

1. Toolbox: “Solar Roof Check”

1.1. Description of the tool / methodology of the tool

The guide “SolardachCheck” is developed by the co2online non-profit GmbH, within the scope of the campaign “climate protection” (“Klima sucht Schutz”) promoted by the German Federal Ministry of Environment.

Based on five simple steps (your concern, roof, map, funding, result, information), the guide reviews, if a roof is convenient/suitable for a solar thermal- and/or a photovoltaic system. Beside the individual evaluation of economic efficiency of a solar thermal- or a Photovoltaic system, the guide shows how many kilograms CO₂ emissions could be avoided by generating renewable solar electricity or hot water.

With simple inquiries and graphic aids, the slope, the alignment and the shading of the roof are considered and economical aspects can be adapted. For the calculation of the roofage a GoogleMaps application is available. With this application the suitable roof area can be estimated.

Primarily the “SolardachCheck” addresses to owners of single- or multi-family houses. But the services are also available for tenants. At the end of the consultation, they can access a datasheet, which contains all results. So they can give their landlord something to think about.

1.2. Outcomes of the tool

Outcomes of the individual evaluation:

- Efficiency of a PV- or Solar thermal system (amortization, interest, etc.)
- Avoided CO₂ emissions
- Information about financial facilities
- Technical dates of a PV-or Solar thermal system

Additional information:

- How to realize a PV-or Solar thermal system?
- Different producer of PV-or Solar thermal systems
- Addresses of local craftsman
- Potential subsidies

1.3. Assessment of the tool

1.3.1. Advantages / Disadvantages

Advantages:

- Freeware
- The guide is very easy to handle for lay people
- Interested people get individual information, with an estimation for the specific roof

Disadvantage:

- The result is only a provisional estimate, which doesn't replace a detailed planning
- There is only a German version of the tool.

1.3.2. Improvements

- Develop the tool for other countries
- Link to relevant internet pages e.g. KfW bank

1.4. Examples



Result: the chart shows the profitability of a PV system (Source: www.co2online.de)

1.5. Literature

- Website of CO2Online campaigns and projects Energy-saving guide (accessed at 16.11.2010) <http://www.co2online.de/kampagnen-und-projekte/projekte/energiespar-ratgeber/solardachcheck/index.html>
- Website of Klimaspot statements 2009 (accessed at 16.11.2010) <http://www.klimaspot.de/2009/09/solardachcheck-lass-die-sonne-auf-dein-haus/>