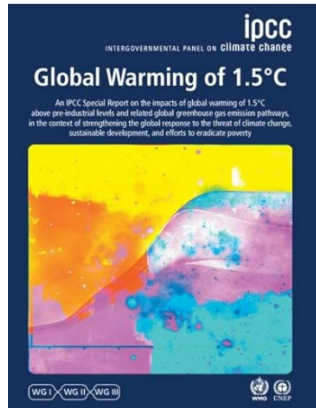
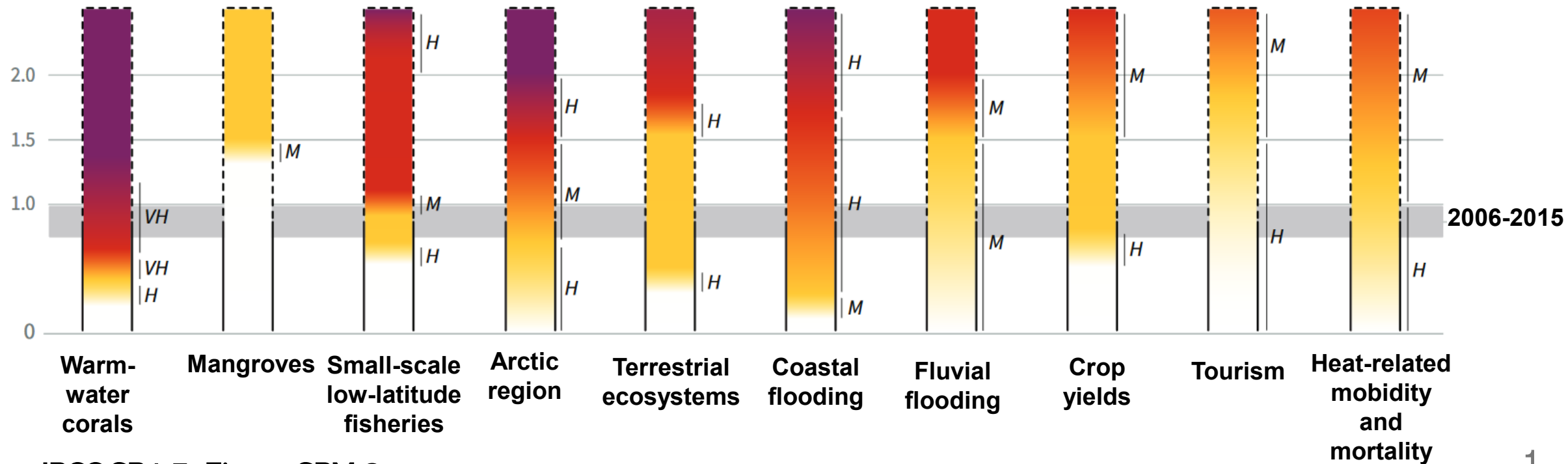


IPCC 1.5°C Special Report (October 2018)



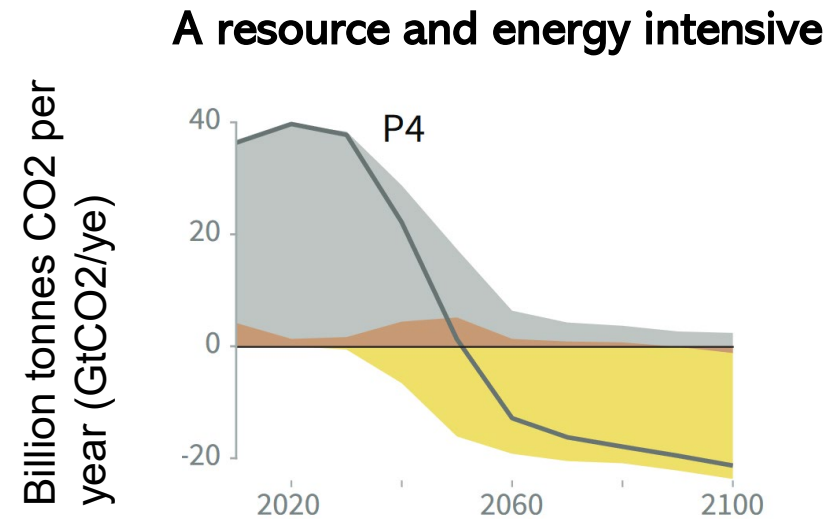
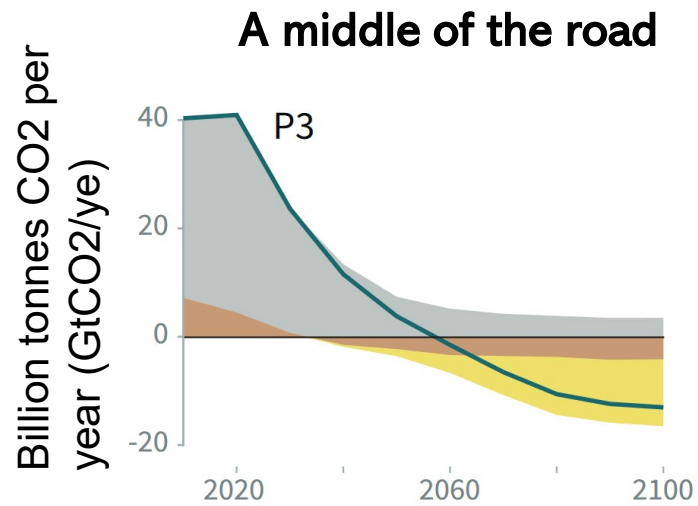
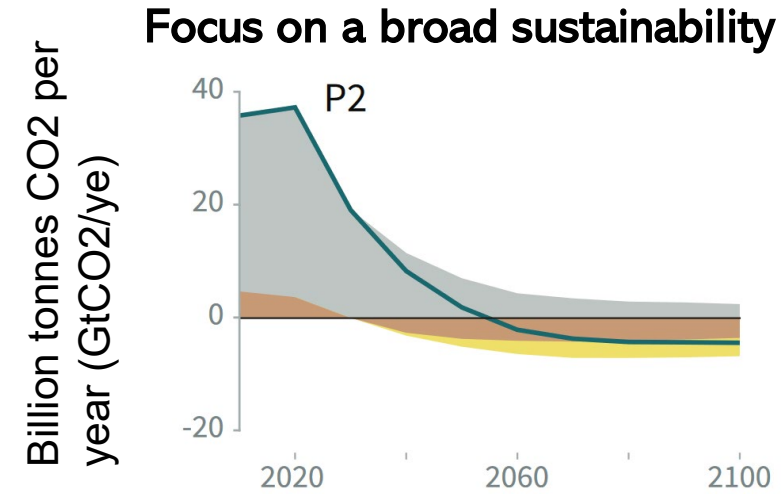
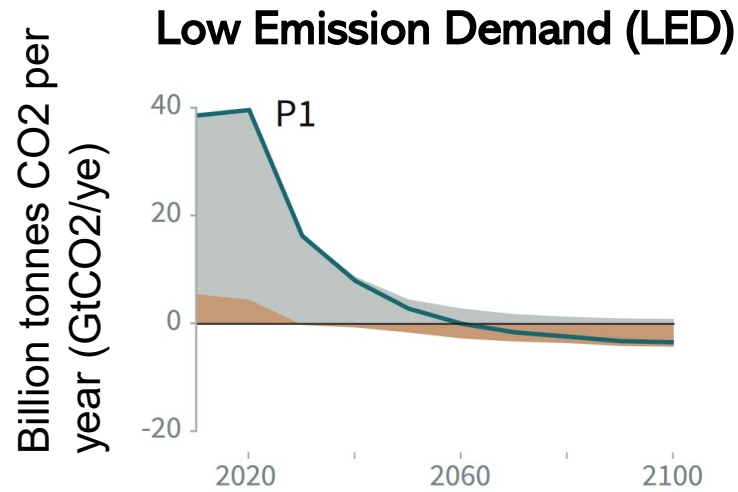
The difference between the impact of a 1.5°C and 2° temperature rise is significant.

Global mean surface temperature change relative to pre-industrial levels (°C)



Source: IPCC SR1.5. Figure SPM.2

Four illustrative model pathways that limits global warming to 1.5 °C with no or limited overshoot



● Fossil fuel and industry ● AFOLU ● BECCS

Source: IPCC SR1.5. Figure SPM.3b

Assessment of pathways of the net zero GHG emission consistent with **the 1.5 degrees** target



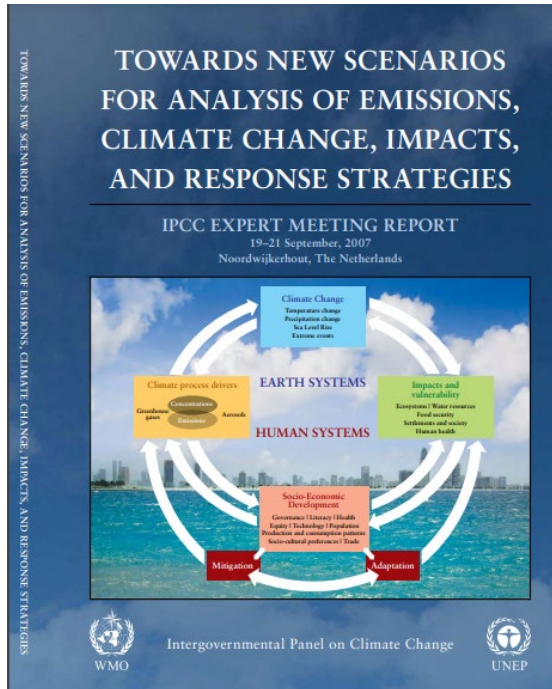
Carbon Management
Volume 9, 2018 - Issue 5



+ Global, Germany, Brazil

- India
- China
- Japan
- Korea
- Thailand
- Nepal
- Germany
- Brazil
- Global

The Integrated Assessment Modelling Consortium (IAMC) was accepted as the consortium to provide the IPCC scenario database at the 2007 IPCC Scenarios Conference in Noordwijkerhout, the Netherlands.



Source: TOWARDS NEW SCENARIOS FOR ANALYSIS OF EMISSIONS, CLIMATE CHANGE, IMPACTS, AND RESPONSE STRATEGIES. IPCC EXPERT MEETING REPORT <https://archive.ipcc.ch/pdf/supporting-material/expert-meeting-report-scenarios.pdf>



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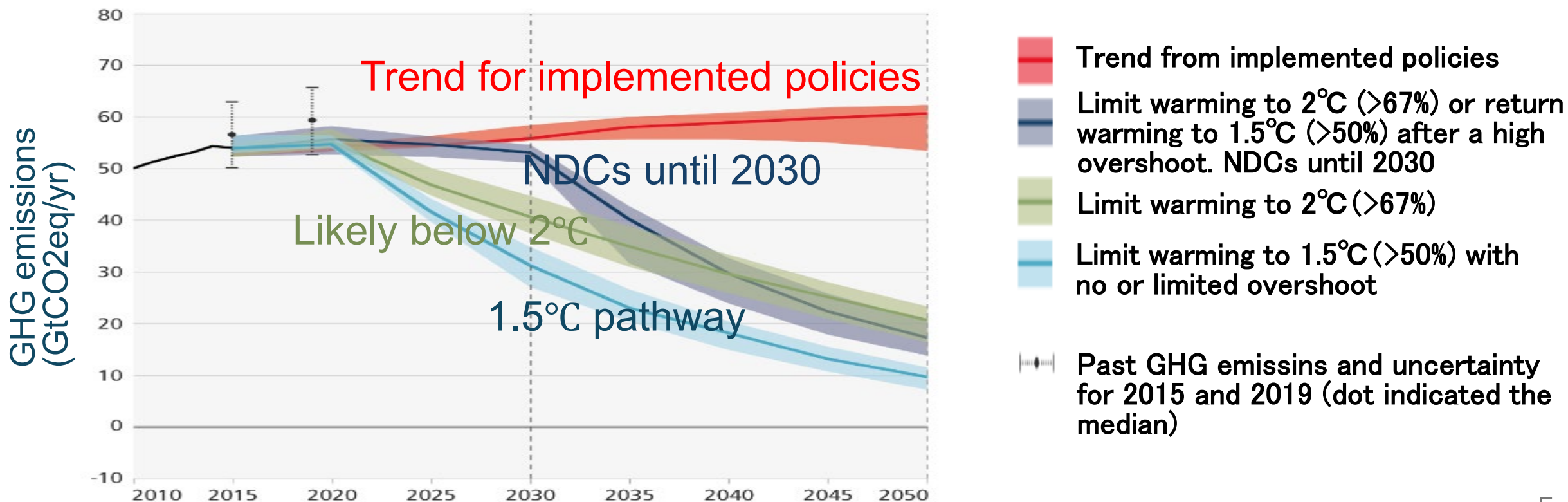


National Institute for Environmental Studies

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- *Marc Vielle*
CEA-LERNA
- *Virginia Vilariño*
Business Council for Sustainable Development – Argentina
- *Robert Watson*
Tyndall Center for Climate Change Research
- *John Weyant*
Energy Modeling Forum, Stanford University

Global GHG emissions of modelled pathways

- Global GHG emissions in 2030 associated with the implementation of the Nationally Determined Contributions (NDCs) announced before COP26 are projected to lead to a high probability of warming exceeding 1.5°C during the 21st century.
- A high probability of keeping warming below 2°C depends on accelerating rapid mitigation efforts after 2030.
- NDCs were considered in the global stocktake at COP 28 (2023). Next meeting in 2028.



AIM International Workshop

AIM: Asia-Pacific Integrated Assessment Model



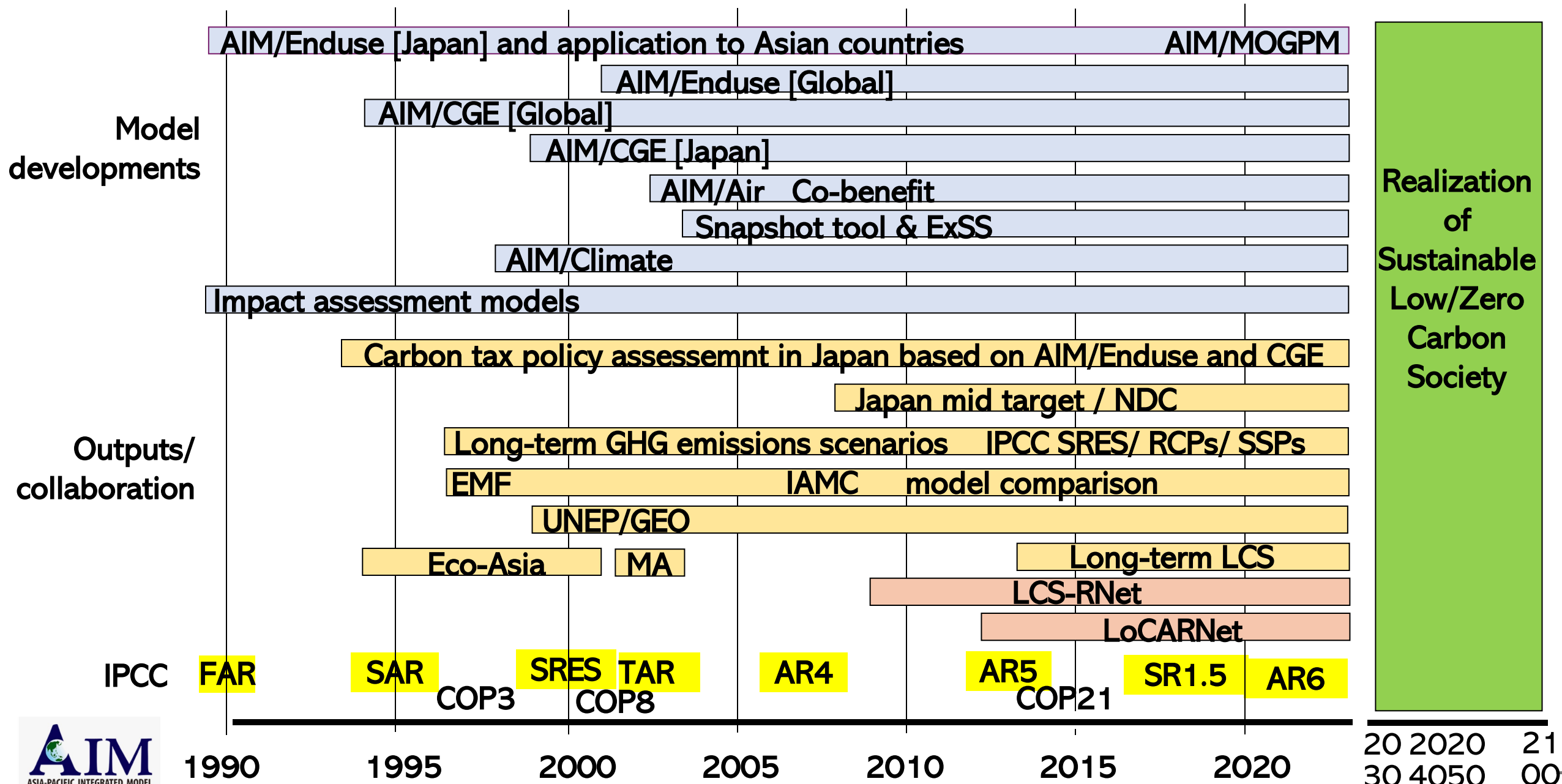
The first AIM International Workshop (Feb. 1996)



The 29th AIM International Workshop (Sep. 2023)

Past 20 years and Next 20 years

Brief History of AIM and its application



How to deploy our study to real world

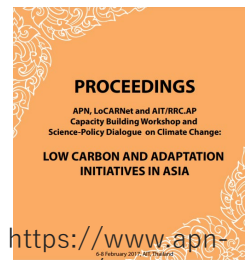
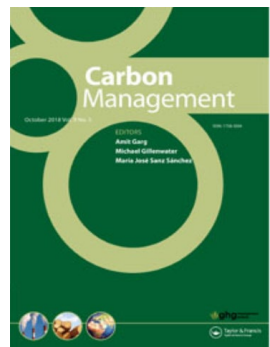
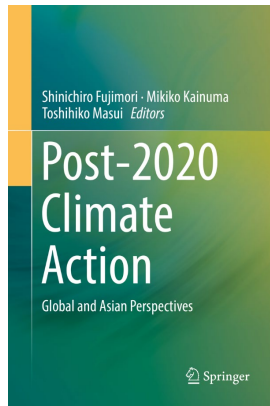
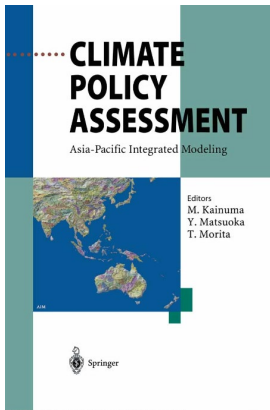
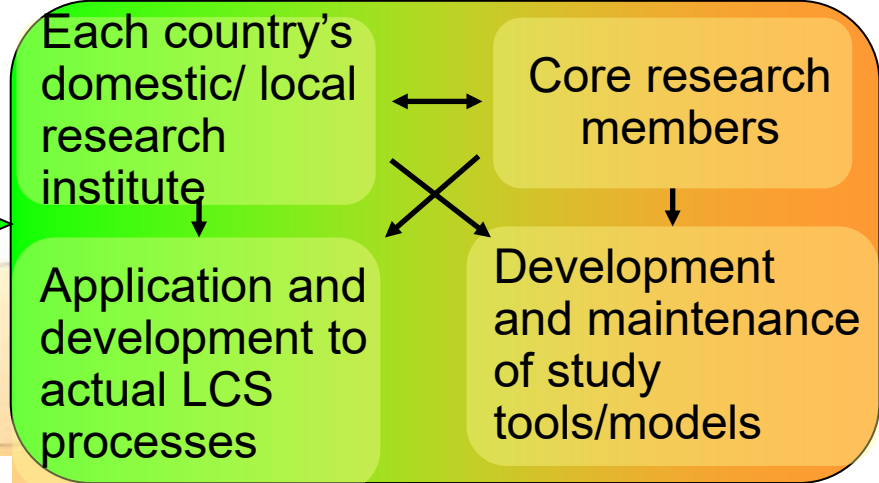
Collaboration with stakeholders

Policy makers
National/ subnational government agencies
NGOs

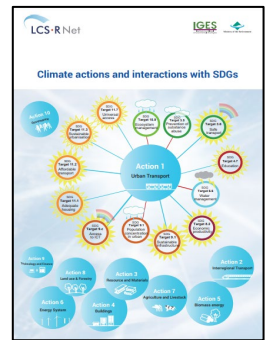
Collaboration for LCS scenario development and building roadmaps

Request of more practical, realistic roadmaps and also tractable tools for real world

Research activities



<https://www.apn-gcr.org/wp-content/uploads/2020/09/b91737449ea1e94822f6c17da5131a59.pdf>



Nepal

Bhutan

India

Thailand

Malaysia

Indonesia

Philippines

Taiwan

Korea

Japan

Viet Nam

Lao PDR

Bangladesh

Cambodia

China

Low Carbon Society Vision 2050 INDIA

Low Carbon Society Scenario Bhopal 2035

Low Carbon Society Scenario 2025 in Bangladesh

Development Strategy for Cambodia toward 2050

Low Carbon Society Scenario TOWARDS 2030 IN VIETNAM

Low Carbon Society Scenario TOWARDS 2030 IN INDONESIA Energy Sector

Low Carbon Society Scenario TOWARDS 2030 IN MALAYSIA

Low Carbon Society Scenario TOWARDS 2030 IN PHILIPPINES

Low Carbon Society Scenario TOWARDS 2030 IN TAIWAN

Low Carbon Society Scenario TOWARDS 2030 IN KOREA

Low Carbon Society Scenario TOWARDS 2030 IN JAPAN

Low Carbon Society Scenario TOWARDS 2030 IN VIETNAM

Low Carbon Society Scenario TOWARDS 2030 IN LAO PDR

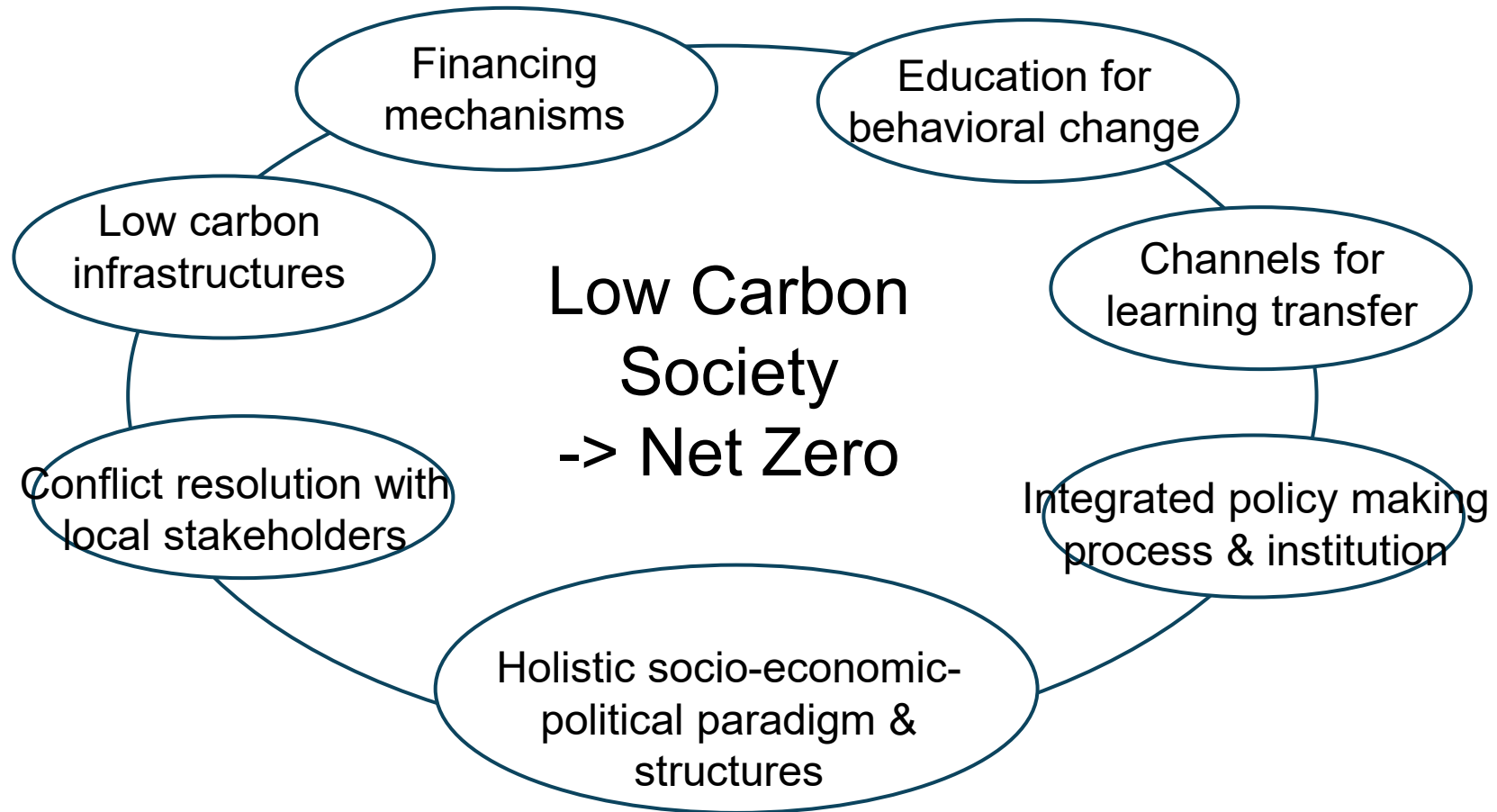
Low Carbon Society Scenario TOWARDS 2030 IN BANGLADESH

Low Carbon Society Scenario TOWARDS 2030 IN CAMBODIA

Low Carbon Society Scenario TOWARDS 2030 IN CHINA



Changes needed in structures, institutions, processes and mechanisms for net zero societies



M. Kainuma (2015) Modeling approach to bridge the climate change and SDGs. presentation at the 21th AIM Workshop. https://www-iam.nies.go.jp/aim/aim_workshop/aimws_21/presentation/s07_03_kainuma.pdf



Thank you very much!



Side event at COP25
「 Is a 1.5° society feasible? 」

