

The background of the slide is a photograph of a mountainous landscape in Austria. In the foreground, a small town with red-roofed buildings is visible in a valley. The middle ground shows rolling green hills and a river. The background features majestic, rugged mountain peaks under a sky with soft, white clouds. A semi-transparent dark blue rectangular box is overlaid across the middle of the image, containing the title and subtitle text.

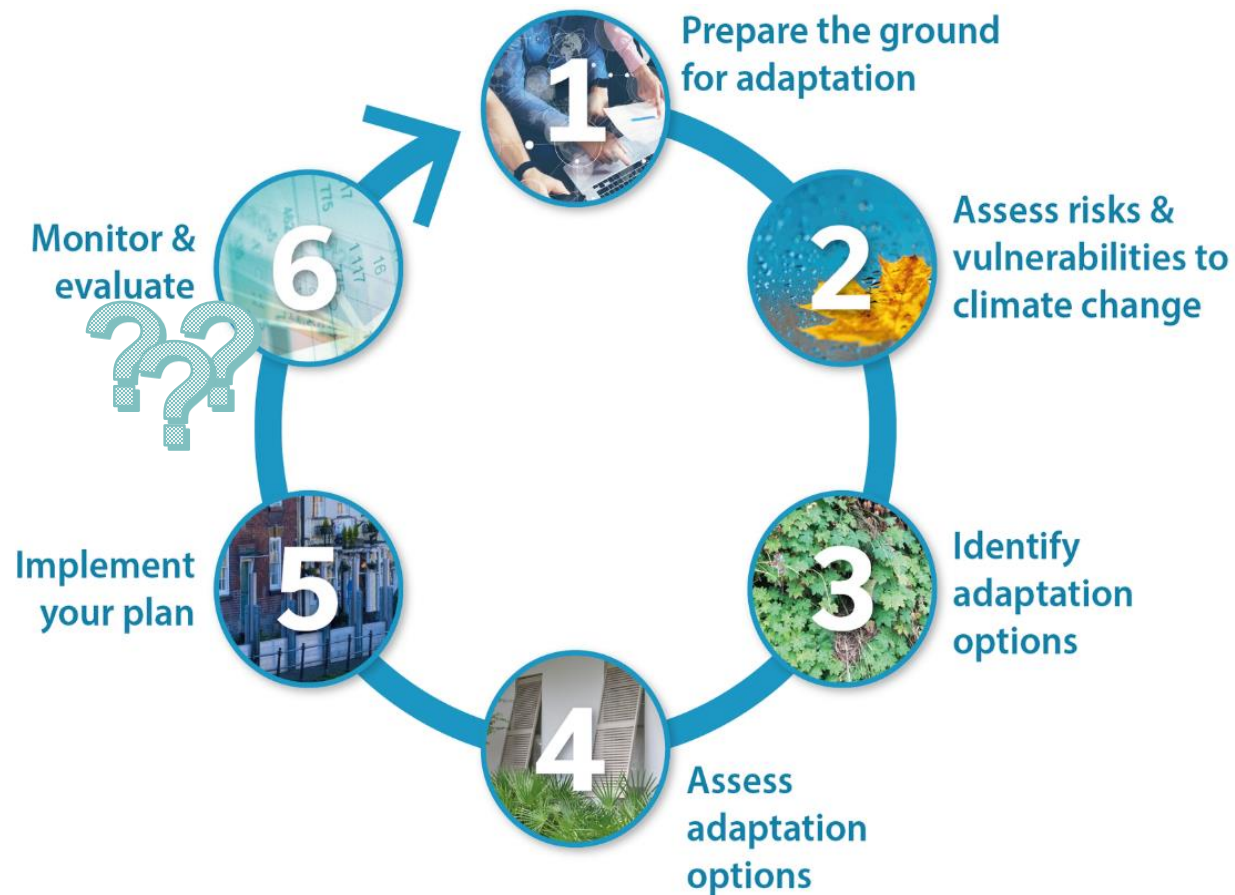
# Austrian experience with M & E and supporting adaptation at the sub-national level

Workshop on Adaptation, April 4, 2023

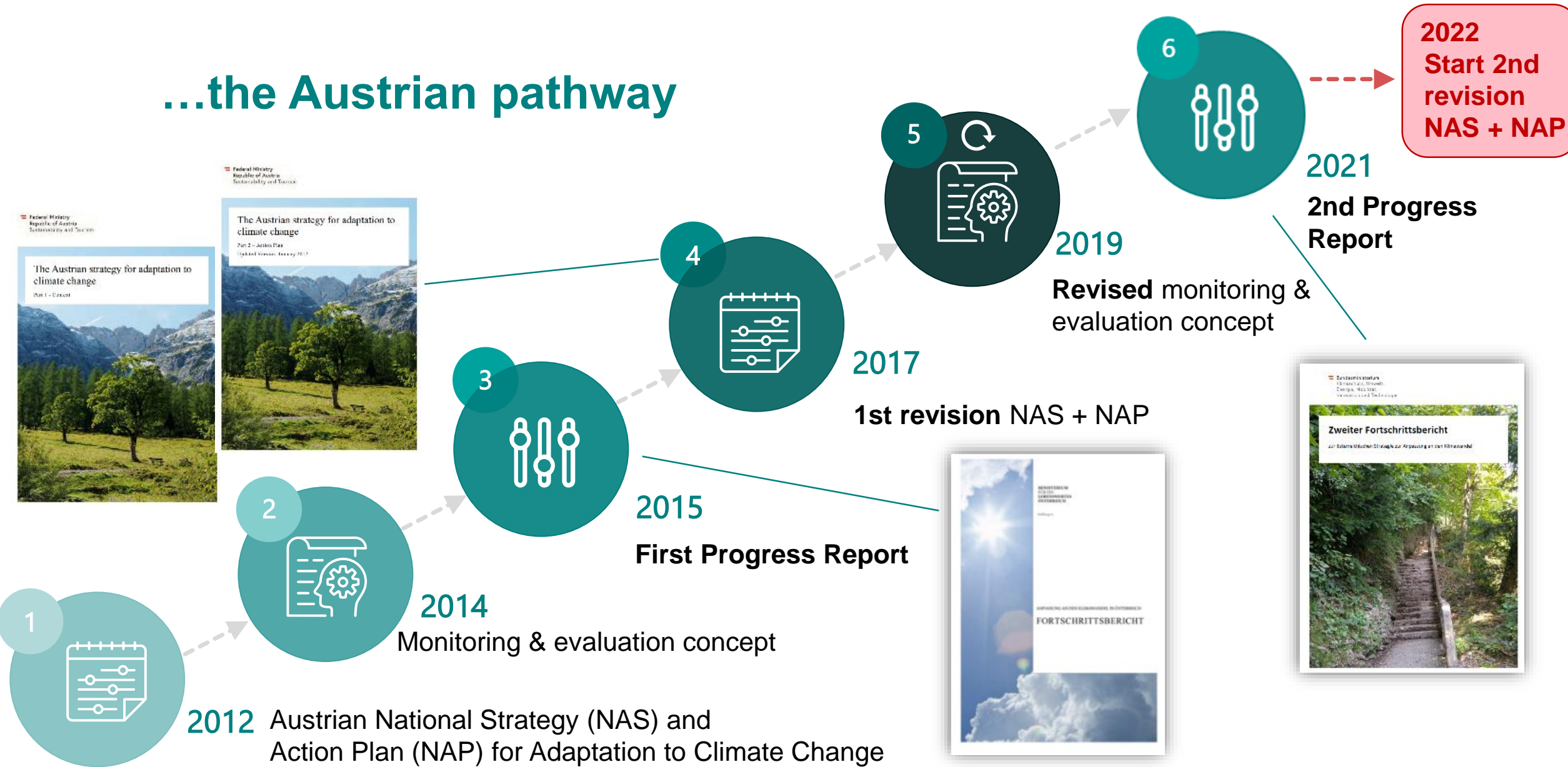
© Anna Schmidt

# Policy Cycle – Adapting to Climate Change

...Monitor and Evaluate



# ...the Austrian pathway



# 1ST PROGRESS REPORT - CONCEPT

NAS and NAP  
(2012)



14 activity fields  
(sectors) and  
recommended  
actions of NAS/NAP



**Participatory  
Approach:  
Self assessment of  
experts (survey)**

**Data based  
approach:  
Criteria catalogue  
(indicators)**

Joint consideration can provide a **broad picture** of the implementation of the NAS/NAP and **key adaptation trends** in Austria.

# CRITERIA CATALOGUE – 1ST PROGRESS REPORT

- **45** criteria
- 3-5 criteria for each activity field
- **Mix of criteria types** (vulnerability, adaptive capacity, etc.)
- **Qualitative** and **quantitative** criteria

Tabelle 24: Anzahl und Leistungsausmaß der Personen, die formelle\* Freiwilligenarbeit leisten

	Pers. × 1000	Vollzeitsäquiv.* × 1000
Kunst, Kultur, Unterhaltg. u. Freiz.	516,5	45,6
<b>Katastr.hilfs- und Rettungsdienste</b>	413,2	40,8
Sport und Bewegung	474,7	37,0
Kirchlicher od. religiöser Bereich	428,5	26,7
Polit. Arbeit- und Interessensv.	242,2	16,4
Sozial- und Gesundheitsbereich	227,9	14,8
Umwelt, Natur und Tierschutz	176,4	9,2
Bildung	174,3	7,7
Bürgerl. Aktivit. u. Gemeinwesen	146,0	7,2

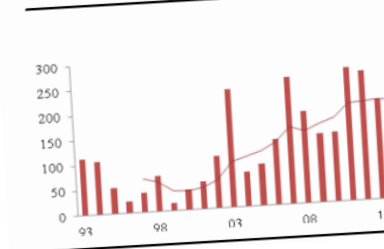
\* in institutionellem Rahmen, also z. B. keine Nachbarschaftshilfe (Einkaufen, Kinderbetreuung...), \*\* Äquivalente zu einer 38,5 h-Woche, berechnet aus Personenanzahl und dem für diese Kategorie erhobenen durchschnittlichen wöchentlichen Aufwand für die Freiwilligenarbeit; Daten: Statistik Austria (2008); Darstellung: Umweltbundesamt

Tabelle 19: Potenziell gefährdete Gebäude in signifikanten Hochwasserrisikogebieten 2013

HW-Risikozone		% **
HQ 100	82.600	3,5
HQ 300	154.000	6,4

\* im Jahr 2013 in Risikogebieten, \*\* Anteil am Gesamtgebäudebestand<sup>12</sup> (2.399.545).  
Daten: Umweltbundesamt GmbH, BMLFUW: interne Auswertung aus der Hochwasser-Fachdatenbank, 2014;

Abbildung 8: Anzahl der angezeigten Waldbrände in den Jahren 1993–2014 (Daten: Institut für Waldbau 2014). Linie: gleitendes Fünfjahresmittel



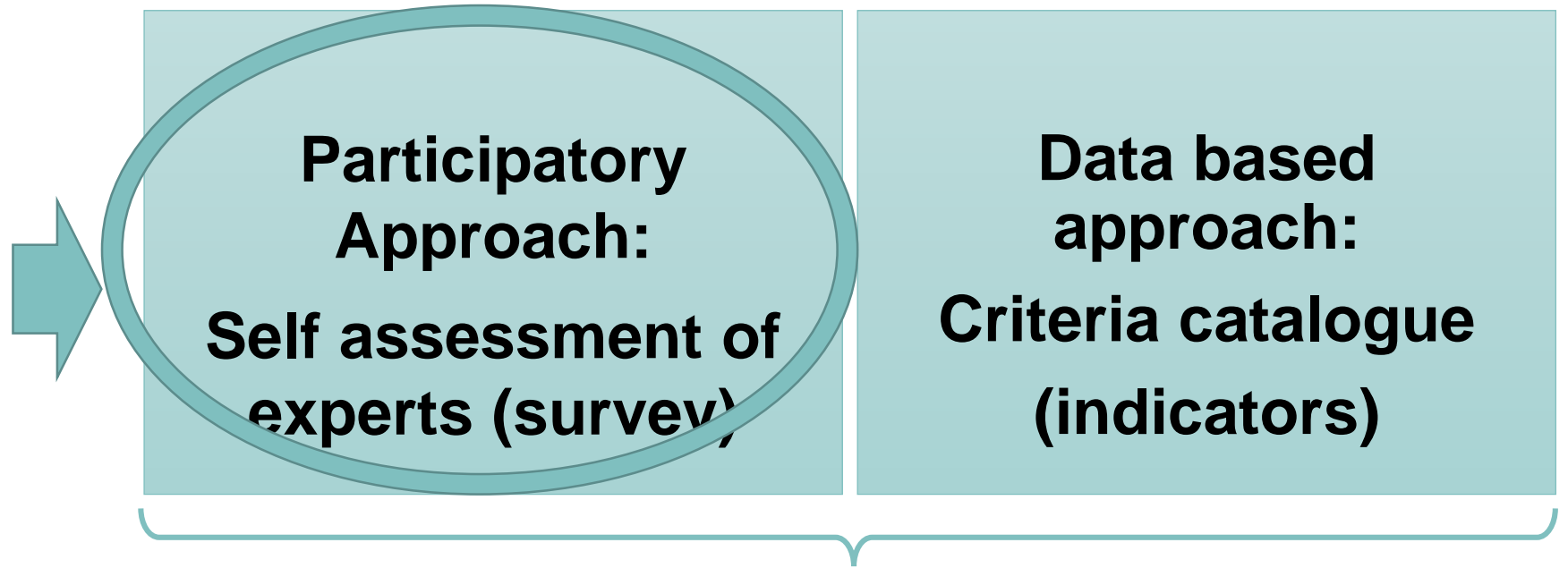


# 1ST PROGRESS REPORT - CONCEPT

NAS and NAP  
(2012)



14 activity fields  
(sectors) and  
recommended  
actions of NAS/NAP



Joint consideration can provide a **broad picture** of the implementation of the NAS/NAP and **key adaptation trends** in Austria.

## LESSONS LEARNED - SURVEY

- **Complex questionnaires** – 136 recommended adaptation actions
- Requires **background knowledge**  
(about adaptation and the adaptation strategy)
- **Misunderstandings**  
(e.g. who is responsible for responding to the survey)
- Met upon **some amount of resistance** (workload for state administrations, processing of large data volumes by M&E coordinators)  
➔ no reporting obligations, only 'soft peer pressure' possible

[illegible]

# LESSONS LEARNED – CRITERIA CATALOGUE

- **NOT all aspects** of adaptation processes are “measurable”
- Limited **data availability** and **most data** available is **not directly related to adaptation**
- There are different ways of **interpreting quantitative and qualitative data**, a common understanding is needed and can be ensured with strong stakeholder engagement during monitoring, reporting, evaluation and the NAS/NAP revision

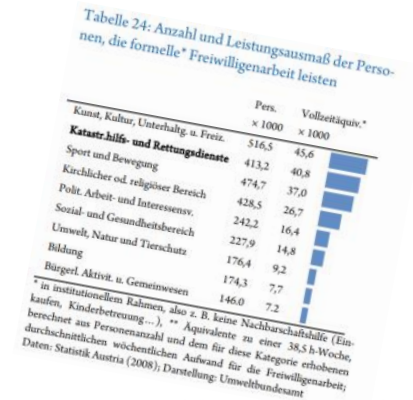
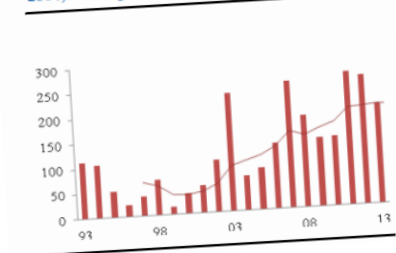


Tabelle 19: Potenziell gefährdete Gebäude in signifikanten Hochwasserrisikogebieten 2013

HW-Risikozone		% **
HQ 100	82.600	3,5
HQ 300	154.000	6,4

\* im Jahr 2013 in Risikogebieten, \*\* Anteil am Gesamtgebäudebestand<sup>12</sup> (2 399 545).  
Daten: Umweltbundesamt GmbH, BMLFUW: interne Auswertung aus der Hochwasser-Fachdatenbank, 2014;

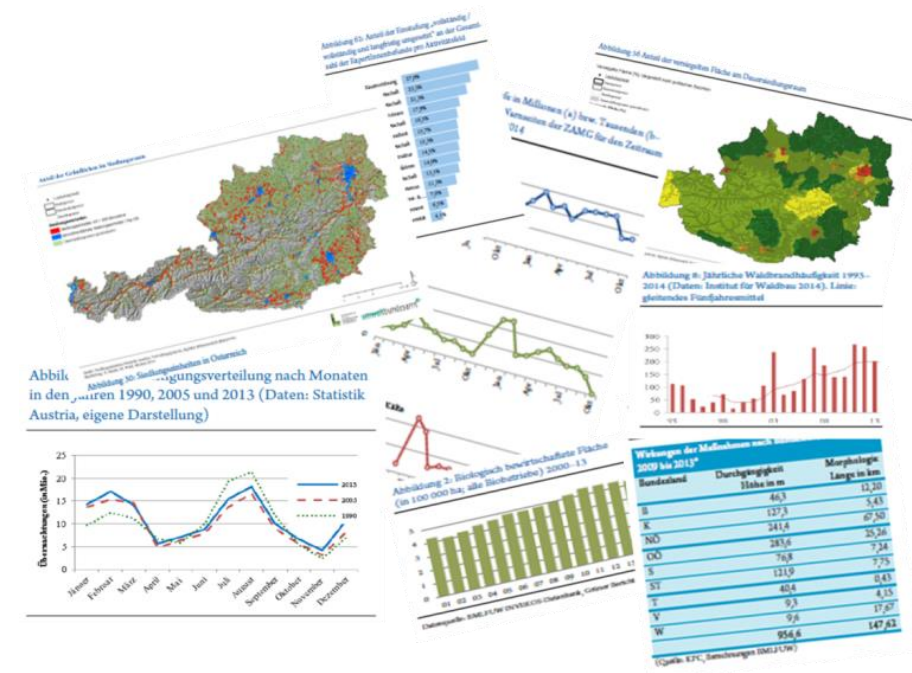
Abbildung 8: Anzahl der angezeigten Waldbrände in den Jahren 1993–2014 (Daten: Institut für Waldbau 2014). Linie: gleitendes Fünfjahresmittel



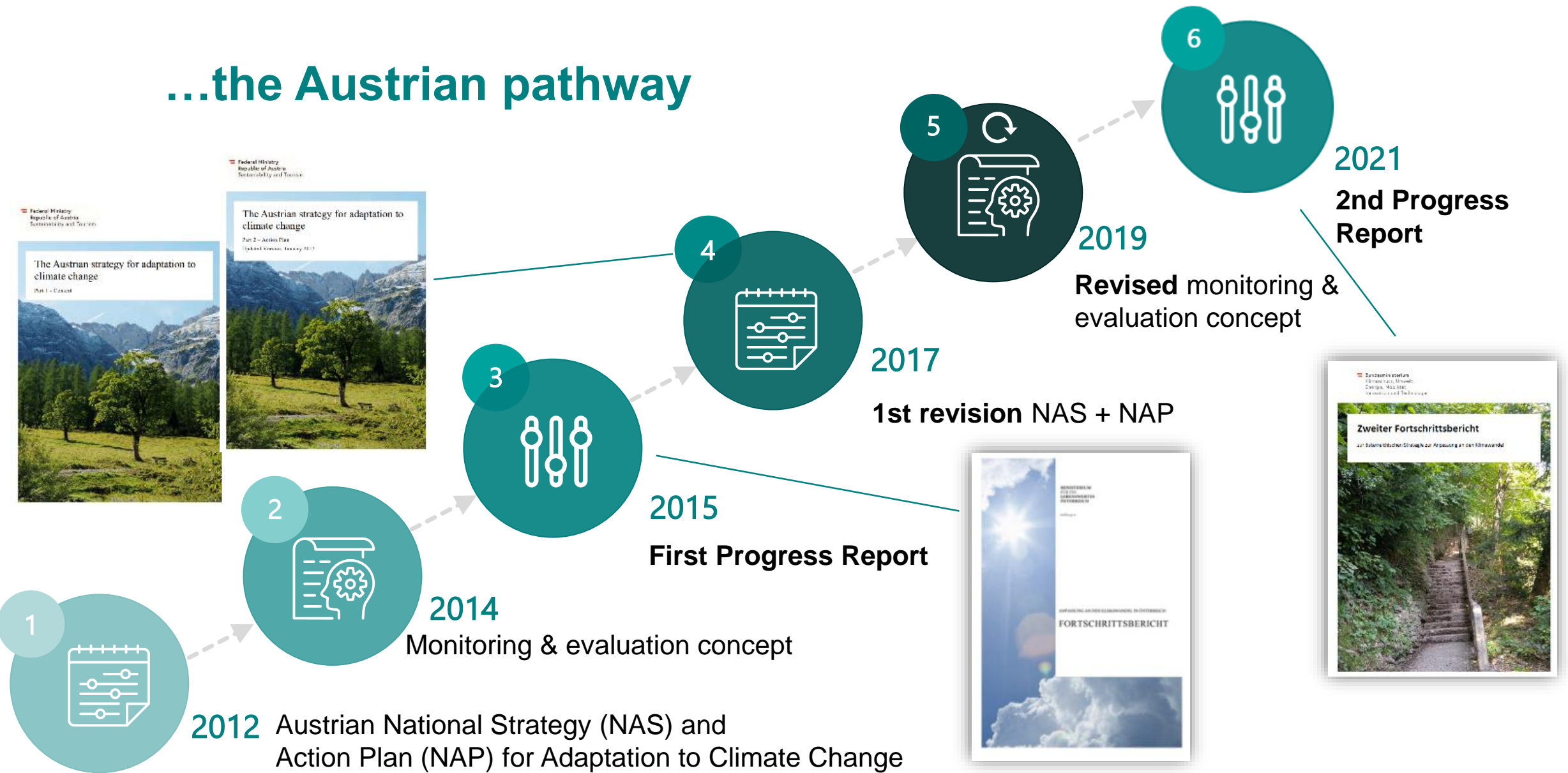


## RESULTS OF MONITORING – 1ST PROGRESS REPORT

- 1<sup>st</sup> progress report give a **broad picture of the state of implementation** and of **key adaptation trends** in Austria (2015)
- Results show that **implementation and mainstreaming** of adaptation **were increasing** in Austria  
with **different levels of progress** in the various areas of action (positive examples: forestry, water management, the area of natural hazard management, agriculture)
- **Based on the results of the 1<sup>st</sup> progress report, NAS and NAP were revised → NAS and NAP 2.0 (2017)**



# ...the Austrian pathway



# SECOND MRE CYCLE – REVISED CONCEPT

- Comparative analysis of selected **international M&E concepts** (CH, DE, UK, F) with options for re-adjustment in Austria was conducted.
- **Written stakeholder survey was replaced** with a **series of stakeholder workshops** per sectoral area of action in the NAP.
- The **criteria catalog was maintained**. Few criteria were supplemented or adjusted according to the latest research findings and developments.



## 2ND PROGRESS REPORT – NEW CONCEPT

NAS and NAP 2.0  
(2017)



Based on 14 activity  
fields (sectors) and  
recommended actions  
of NAS/NAP 2.0



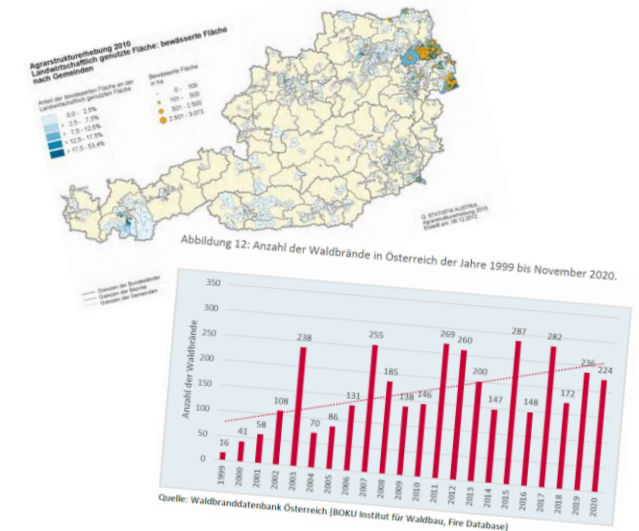
**Participatory  
Approach:  
Self assessment of  
experts  
Workshop series**

**Data based  
approach:  
Criteria catalogue  
(minor adjustments)**

Joint consideration can provide a **broad picture** of the implementation of the NAS/NAP and **key adaptation trends** in Austria.

# Lessons Learned – Criteria catalogue

- Available data /data collection **continues to develop** in some areas (e.g. houses in flood zones)
  - (negative) there are no comparable data → no trend evident
  - (positive) Significance of the data higher
- Indicators can communicate facts clearly and simply.  
**BUT - be careful when interpreting trends!** In some cases, contextual knowledge is important for interpretation.





# Lessons learned – Workshop series

- **Workshops** delivered group-based **expert judgments** on the implementation progress
  - **provided rich in-depth insights** and **enhanced acceptance** among experts, authorities and stakeholder
- In addition, the second progress report presents **good-practice examples of adaptation**.
  - They illustrate the range of possible response options and are intended to **provide assistance and motivation for the implementation** of further adaptation measures.
  - The wide range of practical examples also shows that the **topic of adaptation has gained momentum**, particularly at the regional and local level.
- **Executive Summary** prepared which contains the **key messages** from the comprehensive version of the second progress report
  - **reporting key results** to policy maker and public



# KEY findings EEA M&E report

- ✓ **MRE informs** more effective **adaptation implementation**
- ✓ **Progress on experience of tracking processes**, but move towards understanding the outcomes and impacts of policies and actions
- ✓ **Monitoring**
  - ✓ receive quantitative & qualitative data for monitoring process & progress
  - ✓ interpreting available data & deriving relevant messages
- ✓ **Evaluation**
  - ✓ needs to be a specific and separate effort
  - ✓ put emphasis on getting deeper insights into some elements and into progress from these insights
    - ➔ feeding back into revising adaptation policy. Few countries have gained deeper insights through evaluation.

# Lessons Learned

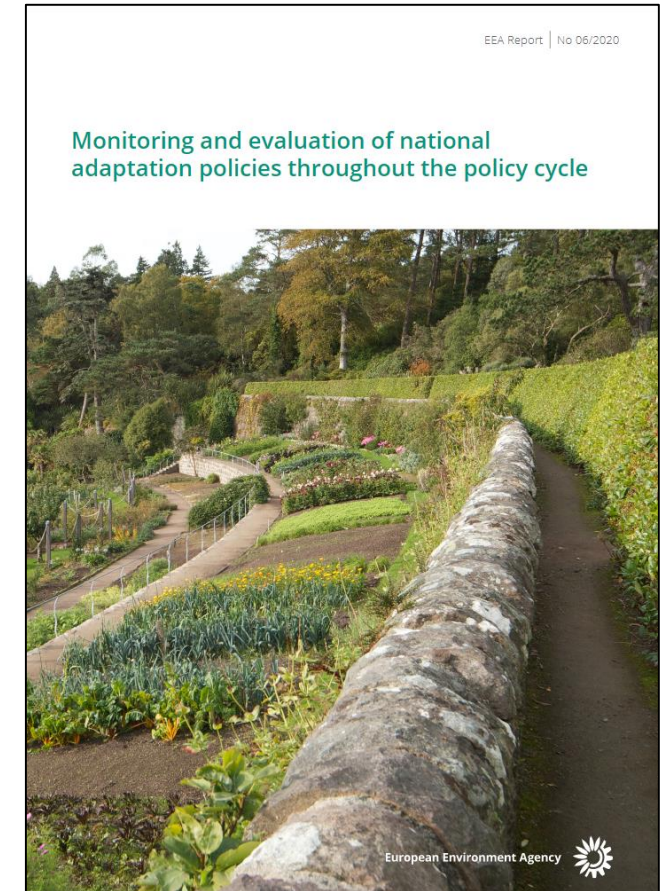
- ✓ There is no **“perfect/shining”** example of an M&E system
- ✓ **Early and clear definition of purpose and objectives of M&E system** saves time and resources and helps taking better decisions at a later stage
- ✓ **Learning** is one **fundamental purpose of M&E systems**
  - ✓ Distinguishing between different types: technical, social and systemic learning
  - ✓ Focus on systemic learning, aiming to improve policy-making and implementation, seems to be lacking in many M&E systems.
- ✓ **High value of sharing experiences** (what worked and didn't) among people who design M&E schemes and **reflecting on them**
- ✓ **Gap between** people carrying out **M&E activities & translating results of these activities into meaningful messages for policy-makers**
  - ➔ gap must be bridged, if we aim to use M&E results to inform policies and other relevant decision-making

# Adaptation indicators: challenges and limits

- ✓ Careful selection of indicators is essential
  - ✓ “Everything is an indicator of something, but nothing is an indicator of everything” (Cairns et al. 1993)
  - ✓ Overriding requirement: relevance, meaningfulness, ability to show trends
- ✓ Trade-offs between scientific accuracy and practicability
  - ✓ Scientific quality requirements: (statistical) validity, credibility, robustness, replicability, traceability, transparency, legitimacy
    - ➔ can be demanding and expensive
- ✓ Practice-related requirements: user-friendly, practicable, feasible, cost-efficient, easy to manage, accepted, easy to understand and to communicate
  - ➔ Compromises are inevitable => pragmatic approaches are required!

# KEY findings EEA M&E report

- ✓ **Participatory approaches** contribute to further building up resilience and increasing adaptive capacity
- ✓ **Co-production of knowledge** & stakeholder engagement are crucial for the adaptation policy cycle
- ✓ **Knowledge** on CCIVR has **improved sizably** at all scales over recent years
- ✓ **Public finance** towards climate change adaptation **increased** but private sector finance is harder to identify
- ✓ MRE relevant for **documenting the impacts of implemented policies**
- ✓ MRE can ensure **learning loops** that **further support implementation**



Link:

<https://www.eea.europa.eu/publications/national-adaptation-policies>



# CLIMATE CHANGE ADAPTATION MODEL REGIONS



KlimawandelAnpassungs  
ModellRegionen

# PUBLIC INCENTIVES FOR AGENDA-SETTING AND ADAPTATION ACTION ON LOCAL LEVEL



## Bottom-up approach

Programme in 3 Phases



**TARGET GROUP**  
**municipalities**  
**&**  
**regions**

**Manager**

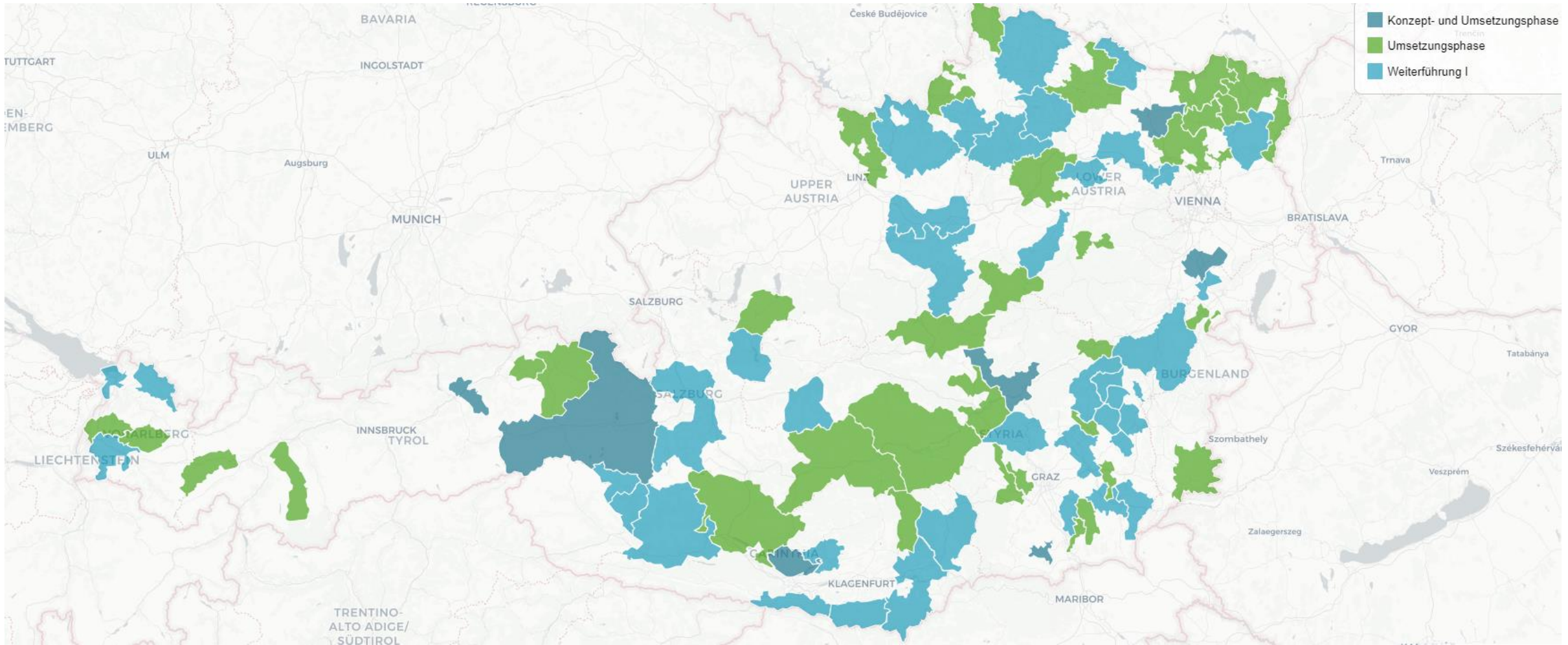
**Know-how**

**Networks**

ENVIRONMENT  
AGENCY AUSTRIA **umweltbundesamt**<sup>U</sup>



# KLAR-REGIONS IN AUSTRIA



# KEY TOPICS (2020): HEAT & DROUGHT



*Folgen des Klimawandels, die mit den KLAR!-Maßnahmen adressiert werden. Im Fokus stehen Maßnahmen gegen die zunehmende Hitze. Auch auf starke Trockenheit, den Anstieg der Durchschnittstemperatur sowie intensivere Starkniederschläge reagieren die Maßnahmen. N=1.375*

# KLAR!-MEASURES (2020)



*Anzahl der KLAR!-Maßnahmen zu den verschiedenen Themenbereichen. Der Schwerpunkt liegt auf bewusstseinsbildenden Aktivitäten, gefolgt von Maßnahmen zur Beschattung sowie für eine klimafitte Forstwirtschaft. N=470*



# Contact

**Umweltbundesamt**  
Spittelauer Lände 5,  
1090 Vienna, Austria



THANK YOU FOR YOUR  
ATTENTION!

Markus Leitner

+43-664-2626-345

[markus.leitner@umweltbundesamt.at](mailto:markus.leitner@umweltbundesamt.at)

© Anna Schmidt