

Name of research institute or organization:

PV-Labor der Berner Fachhochschule Technik und Informatik BFH-TI

Title of project:

PV production in high alpine sites

Project leader and team:

Prof. Urs Muntwyler, project leader

Project description:

The production on the high alpine site Jungfrauoch continued in 2012. The installation was serviced in June 2012.

In 2012 the comparison with other high alpine sites as Birg and other sites in the alps has started. The question is, if high alpine PV-sites could replace the solar production in Northern Africa and Southern Europe. Due to the fast progress in the PV-technology and the strong decline of the production prices this seems more and more realistic.

The study of new sites with existing infrastructure, as for example cable cars, dams, avalanche barreries etc., has started. A new site on an avalanche barrier in Bellwald will be installed with measurement equipment in 2013.

First reflections for a new PV-plant on the Jungfrauoch with new high efficiency solar cells and a high efficiency inverter have started.

Key words:

PV production on high alpine sites, stability of PV-production on high alpine sites

Internet data bases:

<http://pvtest.ch>

Collaborating partners/networks:

Studiengesellschaft Mont Soleil/ Brenet/ SUPSI/ University of Bern/ KWO

Scientific publications and public outreach 2012:

Diskussionspapier mit energie-cluster.ch/ Bau+Energie-Messe (55 Seiten)/ November 2012: Die Photovoltaik ist marktreif für die Schweiz – Der Massenmarkt ist jetzt zu erschliessen! www.energie-cluster.ch

Refereed journal articles and their internet access

Häberlin H., Wie mit PV-Strom durch den Winter?, *Elektrotechnik*, **1**, 44-49, 2012.

<http://www.pvtest.ch/index.php?id=393>

Conference papers

Muntwyler U., Designaspekte von weitgehend Energie-autonomen Häusern in den Hoch-Alpen am Beispiel der „Neuen Monte-Rosa Hütte SAC“, Photovoltaic Conference, Staffelstein, Germany, March, 2012.

Edited books

Häberlin H., Photovoltaik - Strom aus Sonnenlicht für Verbundnetz und Inselanlagen, Electrosuisse-Verlag, ISBN 978-3-905214-62-8, 2012.

Häberlin H., Photovoltaics - System Design and Practice, John Wiley&Sons Ltd., ISBN 978-1-119-99285-1, 2012.

Magazine and Newspapers articles

“Professor fordert Alpine Solaranlagen“, Berner Zeitung, October, 2012.

Address:

PV-Labor
Berner Fachhochschule Technik und Informatik
Jlcoweg 1
CH-3400 Burgdorf

Contacts:

Urs Muntwyler
Tel.: +41 34 426 68 37
Fax: +41 34 426 68 13
e-mail: urs.muntwyler@bfh.ch
URL: <http://pvtest.ch>