

Mercator Research Institute on Global Commons and Climate Change

# Designing effective Global Environmental Assessments? The FOGEAM project

Martin Kowarsch & Pauline Riousset

TIAS webinar 16 June 2017

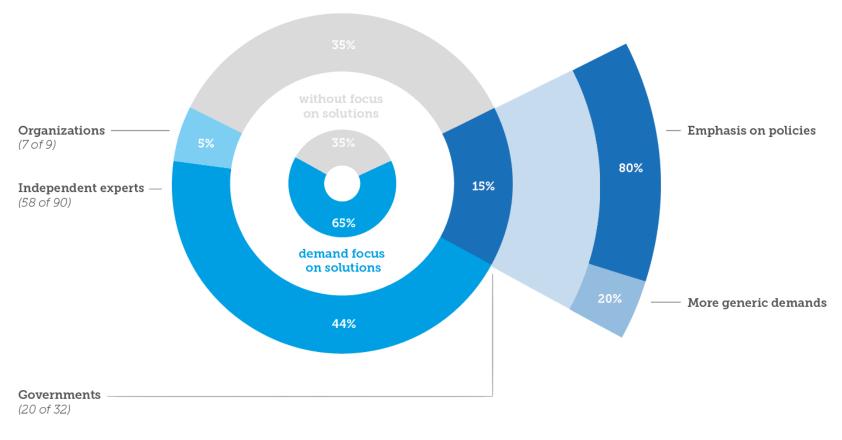


# **GEAs as promising tools** at the science-policy-society interface



### High demand for more assessment of solutions







# **Current research about GEAs**

Different communities, but current GEAs underresearched; often narrow evaluation criteria and focus on politics





### The FOGEAM research initiative

- MCC & UN Environment research project (2013–2016): "The Future of Global Environmental Assessment Making (FOGEAM).
  - "The Future of Global Environmental Assessment Making (FOGEAM).
    Reflecting on past experiences to inform future choices"
  - Analysis of various GEAs, particularly GEO-5 and IPCC WG III AR5
    - Focus on lessons learned for solution-oriented policy assessment
    - SDGs as one example of possible future application
- Outputs: Report for UNEP IGMS (2014); Special Issue of EnvSci&Pol (2017); Nature Clim.Ch. synthesis paper (2017)





COMMENTARY:

A road map for global environmental assessments

Martin Kowarsch, Jason Jabbour, Christian Flachsland, Marcel T. J. Kok, Robert Watson, Peter M. Jan C. Minx, Joseph Alcamo, Jennifer Garard, Pauline Riousset, László Pintér, Cameron Langford, Yulia Yamineva, Christoph von Stechow, Jessica O'Reilly and Ottmar Edenhofer

Increasing demand for solution-oriented environmental assessments brings significant opportunities and challenges at the science-policy-society interface. Solution-oriented assessments should enable inclusive deliberative learning processes about policy alternatives and their practical consequences.

ore than 140 global environmental assessments (GEAs) have been initiated over the past four decades. There is ongoing demand for these diverse, large-scale, multi-stakeholder, typically intergovernmental processes that distil and synthesize knowledge to inform decision-making. GEAs are time-consuming, demanding processes often

The Cerebra discussions neep important this (Fig. 1). Extensive policy assessment stands to reason given the recent developments in international environmental governance. The universal adoption of the Sustainable Development Goals (SDGs) and the Paris Agreement in 2015 were historic milestone

application-oriented, trans-disciplinary knowledge with an extended community of actors is crucial here<sup>16-17</sup>.

However, to be successful, such solution-oriented GEAs must first address three profound challenges (see Supplementary Section C.a.): integrating multiple policy dimensions, treating

opinion & comment



# Methods: empirical & theoretical

### ~100 semi-structured interviews

- With individuals engaged in various GEAs; mostly GEO-5 and IPCC WG III
- Skype or telephone; ~50 min on average; recorded & transcribed; MAX QDA

### Expert workshops for information & discussion

- UNEP-DEWA workshop (Aug 2013); GEO author workshop Berlin (Oct 2013); UNEP IGMS on GEO-6 (Oct 2014); Expert meeting on studies of IPCC (Jan 2015); Future of IPCC workshop Berlin (Feb 2015); ICPP conference Milan (Jul 2015); FOGEAM expert workshop Berlin (Oct 2015); World Science Forum Budapest (Nov 2015)
- Numerous informal conversations with IPCC TSU, GEO staff and SPI experts

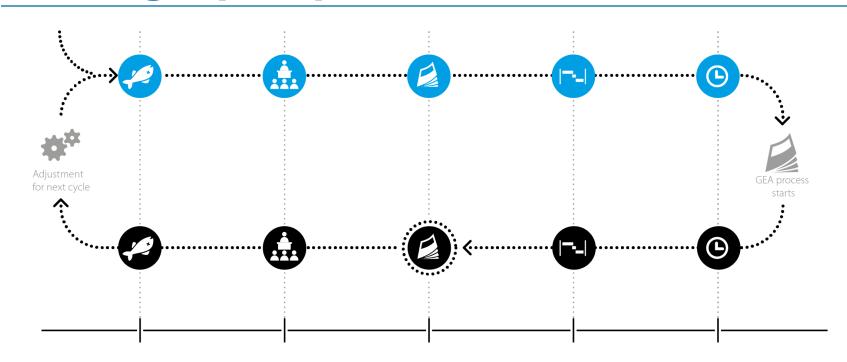
### Analysis of GEA background documents

- Including scoping papers, meeting reports, independent evaluations, official UN documentation, government reports, news articles, assessment reports
- Compilation and analyses of a GEA metadata catalogue
- Literature review and synthesis
- Conceptual and theoretical reflections





# Strategic perspective on GEAs



#### 1) Policy problem

e.g., shrinking biodiversity and insufficient policy regulations (at  $t_0$  and  $t_1$ )

### 2) GEA impacts on policy discourses

e.g., envisaged or actual learning within public policy discourses

### 3) Scope and objectives for GEA

e.g., identifying promising climate mitigation pathways (IPCC WG III)

### 4) GEA methods, processes and procedures

e.g., DPSIR and regional consultations in GEO-5

#### 5) Resources for GEA

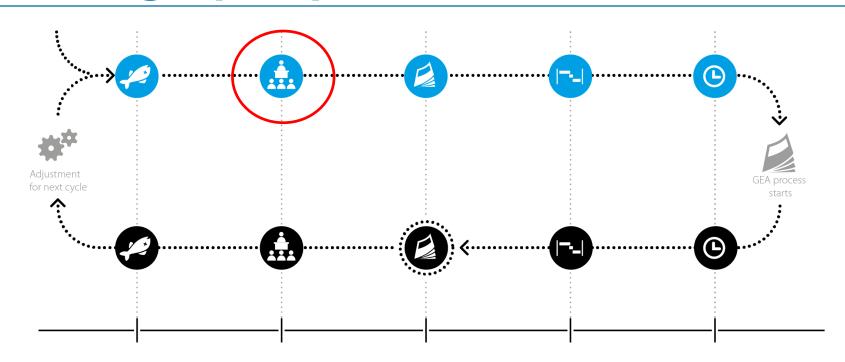
e.g., expertise available, funds, time







# Strategic perspective on GEAs



#### 1) Policy problem

e.g., shrinking biodiversity and insufficient policy regulations (at  $t_0$  and  $t_1$ )

### 2) GEA impacts on policy discourses

e.g., envisaged or actual learning within public policy discourses

### 3) Scope and objectives for GEA

e.g., identifying promising climate mitigation pathways (IPCC WG III)

## 4) GEA methods, processes and procedures

e.g., DPSIR and regional consultations in GEO-5

#### 5) Resources for GEA

e.g., expertise available, funds, time



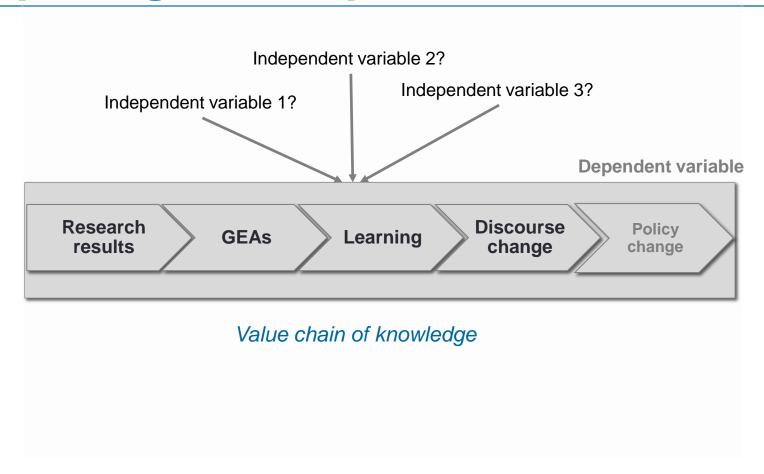




# **Exploring GEA impact mechanisms**



# **Exploring GEA impact mechanisms**





# How GEAs influence policy discourses

	Coordinative discourses
	Shape actor networks
Inter- national	Generate scientific premises for negotiations
	Learning platforms
National	Contextualize & Multiply info.
	Reinforce & standardize methodological capacities



# How GEAs influence policy discourses

		Coordinative discourses	Communicative discourses		
	Inter- national	Shape actor networks	Reassert	Empower knowledge brokers	Empower top-down discourses on envt. issues
		Generate scientific premises for negotiations			
	National	Learning platforms	the urgency of tackling		
		Contextualize & Multiply info.	envt. issues		
		Reinforce & standardize methodological capacities			

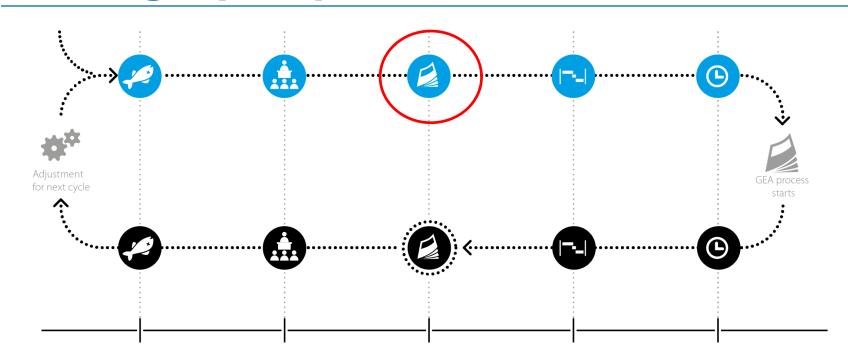


# How GEAs influence policy discourses

	Coordinative discourses	Communicative discourses			Scientific discourses	
	Shape actor networks	Reassert the urgency of tackling envt. issues	Empower knowledge brokers	Empower top-down discourses on envt. issues	Identify critical research gaps	Opportunity to shape research agendas
Inter- national	Generate scientific premises for negotiations					
	Learning platforms					
National	Contextualize & Multiply info.					
	Reinforce & standardize methodological capacities					



# Strategic perspective on GEAs



#### 1) Policy problem

e.g., shrinking biodiversity and insufficient policy regulations (at  $t_0$  and  $t_1$ )

### 2) GEA impacts on policy discourses

e.g., envisaged or actual learning within public policy discourses

### 3) Scope and objectives for GEA

e.g., identifying promising climate mitigation pathways (IPCC WG III)

### 4) GEA methods, processes and procedures

e.g., DPSIR and regional consultations in GEO-5

#### 5) Resources for GEA

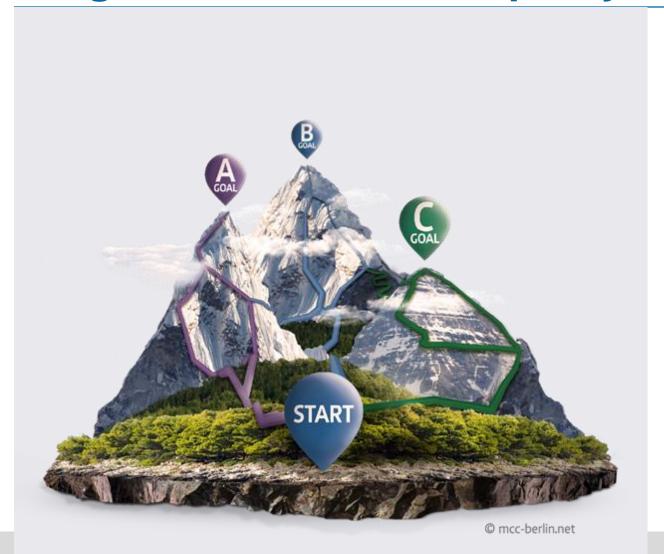
e.g., expertise available, funds, time







### Integrated assessment of policy alternatives





# Integrated assessment of policy alternatives





## Thanks for your attention.

### FOGEAM website:

www.mcc-berlin.net/en/research/cooperation/unep.html



### References

- Kowarsch, M (2016): **Policy assessments to enhance EU scientific advice**. *Nature Climate Change* 6(1): 15–17.
- Kowarsch, M, Flachsland, C, Jabbour, J, Garard, J, Riousset, P (2014): The Future of Global Environmental Assessment Making (FOGEAM): Reflecting on past experiences to inform future choices. MCC Report prepared for UNEP's IGMS consultation on GEO-6, Oct 2014, Berlin. Online: <a href="http://www.mcc-berlin.net/fileadmin/data/events/FOGEAM\_Preliminary\_Draft\_Report\_17102014.pdf">http://www.mcc-berlin.net/fileadmin/data/events/FOGEAM\_Preliminary\_Draft\_Report\_17102014.pdf</a>.
- Kowarsch, M, Jabbour, J, Flachsland, C, Kok, MTJ, Watson, R, Haas, PM et al. (2017): A road map for global environmental assessments. *Nature Climate Change* 7.
- Riousset, P, Flachsland, C, Kowarsch, M (2017): **Global Environmental Assessments: impact mechanisms**. *Environmental Science & Policy* (special issue on solution-oriented GEAs).

#### **FOGEAM** website:

http://www.mcc-berlin.net/en/research/cooperation/unep.html