Cover Story

Work is underway to refurbish the Ryburg Schwörstadt run-of-river hydropower plant on the River Rhine in Switzerland

5 World News

NHPC launches early warning system for hydro projects; Bechtel to work on Big-T pumped storage facility in Australia

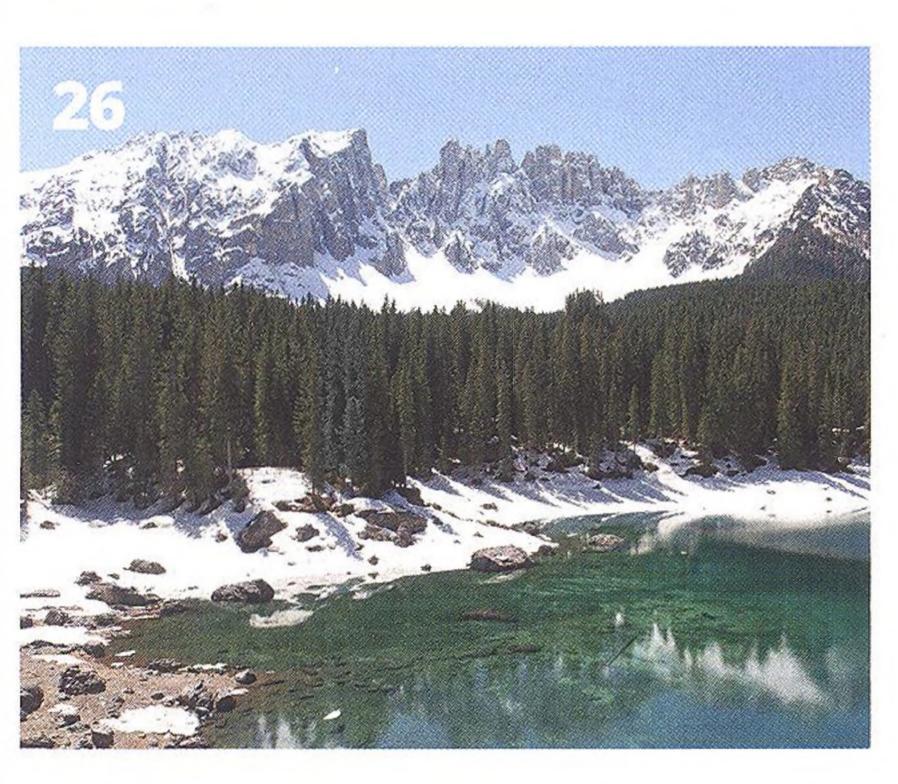
8 Spotlight

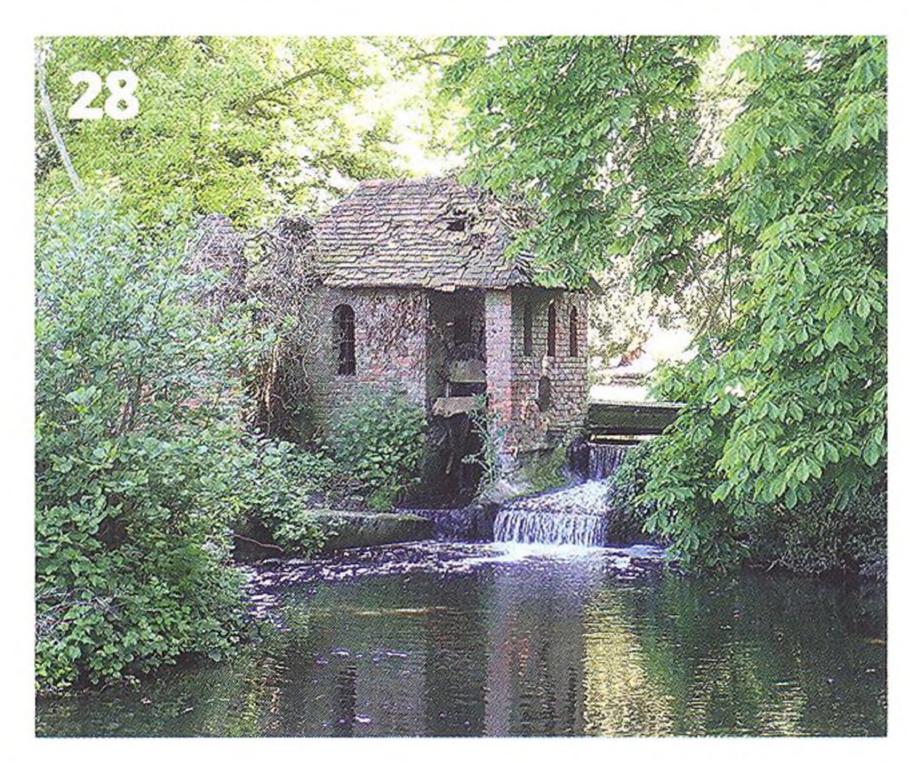
The Nant de Drance pumped storage power plant in Valais, Switzerland, was put into operation on 1 July, with official inauguraton in September

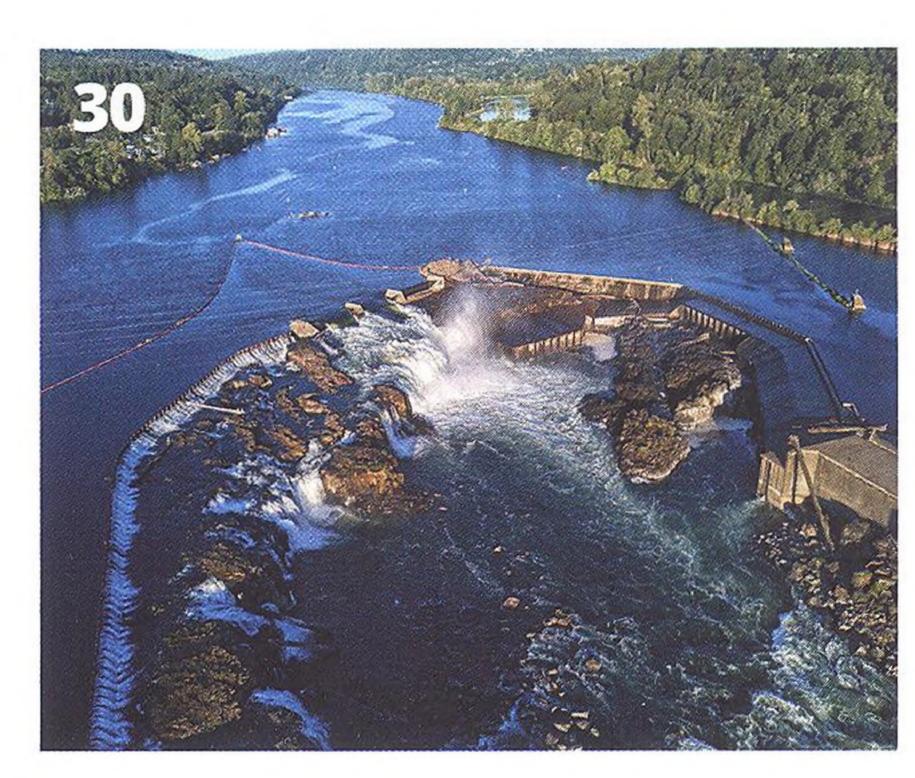
Classified

Contacts

features







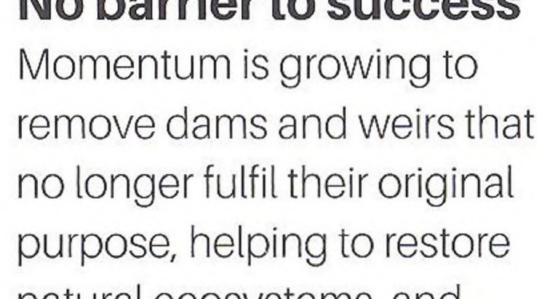
Blue Green Algae Blooms gainst the possibility of contact with this material BATHING DANGER PROHIBITED DEEP WATER

18 No barrier to success

Europe

way

remove dams and weirs that natural ecosystems, and strengthen climate resilience.



Hydropower leads the

Larger pumped storage projects

and hydro refurbishments are

underway in mainland Europe

22 **Celebrating European** achievements

Finnish energy company Fortum gives an insight into different hydropower projects it has worked on in Sweden and Finland over recent years.

26 Snow monitoring and Italian hydropower

Enel and ESA launch new Snow Water Equivalent feasibility study in Italy with Wegaw's satellite-based snow monitoring solution

Small hydro

28 Small steps to sustain

Untapped small hydropower resources have a key role to play in fulfilling renewable energy potential but, as recent research appears to highlight, sustainable development is still of utmost importance.

maintenance

30 New tools

Robots, satellite developments and air gap measuring tools are helping operation and maintenance activities in the hydro industry

34 Algae treatments evolve - from chemicals to nextgen ultrasonics

The rise in global temperatures is creating a new problem in the area of water management -- out of control algae growth in water supplies. Increasing temperatures are resulting in widespread algae blooms that are negatively affecting

reservoirs of all types. George Hutchinson of WaterIQ Technologies discusses some of the top algae management problems that managers are dealing with and some of the approaches that will be used in 2022 to counter this challenge

Renewable integration

36 Hydro can help

Hydropower is working in partnership with other renewables across the grid.

Design

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Geomorphic designs inform tailings dam sustainability

Civil engineer Justin Walls of SRK Consulting considers how geomorphic designs are being applied to tailings dams, emulating natural landforms to render these structures more stable, economic and sustainable.

