

Your benefits

Energy self-sufficiency

Due to the accuracy of hourly simulations, alware can lower investment as well as operational energy costs. This is achieved by dimensioning the components of energy concepts (building and engineering) to the required minimum for economic feasibility, considering current and predicted future carbon pricing.

Our mission

We take responsibility for resource efficiency of materials in the construction of buildings and their services and for the usage of energy sources.

Good for the climate

The aim of our consultancy is to make building physics transparent to you. We will tailor the dimensioning of your building services accurately to your specific project requirements, avoiding excess use of resources.

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I am interested in an electricity plan CO₂-saver, which reduces my electricity costs if my behaviour is sustainable.

WE ARE CONVINCED:
**SUSTAINABLE =
ECONOMICALLY
FEASIBLE**



**CHECK THE HOURLY
CO₂-EMISSIONS OF YOUR
ELECTRICITY CONSUMPTION**

Our approach

The uncertainty around the economic feasibility of sustainable, decentralised solutions is caused by an unrealistic methodological approach to planning buildings and districts.

If energy performance predictions for electricity, heating and cooling are based on peak loads only, sustainable energy systems will appear inadequate.

If all calculations are based on the assumption that every day and every hour of the year are identical, and that renewable energy is not available, a more realistic dimensioning of building services is impossible.

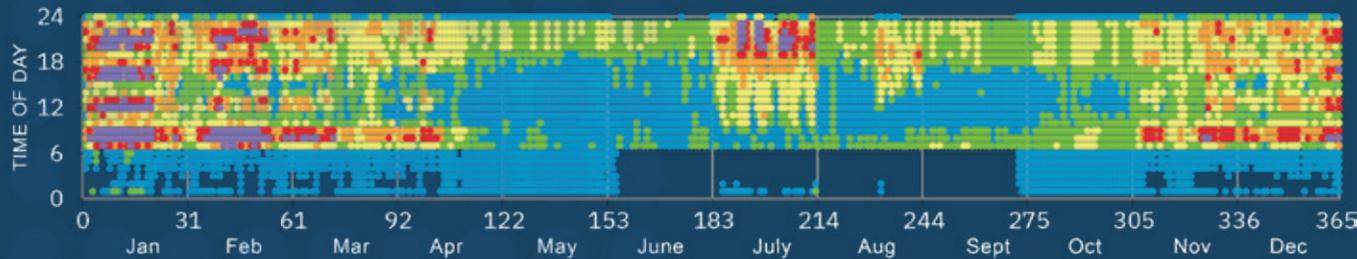
Only a detailed hourly analysis of all 8760 hours of the year will allow for reliable evaluation of the economic feasibility of building services.

THE ALWARE SOLUTION IS AN HOURLY EVALUATION OF ALL ENERGY FLOWS THROUGHOUT A YEAR.

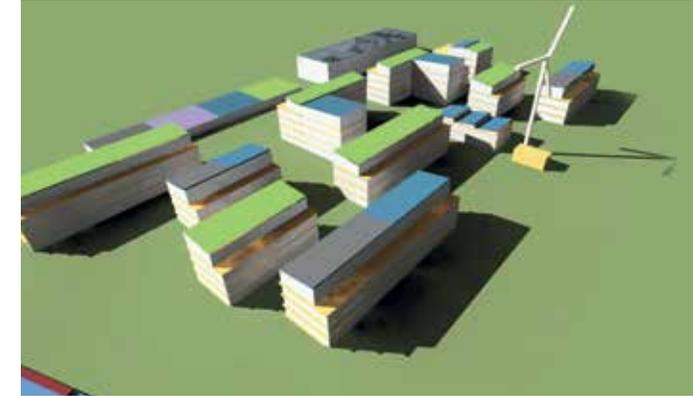
8760 checked

This allows for accurate predictions of energy consumption and economic feasibility of the overall system. The simulation results provide clients with the necessary transparency for decision making about investments. In addition to that, the hourly simulation allows for an evaluation of the CO₂ emissions caused by the consumption of all energy sources (e.g., national electricity grid and gas network).

Exemplary CO₂ emissions for energy sources for each of the 8760 hours of the year

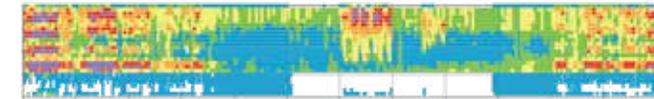


In practice



Example of a building- with energy concept- simulation
building-reference-area 13.000 m²
building area (roof) 5.600 m²
district with 430 Personen
requirement: heat 420 MWh/a, electricity 380 MWh/a

BEFORE



Original energy concept

Annual CO₂ emissions 314 tons
Primary system using gas

AFTER



New energy concept based on simulation

Annual CO₂ emissions 128 tons primary system consisting of heat pumps, geothermal probes and electricity storage

Sustainability
evaluation of your own project
www.8760-checked.energy

