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REGIONAL POLICY ADVOCACY

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Why we are talking about CE – Sixth Global Environment Outlook (GEO-6)

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GEO 6 GLOBAL ENVIRONMENT OUTLOOK | HEALTHY PLANET HEALTHY PEOPLE

The Sixth Global Environment Outlook

GEO 6 GLOBAL ENVIRONMENT OUTLOOK | HEALTHY PLANET HEALTHY PEOPLE | UN environment

The GEO process: fulfils the core mandate of UN Environment of 'keeping the world environment situation under review'

Bringing together a community of hundreds of scientists, governments, peer reviewers, collaborating institutions, partners and stakeholders

A multi-year process taking stock of latest published science across all environmental issues

Providing a legitimate, credible and science-based analysis of the situation, and looking at environmental policy options for the future

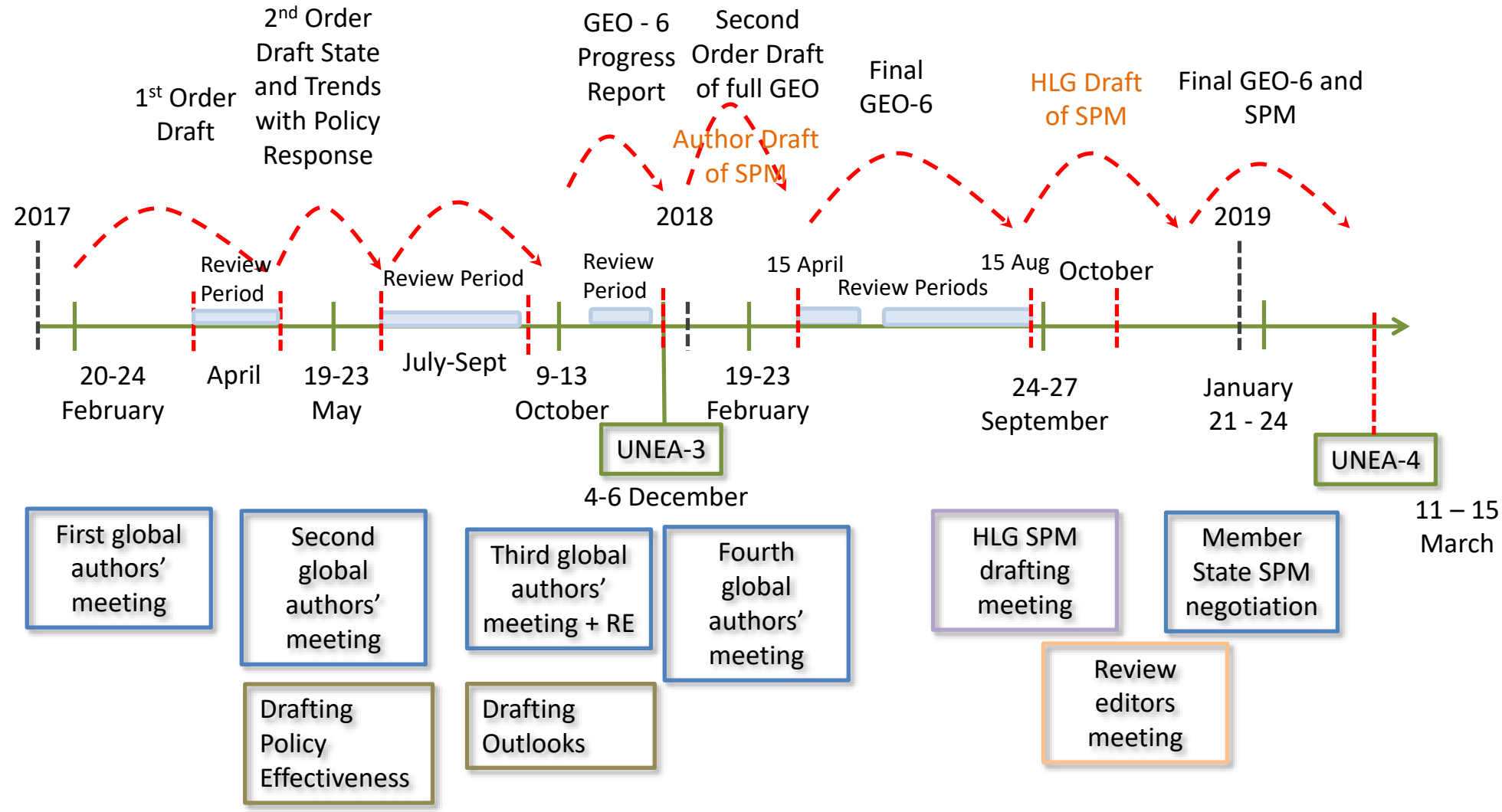
Outlining the way forward to address the environmental dimension of the United Nations Sustainable Development Goals

The Summary for Policy Makers: fulfils the UN Environment Assembly request by providing an overview of the most policy-relevant findings of the main GEO-6 document

Producing an assessment of this scale requires many generous contributions. The following organizations provided funding directly or indirectly to the sixth *Global Environment Outlook*: The Government of Norway, the European Union, the Governments of Italy, Singapore, China, Mexico, Switzerland, Denmark, Egypt and Thailand. Together with UN Environment's Environment Fund and Regular Budget, these contributions allowed for the production of GEO-6 and its accompanying Summary for Policymakers, as well as subsequent outreach activities.

www.unenvironment/global-environment-outlook

The Process



Acronyms: High Level Intergovernmental and Stakeholder Advisory Group (HLG),
Global Environment Outlooks (GEO), Summary for Policy Makers (SPM), Review Editors (RE)

The Process

- Completed over a period of **18 months**, with a total of **7 face-to face meetings** and several **hundred virtual conference calls** with advisory bodies and the community of authors

- The **gender and geographical balance** in all advisory bodies and in the community of authors and the scientific credibility of the process was of highest standards (source: Independent Scientific Advisory Panel)

- **Reviewed five times** at different stages of its development. A **total of 14,388 comments** were addressed by the authors

Authors: 146

Members of Advisory Bodies: 78

Quality Assurance: 41

UN Reviewers: 301

Peer Reviewers: >1,370

Technical reviewers - 1,006
Intergovernmental - 364



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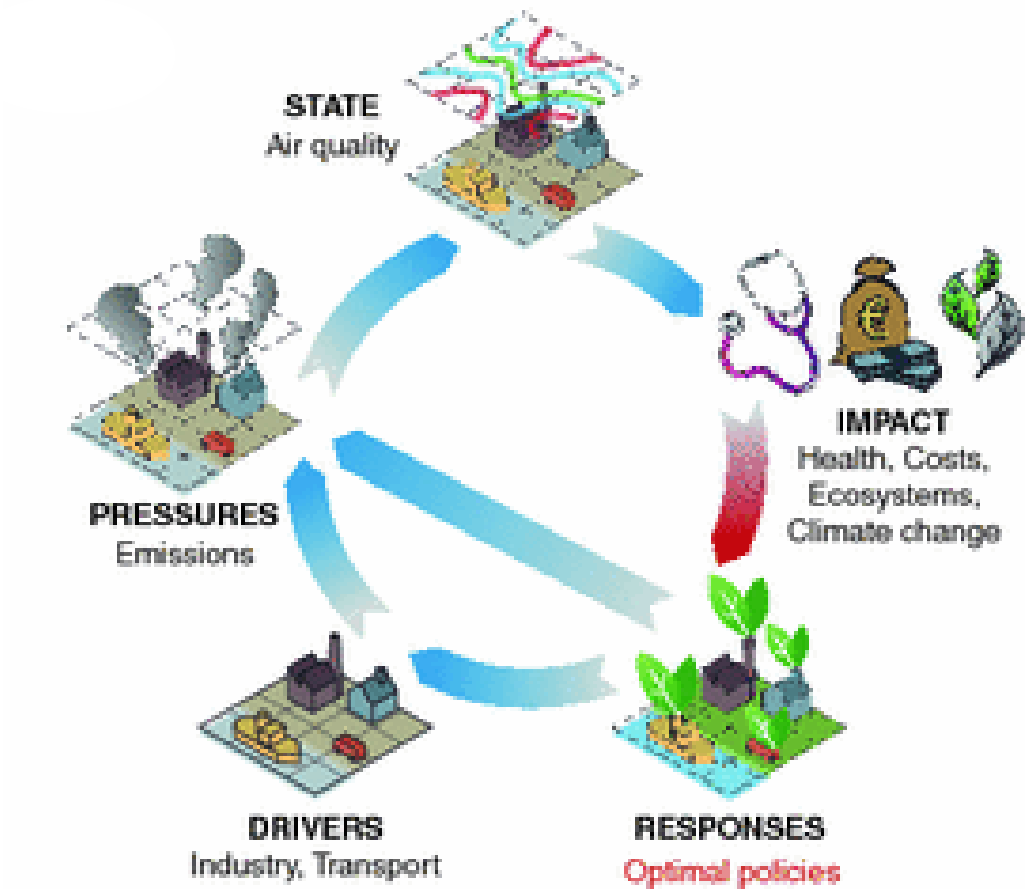
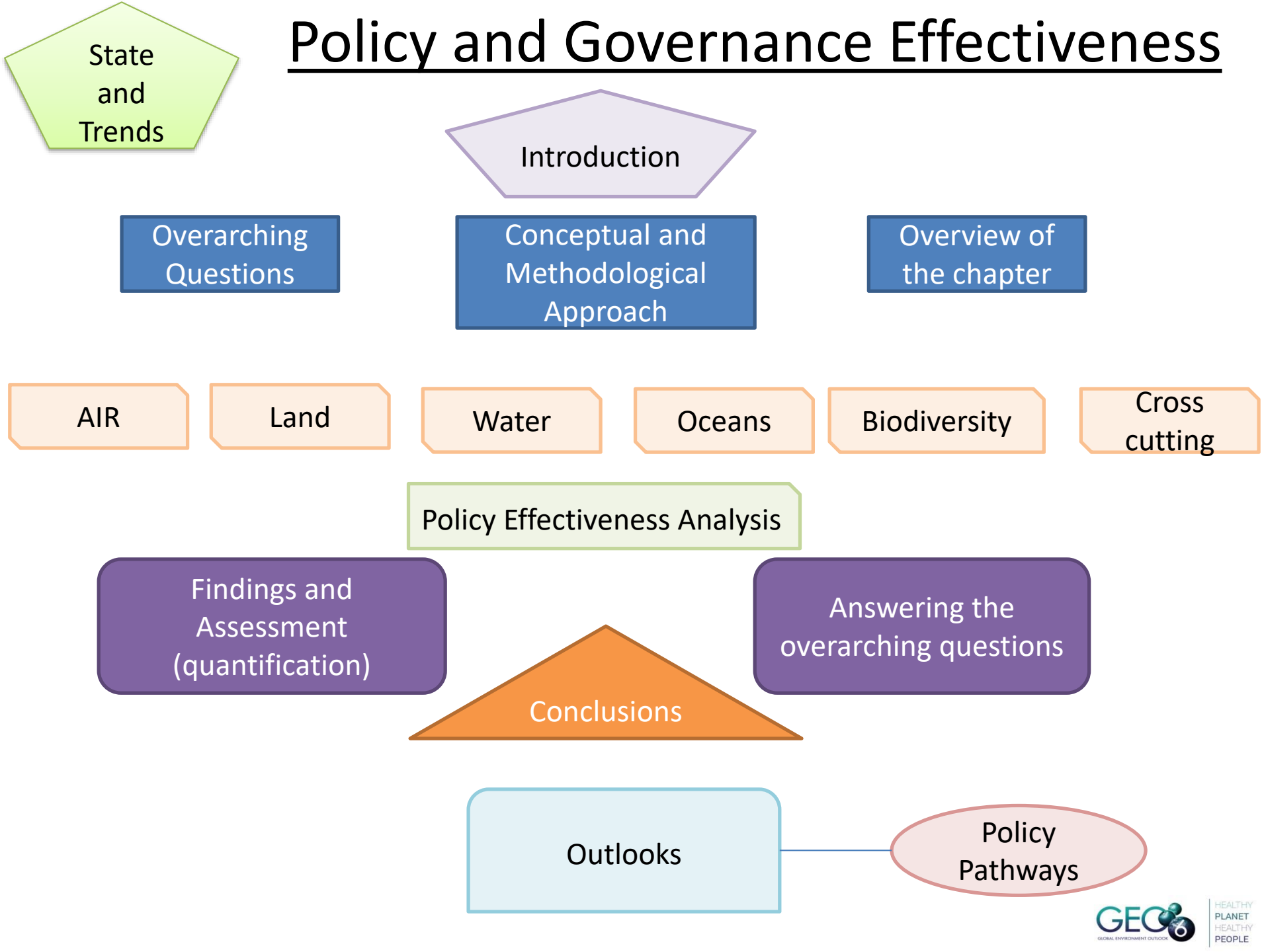
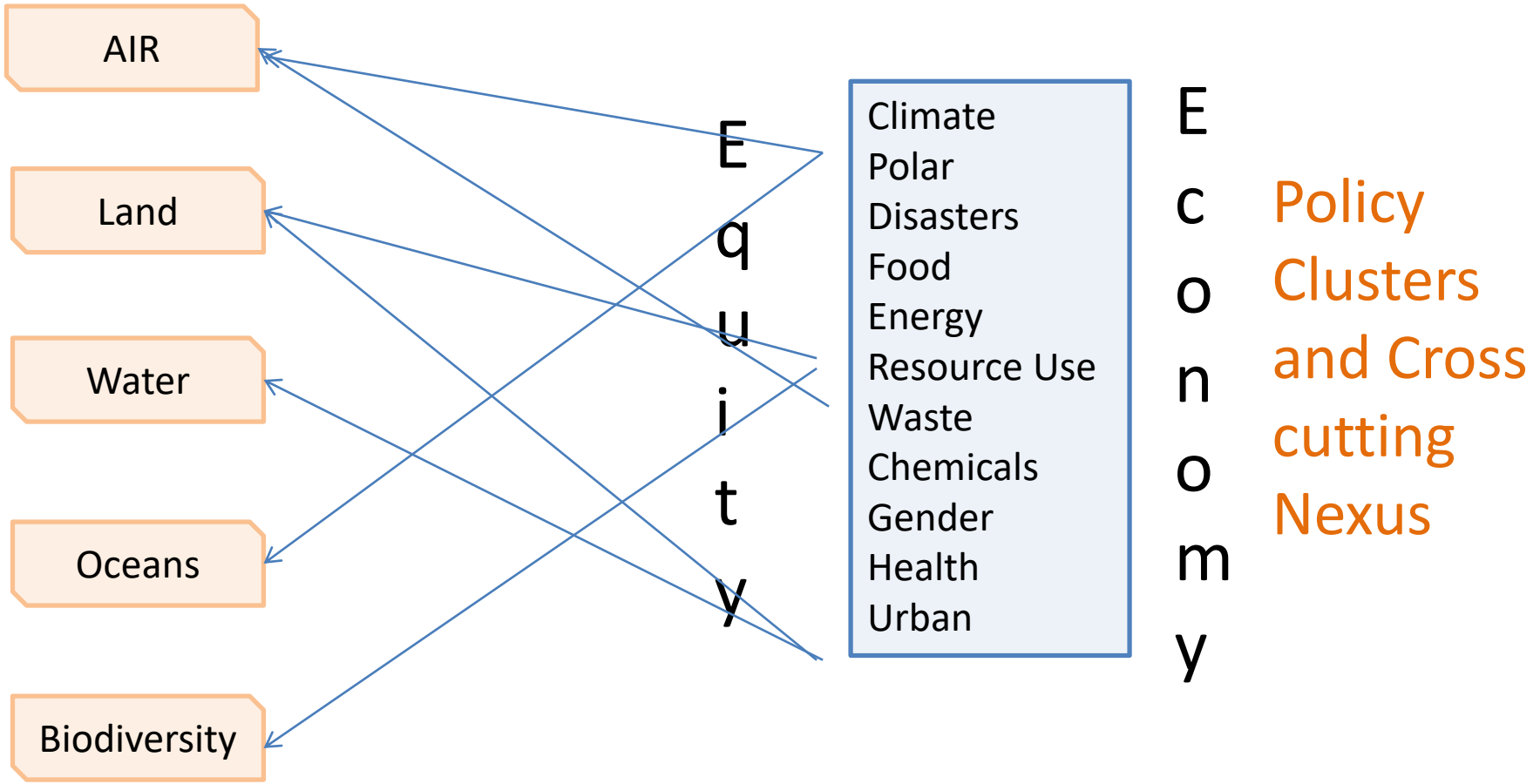


Policy and Governance Effectiveness



Proposed approach for the Cross Cutting contribution

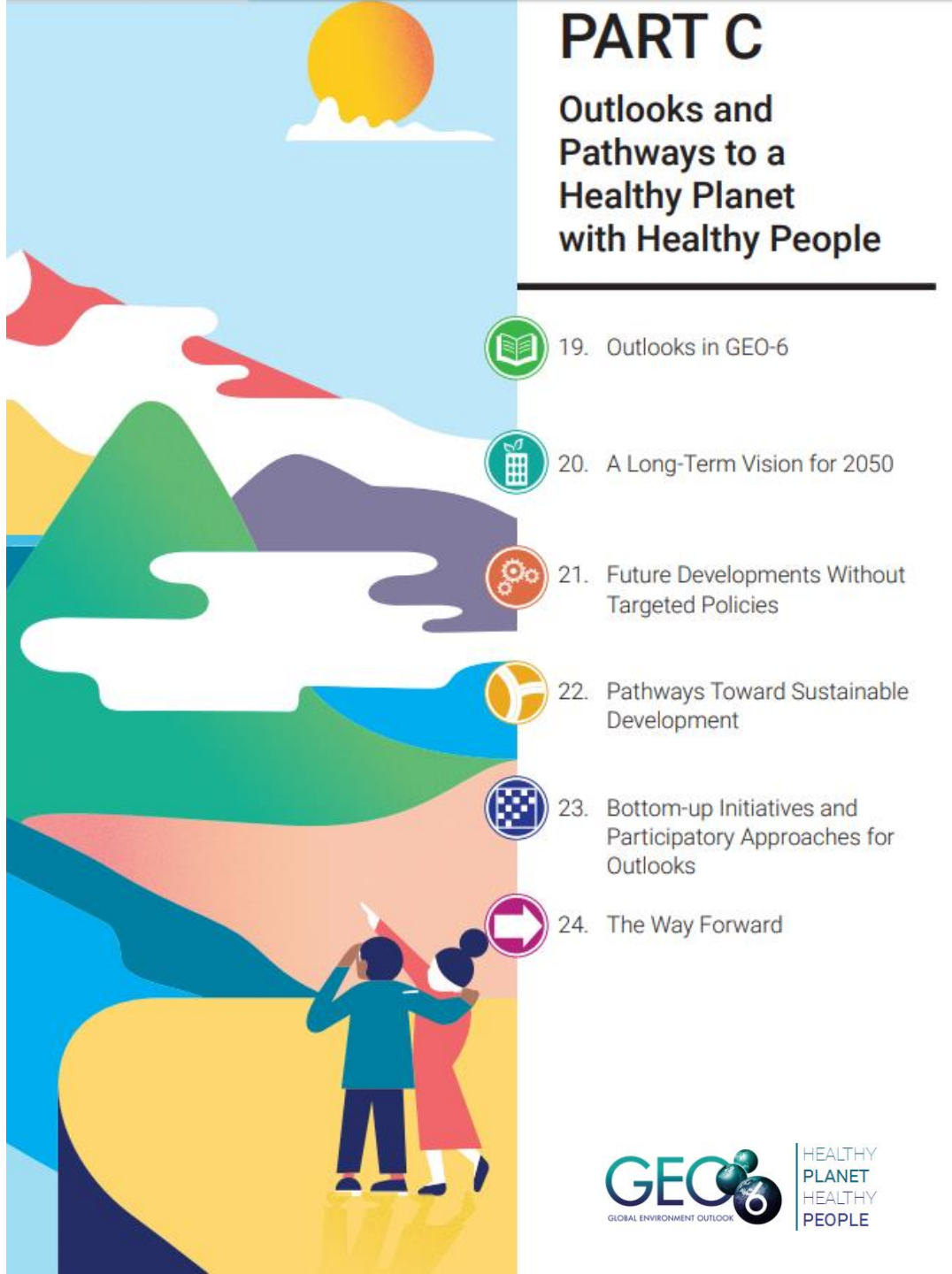


Focusing on three Main Messages

Energy – demand increase versus the need for decrease in fossil fuels

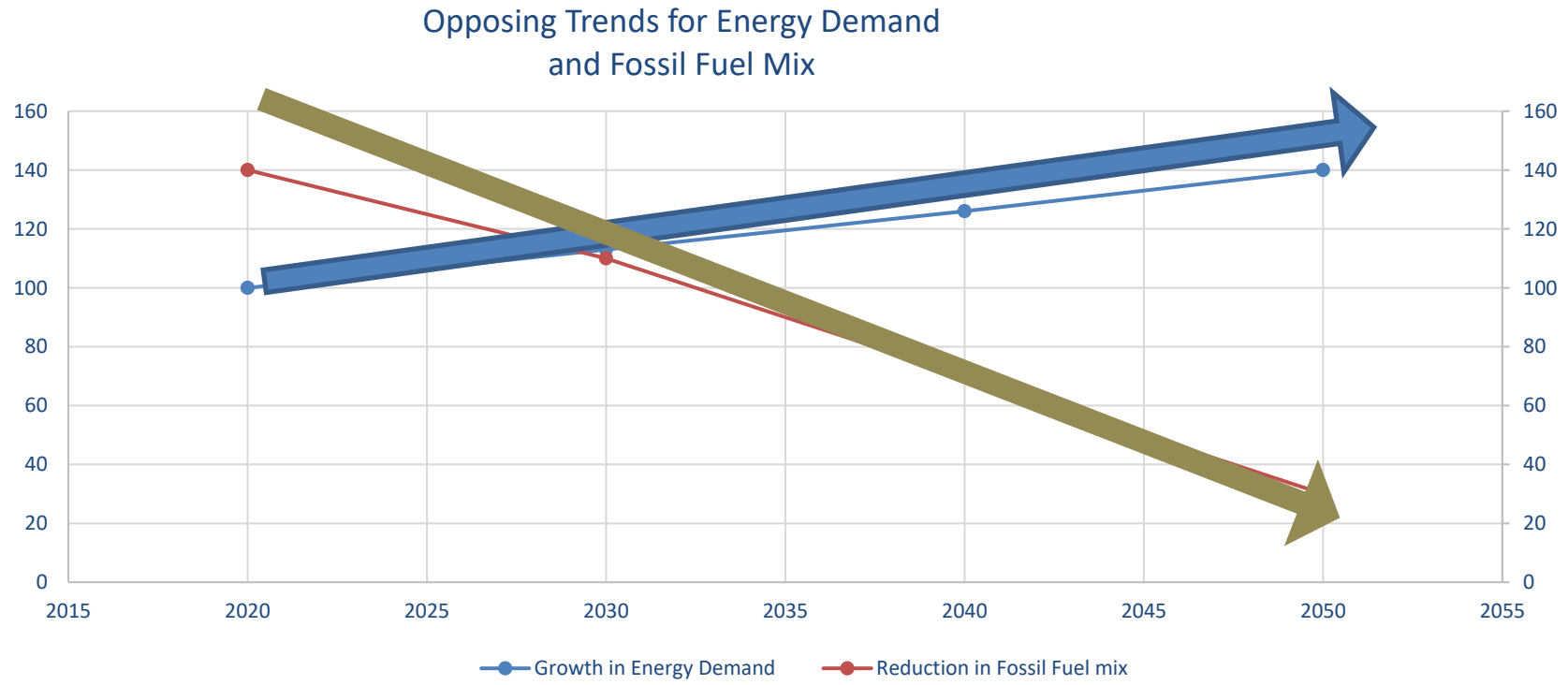
Food – the need to feed 10 billion people in 2050, while reducing environmental impact significantly.

Waste & Circularity - 1/3 of food wasted, 8 million tonnes of plastics entering the ocean per year, etc. , versus the need to move towards a circular economy due to resource constraints, pollution, etc.



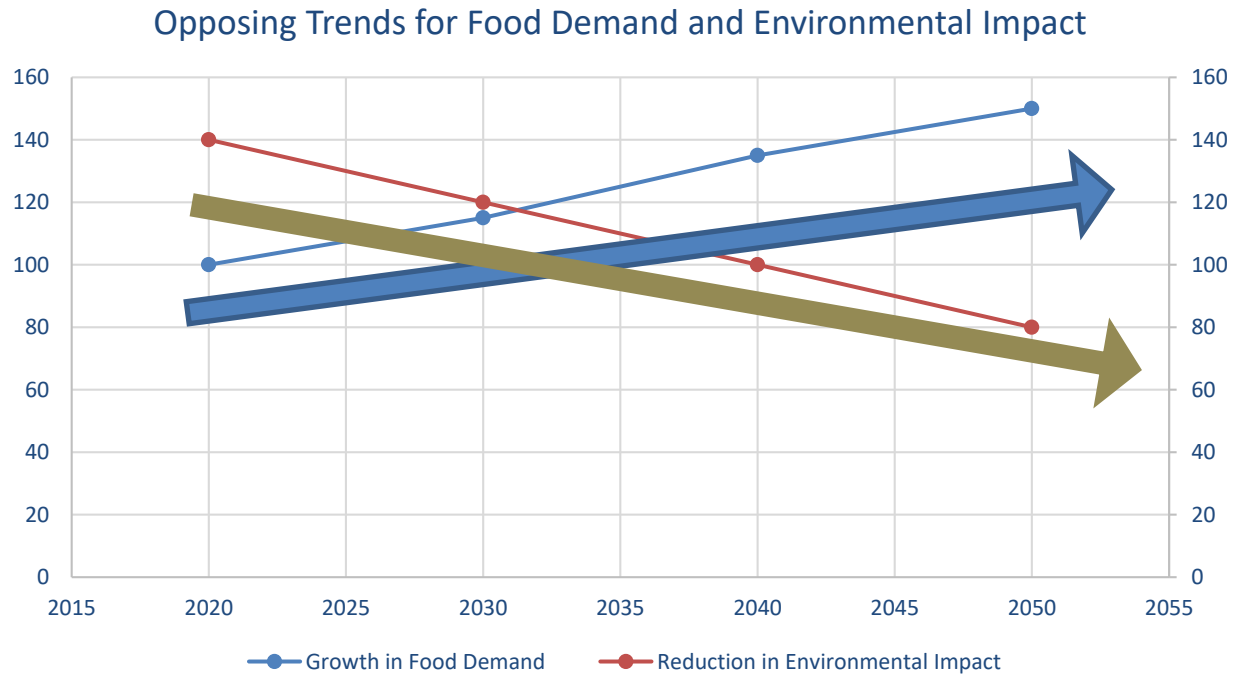
Energy

- Energy demand will increase by 50-60% by 2050
- 1.5 degree targets in the Paris agreement require an 80% decrease in fossil fuel use by 2050
- <u>Action:</u> energy efficiency, faster move to renewables, electrify the vehicle fleet, alternative fuels, etc.



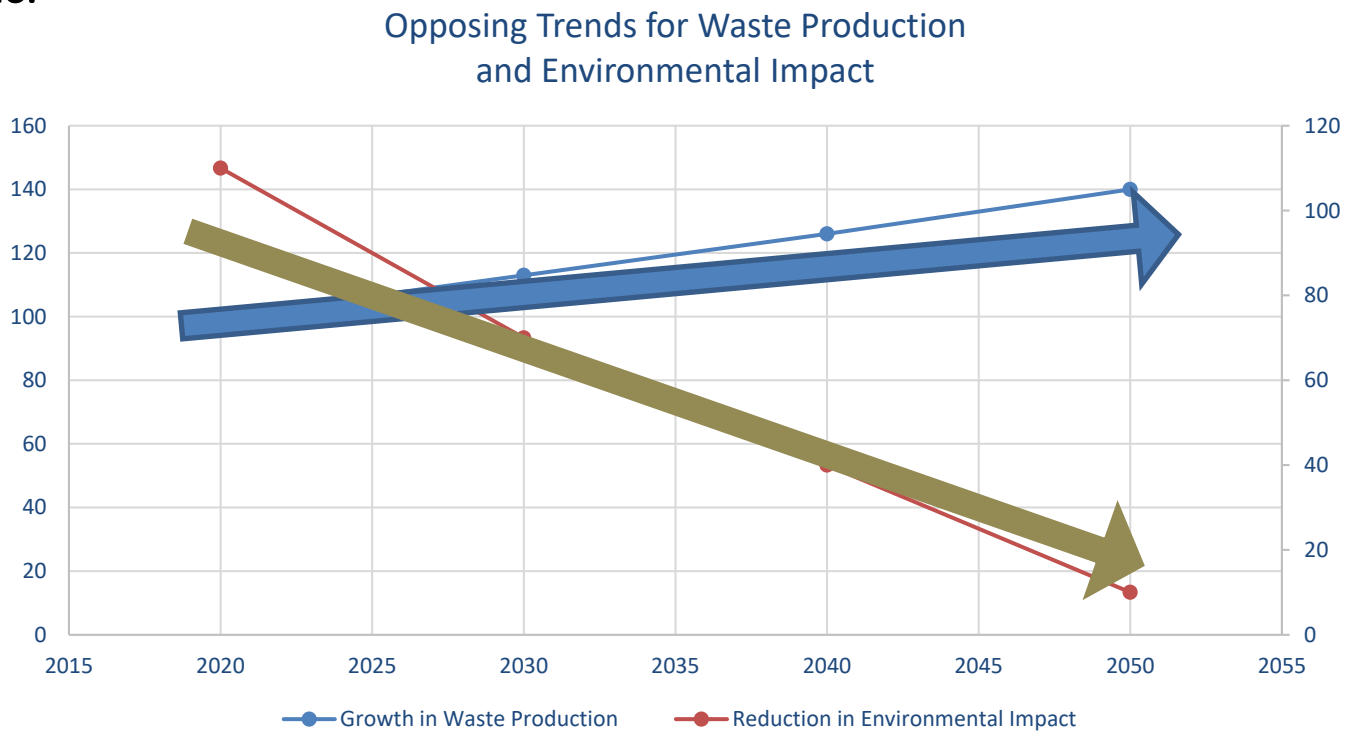
Food

- We'll need 50% more food by 2050 to feed the 10 billion people on the planet
- Environmental impact of food production is significant (pesticides, fertilizers, water use, land use, biodiversity loss)
- Across all of these areas, the environmental impact of food production probably needs to be reduced by 2/3 in order to meet the various environmental goals around the world and stay within current resource constraints
- Action: Reduce food waste, drip irrigation, fewer pesticides and fertilizers, meat-light diets, etc.

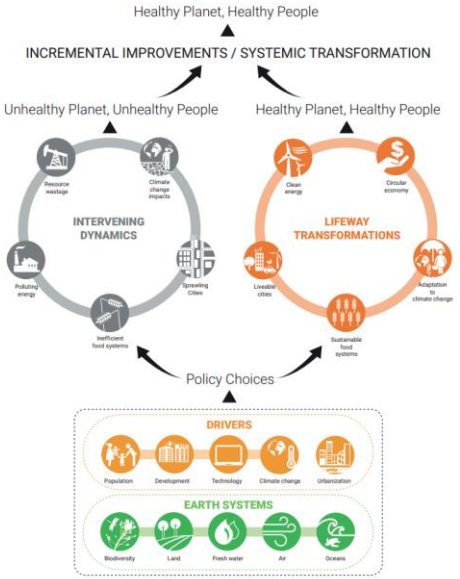


Waste & Circularity

- Reduce Waste – 1/3 of food wasted, 8 million tonnes of plastics entering the ocean per year, etc. , versus the need to move towards a circular economy due to resource constraints, pollution etc.
- Circular economy principles would have us approach a near-zero-waste society by 2050
- <u>Action:</u> design for sustainability, reduce consumption, re-use products, recycle, buy local, etc.



Systemic Approaches and Transformative Change



Addressing environmental problems issue by issue won't result in the level of progress we need (25 case studies in the Policy chapters)

Building policy clusters or enabling policies that **address systems rather than issues** can create the momentum needed

Integrating environmental, economic and social policies is more powerful than environmental policies alone

Private sector, civil society and governments all moving in the same direction

Policy diffusion needs to be strengthened to help create more momentum

Policy effectiveness assessment is essential to know where we are headed

GEO-6 Funders

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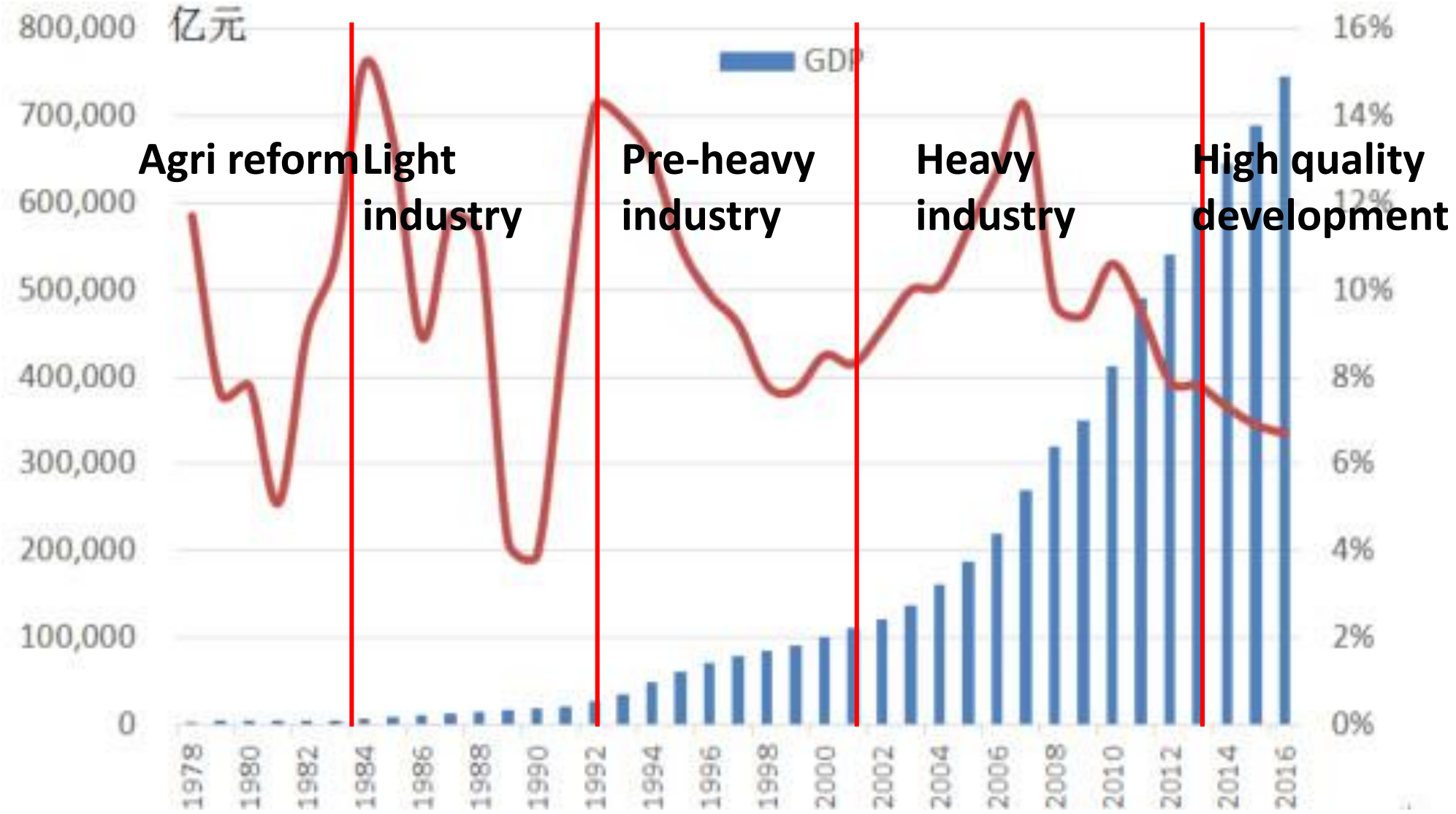
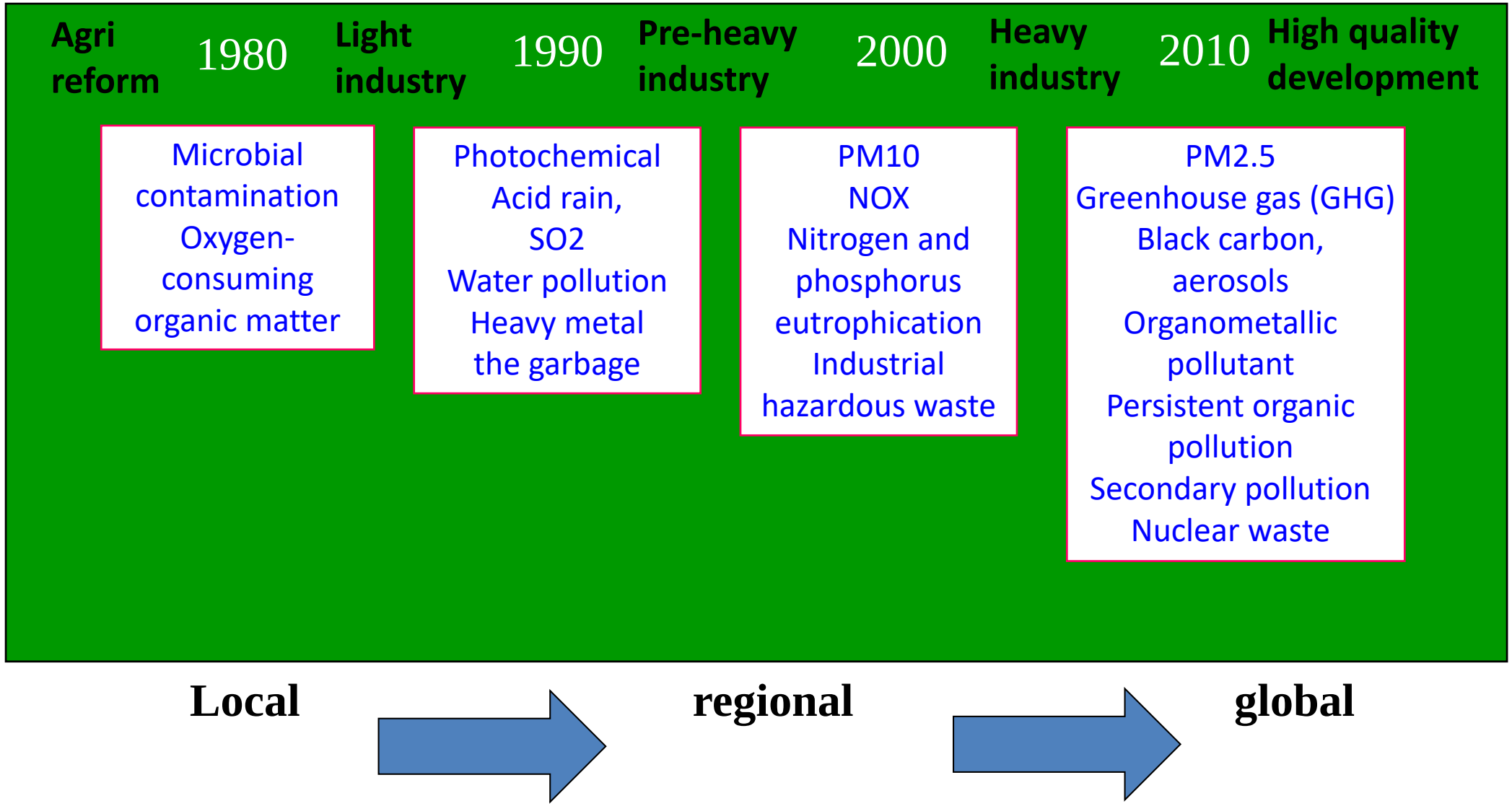
GEO-6 Partners

GEO-6 also benefited from the generous contributions of several partners, including: GRID-Arendal, World Conservation Monitoring Centre (WCMC), The Centre for Environment and Development in the Arab Region and Europe (CEDARE), The Big Earth Data Science Engineering Program (CASEarth), the European Space Agency (ESA), the Netherlands Environmental Assessment Agency (PBL), the Freie Universität Berlin and the Massachusetts Institute of Technology (MIT).

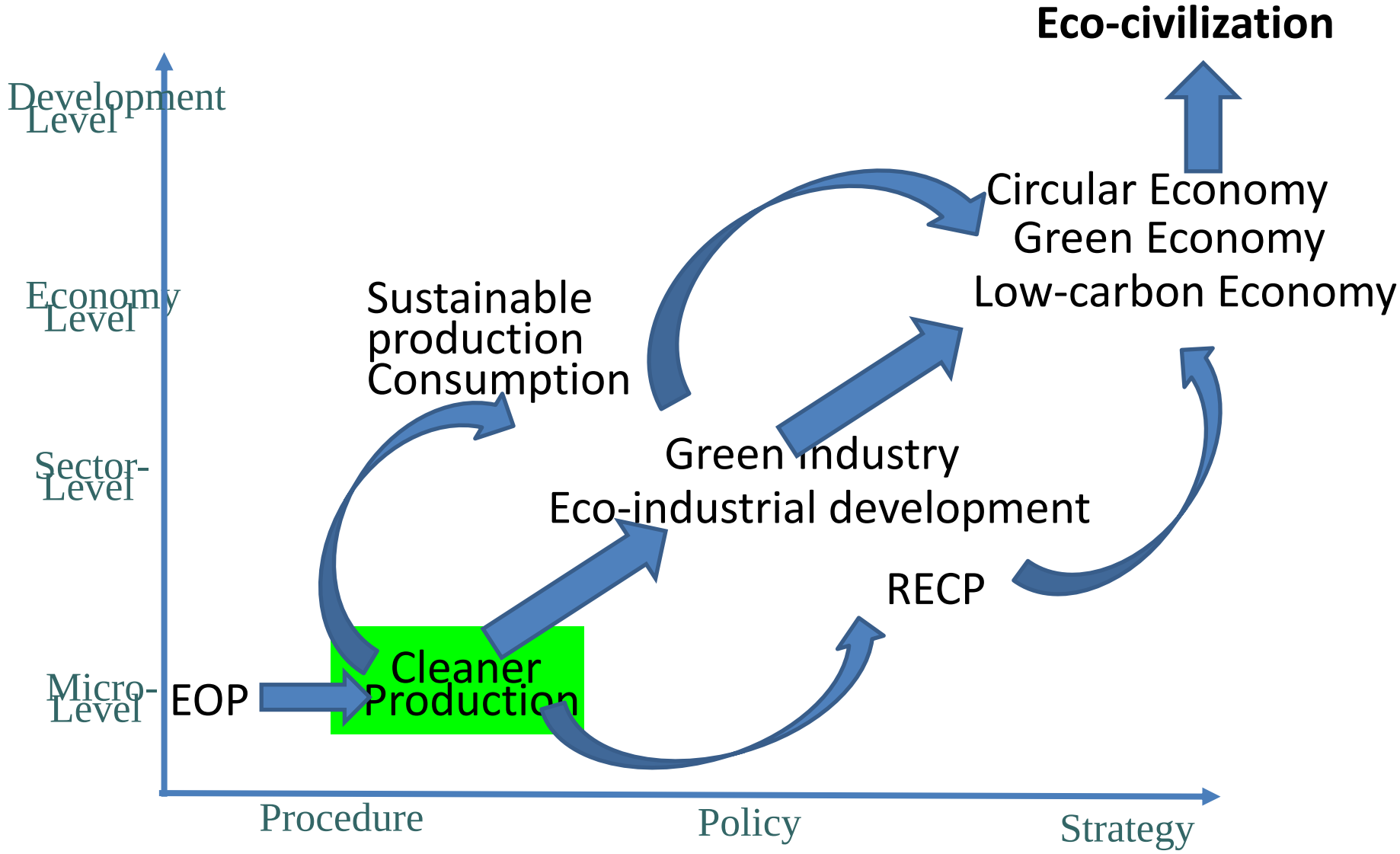
China economic growth miracle: 10.8% industrial development



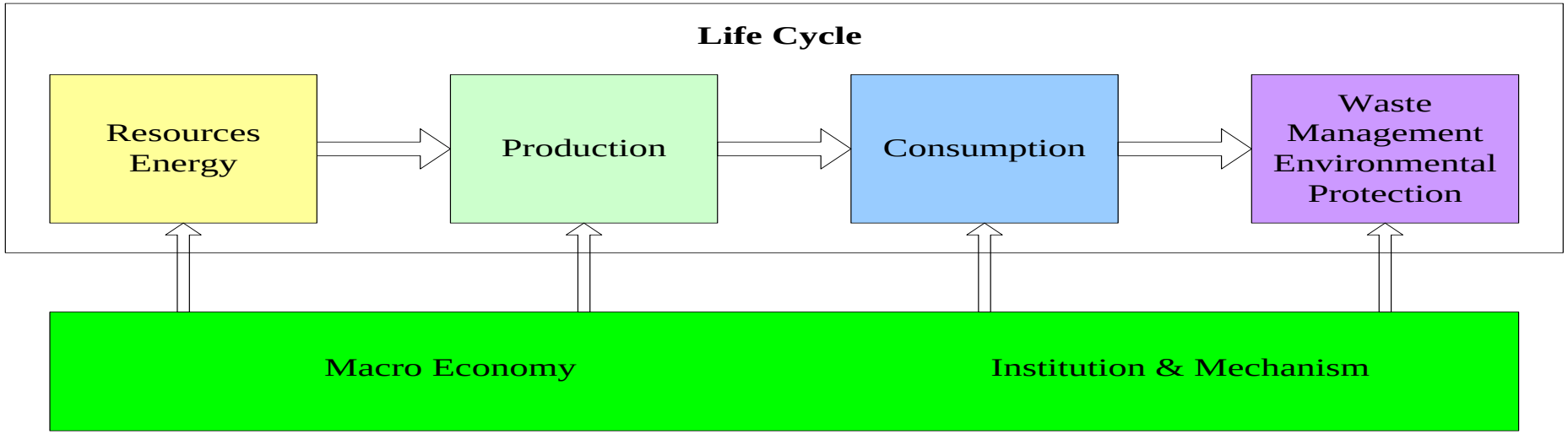
Environmental consequences - China



Cleaner Production Evolving Context



Policy typology from life cycle perspective



- **Resource-oriented: more valuable resource flows**
- **Production-oriented: to improve production eco-efficiency**
- **Environmental-oriented: to prevent and control waste treatment/disposal and associated pollution**
- **Consumption-oriented: sustainable consumption and life-cycle consideration.**

Efforts for a Circular Economy in China

A Comprehensive Review of Policies

Junming Zhu[1], *Chengming Fan*,[1] *Haijia Shi*,[2] *and Lei Shi*[3]