



# ***KLIMAPOLIS***

**Towards the joint governance of climate  
change and air pollution**

**Supported by BMBF**



# Klimapolis at a glance

- 5-year joint project between Germany and Brazil to establish and develop a long term cooperative research on urban air pollution and climate change in metropolitan areas of Brazil.
- Funded by the German Federal Ministry of Education and Research (BMBF)
- It will address the questions of co-evolution of urbanization, climate change and air pollution in several metropolitan areas of Brazil.
- It will integrate complimentary expertise through staff exchange between Brazil and Germany, training courses and joint workshops.



# Bilateral research structures in latin America

## Goals

- **Long-term networking** with excellent scientific actors in partner country
- Construction of **long-term bilateral research structures**
- **Access for research -networks, -resources, - institutions**
- Open up **research funds** in the partner country
- **Visibility** of german excellency in science
- Improvement of international **innovations** with participation of german actors, correlation of science and economy



# 9 projects in the Starting phase

BioENOx, Oaxaca  
Bioeconomia

UndoAD, Medellín  
Health

Decipher, Iquique  
Health

Klimapolis, São Paulo  
Environmental research,  
urbanization

CGComPRT, Santiago  
Health

BlueEcoNet, Florianopolis  
Bioeconomia, Aquaculture

IEDE, Concepción  
Environmental research

DynAMo, Ushuaia, Valdivia  
Climate, Marine Science

IHeaR, Buenos Aires, Santiago  
Health



# BMBF Bilateral research structures in latin America

## Planned timeline

- **Oct./Nov. 2017:** start of 9 projects in the starting phase
- **Mar./Apr. 2018:** project visits DLR-PT in Germany
- **Mai/Jun. 2019:** Submission of interim report (basis for the evaluation of the starting phase)
- **Jul. 2019:** decision about project funding for the consolidation phase
- **Nov./Dec. 2019:** start of the consolidation phase
- **Nov. 2022:** completion of the BMBF-support
- **From Dec. 2022:** self-suatained continuation of the bilateral research structures

# Klimapolis Objectives

- To foster the integration of advanced tools for the assessment, monitoring, modeling – including source apportionment – with innovative technological options and strategies to reduce the carbon footprint and improve the air quality of urban areas.
- To co-design with city officials and assess win-win solutions that will lead to the development of smart cities, resilient to climate change and air pollution
- To develop tools in support of integrated air quality and climate change governance with the aim of designing and implementing adequate abatement strategies and practices.
- To conceptualize, initiate and develop a joint German-Brazilian institute on urbanization and climate change

# Klimapolis Cities (population)



# Klimapolis Partners

## Germany

**Guy Brasseur**, *Max-Planck-Institut für Meteorologie (MPI-M)*

**Daniela Jacob**, *Climate Service Center Germany (GERICS)*

**Anita Engels**, *Universität Hamburg (UHH)*

**Hendrik Elbern**, *Universität zu Köln*

**Nico Caltabiano**, *Project Manager (MPI-M)*



Max-Planck-Institut  
für Meteorologie



Universität Hamburg  
DER FORSCHUNG | DER LEHRE | DER BILDUNG



Universität zu Köln



Max-Planck-Institut  
für Meteorologie



# Klimapolis partners

## Brazil

**Maria de Fatima Andrade, Tercio Ambrizzi, IAG/USP**

**Pedro Jacobi, IEA/USP**

**Jean Ometto, INPE/CCST**

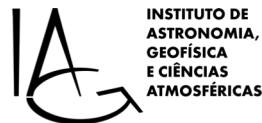
**Chou Sin Chan, INPE/CPTEC**

**Jorge Alberto Martins, Leila Martins, Universidade Tecnológica Federal do Paraná (UTFPr)**

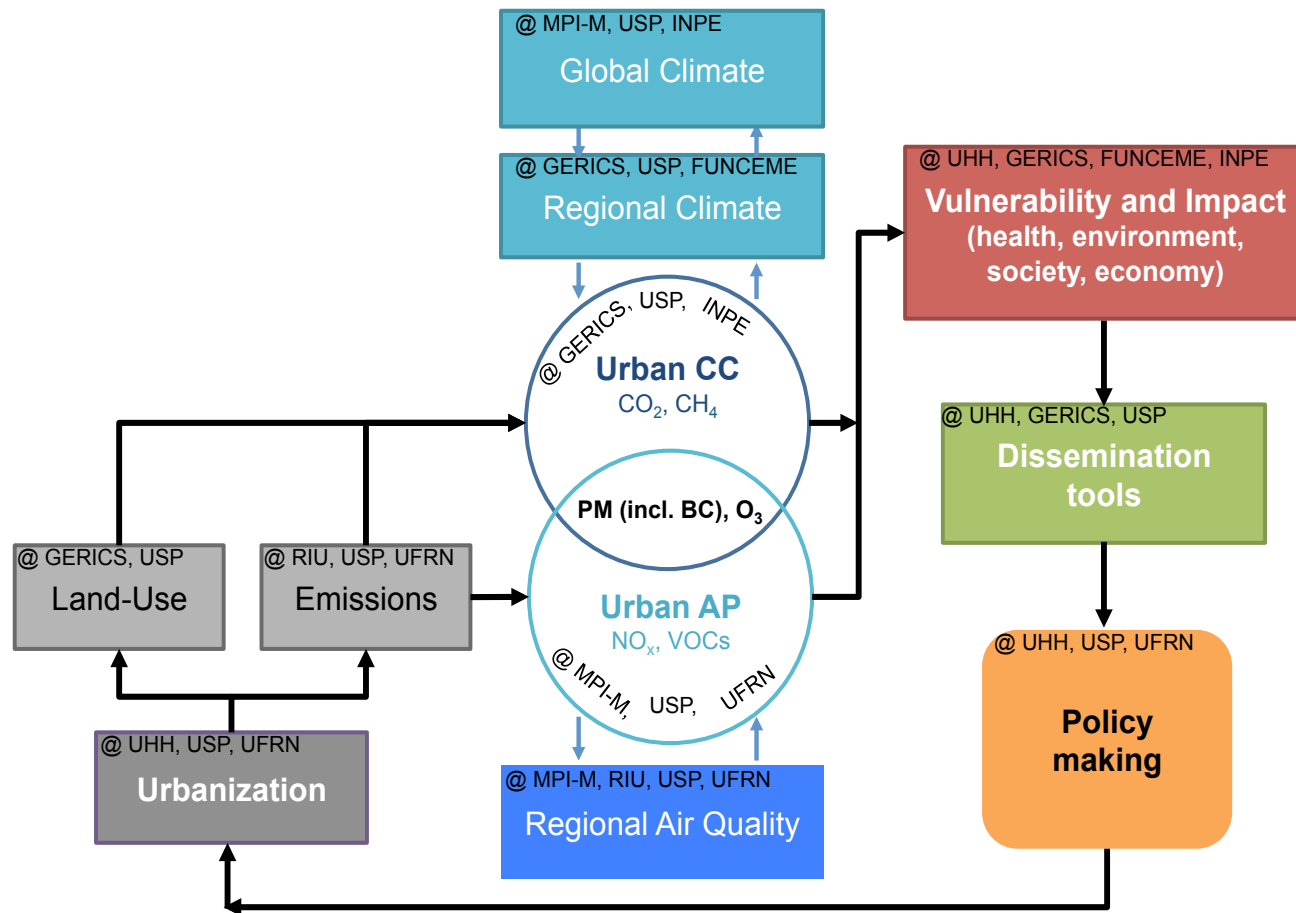
**Taciana Albuquerque, Universidade Federal de Minas Gerais (UFMG)**

**Meiry Sakomoto, FUNCEME**

**Judith Hoelzemann, Universidade Federal do Rio Grande do Norte (UFRN)**



# Klimapolis



# Klimapolis Work Packages

## Phase I – Starting phase (2018-19)

- **WP 1** – Assess City and Stakeholder Needs. (Lead: UHH and USP)
- **WP 2** – Regional CC and AP analysis and modeling (Lead: MPI-M, RIU and INPE)
- **WP 3** – Integrated Assessment, dissemination and decision-making tools (Lead: GERICS and Funceme)

		2017	2018												2019											
		12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	<b>KLIMAPOLIS (1st phase)</b>																									
A1	Kick-off meeting																									
A2	Workshop GOV in Brazil *																									
A3	Workshop MOD/GOV in Germany **																									
A4	Joint proposals																									
A5	Training visits Brazil ***																									
A6	Workshop MOD in Brazil **																									
A7	Joint papers																									
A8	Integration Meeting																									
A9	Report and planning																									

# Klimapolis Work Packages

## Phase II: Consolidating phase (2020-22)

- **WP 4** – Realizing Change - Assessing Effectiveness of CC and AP Mitigation Strategies (Lead: MPI-M and INPE)
- **WP5** – Knowledge Integration and Trade-off Analysis (Lead: GERICS and Funceme)
- **WP 6** – Transdisciplinary Stakeholder Engagement, Policy Support, and Awareness Raising (Lead: UHH and USP)

	2020												2021												2022												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
<b>KLIMAPOLIS (2nd phase)</b>																																					
B1 Kick-off meeting																																					
B2 Early Career Summer School in Brazil																																					
B3 Joint papers																																					
B4 Joint Science Symposium Brazil																																					
B5 Evaluation meeting in Brazil																																					
B6 Joint Governance Symposium Brazil																																					
B7 Framework of the Joint Institute ***																																					
B8 Training visits Brazil ***																																					
B9 Integration Meeting																																					
B10 Report and planning																																					

# Klimapolis Milestones

## Phase I – Starting phase (2018-19)

- **Feb 2018** – Kick-off meeting (INPE, Brazil) - **DONE**
- **Aug 2018** – Workshop on Governance (IAG, Brazil) - **DONE**
- **Dec 2018** – Workshop on Modelling (GERICS, Germany) – **IN PREP**
- **Jun 18 / Apr 19** – Joint proposals – **NOT STARTED**
- **Nov 18 / Jul 19** – Training Visits – **STARTED**
- **Apr 19** – Workshop on modelling (Brazil)
- **Dec 18 / Sep 19** – Joint papers
- **Sep 19** – Integration meeting (possibly to be organized in Apr/May)

