

# Sustainable development needs comprehensive risk awareness

Systematic and systemic consideration of different types of risks is needed to achieve the UN Sustainable Development Goals

**The Agenda 2030 and its 17 Sustainable Development Goals (SDGs) can be considered a global vision and roadmap, potentially capable of guiding humanity onto a safe course that can get us to “The future we want”, as agreed under the United Nations.**

**This framework of 17 development goals and 169 more specific targets is ambitious and calls for smart management of the potential synergies and trade-offs.**

The pathways toward fulfilling each of the SDGs may lead to some negative, unintended side-effects if the goals are not managed jointly and holistically. Potential negative impacts include increased material and energy use because of rebound effects of more efficient technologies; biodiversity loss, water shortage or chemical risks related to some forms of food production intensification; and increased material and energy consumption as a consequence of more efficient technologies. Many of these unintended effects would result in distributional impacts with unequal economic and social consequences.

All SDGs implicitly focus on reducing or controlling risks caused by unsustainable social, economic or environmental trends and their interactions.

Indeed, the implementation of the SDGs implies risk governance, such as uncertainty management; risk prevention; risk-benefit balancing; risk communication; and compensation for risks. The efficient fulfilment of SDGs requires specific attention to risks and more multi-faceted and rigorous analyses of risk governance, starting from the identification of the most relevant types of risks.



# There are different types of risks related to the SDGs

## Risks have multiple meanings in the context of Sustainable Development Goals (SDG):

### 1. Not making progress towards the sustainable development goals:

The fundamental risk related to the SDGs is the failure to achieve, or to make progress, towards the 17 SDGs and their 169 targets. The monitoring of the targets is challenging in itself, and relying on poor metrics can delay or even misguide action. Even accurate and efficient monitoring remains ineffective if it does not influence decisions and action. The risk of not achieving a SDG could be minimized with careful monitoring coupled with timely feedback to policy actions.

### 2. Striving for specific SDGs hampers progress toward impacts on other goals:

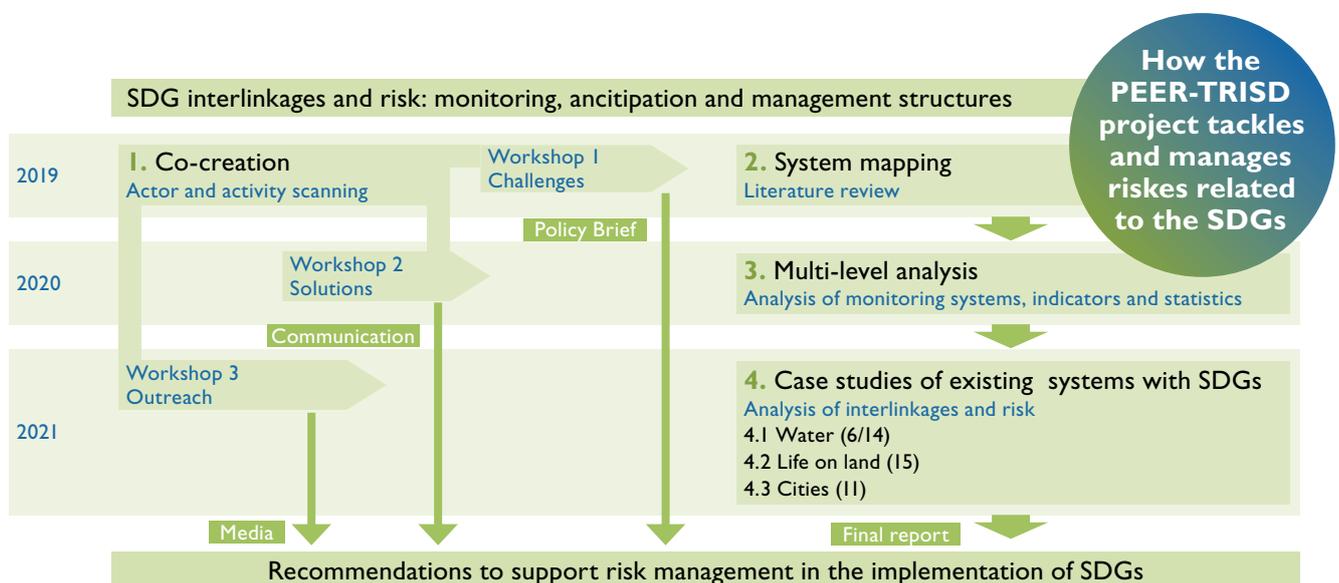
Focus on specific goals or isolated targets within sectors or geographical areas or on specific groups in the society, while neglecting the impacts onto other goals, counts as another type of risk. Neglecting such systemic impacts can result from piecemeal assessments or a focus on short-term interests of a certain sector or actor. The risk of trade-offs can be minimized by systematic analysis of cross-goal impacts in the implementation of the existing targets, and by establishing mechanisms for addressing trade-offs.

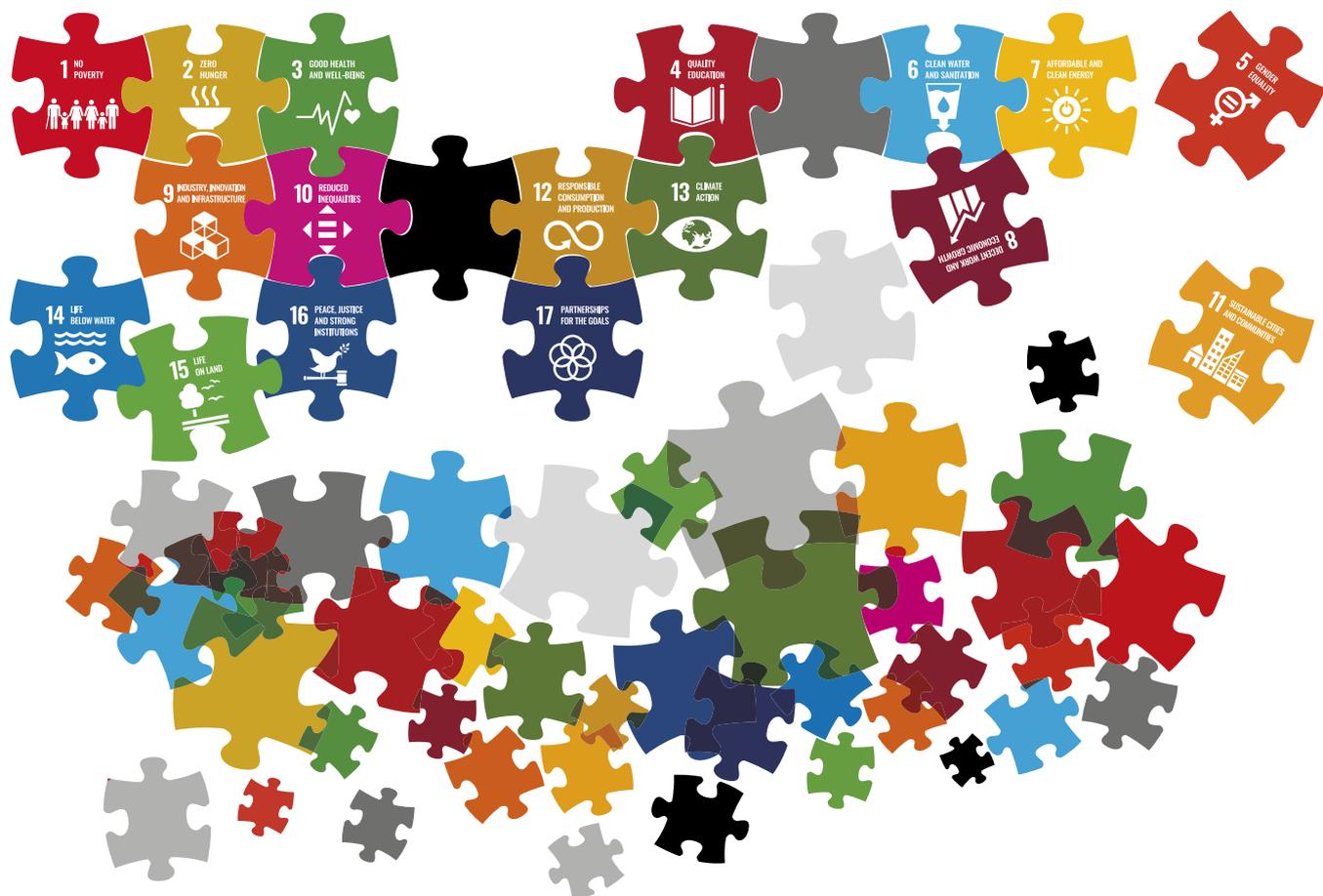
### 3. Complex chains of cascading impacts extend outside the SDG framework:

A third type of potential risk is that the SDG framework fails to address some sustainability concerns or over-emphasizes others. If key vulnerabilities or hazards are not included into the SDG framework, sustainable development will not be reached even if all of the individual targets would be reached. Furthermore, risk issues resulting from cascading impacts may also develop outside the SDG framework. Knowledge of the interlinkages creating cascading impacts is often uncertain or missing. Also, we know only little about potential systemic thresholds and points of no return related to cascading impacts. The risk of complex cascading impacts can be managed by system level analyses and overarching SDG governance that is designed to be sensitive and adaptive toward new emerging risks.

#### Complex chains of cascading impacts

Cascading impacts can start from single events, such as a drought caused by little rain and high temperatures. The risks materialize through chains of impacts. For example, a water shortage (or hydrological drought) can constrain the cooling capacity of power plants, thereby decreasing energy production and resulting in higher energy prices, leading to energy affordability problems across large areas. The same drought can limit cargo transport on rivers, which may result in freight cost increases and pressure on critical infrastructure. The risks posed by a single weather event are aggravated with climate change, land-use change and concentrated and connected infrastructure.





## First lessons for embracing the variability of risks

The first results of the PEER-TRISD project show that many actors see the SDGs as an important communication and planning tool. Some have put much effort in operationalizing SDGs for their specific activities. The first lessons include:

### **SDGs as a whole provide a vision, but only limited advice on how to tackle systemic risks.**

- Most actors recognise the difficulties of dealing with seventeen goals simultaneously in real-world decision-making.

### **Risk management is currently not at the core of most of the SDG-related activities.**

- Risks may go unnoticed because of gaps and overlaps between the SDGs, between sectors and between international and national levels as well as conflicting interests between actors

### **Single SDGs can help in operationalizing existing activities related to risk management.**

- SDGs can help actors to better identify risks, refine strategies, develop indicators, channel resources, conduct studies and develop partnerships. An agreement on SDGs might also mobilise resources and funding.

### **SDGs have a potential for improving policy coherence and integrated management of the risks.**

- A shared motivation to use the SDG-framework in a comprehensive manner, coupled with appropriate monitoring and evaluation, can reveal trade-offs. The SDG-framework allows connecting sector-based risk management activities and improving the coherence of these activities.

## PEER-TRISD tackles the risks

The Partnership for European Environmental Research (PEER) has decided to mobilise its expertise to promote and support the implementation of the Agenda 2030 and the SDGs.

The PEER research initiative “**Tackling and managing risks with SDGs**” (PEER-TRISD) aims to:

- Create a common understanding on how to identify, monitor and manage SDG related risks.
- Analyse the existing UN, EU and national level systems to identify, monitor and manage risks relevant to the implementation of the SDGs.
- Co-create recommendations that can support risk management in the implementation of SDGs
- Improve our general understanding about the links between the SDGs and the risks associated with their implementation.
- Identify needs for future research efforts and policy measures



### PEER-TRISD project

Contact persons for further information:

#### Prof. Dr. Kurt Jax

Leader of PEER-TRISD  
Department of Conservation Biology  
Helmholtz-Centre for Environmental Research – UFZ  
kurt.jax@ufz.de

#### Prof. Eeva Primmer

Leader of co-creation work in PEER-TRISD  
Research Director  
Finnish Environment Institute (SYKE)  
eeva.primmer@ymparisto.fi

This policy brief is based on the first results from the PEER-TRISD, including a co-creation workshop “**Risks and sustainable development: Workshop for scanning ways of anticipating, monitoring and governing risks in relation to SDGs**” organised in Brussels, 22nd January 2019.

AUTHORS:  
JARI LYYTIMÄKI, EEVA PRIMMER,  
ROBERT LEPENIES, KURT JAX.

PHOTOS: MARKUS DISTELRATH /  
PIXABAY, MICHAEL STRANGHOLT.  
LAYOUT: SATU TURTIAINEN, SYKE.  
HELSINKI, 10/2019.