



Sustainable climate response measures – the cc.alps experience

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Content

- The cc.alps project
- Sustainable climate change response measures?!?
- Example: Adaptation (tourism)
- Example: Mitigation (energy self-sufficient regions)





cc.alps – the project

- cc.alps: climate change – thinking one step further!
- Conducted by CIPRA International
- Funded by the MAVA foundation
- 2008–2011

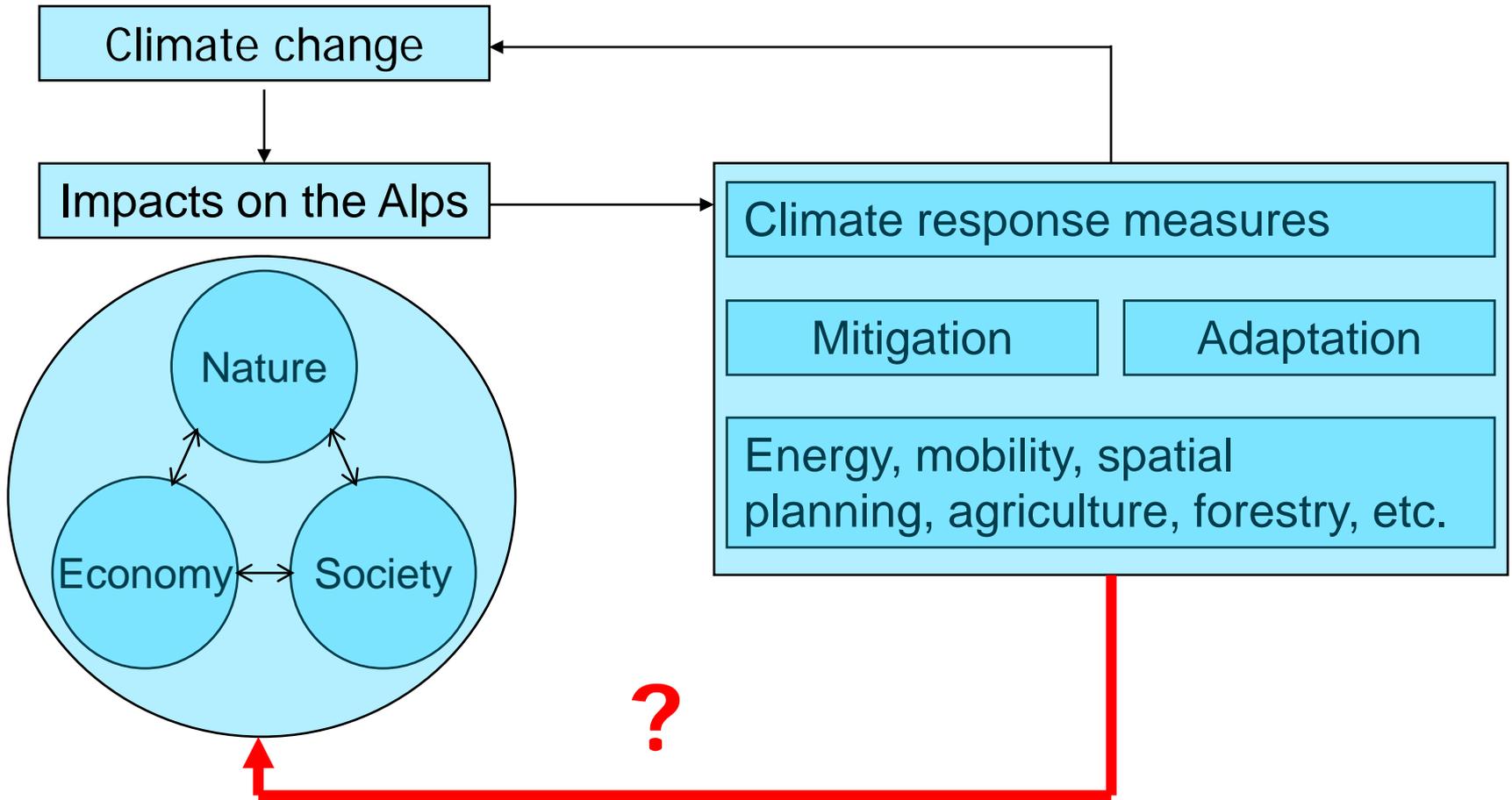


cc.alps – the goals

- Promote climate change adaptation
- Promote climate change mitigation
- BUT in a sustainable way
- That is to eliminate / minimize negative side-effects on ecology, economy and society



cc.alps – the goals



cc.alps – main activities

- Collection of climate response measures (competition/research)
- Development of an evaluation scheme
- Evaluation of climate response measures
- CIPRA compacts



cc.alps – main activities

- Collection of good/bad practices
- Catalogue of measures
- Transnational LEADER-project
- Cooperation with Alliance in the Alps, in particular “dynAlp-climate”
- Dissemination of results and awareness building (publications, workshops, conferences, co-operations etc.)



Compacts

- Background reports (28-32 pages)
- Online are: energy, energy self-sufficient regions, spatial planning, mobility, tourism, constructing and refurbishing, nature protection and agriculture
- Soon to be published: forestry, water and natural hazards
- Good practice examples
- Political statements



cc.alps – some results

- 10% of CRMs are “very good”
- 90% have negative side-effects
- Adaptation : Mitigation: 1:9
- Adaptation: often reactive and isolated, seldom prospective and integrative
- Mitigation: technical (mostly local, easy to implement) and strategic measures (mostly regional, more integrative)



Adaptation: Alpine Tourism



Snowmaking in the Alps



| | skiing area | snowmaking | in % |
|------|-------------|------------|------|
| A | 25'400 ha | 16'760 ha | 66% |
| CH | 22'000 ha | 7'920 ha | 36% |
| D | 3'700 ha | 599 ha | 16% |
| F | 25'000 ha | 5'300 ha | 21% |
| I | 22'500 ha | 15'750 ha | 70% |
| SLO | 1'200 ha | 900 ha | 75% |
| FL | 138 ha | 60 ha | 43% |
| Alps | 99'938 ha | 47'289 ha | 47% |

Source: Abegg/CIPRA International – Compact Tourism 2011



Snowmaking in the Alps



- Current trends
 - earlier
 - higher up
 - more



Photos: Pitztaler
Gletscherbahnen 2009



Snowmaking in the Alps

- Certain potential to offset the impacts of actual climate variability and future climate change
- However, future skiing can only be “guaranteed”, if it is possible to significantly enhance the snowmaking capacity: more equipment, more energy, more water ...



Right way to go?

- What would it mean to double or triple the snowmaking capacity?
 - High investments
 - Even higher dependencies
 - Vicious circle?
- And what about ecology, water availability, winter feeling?



Adaptation: Alpine Tourism

- Too much emphasis on protecting the affected business (i.e. skiing) and the corresponding companies (i.e. large ski area operators)
 - ➔ Expand beyond the affected business, look out for new opportunities
- Too much emphasis on technical adaptation, i.e. snowmaking
 - ➔ Think more strategic, look out for sustainable business models



Because ...

... this is hardly a long-term option



Diavolezza Glacier (Photo: Michael Kehl)



An alternative way

- Sattel (central Switzerland)
 - Some background information
 - Aims
 - Climate mission statement
 - New offers (diversification)
 - Carbon neutrality
- Ongoing project, co-financed by dynAlp-climate



Mitigation: energy regions



Energy self-sufficient regions

- Background
 - Very popular topic
 - Convincing idea
 - Many good reasons to become energy self-sufficient
 - Resources available in the Alps
 - Political support for renewable energies, energy self-sufficient regions (e.g. subsidies)



Energy self-sufficient regions

- Background
 - Many interesting initiatives (mostly independent from each other)
 - Very promising examples
- However, energy self-sufficiency goes well beyond the topic of energy. Ultimately, it is nothing short of a complete structural change: a full conversion of an entire region to sustainability.



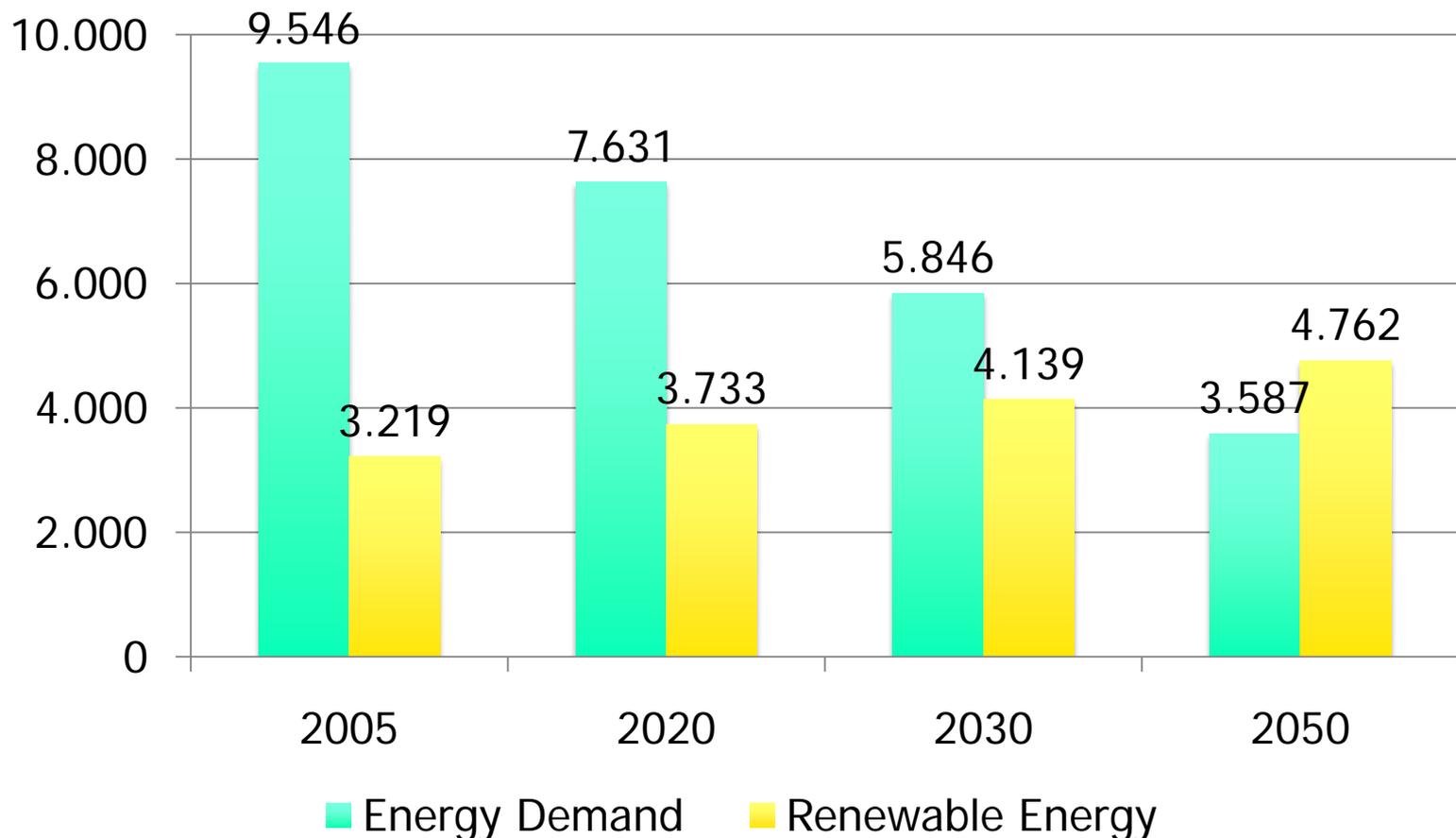
Energy self-sufficient regions

- Evaluation of current developments
 - Very strong focus on renewable energies
 - Very strong focus on potential economic benefits → compare yourself with a comparable role model
 - The case of Güssing (Austria)
 - Partial self-sufficiency → do not forget mobility
 - Target conflicts with nature protection
 - Hype or long lasting trend?



Energy self-sufficient regions

Scenarios for energy demand and supply from renewable energy sources in Vorarlberg (in GWh)



Source: Amt der Vorarlberger Landesregierung 2010: 19

Make the Alps energy self-sufficient





Thank you very much
for your attention

www.cipra.org/en/cc.alps

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