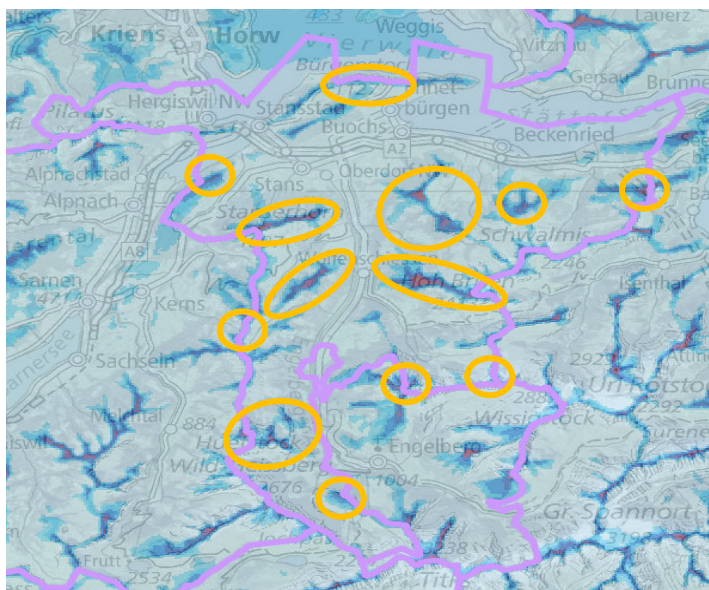


# Evaluation of the potential for small wind farms up to 5MW in Switzerland

## Challenge submitted by Suisse Eole

### CHALLENGE QUESTION

How much more wind energy potential would we have in Switzerland if we could build small wind farms with 1-2 wind turbines with a total of up to 5 MW installed power?



### EXPECTED OUTCOMES

Requirements for the evaluation of the potential of small wind farms (technical, environmental, societal)

Usability requirements for possible evaluation tools

### MOTIVATION

The Swiss wind energy concept stipulates that only larger wind farms (3 or more wind turbines) should be built. This leads to significant territorial conflicts. In the densely built-up of the Swiss Mittelland, the foothills of the Alps and the Jura, the population often resists such wind farm projects. Locations suitable for wind energy in decentralised areas are often nationally protected nature and landscape areas (BLN) where no wind farms are permitted.

Experiences from all over Europe show that individual large wind turbines that are planned for local self-consumption (up to 5 MW, feeding into the medium-voltage grid) are much better accepted than larger wind farms.

### GOAL

Short term: Define the procedure and the tools for evaluating the potential for small wind farms up to 5 MW.

Long term: Develop a concept for easy-to-use tools for wind energy planning in municipalities and local communities.

### WHO THE CHALLENGE IS SUITABLE FOR

Engineers, researchers, students, project planners, cantons, local communities, any other interest group.