



## Using EPA's ENERGY STAR® Portfolio Manager to Establish CO<sub>2</sub> Reduction Goals for Buildings

The Environmental Protection Agency's (EPA) ENERGY STAR Portfolio Manager is a free online tool that benchmarks a building's energy performance and rates it on a scale of 1–100 relative to a representative sample of similar buildings nationwide.<sup>1</sup> Once a baseline is established, Portfolio Manager can be used to manage energy performance over time, as well as to establish energy consumption reduction goals, and associated carbon dioxide (CO<sub>2</sub>) emissions reductions. These estimated CO<sub>2</sub> reductions can then be used to determine your pledge for the Cool Capital Challenge ([www.coolcapital.org](http://www.coolcapital.org)).

Guidance on how to calculate the buildings' portion of your Cool CO<sub>2</sub> reduction pledge:

### 1. Establish a user account in Portfolio Manager:

- Go to [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark) and login to Portfolio Manager. If you do not already have a user account in Portfolio Manager, click the "New User? Register" link on the Portfolio Manager login page and follow the instructions.
- For more information on how to use Portfolio Manager, consider taking the Portfolio Manager Tour and review the available Trainings and Presentations by clicking on the link for the "Tools and Resources Library" and selecting "Training."

### 2. Enter a Building into Portfolio Manager:

- From the Welcome page, click "Access My Portfolio" to reach the "My Portfolio" page. Then go to "Add Facility" to add general information about your building and click "SAVE."

*Note: Once you add a building, you can edit the general facility information by clicking the "Edit" link in the "General Information" section of the "Facility Summary" view.*

- From the "Facility Summary" page, click on "Add Space" in the Space Use section and enter in appropriate space type.
- Indicate an Effective Date for this space data. This is usually the date of construction or the most recent major renovation of the building. Click "CONTINUE."

*Note: Depending on the space type selected, you may be prompted for further detail. Click "CONTINUE" when done.*

- Enter the space attributes, such as gross floor area, number of occupants, number of personal computers in use, operating hours/week, and the date of building construction or the last major renovation. Click "SAVE."

*Note: If the precise information is unavailable, you may check the box designating it as a temporary value. An alert will appear to remind the user to verify this information.*

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<sup>1</sup> The tool calculates site energy intensity and weather-normalized source energy intensity for any building type; for certain building types, it also provides a national energy performance rating.



### **3. Establish an energy consumption reduction goal and calculate associated CO<sub>2</sub> emission reductions:**

- From the “Facility Summary” page, click on “Add Meter” in the Energy Meters section and enter in appropriate meter information.
- On the “Facility Summary” page, click “Set Performance Energy Target” in the Facility Performance section. On this page, you can set an energy target reduction goal (%) or an ENERGY STAR rating goal. After you have determined your energy goal, hit “SAVE” to return to “Facility Summary” page.
- Click on “Generate a Statement of Energy Performance” to generate a report based on your goal. This statement will give you an estimate on your current CO<sub>2</sub> emissions and of your estimated CO<sub>2</sub> emissions associated with your energy consumption reduction goal.
- To calculate your CO<sub>2</sub> emissions reductions associated with your energy goal, subtract the “Target” CO<sub>2</sub> emissions from “Current” CO<sub>2</sub> emissions.
- If you would like to increase your CO<sub>2</sub> emissions reductions, return to “Set Performance Energy Target” and establish a new energy target reduction goal.

*Note: Do not look at the “Delta” column for your CO<sub>2</sub> emission reductions. This delta is the difference between current emissions and your original baseline, not your future target.*

### **4. Pledge your CO<sub>2</sub> emission reductions to Cool Capital Challenge:**

- Go to [www.coolcapital.org/institutions](http://www.coolcapital.org/institutions) for full instructions to take the Institutional Challenge.
- Email [institutions@coolcapital.org](mailto:institutions@coolcapital.org) to pledge CO<sub>2</sub> emissions or with questions.
- Start reducing your energy consumption and environmental impact!

According to the ENERGY STAR training "Best Practices to Improve Energy Performance in Office Properties: A Compilation of Reporting from Partner Perspectives" the average existing commercial building can immediately cut annual energy use and CO<sub>2</sub> emissions by 10 to 15% through operational and management practices that cost \$0.05 to \$0.08 per square foot to implement. And, no-cost O&M improvements can produce significant energy savings. Through additional expenditures in the \$0.25 to \$0.50 per square foot range, EPA analysis and partner experience suggests that energy and CO<sub>2</sub> savings of 30% or more can be achieved, with payback periods of 9 to 18 months.

For more information on the Cool Capital Challenge, please visit [www.coolcapital.org](http://www.coolcapital.org)

For more information on Portfolio Manager, please visit [energystar.gov](http://energystar.gov)