

Sediment Management Feasibility Study

Svartisen, Norway

Challenge

The Svartisen hydropower scheme experiences sediment accumulation in the desander, requiring regular maintenance and sediment removal. Statkraft sought to evaluate whether SediCon Sluicers could provide a safe and efficient solution for continuous sediment management while minimizing operational impact. A comprehensive feasibility study was required to assess sediment characteristics, system sizing, installation methods and sediment disposal alternatives.



Svartisen Power Plant



Svartisen sand trap during emptying in 2025. Sediment deposits have accumulated to approximately 8 m above the sand trap floor.

Solution

SediCon carried out a feasibility study for installation of SediCon Sluicers in the Svartisen desander. The study included sediment analysis, system sizing, capacity calculations, water consumption estimates, installation planning and cost evaluation.

In cooperation with Sweco, alternative concepts for sediment transport and disposal were assessed, providing Statkraft with a complete decision basis for future implementation.



Project Location

Project facts

Client: Statkraft
Project: Svartisen
Location: Glomfjord, Norway
Commissioned: 1993
Technology: Feasibility study
Installed capacity: 600 MW
Annual generation: ~2.3 TWh

Results and benefits

- Sediment suitability verified
- Optimized system design
- Capacity and water use evaluated
- Defined installation method
- Disposal alternatives assessed
- Basis for investment decisions

For more than 30 years, SediCon has developed and supplied proprietary sediment handling technologies from Trondheim, Norway. Our solutions for reservoirs, intakes, desanders and tunnels have been successfully implemented in hydropower projects in more than 20 countries across five continents.