**Comment/Explanation\*:***Include your justification for your proposed change to the draft standard below.*
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1. The last sentence in the Scope section is more appropriate as purpose of the Stnadard.
2. The sources of renewable energy should be more consistent with ASHRAE 90.2, ASHRAE 90.1 and other Standards. The draft qualification in Section 4.3 of “90% reduction” in GHG or other environmental impact is ill-defined. It is widely known that there is no standardized approach for measuring the GHG impacts of biomass combustion, and existing data for claimed GHG impacts of biomass fuels have very wide ranges , well beyond 2x of the difference between biomass and fossil fuels. In addition, even within the term “fossil fuels” in Section 4.3, the range of CO2e emissions in Table 4.1.1.(1) is 25.8%, which itself is well beyond a 10% difference requested to be demonstrated by a renewable fuel substitute. This Public Comment uses the ASHRAE 90.2 language delimiting renewable sources in order to reduce complexity and uncertainty of applying renewable energy in RESNET 1580.
3. The revisions in Section 4.3 also clarify what a user would need to determine regarding disposition of RECs for them to make undisputed claims towards renewable energy for the purposes of this Standard. The language is also derived from and more consistent with ASHRAE 90.2.

**Proposed Change to the Draft Standard\***
*Use “strikethrough” and “underline” formatting to indicate all proposed changes. Changes must be shown with “hard-formatting” strikethrough and underline, not “track changes”.*

*Use a color other than red to indicate proposed changes to the draft.*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1. Purpose:**

The provisions of this standard provide requirements on how to estimate CO2e, emissions from measured data on electricity and fuel consumption of a facility or organization. It is intended for the purposes of complying with standards on disclosure of emissions and of reducing emissions year after year using an Energy Management System such as that required by ISO 50001 and used in many utility-sponsored Strategic Energy Management programs. And it can be used in conjunction with Building Performance Standards that are in effect in many cities, as well as with Energy Star Portfolio Manager.

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**2. Scope:**

This standard applies toany facility of any type that consumes electricity or other fuels. It supports emissions calculations that can be used in conjunction with calculations of the embodied emissions impacts of materials used in constructing residential buildings. It also supports compliance with the recommendations of ISO 50010, and with ISO 50001, which has been widely used for industrial facilities. ~~And it can be used in conjunction with Building Performance Standards that are in effect in many cities, as well as with Energy Star Portfolio Manager.~~

**4.3** Renewable Energy. Renewable energy shall be limited to sources that are not counted toward a renewable energy portfolio nor claimed by ~~or toward~~ a renewables acquisition goal of another organization, and comes from any combination of photovoltaic, geothermal energy (not including ground source heat pumps), or wind systems. ~~that either produce thermal energy or produce electric power that rely on naturally-occurring, on-site resources that are not depleted as a result of their use, and whose direct or indirect Co2~~~~e~~ ~~emissions of greenhouse gas, other gases with adverse impacts on human health, water pollutants, or other toxic releases, and whose impacts on ecosystems are at least 90% lower than those of fossil fuels.~~ Renewable energy sources off site shall be owned by the organization, or shall be leased for a 15-year or greater term.

Note 1 to entry: Geothermal energy that releases high levels of SO2 gases to the atmosphere does not qualify under this requirement.

~~Note 2 to entry: Wood pellet or solid wood combustion does not qualify if the GHG emissions associated with producing the wood-derived fuels are not at least 90% lower than those from gas-fired generation.~~

~~Renewable Energy Systems shall include, but are not limited to, solar energy systems, wind energy systems and biomass energy systems.~~

Renewable Energy shall not include unbundled renewable Energy Credits (REC’s) ~~for which the time of production and the grid into which they are supplied are not known. Renewable Energy shall be produced from systems that retire any RECs that they could generate.~~ RECs associated with on-site and off-site renewable energy production used for estimating CO2e emissions shall be retained and retired on behalf of the project for a period of not less than 15 years