RESNET's HERS® Carbon Index



The US energy system is changing

First-of-its-kind carbon rating index addresses critical issue of greenhouse gas emissions.

The Standard:

Based on ANSI/RESNET/ICC 301-2019 Standard "CO₂e Rating Index"

Provides a more accurate metric to measure emissions: addresses when energy is used, as well as how much of it is used



Uses hourly CO₂e emission rates and electricity generation emission projections as published by the National Renewable Energy Laboratory (NREL).



Combines these values with the hourly energy consumption given by the calculation of the HERS® Index to provide a new metric valuing the carbon emissions when energy is used.

How can it be used?

- ✓ Usable for local climate change initiatives
- ✓ Utility incentive programs
- √ Consumer awareness
- ✓ Can be used in Environmental, Social and Governance (ESG) reporting
- ✓ Can be a basis for green bonds

How it works:

A RESNET accredited
HERS software will take
the information entered
for a HERS Rating and
calculate the HERS® Carbon
Index Score. No additional
inspections needed.



HERS Rating Data



RESNET HERS Software



HERS Carbon Index Score



Zero Carbon Homes

Reference Home

Existing Homes

LESS CARBON

MORE CARBON

Background

The HERS Carbon Index calculates greenhouse gas emissions in units of ${\rm CO_2e}$ or equivalent ${\rm CO_2}$ emissions, which includes the emissions of non-carbon greenhouse gases such as methane. Reports on emission reductions commonly use the word carbon when they really mean greenhouse gas.

Up until now, almost all carbon emission calculations have been based on annual average emissions. This sends the wrong signal to households and builders who want to minimize emissions, because the effect on emissions of a given house depend as much on the time of energy consumption as the amount. Throughout the world, policy makers are concerned about how to achieve large emission savings but have not developed a standard for how to compare the emission savings from different design and fuel choice options for buildings. This standard may be the first in the world to offer this critical information to the consumer and builder.

For more information, visit resnet.us/about/hers-carbon-rating-index/

