



Renewable Electricity Procurement on Behalf of Others: A Corporate Reporting Guide



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Executive Summary

As organizations set ambitious greenhouse gas (GHG) reduction targets that include their value chains, they may evaluate procuring renewable electricity on behalf of value chain partners. Organizations may consider how renewable electricity purchasing can help them reduce their scope 3 emissions as part of their engagement with their value chains. This practice paper discusses guiding principles and provides examples for several procurement scenarios in an effort to explain the application of the [Greenhouse Gas Protocol Scope 2 Guidance](#) for this type of renewable electricity procurement.

The guiding principles are as follows:

- 1 Accounting should align with the GHG Protocol.
- 2 Scope 2 emissions should reflect purchasing choices.
- 3 Scope 3 emissions can reflect choices made by another party.
- 4 Renewable electricity can be allocated.

Clear, transparent, auditable documentation should be used to track renewable energy certificate (REC) retirement and allocation to value chain partners. This documentation should be sufficient to provide a third-party verifier with enough information to confidently verify an organization's emissions and target progress.

This document presents multiple procurement scenarios, including purchasing for tenants, suppliers, and customers. Though the methods of engagement may vary, communication between the purchasing party and the receiving party is of the utmost importance. This paper does not endorse buying unbundled RECs to cover scope 2 emissions of a value chain partner without that partner's knowledge and participation.

This paper's recommendations can be applied to all relevant upstream and downstream scope 3 emissions, with the exception of category 11: use of sold products. It is possible that these emissions could be addressed in the future.

To contact the U.S. Environmental Protection Agency regarding this document, please email James Critchfield (critchfield.james@epa.gov).

Introduction

While leading organizations have established processes for procuring renewable electricity for their own operations, this paper seeks to detail how an increasing number of organizations are also considering how renewable electricity can be reflected and accounted for in their value chains and scope 3 emissions. Many organizations are broadening their efforts by encouraging their value chain partners (i.e., suppliers and customers) to use renewable electricity, and in some cases directly partnering with them in these purchases. These efforts help deepen value chain engagement and provide support if value chain partners lack sufficient electricity load, motivation, or knowledge to enter into renewable electricity arrangements themselves. The RE100 initiative reports that 44 percent of its participants are engaging with their supply chain on renewable electricity use. This statistic highlights the growing importance of properly accounting for renewable electricity across corporate value chains.

This document provides recommendations for how organizations reflect renewable electricity purchases in their scope 2 and scope 3 greenhouse gas (GHG) emissions inventories. These recommendations are aligned with the [Greenhouse Gas Protocol Scope 2 Guidance](#), which provides a comprehensive discussion of issues related to quantification and reporting of scope 2 emissions and is the basis for many of the terms and concepts in this document.

This document does:

- Define guiding principles associated with applying renewable electricity to GHG emissions, specifically in cases where a reporting organization has purchased renewable electricity to be applied to its value chain partners.
- Address the retirement of renewable energy certificates (RECs) and associated retirement documentation for these cases.
- Describe several renewable electricity procurement scenarios involving multiple value chain partners and provide guidance on applying those purchases to GHG emissions scopes.

This document does not:

- Address the use of renewable fuels or other impacts on scope 1 emissions.
- Provide prescriptive guidance on how an organization should allocate renewable electricity purchases across its operations or to its value chain partners when it purchases renewable energy on its own behalf. However, a suggested allocation example is provided in the “REC Retirement, Allocation, and Documentation” section of this document.
- Prescribe documentation templates for auditable tracking of renewable electricity.
- Present a solution for scope 3 emissions from using sold products.

Guiding Principles

The principles defined below should be followed when applying renewable electricity claims and GHG emission benefits to corporate GHG accounting. The term “reporting organization” is used to refer to organizations applying these four principles. This term does not imply that the organizations in the value chain are not also reporting. In fact, it is preferred if all associated parties are publicly reporting emissions and actively engaged with each other.

- | | | |
|---|--|---|
| 1 | Accounting should align with the GHG Protocol. | Reporting organizations should report location-based and market-based scope 2 emissions following the quality criteria and emission factor hierarchy defined in the Greenhouse Gas Protocol Scope 2 Guidance. |
| 2 | Scope 2 emissions should reflect purchasing choices. | Market-based scope 2 emissions should reflect the purchasing choices of the reporting organization and should not reflect the purchasing choices of another party, unless a purchasing choice that benefits another party is made |

explicitly to benefit the reporting organization's scope 2 emissions. For this reason, a purchase of renewable electricity should be applied to only one organization's scope 2 emissions.

- 3** Scope 3 emissions can reflect choices made by another party.

A reporting organization can quantify its scope 3 emissions based on the market-based scope 2 emissions of its suppliers or customers, even if the purchasing choices of those value chain partners are not made explicitly to benefit the reporting organization. The reporting organization should indicate in its public reporting if it is using location-based or market-based scope 2 emissions. A reporting organization should not purchase renewable electricity and simply apply it to scope 3 emissions without involvement from its supplier or customer.
- 4** Renewable electricity can be allocated.

If renewable electricity is purchased for a portion of an activity, the purchaser can choose to which value chain partners the renewable electricity is allocated. The amount allocated should not exceed the amount purchased.

REC Retirement, Allocation, and Documentation

RECs are tradable legal instruments that are used in the United States to verify ownership of the environmental attributes of renewable electricity generation from the point of generation to the point of use. RECs are required to make a claim of renewable electricity use. Because RECs provide no physical delivery of electricity, they can either be sold with the underlying electricity (i.e., bundled) or sold separately (i.e., unbundled). In other markets, similar instruments are known by different names and are generically referred to as Environmental Attribute Certificates (EACs). All such instruments are referred to as RECs in this paper.

Power purchase agreements (PPAs), green tariffs, and unbundled RECs are among the purchasing options that an organization can leverage to obtain renewable electricity and the associated RECs. Each option has its own set of unique characteristics. This broad range of approaches allows reporting organizations to select one option or a combination of options that best meets its electricity and environmental objectives given the organization's unique financial, operational, and policy perspectives. Further information on these U.S. purchase options can be found in the [Guide to Purchasing Green Power](#), which was developed through a cooperative effort between the U.S. Environmental Protection Agency (EPA), U.S. Department of Energy, World Resources Institute, Center for Resource Solutions, and National Renewable Energy Laboratory.

The following guidance discusses appropriate methods for the retiring, allocating, and documenting RECs. This guidance can apply to any renewable electricity purchase option through which RECs are provided.

Retiring RECs

Most commonly, an organization purchases renewable electricity through one of the available options and the associated RECs are retired on their behalf, whether by a renewable energy project owner, utility, or other supplier. This retirement gives the purchasing organization the right to claim the environmental attributes of the renewable electricity, and the right to apply the renewable electricity to its market-based scope 2 accounting. Retirement also prevents another party from claiming the environmental benefits of that same renewable electricity, thereby avoiding double counting.

Allocating RECs

Beyond that common approach, organizations may consider how renewable electricity purchasing can help them reduce their scope 3 emissions as part of engaging with their value chains. There may be instances where an organization would

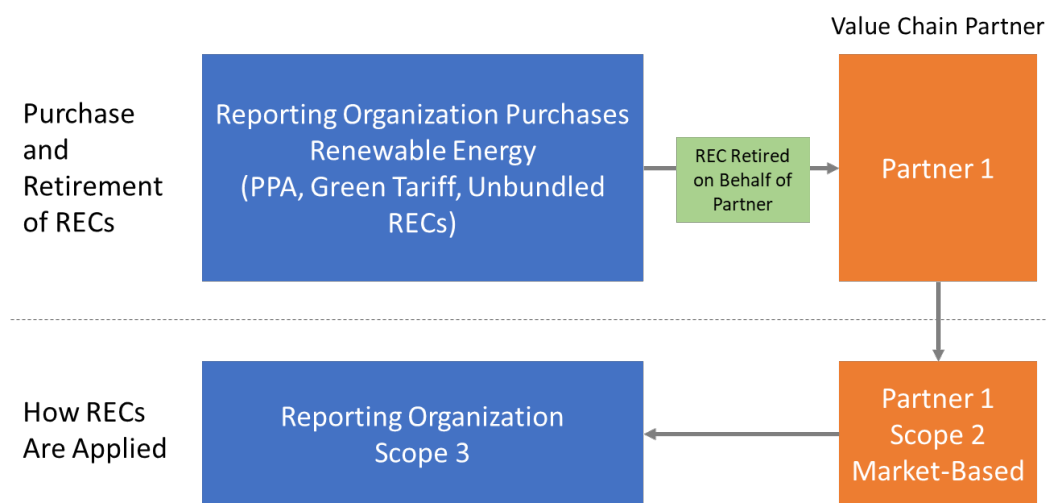
like to purchase renewable electricity for the benefit of a value chain partner, such as a supplier, tenant, or customer. If a reporting organization does this, it would not apply the renewable electricity to its scope 2 emissions. The value chain partner would apply the renewable electricity to its market-based scope 2 electricity emissions, and the reporting organization could reflect those market-based electricity emissions in its scope 3 accounting. Renewable electricity purchases cannot be used to reduce the scope 3 emissions that result from non-electricity emissions of its value chain partners.

Below are several general approaches for this arrangement of a reporting organization purchasing renewable electricity for the benefit of a value chain partner. These approaches vary based on the number of purchases required and how the associated RECs would be allocated between the different parties involved.

Approach 1:

The reporting organization purchases renewable electricity, which is retired by the renewable electricity provider or vendor on behalf of a single partner. The value chain partner applies the renewable electricity to their market-based scope 2 emissions, which can then be used by the reporting organization to calculate its scope 3 emissions.

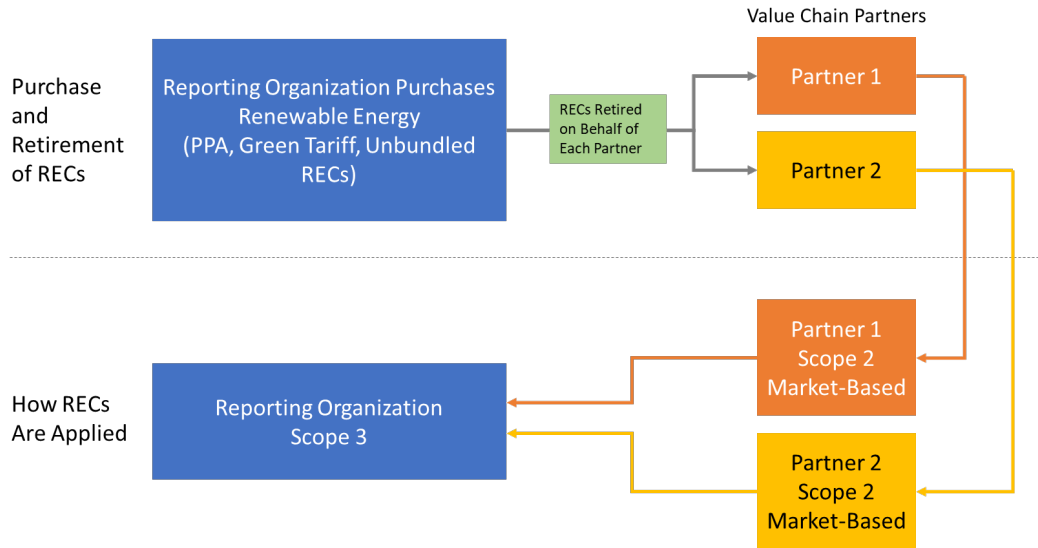
Figure 1. Reporting Organization Purchases Renewable Electricity for a Single Partner and RECs are Retired on Behalf of the Partner



Approach 2:

The reporting organization purchases renewable electricity, portions of which are intended to benefit multiple partners. Each portion is retired by the renewable electricity provider or vendor on behalf of the respective partners. The value chain partners apply the renewable electricity to their market-based scope 2 emissions, which can then be used by the reporting organization to calculate its scope 3 emissions.

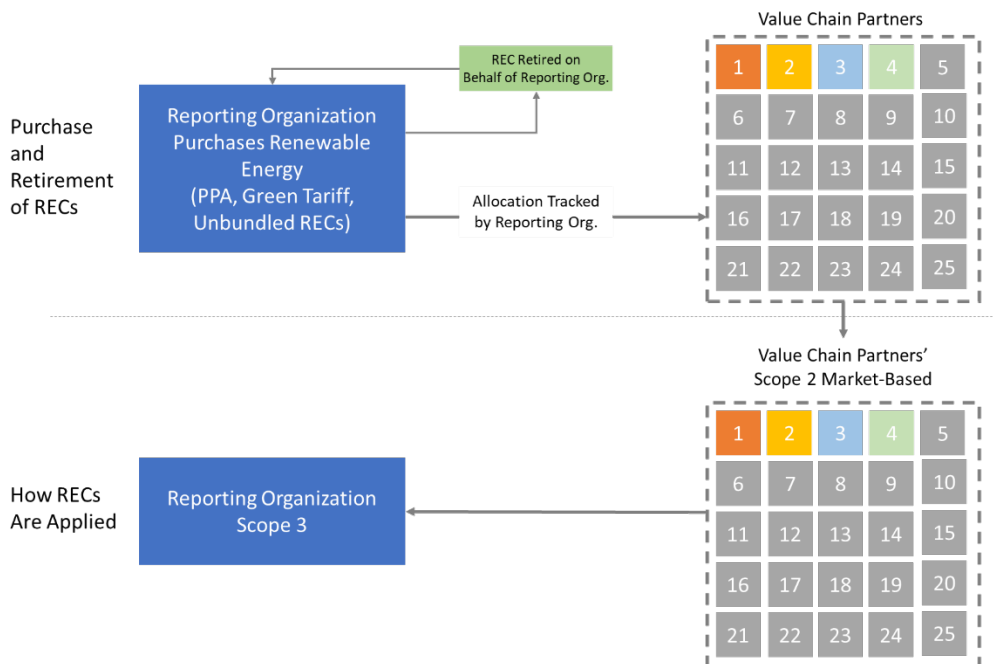
Figure 2: Reporting Organization Purchases Renewable Electricity for Multiple Partners and RECs are Retired on Behalf of the Partners



Approach 3:

The reporting organization purchases renewable electricity, which is retired by the renewable electricity provider or vendor on behalf of the reporting organization. That organization then allocates the renewable electricity to one or more partners, but RECs are not officially retired on behalf of those partners. Instead, the reporting organization’s allocation method is documented and verified by a third party to ensure no double counting of the renewable electricity. The value chain partners apply the renewable electricity to their market-based scope 2 emissions, which can then be used by the reporting organization to calculate its scope 3 emissions.

Figure 3: Reporting Organization Purchases Renewable Electricity for One or More Partners and RECs are Retired on Behalf of the Reporting Organization



Following are two examples for the three approaches above, as well as a decision tree to determine which approach is most applicable.

First, consider a case where a reporting organization would like to purchase renewable electricity for the benefit of four suppliers, each of whose electricity use is known:

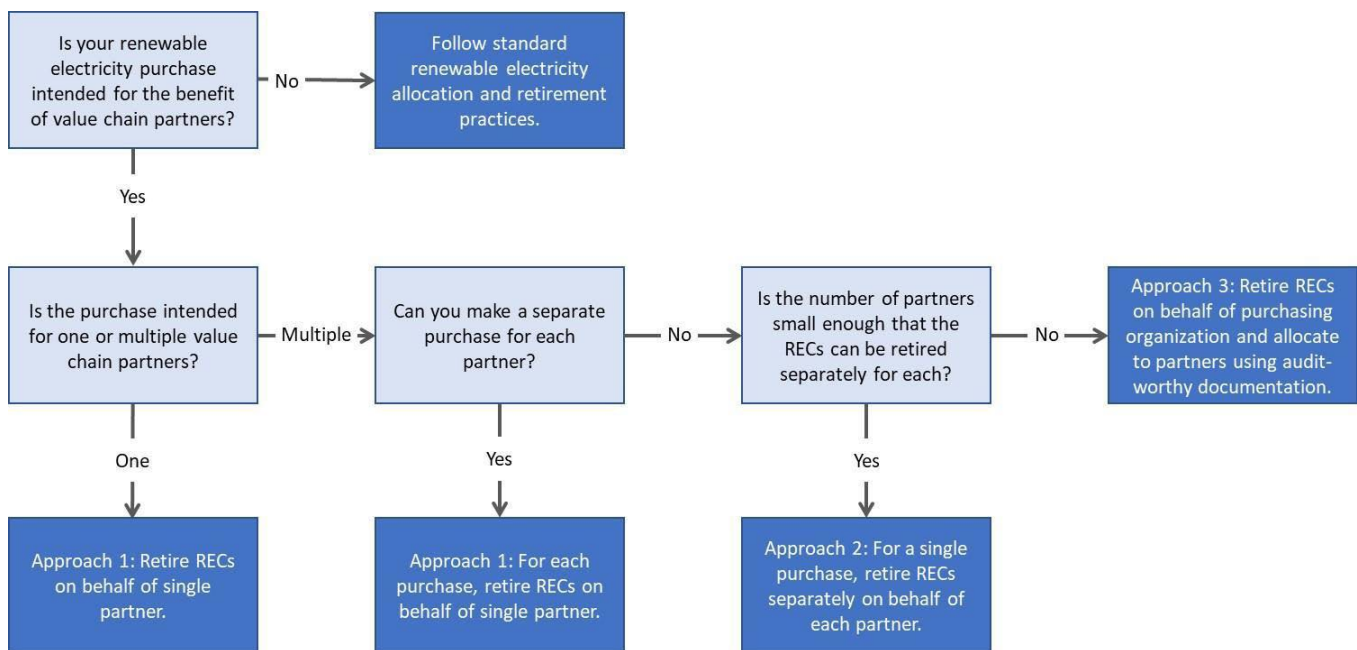
- Using Approach 1, the reporting organization would make four separate purchases.
- Using Approach 2, the reporting organization would make one purchase and the renewable electricity provider or vendor would allocate RECs to the suppliers through individual retirement for each supplier.
- Using Approach 3, the reporting organization would make one purchase, the renewable electricity provider or vendor would retire the RECs on behalf of the reporting organization, and the reporting organization would allocate portions of the purchase to individual suppliers.

Approach 1 or Approach 2 is preferable over Approach 3 since the RECs are explicitly retired on behalf of the supplier company.

Next, consider a case where a reporting organization would like to purchase renewable electricity for the benefit of one hundred customers whose electricity use is not known at the time of purchase. Approach 3 would be the most practical approach to make the REC purchase, and the RECs would be appropriately allocated to these customers once the electricity use was determined.

See Figure 4, below, for additional information on the three approaches to retiring RECs.

Figure 4: Three Approaches to REC Retirement for Value Chain Partners



Documenting REC Retirement and Allocation

In any of the above scenarios, documenting the retirement and allocation of RECs is an important component of renewable electricity tracking to appropriately assign claims and avoid double counting of those claims. Documentation benefits both the purchasing organization and its value chain partners to which it allocates renewable electricity.

The reporting organization that purchases renewable electricity on behalf of its value chain partners should document the purchase and retirement of the RECs. This documentation should include details such as the quantity purchased; where the RECs are retired, and if relevant, for what purpose (i.e., to cover a specific facility); the source, location, and time period of the renewable electricity generation; and any third-party certification of the RECs. The reporting organization should also document the allocation of the renewable electricity to its value chain partners, demonstrating that the amount allocated does not exceed the amount purchased and that there can be no double counting. The documentation should allow the value chain partner receiving the renewable electricity to confirm that the RECs meet the Scope 2 Quality Criteria defined by the [Greenhouse Gas Protocol Scope 2 Guidance](#). This guidance includes the requirement that the renewable electricity be sourced from the same renewable electricity market as the renewable electricity recipient’s operations to which it is applied. This location may be different than the location of the reporting organization purchasing the renewable electricity.

The reporting organization should provide an attestation documenting REC retirement to the value chain partner for their records and to share with a third-party verifier. Credible documentation that provides an audit trail for the reporting organization’s third-party verification is also recommended. See Table 1 for one example of documentation that could be used to track this allocation for the reporting organization and third-party verification. The reporting organization may choose to share only a portion of the table with each respective supplier to protect the confidentiality of suppliers as needed.

Table 1: REC Documentation

| Purchasing Organization | Value Chain Partner | REC Qty. (MWh) | Project Name | Registry / Serial # | Vendor | Electricity Market and Use | Resource Mix | Generation Period | 3rd Party Certification |
|-------------------------|---------------------|----------------|-------------------------------------|---------------------|-----------|----------------------------|--------------|-------------------|-------------------------|
| Org A | Supplier B | 500 | Project X | NAR / 1234 | Company 1 | U.S., Voluntary | Solar | Jan–Mar 2020 | Green-e |
| Org A | Supplier C | 200 | Project Y | NAR / 5678 | Company 1 | U.S., Voluntary | Wind | Jul–Sep 2020 | Green-e |
| Org A | Supplier D | 300 | Project X | NAR / 34567 | Company 1 | U.S., Voluntary | Solar | Oct–Dec 2020 | Green-e |
| Total: | | 1,000 | (should match total RECs purchased) | | | | | | |

The value chain partner that receives the renewable electricity and applies it to its market-based scope 2 emissions should document the amount received, from whom it was received, and whether the RECs were retired on behalf of the partner itself or the reporting organization providing the renewable electricity to the partner. The partner should request a retirement attestation from the organization that purchased the renewable electricity and share that attestation with its third-party verifier. If the renewable electricity received covers less than 100 percent of the value chain partner’s total electricity use, the partner should also keep documentation about which of its operations the RECs are applied to and how the partner allocates the market-based scope 2 emissions to their own value chain partners, which will include the reporting organization. Please see below for an example of this type of allocation.

REC Allocation Example for Market-Based Scope 2 Emissions

Organizations may need to allocate their market-based scope 2 emissions to value chain partners, especially if those emissions reflect renewable electricity purchases. The following table is an example of this allocation approach for a supplier and its customers, which could also apply to other value chain relationships.

Table 2: REC Allocation Example for Market-Based Scope 2 Emissions

| | Customer A | Customer B | Remaining Customers | Supplier Total |
|--|--|--|---|---|
| Units of product | 1,000 | 2,000 | 7,000 | 10,000 |
| Supplier electricity consumption (MWh) | 100 | 200 | 700 | 1,000 |
| RECs allocated (MWh) | 50 | 200 | 0 | 250 |
| Market-based scope 2 emissions calculation | $50 \text{ MWh} \times \text{REC EF (0 lb CO}_2\text{e} \div \text{MWh)} + (100 - 50) \times \text{Grid Avg EF (1,000 lb CO}_2\text{e} \div \text{MWh)}$ | $200 \text{ MWh} \times \text{REC EF (0)}$ | $700 \text{ MWh} \times \text{Grid Avg EF (1,000)}$ | $250 \text{ MWh} \times \text{REC EF (0)} + (1000 - 250) \times \text{Grid Avg EF (1,000)}$ |
| Market-based scope 2 emissions allocation (lb CO ₂ e) | 50,000 | 0 | 700,000 | 750,000 |
| Product emissions intensity (lb CO ₂ e / unit) | $50,000 \div 1,000 = 50$ | $0 \div 2,000 = 0$ | $700,000 \div 7,000 = 100$ | $750,000 \div 10,000 = 75$ |

Note: EF=Emission Factor

The most common approach for allocating RECs would be to apply RECs and market-based emissions evenly across all customers. Under this approach for the above example, the emissions intensity used for each customer would be 75 lb CO₂e/unit. In some cases, however, the allocation may give preferable treatment to certain customers, for example if a customer procured the renewable electricity on behalf of the supplier. In the example, customers A and B may have purchased the RECs that are allocated to them, and in exchange, the emissions intensity that the supplier reports to them is 50 and 0 lbs CO₂e/unit, respectively, while they report 100 lb CO₂e/unit to the remaining customers. In all cases, it is important to avoid double counting the benefits of purchased RECs to more than one supplier.

The reporting organization that applies the renewable electricity to its scope 3 emissions should document the market-based scope 2 emissions information received from its value chain partners, which forms the basis for the organization's scope 3 emissions. The reporting organization should indicate in its public reporting that market-based scope 2 emissions are used for its scope 3 emissions. Similarly, the reporting organization should be transparent when the market-based emissions that are being used to calculate its scope 3 emissions are the result of the reporting organization making a purchase of renewable electricity that is allocated to its value chain partners. The REC retirement, allocation, and documentation specified in this section is explained further in the scenarios that follow.

Case Study: Google

Google works with suppliers in over 70 countries and has made a commitment to add 5 gigawatts of new carbon-free energy across key supply chain manufacturing regions. The electricity grids in many countries where Google's suppliers operate lack sufficient cost-effective, reliable carbon-free energy capacity to support rapidly growing demand. Google's long-term vision is that all its suppliers, direct and indirect, and their communities have access to carbon-free energy. Attaining that vision will only be realized through significant global investment in new wind, solar, and other carbon-free energy capacity, as well as more robust grid systems.

Google works to reduce its direct and indirect impacts on the environment from supply chain activities. It has continued to roll out technology to industry partners to drive climate action at scale, including supporting its suppliers' transitions to carbon-free energy for their operations and helping suppliers find and implement energy efficiency measures (EEMs).

Google also works closely with suppliers to improve their environmental performance by helping them get more out of the energy they consume. This work includes performing energy efficiency evaluations at supplier sites, making recommendations for EEMs, helping suppliers prioritize EEMs by payback and complexity, following up with technical assistance on implementation, encouraging the adoption of robust energy management systems, and evaluating onsite renewable electricity options.

Further, Google empowers suppliers to set and achieve site-specific, ambitious carbon-free energy targets as a scalable way to reduce Google's scope 3 emissions. Beyond shifting toward clean energy, Google hopes that its efforts to build capacity across its suppliers will result in scalable, sector-wide GHG emission reductions. Google therefore provides guidance to help supplier sites build capable energy management teams and provides roadmaps and strategies for supplier site managers to receive senior-level approval to set and track progress against energy targets. This capacity-building effort provides site-level teams with the authority and accountability to execute against aggressive energy efficiency and carbon-free energy goals. The company shares lessons learned in its path to achieve a 100 percent renewable energy match and improve energy efficiency at its data center sites with suppliers, which has resulted in building capabilities across its supply chain partners.

To track progress, Google estimates its manufacturing scope 3 GHG emissions based on data collected from its suppliers, which includes its Tier 1 contract manufacturers, component suppliers, and service suppliers. The guidance provided in this paper clarifies how companies can account for REC purchases that are intended to reduce their scope 3 emissions via their value chain partners. In addition, Google strives to provide consistent guidance for suppliers on how they can reduce their carbon footprints, and thus Google's, to scale impact across multiple value chain partners.

Opportunities exist to share the methods, allocations, and benefits of value chain partners' carbon-free energy procurement and GHG mitigation activities with their customers and/or suppliers. This includes increasing the availability and quality of supplier data to enable tracking and verification of savings from implemented EEMs and installed new renewable electricity capacity by designing and consistently applying allocation methodologies for customers and suppliers. These methodologies should enable site-level reporting, consistency, and transparency to increase accuracy and avoid double counting, so impacts can scale in the global supply chain.

The pace of decarbonization needed across the full upstream supply chain presents challenges and opportunities for innovation and collaboration. A key element of this work is to enable suppliers to report their renewable electricity purchases and resulting market-based GHG emissions to customers consistently, accurately, and transparently. Google's collaborations aim to create a unified approach to supplier renewable electricity allocation that is accurate, practical, scalable, and allows suppliers to report consistently to all customers.

Procurement Scenarios

The [GHG Protocol Corporate Standard](#) outlines several approaches to defining the organizational boundaries for a reporting organization. This document assumes an operational control approach. If either the reporting organization or its value chain partner uses a different approach to boundary determination, the renewable electricity activities may be accounted for in different scopes from those mentioned herein. For further details on scope 2 accounting methodologies, see the [Greenhouse Gas Protocol Scope 2 Guidance](#) or [EPA’s Indirect Emissions from Purchased Electricity Guidance](#). These protocol documents provide guidance for how to apply RECs to an organization’s own GHG scope 2 emissions reporting.

This section builds on these GHG accounting protocols and on the guiding principles and REC retirement, allocation, and documentation discussed earlier in this document. This section shows how these principles can be applied to scenarios in which a reporting organization would like to purchase renewable electricity for the benefit of a value chain partner that is either a tenant, supplier, or customer. In all cases, the recommended GHG reporting approach is predicated on adhering to the principles and guidance presented earlier in this document. The term “purchase” refers to any renewable electricity procurement option where RECs are obtained, whether that be through a PPA, green tariff, or purchase of unbundled RECs.

Purchase for Tenants

When a building owner reports emissions using the operational control approach, the space it leases to a tenant may be considered outside the owner’s operational control, and within the operational control of the tenant. In this case, emissions from that space would be included in the downstream leased assets category of the building owner’s scope 3 emissions. The owner may wish to purchase renewable electricity for the building to improve its sustainability and thus its attractiveness to tenants.

The building owner, or a property manager acting as the owner’s agent, may purchase renewable electricity and not apply it to their own market-based scope 2 reporting, but instead allocate it to one or more tenants. Assuming the REC retirement, allocation, and documentation guidelines above are followed, the tenant is able to apply that purchase in their market-based scope 2 emissions, and the owner is able to reflect it in their scope 3 emissions for downstream leased assets. If the building owner purchases renewable electricity for only a portion of the building space, the owner can choose to which tenant(s) the renewable electricity is allocated. The number of RECs procured and allocated should not exceed the amount of electricity purchased and consumed.

Co-located Data Centers

The tenant space in this scenario may be in an office building, a manufacturing center, a co-located data center, or other type of facility. With ever-increasing data needs, organizations frequently rely on co-located data centers, which are a unique type of landlord–tenant relationship where the tenant owns and operates the IT equipment that is housed in the data center facility. This situation can be treated like any other landlord–tenant relationship for the purposes of renewable electricity sourcing.

Case Study: Iron Mountain

Iron Mountain developed the Green Power Pass to meet the growing demands of its tenants to use renewable electricity in order to power its collocation data centers. The Green Power Pass follows best practices in renewable electricity procurement and allocation regarding Iron Mountain's renewable electricity use and GHG reduction claims for its tenants.

Iron Mountain's data center division is powered by 100 percent renewable electricity through several sourcing approaches, including investments in wind farms and solar power plants, the latest being the largest rooftop solar project on a data center, which came online in 2020. Through collaborating with customers, corporates, auditors, and the non-governmental organization (NGO) community, Iron Mountain helped establish best practices for transparent accounting and allocation of these renewable electricity benefits to its data center customers.

According to Iron Mountain, the Green Power Pass follows current industry best practices, including adherence to the GHG Protocol and further carbon reporting guidance from industry and NGO working groups. Iron Mountain's full data center consumption and renewable purchases are transparently tracked and audited annually. For each tenant who opts into the Green Power Pass program, an annual certificate of attestation is provided by Iron Mountain that communicates the customer's data center electricity consumption and Iron Mountain's allocation of their own 100 percent renewable electricity collocation purchases to align with the tenant's consumption amount. The tenant can reflect their decision to opt into the Green Power Pass program in their own scope 2 market-based accounting, and double counting of the renewable electricity is avoided since Iron Mountain reports these impacts in their scope 3 inventory. Reporting is intended to be standardized, easy, and fast for tenants in order to overcome complexities in the GHG reporting process. Iron Mountain also reports overhead electricity and GHG impacts as their own scope 2 emissions and communicates this information to tenants for inclusion in their scope 3 reporting.

A building owner may include tenant space within its inventory boundaries. If a building owner purchases renewable electricity for a tenant space and applies it in their own market-based scope 2 reporting, that renewable electricity should not also be claimed by the tenant in their scope 2 reporting. This avoids double counting within scope 2 reporting. If the tenant includes the emissions from the leased space in their scope 3 emissions (i.e., upstream leased assets), they could reflect the owner's market-based scope 2 emissions in their scope 3 emissions from that space.

A tenant may purchase renewable electricity to apply to the space they occupy, based on either metered or estimated electricity use. Even if the tenant does not purchase electricity directly, there are several procurement options that would allow the tenant to procure RECs decoupled from the underlying electricity. The tenant would typically reflect their renewable electricity purchases in their market-based scope 2 emissions. In this case, the building owner can reflect the renewable electricity purchases of its tenant in its own emissions reporting for scope 3, category 13: downstream leased assets. The owner should not reflect the renewable electricity purchased by a tenant in its market-based scope 2 emissions, to avoid double counting within scope 2 reporting.

Purchase for Suppliers (By Customers)

Cloud computing is increasing in popularity, and many companies are shifting from onsite servers to a cloud-based solution. Cloud computing is a unique type of supplier–customer relationship, in which the supplier is providing data storage services to a variety of customers. This situation can be treated like any other supplier–customer relationship for the purposes of renewable electricity sourcing and GHG accounting.

A reporting organization may purchase renewable electricity and allocate it to one or more of its suppliers. Assuming the supplier follows the REC retirement, allocation, and documentation guidelines above, they can apply that purchase in their market-based scope 2 emissions, and the reporting organization is able to reflect this in its upstream scope 3 emissions, such as category 1: purchased goods and services. Thus, the reduction in the supplier's market-based scope 2

emissions would also be reflected in the reporting organization's upstream scope 3 emissions. If the reporting organization purchases renewable electricity for only a portion of its upstream emissions, it can choose to which suppliers the renewable electricity is allocated. The amount allocated should not exceed the amount purchased, and the renewable electricity should be sourced from the same renewable electricity market as the recipient's operations to which the renewable electricity is applied. The reporting organization and the supplier should both be involved in the transaction to ensure proper GHG accounting and documentation.

Purchase for Customers (By Suppliers)

A reporting organization may purchase renewable electricity and allocate it to one or more of its customers for certain scope 3 categories. Assuming the REC retirement, allocation, and documentation guidelines above are followed, the customer can apply that purchase in their market-based scope 2 emissions, and the reporting organization can reflect it in its downstream scope 3 emissions, with the exception of category 11: use of sold products. Thus, the reduction in the customer's market-based scope 2 emissions would also be reflected in the reporting organization's downstream scope 3 emissions. If the reporting organization purchases renewable electricity for only a portion of its downstream emissions, it can choose to which customers the renewable electricity is allocated. The amount allocated should not exceed the amount purchased, and the renewable electricity should be sourced from the same renewable electricity market as the recipient's operations to which the renewable electricity is applied.

This approach applies to all downstream scope 3 categories except category 11, because this category reflects emissions from the full lifetime of each product sold during the reporting year. Category 11 differs from the market-based scope 2 emissions of the customer, which only reflect a single year of emissions. Due to this difference in the timing of emissions, there is not currently consensus on how a reporting organization could purchase renewable electricity on behalf of customers to address a product's lifetime emissions. This lack of consensus could change in the future if additional options were provided to account for emissions from the use of sold products, based on the current emissions of sold products currently in use.

Appendix A: Working Group Members

The expertise of the working group members was a critical part of this practice paper. EPA thanks all participants for their contributions:

| | |
|---------------|------------------|
| BCSD | Tony Mo |
| CDP/RE100 | Andrew Glumac |
| CDP/RE100 | Shailesh Telang |
| CRS | Peggy Kellen |
| EKOenergy | Steven Vanholme |
| ERG | Charlie Goff |
| Google | Kealy Herman |
| Google | Ines Sousa |
| Iron Mountain | Kevin Hagen |
| Iron Mountain | James Henry |
| Iron Mountain | Julia Kendall |
| Iron Mountain | Chris Pennington |
| Iron Mountain | Jaime Weibel |
| CEBA | Mark Porter |
| CEBA | Lily Proom |
| WRI | Chirag Gajjar |
| WSP | Eric Christensen |
| WSP | Katie Eisenbrown |
| WSP | Katrina Prutzman |