PUMPED STORAGE PLANTS

ENGINEERING EXCELLENCE.

ILF
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PUMPED STORAGE PLANTS

Pumped storage is a tried and tested technology which has been successfully used for energy storage for over a century. For energy transition, pumped storage plants are essential to balance fluctuating production (e.g. through wind and solar power plants) and to ensure grid stabilization. Considering that pumped storage plants have a service life of around 100 years, the investment and operating costs for plants with capacities of up to 1,000 MW and more, are very low in comparison to other storage technologies.

MORE THAN 96% OF ALL ENERGY STORAGE FACILITIES WORLDWIDE ARE PUMPED STORAGE PLANTS.

With more than 35 years of experience in hydropower, dam and river engineering, and more than 20 years of experience in planning pumped storage plants, ILF has the know-how to support clients worldwide. ILF has been and continues to be involved in some of the largest pumped storage projects in Central Europe, being one of the leading planners in this field.

ILF covers all disciplines required for implementing energy transition, and has a wealth of experience and know-how in all currently available storage technologies (e.g. physical, electrical, electrochemical, chemical and thermal storage).

Providing consulting services on all topics related to energy system planning, network planning (including electrical grids and transmission lines), energy saving potential, energy storage and alternative forms of energy, ILF is your experienced partner for energy transition.

"Being a proven and economical solution for large-scale storage, pumped storage plants play a central role in energy transition and climate protection."

Reinhard Fritzer,
PSP expert

PROJECT HIGHLIGHTS

- Atdorf PSP (1,400 MW) – one of the largest pumped storage plants in Europe
- Limmern PSP (1,000 MW) – one of the largest pumped storage plants in Switzerland
- Limberg II PSP (480 MW) – one of the largest pumped storage plants in Austria
- Prosper Haniel Underground PSP (200 MW) in Germany
- Vianden PSP, 11th machine unit (200 MW) in Luxembourg
- Koralm PSP (1,000 MW) in Austria
- Rehabilitation and expansion of pumped storage plants e.g. Niederwartha PSP, Erzhausen II PSP, Wehr HPP, Säckingen HPP in Germany and Porabka Zar PSP in Poland
- Hybrid power plants e.g. Sanliurfa PSP + PV Plant in Turkey
- Hydropower potential studies and studies of alternatives for pumped storage plants e.g. in Germany and Austria

Limmern Reservoir, Limmern PSP

Pump Turbine, Limberg II PSP

Eggberg Reservoir, Säckingen HPP

Penstock, Häusern PSP

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