



Guide to Making Claims About Your Solar Power Use

Introduction

This guidance document describes best practices for appropriately explaining and characterizing your solar power activities and the fundamental importance of renewable energy certificates (RECs) for solar power use claims. This guidance is primarily focused on claims associated with on-site projects but is equally relevant for off-site owned projects as well.

RECs Put the “Renewable” in Renewable Electricity

Much of the confusion about renewable electricity use claims, including solar power use claims, is because our electricity grid does not distinguish where the electricity was generated and delivered.¹ Electrons produced by a solar panel are no different than electrons produced by a coal-fired power plant or any other electricity generating technology. The indistinguishability of these electrons coupled with the inability to direct where electrons flow within the grid resulted in the U.S. electricity market establishing a separate accounting framework that tracks the generation, sale, and ultimate “use” of renewable electricity. Renewable electricity generators, therefore, produce two distinct market commodities: 1) electricity and 2) RECs. These commodities can be used and/or sold separately or together. The REC instrument embodies the environmental attributes of the underlying electricity generated from a renewable resource.

Across the United States, 10 regional electronic REC tracking systems facilitate the creation, management, and retirement of RECs for most renewable energy projects and resources.² Even if the renewable energy project is not formally registered with and issued RECs from a regional tracking system, the renewable project still generates the environmental attributes that would normally be conveyed by the REC instruments. These environmental attributes or RECs can be sold or transferred to other parties through contractual agreements.

What is a REC?

A renewable energy certificate – REC (pronounced: rĕk) is a tradeable, market-based instrument that represents the legal property rights to the “renewable-ness”—or non-power (i.e., environmental) attributes—of renewable electricity generation.

A REC is created for every megawatt-hour (MWh) of electricity generated and delivered to the grid from a renewable energy resource.

Electricity cannot be considered renewable without a REC to substantiate its renewable-ness.

¹ NREL 2015. Renewable Electricity: How do you know you are using it? <http://www.nrel.gov/docs/fy15osti/64558.pdf>

² NREL 2013. Renewable Energy Certificate (REC) Tracking Systems: Costs & Verification Issues. <http://www.nrel.gov/docs/fy14osti/60640.pdf>

RECs are legal instruments that contractually convey the attributes of renewable electricity (i.e. environmental attributes) to their owner.³ As such, the REC owner has exclusive rights to make claims—either explicitly or implicitly—about “using” or “being powered with” the renewable electricity associated with that REC⁴, as well as the associated claims about carbon footprint reductions. Only the owner of a REC should make claims about using renewable electricity, and once made, no other entity can legally make claims about using the renewable electricity associated with that REC. RECs issued through REC tracking systems can be “retired” or removed from circulation once the owner has made a claim against the underlying attributes of the REC.

Making Solar Power Use Claims

Your institution might have solar panels on-site and use the electrical output to power its facilities, but that does not necessarily mean it can claim to use solar power. The ability to claim “use” of solar electricity from the on-site solar system is contingent on your ownership or exclusive rights to the associated RECs. The requirement to own RECs to substantiate your use of solar energy is true of electricity generation from either a self-owned or third-party owned system, such as through a power purchase agreement (PPA) or solar lease.

To make a solar project financially feasible or improve its return on investment, the project’s RECs are often not conveyed to the electricity consumer, but are sold by the project owner or project developer into the open market. Although selling the associated project RECs brings down the delivered cost of electricity to the consumer the consumer cannot in the absence of owning the RECs claim to be using solar power. In these cases, it is the eventual buyer of the project’s RECs that can make the claim of using renewable electricity from the project. So what is the electricity consumer to do if they must sell the RECs associated with the solar project? Read the EPA white paper on [REC Arbitrage](#) to learn about this widely used instrument swap approach.

The following table provides a sampling of appropriate claims for different scenarios of REC ownership. For a more detailed explanation of claims, please visit the Green Power Partnership’s [Solar Claims webpage](#):

Scenario	Appropriate Marketing Claims
Organization has on-site solar system and owns associated project RECs.	• We are using solar power. • Our solar panels are reducing our organization’s carbon footprint. • We are powered by solar energy. • Our electricity comes from solar panels.
Organization has on-site solar system but does not own associated project RECs.	• We generate solar energy but sell it to another party. • Our solar panels are helping to reduce our energy costs and generate revenue through the sale of RECs. • We are not using solar power, but our solar system is helping to green the grid.

³ Center for Resource Solutions 2015. The Legal Basis for Renewable Energy Certificates. <https://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>

⁴ Federal Trade Commission 2012. Guides for the Use of Environmental Marketing Claims https://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf

Scenario	Appropriate Marketing Claims
	By selling RECs from our solar system to our utility, we are helping the utility fulfill its state-mandated renewable energy targets.
Organization has on-site solar system but does not own associated project RECs; however, purchases replacement wind RECs equal to 100 percent of its power needs.	We generate solar energy but sell the RECs to another party. However, we purchase 100-percent wind power and have zero Scope 2 emissions.

Best Practices in Making Solar Use Claims from On-Site Systems

When making claims about your solar power use, whether through press releases, websites, speeches, videos or other media or public communications, it is important to accurately reflect your specific solar arrangement. By being clear and accurate in your claims, you are helping to ensure that there are no double use claims being made on the same solar electricity.

In order to make accurate and legitimate solar use claims, we suggest the following as best practices:

Be specific and clearly define RECs and who owns them in any public communication.

In your communications and marketing materials, be specific enough to ensure a reasonable consumer or stakeholder understands your solar power arrangement (i.e., who is ultimately using the solar power as substantiated by ownership of the REC).

We suggest that in any press release or public statement, you define what RECs are and who owns them. Partner organizations are encouraged to [contact](#) the Green Power Partnership for assistance when making voluntary green power claims.

For more information on RECs visit the Green Power Partnership's [RECs webpage](#).

If you are claiming to use solar electricity, ensure you either own or have exclusive contractual rights to the environmental attributes or RECs to substantiate your claims.

Before making any claims about “using” solar power, make sure you own the environmental attributes associated with your system or for systems registered in a tracking system that you own the RECs or have had them retired on your behalf in the system.

If you own your solar system, you can claim to be using the solar power as long as you have not 1) sold the RECs to another party, or 2) entered into any contractual agreements that sell or transfer the RECs or the environmental attributes to another party. If the system is registered in a REC tracking system and formally issued RECs, you must retain and retire these RECs in the tracking system.

If your solar system was installed via a PPA or solar lease, you should review the contract and verify that your organization owns the environmental attributes or RECs if it wishes to make claims about using the associated solar power. RECs can be delivered and retired on your behalf

contractually in the lease or purchase agreement. If the system is registered in a REC tracking system, RECs will be issued to the project owner's account and the project owner must either transfer the RECs to your account in the tracking system, or if you do not have an account, retire the RECs in the tracking system on your behalf.

Note, contracts for solar are not always entirely clear with respect to REC ownership, and how transfer and retirement will occur. You should confirm your understanding of what happens to the RECs in any transaction to ensure exclusive ownership of the RECs and exclusive claim to the solar power.

REC ownership is often affected by state laws and incentives. In most states, the project owner is assigned ownership of the environmental attributes or RECs generated by the project. However, some state policies or programs require that RECs be transferred to a utility to help it meet state mandates, such as renewable portfolio standards. You can learn more about your specific state and utilities policies by visiting the online [Database of State Incentives for Renewables and Efficiency](#). For most states, REC ownership policy is covered by either its net-metering or interconnection policies. Again, you may also want to inquire with your utility or solar installer to confirm REC ownership.

If you do not own the RECs associated with your solar system, do not make claims about using solar electricity.

Without REC ownership, making claims about using solar power can result in a number of risks to your organization as well as violate state and Federal law and guidance, including the following:

- **Legal risks**—Possible scrutiny by the Federal Trade Commission (FTC) and/or your state's attorney general's office for false or deceptive marketing claims. This is not only true of electricity consumers but also third-party suppliers who develop solar projects through PPA contracts. A PPA developer can't claim to be selling solar energy if the PPA doesn't convey the RECs to the off taker of the electricity.
- **Contractual and financial risks**—Potential for breach of contract by conveying the same environmental attributes to multiple users.
- **Brand and reputation risks**—Possible requirement to issue a clarifying statement regarding the claims about your solar power project, use of solar energy or carbon footprint reductions.

An organization that claims to be using solar power, but does not own the RECs associated with their solar generator's output, may be double counting or claiming the renewable attributes of the electricity. Double counting RECs between multiple parties undermines the renewable electricity market by overestimating the amount of renewable electricity generated/used relative to the number of megawatt-hours produced.

Avoid implied claims.

If your company or institution installs on-site solar but does not own the associated RECs, avoid making implied claims that consumers or stakeholders might interpret as you "using" solar. For instance, as the FTC notes in an example of a manufacturer with solar on its facility's rooftop: "Even

if the manufacturer uses the electricity generated by the solar panels, it has, by selling the renewable energy certificates, transferred the right to characterize that electricity as renewable [...]. It also would be deceptive [...] to advertise that it 'hosts' a renewable energy facility because reasonable consumers likely interpret this claim to mean that the manufacturer uses renewable energy." Instead, if you intend to make a public statement about a project you are involved in, make sure that it is clear to reasonable consumers of what is happening.

Ask for communications assistance from industry experts and key stakeholders.

Ask industry experts and key stakeholders to review your communications and marketing materials to help ensure that they are accurate and adhere with industry standards and best practices, including the FTC's Guides for the Use of Environmental Marketing Claims. Experts and stakeholders could include individuals from EPA's Green Power Partnership, third party certification programs, regional and national solar power groups, your legal counsel, or your solar developer.

Ensure individuals throughout your organization understand the importance of accurate claims and have multiple stakeholders review communications materials.

You might be the point person for your organization's solar efforts and understand how the solar market works and the importance of REC ownership for claims. However, the members of your organization's public relations team are not experts in the solar market and might reasonably assume that because there is a solar project on the organization's rooftop, it is "using" solar power. To ensure your organization's messaging is accurate, we suggest you have multiple reviewers from different stakeholder groups within the organization review the communications materials. EPA is available to help inform or support these other stakeholders. We can review content and provide you with communications materials to help explain your organization's green power use.

Formally retire the RECs associated with your on-site solar power use.

When possible, your organization should ensure that the RECs associated with your solar power use are formally retired. Formal REC retirement mechanisms exist for RECs issued by tracking systems. Ask your solar developer or tracking system representative about REC retirement options. If your solar system is owned by a third-party but is not registered in a tracking system, the RECs or environmental attributes can be retired contractually. Lastly, if your organization owns a solar system that is not registered in a tracking system, it is not possible to formally retire RECs or environmental attributes. Most states convey the environmental attributes to the owner, in those cases.

In all instances, organizations should not transfer or sell RECs or environmental attributes after a claim has been made. Making a claim constitutes a retirement of the REC; any sale or claim by a different owner would constitute double-counting of or claim on the same renewable electricity. In taking these steps, you help avoid two different parties claiming the same environmental attributes on the same renewable power.

Ensure your organization's GHG accounting and carbon footprint reduction claims align with market best practices.

In accounting for your organization's scope 2 emissions, only electricity backed by RECs can be accounted for as zero-emissions. If your organization owns the RECs associated with its solar system then apply the zero-emissions rate specified by the project REC to your purchased electricity consumption under Scope 2. In the absence of owning the project RECs, apply, in order of preference, either a residual mix or grid average emissions rate to calculate the emissions of your unspecified purchased electricity use under Scope 2. For more information on GHG accounting refer to World Resource Institute's *GHG Protocol Scope 2 Guidance* and the Center for Resource Solutions' *The Greenhouse Gas Benefits of Renewable Energy Purchases* and *Scope 2 Greenhouse Gas Accounting for U.S. Renewable Energy*.

In summary, all renewable electricity generation involves the creation of RECs. Only the ultimate owner of a REC can claim the environmental attributes of a particular megawatt-hour of renewable energy. If you are making claims about using renewable electricity, make sure you own and retire the RECs. If you do not own the RECs, do not make public claims, explicit or implied, about using renewable electricity.

Additional Resources

Green Power Partnership's REC video: www.youtube.com/watch?v=_12VYXms6-c

Green Power Partnership's webpage on making environmental claims: www.epa.gov/greenpower/making-environmental-claims

Center for Resource Solutions' (CRS) resources pertaining to RECs and renewable energy claims: resource-solutions.org/learn/rec-claims-and-ownership/

CRS's The Legal Basis for Renewable Energy Certificates:
resource-solutions.org/site/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf

CRS's Scope 2 Greenhouse Gas Accounting for U.S. Renewable Energy
resource-solutions.org/document/scope-2-greenhouse-gas-accounting-for-u-s-renewable-energy/

CRS's The Greenhouse Gas Benefits of Renewable Energy Purchases
resource-solutions.org/wp-content/uploads/2016/11/GHG-Benefits-of-RE-Purchases.pdf

FTC's Guides for the Use of Environmental Marketing Claims:
www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf

National Renewable Energy Laboratory's Renewable Electricity: How do you know you are using it?:
www.nrel.gov/docs/fy15osti/64558.pdf

National Association of Attorneys General's Environmental Marketing Guidelines for Electricity:

www.naag.org/publications/naagazette/volume-5-number-9/green-marketing-work-continues-to-evolve.php

RE100's Making Credible Renewable Electricity Usage Claims:

www.theclimategroup.org/news/making-credible-renewable-electricity-usage-claims

SEIA Solar Business Code:

www.seia.org/policy/consumer-protection/seia-solar-business-code

World Resource Institute GHG Protocol Scope 2 Guidance

www.ghgprotocol.org/scope_2_guidance