

Für Mensch & Umwelt

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Klimafolgen und Anpassung

UNDP APA Webinar #6: Governance for Climate Adaptation

# Adaptation governance: policy planning, monitoring and evaluation

*C. Rietdorf, A. Daschkeit, L. Dorsch, S. Ebert, C. Hasse, P. Mahrenholz, K. Sander, I. Schauer, P. van R uth*

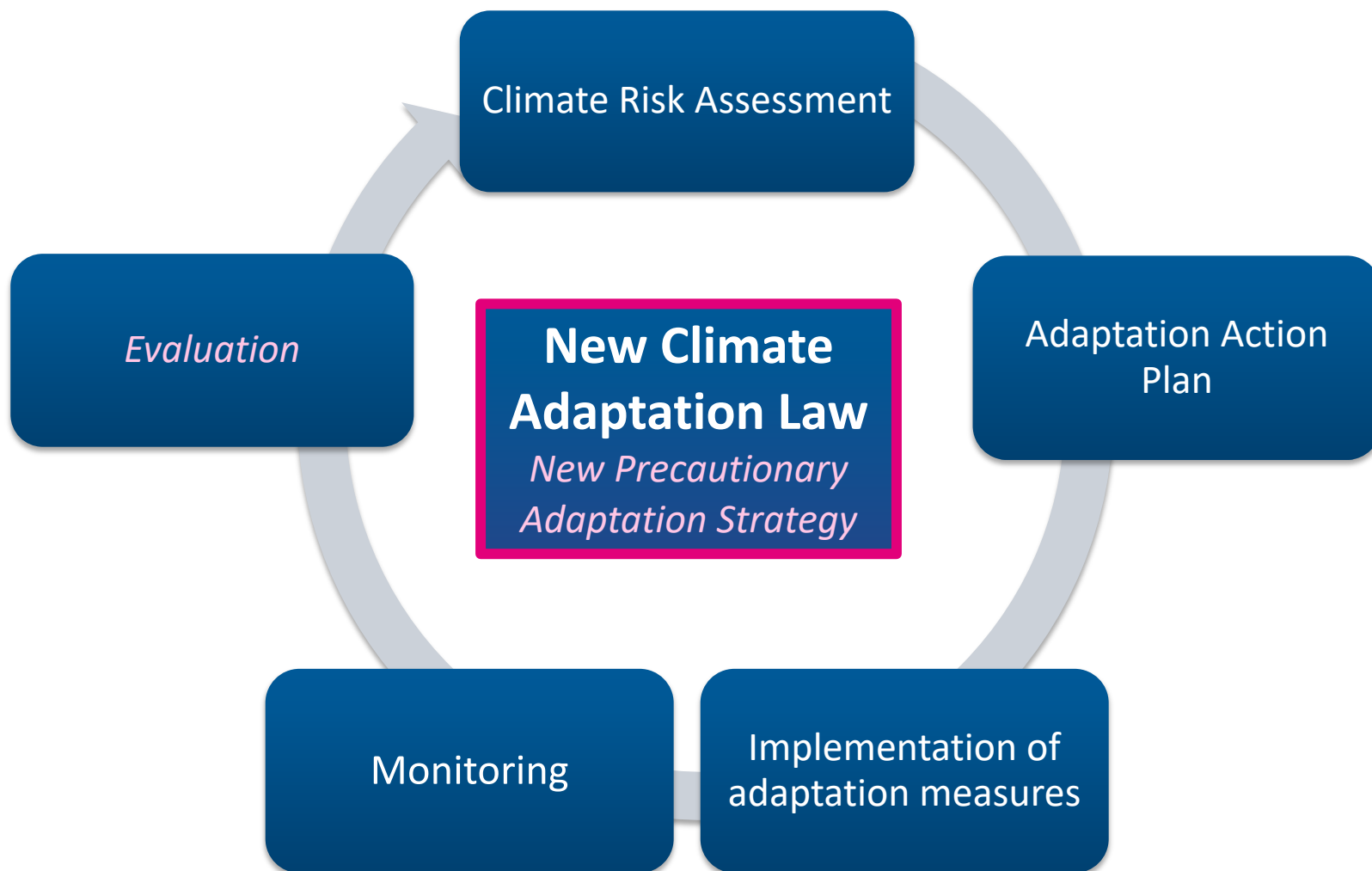
*German Environment Agency – Competence Center Climate Impacts and Adaptation*

- 1. National Adaptation Process**
- 2. Climate Impact and Risk Assessment**
- 3. Monitoring Report 2023**
- 4. Collaboration**

# National Adaptation Process



## Policy Cycle of the Climate Adaptation Process in Germany



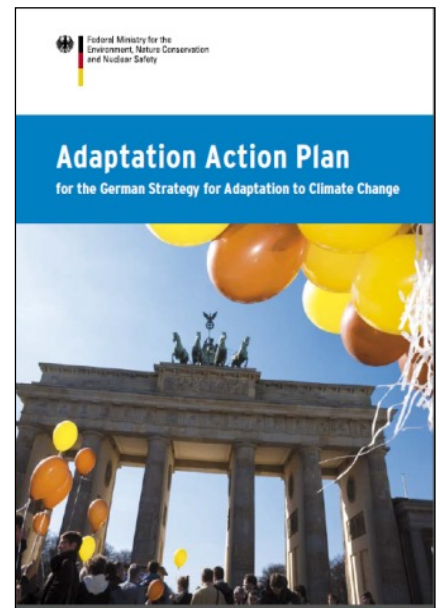
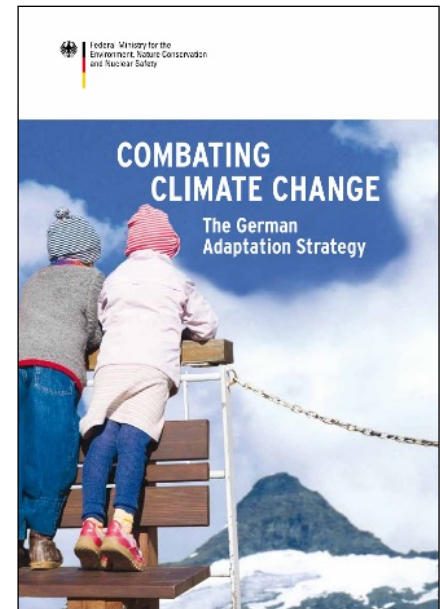
Source: German Environment Agency

# National Adaptation in Germany

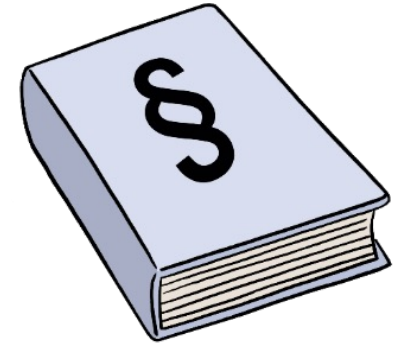
## Process

- **National Adaptation Strategy (DAS) 2008**
- **Adaptation Action Plan (AAP) 1<sup>st</sup> in 2011**
- **Progress report 1<sup>st</sup> 2015, incl. 2<sup>nd</sup> AAP**
- **Progress report 2<sup>nd</sup> 2020, incl. 3<sup>rd</sup> AAP**
- **In development: New Precautionary National Adaptation Strategy (DAS 2.0) end of 2024, incl. 4<sup>th</sup> AAP (incl. measurable targets)**
  
- **Climate Risk Analysis 1<sup>st</sup> 2015, 2<sup>nd</sup> 2021, 3<sup>rd</sup> planned 2028**
- **Monitoring Reports 1<sup>st</sup> 2015, 2<sup>nd</sup> 2019, 3<sup>rd</sup> 2023, planned 2027**
- **Evaluation 2015 (methodology), 1<sup>st</sup> 2019, 2<sup>nd</sup> planned 2028**

**NEW: National Climate Adaptation Law June 2024**



## Climate Adaptation Law (KAnG)



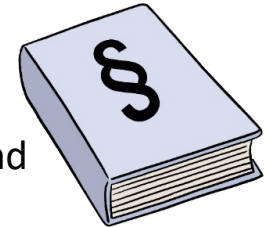
Came into act in **June 2024**

= **1<sup>st</sup> binding framework** for climate adaptation in Germany.

- Commitment to develop a **precautionary climate adaptation strategy with measurable targets**, to regularly updating and implementing it. Responsible are all **federal ministries**.
- Regular **evaluation** of progress, based on **monitoring report** (4 yrs).
- **Climate risk assessments** (<8 yrs), new **register of damages and expenditure**
- **Federal states**: Development and implementation of **own climate adaptation strategies**.
- **Municipalities**: Federal states ensure that **local climate adaptation concepts** are developed based on risk assessments, and **report to the federal government**.
- **All public bodies: requirement to consider** the goal of climate adaptation when planning and making decisions.

<https://www.bmu.de/themen/klimaanpassung/das-klimaanpassungsgesetz-kang>

## Background: measurable targets for climate change adaptation in Germany



Our new **Climate Adaptation Act** creates legal framework for implementation and follow-up of strategy

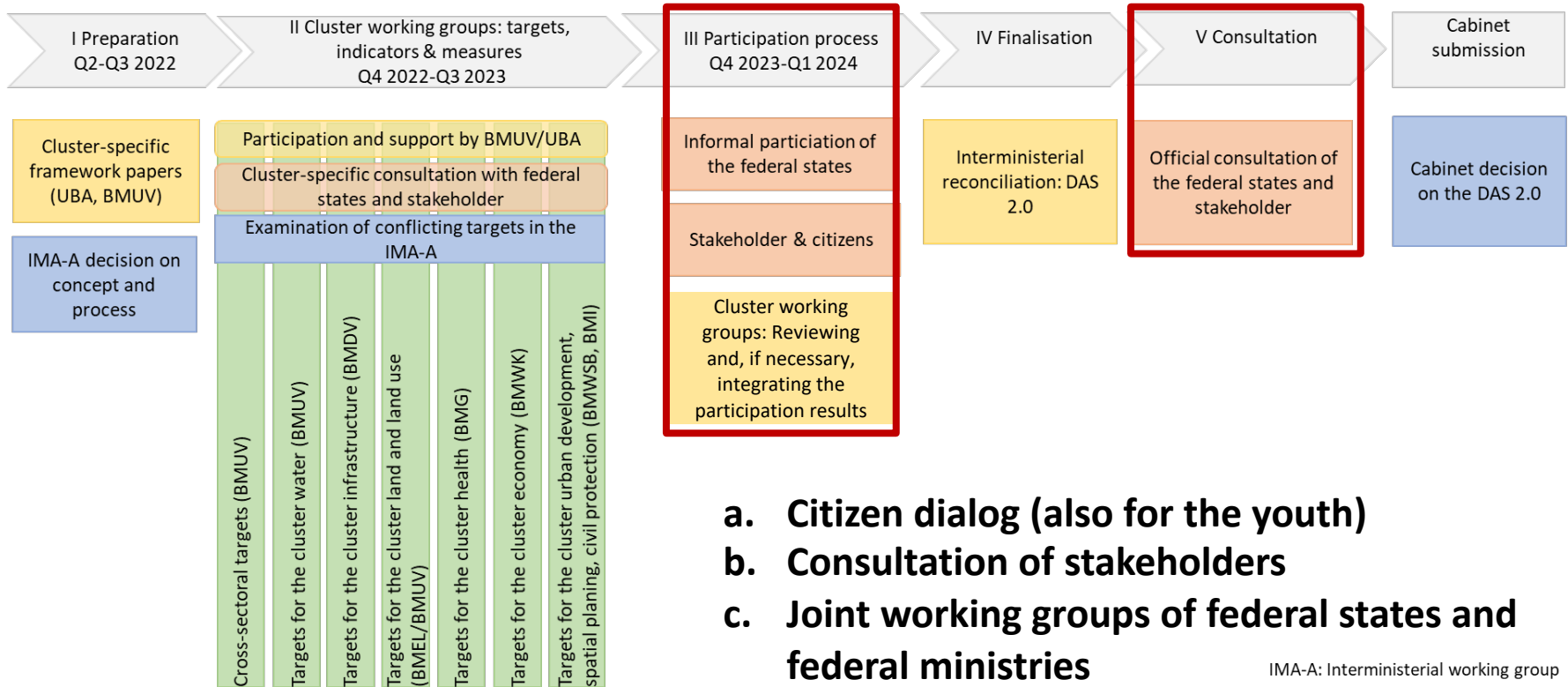
### ➤ **§ 3 Precautionary Climate Change Adaptation Strategy**

- includes measurable and ambitious **targets, indicators** to measure the achievement of targets, and **instruments/measures** that contribute to the achievement of targets
- Strategy makes recommendations on measures that fall within the responsibility of the federal states
- Strategy **establishes a mechanism for assessing progress in achieving the targets**
- **Federal states, associations and the public** must be **involved** in the definition of measurable targets and the corresponding indicators and in the selection of measures.
- **Ministries** are **responsible** for developing, reviewing and, if necessary, updating their targets and measures

### ➤ **§ 5 Monitoring Report informs about climate impacts and status of target achievement**

- target-related indicators are integrated in the Monitoring Report and reported every 4 years

# Process of developing the DAS 2.0

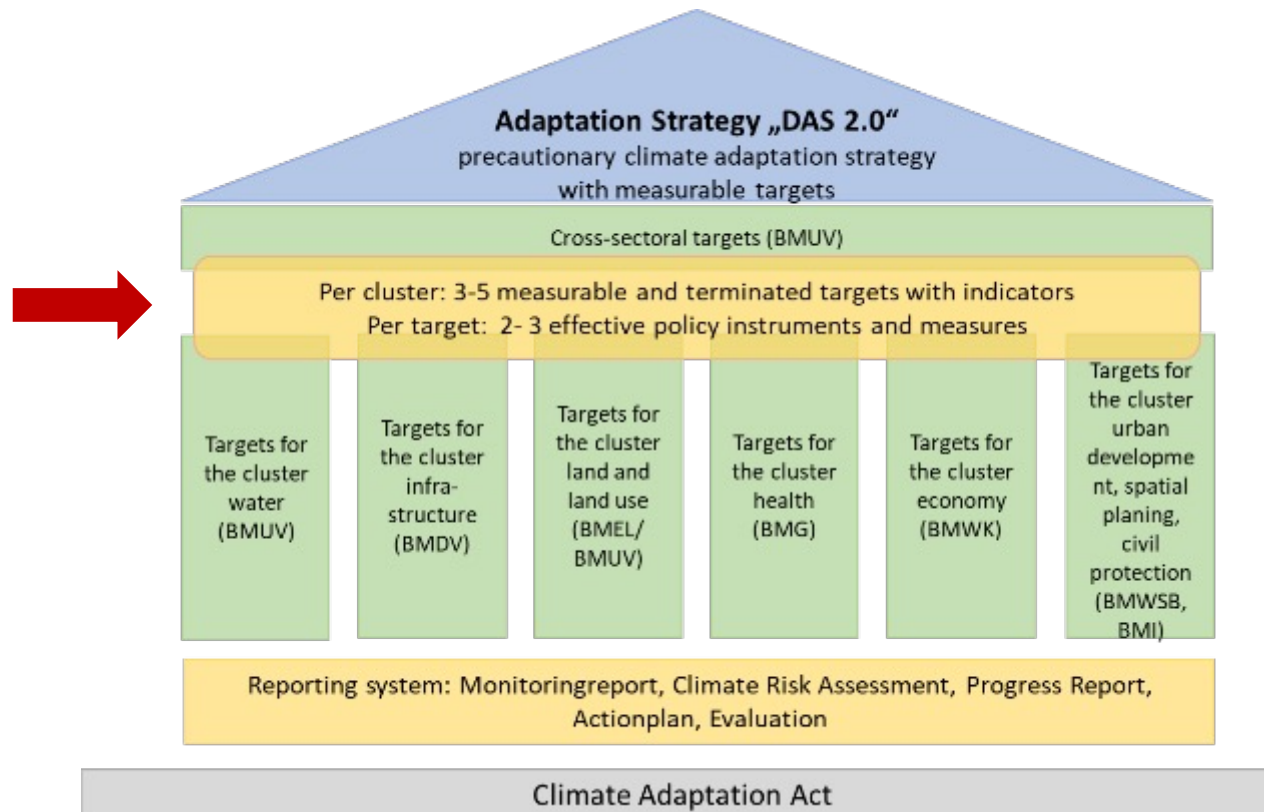


- a. Citizen dialog (also for the youth)
- b. Consultation of stakeholders
- c. Joint working groups of federal states and federal ministries

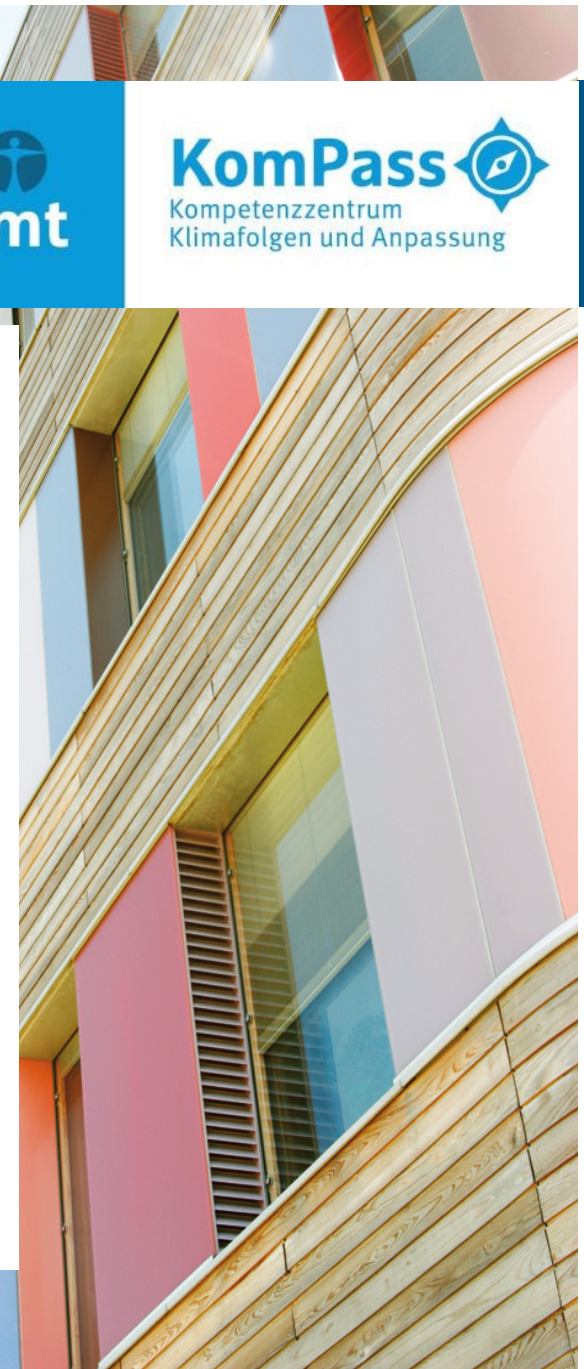
IMA-A: Interministerial working group



# Background: measurable targets for climate change adaptation in Germany



# Climate Impact and Risk Assessment 2021



## National Climate Impact and Risk Assessment (KWRA 2021)

In which fields of action, for which climate impacts and in which regions in Germany are there particularly

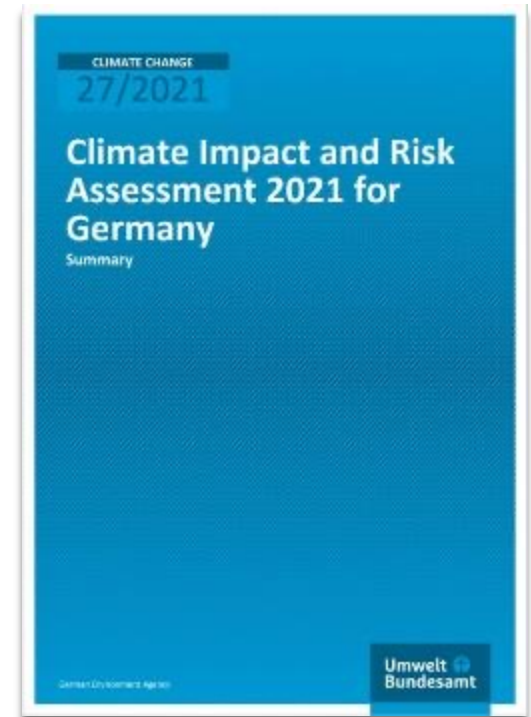
- **high climate risks?**
- **low adaptation capacities?**
- **urgent need for action?**

→ Prioritisation as basis for **adaptation action planning**

About 180 experts from 25 authorities from 9 ministries, external experts and a scientific consortium

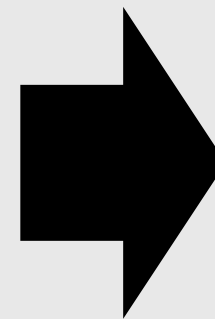
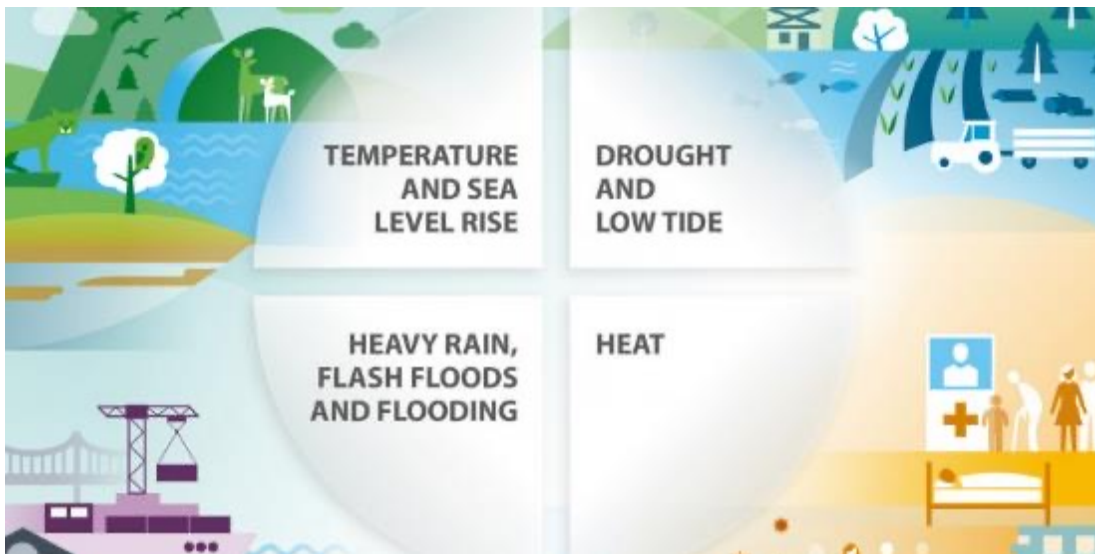
→ Collaborative process (co-production): to rise awareness and ownership

Explanation in a four-minute film on [YouTube](#)



## Key Challenges in Germany (KWRA 2021)

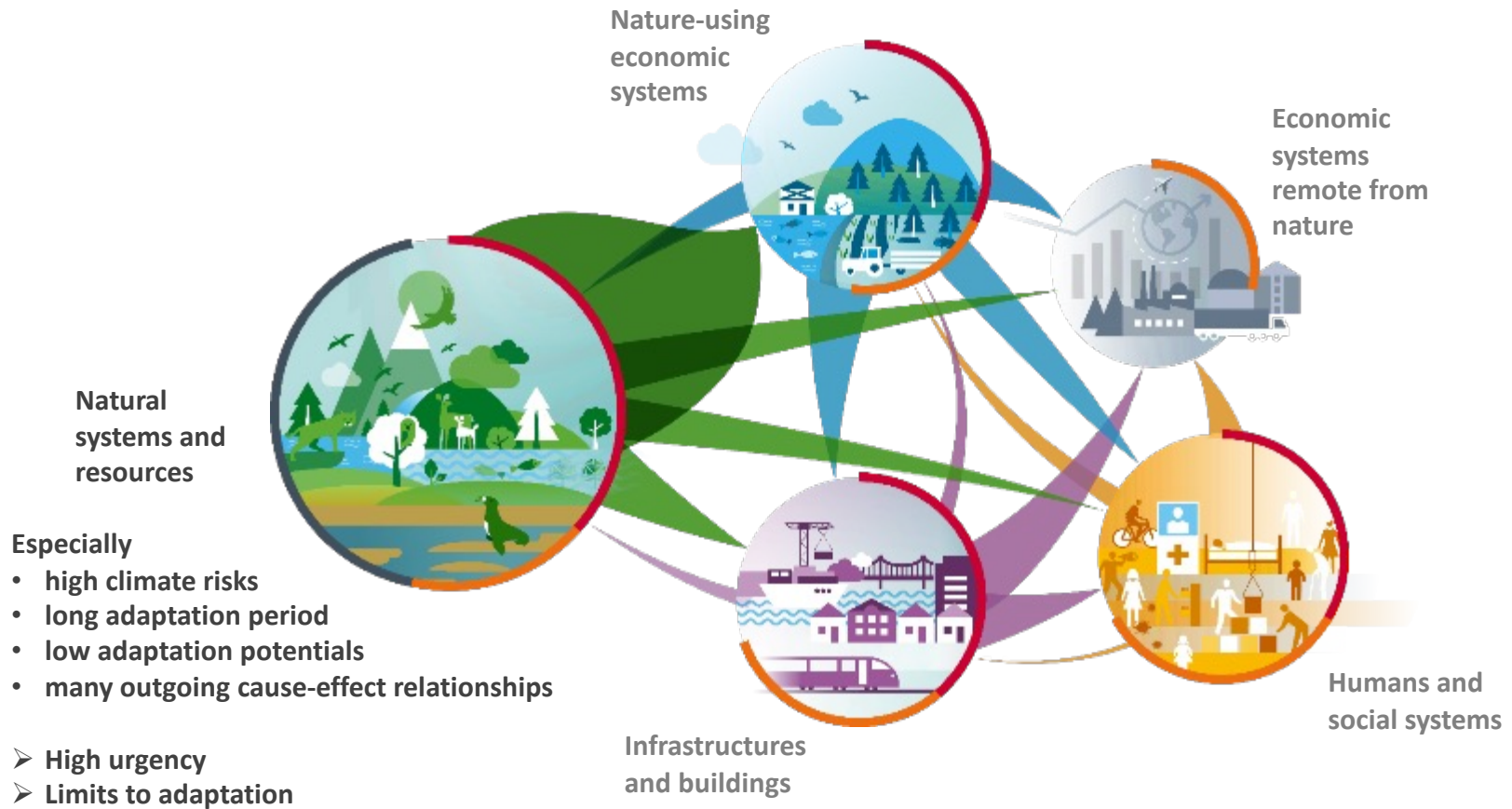
- ▶ Climate risks from **heat for health**, especially in urban areas
- ▶ Climate risks from **drought and low water** (often associated with heat) for all water-using and water-dependent systems.
- ▶ Climate risks from **heavy rainfall, flash floods and flooding**, especially for infrastructure and buildings; settlements near water bodies or in narrow valleys in the low mountain ranges are primarily affected.
- ▶ Climate risks from **gradual temperature rise**, such as **sea-level rise**, for natural and nature-using systems.



31 Impacts of climate change with very urgent need for action

Source: Climate Impact and Risk Assessment 2021

# Affected system domains and interdependencies

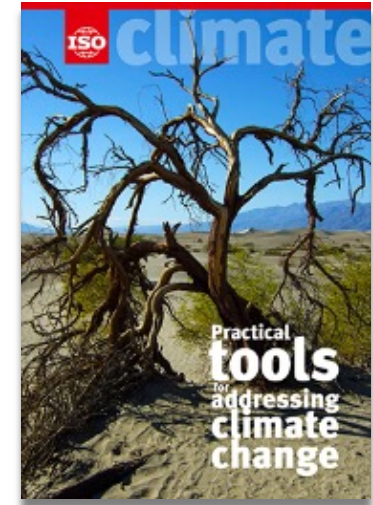


Source: German KWRA 2021

# ISO 14091:2021 Adaptation to climate change: Guidelines on vulnerability, impacts and risk assessment

Methodological experience from German Climate Impact and Risk Assessment contributed to ISO 14091

- Harmonized approach to climate change risk assessment.
- One-time application or regular implementation.
- Assessing present and future climate change risks.
- Guides through all phases of risk assessment:



## Preparation

- Establish context and objectives
- Establish **project team**
- Determine scope and methodology
- Ensure **transparency and participation**

## Implementation

- **Screen** impacts and develop impact chains
- **Identify** indicators
- **Acquire** and manage data
- **Aggregate** risk components
- **Assess** adaptive capacity
- **Interpret** and evaluate results

## Reporting

- Description of objectives, methods and key findings
- Background information
- **Illustration of findings**

Further Guidance:

[Climate Risk Assessments at the Municipal Level - Recommendations for the Implementation of ISO 14091](#)

# Monitoring Report 2023



## Monitoring Report 2023

- National overview based on measured data: contains **117 indicators for 16 fields of action** and cross-sectional activities of the federal government.
  - **State Indicators:** Development of Germany's climate (DWD)
  - **Impact Indicators:** How does climate change affect natural and socio-economic systems?
  - **Response Indicators:** How do we act and what are the outcomes?
- **New indicators** were integrated on key risks **that were identified in the KWRA 2021 as urgent requirements for action**, in order to track developments of important risks.



[2023 Monitoring Report on the German Strategy for Adaptation to Climate Change | Umweltbundesamt](#)



# Overview of innovations in Monitoring Report 2023

## Strengthening references to the KWRA 2021

### New: Overview for the fields of action

- Summary of the results from the indicator-based monitoring
- Brief summary of the KWRA findings
- Data and knowledge gaps
- Qualitative presentation of what is happening at federal level with regard to adaptation.

### Revised structure of the report

Simplified findability of the various elements in the report

Background documentation easy accessible via QR



Action field 'Tourism industry'		Page
Impact indicators		
TOU-I-1	Coastal bathing temperatures	278
TOU-I-2	Snow cover for winter tourism	280
TOU-I-3	Market shares held by wider tourism areas	282
Response indicators		
TOU-R-1	Seasonality of bed-nights in wider tourism areas	284

Action field 'Financial services industry'		Page
Impact indicators		
FIW-I-1	Claims ratio and combined ratio in homeowners' comprehensive insurance	292
Response indicators		
FIW-R-1	Public awareness of storm and flooding risks	294
FIW-R-2	Awareness of the relevance of physical climate risks among financial services providers	296

### Cluster Urban Development, Spatial Planning, Civil Protection

Action field 'Spatial, regional and urban development planning'		Page
Response indicators		
RO-R-1	Priority and restricted areas reserved for wildlife and landscape conservation	302
RO-R-2	Priority and restricted areas for groundwater conservation / abstraction of drinking water	304
RO-R-3	Priority and restricted areas reserved for (preventive) flood control	306
RO-R-4	Priority and restricted areas reserved for special climate functions	308
RO-R-5	Increase in settlement and transport areas	310
RO-R-6	Land use for settlements in officially designated flood plains	312

Action field 'Civic protection'		Page
Impact indicators		
BS-I-1	Person hours due to weather-related damage events	320
Response indicators		
BS-R-1	Information on how to act in a disaster situation	322
BS-R-2	Precautions taken among the population	324
BS-R-3	Exercise volume	326
BS-R-4	Active emergency relief responders in civic protection	328

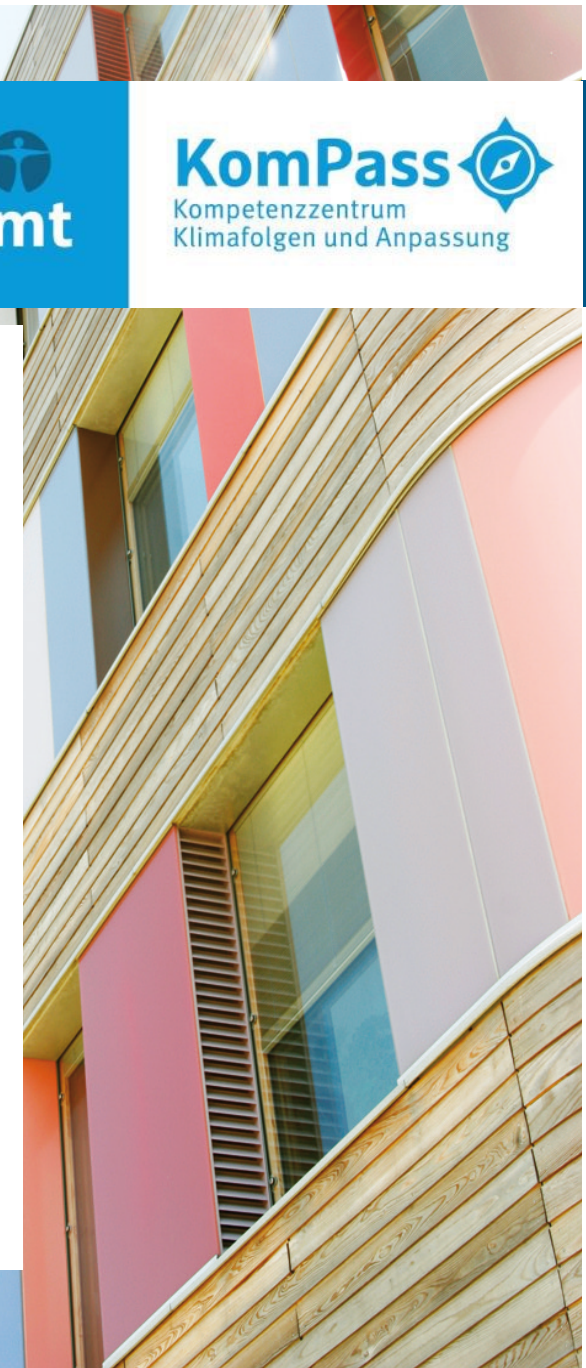
### Cross-sectional Indicators

Response indicators		Page
HUE-1	Manageability of climate change impacts	332
HUE-2	Usage of warning and information services	334
HUE-3	Federal grants for promoting research projects on climate change impacts and adaptation	336
HUE-4	Adaptation to climate change at the municipal level	338
HUE-5	International finance for climate adaptation (from budgetary funds)	340

67 Impact Indicators  
45 Response Indicators  
5 Cross-sectional Indicators



# Collaboration



# NEW R&D Project planned on: International Comparative Analysis of Adaptation Processes and Systems – Learning from and with each other

## Project goal

Strengthen selected international and German Climate Change Adaptation processes and systems by identifying, joining, strengthening or establishing international bi- and multilateral learning collaboration.



In case you are interested to collaborate, please get in touch:

[cornelia.rietdorf@uba.de](mailto:cornelia.rietdorf@uba.de)

# Links

## **DAS Progress Report 2020, incl. Adaptation Action Plan III**

[https://www.bmu.de/fileadmin/Daten\\_BMU/Download\\_PDF/Klimaschutz/klimawandel\\_das\\_2\\_fortschrittsbericht\\_en\\_bf.pdf](https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimawandel_das_2_fortschrittsbericht_en_bf.pdf)

## **Climate Risk Assessment 2021**

[https://www.umweltbundesamt.de/sites/default/files/medien/479/publikationen/cc\\_27-2021\\_climate\\_impact\\_and\\_risk\\_assessment\\_2021\\_for\\_germany\\_english\\_summary\\_bf.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/479/publikationen/cc_27-2021_climate_impact_and_risk_assessment_2021_for_germany_english_summary_bf.pdf)  
[Impacts of climate change | Umweltbundesamt](#)  
[Climate Risk Assessments at the Municipal Level | Umweltbundesamt](#)

## **Monitoring Report**

[2023 Monitoring Report on the German Strategy for Adaptation to Climate Change | Umweltbundesamt](#)

## **UBA KomPass Website**

<https://www.umweltbundesamt.de/en/topics/climate-energy/climate-impacts-adaptation>

## **KLiVO-Portal**

[https://www.klivoportal.de/EN/Home/home\\_node.html;jsessionid=88ADFE6637DDFD8B205304B38A2227C2.live21303](https://www.klivoportal.de/EN/Home/home_node.html;jsessionid=88ADFE6637DDFD8B205304B38A2227C2.live21303)

## **Blauer Kompass**

[https://www.umweltbundesamt.de/sites/default/files/medien/12238/dokumente/factsheet\\_bundespreis-blauer-kompass\\_englisch.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/12238/dokumente/factsheet_bundespreis-blauer-kompass_englisch.pdf)

## **Tools to support local adaptation: Tatenbank, Klimalotse (only in German):**

<https://www.umweltbundesamt.de/themen/klima-energie/klimafolgen-anpassung/werkzeuge-der-anpassung/klimalotse>  
<https://www.umweltbundesamt.de/themen/klima-energie/klimafolgen-anpassung/werkzeuge-der-anpassung/tatenbank>

# Thank you for your attention!

**Cornelia Rietdorf**

[Cornelia.rietdorf@uba.de](mailto:Cornelia.rietdorf@uba.de)

**German Environment Agency (Umweltbundesamt)**

Section KomPass - Climate Impacts and Adaptation

Wörlitzer Platz 1

06844 Dessau-Roßlau

Germany

