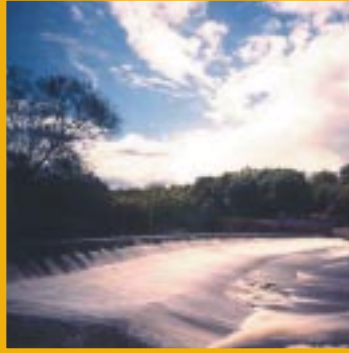


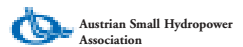


EUROPEAN
SMALL HYDROPOWER
ASSOCIATION

Project Info



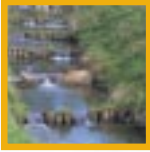
THEMATIC NETWORK ON SMALL HYDROPOWER



with the support from:



Studio Frosio

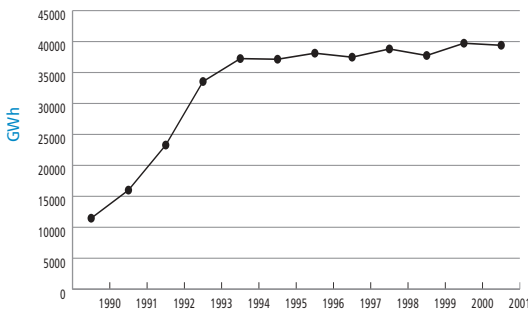


Small hydro power

has been technically feasible for decades, and given a favourable site, it can be economically attractive, sometimes even offering the least-cost method of generating electricity. Small hydropower has a huge, as yet largely untapped potential not only in new construction but also in upgrading and refurbishing, which should enable it to make a significant contribution to future energy needs. Small hydropower offers a very good alternative to conventional sources of electricity since it is efficient, secure, clean, renewable and sustainable.

There are about 14488 SHP plants in the European Union (EU-15) accounting for around 1.5% of the total electricity generation and for about 1.7% of the final electricity consumption in the EU-15. Besides, the European industry has maintained a leading position in the field of hydropower manufacturing since the technology started 150 years ago both in competitiveness and competence.

Small Hydropower Electricity Generation in the EU-15, 1990-2001

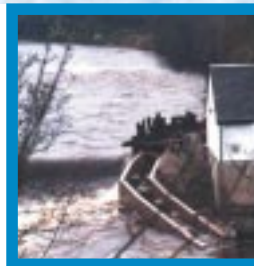


Small hydro makes possible the production of renewable, decentralised, and indigenous energy, which corresponds perfectly to the objectives of the Kyoto protocol, the European Commission's White Paper and the European Commission Directive promoting electricity from RES. It not only brings a solution to the electrification of peripheral areas, and developing countries, but also enables industrialised countries, where the potential for large developments is practically exhausted, to increase their hydroelectricity. Furthermore, there are numerous already existing SHP sites, which are currently not in use but could be easily revitalised.

WHAT IS THE THEMATIC NETWORK ON SMALL HYDROPOWER?

The Thematic Network on Small Hydropower (TNSHP) is a European Commission - DG TREN (Transport & Energy) - funded project in the framework of the EU's FP5 (Fifth Framework Programme for Research, Technological Development and Demonstration) within the specific programme: Energy, Environment and Sustainable Development (ENERGIE).

The TNSHP aims to identify future research and market needs of the SHP sector within the EU and the Candidate Countries in order



to overcome barriers and promote a better exploitation of the resource as regards costs, public acceptance, integration into energy systems, technological issues, environmental impacts and the fulfilment of White Paper targets on installed capacity.

ESHA, the European Small Hydropower Association, is the European co-ordinator of this project which includes ten additional partners: ADEME (France), Studio Frosio (Italy), ÖVFK (Austria), SERO (Sweden), EPFL-LCH (Switzerland),

MHyLab (Switzerland), SCPTH (France), ISET (Germany), IT Power (United Kingdom) and the Lithuanian Hydropower Association (Lithuania). The TNSHP runs for 36 months starting from March 2003.

KEY TOPICS

WHAT ARE THE KEY TOPICS OF THE TNSHP?

- **MARKETING FOR SHP:** Political aspects, International collaboration, SHP Statistics and SHP public image.
- **ENVIRONMENTAL INTEGRATION:** integrated design, social acceptance, bioengineering, reserved flow, environmental effects of water abstractions from rivers, assessment of environmental impact, multipurpose use of water resources.
- **ENGINEERING ASPECTS:** Civil engineering works (weirs and water storage, water intakes, fish migration, erection costs, waterways), mechanical equipment (technological developments of turbines, adequacy of technology for new SHP as well as refurbishment of existing SHP plants) and electrical equipment (generators, operation modes, control and monitoring, etc.).

HOW IS THE TNSHP ORGANISED?

The network is composed of:

- A Steering Group that oversees the network activities and is responsible for policy issues and quality and control of documents produced for publications.
- Three key discussion groups organised around the key topics the thematic network will deal with.
- e-network (electronic networking).
- Network Secretariat.

WHO CAN PARTICIPATE IN THE TNSHP?

The Network is open to associations and the public in general willing to participate.

WHICH DOCUMENTATION IS THE TNSHP GOING TO DELIVER?

- Strategy document on EU RD&D activities and needs (to be updated yearly).
- Layman's guide on how to develop a small hydro site in German, French and Swedish.
- Checklist for SHP developers in French, German and Italian.
- Report on SHP situation in Candidate Countries.
- Brochure on environmental aspects of SHP in English, Italian and German.
- Overview of SHP installed capacities in the EU.



DOCUMENTATION

HOW TO PARTICIPATE IN THE THEMATIC NETWORK ON SMALL HYDRO POWER

ESHA has created a Network Website freely accessible to everyone interested in the small hydropower sector. This site not only offers free information ready to be downloaded but also the opportunity to actively contribute through virtual discussion groups and meetings. Besides, it offers a contacts' database with all people participating in the Network.

If you would like to register to the Thematic Network Website please send your contact details (name, address, telephone, fax and e-mail) to gema.sanbruno@esha.be. If you would like to know more about this project please phone +32 2 546 1945.

ESHA is a non-profit organisation representing the interests of all actors involved in the sector of small hydropower at European level. Based in Brussels, it plays an active role at European political decision level through the dissemination of information, organisation and promotion of seminars and conferences as well as lobbying activities.



Contacts details of ESHA

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