

**Autodesk®**  
Ecotect® Analysis

Visualize sustainable design.



# Create More Sustainable Designs

Comprehensive analysis capabilities help you to analyze and simulate conceptual designs. Study alternatives and make decisions earlier to deliver more achievable, resource-efficient building designs.



Image courtesy of ARBA Studios

## Design More Sustainably from the Start

Autodesk Ecotect Analysis software is a concept-to-detail sustainable design analysis solution with architect-designed desktop tools that help measure the impact of environmental factors on a building's performance and web-based technology for whole-building analysis. Customers who add Subscription to their Autodesk Ecotect Analysis software license can access\* the web-based Autodesk® Green Building Studio® service for the duration of their Subscription and use the service to more quickly evaluate multiple design alternatives for energy efficiency and carbon neutrality. Autodesk Ecotect Analysis helps make it easier for building designers to conduct simulations and visualize results. Analysis can be conducted on a building model as soon as the thermal zones are defined, helping your team make fact-based, more sustainable design decisions during the schematic stage when designs are easier and less expensive to change. These capabilities can result in improved building performance, faster time to market, and lower project costs as well as lower total cost of ownership over time. Unlike complicated engineering analysis tools, Autodesk Ecotect Analysis was developed specifically for architects and designers to provide powerful feedback designed to be easier to interact with and interpret and help improve communication.

\*Access to the Autodesk Green Building Studio web-based service is subject to the terms of use that accompanies the service. See <https://www.greenbuildingstudio.com/default.aspx> for details.

## Stay Competitive with BIM Solutions from Autodesk

The world is changing. The economy is changing. Building and architectural firms must adopt new design practices to meet increasing requirements for energy and resource efficiency—delivering designs that minimize the environmental impact of new and renovated buildings, while seeking opportunities to keep costs low. Integrating sustainable design technologies from Autodesk into your workflows can help you more easily transform today's challenges into profitable opportunities.

Autodesk building information modeling (BIM) solutions help make sustainable design practices easier, more efficient, and less costly. BIM solutions from Autodesk—Autodesk® Revit® Architecture software and Autodesk® Revit® MEP software—are interoperable with Autodesk® Ecotect® Analysis software.

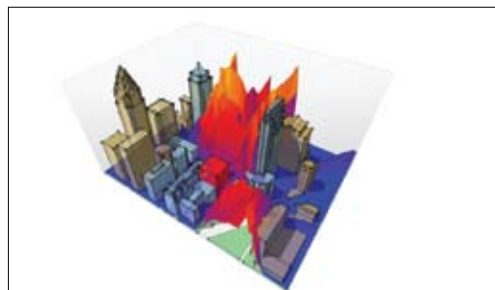
When you add Autodesk® Subscription to your Autodesk Ecotect Analysis software license, you can get access\* to the following web-based capabilities, with Autodesk® Green Building Studio® software.

### Whole-Building Energy Analysis

Calculate the total estimated energy use and carbon emissions of your building model on an annual, monthly, daily, and hourly basis, using a global database of weather information.

### Visual Impact

Analyze site projection angles, assess obstructions, calculate vertical sky components for any point or surface, and visualize the no-sky line in any space.



### Carbon Emission Reporting

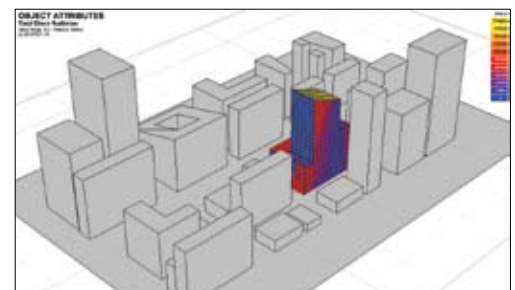
Report carbon dioxide (CO<sub>2</sub>) emissions for nearly all aspects of a proposed building, including on-site fuel use as well as emissions from power plants.

### Water Usage and Cost Evaluation

Summarize estimated water use inside and outside the building, based on the number of occupants as well as the building type.

### Solar Radiation

Visualize incident solar radiation on windows and surfaces, showing differential incident solar radiation calculated over any period.



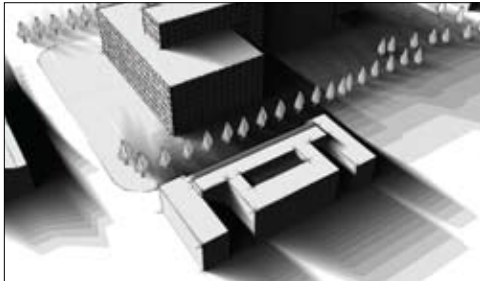
# Add Value Through Energy and Water Efficiency and Environmental Performance

Gain better design insight with whole-building energy, water, and carbon emission analysis.\* Interact with powerful visual feedback to study how environmental factors may impact building performance.

	<b>Ecotect Analysis Desktop Tools</b> Visualize and Simulate Design Performance	<b>Green Building Studio</b> Analyze Multiple Design Alternatives
Whole-Building Energy Analysis		x
Carbon-Emissions Estimates		x
Water Use and Cost Estimates		x
ENERGY STAR® Scoring		x
LEED® Daylighting Credit Potential		x
Natural Ventilation	x	x
Wind Energy	x	x
Photovoltaic Collection	x	x
Thermal Performance	x	x
Solar Radiation	x	
Visual Impact	x	
Shadows and Reflections	x	
Daylighting	x	
Shading Design	x	
Acoustic Analysis	x	

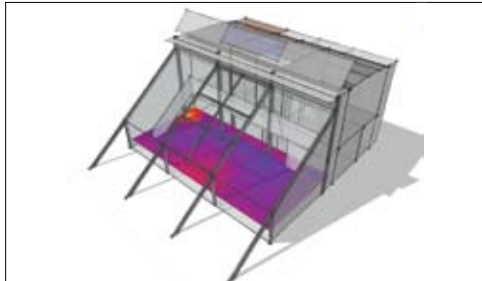
### Shadows and Reflections

Display the sun's position and path relative to the model at any date, time, and location using this simulation tool. View how sunlight enters through windows and moves around within a space.



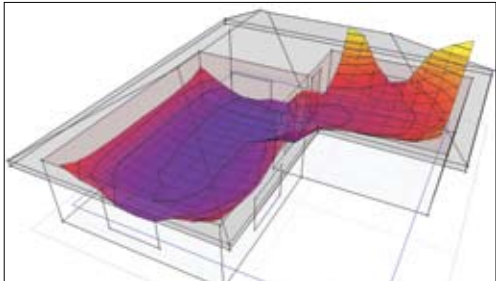
### Daylighting

Calculate daylight factors and illuminance levels at any point in the model or over the analysis grid. This tool helps determine potential savings due to daylight-linked lighting design.



### Thermal Performance

Calculate heating and sensible cooling loads for models with any number of zones or types of geometry. Analyze effects of occupancy, internal gains, infiltration, and equipment items.



We believe expertise in these tools helps provide a strategic advantage — whether we are designing something new or working on a retrofit or renovation.

—Tomislav Zigo  
Director of Virtual Design and Construction, Clayco  
Founding Partner, ARBA Studios

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Wind Turbine design based on QuietRevolution.