



Adaption challenges at national an regional level

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Climate Adaption measures of Styria



1. Climate Scenarios for Styria until 2050

Klimaszenarien für die Steiermark bis 2050



Eine Studie des Wegener Zentrums für Klima und Globalen Wandel im Auftrag des Landes Steiermark



2. Climate Adaption Strategy of Styria 2050

Klimawandelanpassungsstrategie Steiermark 2050




Fachabteilung Energie und Wohnbau
www.klimaschutz.steiermark.at
→ Erneuerbare Energien und Klimaschutz



Expected effects in styria?



Source: ORF



The basic to answer these questions gives us the study Stmk12



Climate Scenarios for Styria until 2050

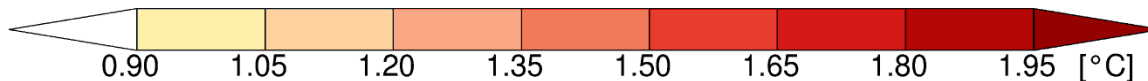
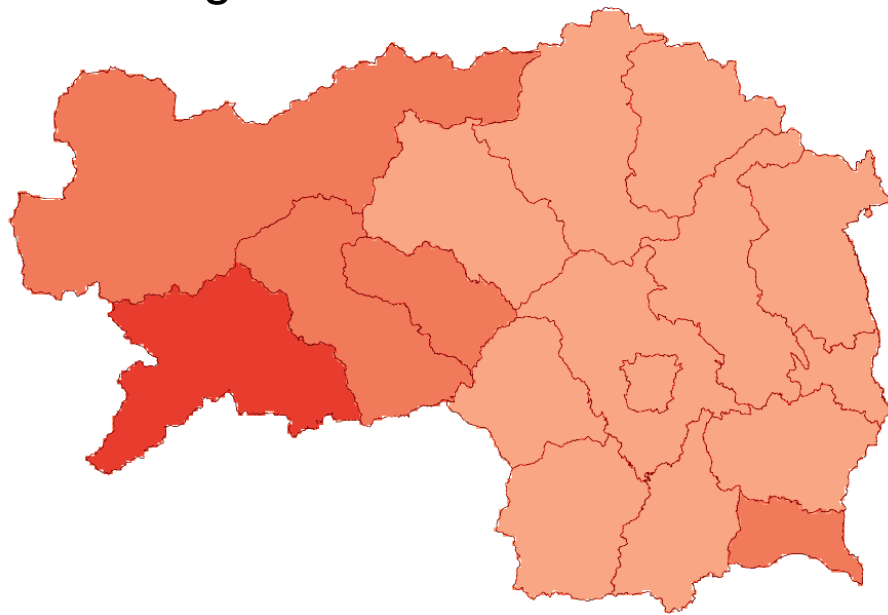
- Partner Wegener Center, University of Graz
- 24 different climate models has been compared
- Emission scenario A1B
- Scale 1 by 1 kilometer
- Parameter: temperature, cooling degree days, days with snow cover, strong precipitation, dry periods



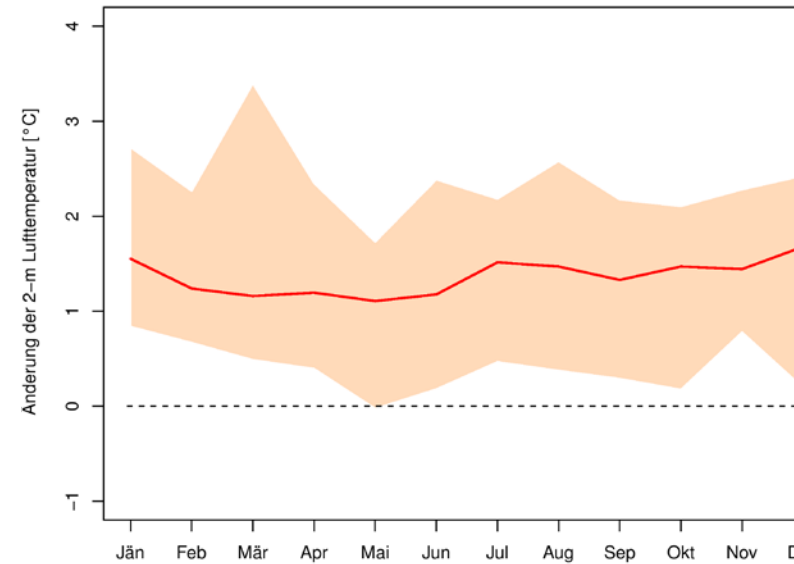
Total Styria (2021-2050 vs 1971-2000)

Expected climate change with regard to temperature, 2021 – 2050 vs. 1971 – 2000

average value



bandwidth



We expect a temperature rising of 1.5 degree in 50 years (0.3 degree per decade)

Climate Scenarios for Styria until 2050



- Results: <http://www.umwelt.steiermark.at/cms/ziel/75236689/DE/>

- Abfall und Stoffflüsse
- Bau und Umwelt
- Boden
- Chemie
- Energie
- Gesundheit
- Klima**
 - Klimaschutzplan Steiermark
 - Klimaregionen der Steiermark
 - KlimaAtlas Steiermark
 - Klimawandelfolgen**
- Lärm
- Luft
- Nachhaltigkeit
- Nahrung
- Natur und Landschaft
- Raumplanung
- Strahlen
- Umwelt und Recht
- Wald
- Wasser
- Datenbanken und Messdaten
- Umweltforschung und Umweltbildung
- Kontroll- und Serviceeinrichtungen
- Weiterführende Links

KlimawandelFolgen

Klimaszenarien und Klimafolgen in der Steiermark bis 2050

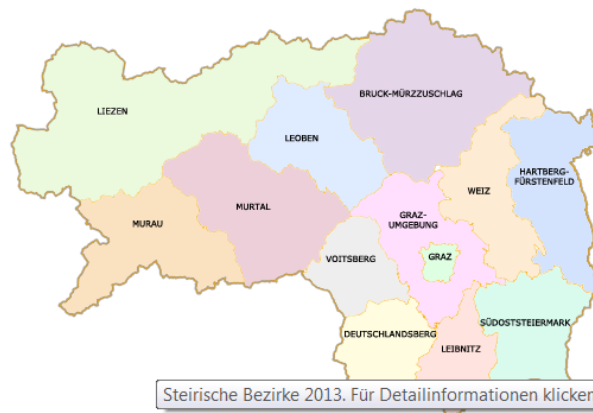


Die vorliegende Studie "Klimaszenarien für die Steiermark-STMK12" analysiert die Auswirkungen des künftigen Klimawandels auf die Steiermark. Auf Basis der neuesten Ergebnisse der nationalen und internationalen Klimaforschung wurden die bis zum Jahr 2050 zu erwartenden Änderungen von Starkniederschlägen, Schneesicherheit und Trockenperioden analysiert.

[Klimaszenarien und Klimafolgen in der Steiermark \(1,3 MB\)](#)

[Factsheets der gesamten Steiermark \(25,5 MB\)](#)

Klimawandelfolgen
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Steirische Bezirke 2013. Für Detailinformationen klicken Sie auf den jeweiligen Bezirk!



Climate Adaption Strategy of Styria 2050



Start: October 2013

partners are:

- experts of the administration
- external stakeholder e.g. Chamber of Commerce, Chamber of Agriculture and Forestry, Chamber of Labour, Association of towns and municipalities
- representatives from NGOs
- research partner (Austrian Environmental Agency)

targets:

- Styrian Climate Adaption strategy
- identification of measures and definition of responsibilities
- prioritization
- timetable
- government resolution
- additional climate scientific studies

Cluster



area of settlement

- Spatial Planning
- Construction and Housing
- Transportation Infrastruktur
- Urban areas

Security of Supply

- Water Resources and Water Management
- Energy Supply
- Disaster Risk Management

Health/ Social Affairs & education

- Health
- Social affairs
- education
- Global Responsibility

Agriculture/Forestry & Ecosystems

- Agriculture
- Forestry
- Ecosysteme and Biodiversity

Business/Industry

- Economy
- **Tourism**
- Insurance

Special measures - Tourism

- Focus on:
 - Consideration of climate change in tourism strategies
 - Development of climate-friendly adaption measures based on tourism strategy
 - Development, provision and improvement of regional data as the basis for decisions-making for adaption measures
 - Change saisonal tourism to a allyear-tourism, spa tourism and urban tourism (City of Graz)
 - Safety of alpine infrastructure (Trails, hiking path, funicular)

Next Steps

- Resolution of the styrian government and parliament
- Development of an implementation plan
- Development of the monitoring system
- additional climate scientific studies
 - ZAMG, Wegener Center, Climate Scenarios on the regional level (financed by the austrian ministry of the environment and the 9 federal countries)
- EU-Project – LIFE
CARMA - climate change adaptation for regions and municipalities

Thank you very much for your attention

www.klimaschutz.steiermark.at

