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Ufficio federale dell'energia UFE
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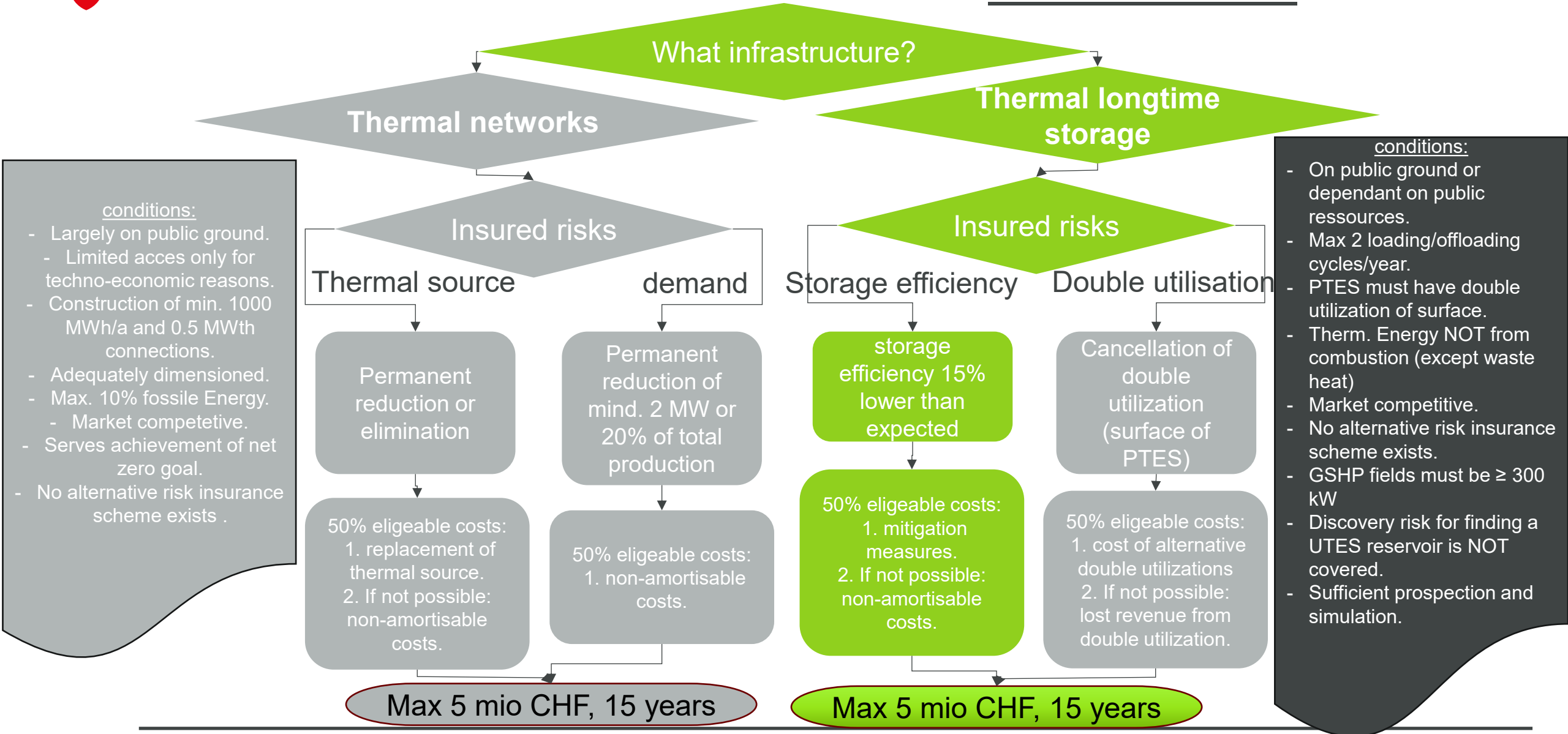


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UTES STRATEGIES, POLICIES & REGULATION IN SWITZERLAND



POLICY - RISK GUARANTEE KLG ART 7





POLICY - RISK GUARANTEE UTES

Insured risks:

storage efficiency 15%
lower than expected

Insured costs:

- 50% of:**
1. mitigation measures.
 2. If not possible: non-amortisable costs.

Limitations:

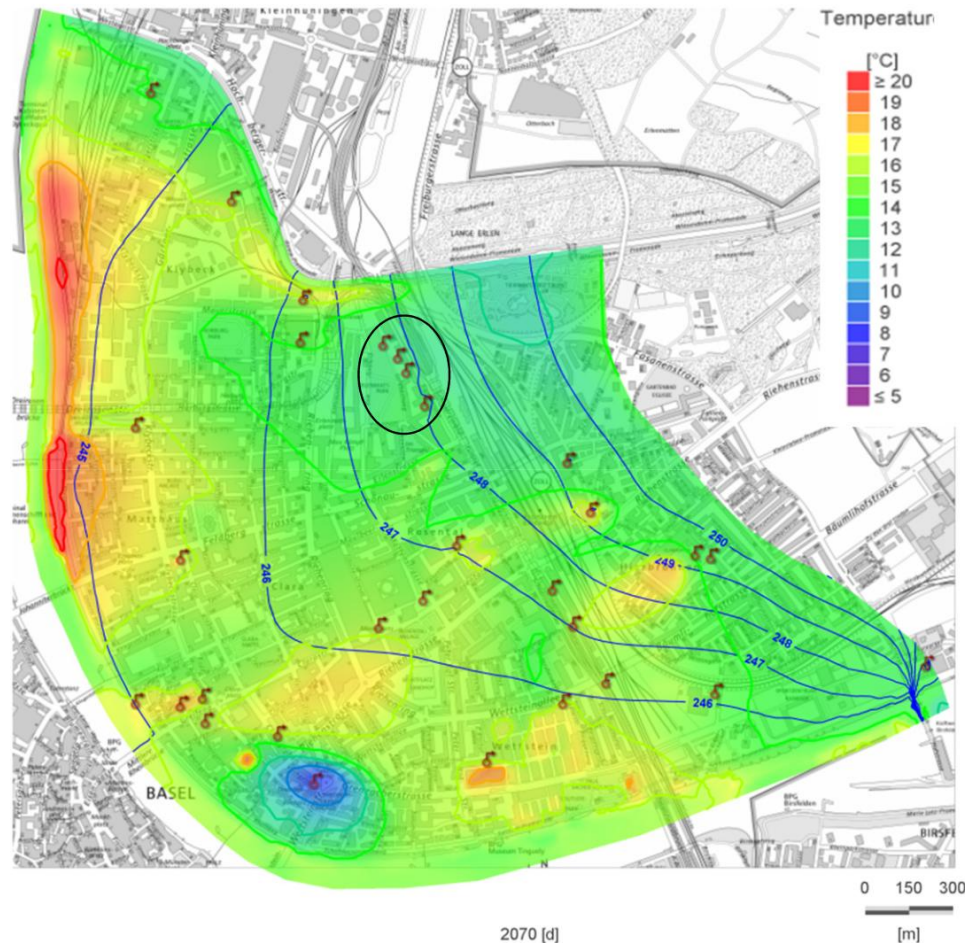
Max 5 mio CHF,
Max duration 15 years

conditions:

- On public ground or dependant on public ressources.
- **Max 2 loading/offloading cycles/year.**
- PTES must have double utilization of surface.
- Therm. Energy NOT from combustion (except waste heat)
- Market competitive.
- No alternative risk insurance scheme exists.
- GSHP fields must be ≥ 300 kW
- **Discovery risk for finding a UTES reservoir is NOT covered.**
- Sufficient prospection and simulation.



REGULATION – GROUND WATER PROTECTION



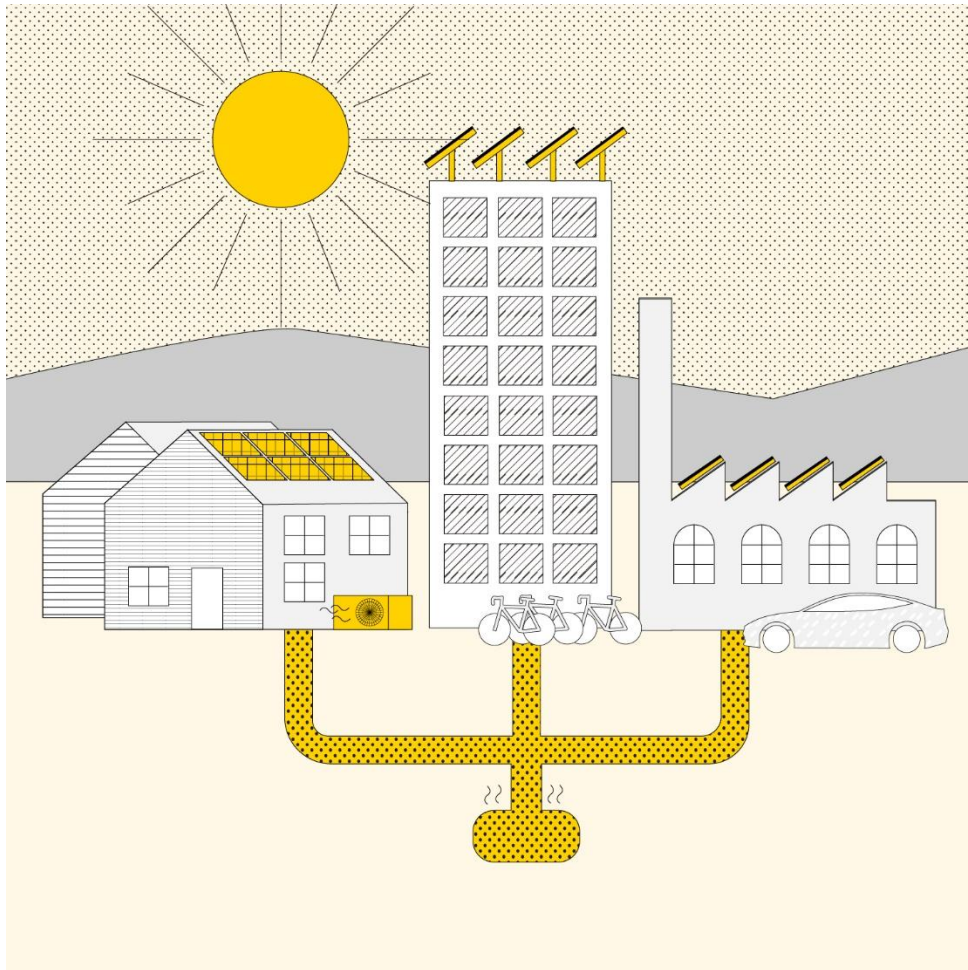
Today's regulation (3°C) is too prescriptive rigid and limiting.

Revised national groundwater regulation in preparation (administrative consultation)

- $\text{GW} > 20^{\circ}\text{C}$: exempt from fix numeric limit \rightarrow case per case (risk based regulation)
- $\text{GW} < 20^{\circ}\text{C}$: higher delta T for GW temp reduction; possibility to grant exceptions (risk based regulation)



ENERGY AND CLIMATE STRATEGY...



GOALS

- Secure and economic supply with renewable energy
- Net zero emissions by 2050

→ *What are the roles of energy storage?*



ENERGY STORAGE ENTERS POLITICAL ARENA

Numerous postulates in national parliament (power, heat, power-to-X)

- showed need for holistic approach
- power, heat, molecules
- stability, resilience, seasonal balancing, self-sufficiency

→ Energy storage round tables & action plan

- Power, heat and molecule storage
- Involving industry, administration, academia, NGO
- goal: joint action plan
- Nov. 25 – Dez. 26



TOPICS OF ROUNDTABLE AND ACTION PLAN

Technical & regulatory

- Technical needs
- Necessary regulatory adaptations

Energy & spatial planning

- Geographic distribution of potential
- Clarification of responsibilities

Socio-economic & institutional

- Business models
- Storage demand

...moving from from early trail blazer projects and opportunistic regulatory adoptions and policy measures....

... towards a new regulatory and policy framework embedded in a holistic storage strategy!



Thank you for your interest!



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