

Towards an integrated strategy for nature conservancy and small hydropower production: the case-study of Portuguese north river basins



**9th EUROPEAN CONFERENCE
ON THE WATER FRAMEWORK DIRECTIVE IMPLEMENTATION**

- **Introduction**
- **Action Programmes**
- **Implementation**
- **Conclusions**

How to ensure the hydropower production with ecosystems quality?

Balancing the requirements of the Water Framework Directive

(hydrology, water quality, ecological continuum, hydromorphological alterations)

and the Renewable Energy Directive

i)) ensure the protection of nature and natural ecological values, retrieve the value of environmental quality (economic) and social;

ii) enhance energy supply security and energy integration of renewable;

Promote transparency /accountability in decision-making

Water:

- Water Framework Directive
- Water Law
- Legal status of water resources

Nature Conservation: :

- National Strategy for Nature Conservation and Biodiversity
- Nature Conservation Network

Energy:

- Renewable Energy Directive 2009/28/EC
- National Strategy for Energy (ENE 2020)
- National Renewable Energy Action Plan (NREAP)

CONSERVAR

PROGRAM FOR THE CONSERVATION AND RIVERS NATURE RESERVE

RESTAURAR

PROGRAM FOR THE RESTORATION OF THE NATURAL STATE OF RIVERS

VALENER

PROGRAM FOR THE RIVERS ENERGY PRODUCTION

PROVIS

TECHNICAL PROGRAM SUPERVISION VISITS

- Preserving habitats in mountain areas;
- Preserve areas / sub-basins for biological continuity and with relevant ecological conservation;
- Preserving the reference terms (setup in each river basin a main river tributary where the human pressure activities are negligible);



CARISMA

Calidad Ambiental de las Reservas naturales fluviales Internacionais y del Medio Acuático

Work in rivers / (sub) river basin, that have a cost & benefits appropriate for ecological restoration;

Rivers with restoration possibility and natural conditions of high biodiversity value and conservation formerly known ;



TFE

Territórios Fluviais Europeus





Develop the implementation of RCM No. 72/2010;

Develop the initiative of particular contests;

Develop / complete projects that are in advanced stage of the process;

Promote tendering procedures for refurbishment of the old existing hydropower;

Promote tendering procedures for use water reservoirs allocated to other uses;

Encourage requalification's / adaptations of traditional infrastructure
(DL No. 363/2007, DL No. 34/2011)

Monitoring the implementation of the fish pass ;

Monitoring the minimum ecological flow;

Hydropower systems safety checks;



Translating this ConResVal North Portugal Strategy for River Basin Management Plans - areas could be distinguished for pre-planning:

Where natural conditions are *non-favourable* to the implementation of any projects;

Where we will recover the functional integrity of ecosystems and the ecological quality, and the river connectivity, it will be considered *less favourable* to the execution of some projects;

where conditions are *suitable* for the implementation of hydropower plants we will attain the goals set in the ENE 2020 (NREAP) and make the necessary effort to achieve good ecological status or good ecological potential of these water bodies

Thank you for your attention

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