



# CD-LINKS

*Linking Climate and Development Policies  
– Leveraging International Networks and  
Knowledge Sharing*





# Context of CD-LINKS



**PARIS2015**  
CONFÉRENCE DES NATIONS UNIES  
SUR LES CHANGEMENTS CLIMATIQUES  
COP21·CMP11

National and local policies with a diverse set of objectives and issues to tackle



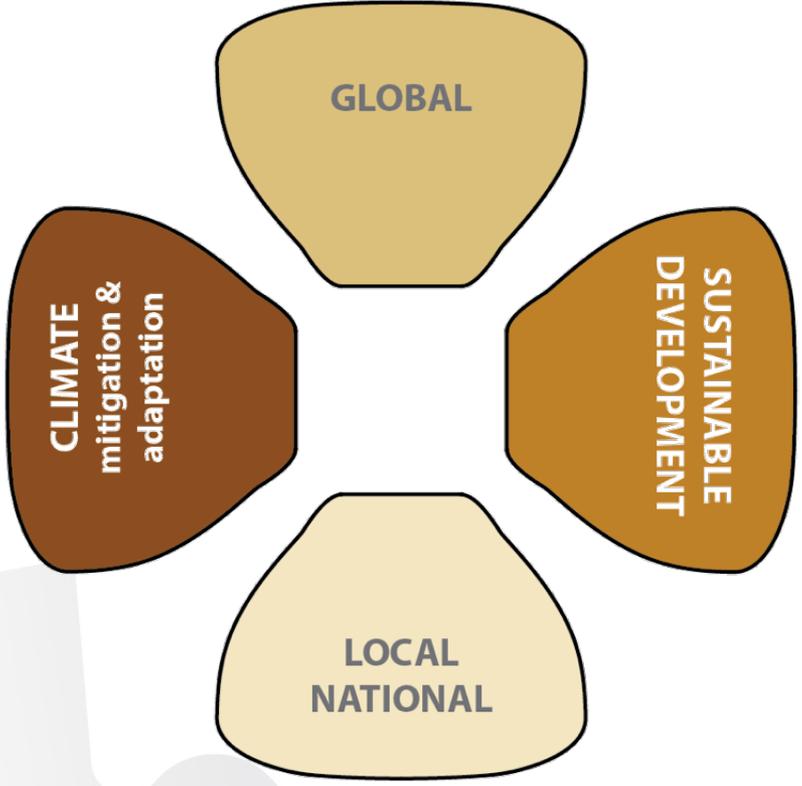
# Project vision

**CLIMATE**  
mitigation &  
adaptation

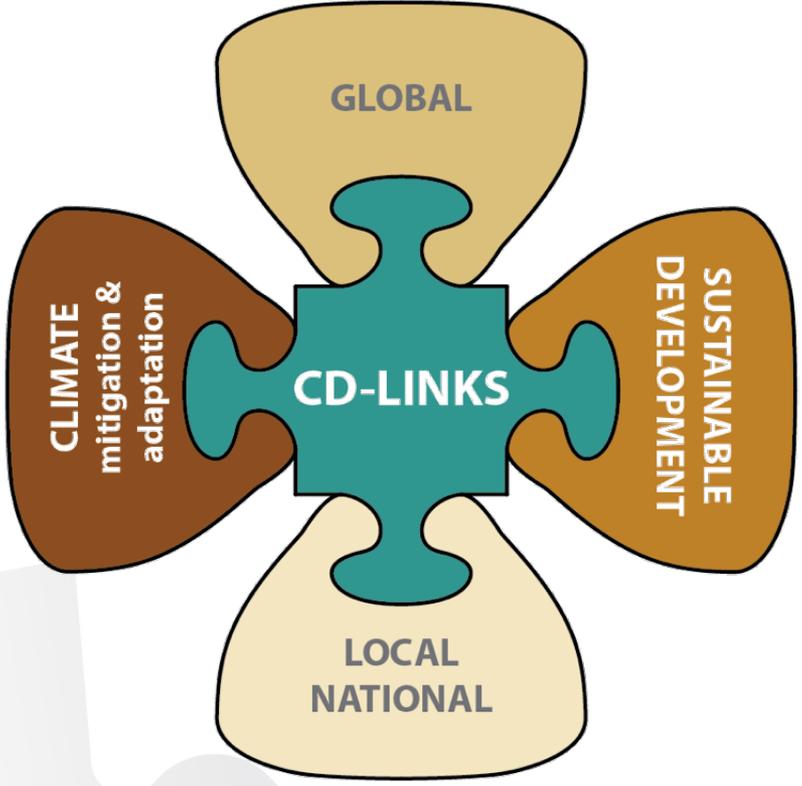
**SUSTAINABLE**  
DEVELOPMENT



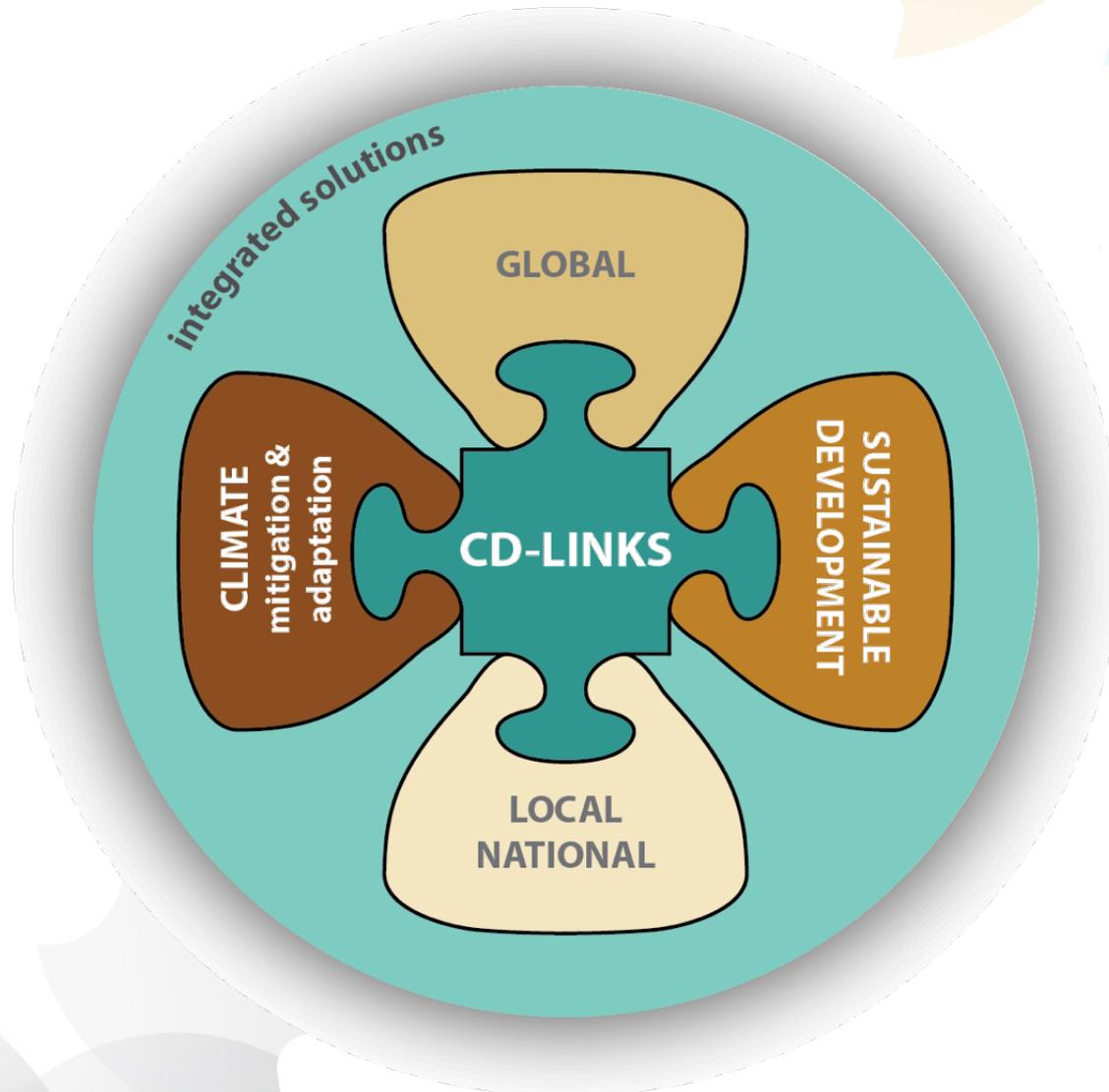
# Project vision



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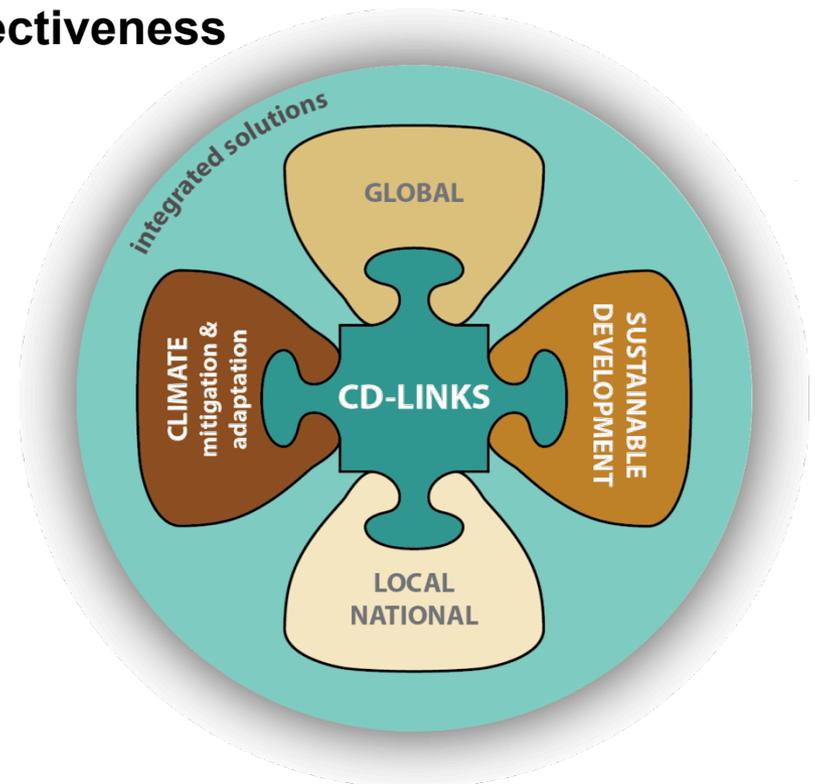


# Project vision



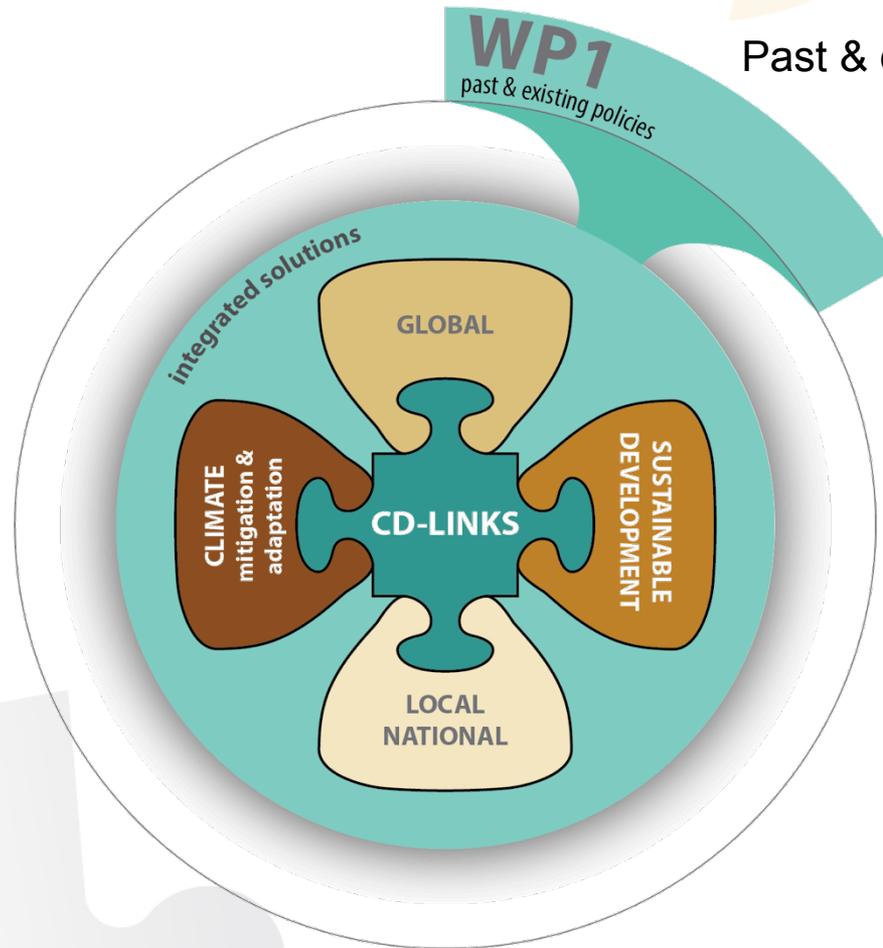
# CD-LINKS objectives

- Improve scientific understanding of linkages between **climate change** and multiple **sustainable development** objectives
- Develop **globally** consistent, **national low-carbon development pathways**
- Broaden evidence base on **policy effectiveness** (learn from past experience)
- Establish **research network** and capacity building platform among institutions from Europe and several Non-European G20 countries



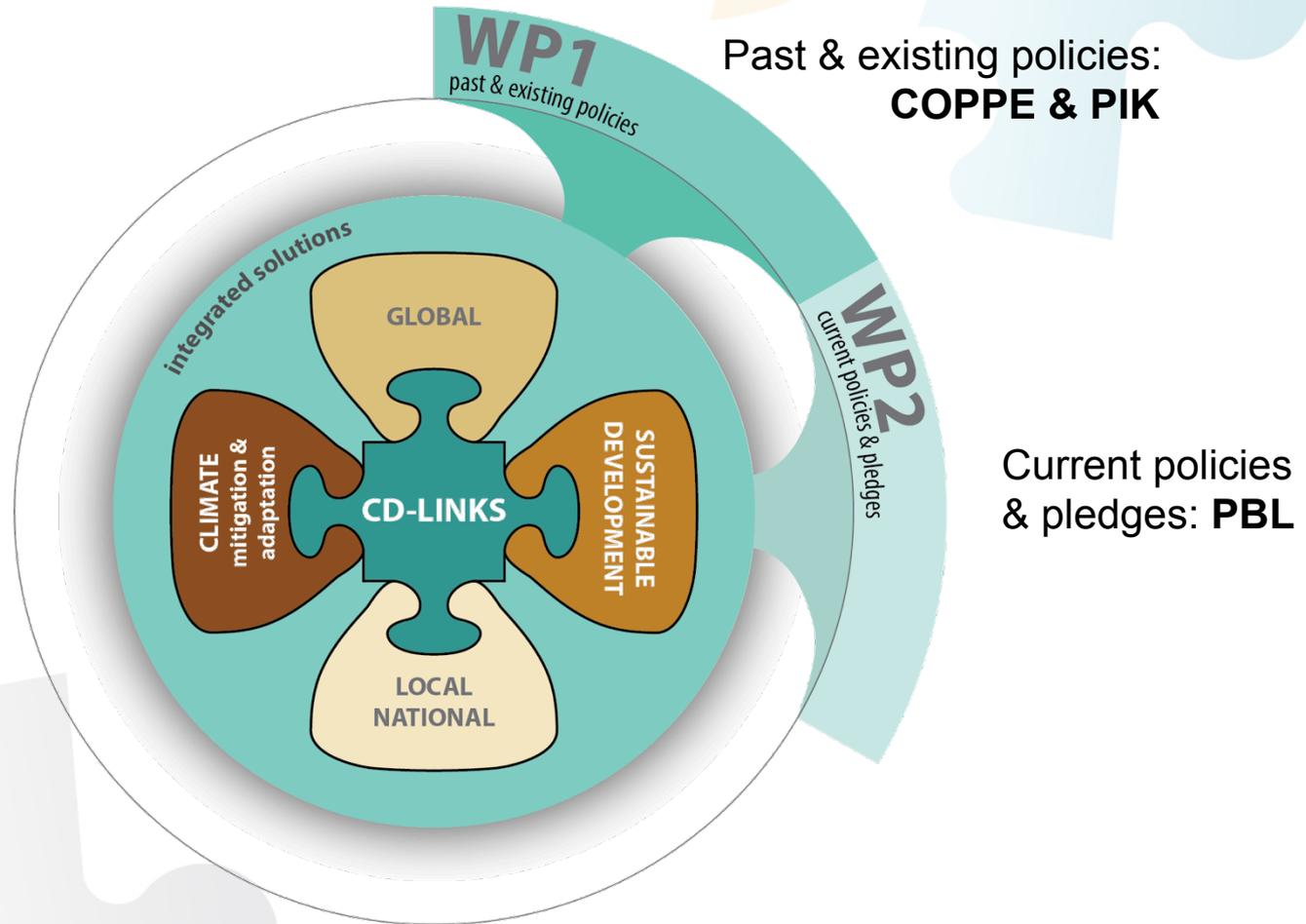


# CD-LINKS work packages

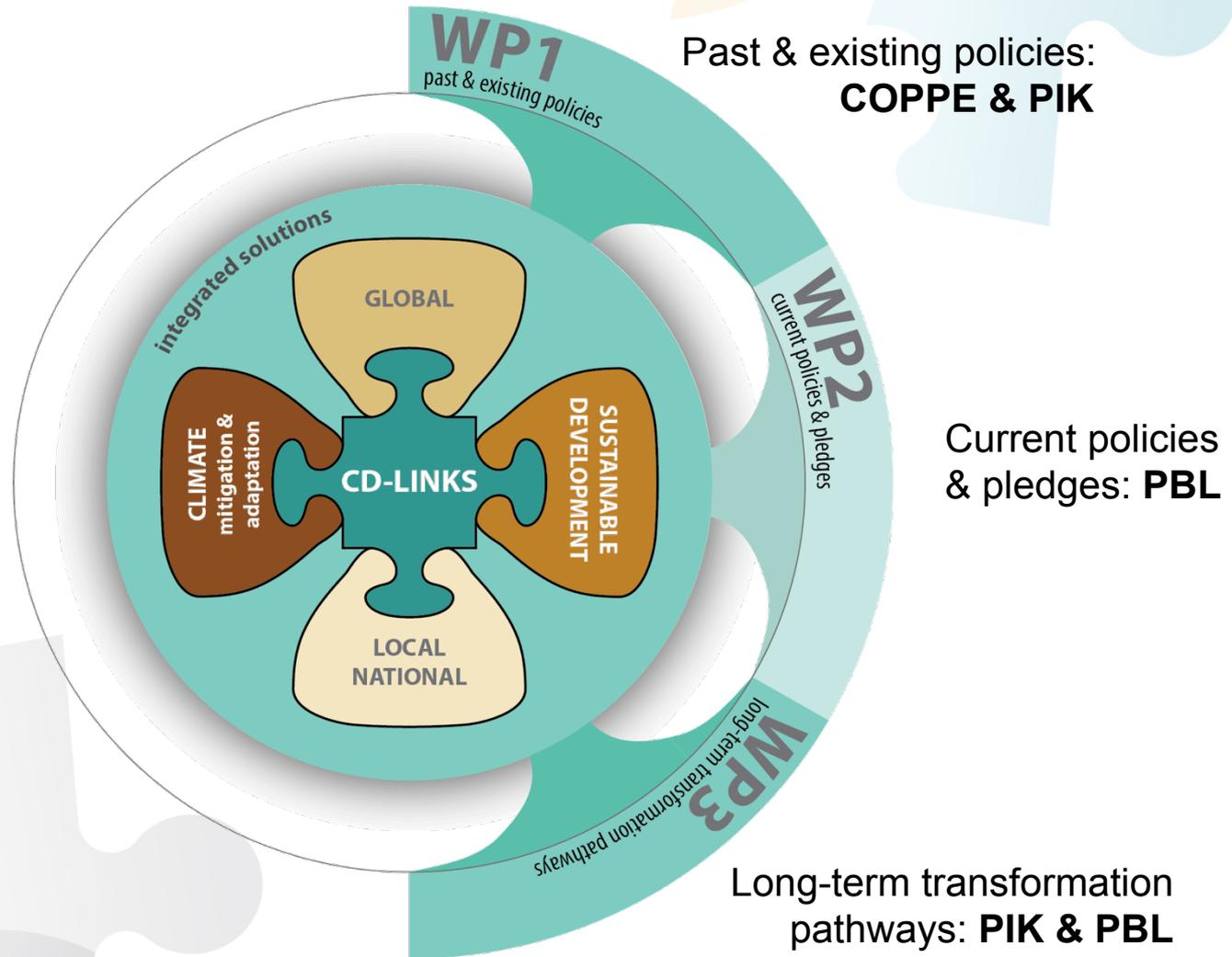


Past & existing policies:  
**COPPE & PIK**

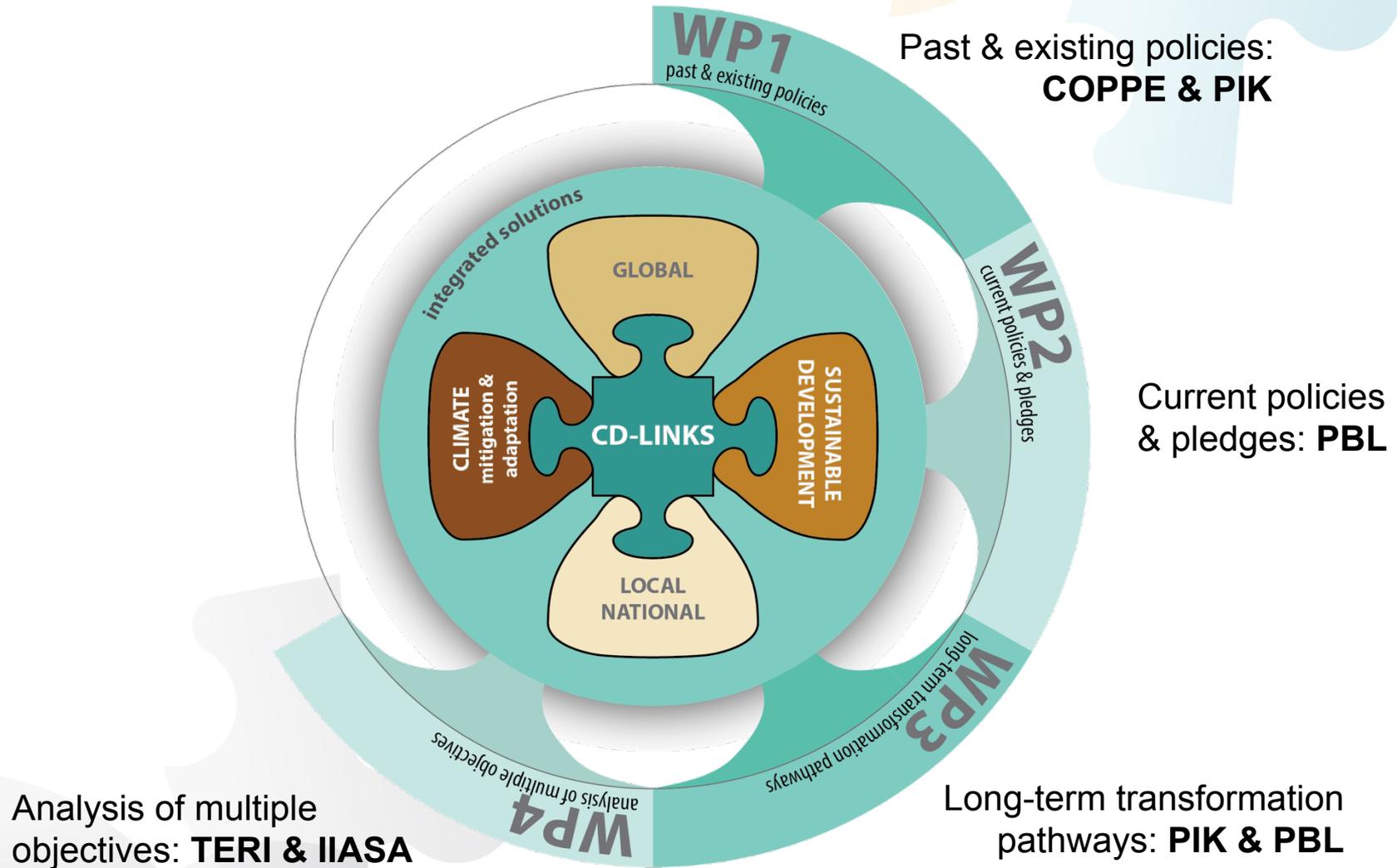
# CD-LINKS work packages



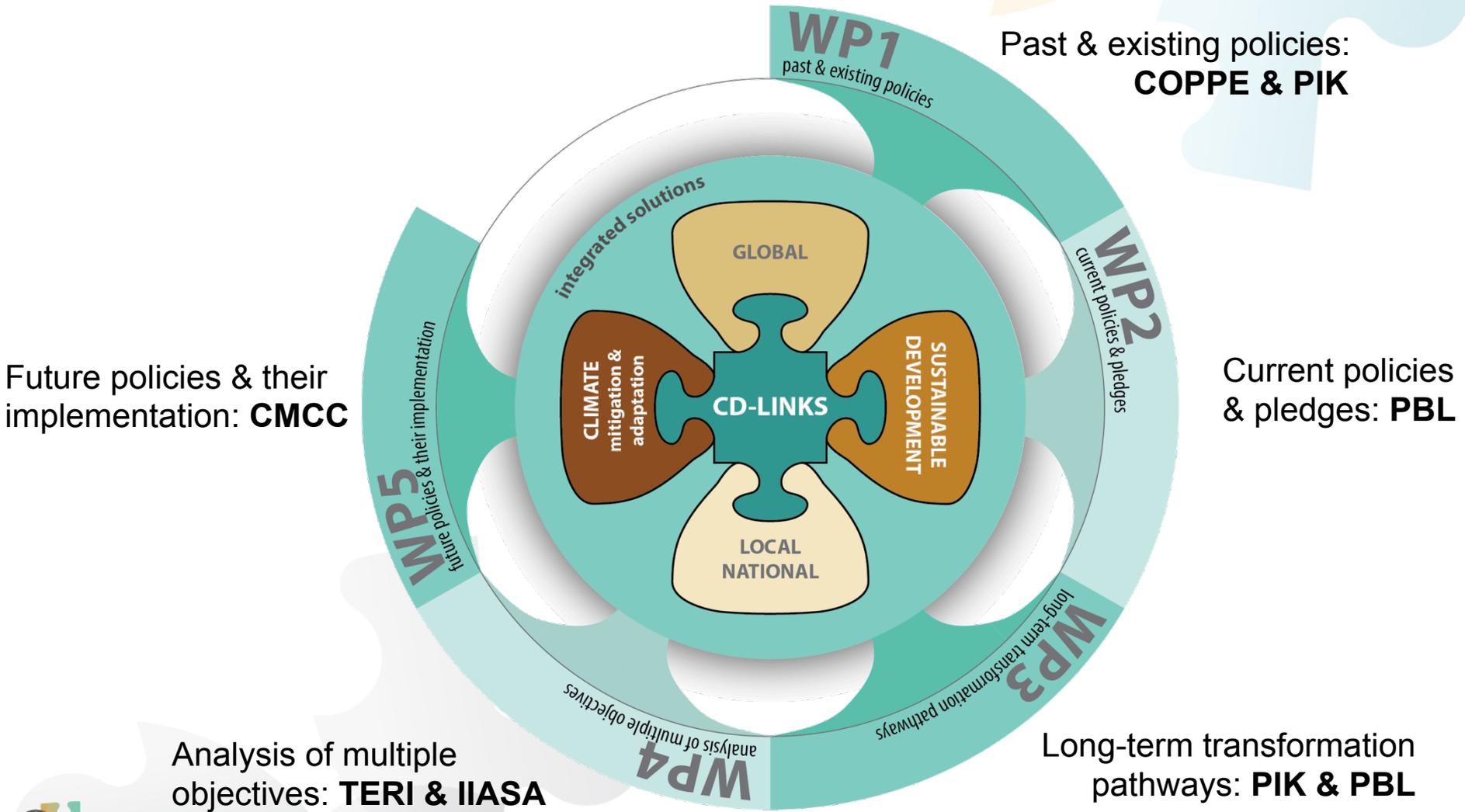
# CD-LINKS work packages



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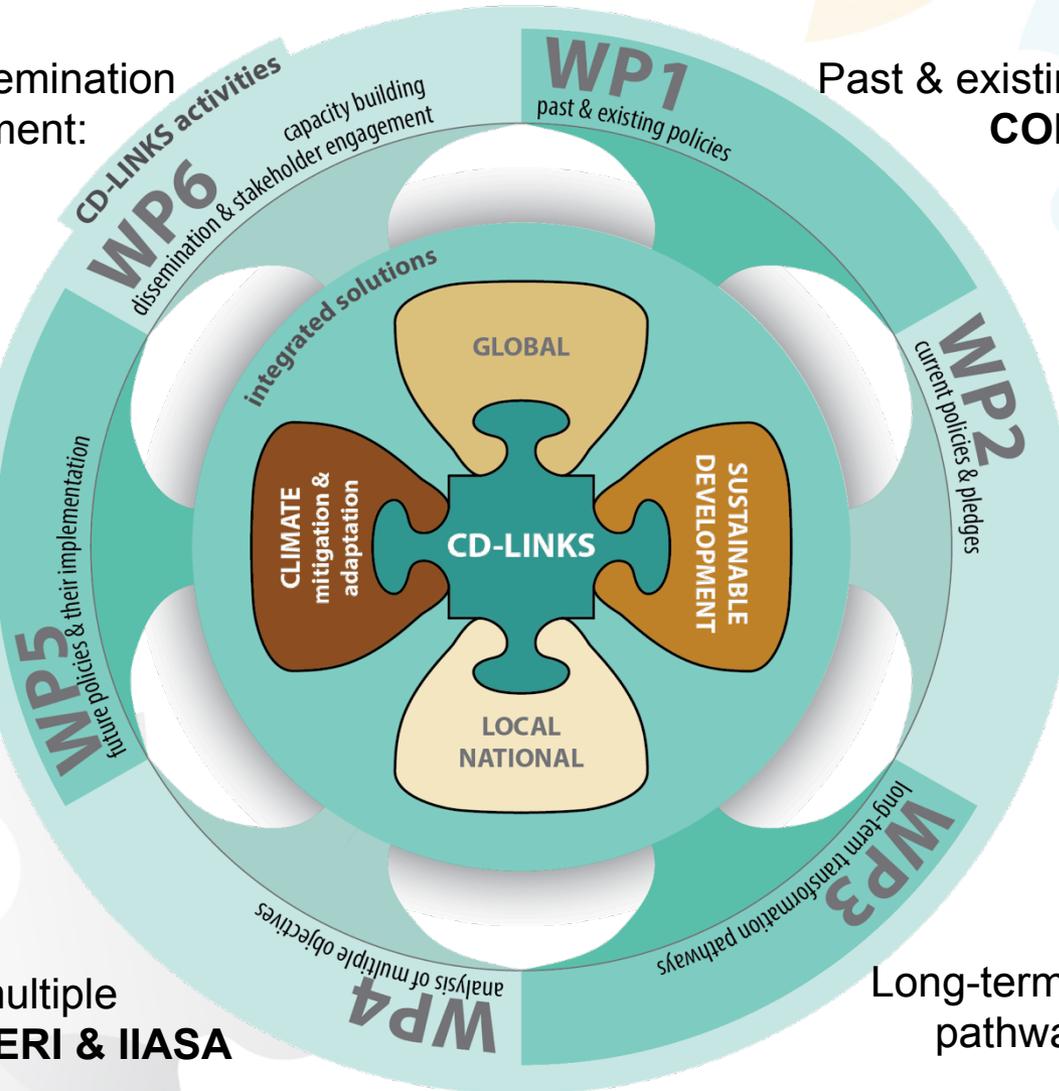
Capacity building, dissemination  
& stakeholder engagement:  
**CMCC & IIASA**

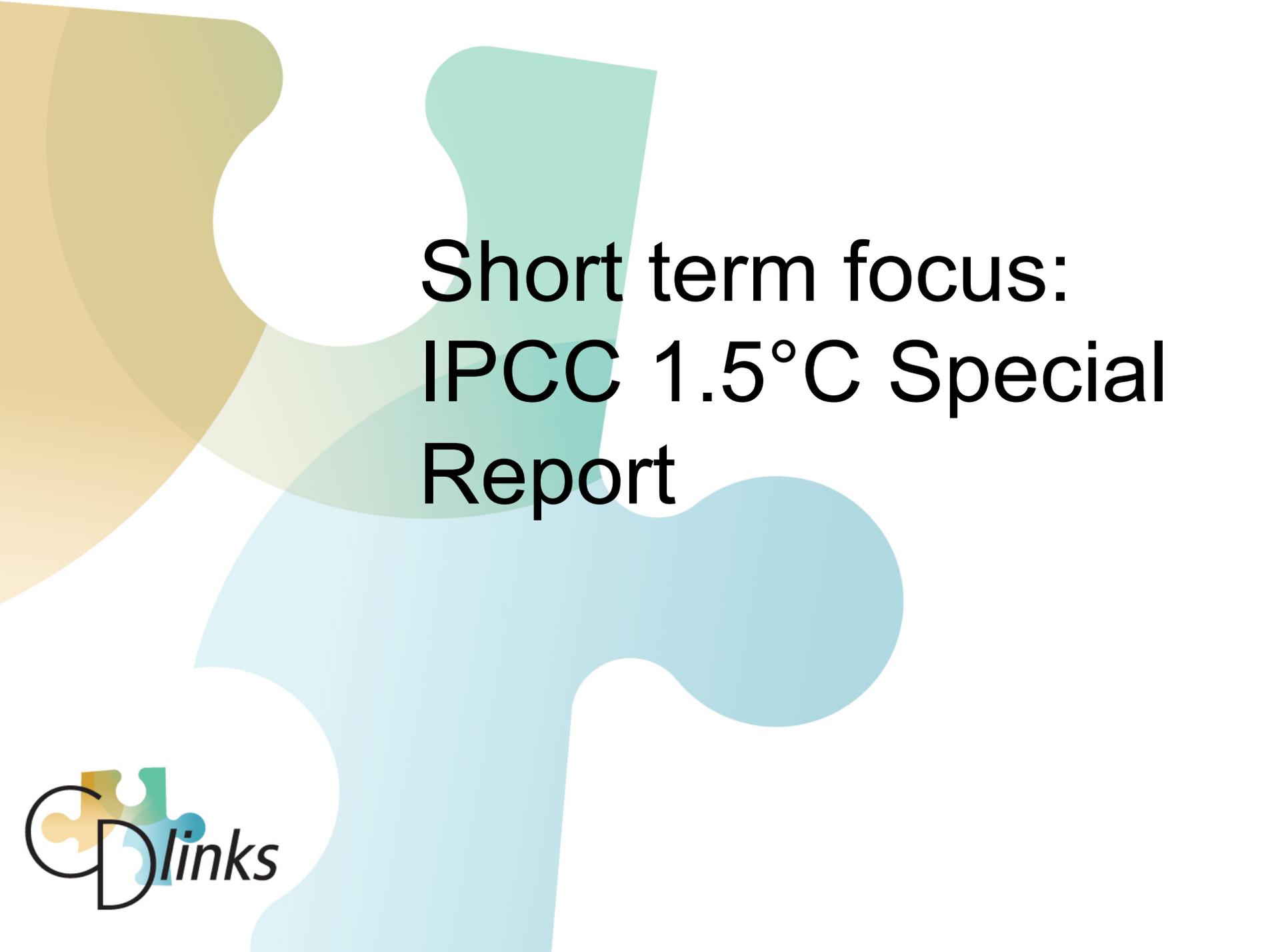
Past & existing policies:  
**COPPE & PIK**

Current policies  
& pledges: **PBL**

Long-term transformation  
pathways: **PIK & PBL**

Analysis of multiple  
objectives: **TERI & IIASA**

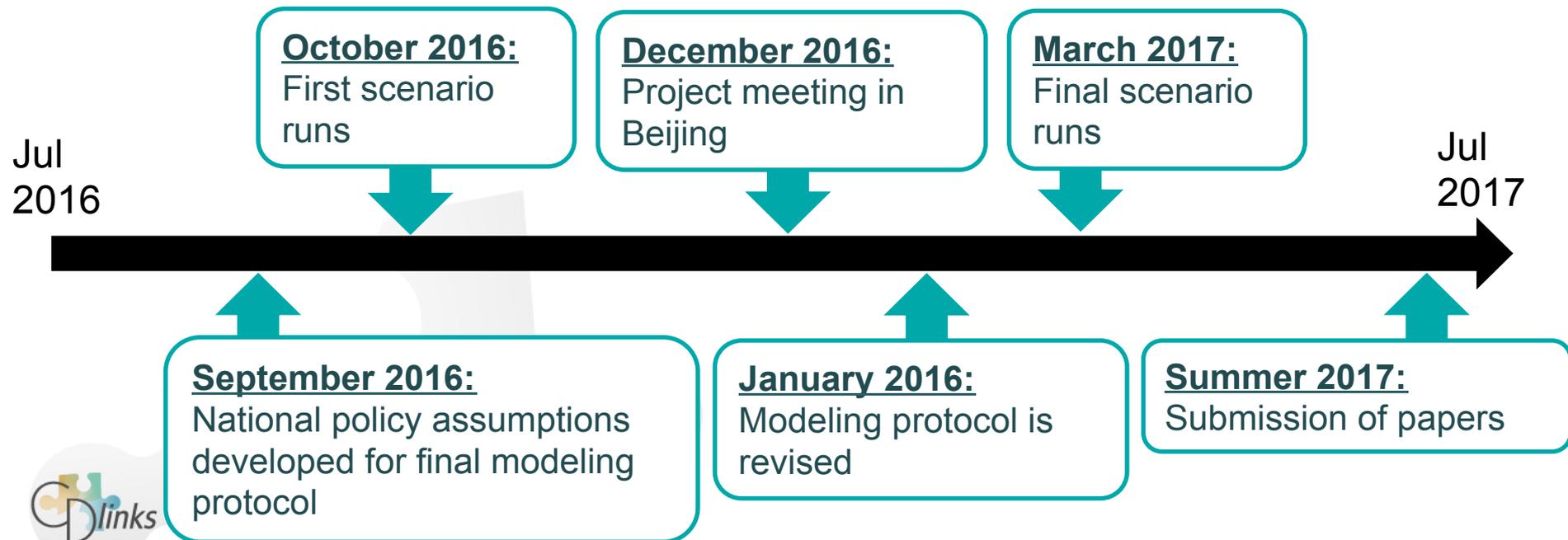




Short term focus:  
IPCC 1.5°C Special  
Report

# Short term focus: IPCC 1.5°C Special Report

- The project will contribute to the discussions regarding the 1.5°C goal that was put forward in Paris through the development of global and national sustainable low-carbon development 1.5°C pathways
- Timeline of the fast-track process:



# Suggested fast-track products for summer 2017 feeding into IPCC report

- Special issue (and possible other publications), including:
  - Cross-cut/synthesizing papers:
    - Emissions budgets (gaps): bringing country results into the perspective of budgets from globally consistent scenarios.
    - Cross-country comparison of national decarbonisation pathways, e.g. Energy/Land system implications; comparative analysis of mitigation effort indicators; comparative analysis of country-level measures for ratcheting-up.
    - Analysis of the scenarios with respect to SD objectives, including INDC implications, enhanced regional detail, and multidimensional gap analysis.
  - Core papers:
    - Country-by-country papers on decarbonization roadmaps in the context of current policies, INDCs and possible measures for enhancing action.
  - National policies paper
    - (summary of global policy landscape, objectives, planned vs implemented, regional/national differences, etc.)

# ADVANCE scenario matrix (global models)

Policy dimension	Long-term CO2 budget (2011-2100 cumulated)			
	None	1800	1000	400
No-policy	NoPOL			
Reference	REF			
INDCforever	INDC			
INDC2030		INDC2030_1800	INDC2030_1000	INDC2030_400
INDC2020 (NPI2020)		INDC2020_1800	INDC2020_1000	INDC2020_400

Proposal for 1st round of CD-LINKS global scenario runs:  
Use same scenario matrix, refine INDC as applicable

# Proposed protocol for national scenario runs

2030 Policy dimension	CO2 budget (2011-2050 cumulated)		
	Extended	H	L
<b>No-policy</b>	X		
<b>NPi2030</b>	X		
<b>[NPip2030]</b>	optional		
<b>INDC2030</b>	X	X	X
<b>Npi 2020 policy</b> (motivated by requirements of H/L scenario, strengthening already after 2020)		X	X (Deep transformation scenario)

# 2030 policy space for scenarios

Status of Policy	Implemented	Planned
National climate and energy policies	1	4
INDCs	N/A	3
National „other“ policies GHG-relevant (incl. SD policies)	2	5

- **N<sub>Pi</sub> (implemented)** = Implemented policies (1+2? to the extent represented)
- **N<sub>Pip</sub> (planned&implemented)** 1+4(+2+5)
- **INDC** = Implemented policies + INDCs (1+2+3) [conditional]

To be studied in second half of project

- **Full** : Implemented + All planned policies

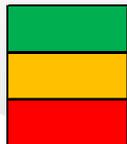


# Beyond Climate Change: Tacking Stock

# Who covers which aspect?

## WP4 Questionnaire results

	Air quality	Health	Climate adaptation	Economic development	Employment	Innovation	Energy poverty	Energy security	Biodiversity	Land use, land degradation	Food security	Water summary	Other environmental impacts
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Fully Operational

Under Development

Planned Development

# EXPERT WORKSHOP: INTEGRATING POVERTY AND INEQUALITY DIMENSIONS IN INTEGRATED ASSESSMENT MODELS FOR CLIMATE CHANGE

- Measuring And Modeling Poverty And Inequality: What's The State of The Art?
  - IAM
  - Macro Economics
  - ABM
- Multidimensions of Poverty



## AGENDA (TENTATIVE):

### MEASURING AND MODELING POVERTY AND INEQUALITY: WHAT'S THE STATE OF THE ART? TUESDAY, 17 MAY

12:00-13:00	Light Lunch
13:00-13:15	Welcome, Introduction to CD-LINKS Project, and Meeting Objectives Valentina Bosetti, CMCC Keywan Riahi, International Institute of Applied Systems Analysis (IIASA)
13:15-13:55	An interdisciplinary overview Narasimha D. Rao, IIASA [25 minute presentation +15 minutes for immediate Q&A]
13:55-14:35	Income Distribution Modeling in GCE models: Guidance for IAMs Bas van Ruijven, National Center for Atmospheric Research (NCAR) [25 minute presentation +15 minutes for immediate Q&A]
14:35-15:15	Modelling Heterogeneous Agents in a DSGE, a Macroeconomics Perspective Marco Maffezzoli, Bocconi University [25 minute presentation +15 minutes for immediate Q&A]
15:15-15:45	Coffee break
15:45-16:25	Modelling Heterogeneous Agents in an Integrated Assessment Modelling Framework Jean-François Mercure, Radboud University [25 minute presentation +15 minutes for immediate Q&A]
16:25-17:05	Modelling Poverty in the Long Run Julie Rozenberg, The World Bank [25 minute presentation +15 minutes for immediate Q&A]
17:05-17:45	Modelling Migration and its Economic Impacts Syud Amer Ahmed, The World Bank [25 minute presentation +15 minutes for immediate Q&A]





# Adaptation

# Adaptation across WPs

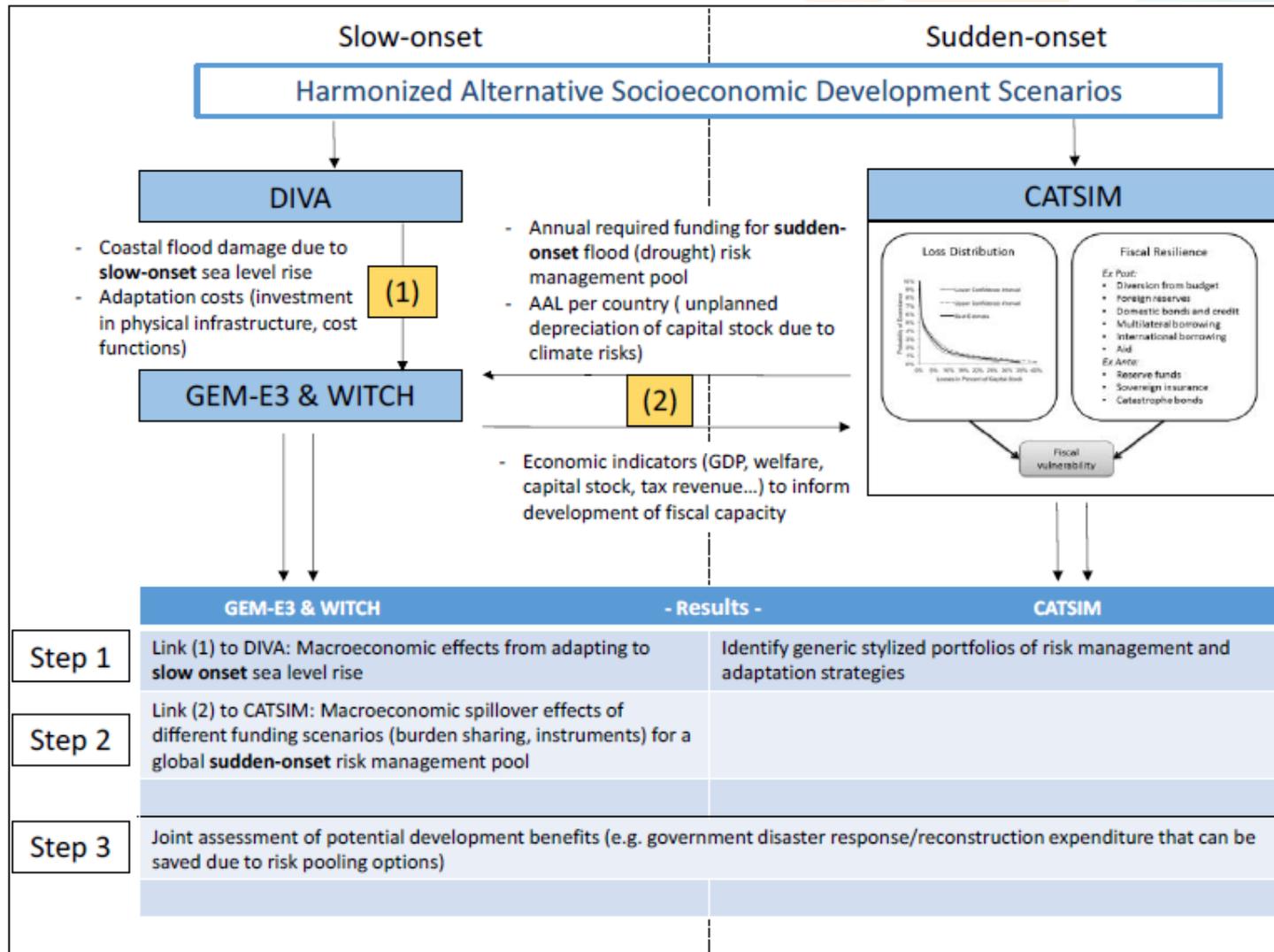


Figure 1: Flow chart of proposed adaptation/CRM research question

# Adaptation in a 1.5° C world

- Adaptation challenges associated to the speed and location of the mitigation capital that this scenario requires
- Additional adaptation requirements of a 1.5° C scenario

The background features three large, interlocking puzzle pieces. The top-left piece is gold, the top-right piece is green, and the bottom piece is blue. The word "Visualization!" is centered over the green and blue pieces.

**Visualization!**



# WP5.4 A map of implementation barriers



# Plan

1. Internal Survey on functionalities, teaser, best available examples
2. Survey of Users
3. Design of Beta version of results visualization tool

