



### How Can Green Footstep Be Used?

#### Green building and sustainability consultants

- Show the trade-offs between energy efficiency, on-site renewable energy, and green power/RECs/carbon offset purchasing to meet project goals; and
- Complement a financial model.

#### Students and Professors

- Learn about carbon impact of buildings in a hands-on way;
- Connect issue of one building impact versus global climate change; and
- Find useful tools for high-performance design

#### Designers

- Conduct building life cycle carbon assessment quickly;
- Ascertain Architecture 2030 compliance;
- Identify carbon solutions in early design phases; and
- Track & Refine solutions through later design phases and occupancy.

#### Owners, Developers, Policy Makers, Directors of Sustainability

- Understand impact of home, building, campus or buildings portfolio;
- Identify and compare solutions to reduce carbon to meet organization sustainability goals; and
- Know that with GFS, carbon footprinting of buildings is easy.

#### Website

<http://greenfootstep.org>



## GREEN FOOTSTEP

### YOUR BUILDING IS PART OF THE SOLUTION TO GLOBAL CLIMATE CHANGE

If you were designing a building and RMI handed you a custom report that showed you exactly how much (if any) your project was adding to climate change, would you be more motivated to reduce your building's carbon emissions? What if RMI told you how to reduce your emissions through design modifications? Would that make it easier?

### RMI GIVES YOU GREEN FOOTSTEP

An architect, engineer, owner, developer, student or educator enters information about the project, and Green Footstep calculates the carbon footprint caused by its site development (the increase or decrease in the capacity of the site to store carbon), construction emissions, and operational emissions. Green Footstep graphs these emissions over any chosen period, indicating the project's lifetime carbon emissions. The user can adjust design targets for the building to change the carbon footprint compared to a baseline. These targets include the percentage of native vegetation on the site, the building's energy intensity, and emissions saved by onsite renewable energy. A report page describes how the carbon footprint of this individual project relates to global climate change goals.

### THE GREEN FOOTSTEP CALCULATOR

The Green Footstep calculator is a building sustainability assessment tool using ecologically based assessment criteria. Most existing tools and assessment systems measure performance relative to a baseline case of "standard performance." Generally this equates to a typical code-compliant building and green performance is measured as a percentage reduction in a particular area, such as water or energy use. As a result, green buildings are rewarded for causing less environmental damage than typical buildings. However, these relative, rather than absolute, performance evaluations rarely make the connection to actual environmental impacts.

The Green Footstep tool brings forth considerations surrounding building site ecology into the domain of building stakeholders. Having brought about this awareness the tool is better able to empower building stakeholders with scientific information that is relevant to building sustainability assessment systems (such as United States Green Building Council's LEED) and existing initiatives such as the Architecture 2030 Challenge and EPA's Energy Star program.