



# **EUROSAI WGEA Seminar: Auditing Climate Change Switzerland**

**Workshop 1, Copenhagen / March 23+24, 2010**

**Swiss Federal Audit Office (SFAO) / Martin Koci**



## Objectives

- Audit of the climate policy (mitigation) in Switzerland: Analysis of the existing data basis, the underlying assumptions for calculations, information policy and cost-benefit/-effectiveness considerations pertaining to different mitigation programmes and measures

<b>Policies / Sector</b>	<b>Policy instrument</b>
Buildings (regulation, renovation, heating, )	Regulation, negotiated environmental agreement, fiscal incentive
Transport/Traffic (regulations, energy efficiency, fuel switch)	Regulation, obligation, agreement with importers
Swiss ETS (and CDM/JI)	Cap and Trade
CO2-Tax (heating oils)	Tax, fiscal incentive
Communication initiatives	Information, provision



## Evidence (Selection)

- Data on climate change and CO2 mitigation is available, delivered by a range of government bodies
- Reliability and traceability of data and results are given mostly
- Costs, predicted impact and cost-effectiveness are principal drivers of policy choice (but different levels of uncertainty)
- Existence of a (selective) disparity between scientific and political information and knowledge management policy

# National Audit on Climate Change



## ETS Comparison

	<b>EU ETS</b>	<b>CH ETS</b>
GHG covered	CO2 emissions from fossil fuel combustion	CO2 emissions from fossil fuel combustion
Trading System	Mandatory cap-and-trade system for direct emissions	Voluntary cap-and trade system for direct emissions
Sectoral coverage	Large emitters in energy and selected industrial sectors	Large emitters from all sectors
Tradable units	EU allowances (≠ AAUs), CERs and ERUs excluding nuclear and LULUCF projects	AAUs, CERs and ERUs (excluding projects involving nuclear power, GMOs, and AIS)
Trading periods	Phase 1: 2005 – 2007 Ph. 2: 2008 - 2012	2008 - 2012
Allocation	Responsibility of Member states (phase 1: mostly grandfathering)	Free allocation based on negotiated agreements
Sanctions	Penalty (ph. 1: EUR 40; ph. 2: EUR 100); deficit must be covered in next period	Repayment of full CO2 tax plus interest for each tonne emitted
Monitoring, Reporting, Verification	Reporting by all installations, verification by independent entities	Reporting by all installations, no independent verification
Price Cap	None	None



## Recommendations

- Transparent representation and reporting of basic parameters, assumptions used, and results ("technical characteristics")
- Harmonisation of key result parameters: Uniform indication of duration and time unit over which a measure achieves CO<sub>2</sub> reductions or is calculated (to facilitate comparison and replication)
- Use of different assumptions ("scenarios") where influencing values are uncertain and sensitivity analysis
- Continuous monitoring of specific sectoral climate indicators (post2012): facilitates the monitoring of undesirable developments ("impact and risk analysis")

# Follow-up Processing



## Recommendation Mgmt System

ID-#	Priority	Audit Recommendation	Mgmt./Client Response	Due Date jjjj.mm.tt	Responsi- bility
9398.001	1 (high)	<b>Transparent representation of basic parameters, assumptions used, and results ("technical characteristics"):</b> Assumptions used in studies should be reported transparently to improve replicability of calculations and interpretation of the results generated; the selection of assumptions should be briefly justified.	The FOEN welcomed the SFAO's review as well as this opportunity to provide a formal response to its recommendations. We strongly support the SFAO's recommendations and see their implementation as essential if the National Climate Change Strategy is to continue the progress it has made so far...	2010.07.01	Federal Office of the Environment (FOEN), Climate Policy Section

## Follow-up Study (after 2-4 years)

- ensuring that actions recommended have been implemented in a timely fashion (yes/no) -> Report to Joint Committee on Finance of Parliament

# Challenges, Obstacles & Lessons Learned



- (Auditing) Climate Change is an interdisciplinary, technical complex issue sometimes with an unclear network of roles, responsibilities, activities and competencies. Cross sector/ authority cooperation (coherence) depicts therefore a crucial aspect
- Lessons learned I: Finding relevant audit *topics and criteria* is crucial: “Meeting ecological targets” and “dynamic efficiency” as possible audit criteria for different measures?
- Lessons learned II: Intl’ standards, databases (audits performed) and guidelines proved to be helpful
- To discuss: How to measure impacts/outcomes of (international) climate change instruments? How much information or knowledge does politics require?

# More information...



... please consult

[martin.koci@efk.admin.ch](mailto:martin.koci@efk.admin.ch)

or

<http://www.efk.admin.ch/>

**Thank you for listening!**



# Abstract of Presentation



The presentation addresses main characteristics of an audit/evaluation on climate change in Switzerland. The audit conducted covered all relevant policy tools (holistic approach) in the context of the amendment of the CO2 Act. Audit results show that numerous information and data on climate change and CO2 mitigation measures are available. Costs, predicted impact and cost-effectiveness are principal drivers of policy choice (but different levels of uncertainty). Even though not all policy tools are documented on same quality levels, data may be assumed as reliable. The presentation also illustrates some of the recommendations by the SFAO.

The second part of the presentation gives a short introduction to the formal audit recommendation management system by the SFAO ensuring that actions recommended are implemented in a correct and timely fashion.

The presentation closes by concluding main challenges, obstacles and lessons learned the SFAO was facing in the course of the audit performed. Especially the comparison of national and international policy tools (and hence the lack of applicable audit criteria) emerged as a big challenge. Future audits will cover selective sectors or policy tools.

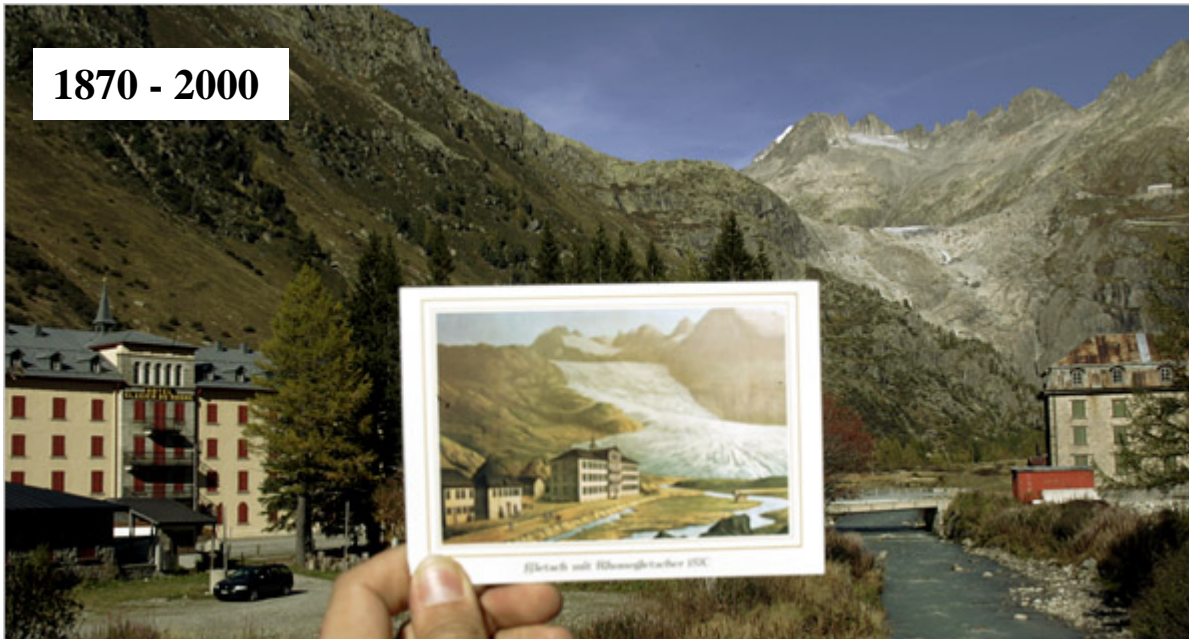
# Adaptation challenges in Switzerland



## Glacier Melting and Mass Movements



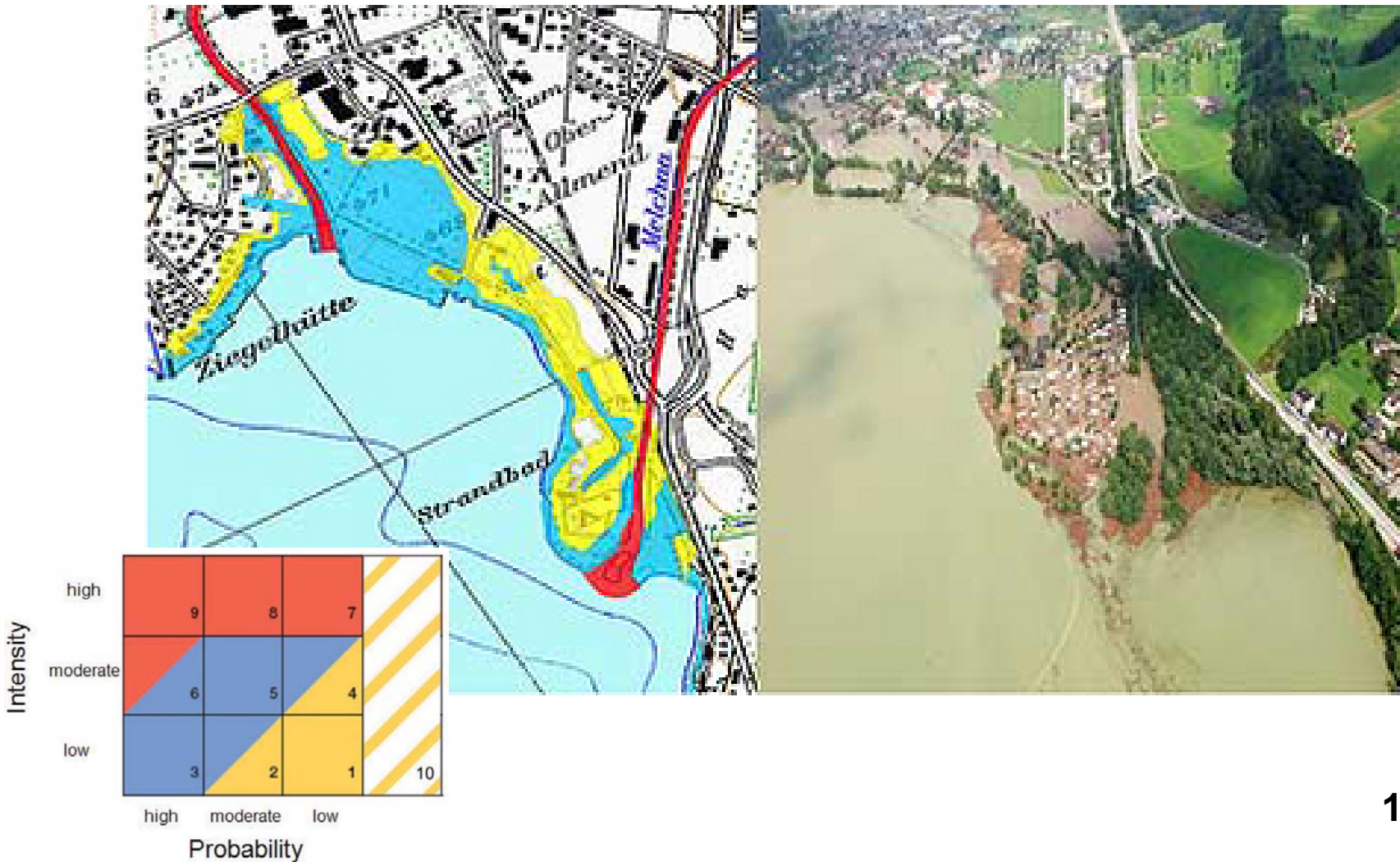
Rhonegletscher  
1906 und 2003



# Adaptation challenges in Switzerland



## Natural Hazard Maps (Floods, Avalanches, Earthquakes, ...)



# Climate Adaptation Policy in Switzerland



- Switzerland has not yet implemented a national policy on climate adaptation (main focus is on mitigation: “single-track”)
- Several EU-countries do have “dual-track” strategies and legislation (mitigation and adaptation)
- Previous policies (and research) cover only known adaptation measures and natural hazards. New hazards and sectors concerned in the course of climate change need to be integrated
- Cross-authority workgroup: Coordination of all climate issues implementation of a national (mitigation and adaptation) climate policy