

ESS INDIA

Team INDIA

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Scenario Sustainable (2050)

'A progressive society which is rapidly growing, inclusive as well as urbanized and simultaneously addresses the concerns of intergenerational equity and critical natural capital'

| | |
|---------------------------------------|--|
| Societal Mindset | Individualistic but conscious |
| Allocation of Time | Life revolves around work |
| Consumption Behavior | High but sensitized to intergenerational equity |
| Housing Preference | Multi dwelling housing structure |
| Average Floor Space | Increase |
| Economic Status | Reasonable growth rates |
| Industrial Structure | Led by tertiary sector |
| International Relationships and Trade | Selective |
| Education | Complete literacy, Strengthened school and higher education system |
| Population | Slow down in growth rate, Decline in family size |
| Urban Profile | 60% Urbanization, Balanced, Compact city structure, Public transport priority, Efficient corridors, EE Technologies, Critical natural resource protection. |

Scenario Sustainable (2050)

| Keywords | Index | Base Year | Target Year | Grounds for the parameter |
|--|-------------------------|----------------------|------------------------|--|
| Housing Preference | Share of detached house | X% | 0.5X% | Larger urbanized population with a compact city development is expected to reduce the share of detached houses |
| Floor Space | Houses | 35 m ² | 60 m ² | 12 m ² per capita (Planning standard, India) * 4 (Household Size Expected) + 25% |
| | Offices | 8.6 b m ² | 37.36 b m ² | High urbanization and high employment in secondary and tertiary sectors |
| Real GDP 2000 B Rs. | | 18801 | 445856 | 7% Average |
| GDP Share | P/S/T | 22/27/51 | 15/25/60 | High urbanization and tertiary sector driving change |
| Population (Billion) | | 1.028 | 1.658 | UN Medium Variant |
| No. of households (mil)/Average family members | | 192 /5.3 | 473 /3.5 | Higher population / Urbanization leading to reduction in family size |
| Urban Population | | 30% | 55% | Forecasts |
| Energy Access | | 55% | 90% | Govt vision for complete access by 2020 |

Scenario Aggressive (2050)

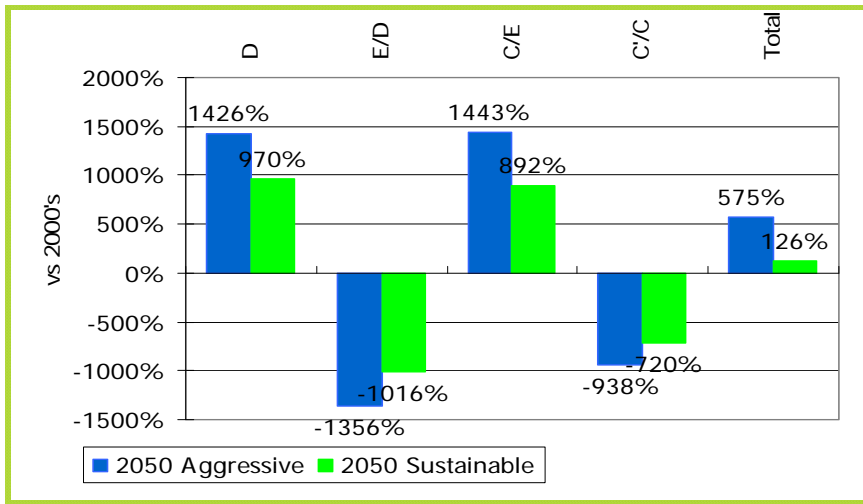
| | |
|---------------------------------------|---|
| Societal Mindset | Individualistic |
| Allocation of Time | Life revolves around work |
| Consumption Behavior | High |
| Housing Preference | Multi dwelling housing structure |
| Average Floor Space | Increase |
| Economic Status | High growth rates |
| Industrial Structure | Secondary and tertiary sectors having equal priority and increase rapidly |
| International Relationships and Trade | Open |
| Education | Complete literacy, Strengthened school and higher education system |
| Population | Slow down in growth rate, Decline in family size |
| Urban Profile | 70% Urbanization, Focused Growth, Multimodal transport characteristics, Efficient corridors |

Scenario Aggressive (2050)

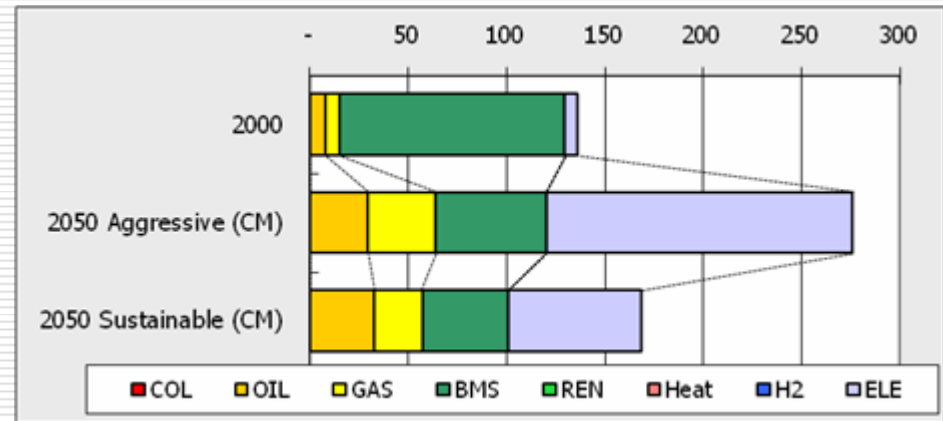
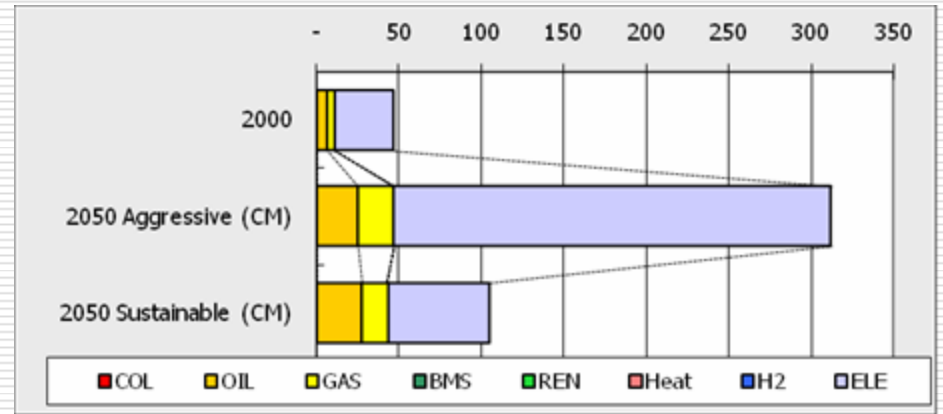
| Keywords | Index | Base Year | Target Year | Grounds for the parameter |
|--|-------------------------|----------------------|-----------------------|---|
| Housing Preference | Share of detached house | X% | 0.6X% | Larger urbanized population is expected to reduce the share of detached houses |
| Floor Space | Houses | 35 m ² | 52 m ² | 12 m ² per capita (Planning standard, India) * 3.5 (Household Size Expected) + 25% |
| | Offices | 8.6 b m ² | 50.7 b m ² | High urbanization and high employment in secondary and tertiary sectors |
| Real GDP 2000 B Rs. | | 18801 | 615722 | 8% Average |
| GDP Share | P/S/T | 22/27/51 | 5/30/65 | High urbanization and tertiary sector driving change |
| Population (Billion) | | 1.028 | 1.978 | UN high variation |
| No. of households (mil)/Average family members | | 192 /5.3 | 565 /3.5 | Higher population / Urbanization leading to reduction in family size |
| Urban Population | | 30% | 60% | Forecasts |
| Energy Access | | 55% | 90% | Govt vision for complete access by 2020 |

Results: Residential

Factor Analysis



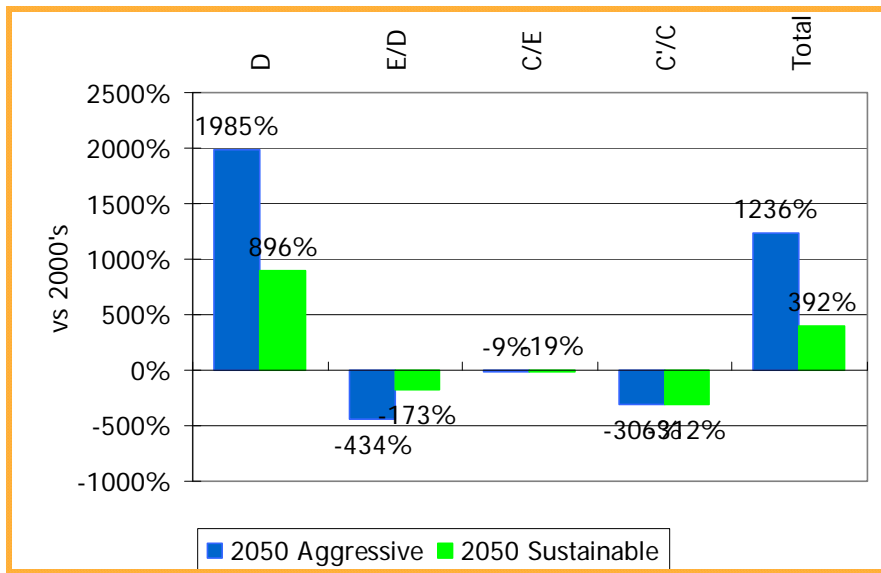
CO₂ Emissions



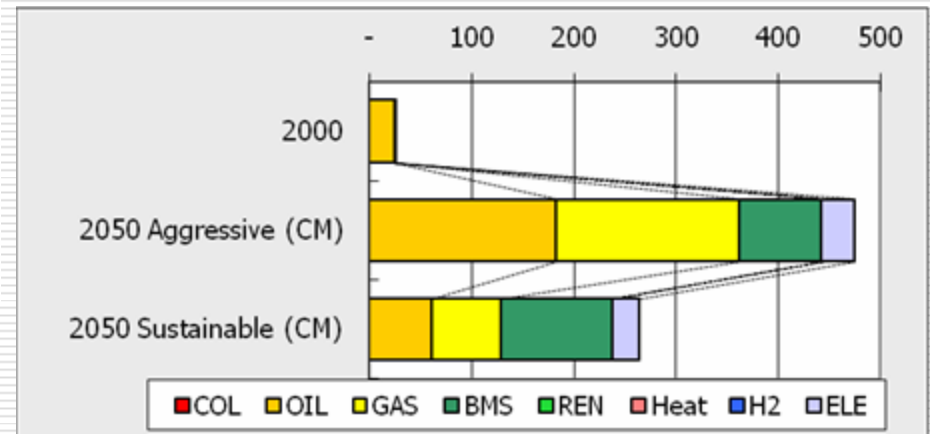
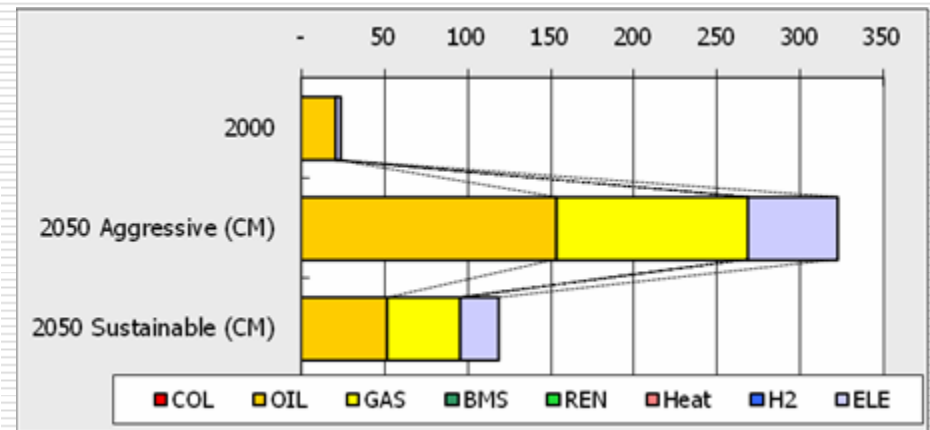
Energy Consumption

Results: Passenger Transport

Factor Analysis



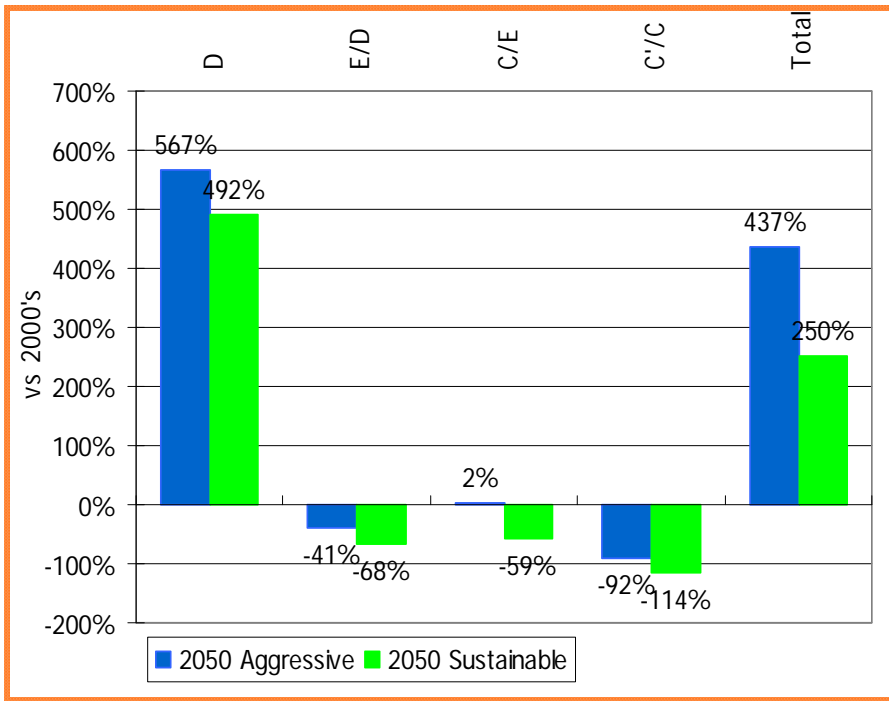
CO₂ Emissions



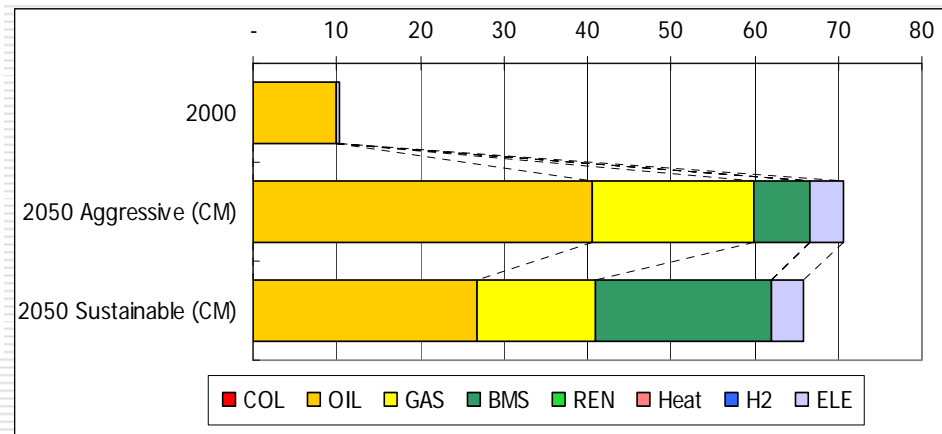
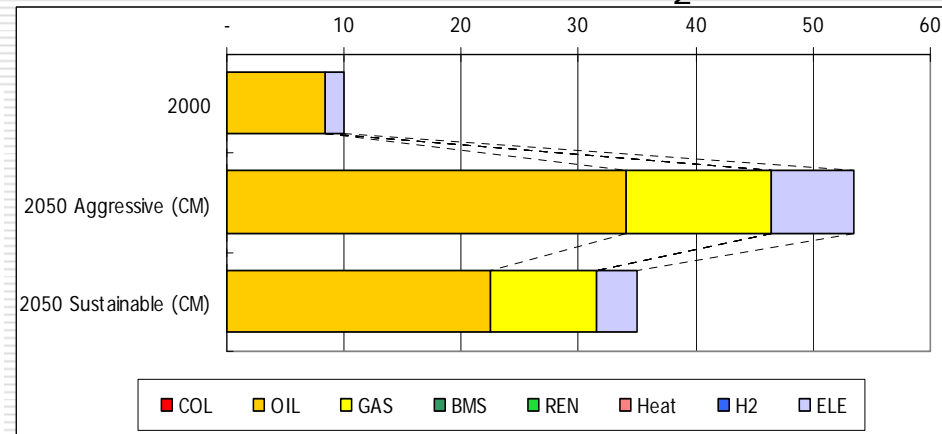
Energy Consumption

Results: Freight Transport

Factor Analysis



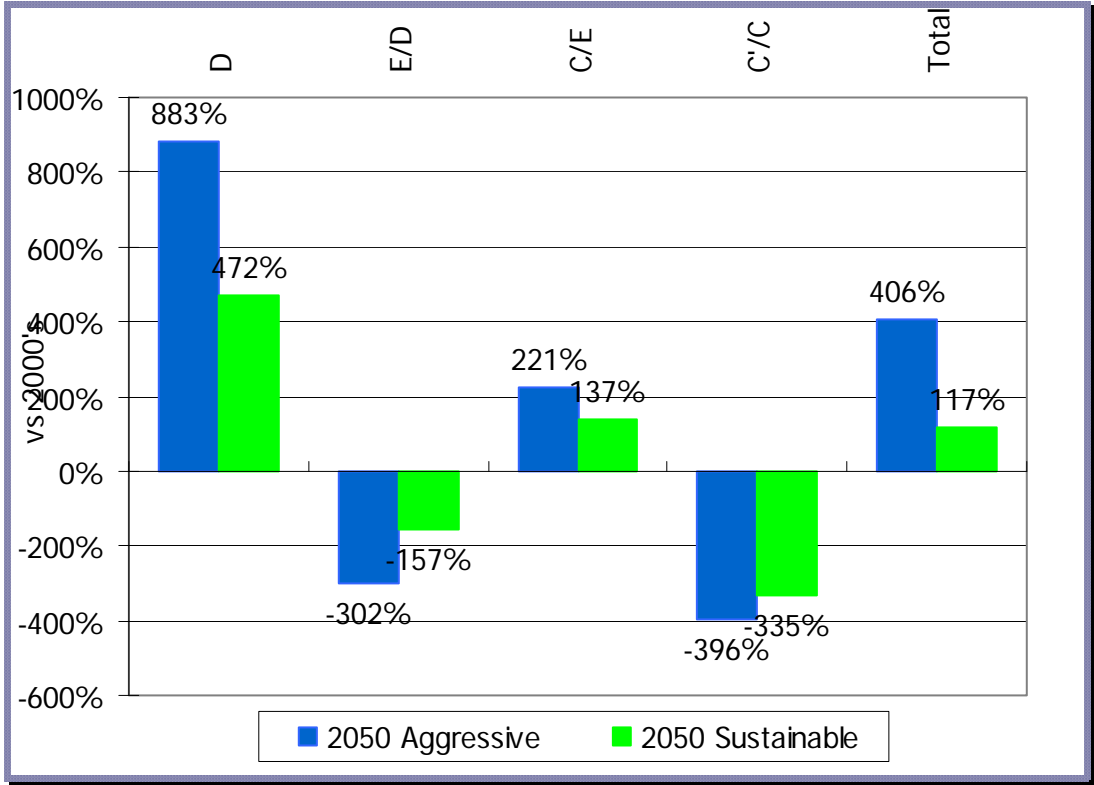
CO₂ Emissions



Energy Consumption

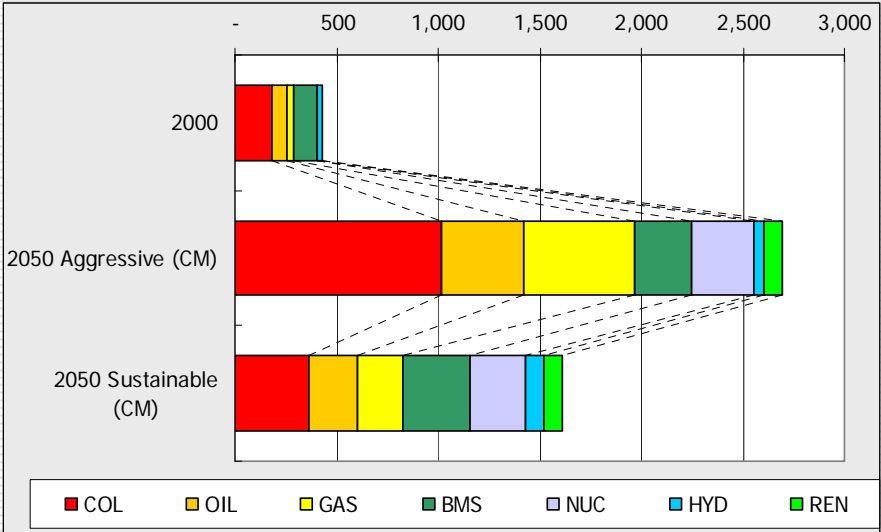
Results

Total

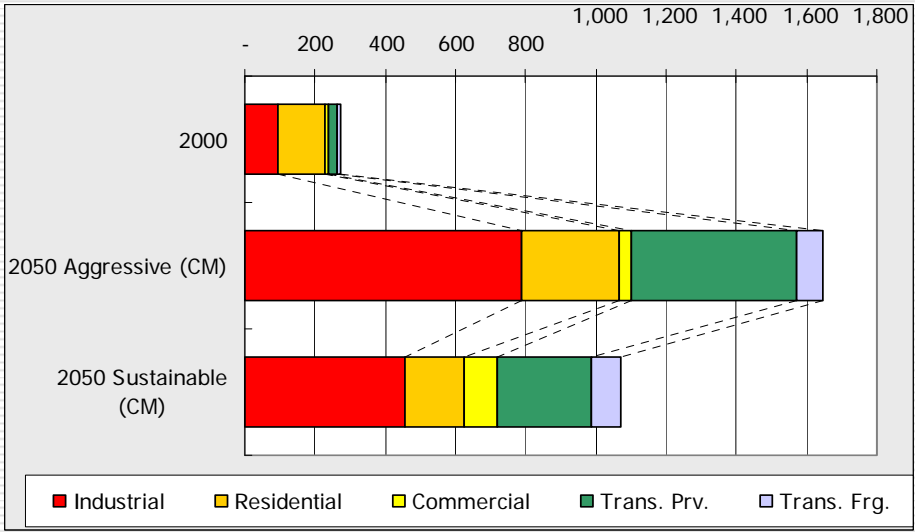


Results

Primary Energy Consumption
(By Fuel)

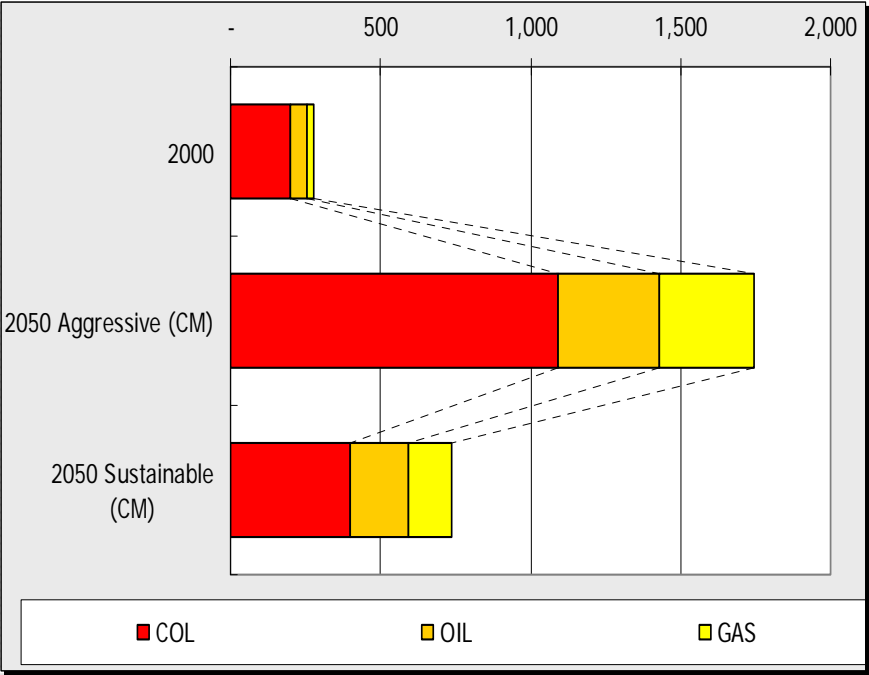


Secondary Energy Consumption
(Sectoral)

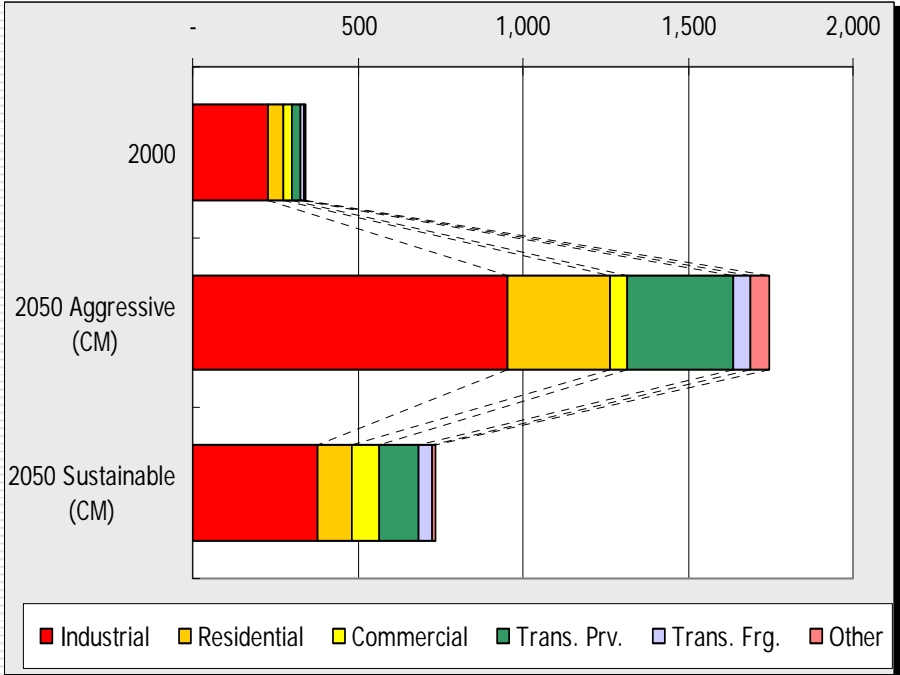


Results

CO₂ Emissions
(By Fuel)



CO₂ Emissions
(Sectoral)





Thanks!!

