

Energy Scenarios and Pathways for India

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Scope and Method

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- **Need for Energy Scenarios:**
 - India's commitment in the 'Copenhagen Accord'
 - Assessment of energy needs and supply options
 - Development challenges related to energy
- **Disaggregated, bottom-up analysis (2005-2030)**
 - Bottom-up: shared and intuitive understanding through LEAP
 - Comprehensiveness: sector-specific and overall changes
 - Transparency: for greater scrutiny
 - Collaboration: to vet energy drivers and pathways

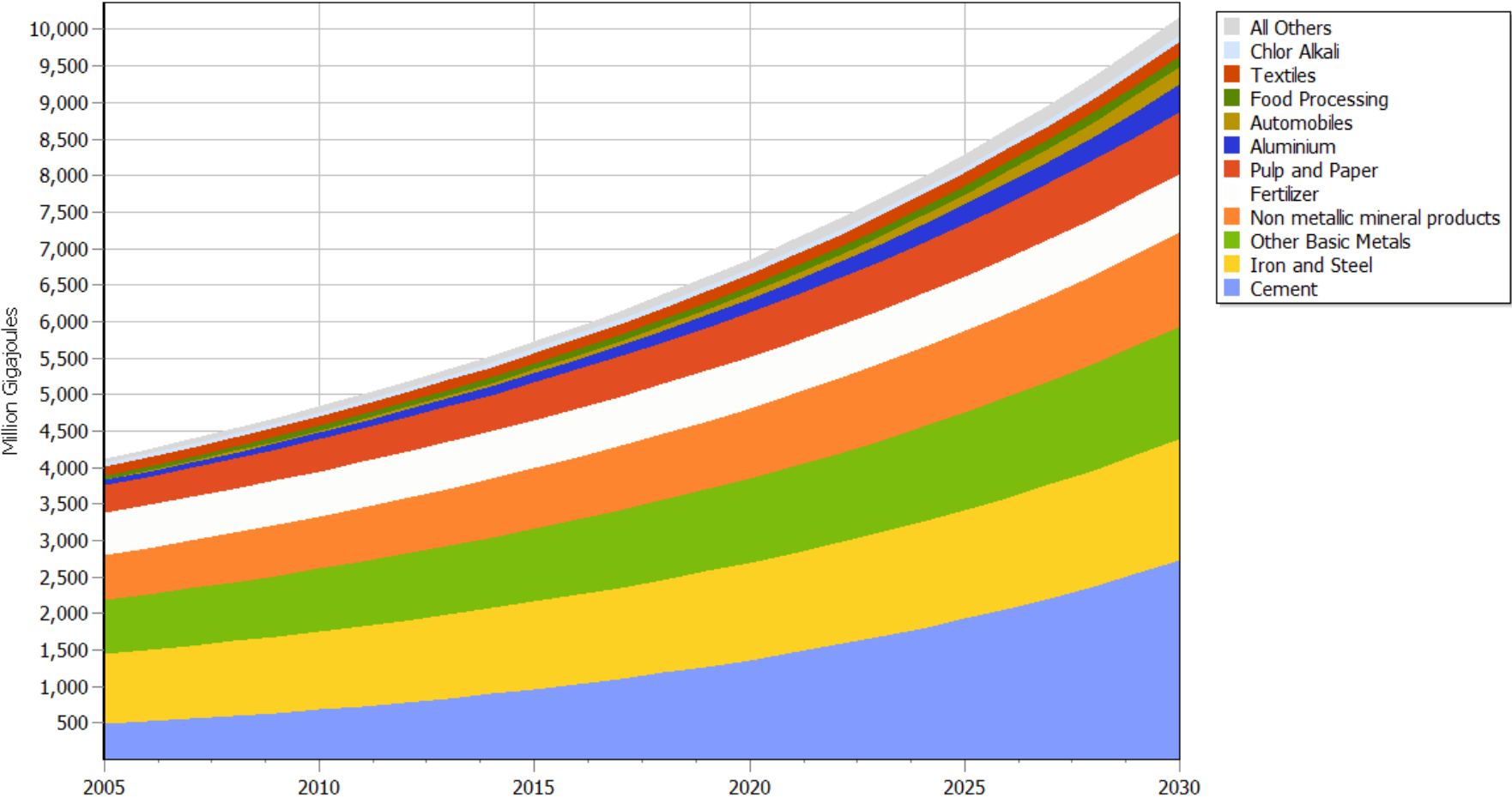
Scenarios

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- **Reference Scenario**
 - Based on projections of current trends
 - Driven by existing policies
 - Without any cap on emissions or intensity
- **Carbon-constrained Scenario**
 - Incorporates commitment in the ‘Copenhagen Accord’
 - Improvement in end-use efficiencies
 - Increased deployment of renewable energy sources
- **Development and Carbon-constrained Scenario**
 - ‘Human Development’ outcomes
 - Improvement in access to modern energy services
 - Directs focus to the poorest in India

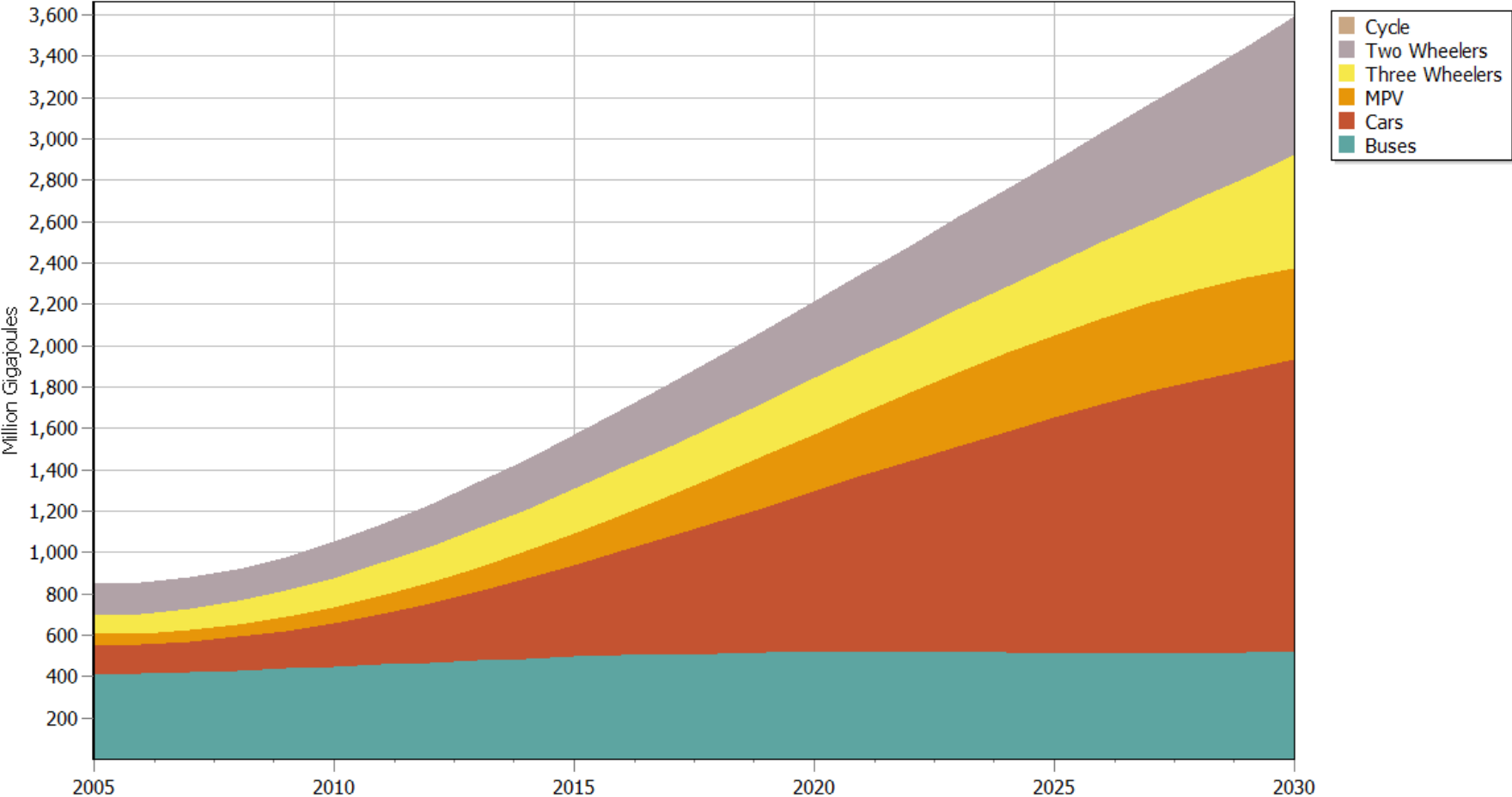
Energy Demand in Industry

Scenario: Reference



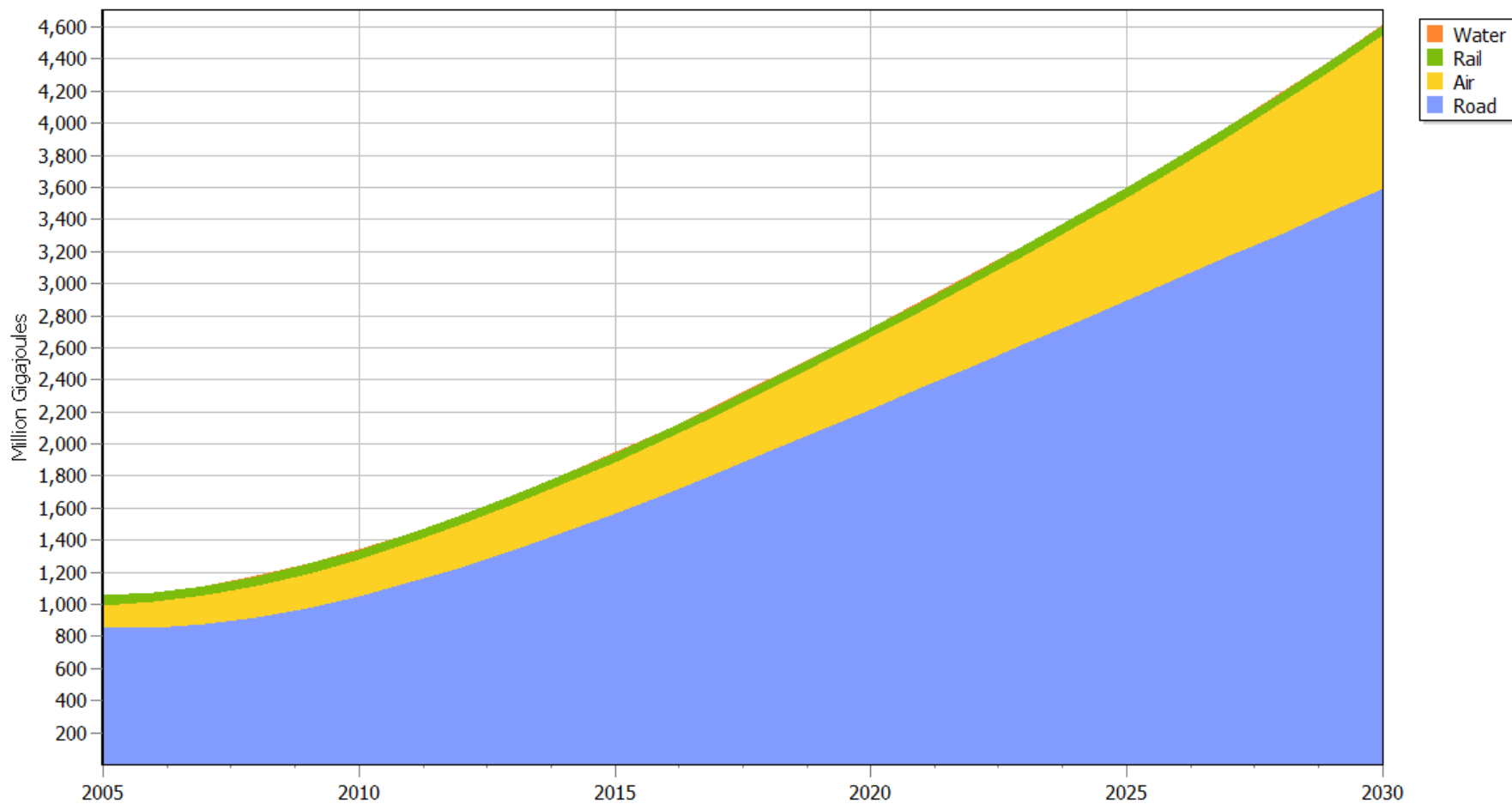
Energy Demand in Road Subsector (Passenger Transport)

Scenario: Reference



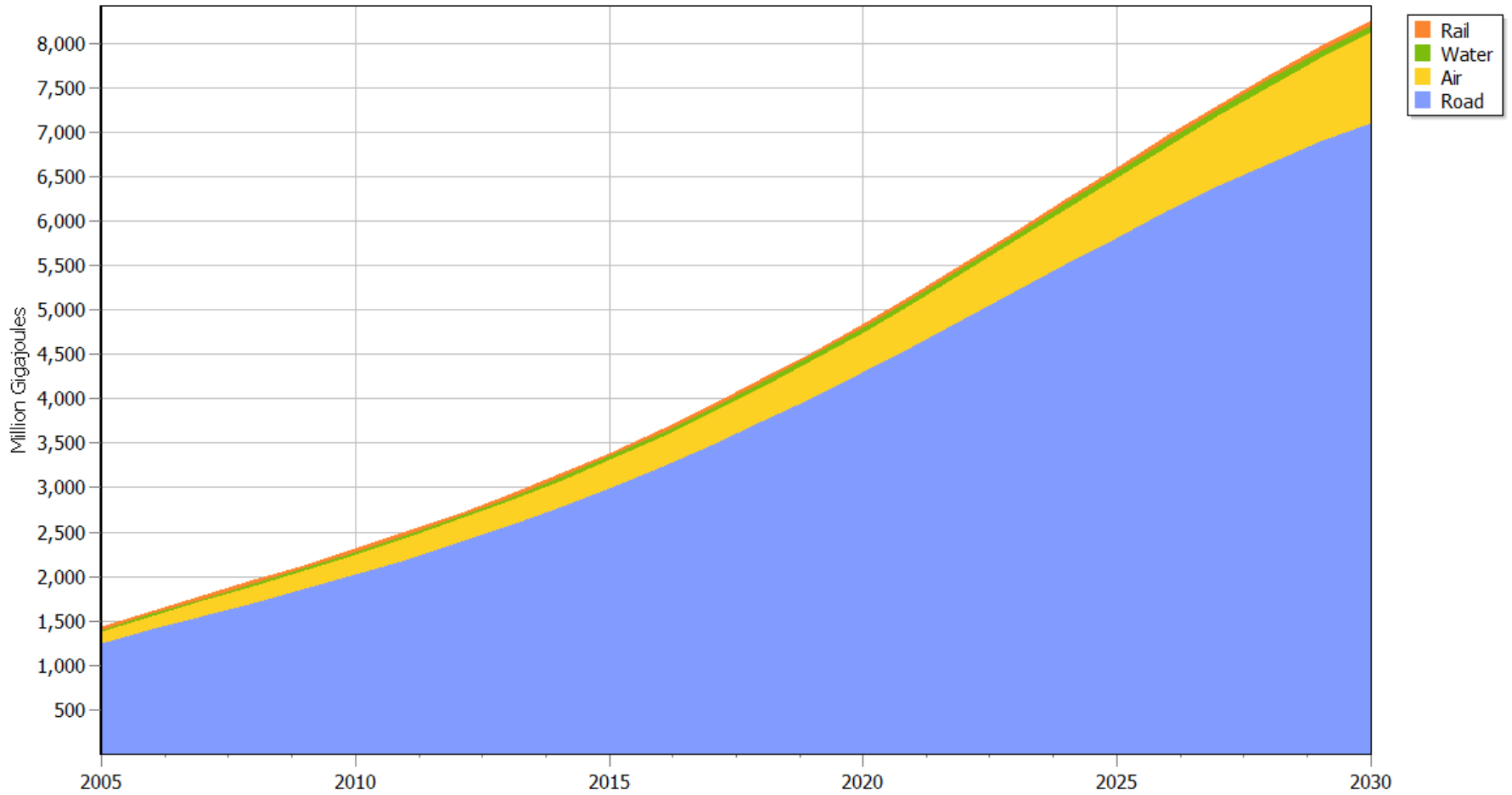
Energy Demand in Passenger Transport

Scenario: Reference



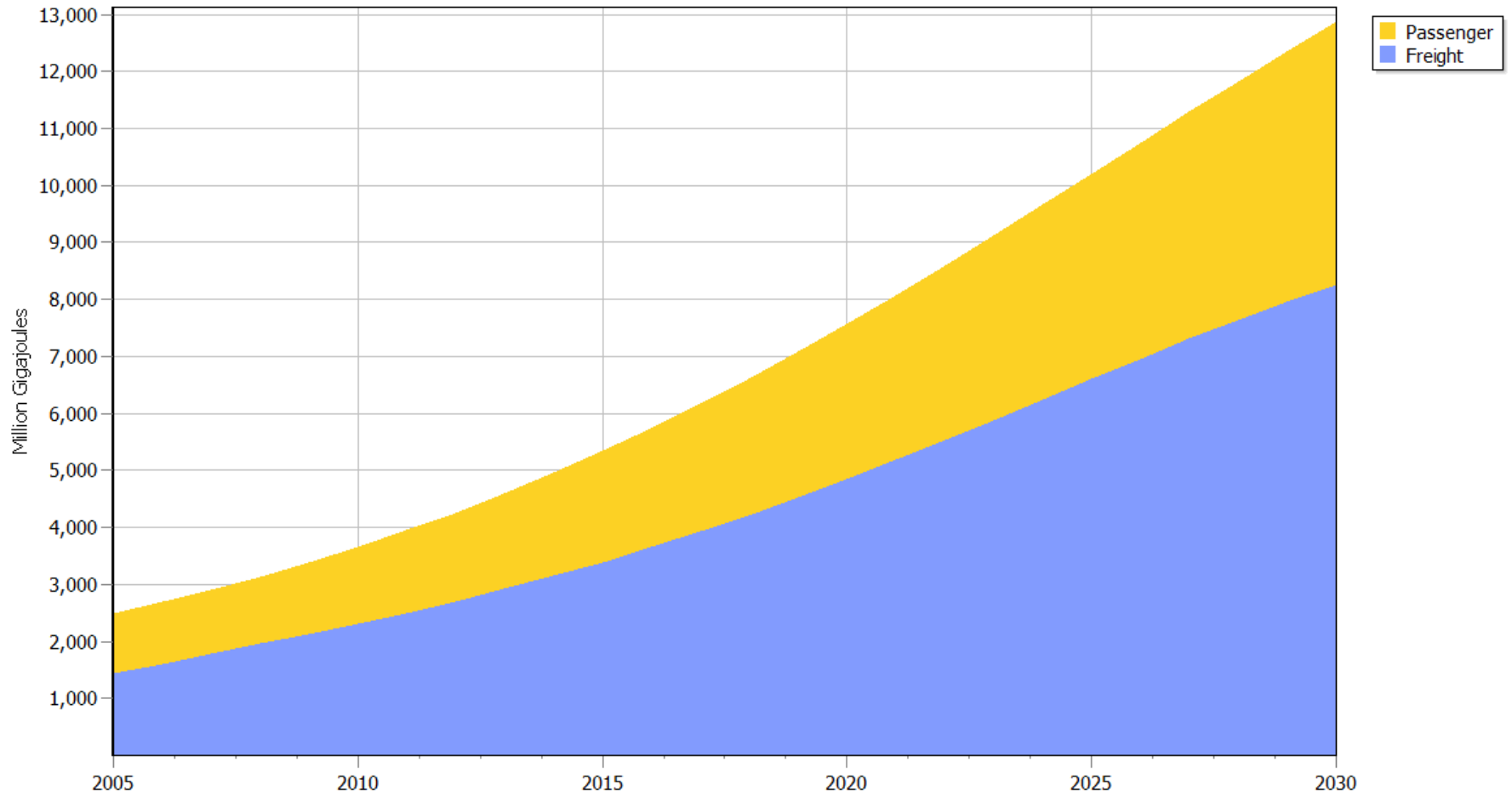
Energy Demand in Freight

Scenario: Reference



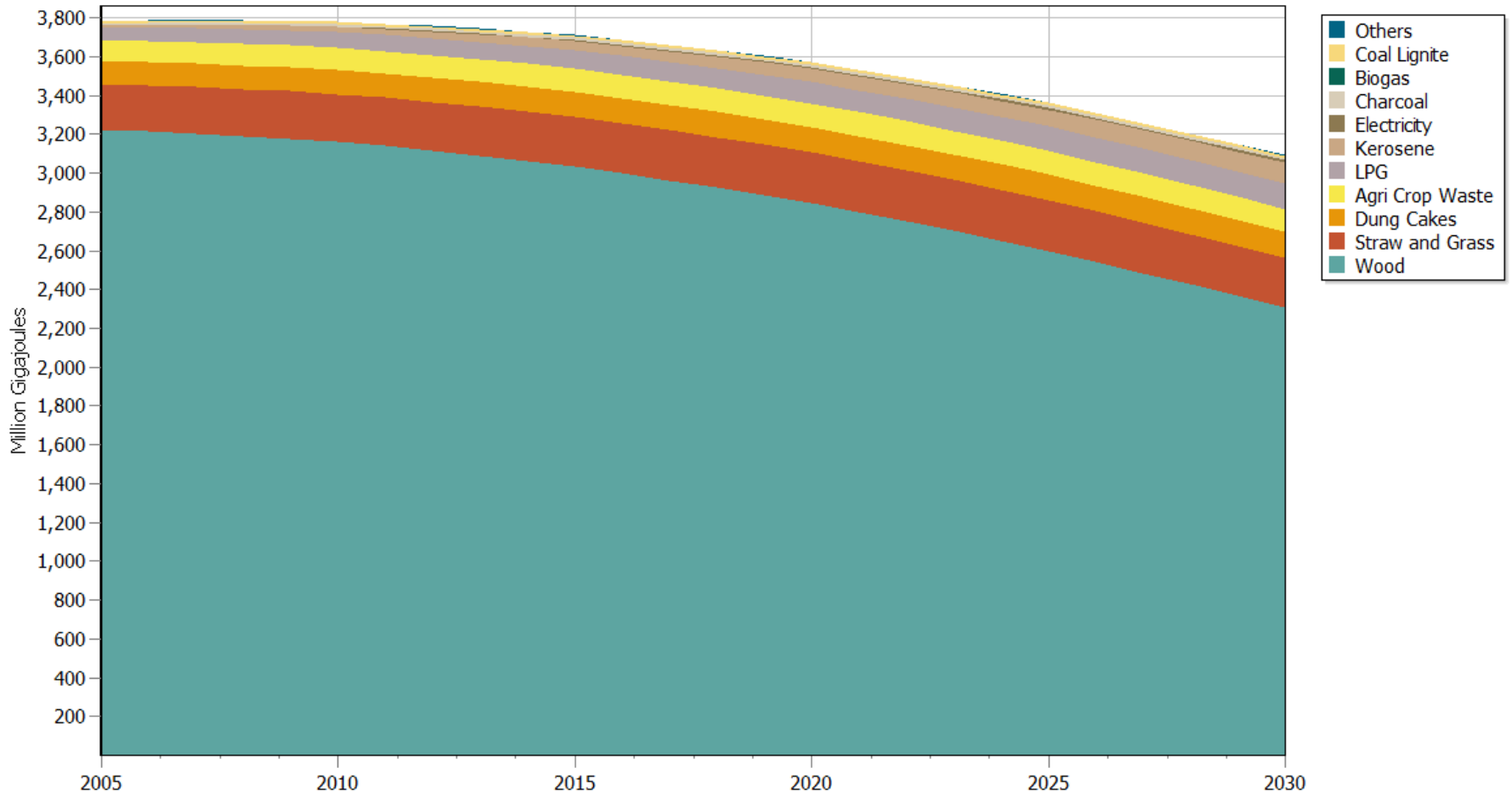
Energy Demand in Transport

Scenario: Reference



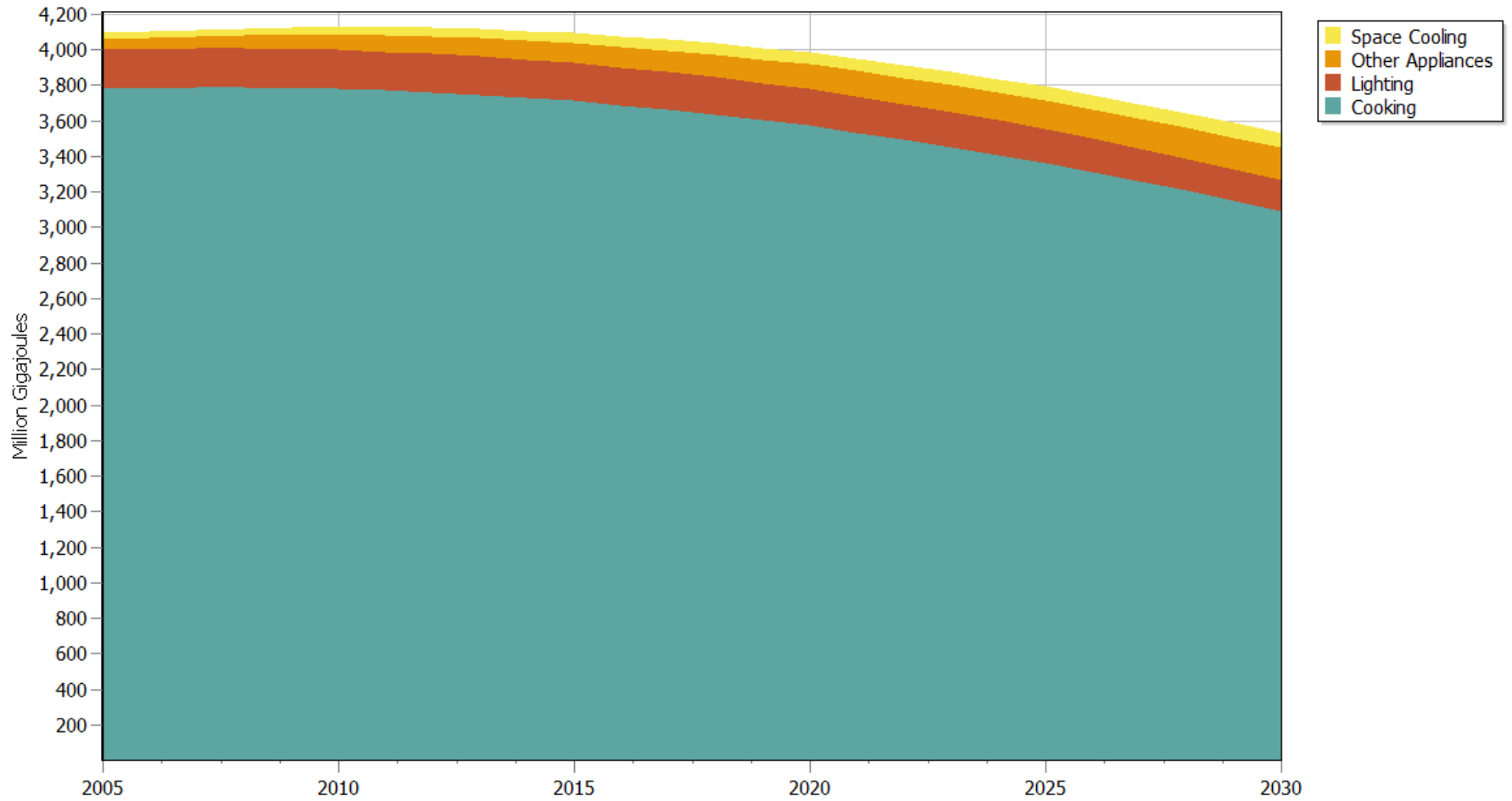
Energy Demand in Rural Cooking

Scenario: Reference



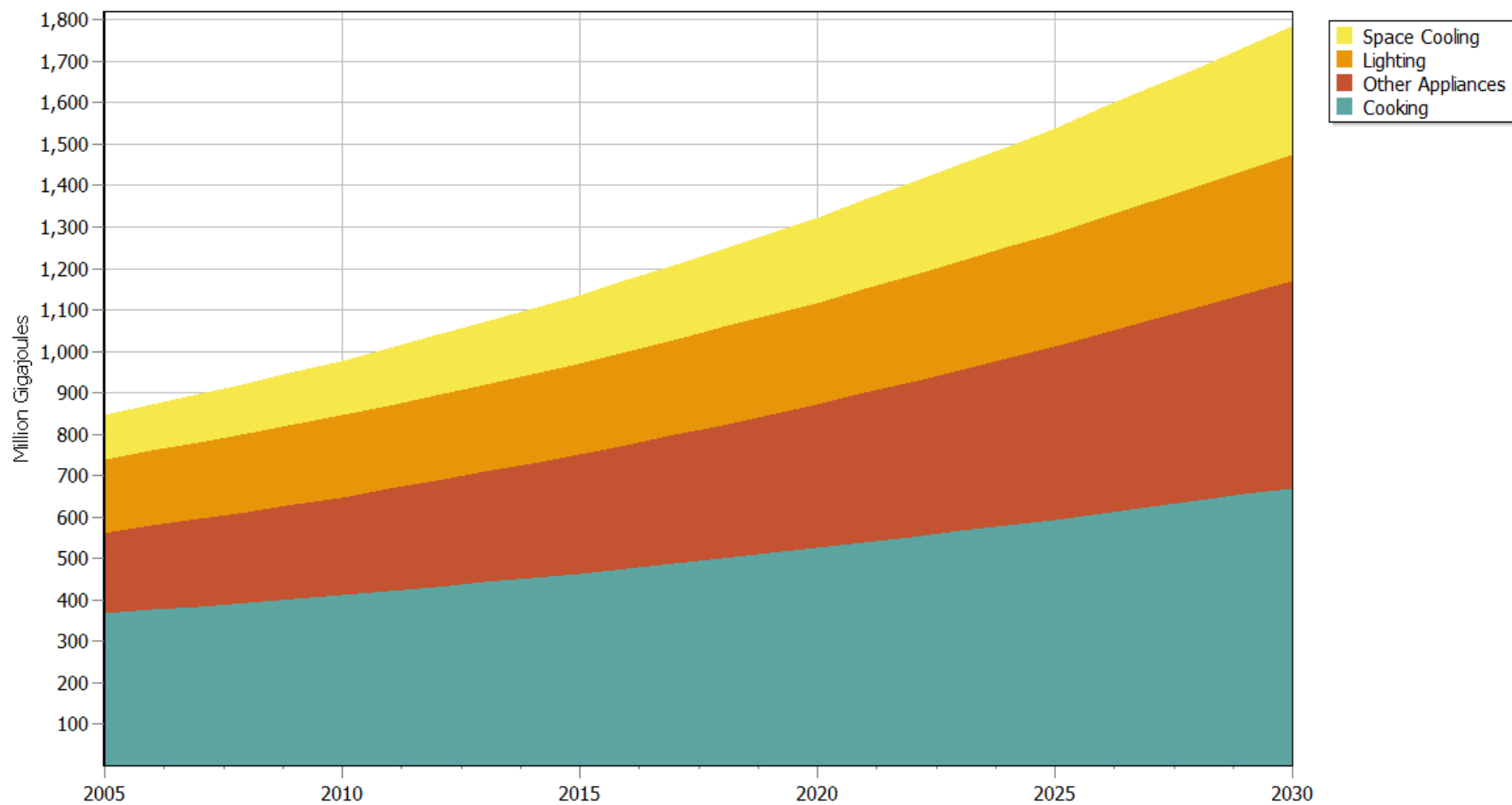
Energy Demand in Rural Households

Scenario: Reference



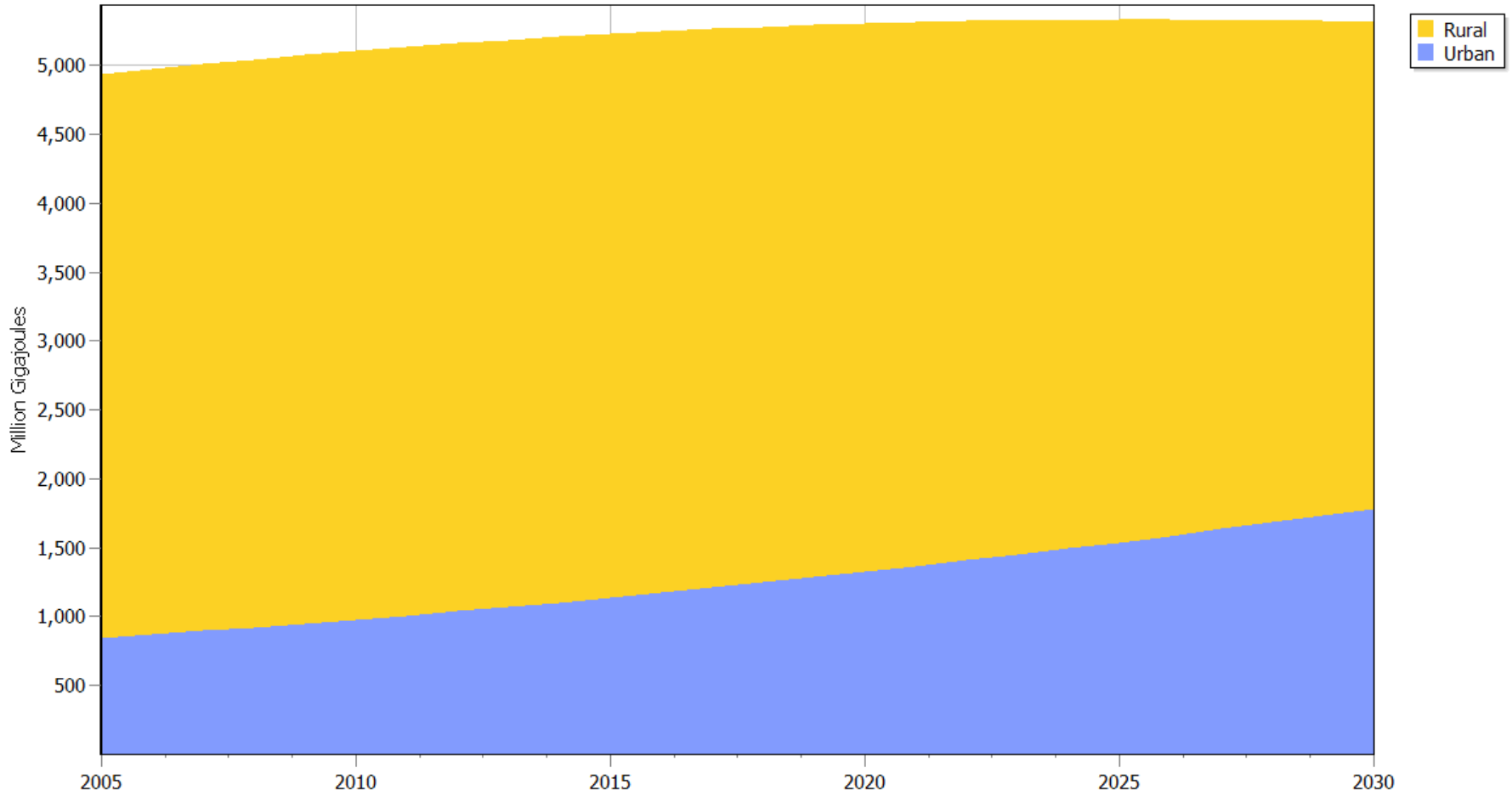
Energy Demand in Urban Households

Scenario: Reference



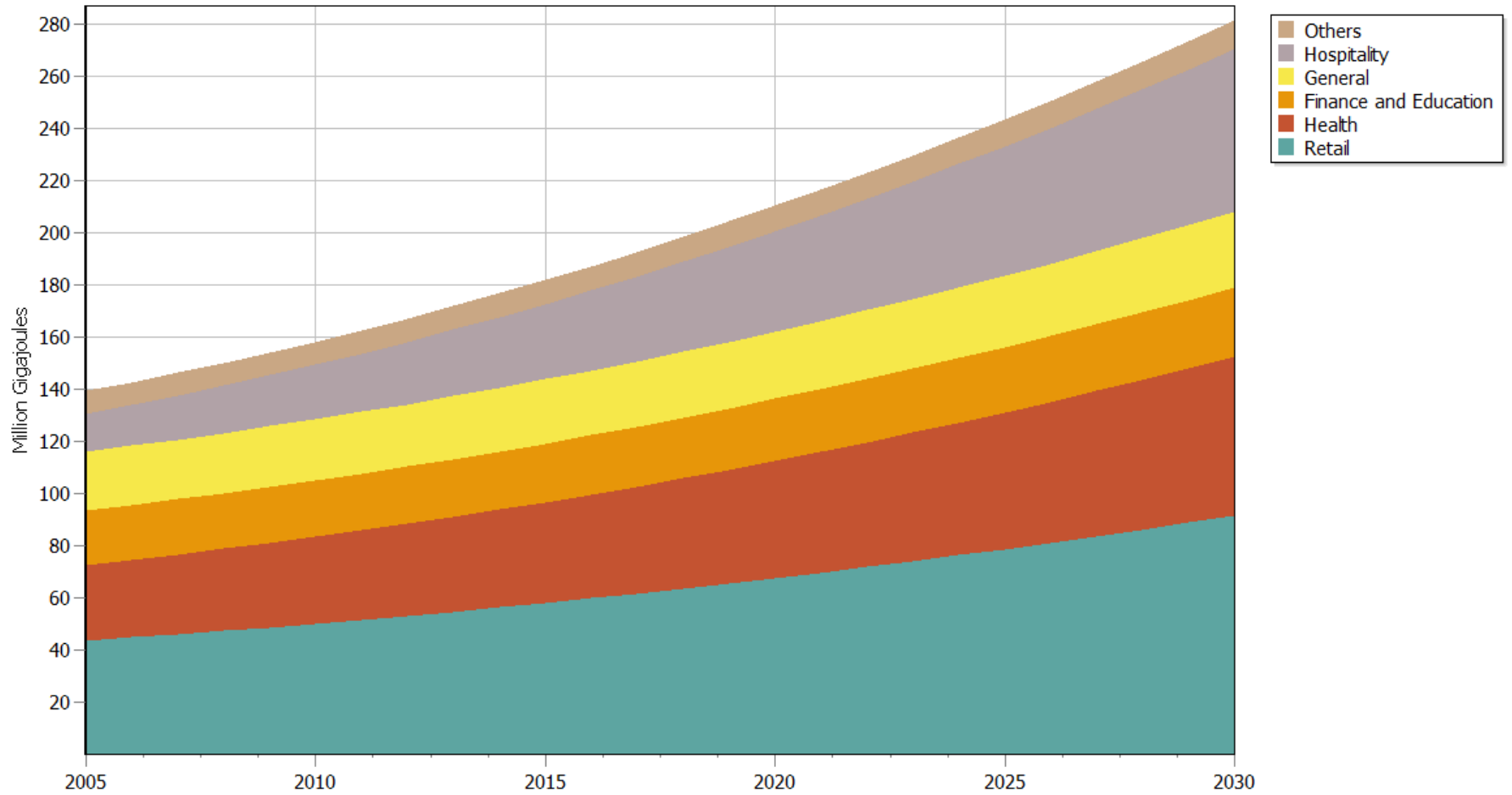
Energy Demand in Residential Sector

Scenario: Reference



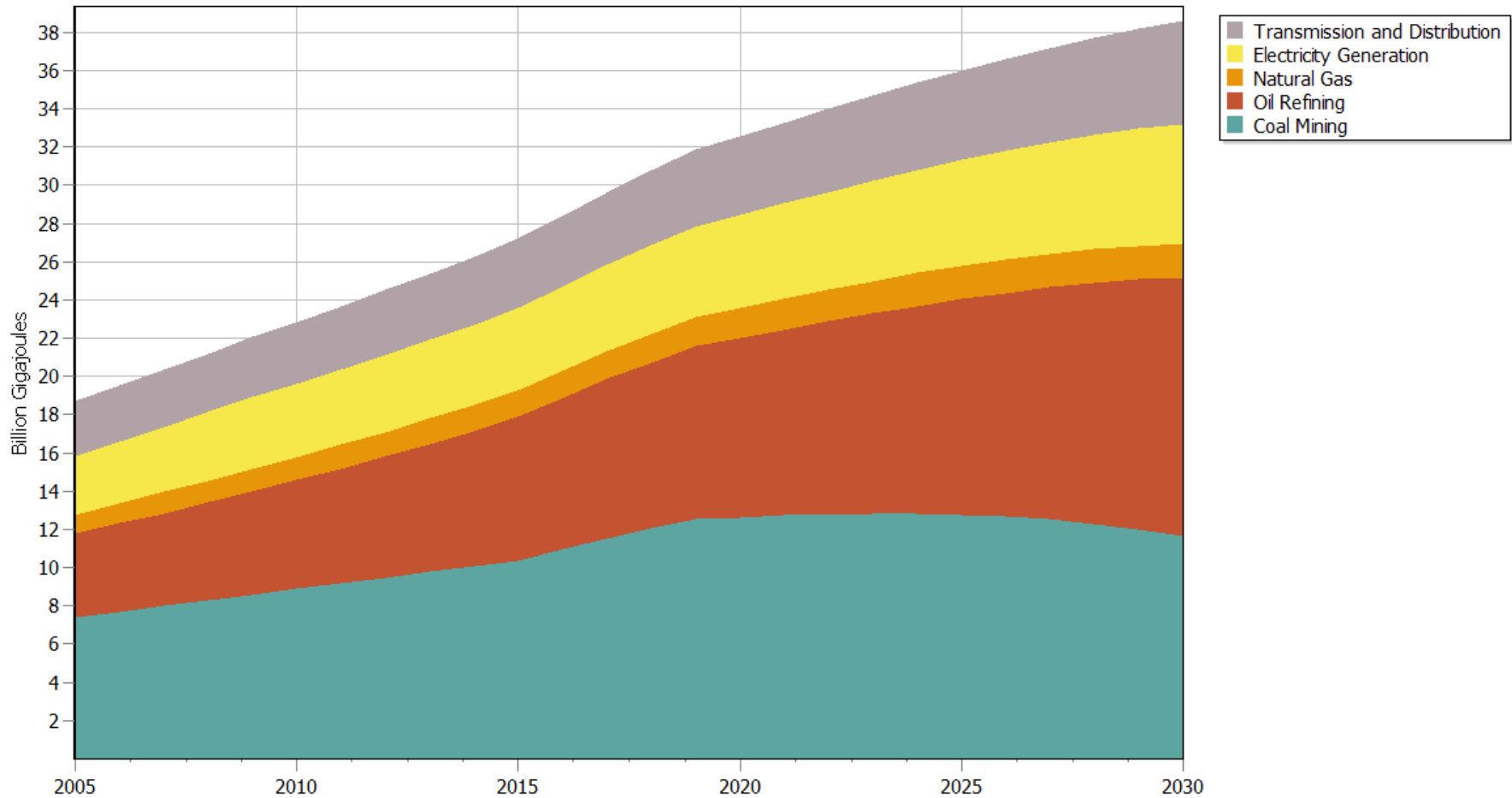
Energy Demand in Commercial Sector

Scenario: Reference



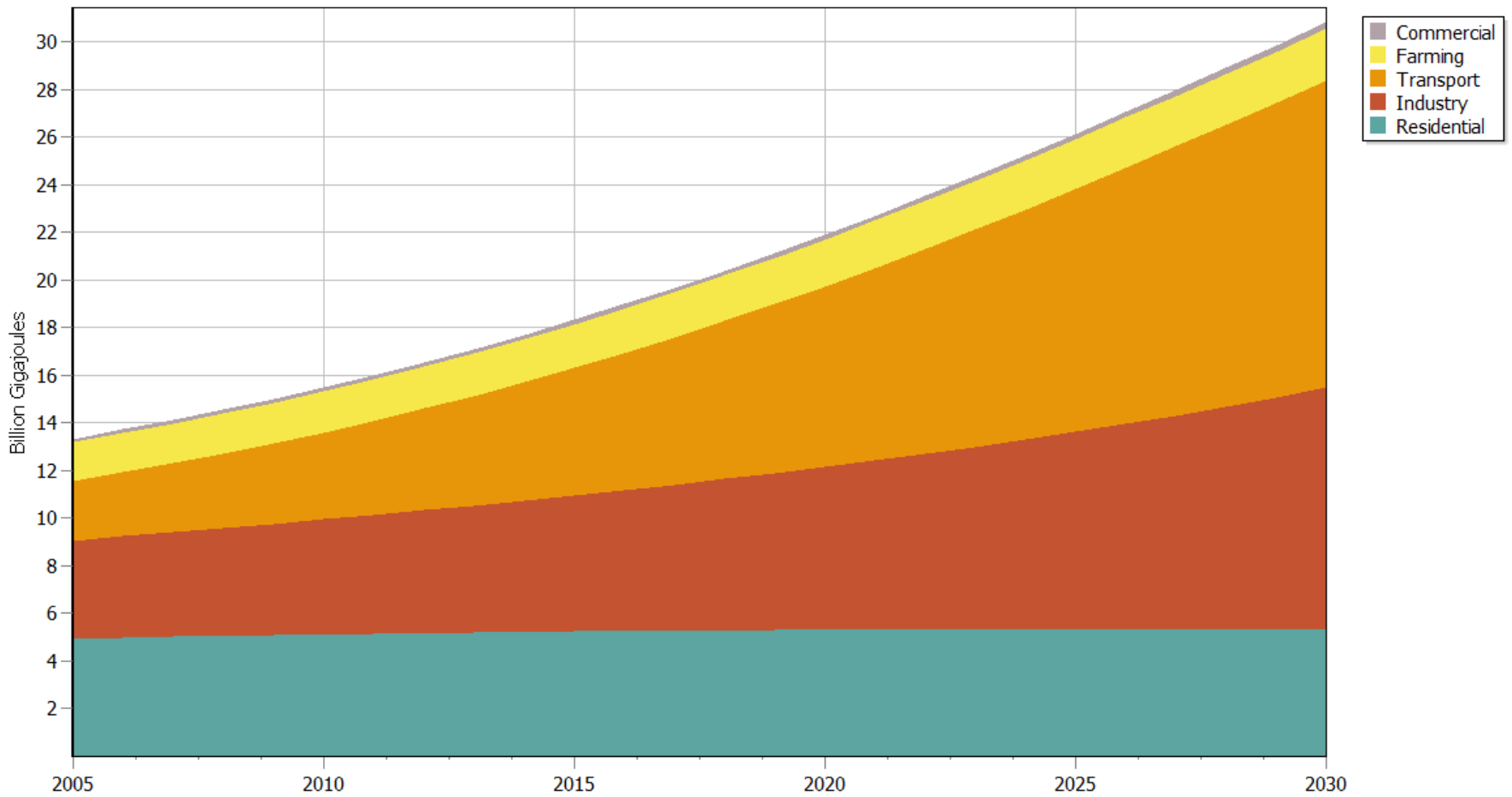
Output in Transformation

Scenario: Reference

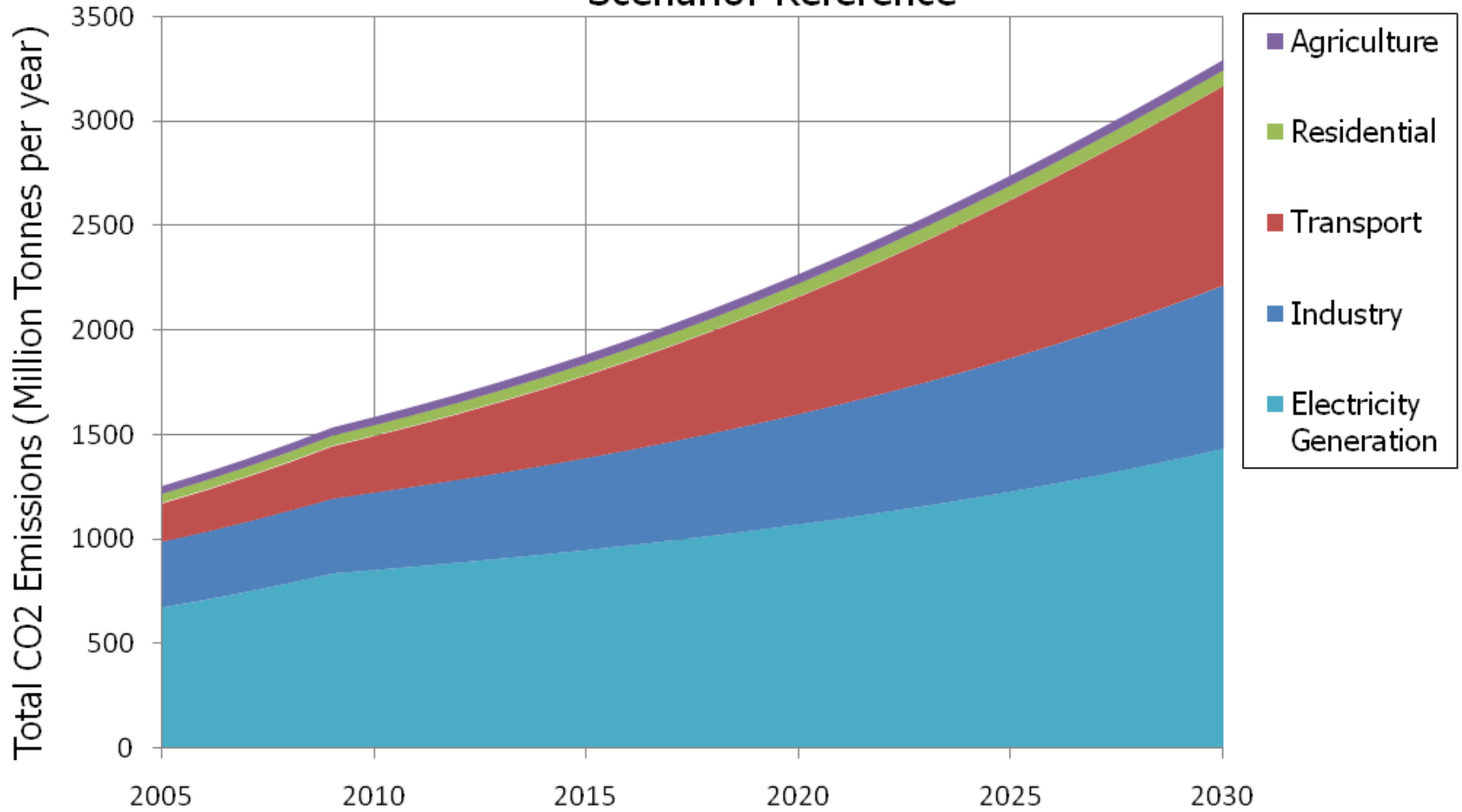


Total Energy Demand in India by Sector

Scenario: Reference



Total CO2 Emissions: India, by sector Scenario: Reference



Acknowledgements

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- We welcome your comments on this study and invite you to contribute to the development of further scenarios.