

An aerial photograph of a railway track cutting through a landscape. The embankments on either side of the track are covered with a pattern of green grass and white stone or concrete blocks, creating a decorative and functional green growth. The track itself is made of gravel and steel rails. In the background, there are trees and a utility pole under a hazy sky.

Green Growth and Railway Development

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Asia on the Move

- Sustained economic progress
- High GDP growth rates—6% since 1999
- Share of global exports increased from 16% in 1980 to 27% in 2006
- Rising incomes with resulting decline in absolute poverty
- Rapid urbanization

Asia on the Move

- High sustained inflows of capital
- High rates of savings
- Burgeoning intraregional trade and investment
- Improved technological skills and managerial expertise
- Increasing middle class, with increasing resources to save and spend

And all this means...

- Continued high economic growth—will result in substantial worldwide growth in transport use—particularly in Asia
- Trade will continue to grow—so will consumption
- Motorization rate likely to triple between 2000 and 2050

A Reality

- Transport is almost entirely dependent on oil/fossil fuels
- Transport sector used over 20% of total energy consumption
- Growth in transport demand will lead to increased demand for oil and substantial increase in CO₂ emissions

A Reality

- Emerging Asia will account for much of future consumption growth in oil and GHG emissions due to economic and population growth by 2025
- Emerging Asia to account for 45% of the total world increase in oil use by 2025
- Emerging Asia—a net oil importer
- More than 50% of oil consumption is imported

Impacts—Vehicle Use

- Increase in per capita income will increase vehicle ownership
- 10 countries in the world with highest private-vehicle future demand index are in Asia—PRC, India, Indonesia...
- Motorization rates in some countries doubling every 5–7 years
- In emerging Asia—Car and SUV ownership rates are likely to grow much faster than GDP

Impacts–Emissions

Transport accounts for:

- 13% of all world green house gases (GhG)
- 23% of CO₂ emissions from fuel combustion of which
 - Road transport – 75%
 - Aviation – 11.5%
 - Maritime – 10.3%
- Cars and SUVs account for 10% of global CO₂ emissions

Impacts–Emissions (2005–2030)

- Increase by 57% (worldwide)
- PRC and India account for 56% of increase in this period
- In the PRC transport related CO₂ emission increases four-fold
- Increases to 27% from 19% of total emissions
- India-transport emissions increases to 13% from 8% of total emissions

What will happen...

Combination of accelerating incomes, urban growth, and accelerating vehicle ownership will

- lead to environmental disaster and
- affect economic development of Asian cities and economies

A Reality

Such considerable increases in the number of vehicles, congestion, and fuel consumption will

- threaten to severely limit the quality of life and economic growth of Asia, and
- increasingly contribute to climate change which has a severe implication and will require substantial adaptation in many areas

---So what should we do?

We should...

Promote a mode of transport that is environmentally sustainable, is **inclusive**, helps in achieving **sustained and equitable development**, improving the **quality of life**, and eradicating **poverty**

And the mode is: Railways

It is more:

- Sustainable
- Energy-efficient
- Clean and environment-friendly
- Cheap, safe, affordable and reliable

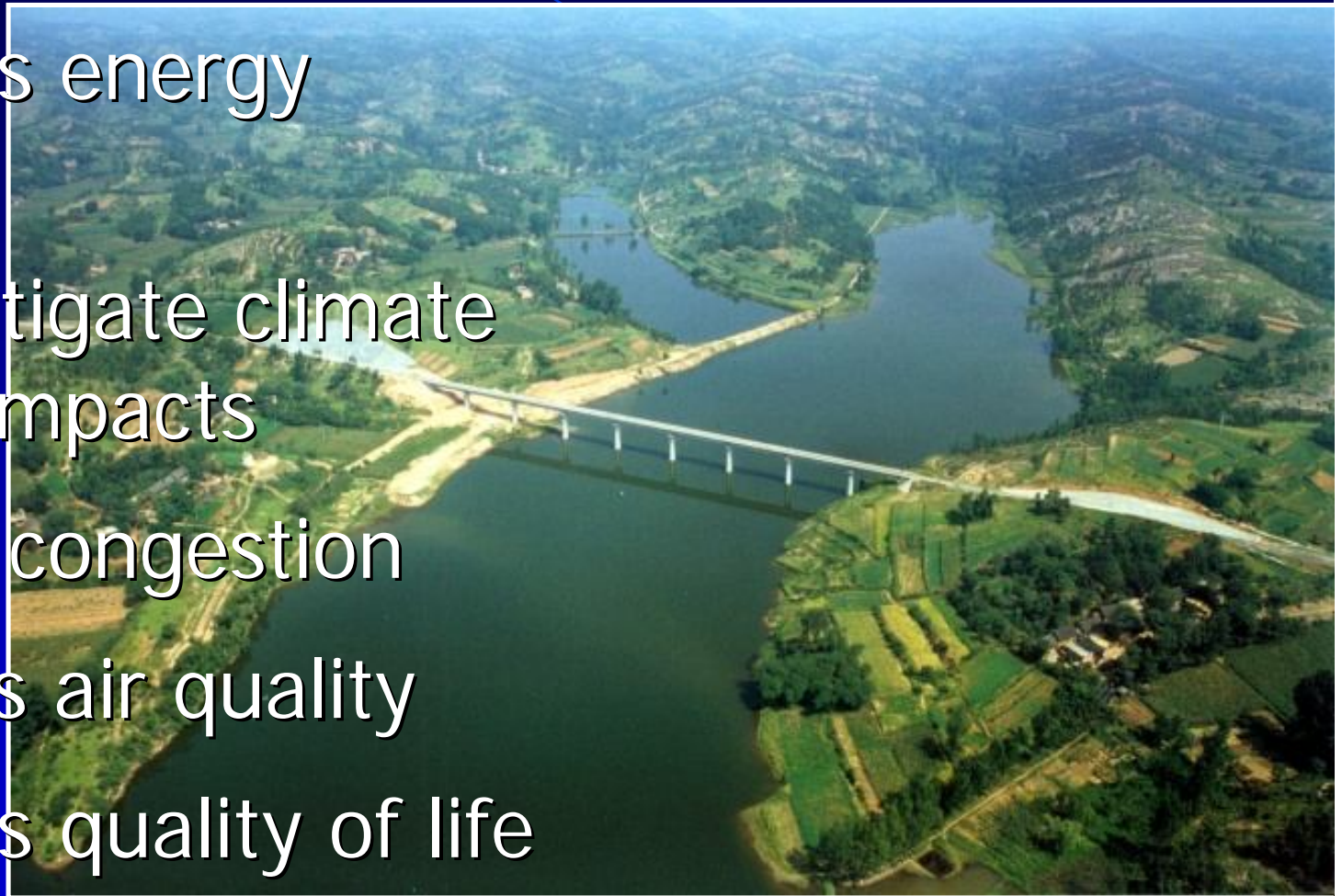


Why Railways?

- Close Linkage: Transport and Development
- Moves People and Goods
- Provide connectivity and accessibility to hinterland, inaccessible, and land-locked regions
- Integration of nations, regions, and beyond
- Development of major cities, towns along roads, railways, and ports
- A key driver of economic growth

Railways—Key Benefits

- Enhances energy security
- Helps mitigate climate change impacts
- Relieves congestion
- Improves air quality
- Enhances quality of life



Conclusion

Promoting railways can decouple growth in transport from

- rising fuel demand and CO₂ emissions, and
- economic and population growth

A high-speed train, blurred due to motion, is crossing a large stone bridge with multiple arches. The bridge spans over a river. The train is white with a red stripe. The background shows green foliage and a clear sky. A traffic light is visible on the left side of the bridge.

Railways—a mode of choice

To promote green growth

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Thank you

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