

PhoEf

Photons crash on the arts

A research project about the use of photovoltaics in the worlds of the arts.

By Bartaku / FoAM – Brussels (Be), 2007

PhoEf aims to provide insights and information about ways and aesthetics of converting solar irradiation into electricity. More in particular on the opportunities photovoltaic technologies provide to electrical energy depending artistic creations, performances, and interventions.



Besides the drive of the PV-industries gradually there is a new generation of artists emerging, applying the photovoltaic effect in their work. They use different kinds of solar cells as an energy source, an actuator or a light sensor, either or not integrated in their work. Examples are the large scale *Bamiyan Laser Project* by *Hiro Yamagata* who will try to revive the images of the destroyed Buddhas in Afghanistan by using solar cell powered laser beams. On a smaller scale *Sarah Hall* integrates solar cells in her colored glass work and *Bjorn Schoelke* uses them for powering his interactive media works and sculptures.

PhoEf's body of knowledge consists -besides an introductory theoretical part- an overview of the different pv-technologies, looking specifically at their aesthetics and versatility mainly in an off-the-grid context. A PV-in- practice section features artists and arts projects using the technologie as well as a description of the experiences in an ongoing pv-project involving the set-up of an urban meshed node network. Finally the research contains an up-to-date overview of arts oriented PV-tools, Do-It-Yourself resources as well as information about the 'greenness' of the different technologies.

In the period September-December 2007 desk- and field research have shown that there is a clear *momentum* for the development of collaborations between the PV-developppers and the artist community. A lot of R&D departments of companies and research centers are very open for input from -and collaborations with- artists. At the same time amongst the latter there appears to be a fast growing urge to engage in and experiment with photovoltaics.

The aim of this research is to contribute to the realisation of this momentum. It is an opportunity for the development of both worlds and especially it would be a further step towards the worldwide integration and acceptance of photovoltaic technologies. This research project is *obviously not about more! electricity. It is merely about deepening the understanding of electricity using new tools, interacting with new people and of the interwovenness of -matter-mankind-the elements and the cosmos.*

The research is done by Bart Vandeput (*Bartaku*) with the support of the interdisciplinary lab FoAM vzw (Brussels/Berlin/Amsterdam).

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