

# Greenhouse Energy Consumption

[AgEnergy](#), by Scott Sanford, University of Wisconsin Madison. Resource site for information on greenhouse energy conservation.

[10 Ways to Lower Your Spring Heating Bill and Save Money](#) - pdf. An article from the December 2005 issue of GMPRO magazine by Erik Runkle, Michigan State University. This article discusses ten production strategies for growing crops more efficiently and reducing energy consumption.

[Individual Greenhouse Energy Conservation Checklist](#) - pdf., by A.J. Both, Rutgers University, and Paul Fisher, University of New Hampshire. This 3-page document includes a checklist for greenhouse operations for evaluating energy conservation in their business. Also included are calculations for determining heat loss based on greenhouse structure and location.

[Virtual Grower](#). A decision support tool for greenhouse growers provided by the USDA Agricultural Research Service. Users of this free software can build a virtual greenhouse with a variety of styles and materials for roofs and sidewalls, schedule temperature set points throughout the year, and predict heating costs for over 230 locations within the U.S. [Click here to download software.](#)

[Greenhouse Alert on Energy Savings](#), multiple articles by the Floriculture Area of ExpertiseTeam at Michigan State University

[Biomass Energy and Funding Resources for MI Greenhouses](#), a presentation delivered at the 2005 Michigan Greenhouse Growers Expo by Dulcey Simpkins, Michigan Biomass Energy Program

[Greenhouse Energy Efficiency, a presentation by Scott Sanford, University of Wisconsin – Madison](#)

[Reducing Natural Gas/Propane Use for Greenhouse Heating](#), by Scott Sanford, University of Wisconsin. This four-page document discusses strategies to minimize heat loss and maximize heating systems, as well as considerations for greenhouse space use efficiency.

[Greenhouse Energy Conservation Checklist](#), by John W.



Bartok, Jr., the University of Connecticut

[Greenhouse Energy Conservation](#), an excerpt from the book Greenhouse Gardener's Companion by Shane Smith

[Greenhouse Energy Conservation and Alternatives](#), a short book chapter from Introduction to Controlled Environment Agriculture and Hydroponics, by Patricia Rorabaugh, Merle Jensen, and Gene Giacomelli, the University of Arizona

[Energy Conservation for Greenhouse Growers](#), by David Tatum and Jimmy Bonner, Mississippi State University

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