

# Aligning Climate Change and Sustainable Development Policies

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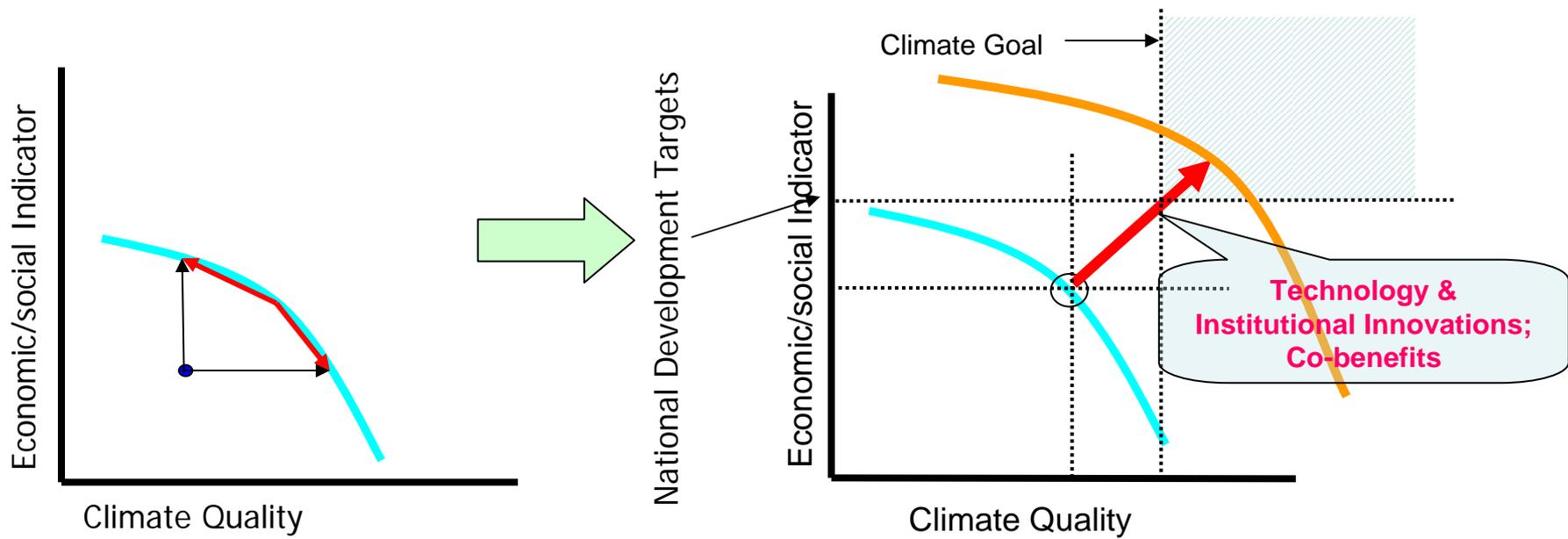
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# Why should “Development and Climate” actions be aligned?

- Climate change is a derivative problem of development
- Development is the key to mitigative and adaptive capacities
- Dealing with climate change exclusively is very expensive & expected to cost several trillion dollars over this century
- Strategies for dealing with sustainable development and climate change have many common elements, and aligning these would deliver co-benefits

# Aligning Development and Climate by Shifting the Frontier



## Overcoming Conflict by Shifting the “frontier” though:

- Innovations in technology & institutions
- Targeted technology innovations, investment and deployment
- Aligning diverse interests of multiple stakeholder
- Sequence of policies and measures to accrue co-benefits
- International and regional cooperation

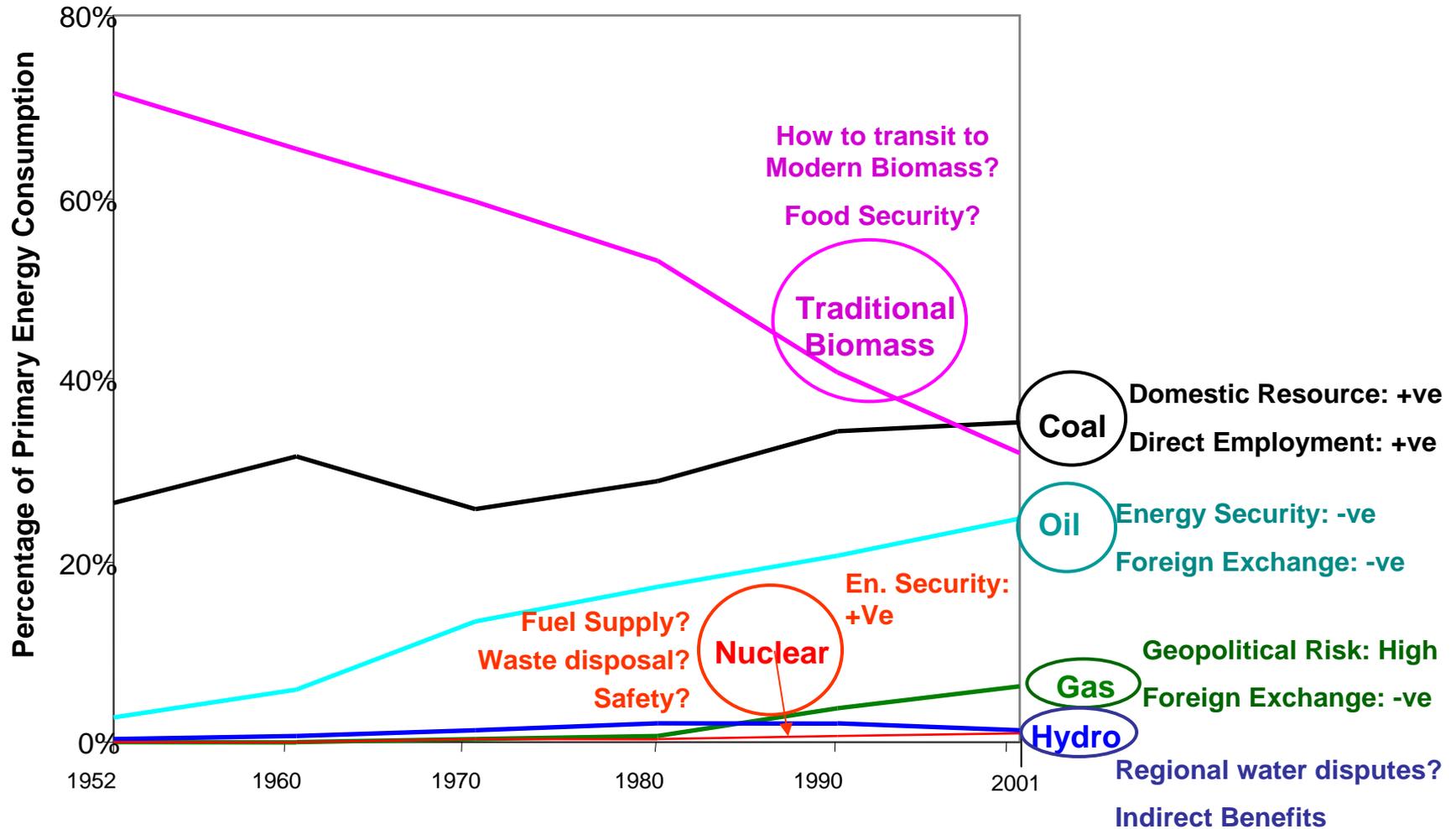
# Mainstreaming Climate Change in National Development



## MDG, India's National Targets and Climate Change

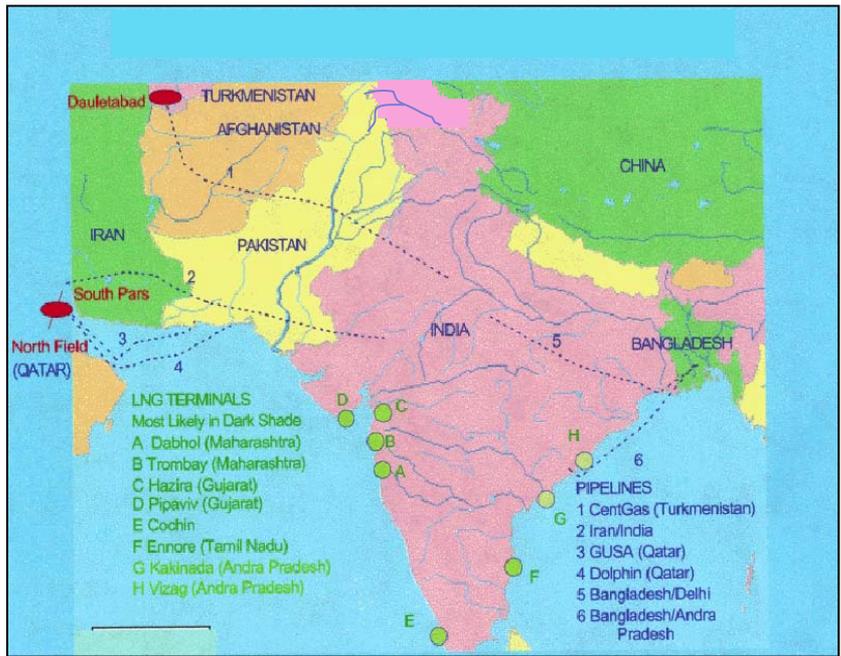
MDG and global targets	India's National plan targets	Interface with Climate Change
<p><b>Goal 1: Eradicate extreme poverty and hunger</b></p> <p>Targets: Halve, between 1990 and 2015, the proportion of people with income below \$1 a day and those who suffer from hunger</p>	<ul style="list-style-type: none"> <li>• Double the per capita income by 2012</li> <li>• Reduce poverty ratio by 15% by 2012</li> <li>• Contain population growth to 16.2% between 2001-2011</li> </ul>	<ul style="list-style-type: none"> <li>• Income effect would enhance choices for cleaner fuels and adaptive capacity</li> <li>• Reduce GHG Emissions due to lower population</li> </ul>
<p><b>Goal 7: Ensure environmental sustainability</b></p> <p>Targets: Integrate SD principles in country policies/ programs to reverse loss of environmental resources</p> <p>Target: Halve by 2015 the proportion of people without sustainable access to safe drinking water</p>	<ul style="list-style-type: none"> <li>• Increase in forest cover to 25% by 2007 and 33% by 2012 (from 23% in 2001)</li> <li>• Sustained access to potable drinking water to all villages by 2007</li> <li>• Electrify 80,000 additional villages by 2012 via decentralized sources</li> <li>• Cleaning of all major polluted rivers by 2007 and other notified stretches by 2012</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced sink capacity, reduced GHG and local emissions; lower fossil imports; reduced pressure on land, resources and ecosystems</li> <li>• Higher adaptive capacity to from enhanced supply of water, health &amp; education in rural areas</li> </ul>

# Influencing Energy Transitions



# South-Asia Energy Cooperation

## Integrated South-Asia Energy Market

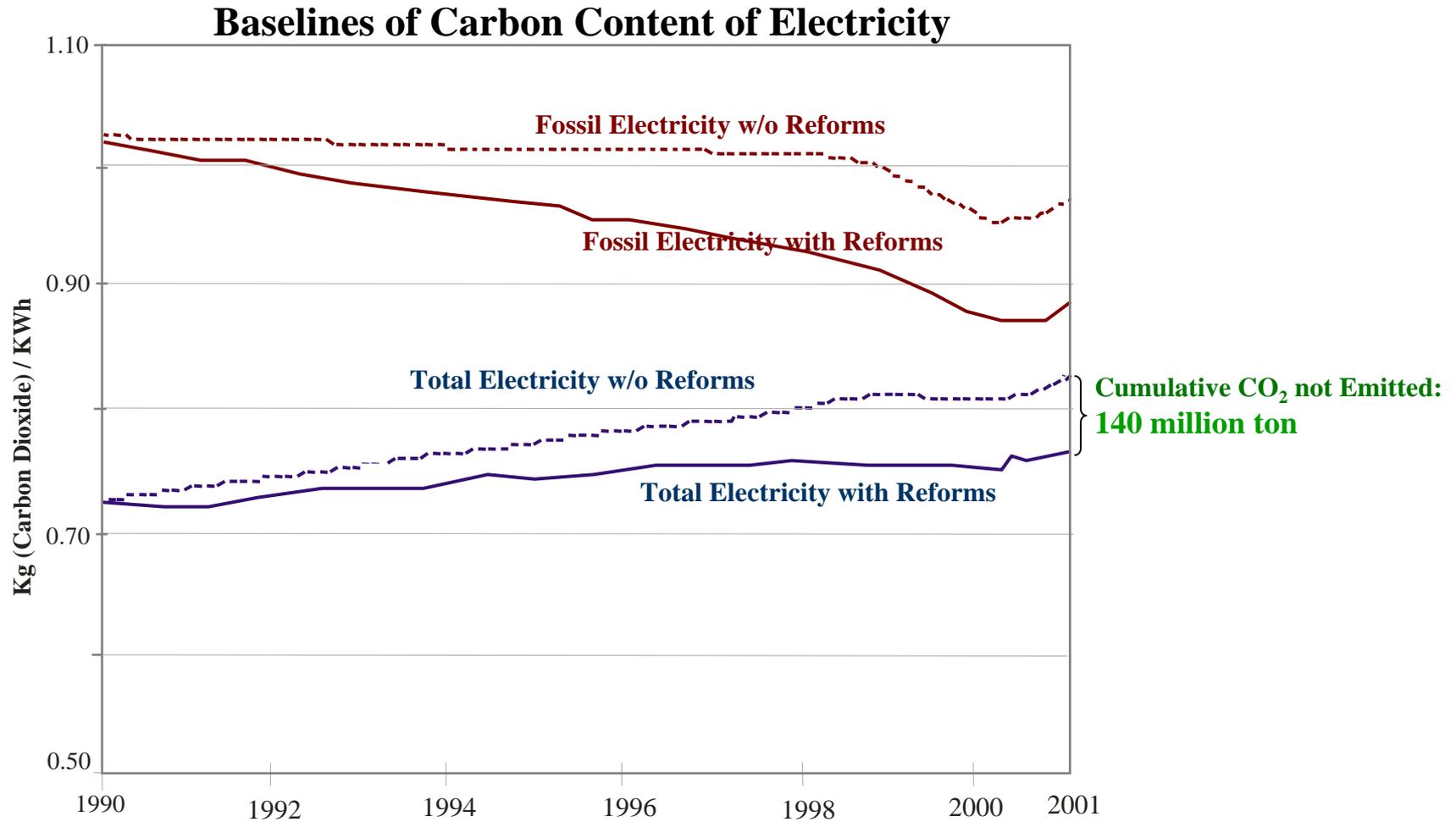


### Spillover Benefits:

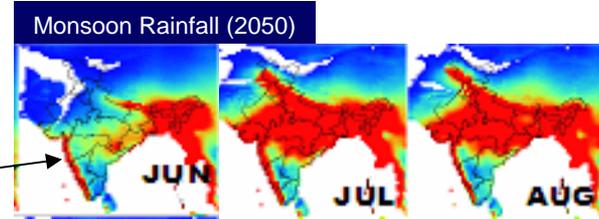
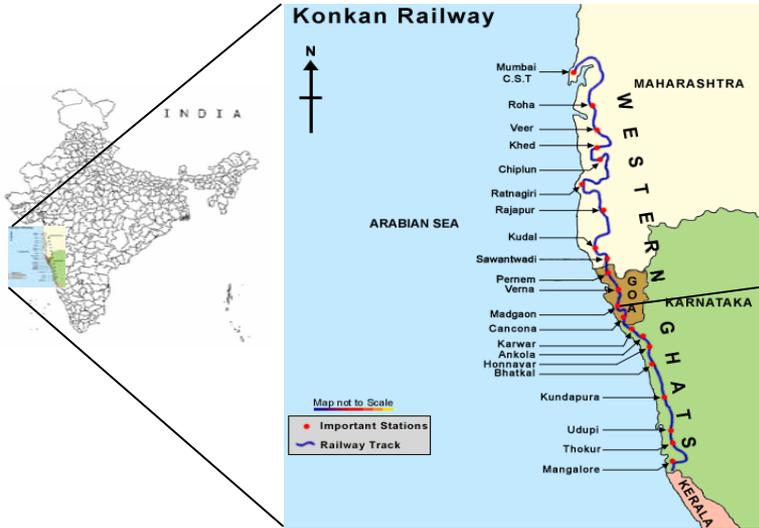
- 16 MW additional Hydropower
- Flood control
- Lower energy prices would enhance competitiveness of regional industries

Benefit (Saving) Cumulative from 2010 to 2030		\$ Billion	% GDP
Energy	60 Exa Joule	321	0.87
CO <sub>2</sub> Equiv.	5.1 Billion Ton	28	0.08
SO <sub>2</sub>	50 Million Ton	10	0.03
<b>Total</b>		<b>359</b>	<b>0.98</b>

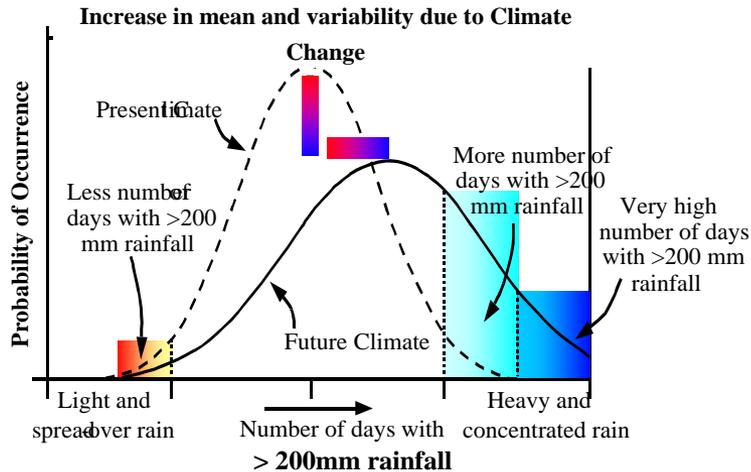
# CO<sub>2</sub> Emissions Saved by Electricity Reforms



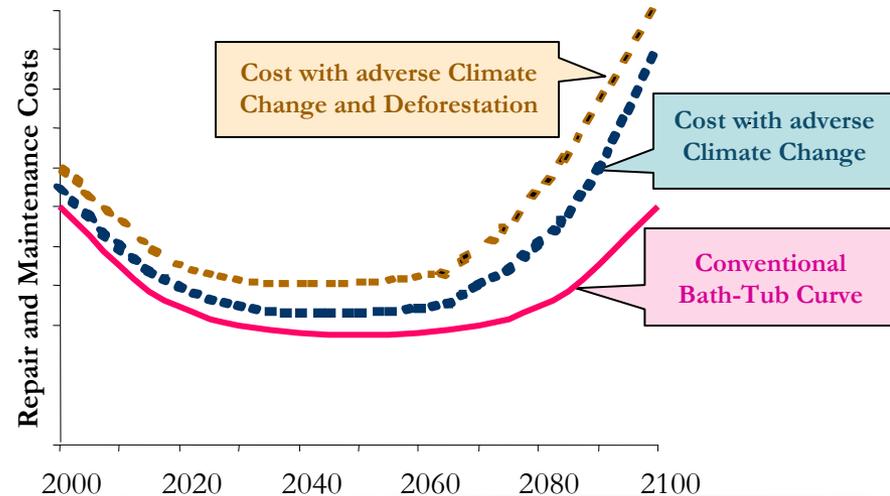
# Sustainable Development & Climate: Impacts on Infrastructure



## Increase in Climate Intensity and Variability



## Maintenance Cost Curve



# Conclusions

- Opportunities to **mainstream** climate concerns in development actions exist everywhere; and more so in developing countries.
- **Climate centric** actions could miss opportunities which may deliver development and climate co-benefits.
- Pathways to “**Low Carbon**” and “**Climate Resistant**” societies are best found if viewed through the **sustainability lens**.
- **Cost-effective** transition to **Low Carbon Society** is not automatic. It would require crafting strategies that align development and climate policies and actions through sustainability goals.