

# IPCC WG3

## Sustainable Development and Climate Change Mitigation

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**Co-CLA Chapter 12:  
Sustainable Development and Mitigation**

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# *Two-way Relationship Between Climate Change and Sustainable Development*

**A. Climate policy can have positive or negative effects on other factors**

-- **Ancillary benefits or co-benefits**

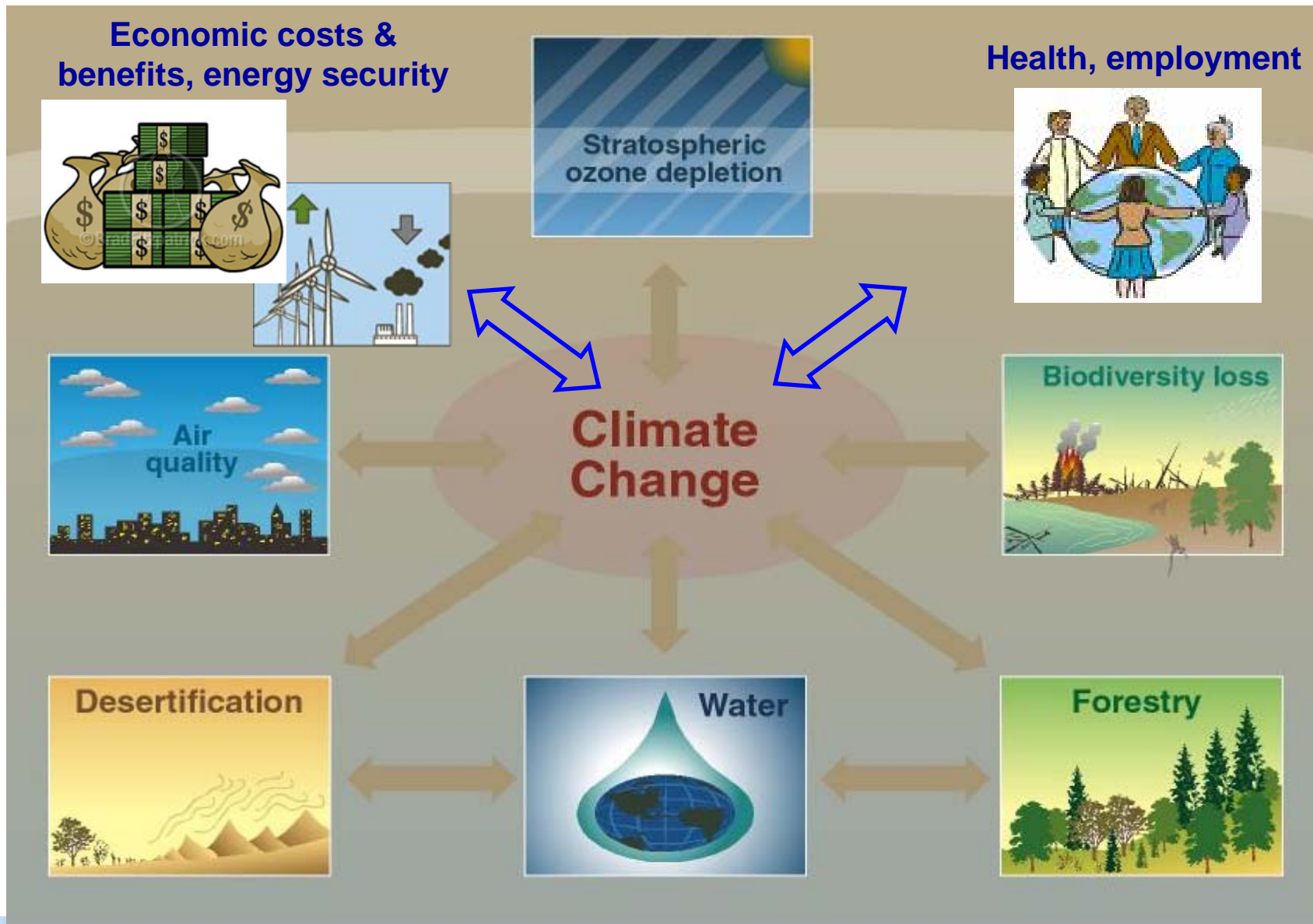
**B. Non-climate policies can influence GHG emissions as much as specific climate policies**

-- **Requires mainstreaming climate change in decision-making**

A




# Climate change and other issues

3 dimensions of sustainable development: economic/social/environmental



# Examples of side-effects of climate mitigation

A

<b>OPTIONS</b>	<b>SYNERGIES</b>	<b>TRADEOFFS</b>
<p><b>Energy:</b> efficiency, renewables, fuel-switching</p> 	<ul style="list-style-type: none"><li>• air quality</li><li>• supply security</li><li>• employment</li><li>• costs (efficiency)</li></ul>	<ul style="list-style-type: none"><li>• particulate emissions (diesel)</li><li>• biodiversity (biofuels)</li><li>• costs (renewables)</li></ul>
<p><b>Forestry:</b> reduce deforestation, plant trees</p> 	<ul style="list-style-type: none"><li>• soil protection</li><li>• water management</li><li>• employment</li><li>• biodiversity (deforest.)</li></ul>	<ul style="list-style-type: none"><li>• biodiversity (plantations)</li><li>• competition food production</li></ul>
<p><b>waste:</b> landfill gas capture, incineration</p> 	<ul style="list-style-type: none"><li>• health &amp; safety</li><li>• employment</li><li>• energy advantages</li></ul>	<ul style="list-style-type: none"><li>• ground water pollution</li><li>• costs</li></ul>

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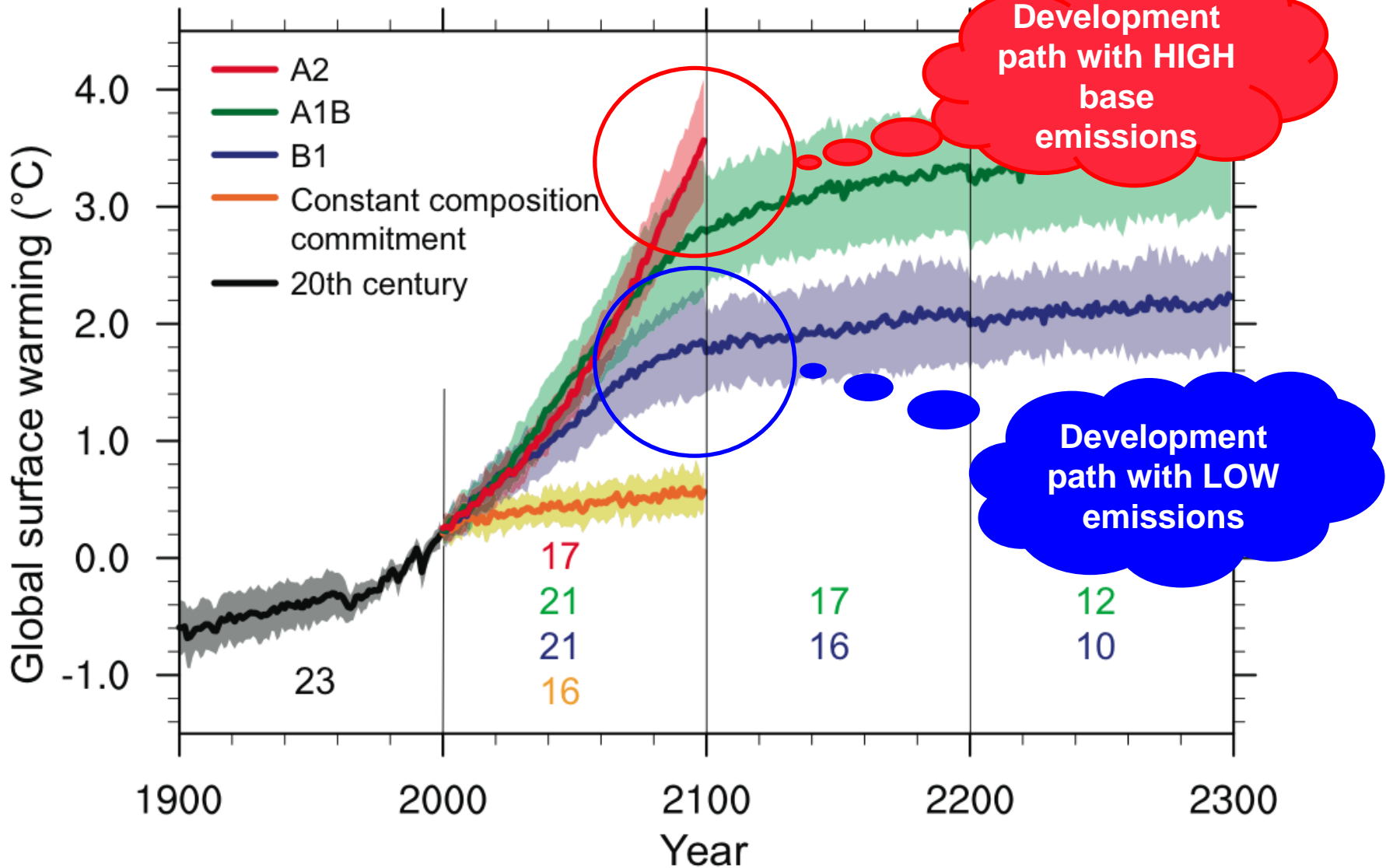
-- Ancillary benefits or co-benefits

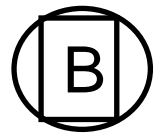
**B. Non-climate policies can influence GHG emissions as much as specific climate policies**

-- Requires mainstreaming climate change in decision-making

**B**

# *Development path as important as specific climate mitigation policies*

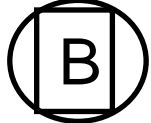




*Mainstreaming climate mitigation in development decisions with climate consequences is essential*

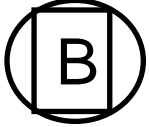
**Examples:**

- **Economic policy (incl. fiscal, trade)**
- **Power sector deregulation**
- **Energy/oil import security**
- **Forestry**
- **Bank lending**
- **Insurance industry**
- **Rural energy**



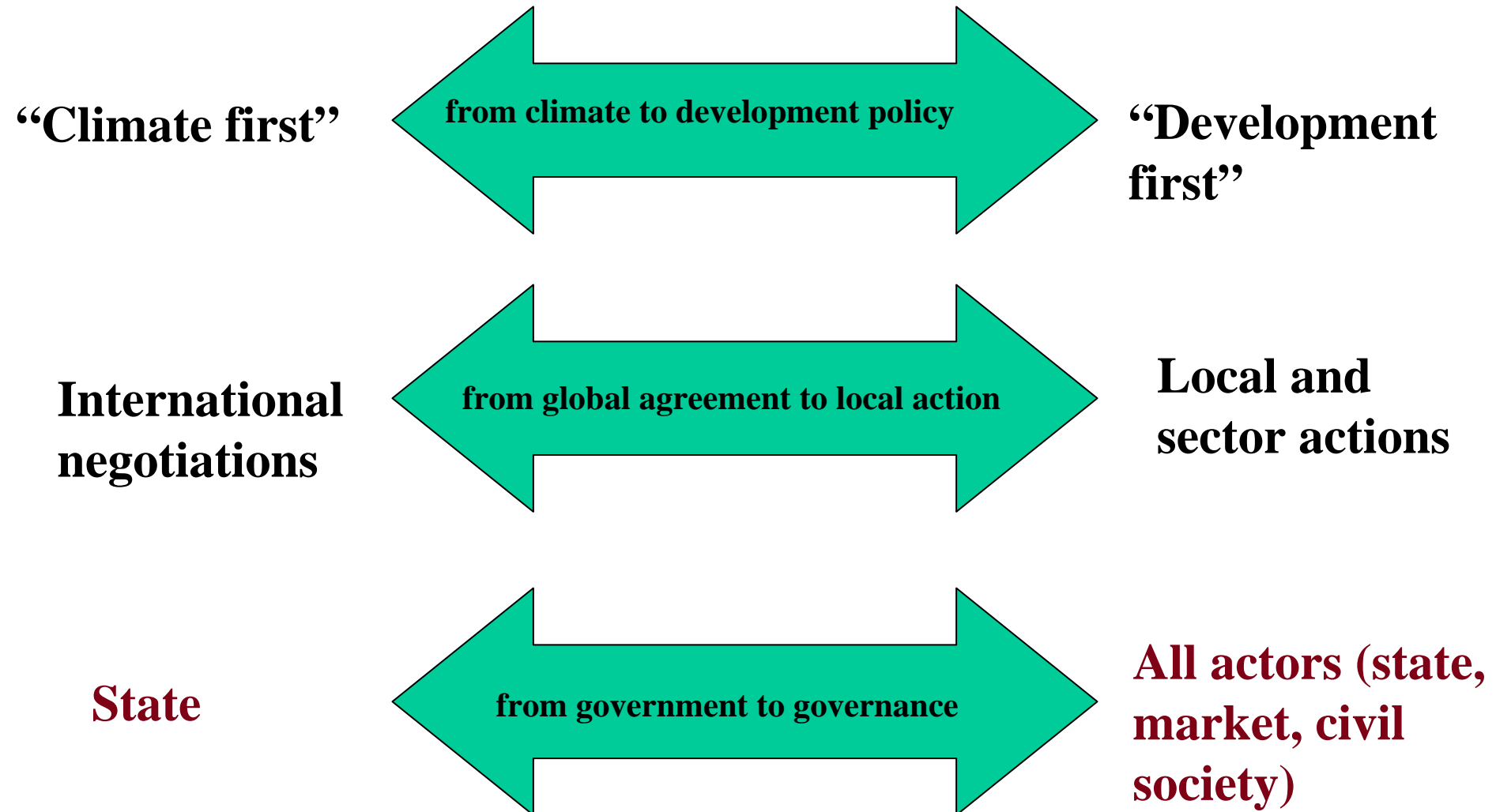
## *Non-climate policies can influence GHG emissions as much as specific climate policies*

<b>Sectors</b>	<b>Non-climate policies -- Candidates for integrating climate concerns</b>	<b>Possible influence (% of global emissions)</b>
Macro-economy	Taxes, subsidies, other fiscal policies	All GHG emissions (100 %)
Forestry	Forest protection, sustainable management	GHGs deforestation (7%)
Electricity	Renewable energy, demand management, decreasing losses transport,/distribution	Electricity sector emissions (20 %)
Oil-imports	Diversification energy sources/decrease intensity -> enhance energy security	GHGs from oil product imports (20 %)
Insurance buildings, infrastructure	Differentiated premiums, liability conditions, improved conditions green products	GHG emissions buildings, transport (20 %)
Bank lending	Strategy/policy, lending projects accounting for options emission limitations	Notably development projects (25%)
Rural energy	Policies promoting LPG, kerosene and electricity for cooking	Extra emissions over biomass (<2 %)



# *3 Ways to Broaden Climate Policies*

## *(Mitigation and Adaptation)*



# *Conclusions*

- Mainstreaming climate mitigation in development decisions with climate consequences is essential for a low-emissions path to emerge
- Entities – state, markets, and civil society – at all levels need to participate in the mainstreaming process
  - National, state, and local governments,
  - Organized and unorganized industry,
  - Non-governmental organizations, and
  - General public

Thank you for your attention!