# **RESNET's** New Carbon Rating 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 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 CO<sub>2</sub>e 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 Carbon Rating Index Score. No additional inspections needed.



**HERS Rating** Data



**RESNET HERS Software** 



**Carbon Index** Score



Zero Carbon Homes

Reference Home

**Existing Homes** 

**LESS CARBON** 

**MORE CARBON** 

## Background

The RESNET CO<sub>2</sub>e Rating Index calculates greenhouse gas emissions in units of CO<sub>2</sub>e or equivalent CO<sub>2</sub> 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/co2eindex

