

swiss defense

was sie sagen – was wir sehen.



At the start of 2006, the Swiss military announced that in case of grave danger the budget for defense could rise to 40 Billion Swiss Francs.

That figure comes out to about 5,000 CHF (\$3,000) per citizen.

This is three times higher than the defense costs per citizen in the country with the world's biggest military budget, the United States.

So, Switzerland has a great deal to defend.

If one takes into account its glaciers, waters, meadows and forests, if one takes into account all the natural assets that make Switzerland so special (let alone the banking accounts), then there is a lot to defend.

At present, at the start of the 21st century, those assets are in grave danger.

They are in danger of being sharply reduced, or even being wiped out.

Being positioned among the highest mountains in the middle of Europe, Switzerland receives, every day, threats to its natural assets from: acid rain and snow, other emissions from fossil-fuel combustion, warmer and drier air than usual, any high-altitude concentration of nuclear contaminants. Also, because Switzerland participates in current hydro-electric technology, it damages itself, on its own territory, with large dams: they generate electricity but also cut off nutrient flows and biodiversity downstream.

The chief dangers to Switzerland come not from military forces, but from the energy technologies now chiefly in use, namely: fossil-fuel power plants and transportation; river-blocking dams; nuclear-fuel power plants, with nuclear wastes to be stored. Furthermore, the fossil and nuclear-fuel systems require stable political conditions in faraway places, and everywhere between Switzerland and there. Here, too, lies danger: how reliable can Russian gas supplies be, and at

what stable, predictable price? How surely can oil continue flow from the Middle East, particularly after Iran gets the nuclear bomb?

With these threats in mind, students in New Media at the Hochschule fuer Gestaltung und Kunst Zurich investigated how the sources of danger are behaving, at least in the mass media. They also researched ways of promoting or even effecting sustainable sources of energy, for example, an undershot waterwheel. The new sources of energy are not as "efficient" as the more deadly and risky forms, but they also don't threaten life.

A proposition has arisen, that the choice of energy technology will be decided less by economic calculations than by health and longevity ones. Which technology is to be developed to protect the natural resources, the special living-space, of Switzerland?

Participants in the seminar "Swiss Defense: Schutz der Schweiz", in the Studienbereich Neue Medien, went through a list of key sources of danger, and of opportunity, including:

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| No. 1 | Energy company in the world, Exxon Mobil |
| No. 2 | Energy company in the world, Total |
| No. 4 | Energy company in the world, BP |
| No. 5 | Energy company in the world, Shell |
| No. 13 | Energy company in the world, E.ON |
| No. 22 | Energy company in the world, RWE |
| No. 3 | Power supplier in Europe north of Switzerland, Vattenfall |
| No. 2 | Power supplier close to and north of Switzerland, EnBW |
| No. 1 | Industrial company producing energy technology, GE |
| No. 1 | Power supplier inside Switzerland, AXPO |
| No. 1 | Steel producer in continental Europe, Arcelor |

All of these companies have emphasized, in public, how they are working on or developing zero-emissions and renewable technologies.

Nearly all of them boast of being "ecological". But they still pose threats to the physical security of Switzerland.

Three students have focused on promoting technologies which could replace the more deadly, dangerous forms of energy production.

Two, the brothers Gaus (Simon and David), pursue ways to install and operate an undershot waterwheel in Zurich, which could be a model for sites throughout Europe and the world.

Another, Tristan Hauser, has emphasized how biomass from Swiss forests could become a sustainable source of fuel, particularly in remote areas.

Also, Nicolas Fojtú produces a second card promoting Swiss H2O as a water-based energy program, using the mountains as an asset for sustainable development, not just protection.

As for the choices of companies to critique, in this first strike, on behalf of Swiss Defense, the lineup, after some adjusting, has come to be:

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| Exxon | Peter Fend |
| Shell | Benny Schudel |
| BP | Tristan Hauser |
| Total | Christian Vollenweider |
| E.ON | Marco Zimmerli |
| Vattenfall | Lars Pautsch |
| RWE | Sabine Rödiger |
| EnBW | A team of students, in producing an exhibition in concurrence with this firms „Energiezukunft“ show. |
| GE | Nicolas Fojtú |
| AXPO | Stefan Zollinger |

In taking on EnBW, we take on an immediate neighbor which already buys energy from Swiss hydroelectric, as well as supplying energy into Switzerland. EnBW, further, is closely tied through its board and with energy-supply contracts with the biggest single source of nuclear power in Europe: Electricite de France. Should anything go wrong with one of the reactors of

EDF, or of EnBW, then Switzerland could be the main area hit. Of course nothing will go wrong. People are perfect. Or at least perfectable.

On this general recognition, Ron Lux weighs in, with a comment about the ongoing ecological problem in the countryside surrounding Switzerland, all arising from good or bad management in the higher-elevation areas, like Switzerland: flooding. Curiously, if a politician somehow gets in front of TV cameras during a rescue effort during a flood, he or she has a chance to become Chancellor. Little is done about preventing the conditions that cause flooding in the first place. Ron Lux reveals the chief problem in human psychology: people won't go into action until after there is already a disaster, and they won't take precautions far upstream, in places like Switzerland, to prevent a disaster. Could this change now, at least through action initiated up there, in Switzerland?

For those who think that perhaps "Defense" is too military, consider this: one, the function of any "military" is to protect territory, so now the ecological protection of territory, given modern energy technology, becomes a long-term security issue; and two, the chief ecology-protection advocacy group in the United States, operating of course with a budget much smaller than that for "defense", is called the "Natural Resources Defense Council."

So too, we here in Zurich work on defense of the natural resources of where we are.

Peter Fend
Media Artist and Projectleader „Swiss Defense“