

DAMS IN PORTUGAL

CNPGB(PTCOLD) and APA ROLES BRIEF OVERVIEW

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PORTUGUESE NACIONAL COMMITTEE ON LARGE DAMS



- 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/





ICOLD EUROPEAN CLUB SITE

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 <u>role of the</u> <u>Club</u>, 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, <u>EUROPEAN ICOLD CLUB MANIFESTO ON DAMS AND RESERVOIRS</u> was launched and is now displayed at the front page of the website.

The <u>new President</u>, 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 <u>CLUB site is easily accessed through the main ICOLD site</u>, within the <u>"REGIONAL CLUBS"</u> label.

AGÊNCIA PORTUGUESA DO AMBIENTE

ICOLD EUROPEAN CLUB SITE

http://cnpgb.apambiente.pt/IcoldClub/index.htm



ICOLD EUROPEAN CLUB SITE



AGÊNCIA PORTUGUESA DO AMBIENTE

PORTUGAL

MAIN CHARACTERISTICS



PORTUGAL DROUGHTS

Main Droughts in Portugal:







GREEN PAPER FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THECONMITTEE OF THE BEGIONS



IBERIAN SHARED RIVER BASINS



Iberian water basins occupy 64% of the mainland territory





AGÊNCIA PORTUGUESA DO AMBIENTE

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LARGE DAMS: MAIN PURPOSES



AGÊNCIA PORTUGUESA DO AMBIENTE

Define a new target for Hydropower in 2020

Exploitable hydropower potential vs. Hydropower capacity built since 1975



NEW HYDROPOWER DAMS



Hydropower dams on which construction is now starting - IBERDROLA

Hydropower dams recently built (last 3 years) - <u>EDP</u>

Dam	Basin	River	Basin Are a	Dam Height	Re se rvoi r Vol ume	Installed Power	Annual Generation	Туре
			Km ²	m	hm ³	MW	GWh	
Foz Tua	Douro	Tua	3822	108	310	234	340	Reversible
Fridão	Douro	Tâmega	2630	97	195	163	299	
Alto Tâmega	Douro	Tâmega	1557	115	96	90	114	Reversible
Gouvães	Douro	Tâmega	100	32	13	112	153	Reversible
Daivões	Douro	Tâmega	1984	75	66	109	148	Reversible
Baixo Sabor	Douro	Sabor	3447	123	1095	140	358	Reversible
Feiticeiro	Douro	Sabor	3491	45	30,8	30	86	Reversible
Ribeiradio	Vouga	Vouga	945	83	136,4	71,6	139*	
Ermida	Vouga	Vouga	965	35	3,86	7	*	
Alto Ceira	Mondego	Ceira	34,5	41	1,6	**	**	



ALQUEVA MULTIPURPOSE SCHEME





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NEW DAMS



Alqueva Multipurpose Scheme



APA – <u>AUTHORITY</u> 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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ENVIRONMENT