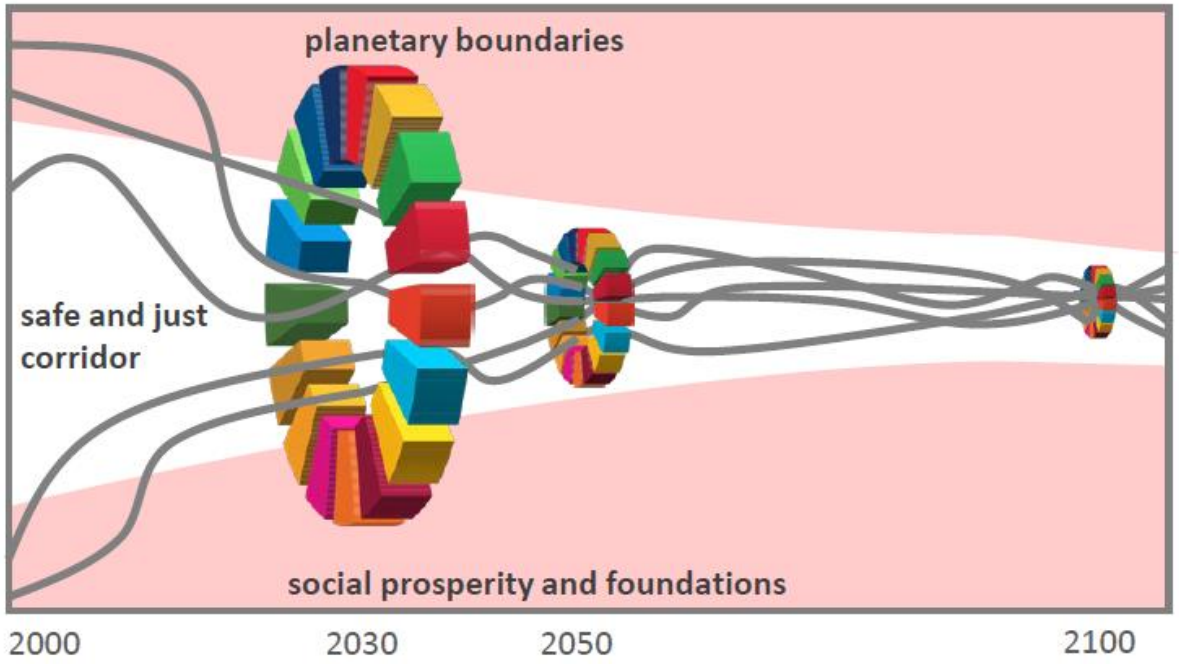
Three foci at the science-policy interface for systemic Sustainable Development Goal acceleration

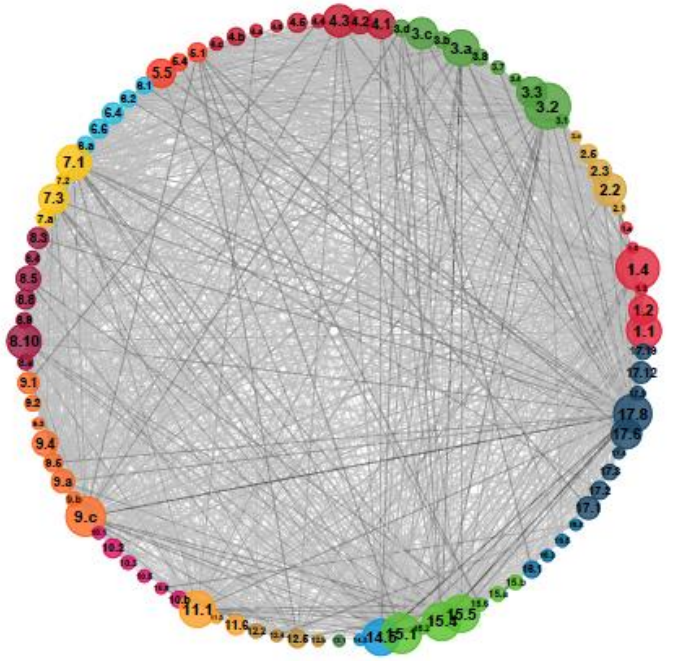
A Side Event at the 2024 United Nations High-level Political Forum on Sustainable Development

Prajal Pradhan

16.07.2024

Current sustainability challenges





The underpinning principles of integration, indivisibility, and universality have yet to be prominent in SDG implementation.

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Future of Sustainable Development: Bridging SDG Interactions, Modeling, Tools and Policy

Date: 22-24 April, 2024

Venue: House of Connections, Grote Markt 21,
9712 HR Groningen

IREES Integrated Research on Energy, Environment and Society

SEI Stockholm Environment Institute

erc European Research Council

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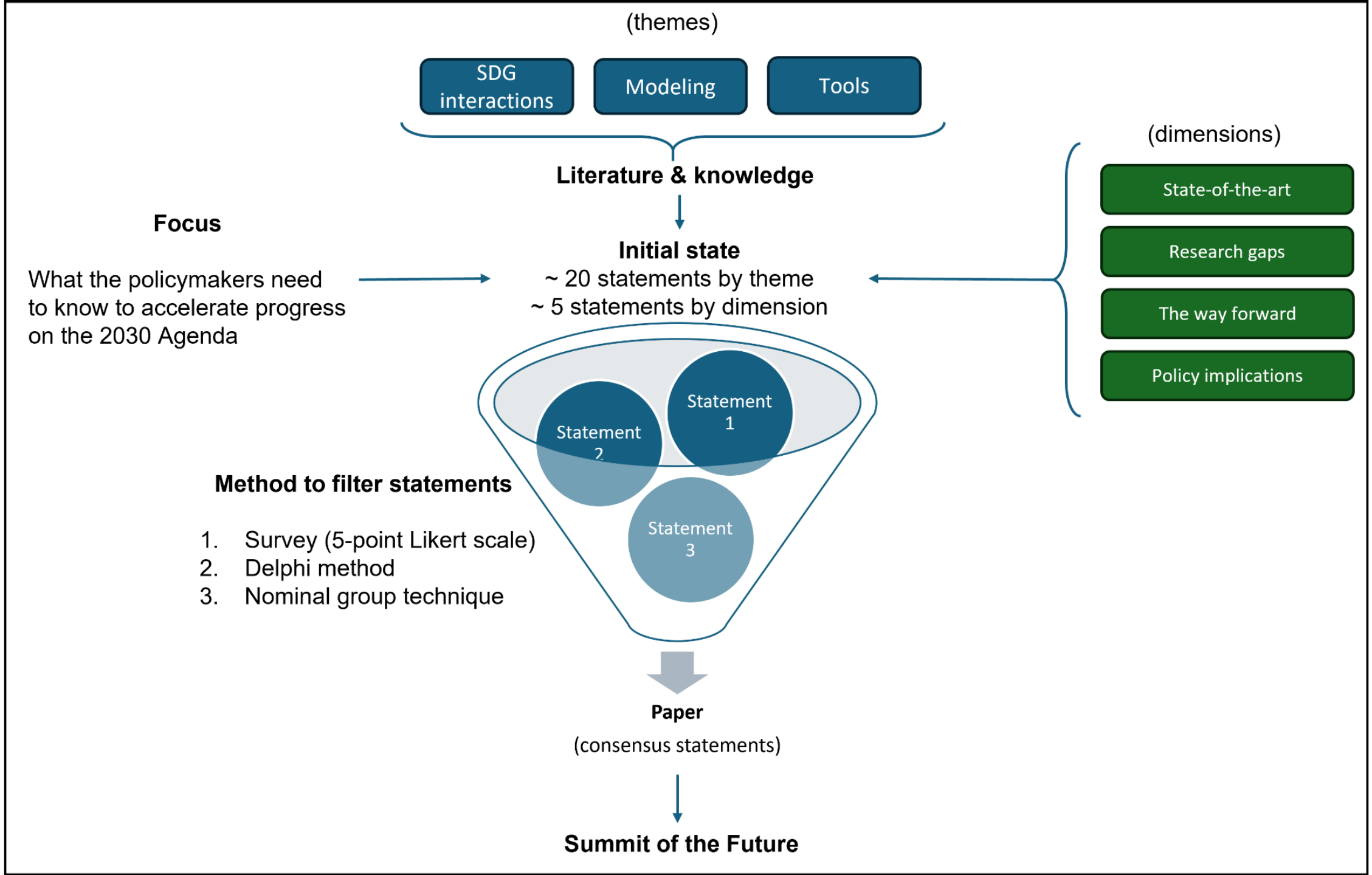
Workshop objectives

- **Develop a consensus paper** on the importance of SDG interactions and how modeling and tools can support policymaking to accelerate efforts for achieving SDGs and beyond.

- **Bring SDG research communities together** to develop evidence-based policy recommendations informed by SDG interactions, modeling, and tools

- **Forster the SDG research network** bridging interactions, modeling, tools, and governance communities for accelerating SDGs and a science-based post-2030 Agenda


(themes)
SDG interactions
Modeling
Tools
Literature & knowledge
(dimensions)
State-of-the-art
Research gaps
The way forward
Policy implications
Focus
What the policymakers need to know to accelerate progress on the 2030 Agenda
Initial state
~ 20 statements by theme
~ 5 statements by dimension
Statement 1
Statement 2
Statement 3
Method to filter statements
1. Survey (5-point Likert scale)
2. Delphi method
3. Nominal group technique
Paper
(consensus statements)
Summit of the Future

Workshop participants

- total of **60 participants** representing more than **ten countries**
- participants from the Ministry of Foreign Affairs of the **Netherlands**, the National Planning Commission **Nepal**, and the **United Nations** Department of Economic and Social Affairs
- **experts** working on SDG interactions, modeling, tools, policies, and governance
- **diverse career stages**, from PhD students to senior researchers and university professors

Three foci at the science-policy interface for systemic Sustainable Development Goal acceleration

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SDG interactions

- SDG interactions refer to the **complex and dynamic relationships between SDGs**.
- Actions and policies to pursue one goal can have **synergies or trade-offs** for achieving the others.
- **Accounting for SDG interactions** and aiming to strengthen synergies and mitigate trade-offs in policymaking is **crucial**.
- Accelerating sustainable development efforts **requires shifting focus from achieving specific SDGs** in the short term to a more holistic system-wide approach.

SDG interactions

- Current studies identify **more synergies than trade-offs** among SDGs, which are dynamic and context-specific.
- While trade-offs may be fewer, they are **important considerations** from a policy perspective.
- **Understanding the mechanisms** behind SDG interactions is crucial to identifying levers for accelerating systemic changes and SDG progress.
- **Coupling** the 2030 Agenda **with other intergovernmental processes** can leverage co-benefits and minimize conflicts.

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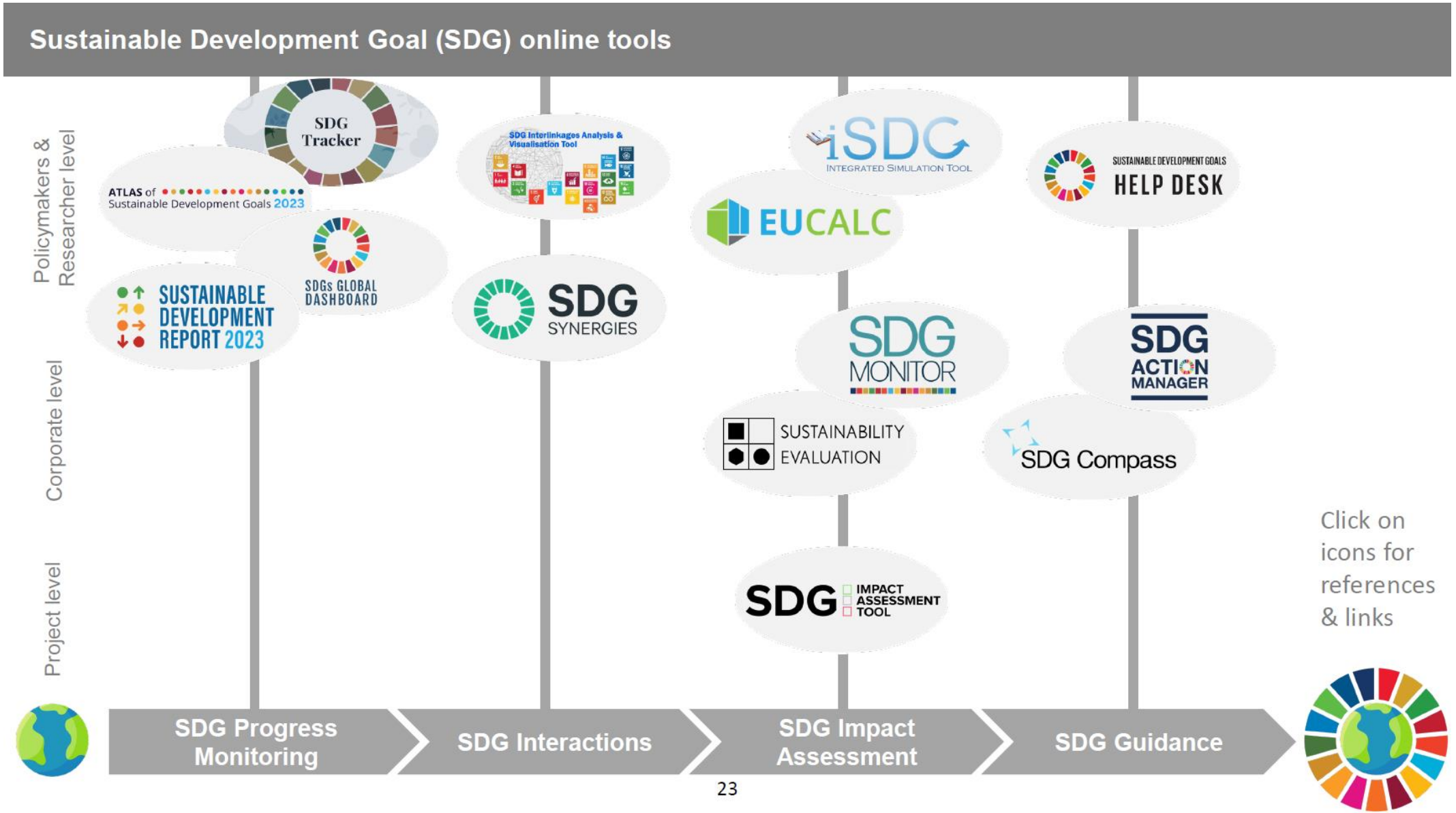
SDG modeling

(Orbons et al. 2023)

Table 1. Overview of seven studies addressing pathways toward achieving multiple SDGs

Study	Moallemi et al. (Moallemi et al., 2020)		Soergel et al. (Soergel, Kriegler, Weindl, et al., 2021)		Moyer et al. (Moyer & Bohl, 2019)		Van Vuuren et al. (van Vuuren et al., 2015)		Van Vuuren et al. (van Vuuren et al., 2017)		Grubler et al. (Grubler et al., 2018)		Randers et al. (Randers et al., 2019)	
Scenario	SSP1*		SDP (based on SSP1)		CC+DS+G		CC/DS/GT		SSP1*		LED		BAU	
	R	S	R	S	R	S	R	S	R	S	R	S	R	S
SDG 1				1		1						3	2	
SDG 2		4 6 7 9 10 11 12		13		14		4 8 14 15		5 9		9	16	
SDG 3		17 18 19		20		15		20 21 22 23		22 23		21 22	17	
SDG 4		25 26 27		28		24							25	
SDG 5				31									32	
SDG 6				33		36 37		34 35 36					37	
SDG 7	38 39 40 41	42 43 44 45		46		46		47 48 49		38 45 47		38 50 51	48	
SDG 8		52 53		55									54	
SDG 9				56						57			58	
SDG 10				60									61	
SDG 11				62									62	
SDG 12		63 64 66		67				64 67 69		67		59	68	
SDG 13	71 72 73 74	75 76 78		74 78		73		74 77 78		74 75 78		75 82	78	
SDG 14				80									79	
SDG 15		81 82 83		84 85				83		81 82		81 82 86	87	
SDG 16				88 89									90	
SDG 17				91									92	

Landscape of SDG Tools



Moving Forward

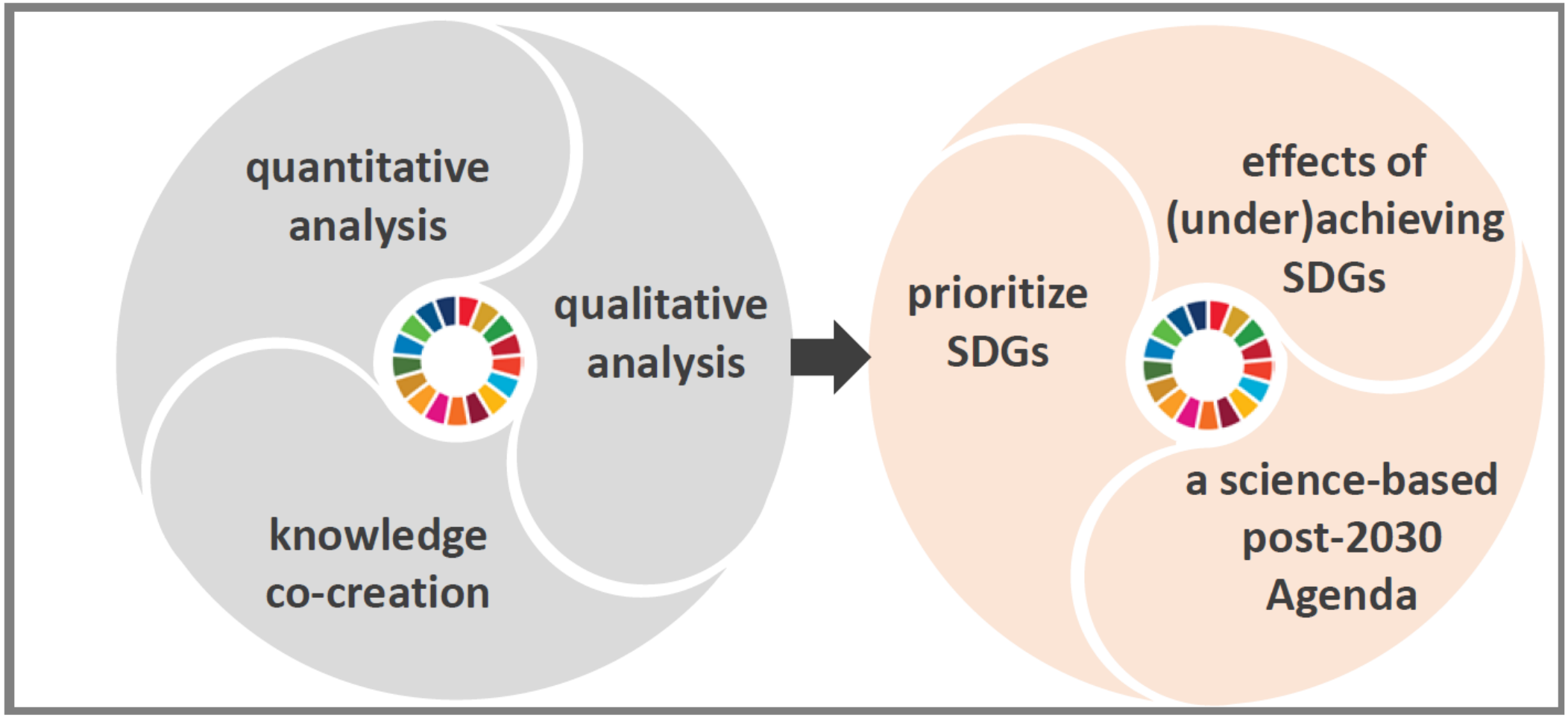
- Our **three interconnected foci** operationalize SDGs' **integration** and **indivisibility** principles, supporting holistic decision-making and accelerating systemic efforts for sustainability beyond SDGs.

- We **know enough** about SDG interactions, **have models** providing essential insights, and **have tools** to support holistic SDG decisions.

- Accelerating SDGs also requires **comprehensive** and **integrative** ways of thinking and more coherent policy frameworks across scales, engaging with **new voices and diverse ways** of knowing and fostering **trust and cooperation**.

BeyondSDG research approach

The threefold scientific approach (grey circle) combines three methods to rescue the 2030 Agenda from failing (orange circle).



(Pradhan 2023, National Science Review)

Thank you very much!

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