

# Cover Story

The Hydropower Extending Power System Flexibility (XFLEX HYDRO) project aims to demonstrate the flexibility of hydropower technologies

# 5 World News

Draft deal agreed between Egypt, Ethiopia and Sudan for the Grand Ethiopian Renaissance Dam; Repair work starts at Toddbrook reservoir

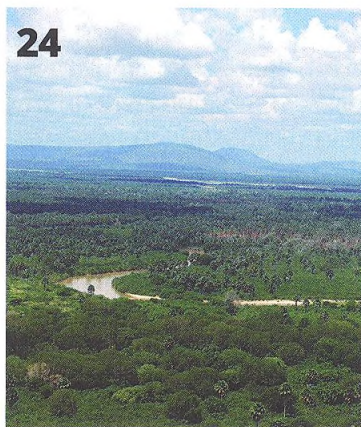
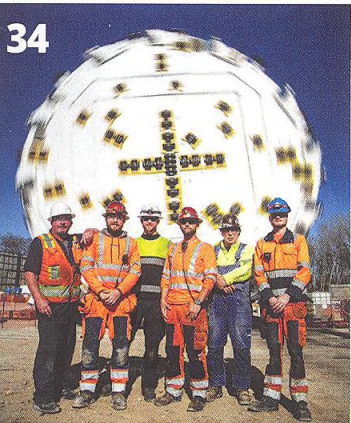
# 10 Spotlight

Martin Wieland, Chairman of the ICOLD Committee on Seismic Aspects of Dam Design, reflects on past achievements and future issues

**46**  
Classified

**50**  
Contacts

## features



## Inspection

**14**  
**Upon closer inspection**  
Insight into recent dam and reservoir inspections

**18**  
**Expert verdict delivered on tailings failure**  
A look at the expert panel's technical report on Brumadinho tailings dam failure in Brazil

## Environment

**22**  
**Revisiting the debate on large dams**  
As 20 years pass, what are the legacies of the World Commission on Dams?

**24**  
**African assessment**  
Assessing environmental and socially sustainable considerations in hydro projects

**26**  
**Conversion improves environmental credentials**  
Reducing maintenance in Spanish hydro plants

## Analysis & design

**28**  
**Innovative and resilient**  
Project aims to demonstrate how flexible hydropower technologies can deliver a secure power system

**32**  
**Can climate change Canadian potential?**  
The impact of climate change on Canadian hydropower

## Technology & tools

**33**  
**Rapid parts for rotating equipment**  
Digitalization helps improve lead times for equipment

**34**  
**Big Tex gets to work at Mill Creek**  
The largest hard rock TBM ever starts to bore in the US

## 36 Streamlining dam inspections

Details on the Fulcrum mobile dam inspection app, designed to help dam operators save time and resources

## Wave & tidal power

**38**  
**Can Britannia rule the waves?**  
Organisations in the UK are working to help secure revenue support and pave a more accessible route for the country's wave & tidal power industry to the energy market

**41**  
**From wheat farming to wave farming**  
Bombora Wave Power is set to commission its mWave wave energy converter in 2020.

**44**  
**Novel approach to wave energy generation**  
Wave Swell Energy is developing its Oscillating Water Column technology in Tasmania, Australia