

IPCC Fourth Assessment Report: Working Group 3

Chapter 12: Sustainable Development and Climate Change Mitigation

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Transparencies have been copied from:
http://www.ipcc.ch/unfccc_pdf/session3_sathaye.pdf,
with compliments by the author, Jayant A. Sathaye,
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Why do we care?

- The development paths of developing countries will determine to a large extent global warming, also in Switzerland
- Climate mitigation in developing countries is a formidable challenge for the Swiss export industry

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

Has been discussed extensively in CH

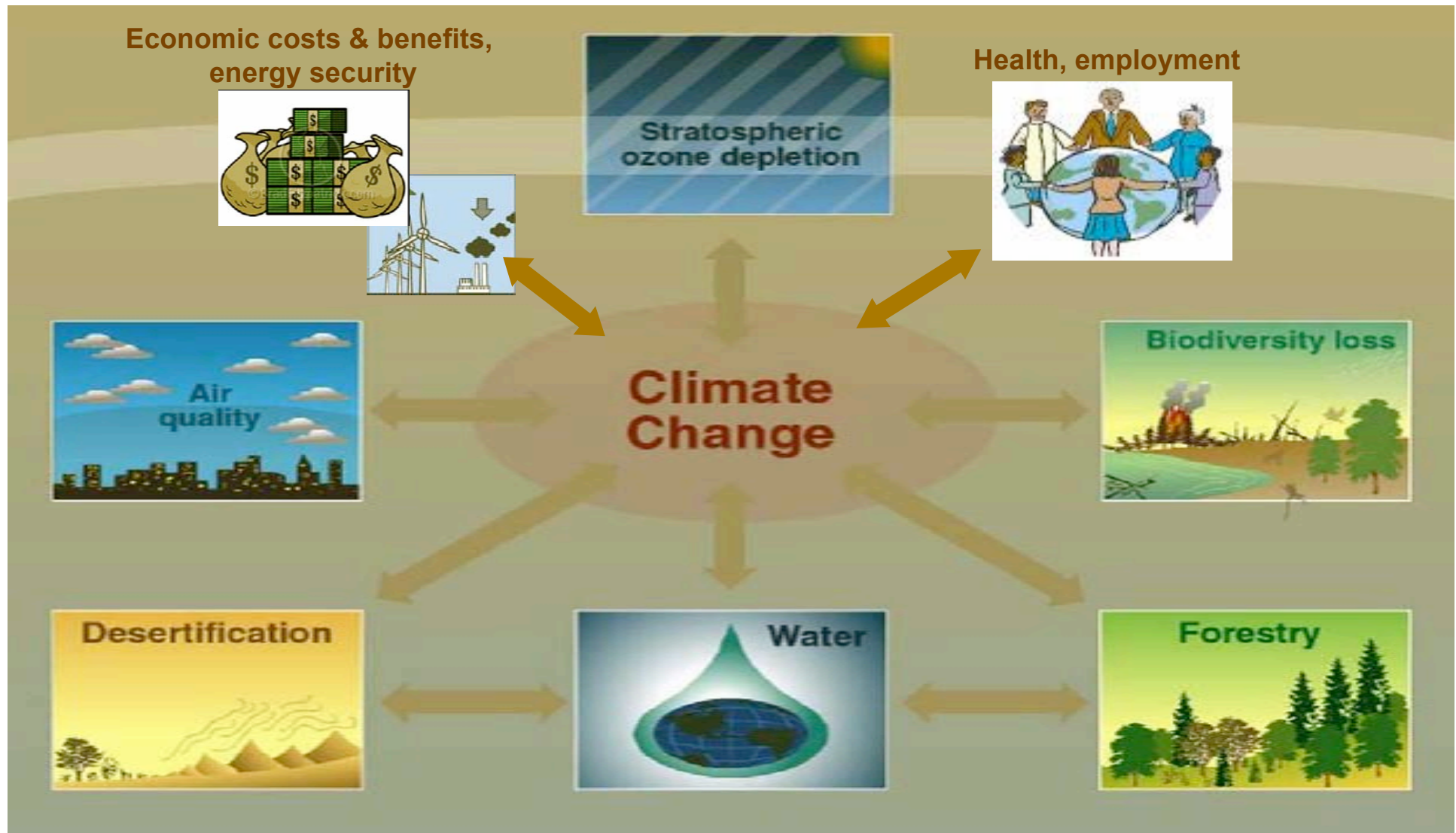
B. Non-climate policies can influence GHG emissions as much as specific climate policies

-- Requires mainstreaming climate change in decision-making

Has hardly been discussed in CH, is as much true for CH as for any developing country

Climate change and other issues

Three dimensions of sustainable development:
economic/social/environmental






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**

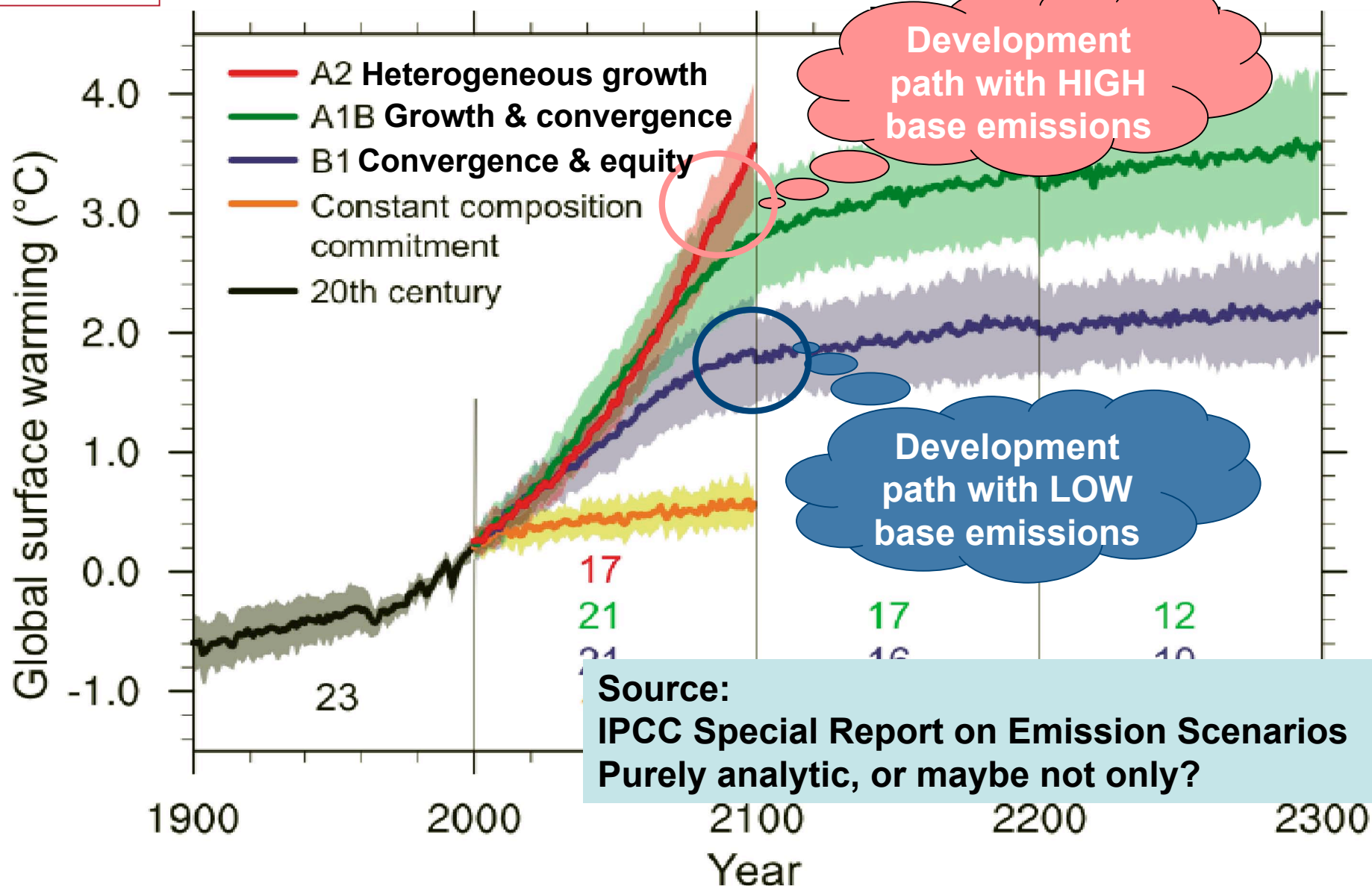
Relationship A:

Examples of side-effects of climate mitigation

OPTIONS	SYNERGIES	TRADEOFFS
Energy: efficiency, renewables, fuel-switching 	<ul style="list-style-type: none"> • air quality • supply security • employment • costs (efficiency) 	<ul style="list-style-type: none"> • particulate emissions (diesel) • biodiversity (biofuels) • costs (renewables)
Forestry: Reduce de-forestation, plant trees 	<ul style="list-style-type: none"> • soil protection • water management • employment • biodiversity (deforest.) 	<ul style="list-style-type: none"> • biodiversity (plantations) • competition with food production
Waste: landfill gas capture, incineration 	<ul style="list-style-type: none"> • health & safety • employment • energy advantages 	<div style="background-color: #e0f0ff; padding: 10px; transform: rotate(-15deg); display: inline-block;"> Important, but not the main point of this talk </div>

Relationship
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**
- **Insurance industry**
- **Bank lending**
- **Rural energy**

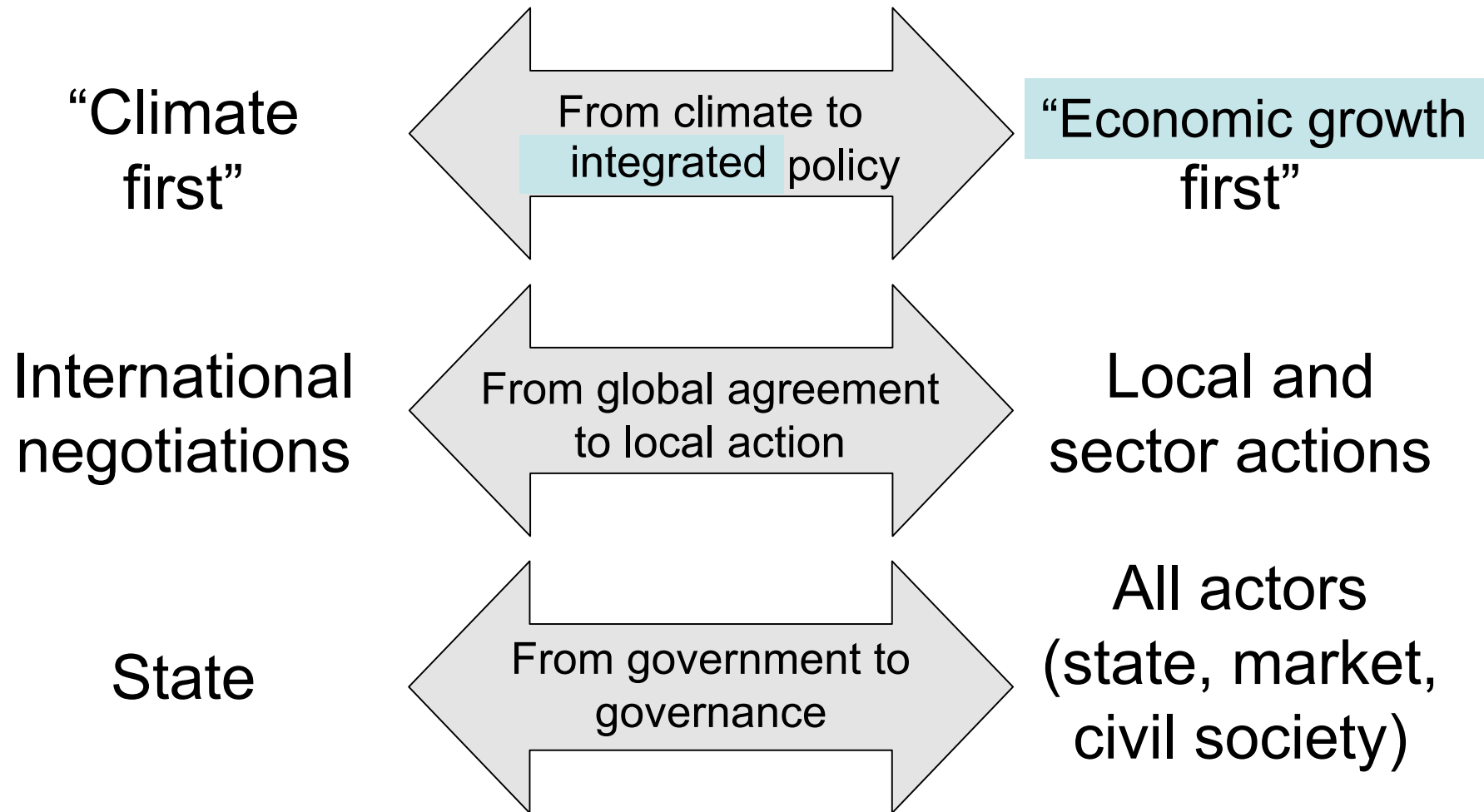
For developing countries IPCC ventures out of its traditional domains
(energy, forestry, waste)
• Hints to different possible development paths
• and partnerships

Interesting for Switzerland

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

Sectors	Non-climate policies -- Candidates for integrating climate concerns	Possible influence (% of global emissions)
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 %)

Three Ways to Broaden Climate 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

What have we learned?

- Mainstreaming climate mitigation in decisions with climate consequences is essential for low-emissions path to emerge, also for Switzerland
- Entities – state, markets, and civil society – at all levels need to participate in the mainstreaming process, also in Switzerland. This requires support from social science research.