



# Wind turbines, biomass and solar power plants, a challenge for spatial planning?

**ALPSTAR Initial conference**

27th and 28th October 2011, Chambéry, France

**Toward Carbon Neutral Alps**

**Make Best Practice Minimum Standard**



# Agenda

- Key figures of the canton of St.Gallen
- Projects in the canton of St.Gallen (without claim to completeness)
- Spatial planning challenges
- Are energy projects so different?
- Concluding remarks



# Key figures of the canton of St.Gallen

- **Surface:** 2'026 km<sup>2</sup>
- **Inhabitants:** 471'000 (2008)
- **Gross Regional Product:**
  - Fr. 25 Billion
  - Fr. 52'500 per capita (Swiss av: Fr. 60'500)
- **Distinguishing marks:**
  - Ring-form
  - Canton with most of neighbours (other Cantons or States) in Switzerland
  - 5 Agglomerations, 6 Regions, 85 municipalities
  - Is at the fringe of the Zurich Metropolitan Area



# Political discussion



**today: fight ...**

**tomorrow: symbiotic ...**



# Large-scale projects



# Large-scale projects in planning



# Large-scale projects in planning

## Solar power plants at avalanche controls



# What are the energy issues?

- Biomass: What belongs in a construction zone?
- Wind turbines: Structure plan? Approval procedures?
- Geothermal plants: Where?
- Solar power plants beyond construction zone? In protected objects?
- Hydropower: Approvals beyond construction zone? Concessions are crucial





# Shown at the example of wind turbines ...



# ... and the landscape protection?



# ... and the approval procedures?



# Sustainability



**We bear responsibility not only for our children but also for the future of our planet!**

