



## **Hidroenergia 2006 - International Conference and Exhibition on Small Hydropower**

**Post conference review - -**

*Crieff, Scotland 7-9 June 2006*

Organised by ESHA (European Small Hydropower Association) and BHA (British Hydropower Association) the International conference HIDROENERGIA 2006, held in Crieff, Scotland, from the 7 - 9 June has been a big success. More than 250 participants from 34 different countries gathered to discuss the challenges and advancements of the SHP sector. Such an international discussion and information exchange is particularly imperative now, as the European Commission has just published a green paper on security of energy supply where hydropower, amongst the other renewable energy technologies, has an important role to play. Indeed, the enormous challenge facing mankind is not only to tackle climate change, but also to meet the rising demand for energy and to safeguard security of energy supplies. Small hydropower is therefore needed to meet all these challenges.

With more than 40 oral presentations from all relevant sectors (representatives from the industry, NGOs, European institutions, research bodies, government), the conference has looked to (i) new innovative engineering solutions, (new low-head turbine developments, grid connexion, research results uptake to the market, innovations in civil engineering works...), (ii) policy opportunities (new potentials and refurbishment, investment opportunities, CDM markets), (iii) environmental integration (fish-friendly turbines, reserved flow, environmental mitigation techniques) and (iv) planning issues (SHP for local community development) for the further development of small hydropower.

The conference served as a platform for discussion on how to reach the European Renewable Electricity Target (22.1% by 2010, from which small hydro should contribute with 14GW of installed capacity) and to cope with the challenges that the Water Framework Directive (WFD) is posing to the Small Hydropower Sector. At the same time, the exhibition showcased the latest trends in the small hydropower engineering and technological development.

Two parallel workshops were organised:

One organised by BHA and ESHA on the European Water Framework Directive and its repercussion on SHP. Currently the WFD and the Directive for the Promotion of Electricity Produced from Renewable Energy Sources (RES-E Directive) might be pushing in different directions, the first one could slow down SHP development and the second one gives an important part to the use of hydroelectricity, therefore the challenge is to achieve the balance between electricity production from SHP and nature conservation.

In this sense, energy and environmental policies and regulations should be coordinated and complementary. The workshop presented how European small hydro developers perceived the major issues in their experience with the implementation of the WFD. The discussion was followed by a response from the governmental implementing agencies dealing with the transposition of the WFD. The workshop concluded that WFD should bring an opportunity towards an integrated water management in Europe where SHP can be integrated in the rivers ecosystem, with minimum environmental impacts, producing clean electricity and being the backbone of renewable energy in many European countries. The WFD should also be implemented in the context of clear commitments and targets to increase the contribution of renewable energy sources to overall energy consumption in the EU as part of the strategy to combat climate change, and ensure security of supply.

The second workshop, on R&D "Research, Development and Innovation in Small Hydropower: opportunities and challenges", was organised in the framework of the IEA Annex II activities. The workshop presented recent achievements in small hydropower research, it analysed driving forces for the innovation process, and was the basis for discussion on future joint initiatives to be developed between IEA – Annex II participating countries and ESHA to establish the basis of networking activities on R&D.

Small hydro is facing a number of challenges today, as a result of: (i) the implementation of the Water Framework Directive, (ii) the implementation of the Directive for the Promotion of Electricity Produced from Renewable Energy Sources, and (iii) the urgent necessity to increase public acceptance and to improve the public image of small hydro schemes. In this context Hydroenergia 2006 has shown that the SHP sector is strongly alive and interconnected and that networking activities are working in the SHP sector bringing together technicians but also environmentalists, project developers, and public administration etc. Hydroenergia concluded that in order to reach the target set up by the RES-e Directive of 22 % use of electricity from renewables in the EU by the year 2010, SHP development is fundamental as a part of the renewable energy mix, and thus the main administrative and environmental barriers that hinder a major development of SHP should be addressed at the policy level. Therefore, the conference will serve as an input for the European Commission to shape future policy and RD&D priorities for renewables in general and Small hydropower in particular.

At the end of the conference, site visits were organised to two privately and one publicly owned SHP site, each of them being a vivid example of the manifold benefits of this technology and the involvement of the persons operating the plant. These site visits nicely complemented the discussions on small hydropower throughout the conference and were met with great interest by the delegates.

ESHA will continue to work to promote SHP in Europe and beyond and is looking forward to welcoming SHP specialists at Hydroenergia 2008 in the Slovenia.