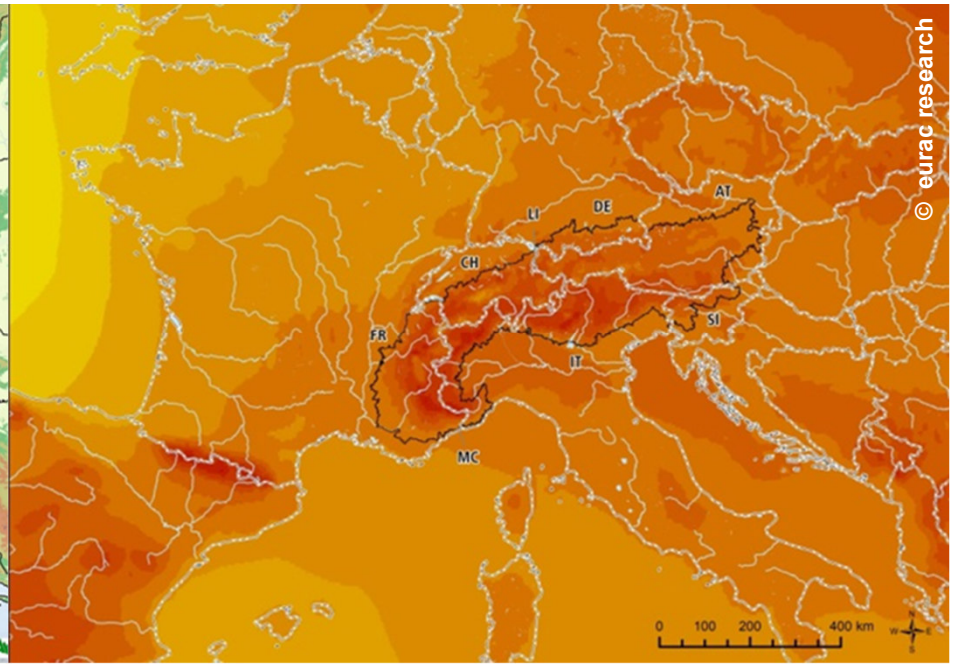


JOINING FORCES TOWARD CLIMATE-RESILIENCE OF THE EUROPEAN ALPS - THE EXPERIENCE OF THE ALPINE CONVENTION AND THE ALPINE CLIMATE ACTION PLAN 2.0

WOLFGANG LEXER, ENVIRONMENT AGENCY AUSTRIA

EU4Climate – Webinar 30th - 31st March 2021

ALPENKONVENTION
CONVENTION ALPINE
ALPSKA KONVENCIJA
CONVENZIONE DELLE ALPI

ENVIRONMENT AGENCY AUSTRIA umweltbundesamt

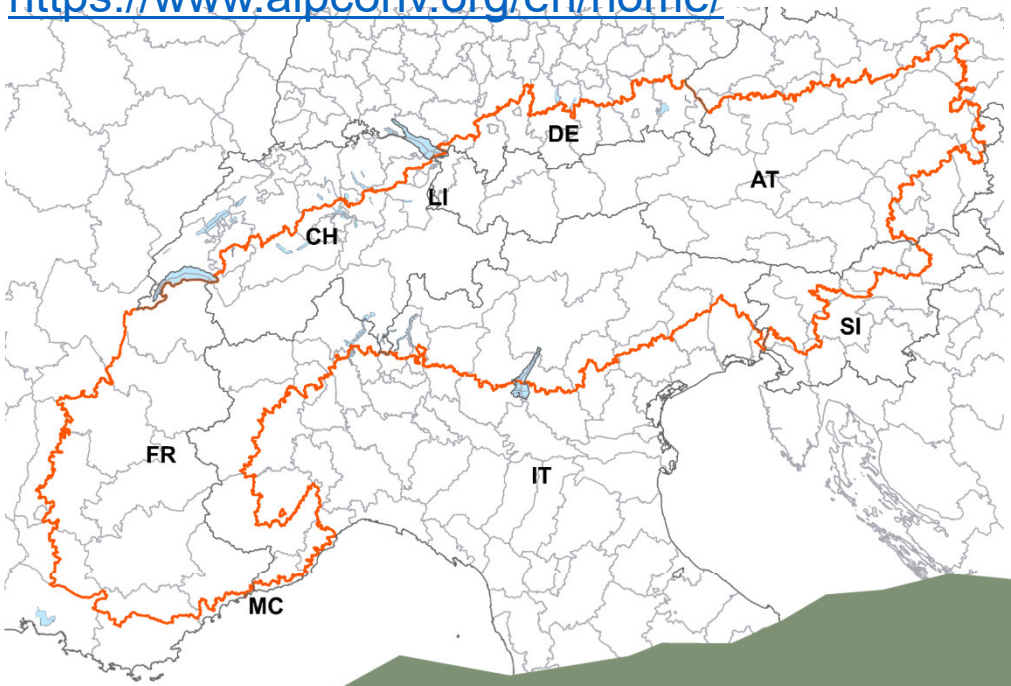
Leading the way for sustainable life in the Alps

A pioneer of its kind: The first international treaty covering an entire mountain range that crosses several national borders.

Aim: Safeguard the Alps and their unique natural and cultural heritages – now and for the future.

30 years of experience: The Alpine Convention was signed in 1991.

https://www.alpconv.org/en/home/



Signatories:

- Austria
- France
- Germany
- Italy
- Liechtenstein
- Monaco
- Slovenia
- Switzerland
- and the European Union

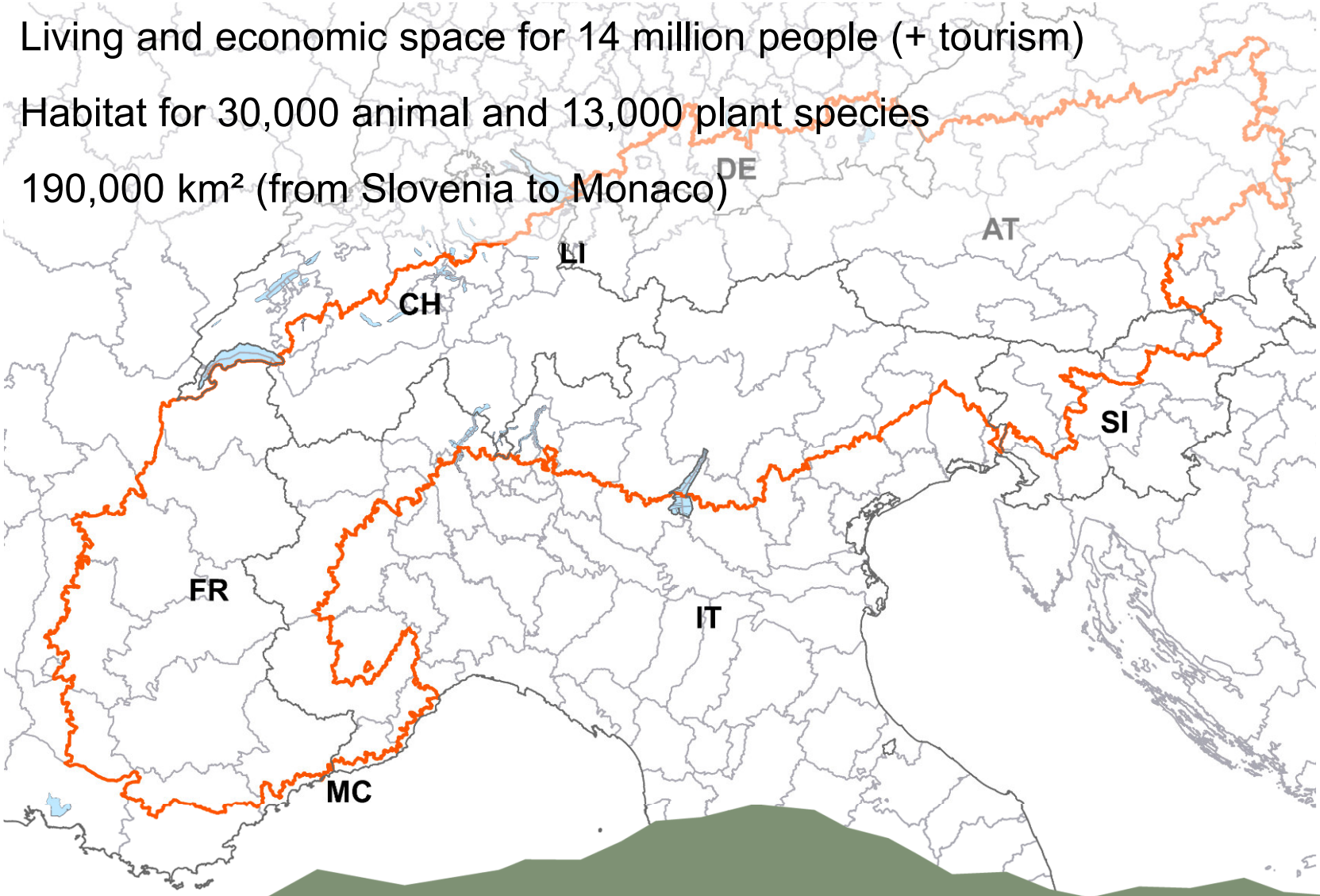
What is the Alpine Convention?

The Alpine Perimeter – Dimensions

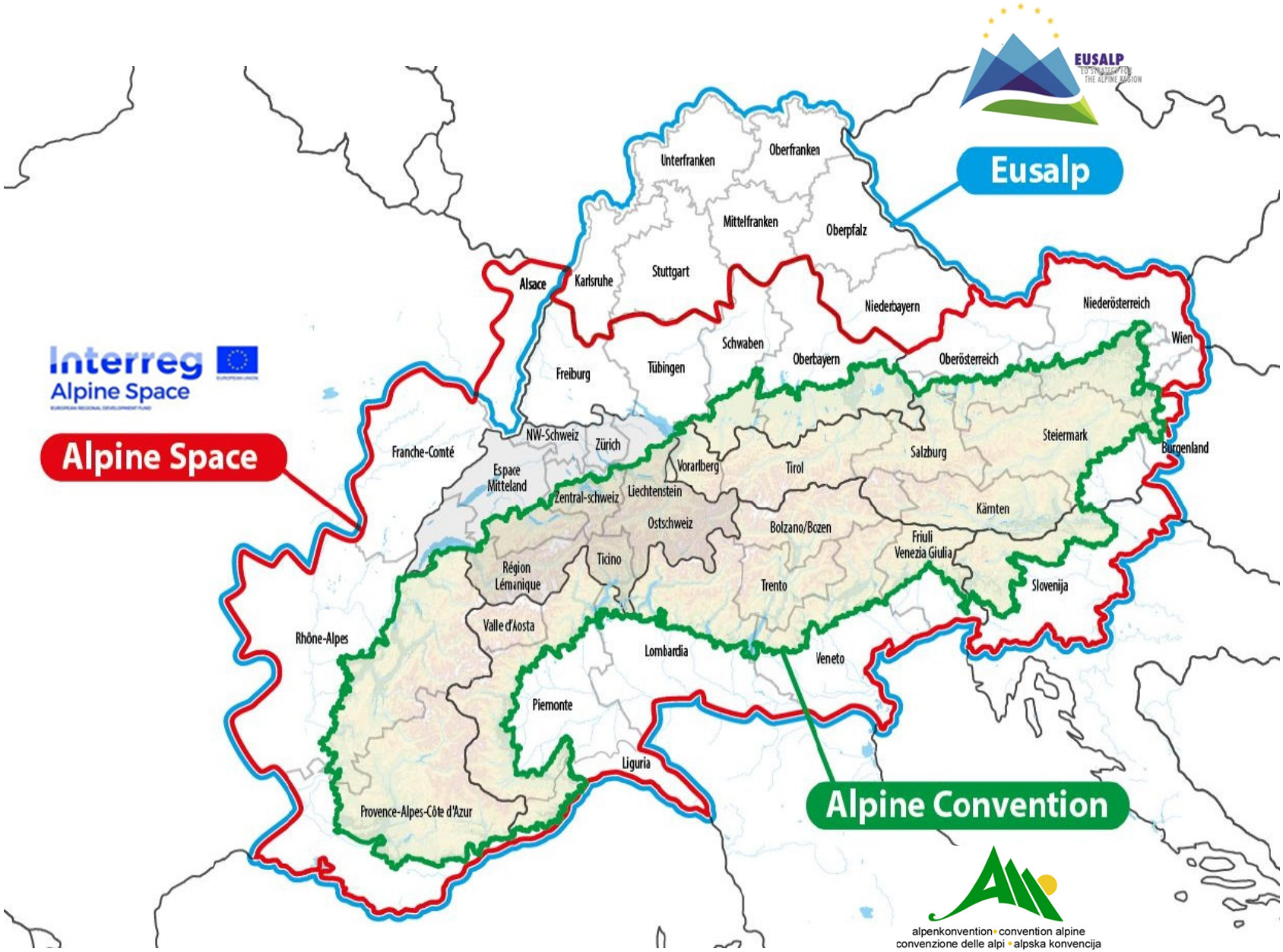
Living and economic space for 14 million people (+ tourism)

Habitat for 30,000 animal and 13,000 plant species

190,000 km² (from Slovenia to Monaco)



Transnational cooperation structures in the Alps



Framework Convention

Guiding principles for transnational cooperation in the Alpine region

Protocols

- Spatial planning and sustainable development
- Tourism
- Mountain farming
- Energy
- Soil conservation
- Nature protection and landscape conservation
- Mountain forests
- Transport

… and six ministerial Declarations

- Population and Culture (2006)
- **Climate Change (2006)**
- Strengthening of Sustainable Economy in the Alps (2016)
- **Climate-neutral and Climate-resilient Alps 2050 (2019)**
- Integrated and Sustainable Water Management in the Alps (2020)
- Protection of Mountain Biodiversity and its Promotion at International Level (2020)

Climate change: a priority of the Multi-Annual Work Programmes since 2011

Foundations of the Alpine Convention

The Alpine Convention works across administrative levels, fostering cooperation among Alpine countries, regions and local communities.

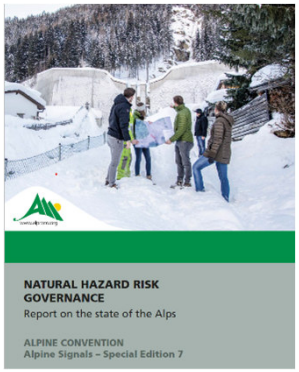
The Convention also facilitates cross-sectoral cooperation through a large network of partners and organisations.

Work is carried out in different formats by the Convention's various bodies:

- **Alpine Conference**
- **Contracting Parties**
- **Permanent Committee**
- **Compliance Committee**
- **Thematic Working Bodies**
- **Permanent Secretariat**

Several Observer organisations participate in the work of the Alpine Convention's bodies.

Our Activities



www.alpconv.org

How the Alpine Convention works

Thematic Working Bodies

- Alpine Biodiversity Board
- **Alpine Climate Board**
- Large Carnivores, Wild Ungulates and Society Working Group – WISO
- Mountain Agriculture and Mountain Forestry Working Group
- Soil Protection Working Group
- Natural Hazards Working Group – PLANALP
- Spatial Planning and Sustainable Development Working Group
- Transport Working Group

… and various ad-hoc working groups …

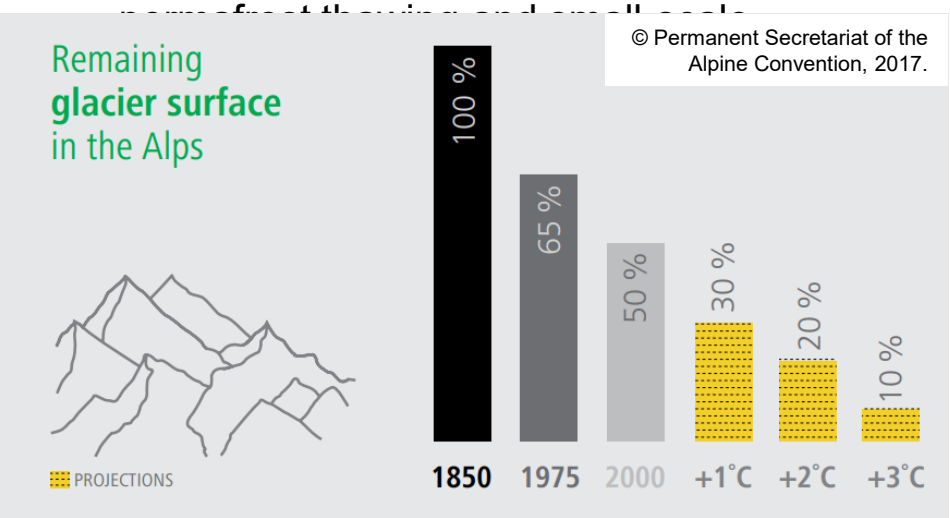
THE ALPS: A ‘HOT SPOT’ OF CLIMATE CHANGE

Climatic changes and impacts

- Observed increase in air temperatures +2°C (nearly twice as much as at global level and above European averages)
- Projections: + 3.5 – 4°C by 2100 (A1B)
- Observed increase in annual precipitation mainly in the north-west and decrease in the south-east; projected wetter trend in winter and drying trend in summer
- Increase in frequency of (small-scale) extreme precipitation events
- Increase in frequency of summer droughts
- Decrease in glacier extent (up to 90 by 2100 under RCP8.5), snow pack and annual duration of snow pack; elevation rise in snow line
- Changes in river flow regimes
- Increase in permafrost thawing and increasing slope instability
- Biodiversity regime shifts

Risks and opportunities

- Increasing risk from debris flows, rock falls, landslides, avalanches and torrential processes affecting human lives, settlements and infrastructure due to



© Permanent Secretariat of the Alpine Convention, 2017.

- Increasing risks of losses of ecosystem services from forest calamities (pests, storms, water stress)
- New opportunities for summer cool-seeking tourism

ENVIRONMENT AGENCY AUSTRIA umweltbundesamt

Alpine Climate Board

Established in 2016; Members of all Alpine states + representatives of NGOs

Chair: Austria, Federal Ministry of Climate Action (BMK)

Challenging circumstances: *"Since the late 19th century temperatures have risen by almost 2 ºC, a rate about twice as large as the northern hemisphere average. The* ***impacts of climate*** *change are affecting the living conditions of the 14 million inhabitants, 30,000 animal species and 13,000 plant species in the Alps.* ***They vary across the Alps, but they do not stop at administrative borders.****"* (ACB 2019)

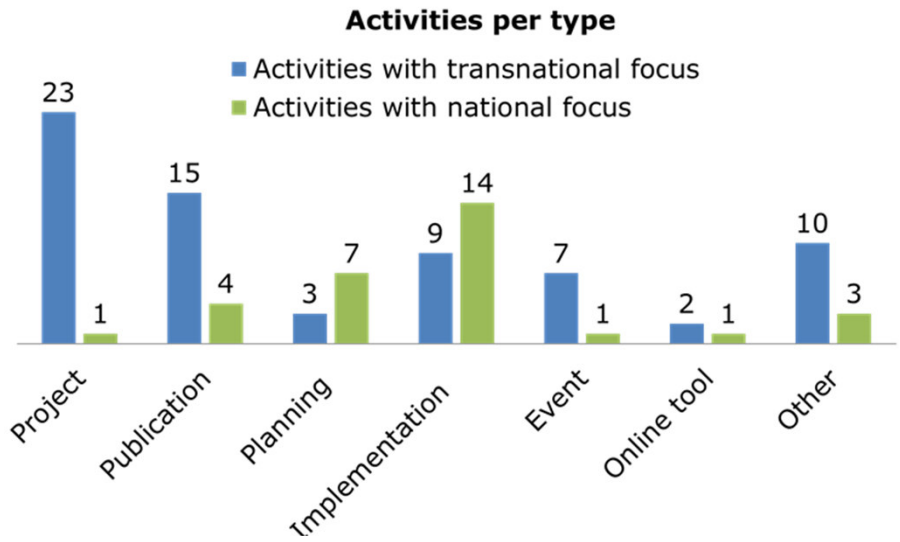
The ACB approach

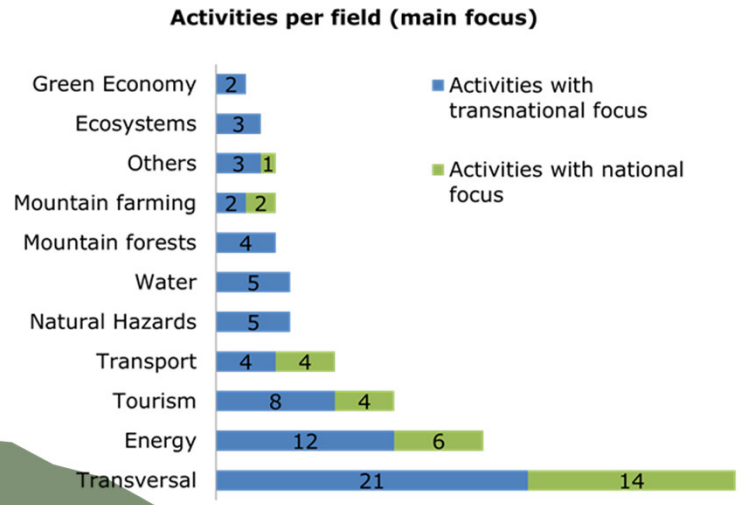
- Overall objectives: Alpine Climate Target System 2050
- Task: Operationalization of the Alpine Climate Target System 2050
- Outcome on the political level: Climate Action Plan 2.0
- Creating an environment for implementation action: Matchmaking, Homepage for gathering information and enabling exchange

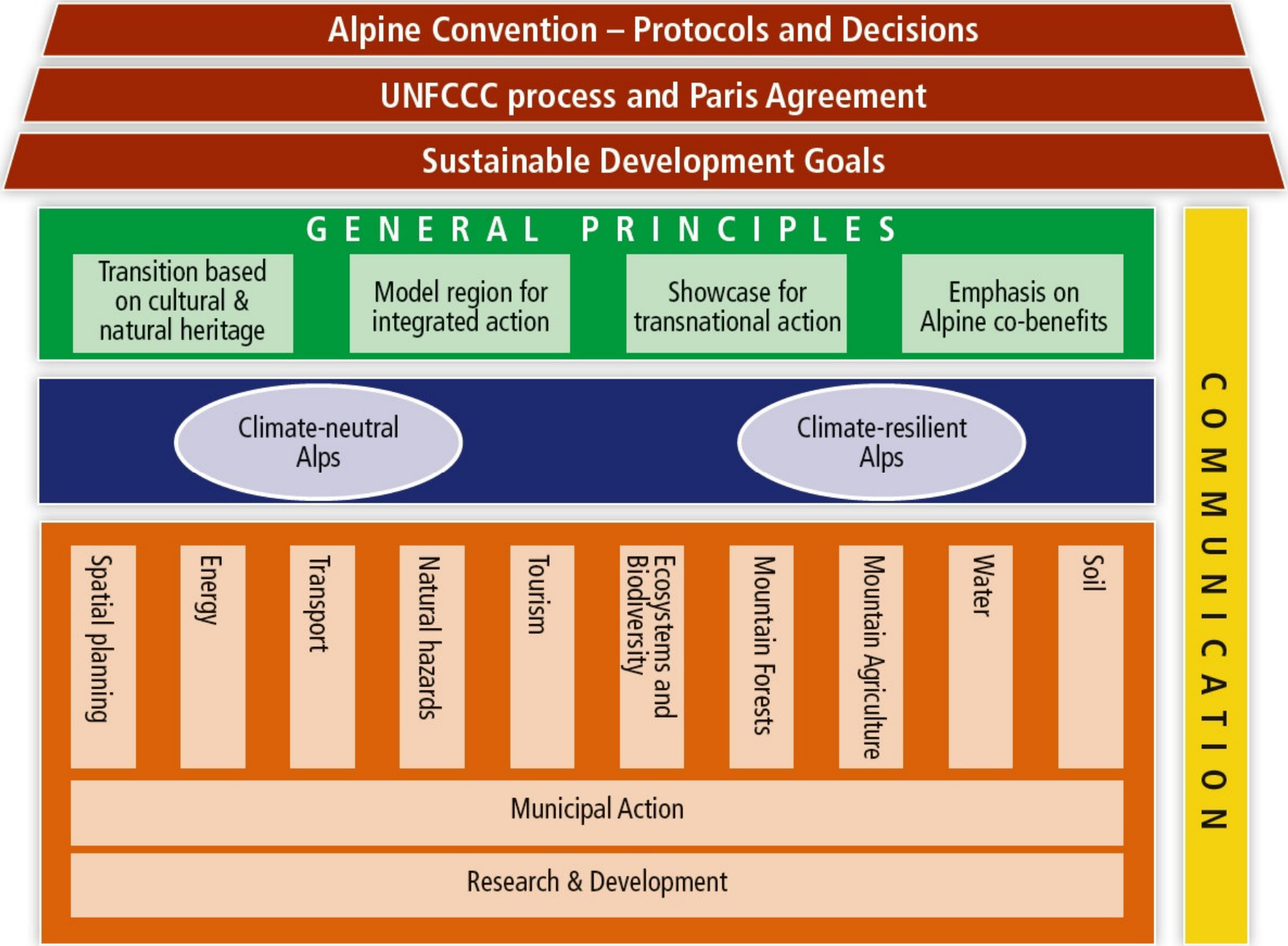
Starting point: Stocktaking

Stocktaking of recent (2013-2019) climate action in the Alps

- 70% of activities with transnational focus; plus national activities with good transfer potential
- Transnational activities: mostly exchange of experience and projects
- 50% mitigation focus, 43% adaptation focus, 25% integrated (adaptation + mitigation)
- Major adaptation issues: natural hazards, ecosystems, water, mountain forests
- More action needed on: implementation, awareness-raising







ACB 2019: Alpine Climate Target System 2050
(https://www.alpconv.org/fileadmin/user_upload/Publications/Climate2050_EN.pdf)

Alpine Climate Target System 2050

The Alpine Climate Target System 2050 has been adopted by the Alpine Conference in April 2019.

- 37 targets (in 10 sectors plus for 2 transversal issues)
- Mainly soft, but verifiable
- Predominantly integrated mitigation and adaptation targets

Examples of adaptation-focused or integrated targets

Priority for cc mitigation and adaptation in spatial planning processes

Planning systems in risk management changed from passive to proactive

Climate-proofed Alpine hydropower

Individual risk precaution

Sustainable diversification of Alpine tourism

Alpine ecological connectivity

Accelerated forest conversion

Resilient and climate-friendly mountain agriculture

Alpine-wide optimized water management

Minimised land-take and sealing

Municipalities as transition engines

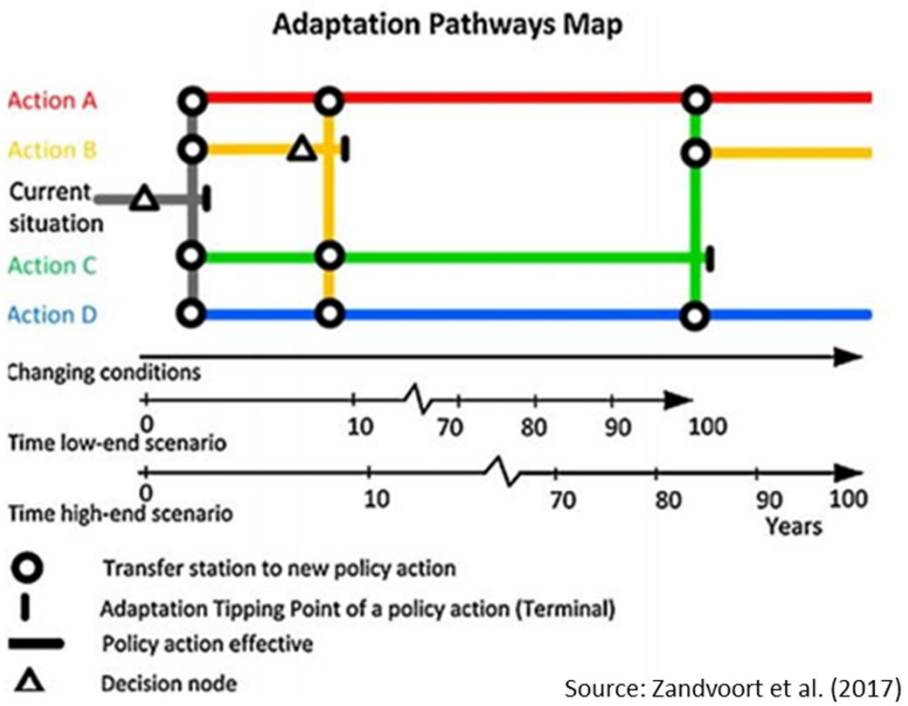
Research on climate-driven extreme events

Operationalization of the Alpine Climate Target System 2050

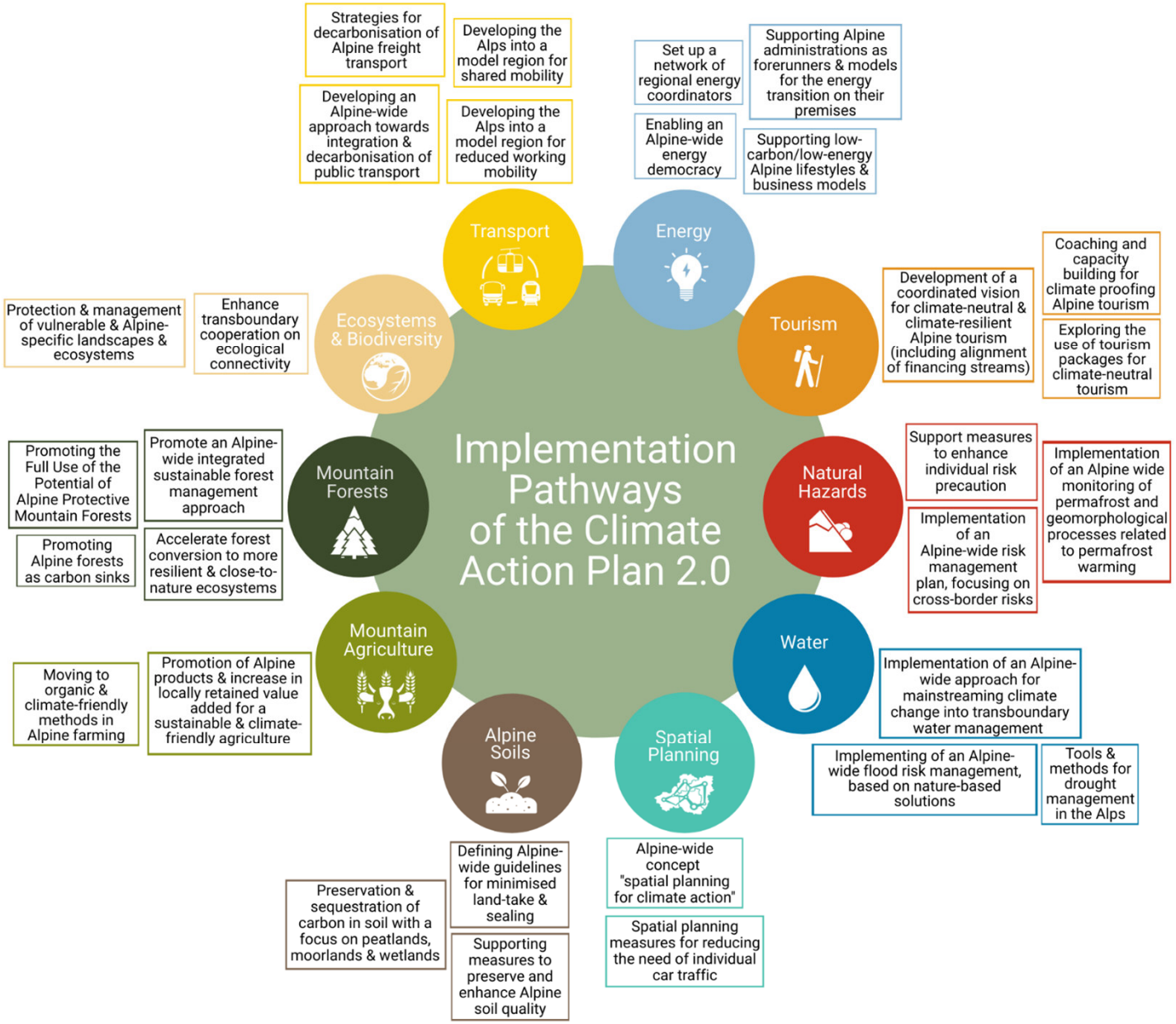
- Finding a methodology to take the step from targets to action
- Defining **implementation pathways** for the ten sectors of the ACTS 2050
- Prioritisation of implementation pathways for the Climate Action Plan 2.0
- Making use of participatory processes at all stages
- Creating an „implementation-friendly“ environment

⇒ 30 implementation pathways for sectoral targets (transversal targets integrated)

⇒ 2 – 4 pathways per sector

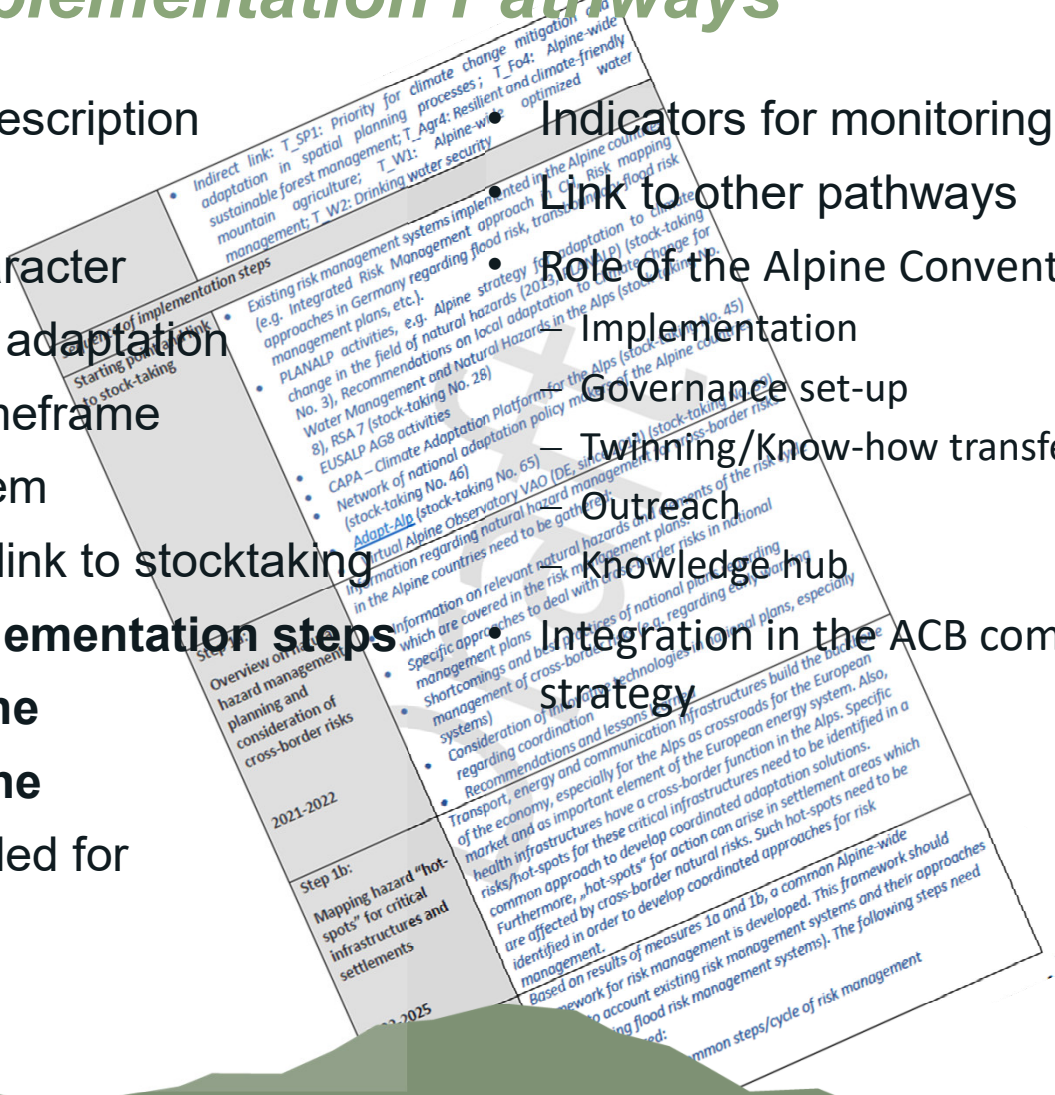


Source: Zandvoort et al. (2017)


Implementation Pathways of the Climate Action Plan 2.0
Transport
Strategies for decarbonisation of Alpine freight transport
Developing the Alps into a model region for shared mobility
Developing an Alpine-wide approach towards integration & decarbonisation of public transport
Developing the Alps into a model region for reduced working mobility
Energy
Set up a network of regional energy coordinators
Supporting Alpine administrations as forerunners & models for the energy transition on their premises
Enabling an Alpine-wide energy democracy
Supporting low-carbon/low-energy Alpine lifestyles & business models
Tourism
Development of a coordinated vision for climate-neutral & climate-resilient Alpine tourism (including alignment of financing streams)
Coaching and capacity building for climate proofing Alpine tourism
Exploring the use of tourism packages for climate-neutral tourism
Natural Hazards
Support measures to enhance individual risk precaution
Implementation of an Alpine-wide risk management plan, focusing on cross-border risks
Implementation of an Alpine wide monitoring of permafrost and geomorphological processes related to permafrost warming
Water
Implementation of an Alpine-wide approach for mainstreaming climate change into transboundary water management
Implementing of an Alpine-wide flood risk management, based on nature-based solutions
Tools & methods for drought management in the Alps
Spatial Planning
Alpine-wide concept "spatial planning for climate action"
Spatial planning measures for reducing the need of individual car traffic
Alpine Soils
Defining Alpine-wide guidelines for minimised land-take & sealing
Supporting measures to preserve and enhance Alpine soil quality
Preservation & sequestration of carbon in soil with a focus on peatlands, moorlands & wetlands
Mountain Agriculture
Moving to organic & climate-friendly methods in Alpine farming
Promotion of Alpine products & increase in locally retained value added for a sustainable & climate-friendly agriculture
Mountain Forests
Promoting the Full Use of the Potential of Alpine Protective Mountain Forests
Promote an Alpine-wide integrated sustainable forest management approach
Promoting Alpine forests as carbon sinks
Accelerate forest conversion to more resilient & close-to-nature ecosystems
Ecosystems & Biodiversity
Protection & management of vulnerable & Alpine-specific landscapes & ecosystems
Enhance transboundary cooperation on ecological connectivity

Fact Sheets
Implementation Pathways

- Background and description
- Final output
- Alpine specific character
- Link to mitigation / adaptation
- Implementation timeframe
- Link to target system
- Starting point and link to stocktaking
- **Sequence of implementation steps**
  - **Step 1 + timeline**
  - **Step n + timeline**
- Stakeholders needed for implementation



- Indicators for monitoring
- Link to other pathways
- Role of the Alpine Convention
  - Implementation
  - Governance set-up
  - Twinning/Know-how transfer
  - Outreach
  - Knowledge hub
- Integration in the ACB communication strategy

Climate Action Plan 2.0

Implementation pathways Natural Hazards

The Alps are specifically prone to natural hazards with different scopes and intensities, including local events such as avalanches, rockfalls, torrential hazards and landslides as well as larger events like floods or severe storms. A generally growing population and accumulation of human assets and settlements in hazard-prone areas as well as extreme events tend to increase natural hazard risk. As natural hazards do not stop at regional or national borders, an Alpine-wide common framework to deal with large-scale and potential cross-border impacts is required. Special consideration needs to be given to permafrost areas and potential risks related to permafrost instabilities as well as large-scale flood events with impacts on whole river basins and protective forests. These natural hazards have the potential to lead to large-scale and cross-border impacts, affecting both settlements as well as critical infrastructures in the Alps.

IMPLEMENTATION OF AN ALPINE-WIDE RISK MANAGEMENT PLAN, FOCUSING ON CROSS-BORDER RISKS	
1a	Overview on natural hazard management planning and consideration of cross-border risks
1b	Mapping hazard 'hot spots' for critical infrastructures and settlements
2	Common framework for risk management of cross-border risks
3a	Alpine warning systems for extreme weather events
3b	Alpine-wide approach for natural hazard 'hot spots'

ALPINE WIDE MONITORING OF PERMAFROST AND GEO-MORPHOLOGICAL PROCESSES	
1a	Stock-taking and mapping of existing systems
1b	Assessing potential of remote sensing data and services
2	Alpine-wide permafrost risk monitoring
3	Pilot projects in areas exposed to permafrost thawing

SUPPORT MEASURES TO ENHANCE INDIVIDUAL RISK PRECAUTION	
1a	Toolbox for individual risk precaution
1b	Network of regional adaptation coordinators
2a	Implementation of Alpine-wide standardized qualification program
2b	Road show with risk experience
3	Incentive program for individual measures

https://alpineclimate2050.org/pathways/natural-hazards/

Climate Action Plan 2.0

The Climate Action Plan 2.0 has been adopted by the Alpine Conference in December 2020.

- Prioritization of 16 implementation pathways
- Criteria:
  - Alpine-wide relevance and direct interface to Alpine Convention
  - Transformative character
  - Political relevance in the short term (support from political decision makers)
  - Feasibility of short-term implementation
- Time horizon of 5-10 years
- Political messages on the ten sectors and the 16 prioritized pathways
- Integration of “Green Recovery”
- Full package of implementation pathways annexed

Transport

Transport is a major emitter of CO_2-emissions in the Alps –

Transport is one of the main causes for climate change in the Alps, almost 30% of all greenhouse gases are due to passenger and freight transport emissions. Especially freight transport poses some specific challenges in the Alps as several **core corridors of the European transport network** cross the Alpine perimeter. These long-distance freight transport flows represent the largest share of CO_2-emissions of Alpine transport but can only be decarbonized in a common approach – hand-in-hand with partners at regional, national and European level and with the relevant stakeholders in the transport sector.

Similarly, modal shift strategies for passenger transport need to recognize the specific challenges in the Alps as related to cross-border mobility, mobility needs in remote regions as well as specific demand patterns related to tourism traffic. Increasing attractiveness of public transport and shared mobility options requires easily accessible information on services and attractive ticketing solutions. In the frame of the recent Corona pandemic, also the need for smart reservation systems for optimizing capacity under restrictions became obvious. Also, public transport vehicles need to be customized for Alpine-specific needs (e.g. allow space for bike transport) and should use low-carbon technologies.

– and a common modal shift & decarbonisation strategy as well as a coordinated approach for integrating alternative mobility solutions are identified as priority actions –

In the frame of this Climate Action Plan, the **Alpine Conference agrees to put the development of a common modal shift strategy for Alpine freight transport and the set-up of an Alpine-wide approach for integrating and decarbonising alternative mobility solutions at the heart of future climate action.**

The Conference recognizes the high added value of an Alpine-wide coordinated approach –

- to avoid unwanted distributional effects between the Alpine corridors and
- to ensure that strategies and actions towards decarbonisation of freight and passenger transport are coordinated in the entire Alpine transport network to become fully effective.

To move forward with such a modal shift strategy, **the Alpine Conference acknowledges the importance of the following actions as proposed by the Alpine Climate Board:**

- The implementation of a common policy framework for steering modal shift, based on steering measures as, for example, Toll Plus or the Alpine Crossing Exchange.
- The support of innovative technologies, especially for rail and combined transport (freight) and public transport vehicles to ensure that these elements of the transport network keep up in the innovation race and to support stakeholders in the take-up of innovative technologies.
- The development of recommendations on the further use of internal combustion engine (ICE) vehicles on the Alpine transit corridors, ensuring that the best available vehicle fleet is used in the sensitive Alpine environment.
- The implementation of an Alpine wide information and integrated ticketing system for public transport, which can also be used as reservation system in times of “social distancing”.

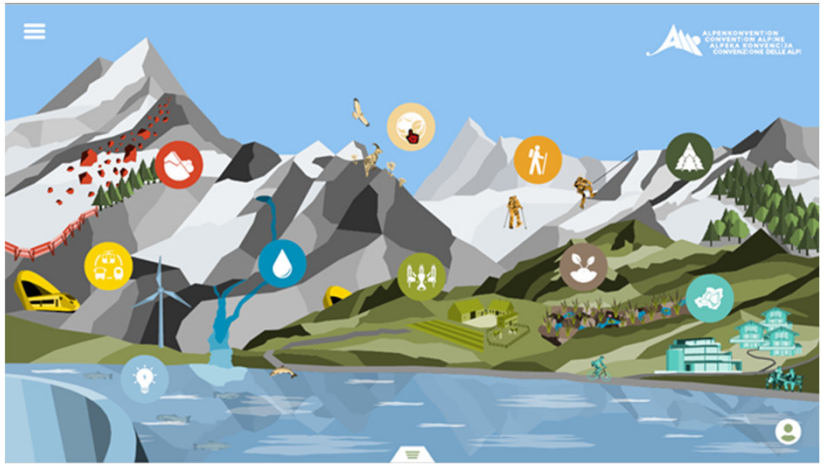
– with the following implementation steps in the frame of this Climate Action Plan:

The Alpine Conference calls upon the Contracting Parties, the thematic working bodies and the observer organisations to join forces with relevant stakeholders to implement the following steps:

5

Implementation approach

Website: communication hub, relevant information, community forum, …
https://alpineclimate2050.org



Alpine stakeholder community
(authorities, municipalities, private sector, science, civil society): invited to team up for **implementation partnerships** and to commit to taking lead roles

Financing:

- Strategic bundling of existing funds and streamlining processes
- Contracting Parties
- Projects under EU (co-)funding programmes (INTERREG Alpine Space, LIFE, …)
- In-kind resources of interested parties
- …

Website and Community

Implementation approach

Roles of the Alpine Convention bodies:

- *Alpine Climate Board:*
  - Stimulating, supporting and accompanying partnerships (matchmaking events, webinars, caretakers)
  - Communicating activities and products, promoting showcase actions
  - Developing monitoring and evaluation system, monitoring progress
- *Contracting Parties:* invited to lead, join and support relevant implementation teams (incl. with financial resources)
- *Presidencies:* focus on certain activities of the CAP 2.0
- *Thematic Working Bodies:* integration of pathways / steps into their work programs
- *Observer organisations:* taking an active role in implementation projects

SOME LESSONS LEARNT ON TRANSNATIONAL COOPERATION IN CLIMATE CHANGE ADAPTATION

- **Added value** of transnational cooperation: **Learning** from shared strengths and weaknesses, **exchange** of knowledge and experiences, strategic **bundling** of resources, **joining forces** for implementation, **coordination and coherence** and national courses of action, **replicability** of results
- Defining **joint actions that deliver added transnational value**, fill gaps in national policies and create synergies, rather than duplicating national efforts
- Joint planning and implementation is necessary for management of **border-crossing climate impacts** and **shared transboundary resources** (e.g., river basin management, cross-border disaster risks)
- Plays a **significant role** in: **(i)** developing the knowledge base and tools needed to support climate change adaptation actions; **(ii)** improving awareness-raising and capacity building; **(iii)** promoting agenda-setting, inception and exploration of adaptation policies; and **(iv)** piloting climate change adaptation initiatives in many countries
- **Supportive factors for transnational adaptation strategies or plans**: **(i)** attachment to existing transnational structures/institutions and multi-level governance mechanisms, rather than trying to introduce new governance structures or layers; **(ii)** active lead role and ownership by an established and officially tasked international organization (e.g., ICPDR in the Danube region); **(iii)** an official mandate entrusted to this institution at a political level (national governments); **(iv)** embedding of implementation in a binding framework (e.g., EU water legislation); **(v)** continued support for implementation activities

drawing also on: ETC/CCA Technical Paper 2018/4:
Adaptation policies and knowledge base in transnational regions in Europe

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