#### SMALL HYDRO POWER NEWS

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SHP Technical Level in China

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## HIGHLIGHTS

### SHP Technical Level in China

SHP seems simpler than big or medium hydro, but it is not simply a "miniature" of large hydropower technology. SHP has its own features. After decades of practice in China, rich experience in SHP technology has been gained, practiced and proven repeatedly. 2

### An Electric Device for Cleaning up Trash Rack

Ancheng station, a cascade one at the lower reach of Fushi reservoir in Anji county, Zhejiang province, has a diversion channel of 43km, with the main section extending 25km and the normal diverted flow of  $11.5m^3/s$ . Passing through villages, fields and mountainsides, the channel carries lots of trash, branches or leaves. At the intake of penstock, it's very difficult for operators to remove the trash manually at the forebay due to the limited width of trash rack and the fast speed, which principally restricts the output of unit. If removing trash during operation, the open gage of guide vane commonly needs to be reduced. Therefore, replacing manual operation with a set of mechanical device for trash removal is highly expected. 11

## Environmental Issues and Management for Hydropower Peaking Operations

Where reservoir hydro schemes are operated primarily to provide peak load services, there are particular environmental risks that should be considered in any environmental impact assessment. At a minimum these should focus on water quality, fluvial geomorphology, riparian vegetation, macro-invertebrate and fish communities underpinned by a sound hydrological analysis. 15

# Hydro Power in Norway - Lessons learned through more than 100 years of developments

#### Development, Political Priorities and Public Opinion

The production of hydro power from its natural water resources has come to mean more to Norway than to possibly any other country in world. Norway during a long period of economic development. Today, Norway is a rich and materially well developed country, and there is no longer any acceptance for further hydro power development. Some of the remaining potential will be utilized for small-scale local developments, but most of it will be incorporated in governmental conservation plans. 20

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