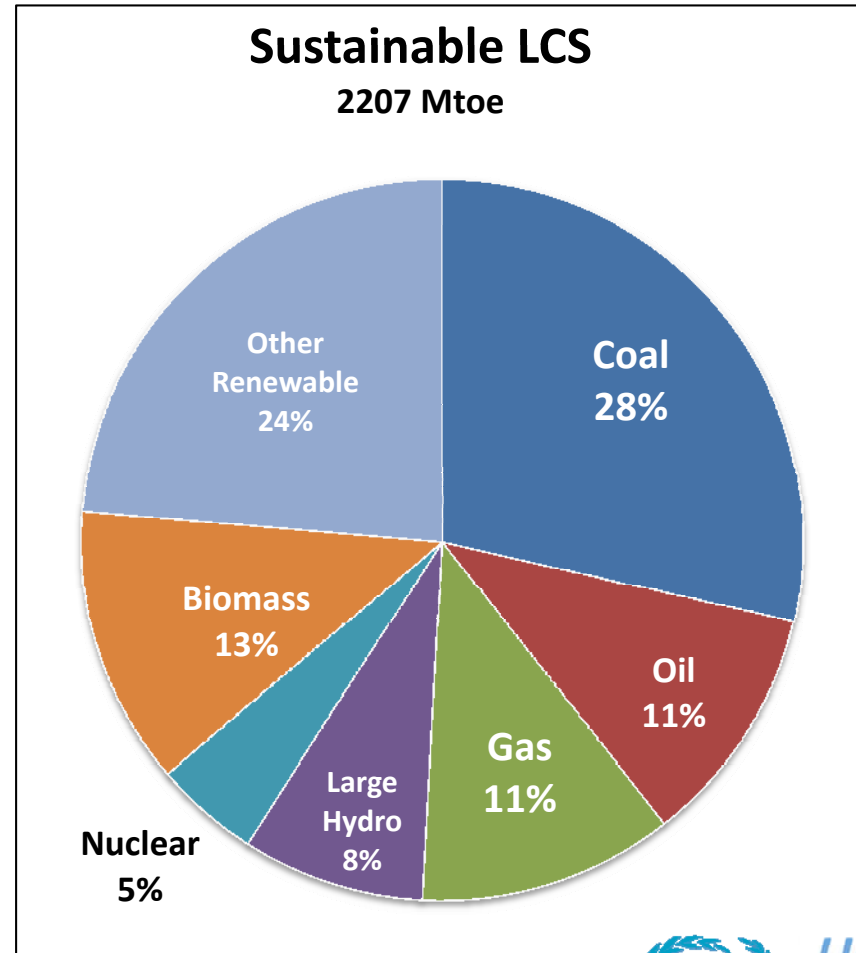
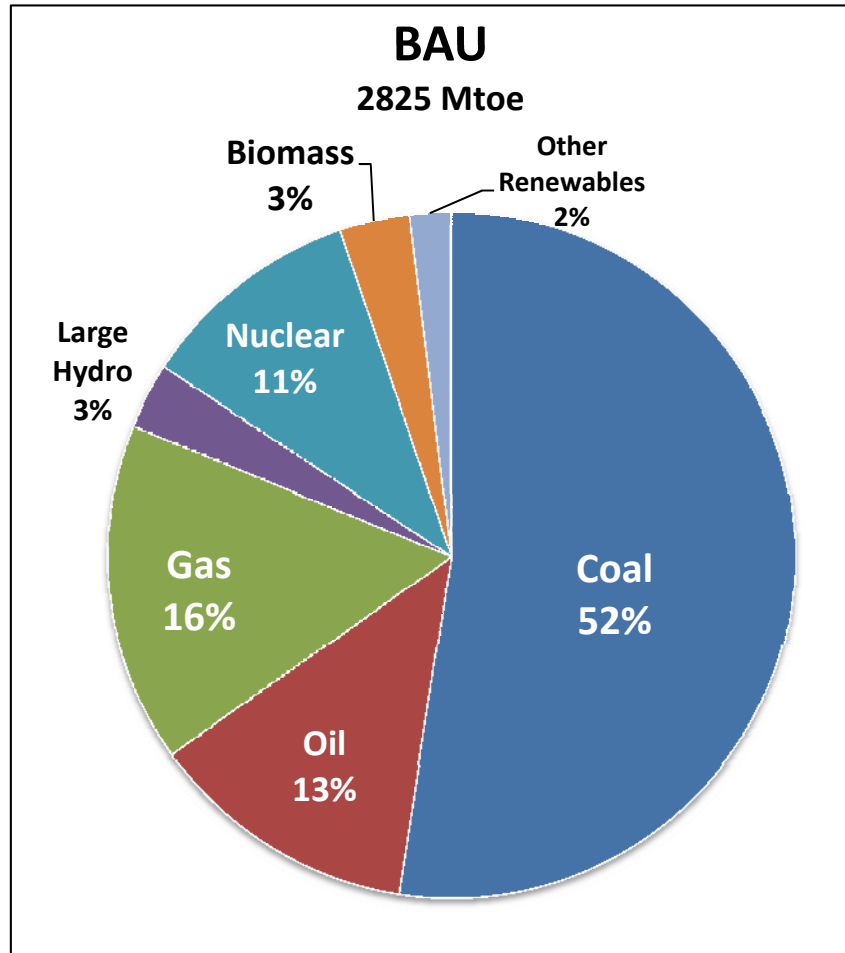
National Development and Transport Scenarios



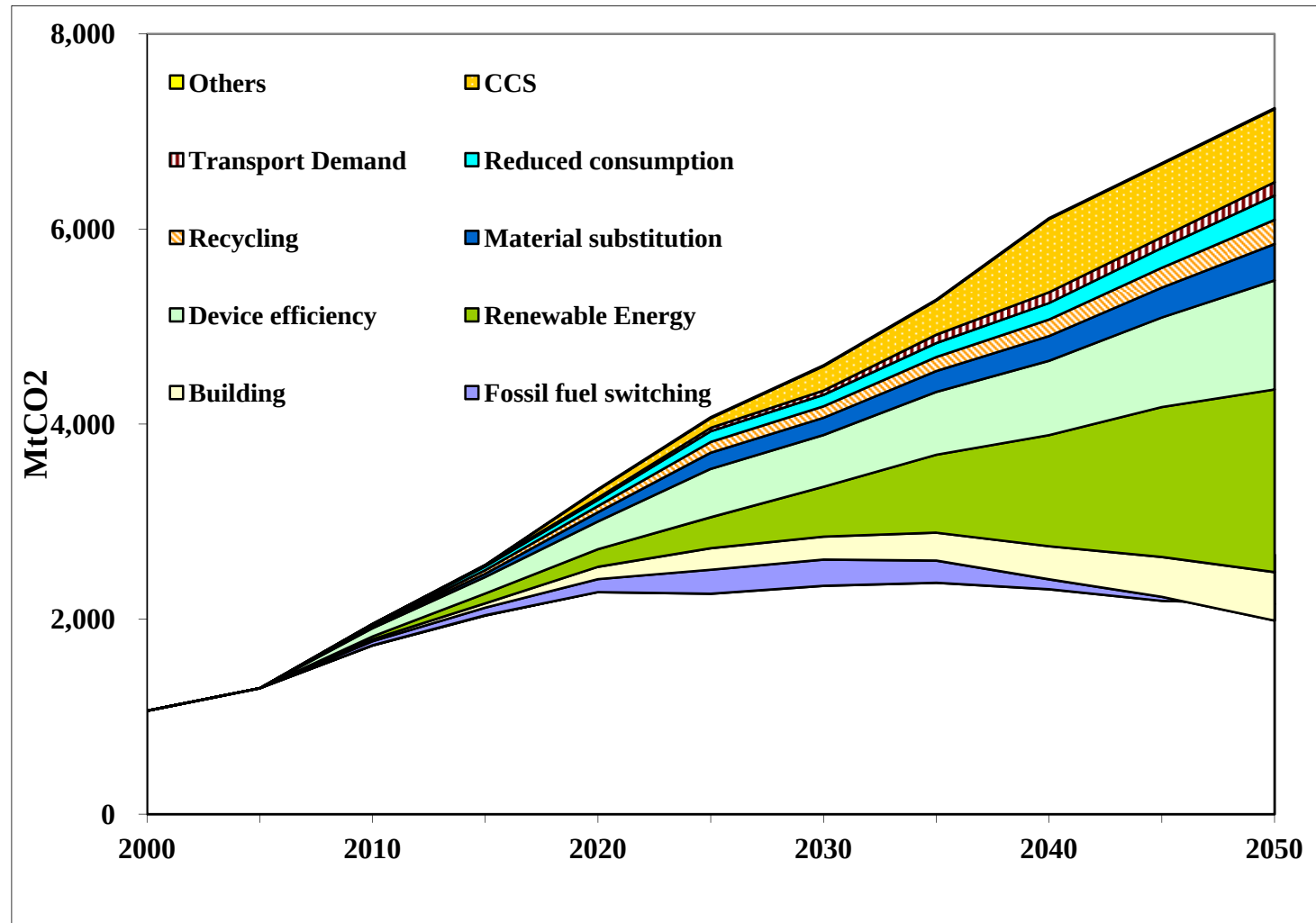
INDIA: Primary Energy



INDIA: Primary Energy Mix (2050)



CO₂ Reduction: Sustainable Low Carbon Scenario



Sustainable Low Carbon Transport: Results of Modeling Assessment



Sustainable Mobility Storyline

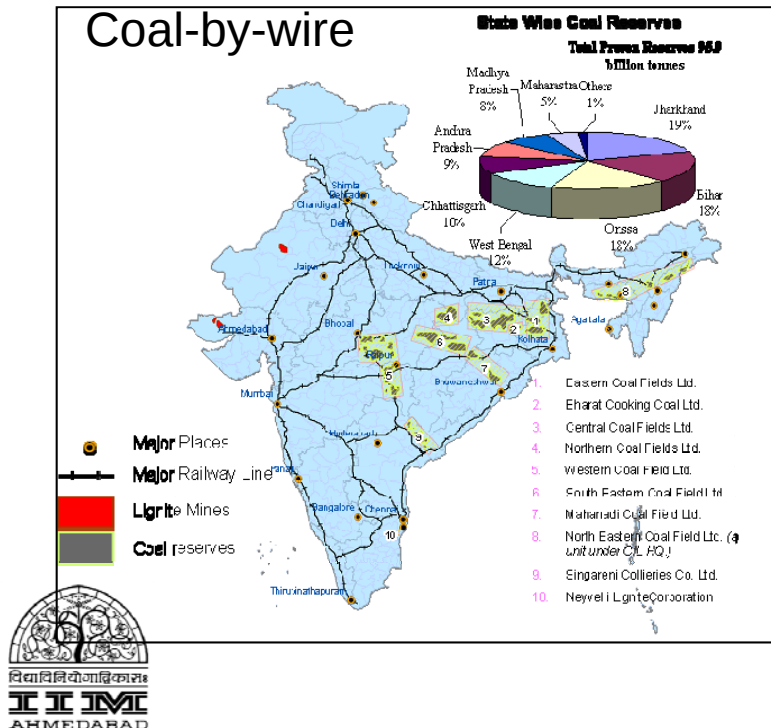
Non-Motorized Transport



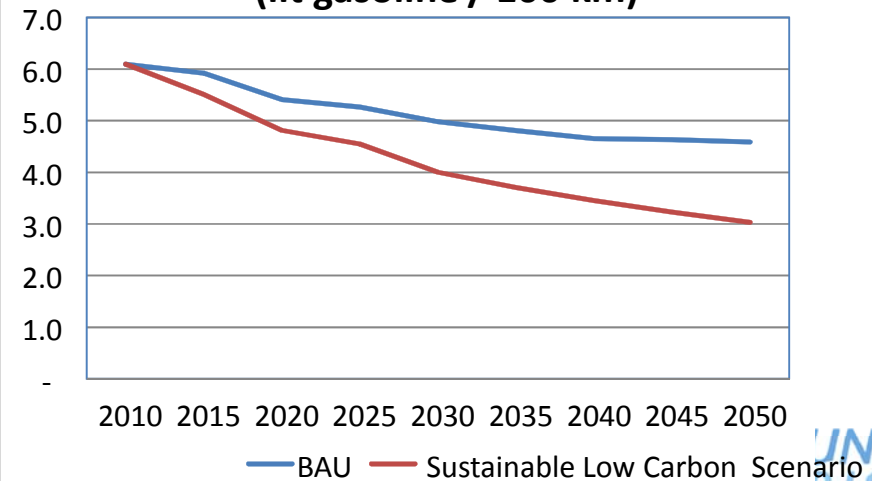
Pipe Transport



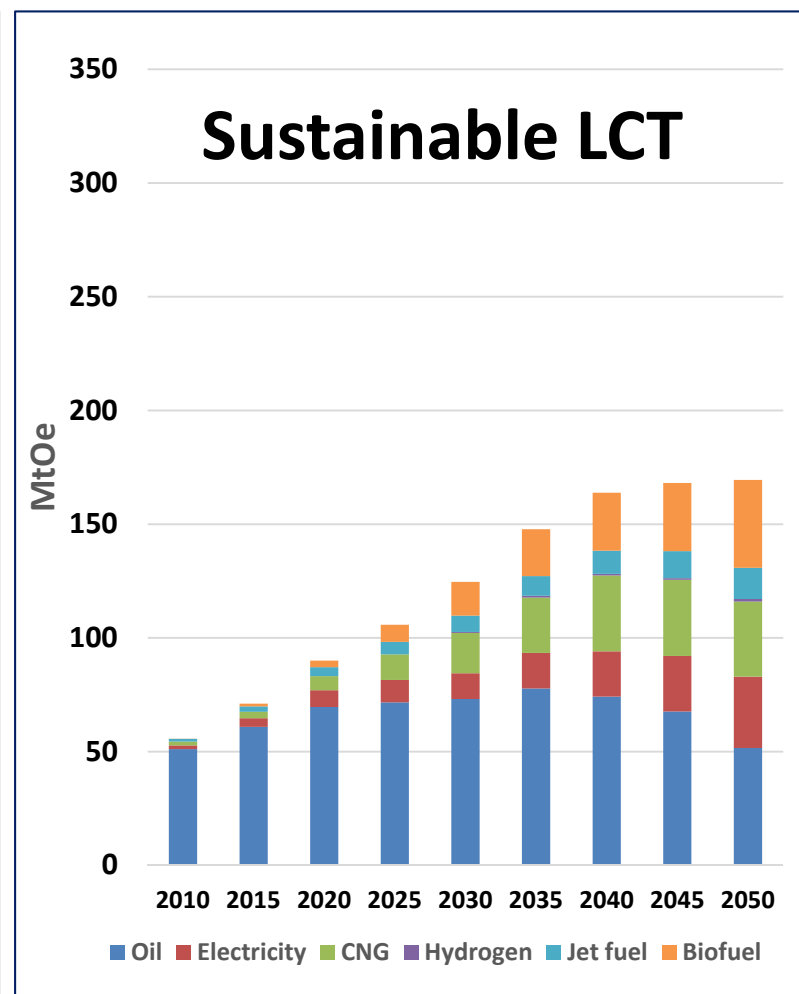
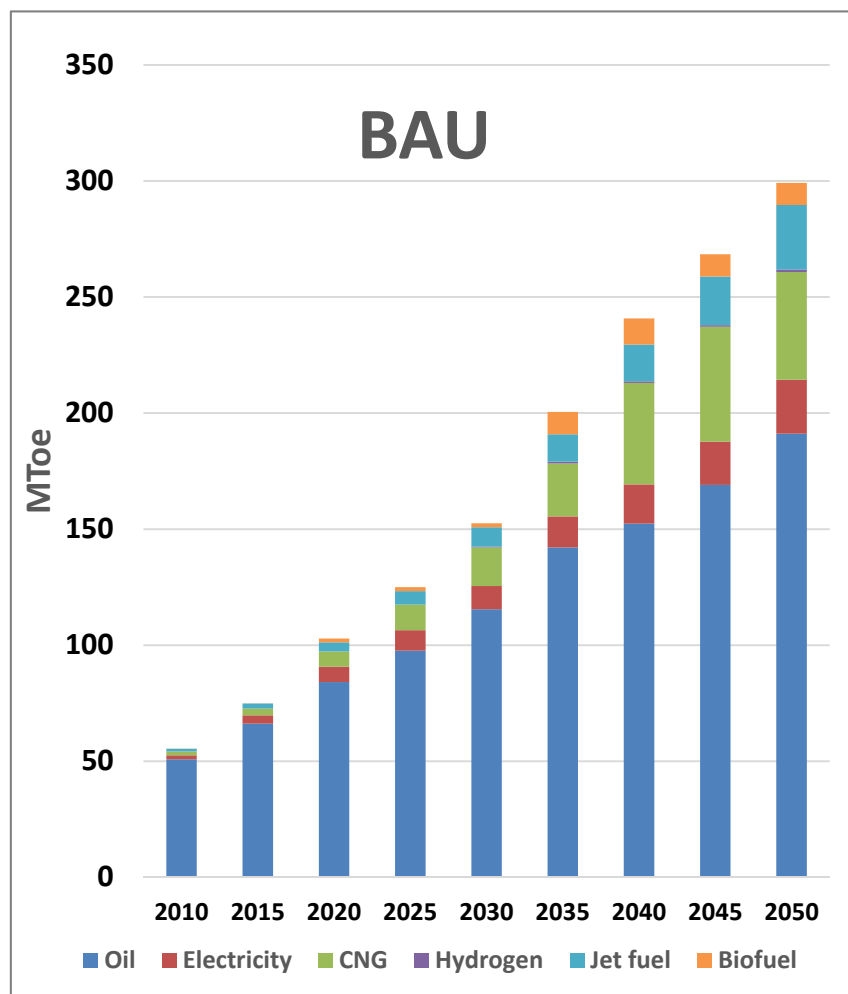
Coal-by-wire



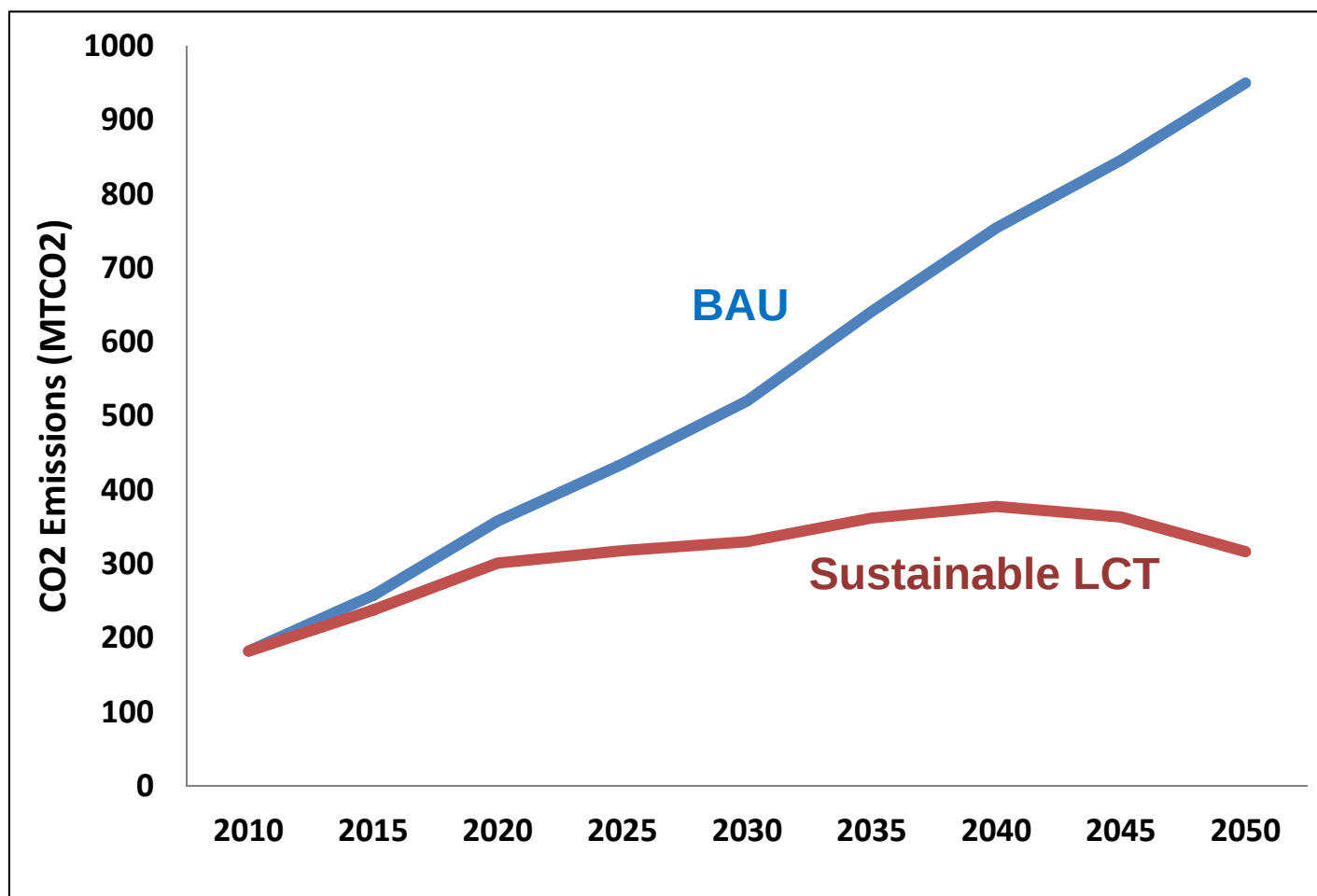
Fuel Economy (Cars) (lit gasoline / 100 km)



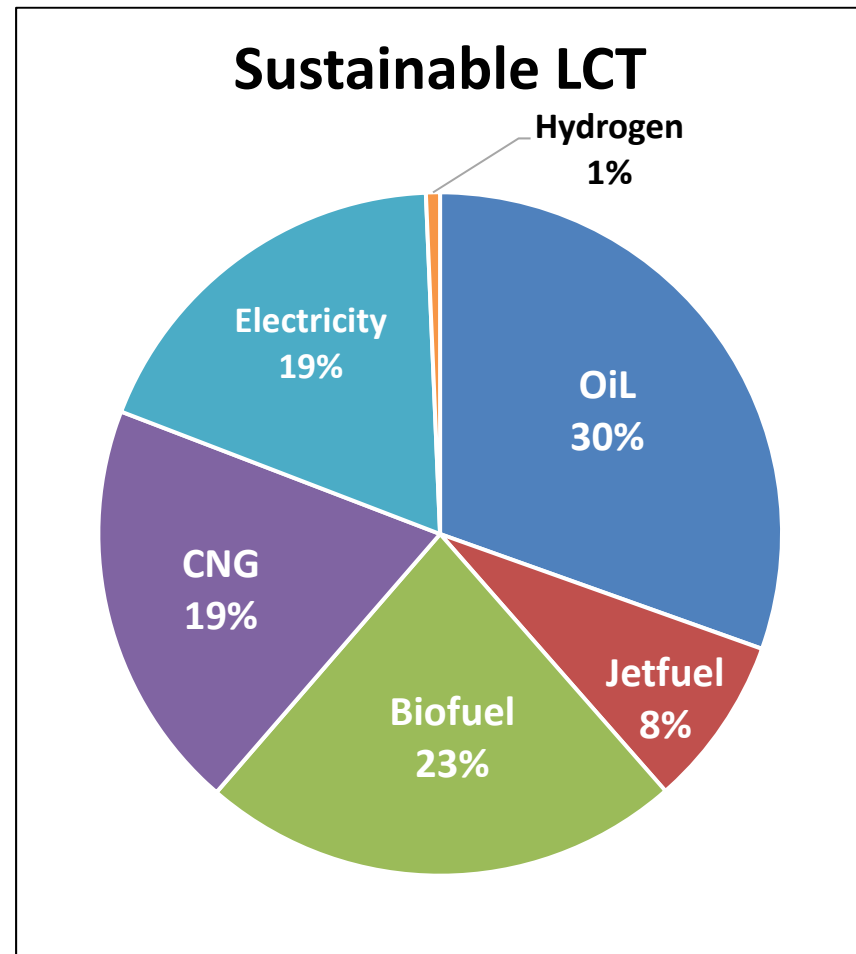
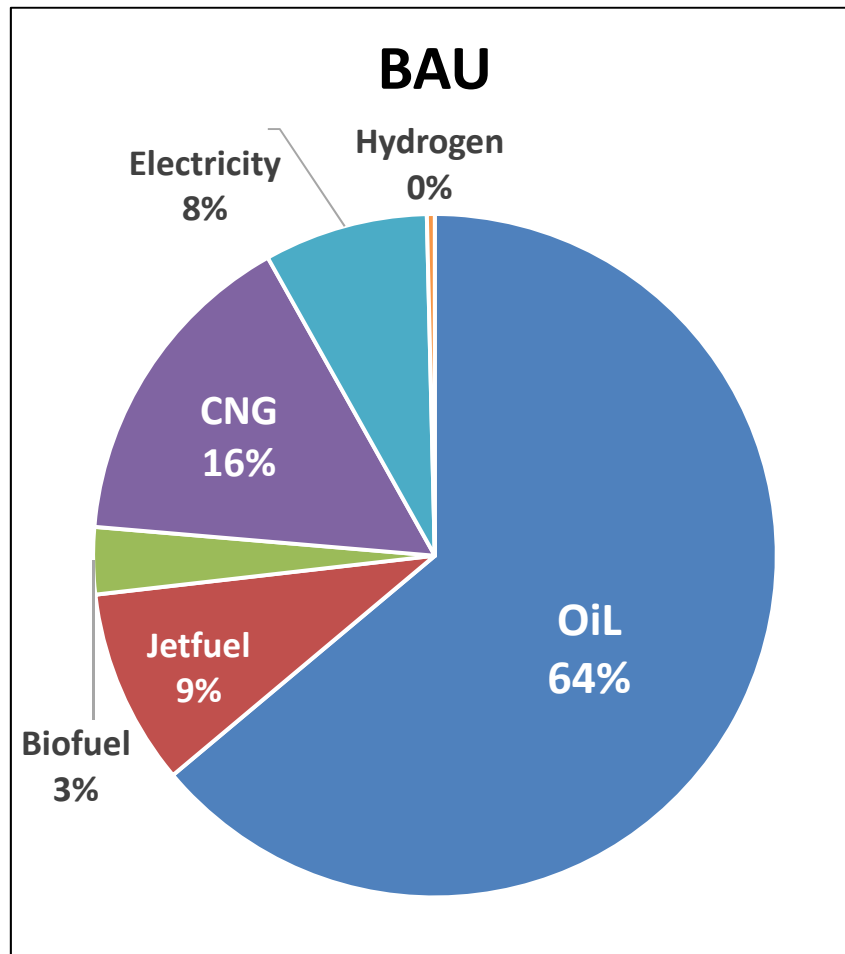
Energy Mix for Transport



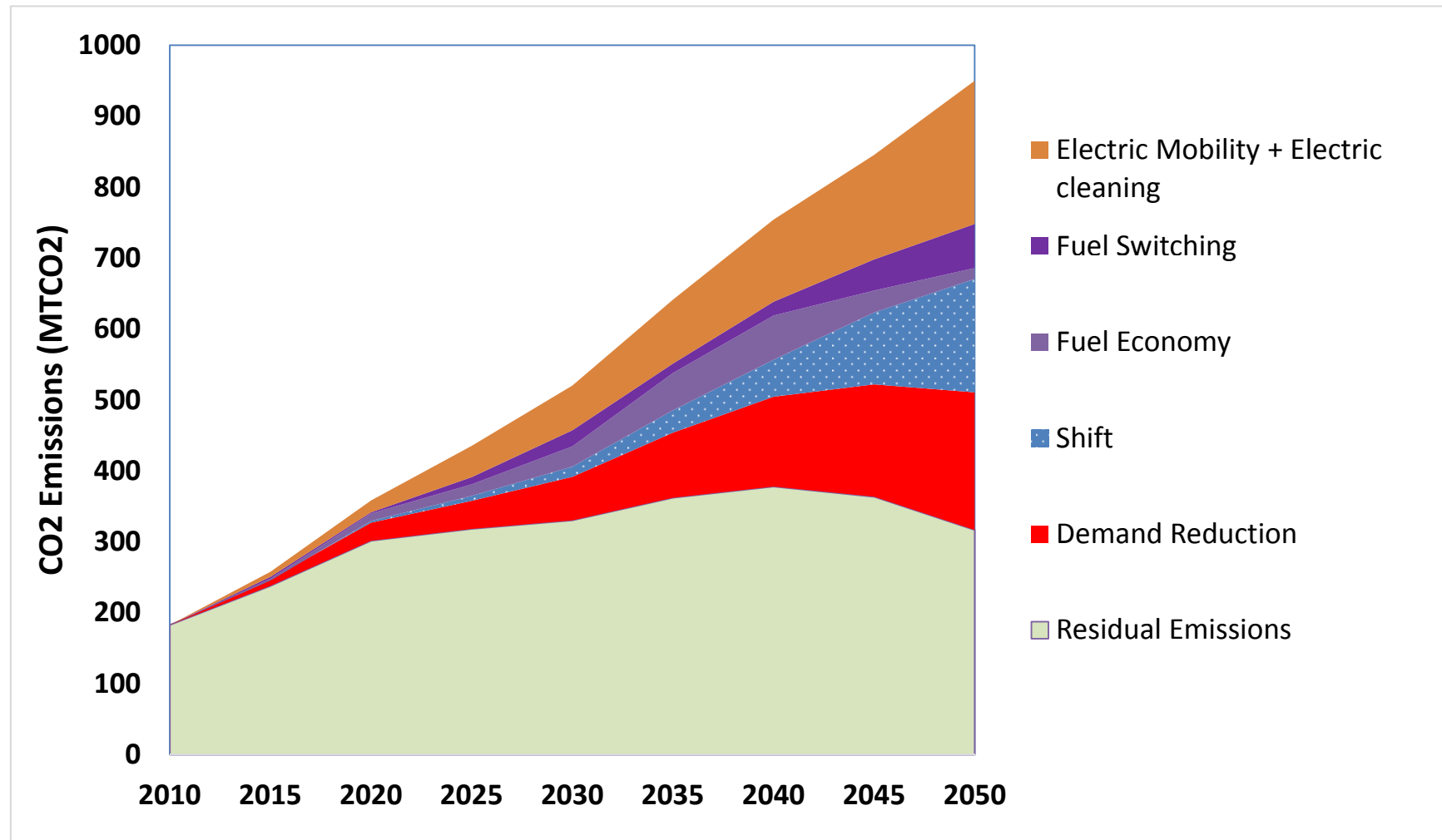
Transport Sector CO₂ Emissions



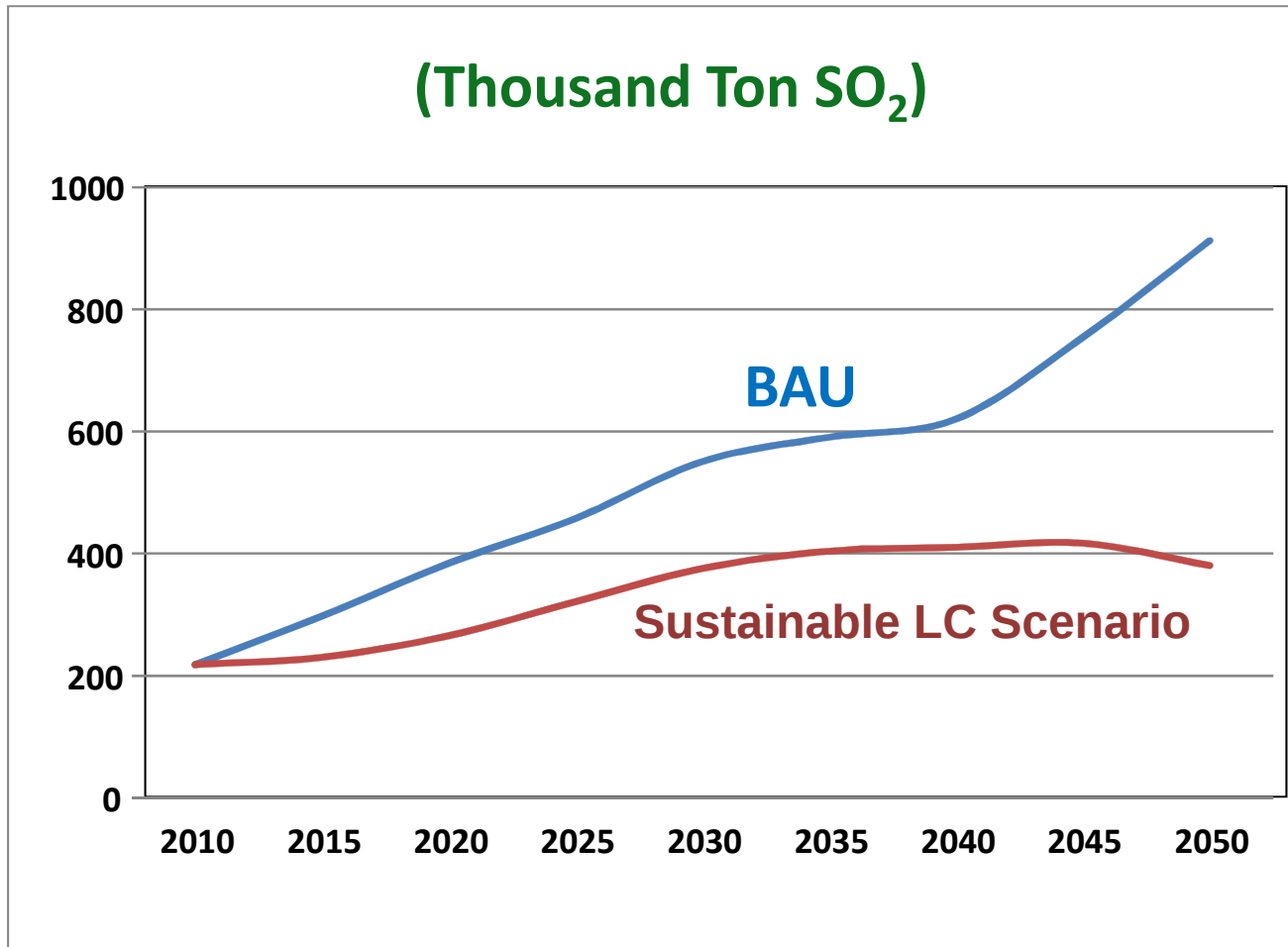
Transport Fuel Mix in 2050



CO₂ Mitigation: Sustainable LCT Scenario



Co-benefits: Improved Air Quality



Conclusions:

2°C Stabilization and Sustainable Development

1. Under Economically efficient 2°C Stabilization regime, India will have less than 2 ton per capita CO₂ emission in 2050
2. Participation in stabilization will cause substantial change in India's energy system and consumption behavior
3. Altered choices would add costs in the short-run and would require technology transfer as well as domestic innovations.
4. Transport sector can deliver sustained emissions cuts if short-run infrastructure choices are made to avoid long-term lock-ins
5. Policies that align CO₂ mitigation and sustainable development can deliver significant co-benefits to off-set the added costs



Thank You

UNEP Project Website: www.unep.org/transport/lowcarbon

AIM Website: www-iam.nies.go.jp/aim/

LoCARNet Website: http://lcs-rnet.org/about_locarnet/

