

# 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**

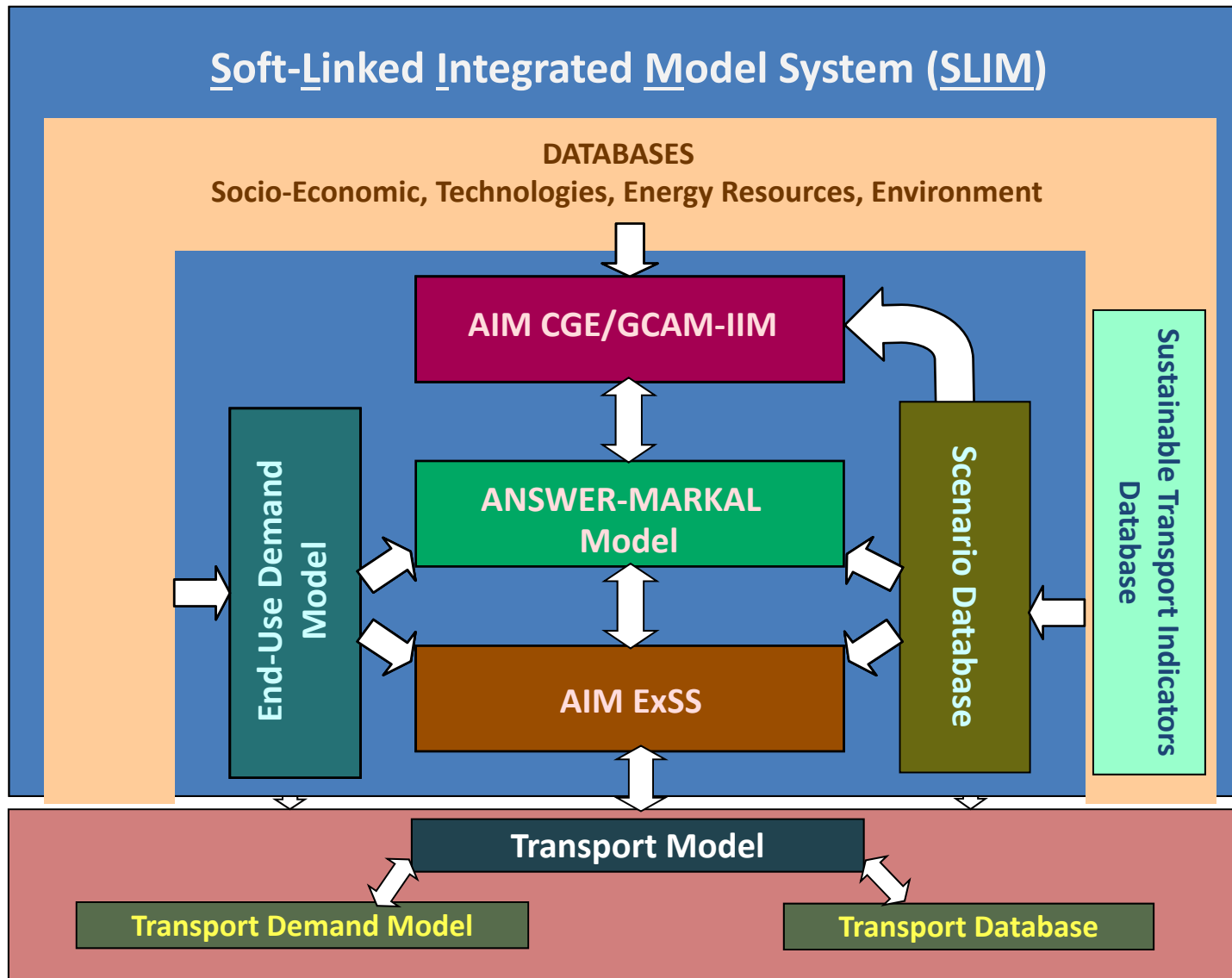
**GHG Emissions Reduction Potential in Asia for the Two Degree Target**

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

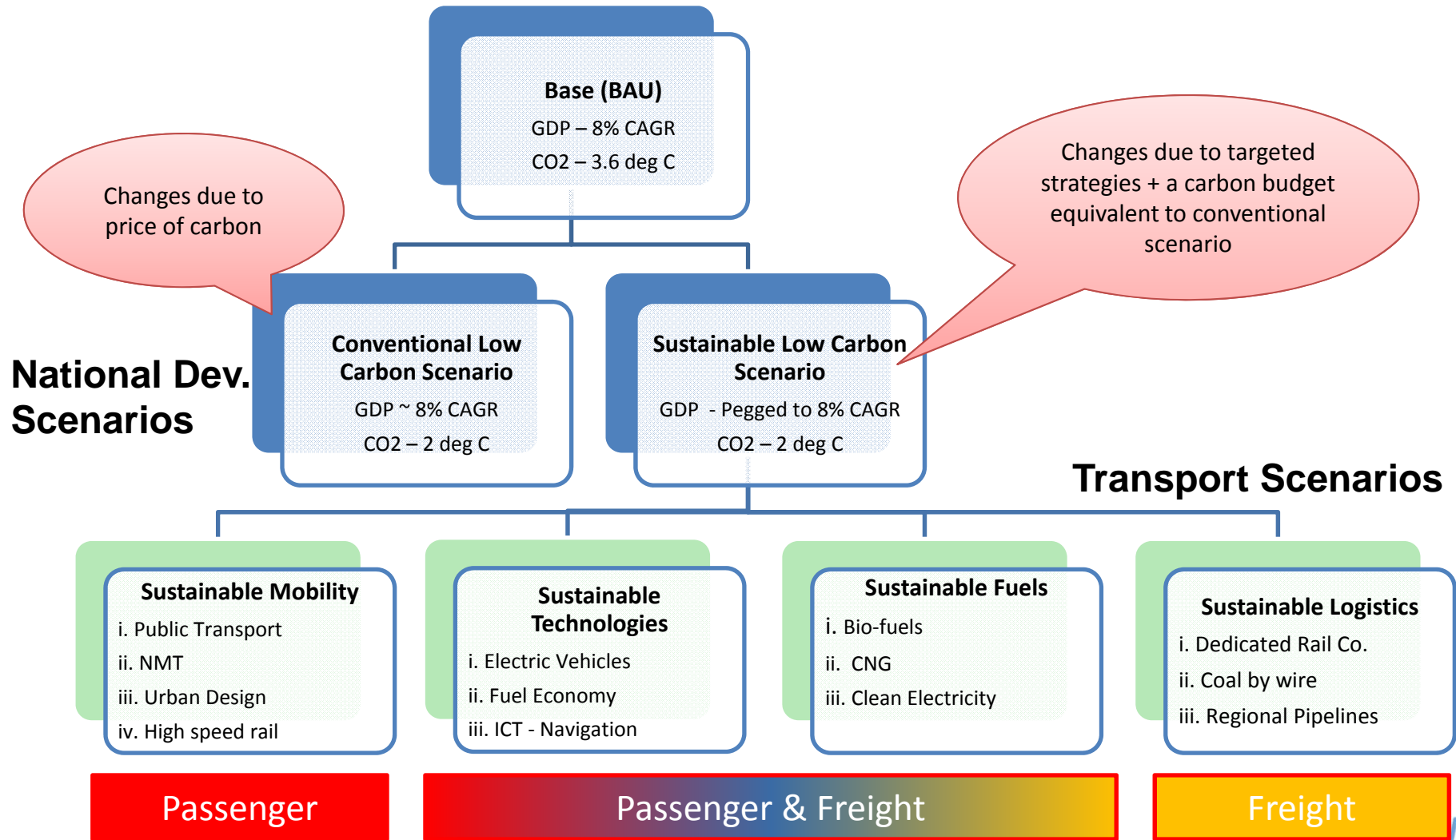
**Warsaw, Poland**



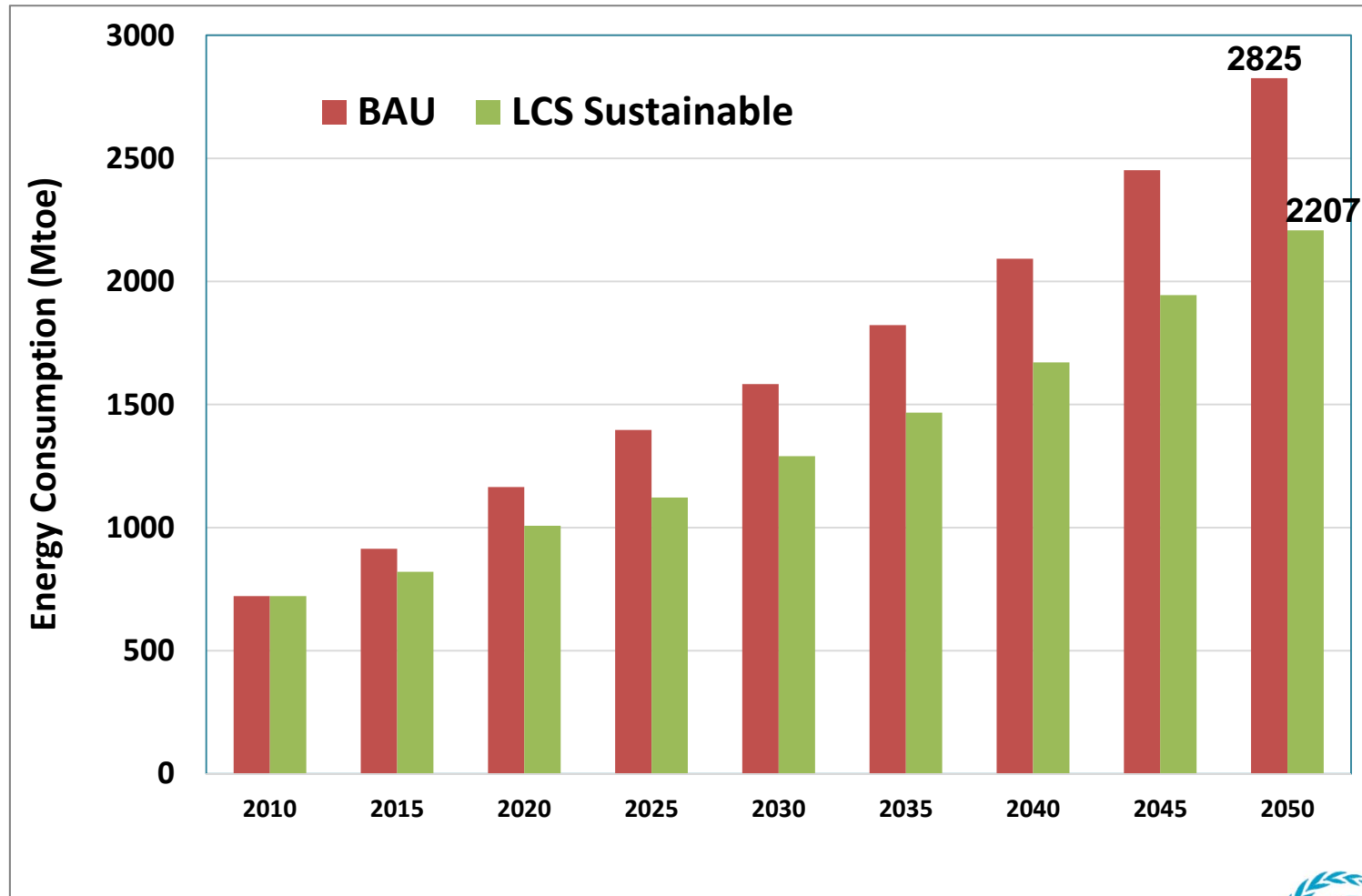
# Soft-Linked Integrated Model



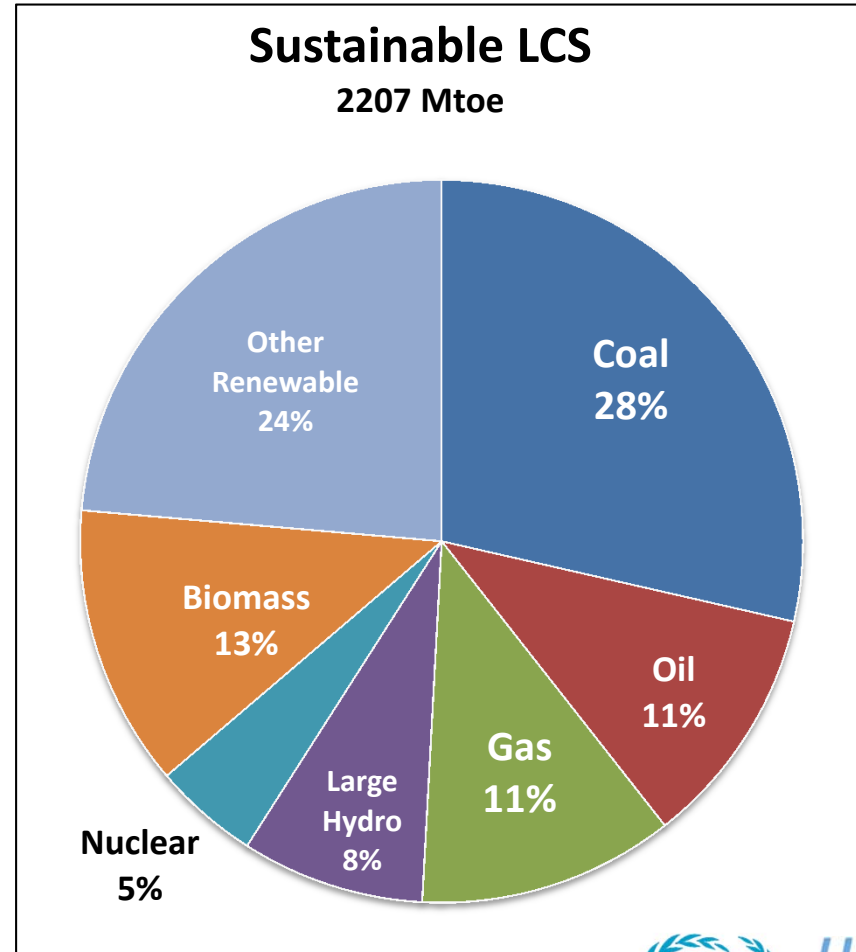
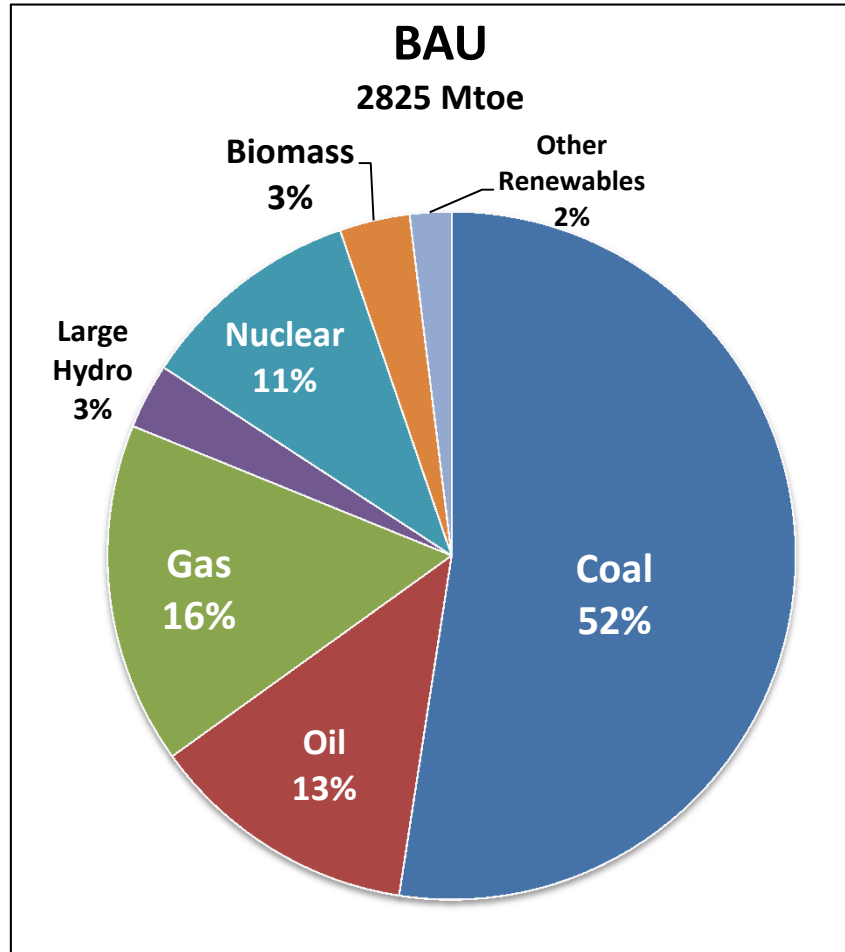
# National Development and Transport Scenarios



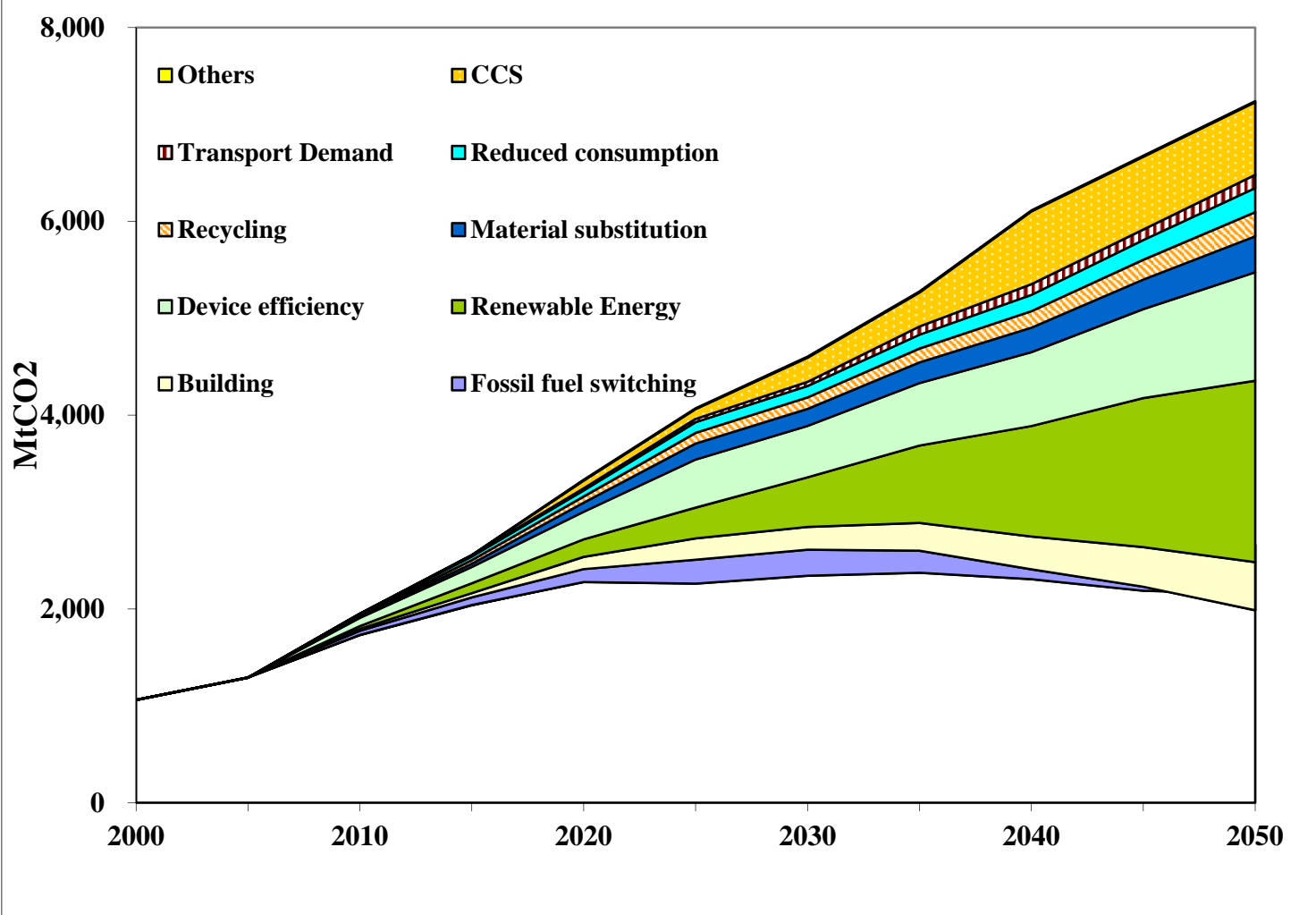
# INDIA: Primary Energy



# INDIA: Primary Energy Mix (2050)



# CO<sub>2</sub> Reduction: Sustainable Low Carbon Scenario



# Sustainable Low Carbon Transport: Results of Modeling Assessment



# Sustainable Mobility Storyline

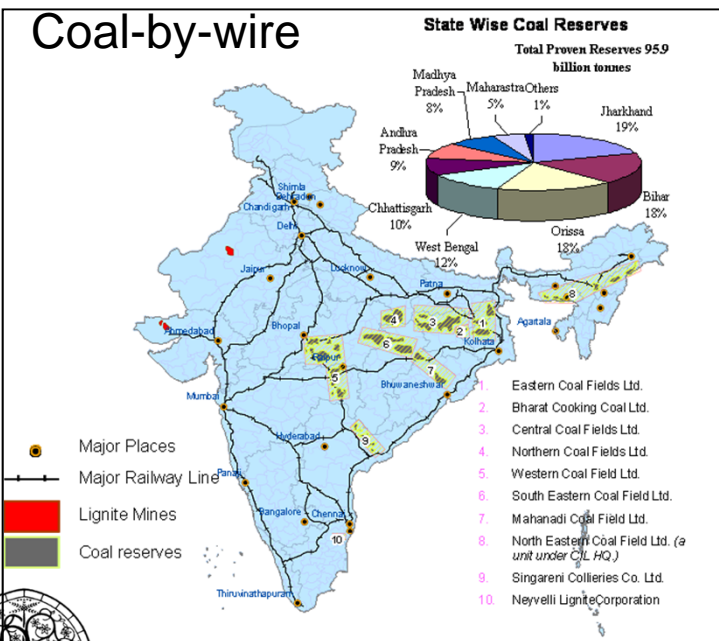
## Non-Motorized Transport



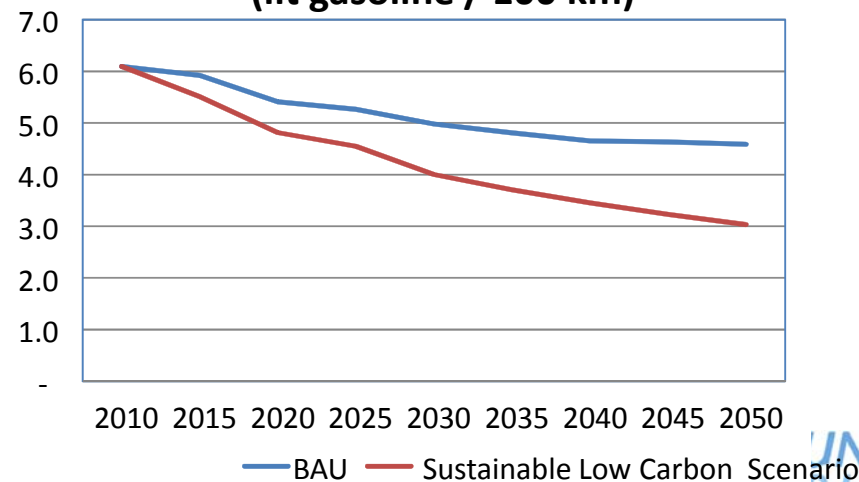
## Pipe Transport



## Coal-by-wire

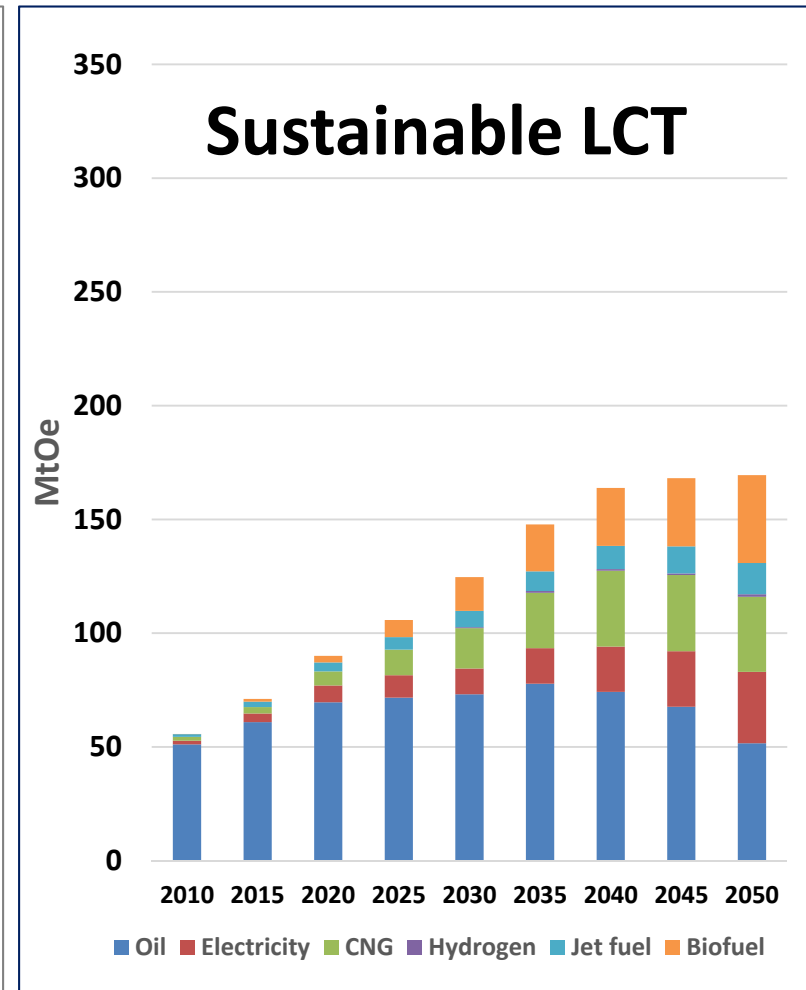
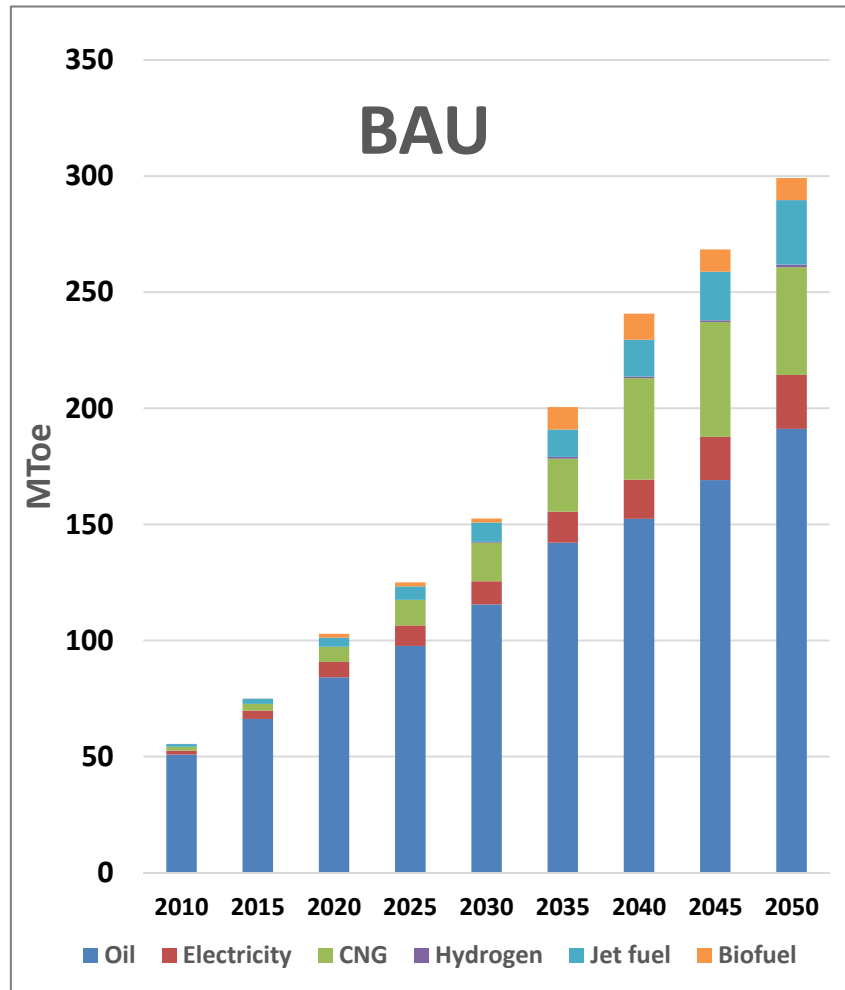


## Fuel Economy (Cars) (lit gasoline / 100 km)

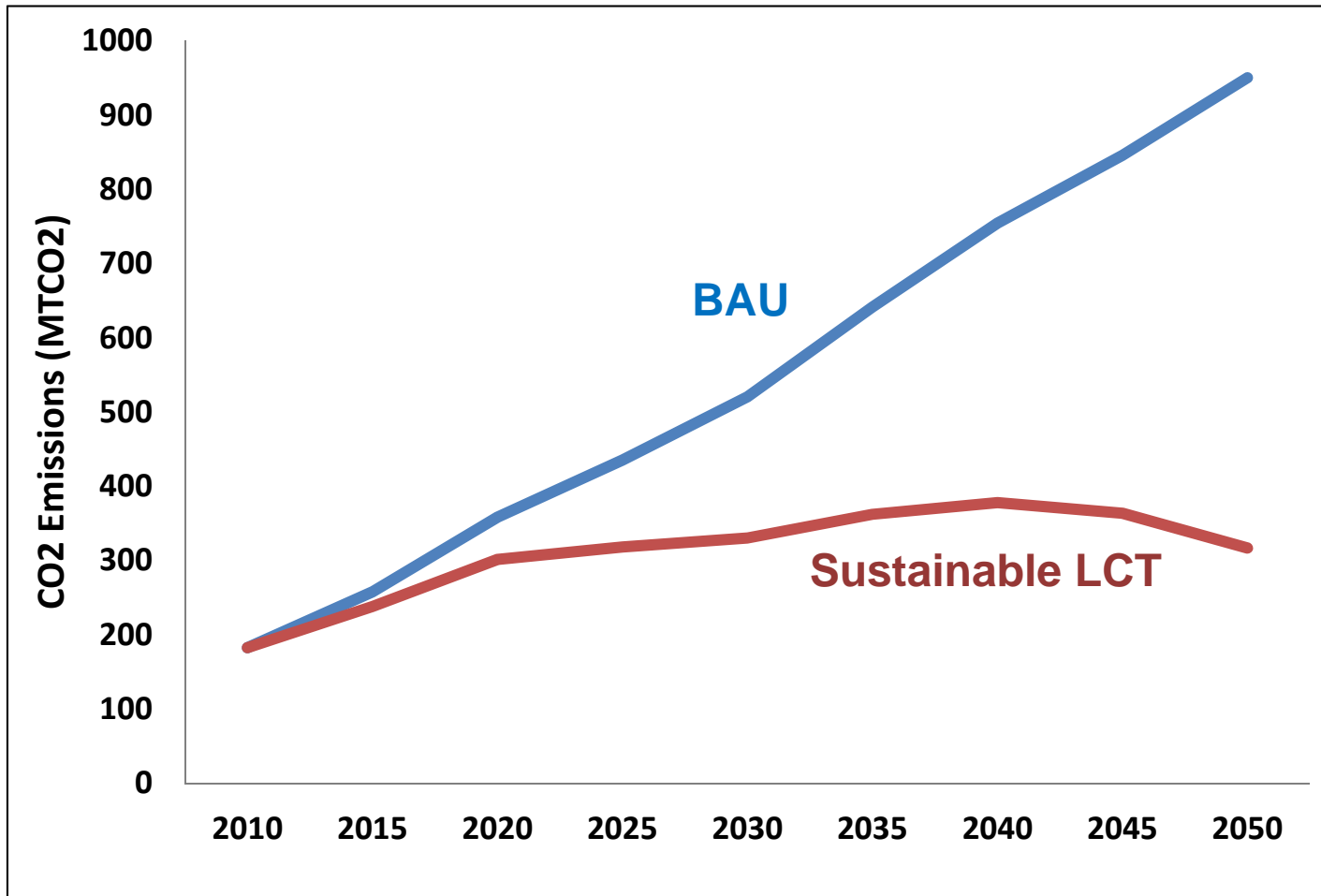




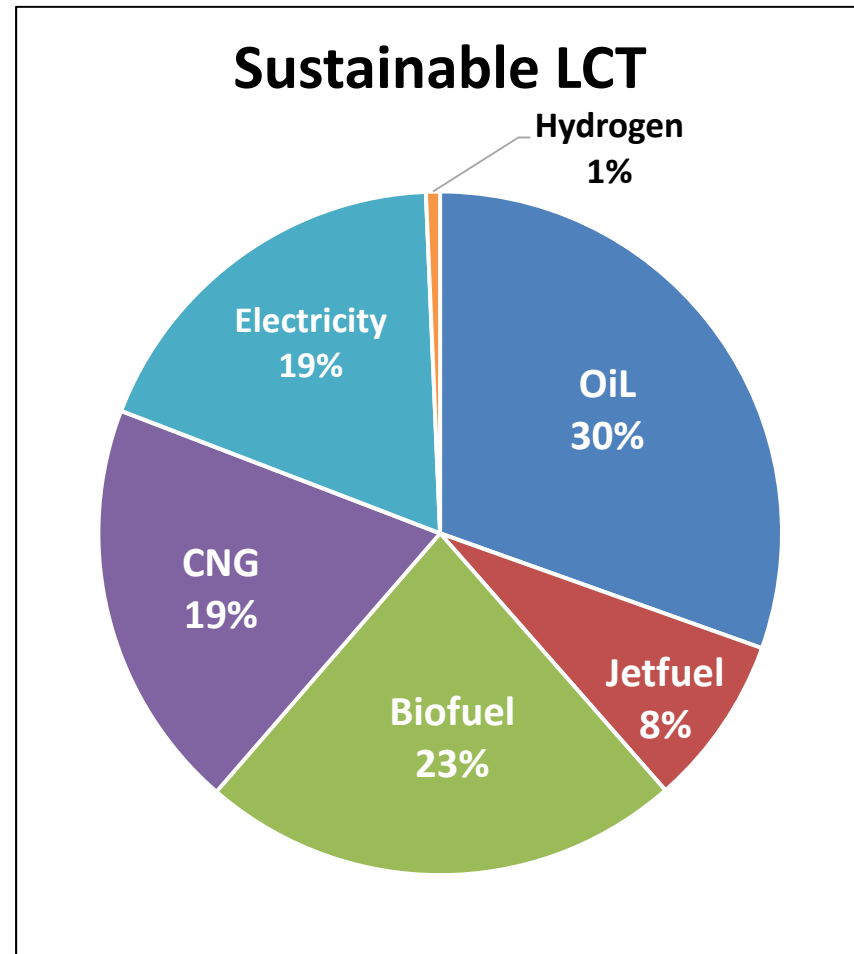
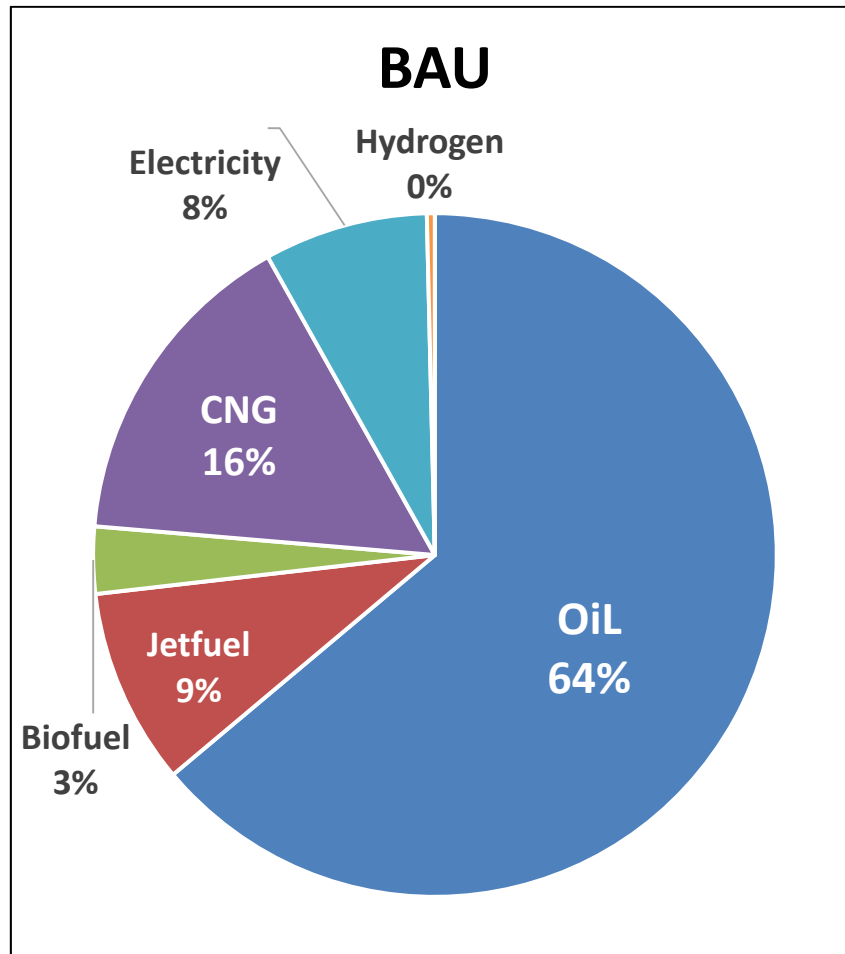
# Energy Mix for Transport



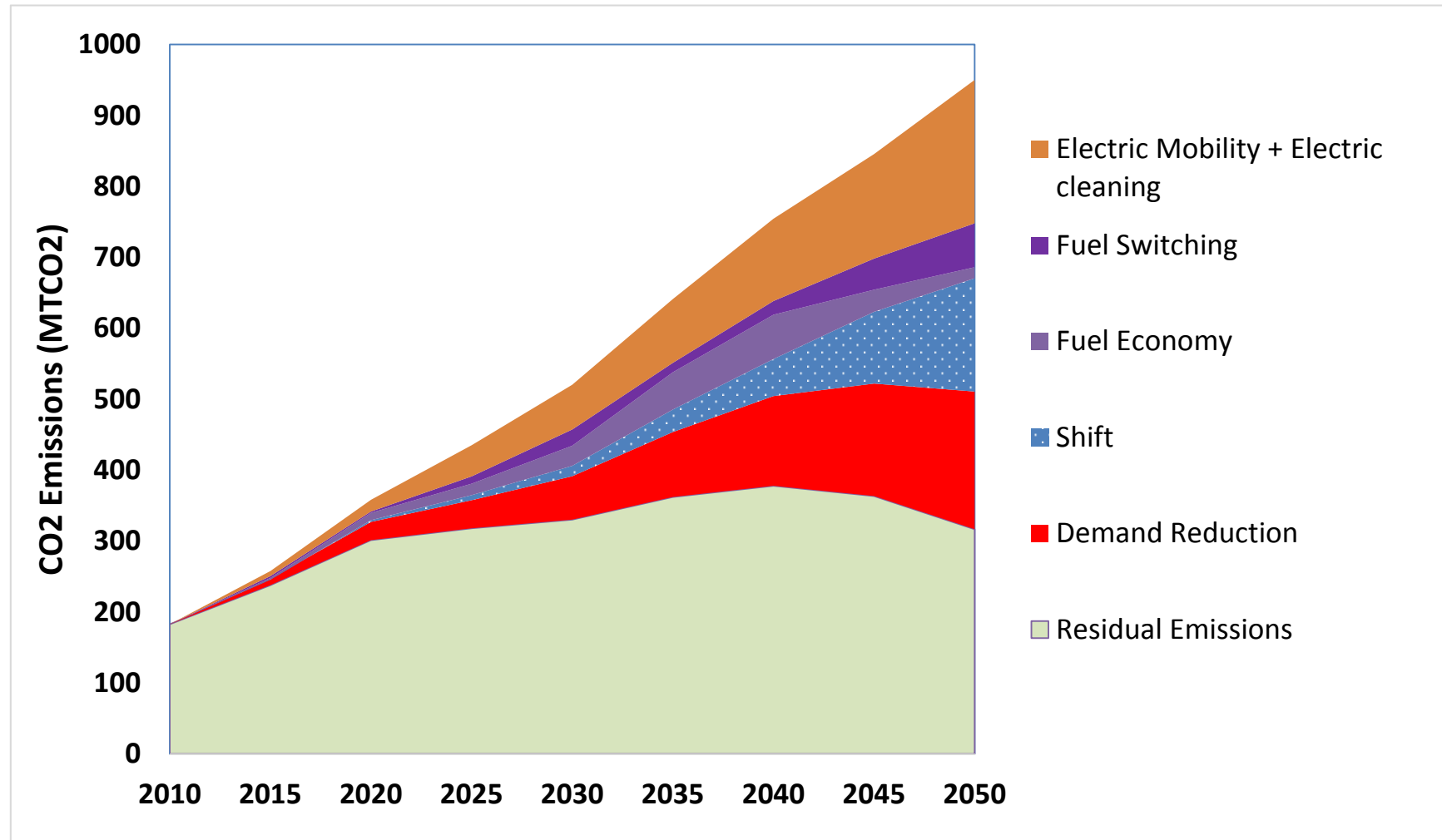
# Transport Sector CO<sub>2</sub> Emissions



# Transport Fuel Mix in 2050



# CO<sub>2</sub> Mitigation: Sustainable LCT Scenario





# Conclusions:

## 2°C Stabilization and Sustainable Development

1. Under Economically efficient 2°C Stabilization regime, India will have less than 2 ton per capita CO<sub>2</sub> 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 CO<sub>2</sub> 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](http://www.unep.org/transport/lowcarbon)

**AIM Website:** [www-iam.nies.go.jp/aim/](http://www-iam.nies.go.jp/aim/)

**LoCARNet Website:** [http://lcs-rnet.org/about\\_locarnet/](http://lcs-rnet.org/about_locarnet/)

