DAMS IN PORTUGAL

CNPGB(PTCOLD) and APA ROLES
BRIEF OVERVIEW

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The CNPGB is chaired by the President of the PORTUGUESE ENVIRONMENT AGENCY (APA)

Its members are appointed by order of the Minister of Environment, acting on a proposal from the Committee, which proposes individuals with a relevant activity in the field of large dams

CNPGB/PTCOLD is the Commission that is in charge of the Portuguese representation at the International Commission on Large Dams (ICOLD)

The permanent representation of Portugal in ICOLD dates to 1948. The National Portuguese Committee (CNPGB) was created by a Decree of March 21, 1952
PTCOLD SITE  http://cnpgb.apambiente.pt/

Praga 2017
A 85ª reunião anual da ICOLD terá lugar em Praga, na República Tcheca, de 3 a 7 de julho de 2017.

Hydro 2017
A edição de 2017 da Conferência Internacional de Hydropower & Dams terá lugar em Sevilla, de 9 a 11 de outubro. Brochura
The Portuguese Committee on large Dams hosts the Website of the ICOLD EUROPEAN CLUB, and has been doing it since 2004, when its proposal and development of the site occurred.

The aim of this Website, from the very beginning, independently of its simple layout, is to help improve the role of the Club, particularly by displaying:

- objectives;
- activities from the Working Groups;
- Club Symposia and its contents;
- European safety legislation;
- texts or reports, discussion material, position papers, other activities, etc.
- links to other projects;
- other proposals from the Club members.

All of the Presidencies of the Club have helped improve the contents of the site.

At the former Presidency, in 2016, EUROPEAN ICOLD CLUB MANIFESTO ON DAMS AND RESERVOIRS was launched and is now displayed at the front page of the website.

The new President, Jean Jacques Fry, started activity in 2017 and has already introduced new ideas, such as the “Letters from the Presidency”, “Eucold News” and the “share space” for working groups.

The EUROPEAN CLUB site is easily accessed through the main ICOLD site, within the “REGIONAL CLUBS” label.
PORTUGAL

MAIN CHARACTERISTICS

RELIEF

RAINFALL

AQUIFERS
PORTUGAL DROUGHTS

Main Droughts in Portugal:

• 1944/45
• 1953/54
• 1975/76
• 1981/83
• 1992/93
• 2004/2005

SPI Standardized Precipitation Index

- Extreme
- Severe
IBERIAN SHARED RIVER BASINS

Iberian water basins occupy **64%** of the mainland territory.
PORTUGUESE LARGE DAMS

“LARGE DAMS”:

\[ h \geq 15 \text{ m} \]

\[ 15 \text{ m} > h \geq 10 \text{ m} \land V \geq 1 \text{ hm}^3 \]

\[ V \geq 100,000 \text{ m}^3 \]

“MEDIUM SIZE”
LARGE DAMS: MAIN PURPOSES

- Hydropower
- Small Hydro
- Irrigation
- Water Supply
- Multipurpose
- Others
Define a new target for Hydropower in 2020

Exploitable hydropower potential vs. Hydropower capacity built since 1975

PNBEPH 2007

(1) Total Hydropower installed capacity / Theoretical Hydropower potential
(2) Source: MEI; DGGE; REN
NEW HYDROPOWER DAMS

Hydropower dams on which construction is now starting - IBERDROLA

Hydropower dams recently built (last 3 years) - EDP

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<th>Basin</th>
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<th>Dam Height</th>
<th>Reservoir Volume</th>
<th>Installed Power</th>
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ALQUEVA MULTIPURPOSE SCHEME
NEW DAMS

**ALTO CEIRA**
- Dam Safety
- Hydropower

**FOZ TUA**
- Hydropower

**VEIGUINHAS**
- Public Water Supply

**RIBEIRADIO**
- Hydropower

**ERMIDA**
- Hydropower

**S. PEDRO**
- Irrigation

**BAIXO SABOR**
- Hydropower

**FEITICEIRO**
- Hydropower

Alqueva Multipurpose Scheme
APA – AUTHORITY ON DAM SAFETY

• DESIGN APPROVAL
• APPROVAL OF SURVEILLANCE PLANS, 1ST FILLING PLANS, OPERATING SAFETY RULES
• AUTHORITY INSPECTIONS:
  — SCHEDULED
  — OWNER’S REQUEST
  — EXCEPTIONAL AND EMERGENCY SITUATIONS
• SUPPORT FROM LNEC (CLASS I DAMS)
• INTERACTION WITH OWNERS
• DIRECT ACTION, IN CASE OF OWNER’S FAILURE TO ACT
• LEGAL ACTION
• LAUNCHING OF SPECIFIC SAFETY EVALUATION PROGRAMS
• COORDINATION WITH REGIONAL AUTHORITIES
• COOPERATION WITH AUTHORITY OF CIVIL DEFENSE, CONCERNING EMERGENCY PLANNING;
• MANAGEMENT OF SAFETY DATABASES
• PROVIDING DAM SAFETY COURSES
MERCI POUR VOTRE ATTENTION

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