

## **Green Electricity Products and the Sustainable Use of Water Resources**

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### **Abstract**

The non-sustainable use of water creates major environmental problems on a world wide scale. It is even an issue in regions with a relative abundance of this resources, like the Alps. Here, major problems are associated with the construction of dams and the operation of hydropower plants. The environmental impact of hydropower has been subjected to a fierce political debate in the eighties, especially in Switzerland. Recently, the discussion has got a new form and direction with the ongoing deregulation, privatization and internationalization of European electricity markets. In the present paper, the development of green hydropower products is discussed as a means to create new incentives for a sustainable use of water resources in a liberalized market environment. The paper is based on the experiences in a recently started research project which aims at developing a certification procedure to identify "green hydropower" plants. This case— although quite remote from traditional water problems in the Mediterranean region — may be used to draw more general insight for the sustainable use of water resources.