„EPASch“
Energy Potential Analysis of site development concepts

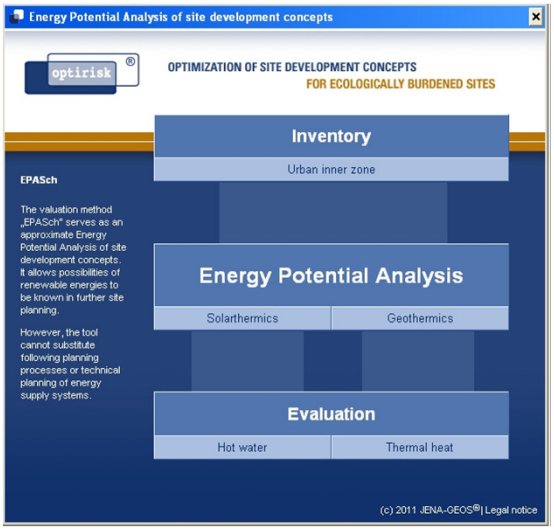
What is EPASch?

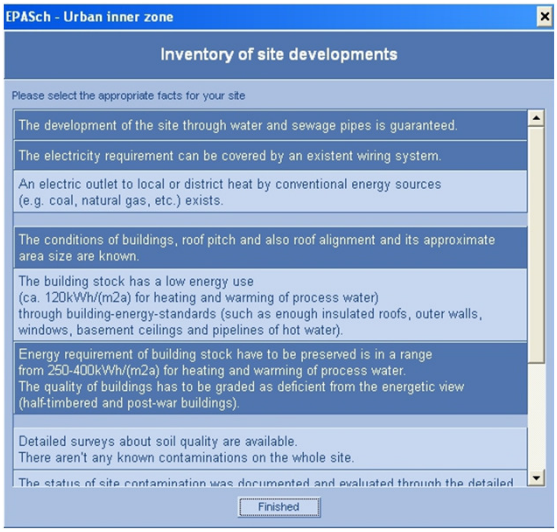
With regard to current discussions about climate change the reduction of CO_2 emissions has become an important task. Employing renewable energies an energy supply which is environmental-friendly but also independent of finite resources should be achieved. Inner-city brownfields provide a great area potential for renewable energies. In the urban inner zone the existing heat requirement needs to be covered consumer-oriented by potentials of solarthermics and near-surface geothermics. These potentials should be integrated into site development concepts as early as possible.

For that purpose „EPASch“ was developed. The software tool enables an energy potential analysis of site development concepts for brownfields in the urban inner zone in relation to the site-specific heat requirement. In addition, different optimization possibilities for an integration of solarthermics and geothermics can be visualized by means of varying scenarios. Within the 2 working steps *Inventory* and *Energy Potential Analysis* the user is required to answer questions about the on-site situation and about characteristics of the urban-planning concept with the help of fixed input screens. „EPASch“ processes and analyzes all inputted information and displays the identified energy potentials for the brownfield by a summarizing evaluation of the results.

Possible Applications

- Valuation of solar energy and near-surface geothermal potentials for site development concepts of brownfields
- Evaluation of energy potentials at existing roof-top areas and open spaces
- Access to energetic optimization variants during the planning process of site development concepts
- Cost savings due to an early integration of renewable energies into urban-planning designs and possibilities of long-term energy savings
- Image improvement of the brownfield by the use of renewable energies





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