

# Cover Story

Bauer helped BC Hydro upgrade the John Hart Dam on Vancouver Island, installing a water seepage barrier to improve seismic resilience.

# 5 World News

Construction approved for world's largest hydropower dam in Tibet; AIIB approves \$270 million loan for Rogun hydropower project

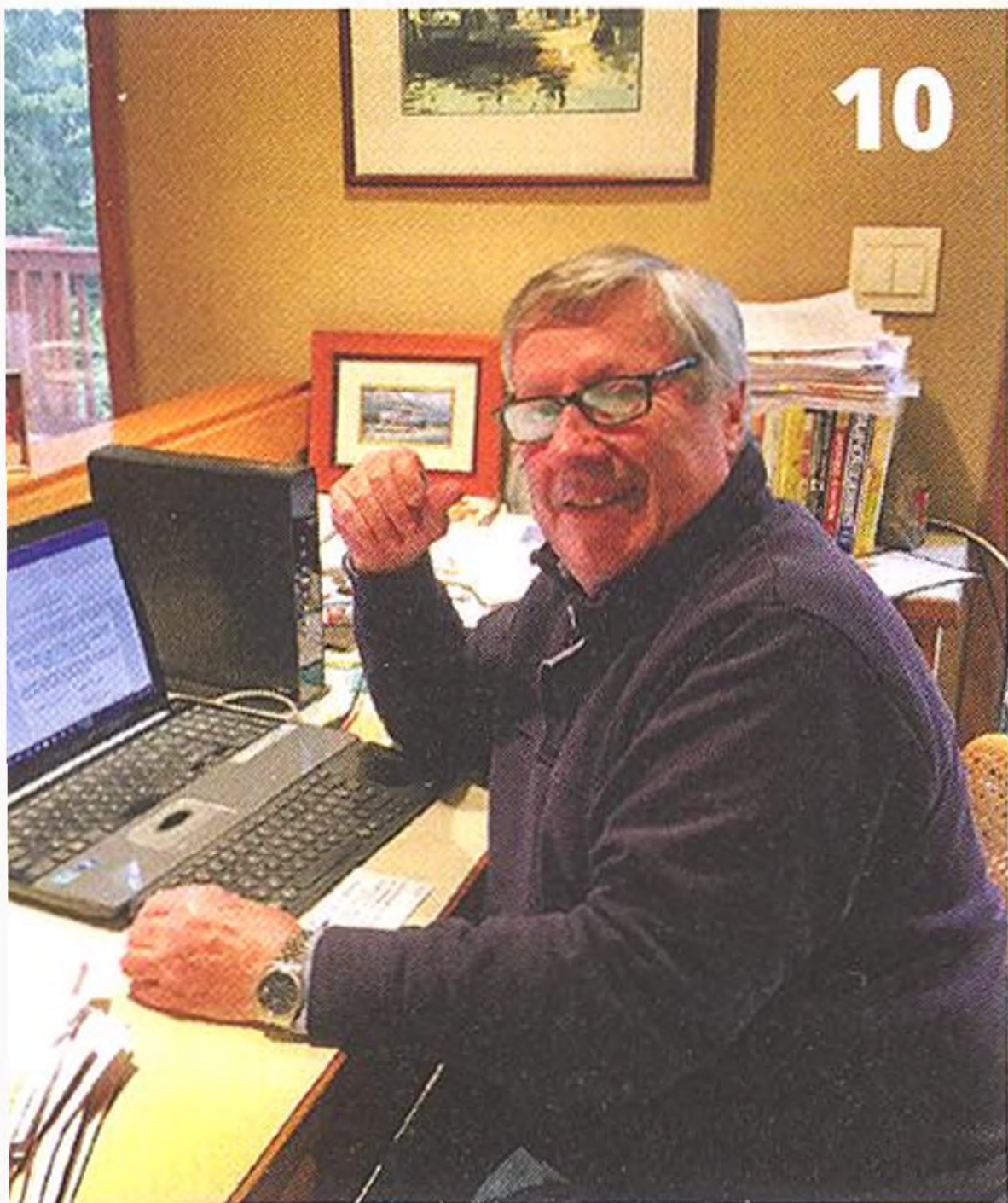
# 10 Spotlight

Reports spanning 20 years highlight collaboration on China's 245m-high, 3300MW Ertan Dam, with reflections from Stephen O. Simmons.

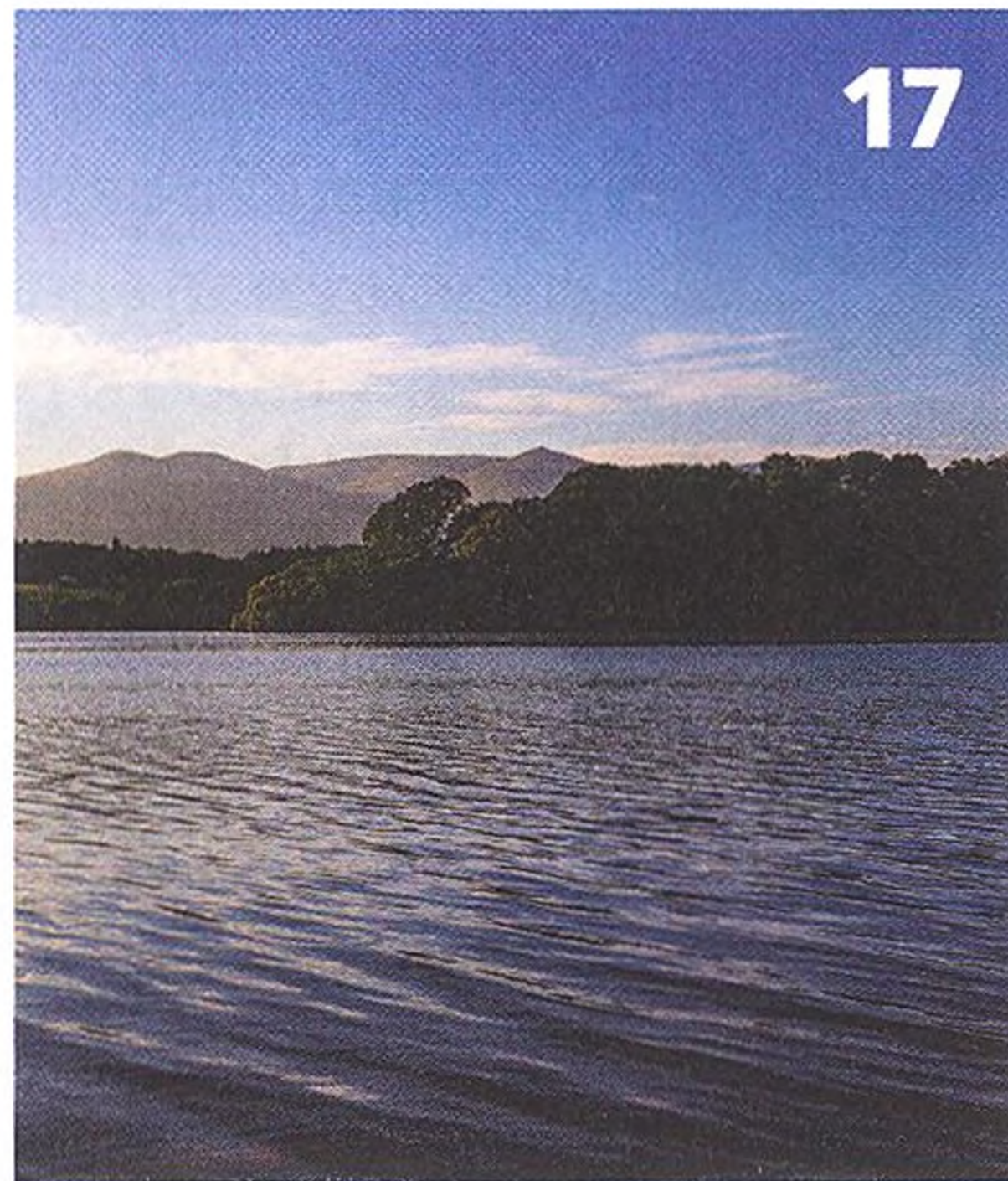
**40**  
Classified

**42**  
Contacts

## features



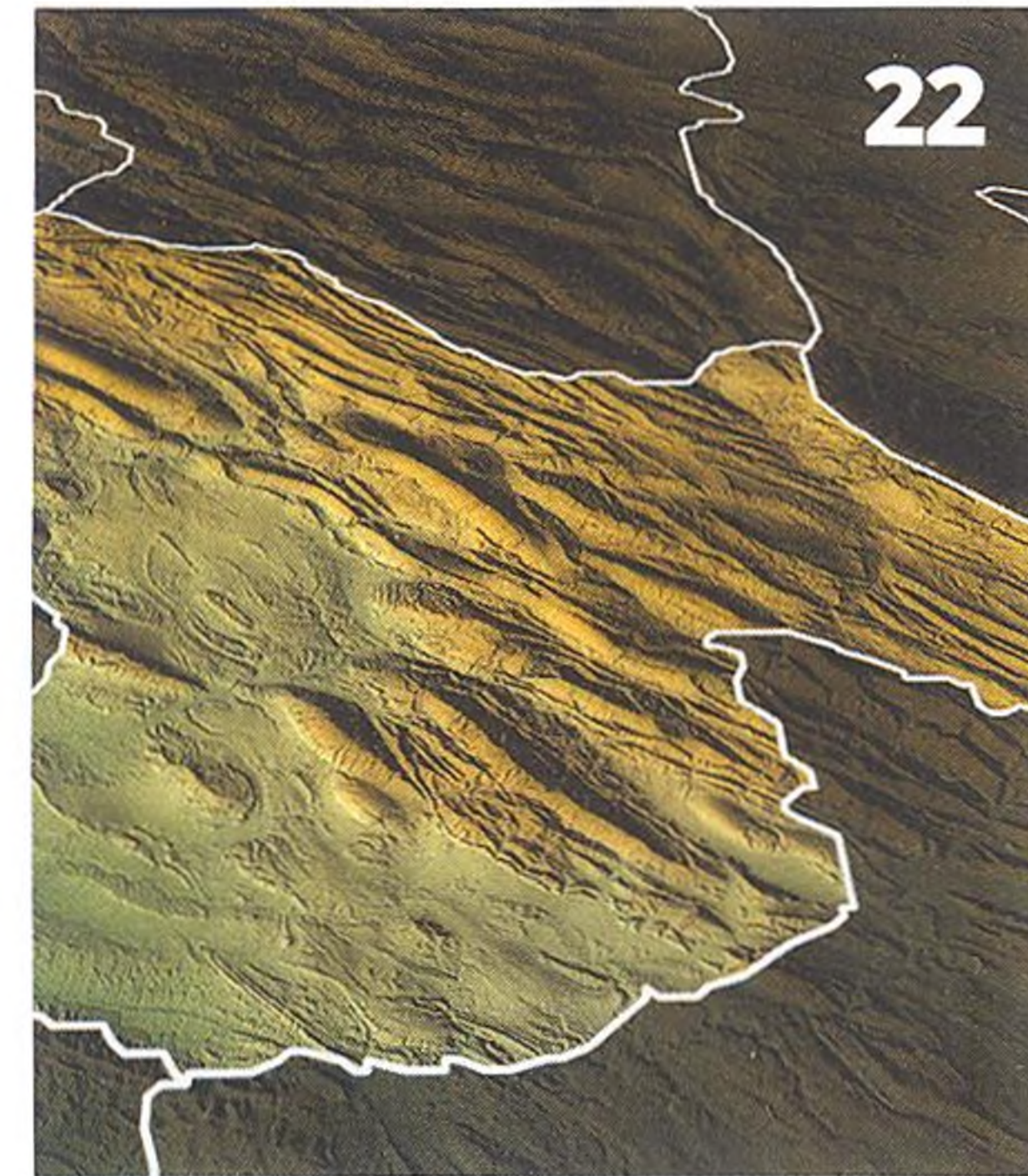
10



17



18



22



24

## People

8

### People on the move

IWP&DC reports on recent appointments in the industry

## Seismic safety

14

### Seismic upgrades: dams reinforced

Projects tackle earthquake risks, safeguarding water, power, and ecosystems in seismic zones

## Operational data analysis

17

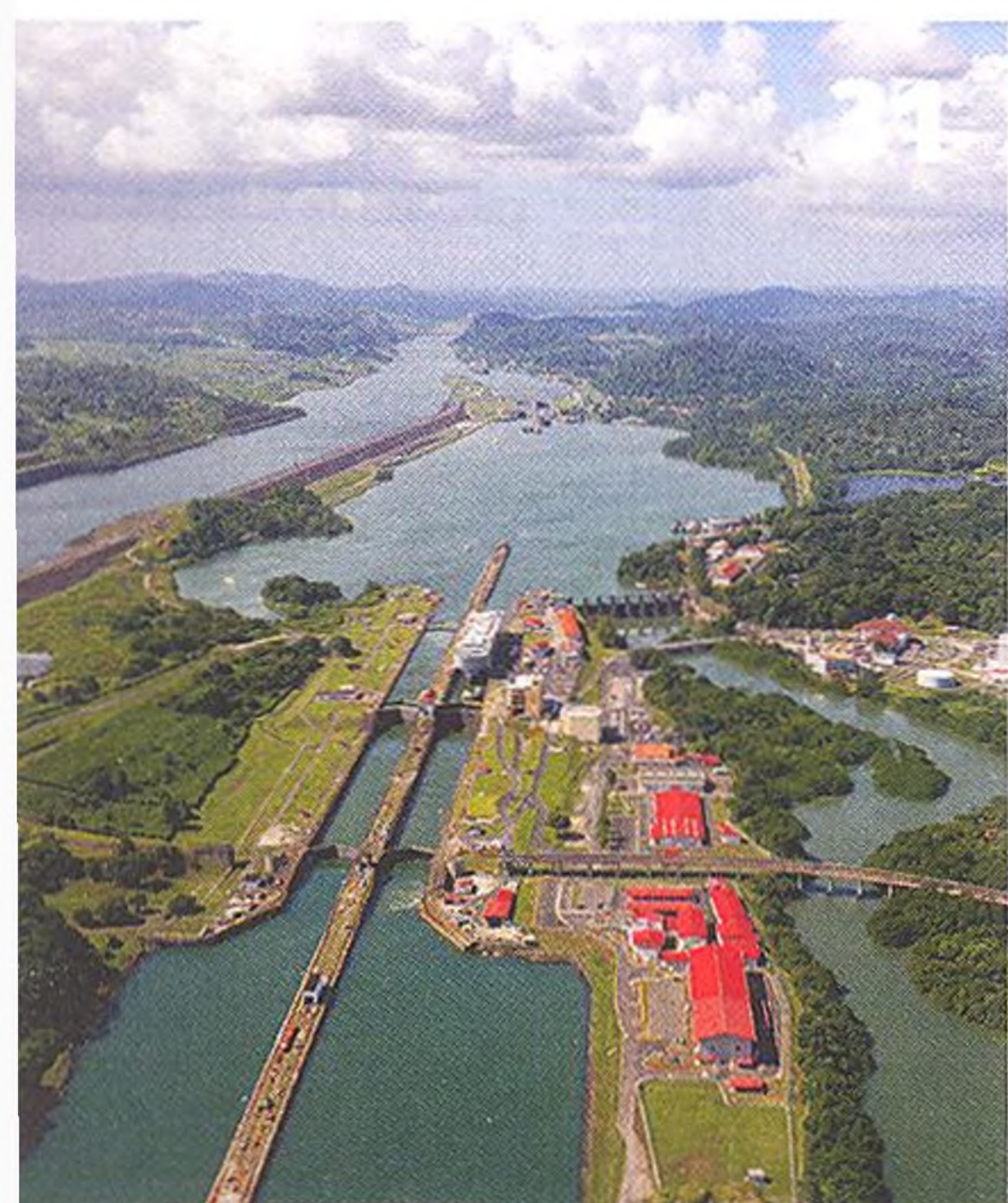
### Oh Bouy!

Research underway at Gartmorn Dam in Scotland.

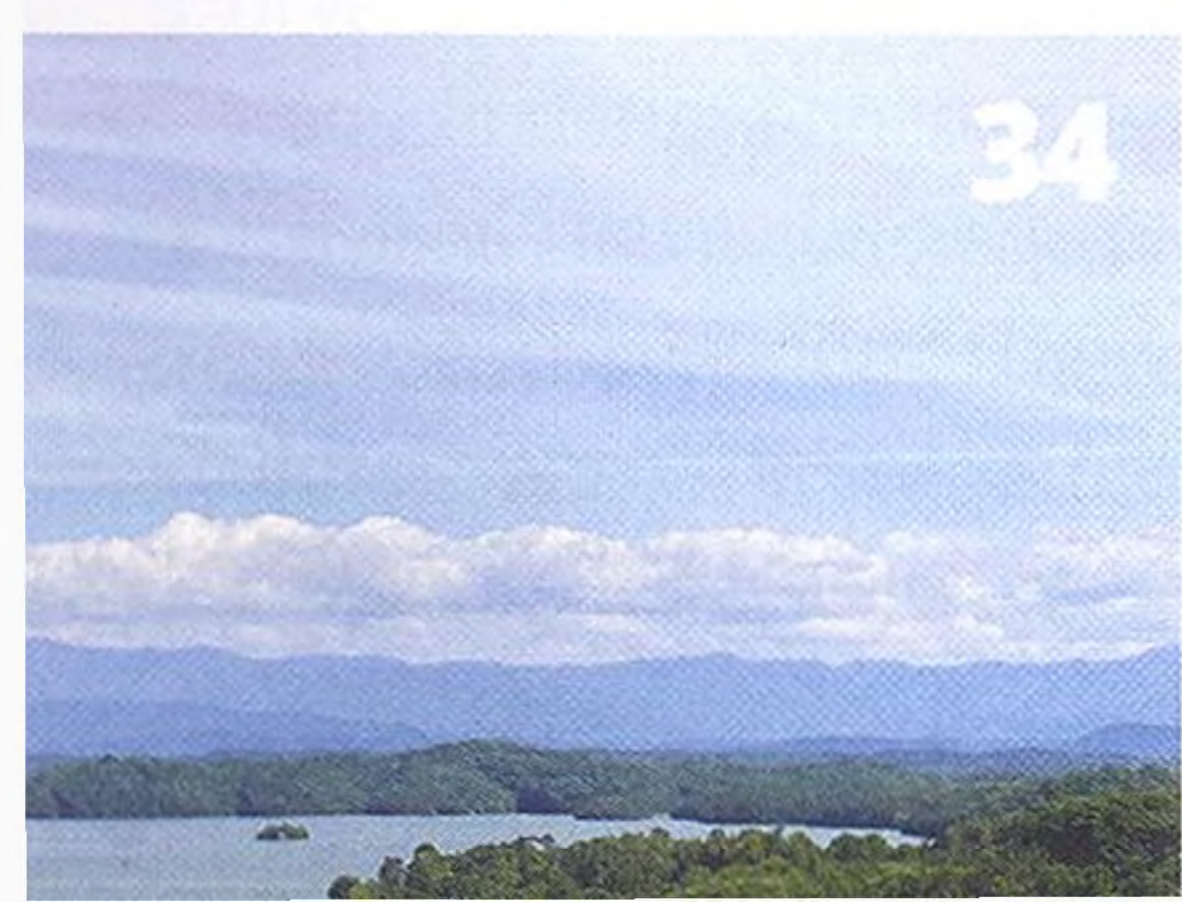
18

### Maximizing hydropower efficiency and investment decisions with digital solutions

Hydropower investment is growing complex, but digital twins enable data-driven decisions for optimised performance and longevity.



21



34

22

### Complex undertakings

The increasing complexity and uncertainty associated with decision-making involved in projects, has led to a more comprehensive and systematic multi-criteria approach

## Barriers & booms

24

### Boom safety innovations

Filip Stefanovic and Michael Sims of Ecocoast explore how dams and powerplants pose hidden dangers to recreational water users, with strong currents turning them into "drowning machines." To mitigate these risks, innovative safety booms are being deployed, offering advanced protection through enhanced strength, visibility, and integrated safety features

28

### Subsea energy storage

The StEnSea project is seeking to revolutionise long duration energy storage by adapting the principles of pumped storage hydro for subsea environments

## Climate Resilience

31

### New plans for Panama

Plans for a new dam to strengthen climate resilience of the Panama Canal

32

### Breathing new life into hydropower

GE Vernova's aerating turbine technology enhances dissolved oxygen levels in river ecosystems while improving hydropower plant efficiency

34

### All change

The impacts of climate change are being felt from the Andes-Amazon to the US.

## Flood management

38

### Leeds flood scheme triumphs

Construction of groundbreaking £200million scheme to protect Leeds from extreme flood risk is complete