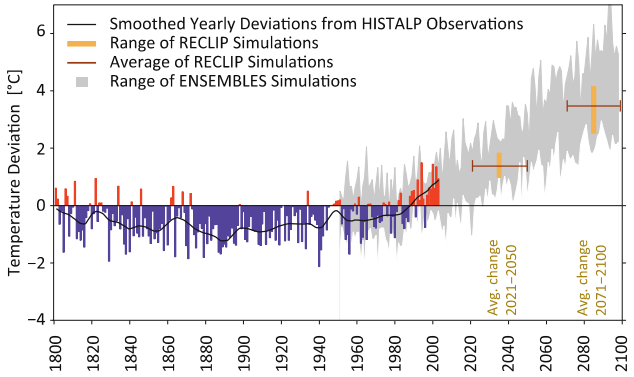

Past and future temperature change in Austria

AAR14, Volume 1, Chapter 5. Source: ZAMG

Landslides and debris flows triggered by a stationary thunderstorm characterised by > 130 mm precipitation in 3h in the Kleinsölk valley

AAR14, Volume 2, Chapter 4. Photo: Markus Mayerl, Torrent and Avalanche Control

Implicit embodied CO_2-flows within foreign trade flows from and to Austria, by world region

AAR14, Volume 3, Chapter 5. Source: Munoz und Steininger (2010)

KEY FINDINGS

Past and future climate change in Austria

- Temperature rise in Austria since ca. 1880 amounted to nearly 2°C, compared to average global warming of 0.85°C.
- Considerable change in temperature extremes: cold nights are rarer, hot days more frequent.
- Further rise of mean temperature in Austria is very likely: In the first half of the 21st century about +1.4°C compared to today's levels. The trend thereafter is strongly influenced by near-future anthropogenic greenhouse gas emissions.

Impacts of climate change in Austria

- Expected economic impacts will be primarily determined by extreme weather events and exceptional atmospheric conditions, but also by gradual shifts in temperature and precipitation (e.g. agriculture, the energy sector, winter tourism).
- Effects on soil functions such as fertility, water and nutrient storage capacity, humus decomposition and erosion.
- Risk of forest degradation in Austria rises due to increasingly long and frequent dry spells in summer.

Measures for climate change mitigation and adaptation

- The measures taken so far are insufficient to meet the expected contribution of Austria to achieve the global 2°C- target.
- According to scenario calculations, emission reductions up to 90% can be achieved in the energy sector in Austria by 2050. At present a clear commitment by policymakers to reductions of that scope is lacking.
- In Austria, political initiatives with regard to climate change mitigation and adaptation are required on all levels of policy making (national, federal, community); only a joint and coordinated approach can achieve effective mitigation and adaptation measures.

Everything you need to know about climate change in Austria!

Austrian Panel on Climate Change (APCC)

Austrian Assessment Report 2014 (AAR14)

In a three-year joint effort the climate research community in Austria developed the **Austrian Assessment Report on Climate Change 2014 (AAR14).**

All results and materials that were produced since publication are available for free online:

www.apcc.ac.at

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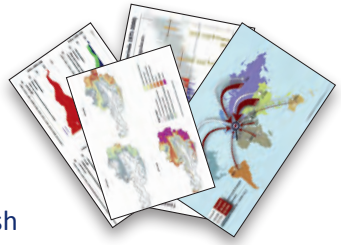
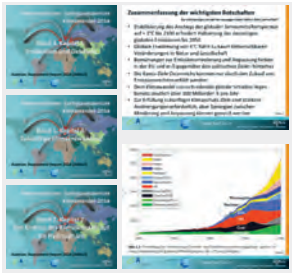
Available Online:

– **Full Report**
complete (1096 pages) or as single chapters



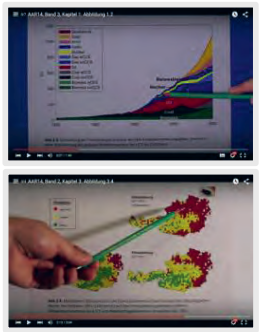
– **Summaries**
Summary for Policymakers and Synthesis, approx. 130 pages in German and English

– **Synopsis**
Main findings, summarised on 12 pages, available in German and English



– **Graphs**
All figures and tables of the report

– **Slides**
Essential messages and figures of each chapter, prepared for lectures and talks



– **Video clips**
Brief explanation of the slides' contents by the respective authors

– **Literature Database**
Searchable, including grey literature

The **Austrian Assessment Report on Climate Change 2014 (AAR14)** was conceived as a national counterpart to the periodically published IPPC assessment reports, depicting the state of knowledge on climate change in Austria, its impacts and the necessities and opportunities for climate change mitigation and adaptation strategies. It takes country-specific natural, societal, and economic characteristics into account. The report presents a coherent and consistent view and provides much needed knowledge about regional manifestations of global climate change for policy makers, the private sector, academic institutions and the public. It also indicates gaps in knowledge and understanding. Like the IPCC's reports, it aims to be policy-relevant without being policy-prescriptive.

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