

THE AIM PLATFORM

Electricity Implementation Guidance

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We extend our sincere appreciation to all those who participated in consultations and submitted feedback. Your input has been instrumental in building a practical, credible, and transparent framework for assessing and reporting electricity value chain decarbonization interventions.

Disclaimer

This document does not constitute legal, financial, or regulatory advice. Users of this document are responsible for ensuring their compliance with applicable laws and regulations and should seek independent legal or professional advice where necessary.

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Chapter 1: About the AIM Platform Standard: Electricity Implementation Guidance

Purpose of the Electricity Implementation Guidance

Electricity consumption is among the most common emission sources in company value chains, and many companies are eager to invest in interventions to address their value chain electricity emissions. However, addressing electricity use in a company's value chain requires unique considerations. For example, electricity is never directly purchased or sold if reported in a scope 3 inventory, and there are regulatory and policy restrictions to sourcing electricity generation in many countries. While market instruments like renewable energy certificates have been used for scope 2 reporting and voluntary and regulatory systems for many years, different considerations are needed to address scope 3 emissions. Chapter 1 of the AIM Platform Standard and Guidance Version 1 (hereafter referred to as the AIM Standard) recognizes that the requirements, recommendations, and guidance outlined in the Standard may not fully address the needs of companies pursuing certain interventions and therefore additional sector-specific guidance will be needed.

The AIM Platform Standard: Electricity Implementation Guidance (hereafter referred to as the Electricity Guidance) provides additional guidance needed to implement the AIM Standard for electricity interventions, including:

- Identifying, sizing, and locating potential electricity interventions and electricity subcomponents in a company's value chain for association testing,
- Evaluating the interventions and subcomponents against the requirements for Basic and Further Association,
- Assessing the electricity interventions against quality criteria, and,
- Accounting for and reporting the outcomes of electricity interventions.

Relationship with the AIM Standard

The Electricity Guidance is a supplemental document to the AIM Standard, and understanding the AIM Standard is a prerequisite for using this guidance. Companies pursuing electricity interventions will use this document alongside the main Standard, not in place of it.

Requirements, Recommendations, and Terminology

All the requirements and recommendations in this Electricity Guidance are identical to those in the AIM Standard and have been included for completeness. No new requirements or recommendations have been introduced.

Applicability

Because the AIM Standard's requirements and recommendations are written to be cross-sectoral and intervention agnostic, not all of them will be applicable for electricity interventions. For each requirement and recommendation, one of three situations will apply:

1. Not applicable to electricity interventions, in which case this document will note that explicitly.
2. Applicable, but no electricity-specific guidance is needed to implement it, in which case this document will note that explicitly.
3. Applicable and electricity-specific guidance is needed, in which case that guidance is provided.

Companies remain responsible for meeting all applicable requirements of the AIM Standard regardless of whether electricity-specific guidance is provided; the purpose of this document is to help interpret and implement those requirements in the context of electricity interventions.

Terminology

This document follows the AIM Standard's convention for distinguishing requirements, recommendations, and permissible options:

- The word "shall" refers to requirements that companies must follow to conform to the standard.
- The word "should" refers to recommendations that companies are advised to follow but not required to follow for conformance.
- The word "may" refers to options that companies are permitted to follow.

Words like "will", "can", "need", and "must" are used to elaborate on how a requirement or recommendation is implemented. These terms are not used to indicate additional requirements or recommendations. The terms "justify" and "demonstrate" are used to indicate information that will be used to perform assurance against the AIM Standard, as detailed in Chapter 8.

Supported Electricity Interventions

There are three general categories of electricity interventions that are covered by this Electricity Guidance. These are referred to as 1) generation, 2) non-generation, and 3) generation + non-generation interventions. Table 1 below outlines what falls under each intervention type.

Table 1: Electricity Intervention Types

Type of Intervention	Intervention Details
Generation	▹ Clean energy generation. These include, but are not limited to, power purchase agreements (PPA), virtual power purchase agreements (vPPA), or the purchase of clean electricity attributes.
Non-generation	▹ Interventions that reduce the carbon intensity of electricity on the grid or within an operation, but do not include generation. Non-generation actions include, but are not limited to, clean energy storage, efficiency projects, transmission line improvements, fossil fuel plant decommissioning, and carbon capture and storage (CCS).
Generation + non-generation	▹ Interventions that include clean energy generation and non-generation elements. These could include, for example, a wind energy project inclusive of energy storage or a new solar project that directly supports the early retirement of a coal plant.

There will be cases where an intervention addressing a broader emission source impacts electricity emissions. For example, a company could engage with a supplier to support updates to their fabric manufacturing factory inclusive of energy efficiency upgrades. If the emission source being addressed in the company's physical inventory is emissions from fabric manufacturing inclusive of electricity, rather than electricity specifically, the company will use the AIM Standard.

Some electricity interventions can specifically include non-carbon social benefits such as bringing distributed power to underserved communities[1]. These are important considerations to ensure investments provide the largest benefit inclusive of, but not limited to, reducing greenhouse gas emissions. While the AIM Platform supports these types of interventions, the scope of the AIM Standard covers accounting and reporting of greenhouse gases. Therefore, for the sake of this guidance, all electricity interventions are treated the same and are assessed based on their emissions outcomes, rather than their non-carbon benefits.

Supported Claims, Use Cases, and Outputs of the Electricity Guidance

The Electricity Guidance is designed to be used by companies seeking to credibly report an electricity intervention outcome associated with electricity consumption in their value chain (scope 3) in a comprehensive multi-statement GHG report. This document does not provide guidance for scope 2 electricity interventions. In applying the Electricity Guidance alongside the AIM Standard, companies will produce the necessary documentation to determine value chain association, assess intervention quality, and account for and report intervention outcomes.

The AIM Platform recognizes that the Electricity Guidance is being published during a critical transition period in GHG Accounting and Reporting Standards. GHG Protocol and ISO are actively developing a consolidated Corporate GHG Accounting Standard V3.0 that will incorporate updates to scope 1, 2, and 3 accounting inclusive of actions and market

1 Examples of programs that include social benefits include, but are not limited to, P-RECs and D-RECs.

instruments[2]. It is anticipated that this update will shift how electricity is accounted for and addressed across scope 2 and scope 3. This guidance is written based on current practice as we cannot anticipate the outcome of the Corporate GHG Accounting Standard V3.0 process, which is expected to conclude in Q4 of 2028. Once that process is complete, the AIM Platform will assess whether updates are needed to this guidance and the AIM Standard. If updates are required, the AIM Platform will undergo a process to update both documents. For more details on how the AIM Platform currently fits into the GHG accounting and target-setting ecosystem, refer to the section "Position of the AIM Platform within the Climate Standards Ecosystem" in Chapter 2 of the AIM Standard.

2 Consolidated Corporate Standard - Standard Development Plan (SDP)

Chapter 2: About the AIM Platform

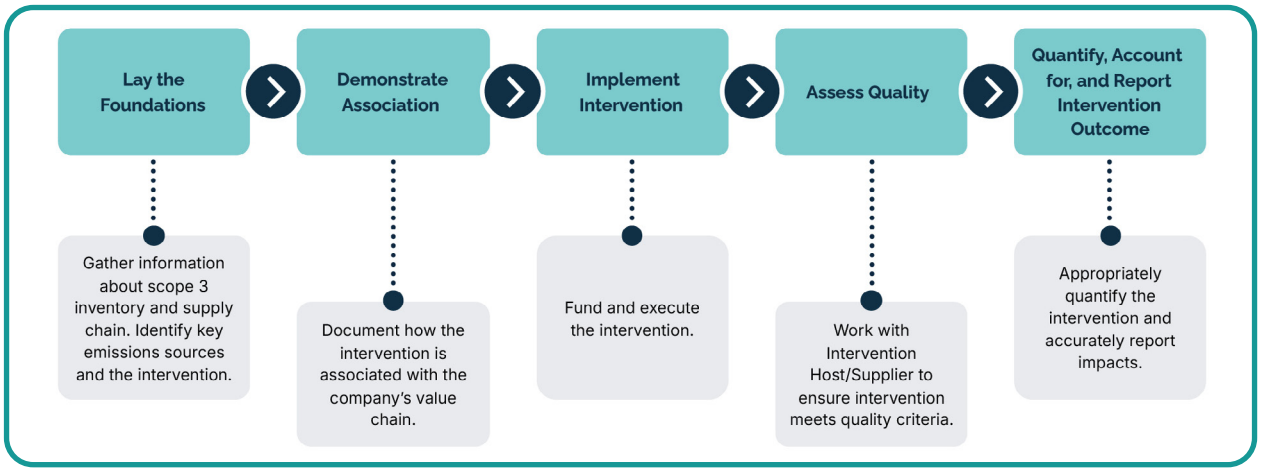
No additional detail has been added to this chapter as part of the Electricity Guidance. Please see Chapter 2 in the AIM Standard for more detail on the mission, vision, objectives, and governance process of the AIM Platform.

Chapter 3: How to use the Electricity Guidance

Navigating the Electricity Guidance

The Electricity Guidance follows the structure of the AIM Standard, moving sequentially through the process of engaging in climate interventions, starting by determining an intervention's association to the value chain, then assessing intervention quality, and finally accounting for and reporting on outcomes. A high-level flow chart outlining this process is provided below. Chapter 3 in the AIM Standard provides a more detailed decision tree of the process. It is important to note that, while the order in the high-level flow chart and decision tree may be typical for most companies, details may differ in some instances and therefore, this figure is intended as general guideline to the process rather than a prescriptive set of rules.

Figure 1: High-Level Flow Chart Outlining the Steps of the AIM Standard



As identified in Table 1, the Electricity Guidance groups interventions into 3 categories: generation interventions, non-generation interventions, and generation + non-generation interventions. The guidance provided in this document covers all these intervention types unless explicitly noted.

Chapter 4: Association Test provides additional guidance on locating electricity subcomponents in a physical inventory, identifying and locating appropriate electricity interventions, and meeting the requirements of Further Association.

Chapter 5: Intervention Quality provides additional guidance for utilizing appropriate standards and methodologies for the different intervention types. It focuses on guidance specific to the intervention outcome, which will take one of three forms:

- Renewable Energy Certificate (REC): For simplicity, this document uses the term REC to be inclusive of any tradable electricity certificates including, for example, I-RECs, Guarantees of Origin, or Green Electricity Certificates. A REC is a tradeable

instrument that represents the characteristics of a unit of renewable energy generation. It typically does not directly convey an emissions factor but is used to substantiate an assumed emissions factor of 0g CO_2e/MWh[3]. These are common outcomes for generation interventions and could also be a portion of intervention outcomes for generation + non-generation interventions. Because RECs present a unique form of intervention outcome (an assumed emissions intensity rather than a verified emissions intensity), most of the additional guidance provided in Chapter 5 is specific to RECs.

- Emissions-Factor: An intervention outcome represented in units of emissions reduced or removed relative to a unit of electricity generated or consumed (e.g., units of CO_2e/ units of electricity). These are common outcomes for non-generation interventions and generation + non-generation interventions.
- Project or Impact-Accounted Emissions: An intervention outcome represented in units of emissions reduced or removed (e.g., units of CO_2e). These are common outcomes for non-generation interventions and generation + non-generation interventions.

Chapters 6 – 8 provide guidance for accounting and reporting of electricity interventions. When guidance is specific to an intervention type or intervention outcome, that will be noted.

No appendices have been added to the Electricity Guidance. Where additional electricity implementation guidance on topics covered in an AIM Standard appendix is relevant, it has been included in this document. In other cases, users are referred to the appendices in the AIM Standard.

Table 2 provides an overview of which chapters and appendices have electricity-specific guidance and which are consistent with the content of the AIM Standard.

3 Guidance is provided in Chapter 5 for cases where a REC includes a non-zero emissions intensity.

Table 2: Overview of Chapters with Additional Electricity-Specific Guidance

Chapter / Section	Summary
Chapter 4: Association Test	
Section 4.1	▹ Electricity-specific guidance provided
Section 4.2	▹ No additional guidance – refer to AIM Standard
Section 4.3	▹ Electricity-specific guidance provided
Chapter 5: Intervention Quality	
Section 5.1	▹ No additional guidance – refer to AIM Standard
Section 5.2	▹ Electricity-specific guidance provided
Section 5.3	▹ Electricity-specific guidance provided
Section 5.4	▹ Electricity-specific guidance provided
Section 5.5	▹ Electricity-specific guidance provided
Section 5.6	▹ Electricity-specific guidance provided
Section 5.7	▹ Electricity-specific guidance provided
Section 5.8	▹ No additional guidance – refer to AIM Standard
Chapter 6: Quantification and Accounting	
Section 6.1	▹ Electricity-specific guidance provided
Section 6.2	▹ Electricity-specific guidance provided
Section 6.3	▹ No additional guidance – refer to AIM Standard
Chapter 7: Reporting	
Section 7.1	▹ No additional guidance – refer to AIM Standard
Section 7.2	▹ Electricity-specific guidance provided
Section 7.3	▹ No additional guidance – refer to AIM Standard
Chapter 8: Assurance	
Chapter 8	▹ No additional guidance – refer to AIM Standard
Appendices	
Appendix A: Glossary	▹ No additional guidance – refer to AIM Standard
Appendix B: Summary of Requirements and Recommendations	▹ No additional guidance – refer to AIM Standard
Appendix C: Standards, Methodologies, and Audit Parameters	▹ No additional guidance – refer to AIM Standard
Appendix D: Assurance to the AIM Standard Readiness Resources	▹ No additional guidance – refer to AIM Standard
Appendix E: Identifying, Quantifying and Locating (Sub)Components	▹ No additional guidance – refer to AIM Standard
Appendix F: Identifying and Location Interventions	▹ No additional guidance – refer to AIM Standard
Appendix G: Regulatory Surplus	▹ No additional guidance – refer to AIM Standard
Appendix H: Activity Data Estimation	▹ No additional guidance – refer to AIM Standard
Appendix I: Determining a Credible Baseline	▹ No additional guidance – refer to AIM Standard

Chapter 4: Association Test

4.1 Preparing for the Association Test

To perform the Association Test and be able to adhere to subsequent steps of the AIM Standard, companies will first:

1. Identify, quantify, and locate the components and subcomponents accounted for in their scope 3 physical inventory that could be associated with the tested electricity intervention.
2. Identify and locate the electricity intervention they seek to associate with their value chain.

Requirements:

- N/A – No requirements in this chapter.

Recommendations:

- Companies should record the information obtained when identifying, quantifying, and locating the tested interventions, components, and subcomponents. This documentation will be necessary in performing subsequent steps of the AIM Standard and the Electricity Guidance and when undertaking assurance. An assurance readiness resource can be found in Appendix D of the AIM Standard.

Implementation Guidance

Understanding Electricity as a Subcomponent

The AIM Standard uses the organizing concepts of components and subcomponents, hereafter referred to as "(sub)components", to help companies categorize value chain activities and emissions sources. (Sub)components are organizing concepts that are intentionally flexible so they can support the variety of interventions companies seek to associate. Components are the products (goods or services) companies directly purchase and sell across their value chains. Subcomponents are inputs to, or outputs from, components.

Scope 3 electricity is always a subcomponent; it cannot be a component as purchased electricity would be reflected in a company's scope 2 inventory, rather than scope 3. Electricity can be an input to other (sub)components, or as a targeted subcomponent unto itself. The Electricity Guidance focuses on the latter use case. Where electricity is an input to another (sub)component, whether a company uses the Electricity Guidance or the AIM Standard will depend on whether the intervention is defined at the level of the electricity subcomponent. For example, consider a company that sells a laptop that uses electricity. Defining the sold laptop as the component to match with an intervention would require use of the main AIM Standard. If the company defines the electricity consumed by the laptop as the studied subcomponent, they would use the Electricity Guidance and the AIM Standard.

Other value chain interventions, such as the purchase of low carbon commodity Environmental Attribute Certificates (EACs), could overlap with clean electricity procurement efforts if that EAC reflects actions to reduce that commodity's electricity-related emissions. Companies pursuing multiple interventions across their value chain will need to ensure they are not reporting two separate intervention outcomes for the same electricity subcomponent. Companies therefore might only pursue interventions using the Electricity Guidance if they are confident the targeted electricity subcomponents have not already been addressed through other interventions.

For more information on components and subcomponents, refer to Section 4.1 and Appendix E of the AIM Standard.

Procuring on Behalf of Suppliers and Customers

Many companies have supplier engagement programs that provide support for suppliers to procure renewable energy to address the supplier scope 2 emissions and the company's scope 3 emissions. Companies also pursue renewable energy procurement and other interventions to address supplier and customer electricity emissions without involving the suppliers and customers in the procurement and contracting process. The Electricity Guidance supports both use cases. The Electricity Guidance does not require companies to report these procurements to suppliers or customers consuming the targeted electricity subcomponents.

Electricity Subcomponent Data Sources

Companies can identify and quantify electricity subcomponents in their physical inventory by using data sources such as:

- Supplier-reported electricity consumption data allocated to the reporting company
- Component process life cycle assessment (LCA) / Environmental Product Declaration (EPD) reports
- Environmentally-Extended Input-Output (EEIO) data sets
- Customer-provided or other estimates of electricity consumption sources within the reporting company's downstream scope 3 categories

Quantifying Electricity Subcomponents

To effectively pursue electricity interventions, companies will identify the electricity subcomponents within their inventory. Companies can quantify these electricity subcomponents in:

- Units of energy (e.g., MWhs) or
- Quantity of GHG emissions (e.g., X tonnes CO_2e emissions attributed to the consumed electricity)

Given that companies' value chain electricity subcomponents are embedded across and within other (sub)components, there can be a variety of methods available to determine the quantity of electricity emissions or volume of electricity consumption. Table 3[4] outlines approaches companies can use to determine electricity emissions or volume of energy consumed based on their available data.

4 Table 3 is adopted from the 2025 3Degrees paper: "Unlocking Clean Electricity in the Value Chain". https://go.3degreesinc.com/value-chain-eacs-pp

Table 3: Methods to determine quantity of emissions or volume of electricity consumed

Data Available	Approach
Electricity consumption data (MWh)	Use known volumes (e.g., as provided by supplier)
Supplier- or customer-specific emissions data (tCO_2 e)	Confirm with supplier/customer the portion of emissions that is attributable to electricity
Unit-based activity data (CO_2e/product, package weight, sqft, etc.)	Investigate the relevant activity-based emission factor(s) to determine the portion of emissions from electricity
Spend-based data (CO_2e/$)	Investigate the relevant spend-based emission factor(s) to determine the portion of emissions from electricity
If none of the above options are feasible	Use reasonable assumptions to find or estimate the needed information about the percentage of emissions attributable to electricity[5]

Converting electricity subcomponents measured in different units is also possible, though companies will want to consider potential tradeoffs in the types of assumptions required to convert the data, and the interventions enabled by converting the subcomponents. Determining the appropriate emissions factor per MWh for a given volume of electricity subcomponent is a necessary step to 1) convert a quantity of emissions to a quantity of MWh, and 2) do substitution accounting as outlined in Section 6.1. Companies will need to choose the most appropriate emissions factor given available data on the volume of electricity and its location:

- If a company can identify a specific emissions factor for electricity subcomponents in their physical inventory, that emissions factor will be used. For example, a supplier provides data to a company that includes units of CO_2e per unit of electricity consumption.
- If the company cannot identify a specific emissions factor, companies will use the most relevant grid emissions factor of the identified location of the electricity subcomponent (see the section below on 'Locating Electricity Subcomponents')[6]. If the embedded electricity subcomponent has been identified using an EEIO table, they will use the (location and year) grid emissions factors used to build the table.

Locating Electricity Subcomponents

Accurately determining where value chain electricity subcomponents occur across global value chains is inherently difficult for companies. Several core challenges contribute to this difficulty:

- Available secondary process life cycle emission factors might not detail the electricity-specific geographic assumptions made to develop the emission factor.
- EEIO datasets often make necessary simplifying modeling assumptions, such as assuming all value chain electricity is generated within the modeled country's national boundaries. Some EEIO models include domestic, imported, and foreign manufacturing emissions data to augment this modeling feature.

5 For example, companies could identify a proxy emissions factor or LCA to identify the portion of emissions likely embedded in a given good or service.

6 If companies can only identify a subcomponent to a given country or region of origin rather than a narrower geography, they will select a representative, average emissions factor for the whole country or region.

Accurate data, when it exists, might be impossible to access or use:

- The use of telemetry data on customer product electricity consumption is often highly restricted within companies, so determining where customer electricity consumption occurs for decarbonization purposes is challenging for internal teams.

However, determining where electricity subcomponents occur is an important step to assess a tested electricity intervention against the requirements of the AIM Standard. Given this, the Electricity Guidance provides guidance for how a company can estimate or make reasonable assumptions as to where the electricity subcomponents occur, depending on the data available. The goal is to provide a reasonable, transparent way for companies to move forward with electricity interventions despite the challenges of traceability.

This approach allows companies to assign emissions to a specific country based on available supplier-reported, LCA, or EEIO data. Tables 4 and 5 outline examples of assigning location to upstream and downstream subcomponents depending on the data available. Companies can refer to other documents that provide guidance on determining the location of electricity subcomponents.[7]

Table 4: Assigning Location to Upstream Electricity Subcomponents

Data Available	Where Electricity Consumption Occurs	Example
Supplier reported data	Location of supplier use	Supplier A participates in the company's supplier engagement program. Supplier A annually reports electricity consumption data of its facilities that produce products purchased by the company through the supplier engagement program. Company assigns the location of its electricity subcomponents to each supplier facility.
Supplier reported data from tier 1 suppliers but not further upstream	▹ Assume all upstream consumption occurs in the tier 1 supplier's country OR ▹ Make an estimate about upstream consumption based on industry knowledge and/or LCA tools	Supplier A participates in the company's supplier engagement program. While supplier A annually reports its electricity consumption to the company, it does not report its suppliers' electricity consumption. Company can assume that all of the upstream electricity consumption occurs in the same country as Supplier A.
No supplier reported data	Estimate the location of electricity consumption based on industry knowledge and/or LCA tools	The company uses a detailed LCA software system that allows the company to isolate certain modeled electricity consumption sources within a targeted (sub)component's life cycle. The company uses information from the underlying LCA study to determine where the upstream electricity consumption sources likely occur. The company assigns the different electricity sources to their respective likely country(ies).

7 One example is the 2025 3Degrees paper "Unlocking Clean Electricity in the Value Chain" https://go.3degreesinc.com/value-chain-eacs-pp

Table 5: Assigning Location to Downstream Electricity Subcomponents

Data Available	Where Electricity Consumption Occurs	Example
Telemetry data	Location of usage	Company has internal telemetry data that details the location of electricity use of a handheld electronic device. Company assigns the location of its subcomponents to where the use occurred.
Location where the products are sold	▹ Assume all downstream usage occurs in the country where the product was sold ▹ Make an estimate about downstream usage based on industry knowledge and/or LCA tools	A company sells residential air conditioning units in 5 different countries. The company can assume that the annual electricity consumption from each air conditioning unit occurs in the country where the unit was sold.

Example: Identifying, Quantifying and Locating Electricity Subcomponents

Consider a company that wishes to associate electricity interventions with its upstream electricity subcomponents. The company has varying levels of data granularity for its upstream electricity use. For some components sourced from its largest supplier in Germany, the company has accurate, location-specific data of the quantity of MWhs consumed. The company also uses internal knowledge of its value chain to reasonably assume the country of origin of additional MWhs in Poland, France, and Croatia.

Finally, for electricity usage deeper in the value chain, the company conducts industry research and determines that the typical manufacturing process for a given subcomponent occurs primarily in Scandinavia, and therefore assumes the Scandinavian region as the subcomponent location. The company only has kilograms of CO_2e from electricity consumption for the given subcomponent (based on the relevant portion of a spend-based emissions factor that is attributed to electricity). The company converts the CO_2e to MWh by applying the average of the European Union Scandinavian electricity emissions factors (16.5 kg CO_2e/MWh) in the absence of more granular conversion factors.

Component #	Location of Upstream Electricity Subcomponent	Estimated Quantity
1	Hamburg, Germany	20,000 MWh
2	Berlin, Germany	8,000 MWh
3	Dortmund, Germany	32,000 MWh
4	Poland	25,000 MWh
5	Croatia	9,000 MWh
6	France	11,000 MWh
7	Scandinavia	495,000 kg CO_2e ÷ 16.5 kg CO_2e/MWh = 30,000 MWh

Identifying Electricity Interventions

As within the AIM Standard, the Electricity Guidance uses "Intervention" to refer to an action intended to reduce or avoid greenhouse gas (GHG) emissions, or to remove and store GHGs from the atmosphere. Consistent with the three intervention categories introduced in Chapter 3, electricity interventions include but are not necessarily limited to:

- Generation: Interventions that change electricity generation systems by adding new clean generation capacity to the grid or to an operation. This can include:
  - Installing solar panels or wind turbines that generate renewable electricity.
  - Entering a power purchase agreement (PPA) or virtual power purchase agreement (VPPA).
  - Purchasing clean electricity attributes (e.g., RECs).
- Non-generation: reduce the carbon intensity of electricity on the grid or within an operation, or reduce/shift electricity consumption, without generating clean electricity directly. This can include:
  - Installing an energy battery storage system, displacing the need for system capacity from fossil fuel generators.
  - Improving the efficiency of electricity transmission systems in grids.
  - Installing high-efficiency variable frequency drives (VFD) in HVAC systems.
  - Customers participating in demand response programs optimized around marginal grid emissions forecasts.
- Generation + Non - Generation: a combination of interventions above, or a project that combines generation with additional non-generation activities like the decommissioning of a fossil fuel generation plant.

Locating Electricity Interventions

As companies move through the Electricity Guidance, they will need to understand where the electricity intervention they are targeting is located. The location of the intervention could be:

- The supplier facility(ies) or regions where the electricity efficiency, onsite solar, or battery system is installed.
- The region where the carbon-free electricity generation intervention will be built.

Information about the intervention location will be provided to the reporting company by the intervention host/supplier as part of the system of record and record information. See section 5.3 for more details.

4.2 Basic Association

Purpose of Basic Association

Basic Association is the first of two parts of the Association Test. It serves to ensure that an intervention a company seeks to invest in to address value chain emissions is associated with an emissions source in their physical inventory as a (sub)component.

Requirements:

- To pass Basic Association, the intervention shall address an emissions source that is included in the company's value chain as part of their physical inventory. The emissions source can be in the physical inventory as a component or subcomponent.

Recommendations:

- Companies may use relevant sector-specific guidance to pass the Basic Association requirement.

Implementation Guidance

N/A – This section has no electricity specific considerations.

4.3 Further Association

Purpose of Further Association

The Further Association test assesses the relationship between the company's tested intervention and the company's value chain.

Requirements:

- Interventions shall meet the requirements of one of the following three Further Association Methods:
  - Supplier or Customer
  - Sourcing or Use Region
  - Critical Sector
- If using the Critical Sector method, companies shall justify the barriers to using the other two methods.

Recommendations:

- N/A – No recommendations in this chapter.

Implementation Guidance

Due to the unique nature of the sector, electricity interventions need to use the Sourcing or Use Region Method. The Supplier or Customer and Critical Sectors methods are not an option for companies pursuing interventions to address electricity subcomponents for the following reasons:

- Supplier or Customer method: While a company can intervene directly with a supplier or customer, the intervention would still occur within a sourcing or use region given the nature of electricity grids. As such, the Supplier or Customer method was removed to simplify implementation of this guidance.
- Critical Sectors method: While electricity is frequently an input to interventions for critical sectors, electricity itself is not a critical sector intervention.

As such, guidance on these two methods has been omitted from this document.

Because electricity interventions can only make use of the Sourcing or Use Region method, guidance for implementing this method for electricity has been adjusted to provide additional flexibility compared to the broader set of options that companies have in the main AIM Standard.

Sourcing or Use Region Method

Requirements:

- To pass the Sourcing or Use Region method, companies shall demonstrate that the intervention is located within the same sourcing or use region as a targeted (sub)component.
- If the intervention is in the Forest, Land, and Agriculture (FLAG) sectors, the GHG Protocol Land Sector and Removals Standard or an equivalent standard shall be used to set the boundary of the sourcing region.

Recommendations:

- Companies may use sector-specific guidance to define the sourcing or use region in non-FLAG sectors if available.

Implementation Guidance

The requirement to use the Land Sector and Removals Standard (LSR) is not applicable for this guidance document.

Sourcing or Use Region

Companies will define a sourcing or use region boundary that works best for the targeted electricity subcomponent and intended intervention. Companies will need to document how they define their sourcing or use region.

Examples of sourcing or use region boundaries include, but are not limited to:

- India's Regional Power Grids
- United States Regional Transmission Organizations (RTO) / Independent System Operators (ISO)s or Balancing Authorities, European bidding zones within countries (e.g., Swedish bidding zones)
- Country-boundary (China, Philippines, Germany, United States)
- European bidding zones spanning multiple countries (e.g., DE-LU [Germany-Luxembourg])
- European Union Capacity Calculation Regions (CCRs)
- IEA Regions
- RE100 Single Markets (United States and Canada, European Single Market)
- African Power Pools

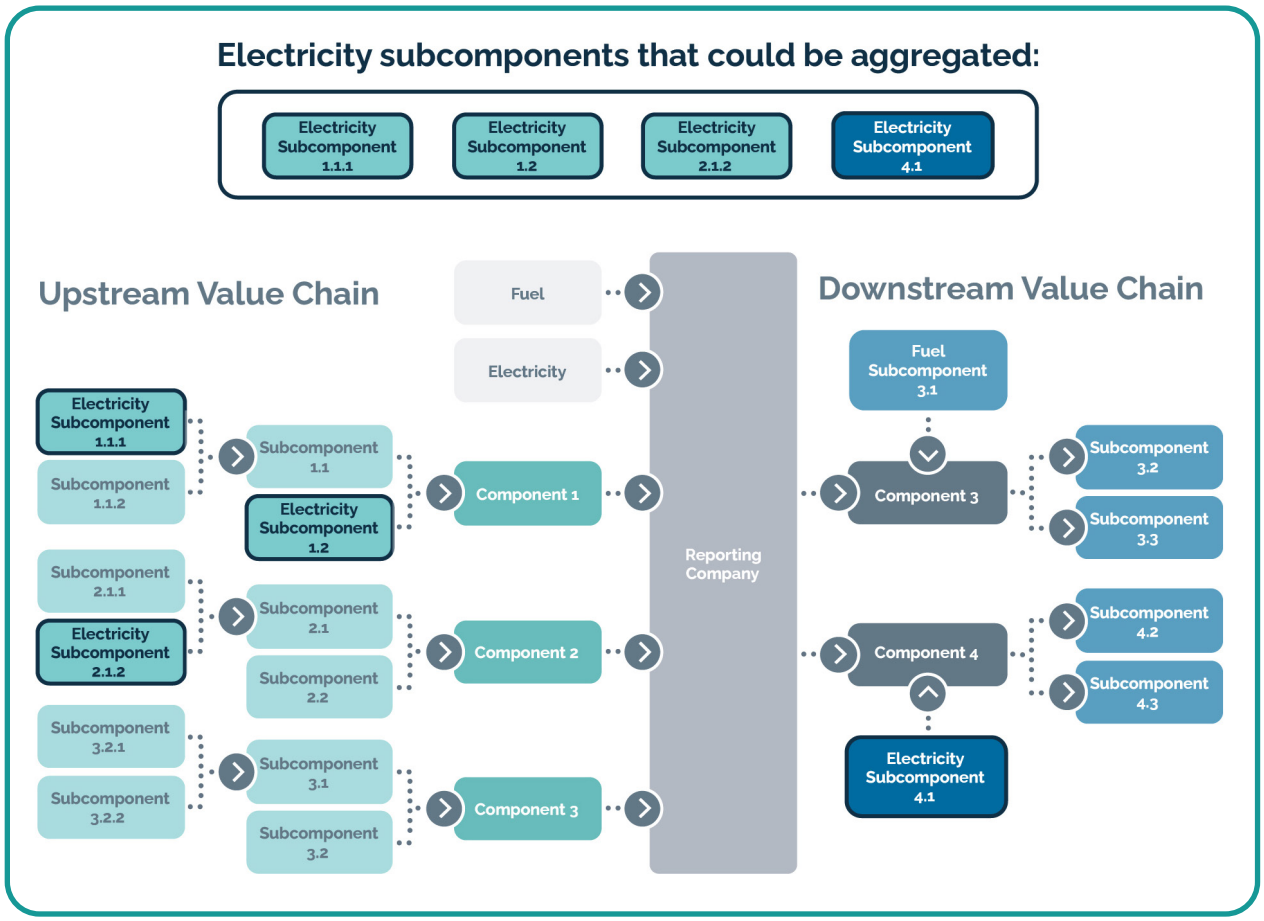
There are various reasons why a company may choose a certain sourcing or use region. They may have distributed loads that are mobile or difficult to trace, have year on year fluctuations in their supply chain, or may have identified an impactful intervention to address certain subcomponents.

Companies wanting to use a particular reporting framework or target setting framework will need to look to the definitions and required requirements for sourcing or use region in those frameworks to ensure consistency.

Aggregating Electricity Subcomponents to Maximize Intervention Investment

Defining electricity as the targeted subcomponent can enable companies to aggregate electricity consumption in their upstream and downstream value chains. In Figure 2, the company identifies electricity consumption in different parts of its value chain. The company can aggregate these subcomponents to target with an intervention.

Figure 2: Electricity as a Subcomponent



Being able to aggregate subcomponents beyond a sourcing region reduces barriers to systemic action by enabling companies to source larger and more impactful interventions.

Further Association ensures that companies prioritize interventions in known sourcing or use regions, as those are the locations where they have known or estimated suppliers and customers. Being able to aggregate subcomponents across geographies enables companies to source larger and/or more electricity interventions, potentially reducing transaction costs and increasing the available intervention options. The AIM Standard does not set limits on how a company aggregates subcomponents across geographies; however, geographical differences can impact the amount of an intervention a company can account for following the requirements in Chapter 6. Decisions about aggregation will need to consider how the emission intensity of the electricity grid where the subcomponents are located, or estimated

to be located, compares to the pre-intervention emission intensity of the grid where the intervention is located. To increase transparency, companies are strongly encouraged to justify their aggregation approach when aggregating subcomponents across geographies for a given intervention. More guidance and examples regarding accounting and aggregation are available in Chapter 6.

Example: Aggregating Electricity Subcomponents

Continuing the example from 4.1 above, a company has identified the following electricity subcomponents.

Component #	Location of Upstream Electricity Subcomponent	Estimated Quantity
1	Hamburg, Germany	20,000 MWh
2	Berlin, Germany	8,000 MWh
3	Dortmund, Germany	32,000 MWh
4	Poland	25,000 MWh
5	Croatia	9,000 MWh
6	France	11,000 MWh
7	Scandinavia	30,000 MWh

Based on this aggregation, the company has 135,000 MWhs of electricity across these components in its value chain to potentially address with interventions. The company can use this information to inform their decisions around which interventions to pursue and how to size those interventions.

Chapter 5: Intervention Quality

Purpose of Quality Criteria and Implementation Mechanisms

Companies need to know that the intervention occurred and that it meets minimum quality criteria. Companies will meet these requirements by ensuring that their intervention host/supplier implements assessment and information sharing practices for each of these quality criteria.

Overview of Electricity Intervention Quality Requirements

To meet the requirements for intervention quality, reporting companies need to ensure that electricity intervention hosts/suppliers:

- Convey an accurate emissions outcome.
- Mitigate negative social and environmental impacts.
- Demonstrate regulatory surplus.
- Mitigate double counting risks.
- Ensure timely delivery of intervention information.

A company can demonstrate that these quality criteria have been met through the following three implementation mechanisms:

1. The agreement between the reporting company and the intervention host/supplier.
2. Independent assessment conforming to a relevant standard or methodology to confirm that key information intervention hosts/suppliers share about the intervention outcomes and other impacts is accurate and correctly implemented (see Appendix C in the AIM Standard).
3. The system of record (i.e., the intervention record) that intervention hosts/suppliers use to share information with reporting companies.

The type of electricity intervention and corresponding intervention outcome will influence how several quality requirements are implemented. As a result, the implementation guidance in sections 5.2 – 5.6 delineates between generation interventions conveyed with RECs, and other electricity interventions.

Implementation Mechanisms for Quality Criteria

Sections 5.1 through 5.3 are the implementation mechanisms for quality criteria. These mechanisms can be used to demonstrate that the quality criteria in Sections 5.4 through 5.8 have been met.

5.1 Agreement

Requirements:

- N/A – No requirements in this chapter.

Recommendation:

- The agreement between the company and intervention host/supplier should specify how the intervention host will meet and demonstrate conformance with all quality criteria.

Implementation Guidance

N/A – This section has no electricity specific considerations.

5.2 Intervention Assurance

Requirements:

- Interventions shall undergo third-party assessment to an appropriate standard by an auditor to independently assess stated emissions outcomes and other impacts. See Section 5.2.1 for details on determining an appropriate standard.
- Companies shall ensure that the intervention host/supplier is using one or more appropriate standard(s) or methodologies to evaluate the intervention's technology and process characteristics, emissions calculations, and broader social, environmental, and stakeholder impact.
- Audits to evaluate each intervention quality criterion against an appropriate standard or methodology shall occur in line with requirements outlined in that standard or methodology, when audit parameters are specified. If unspecified, audits shall include an ex-post assessment and shall occur within 5 years of intervention occurrence.

Recommendations:

- In addition to the audit requirements above, in instances where standards or methodologies do not specify granular auditing procedures, audits should:
  - Be conducted by accredited auditors,
  - Be conducted to convey, at minimum, limited assurance[8],
  - Include an ex-ante and ex-post assessment, and
  - Include a regular site evaluation.

Implementation Guidance

Generation Interventions Conveyed with RECs

For interventions whose records are conveyed via a REC, REC or equivalent programs[9] define the standard that evaluates the intervention's technology and process characteristics (e.g.,

8 "Limited assurance" is the level of assurance where the nature and extent of the verification activities have been designed to provide a reduced level of assurance on historical data and information.

9 REC "programs" refer to any combination of standards (e.g., I-REC standard), tracking systems (registries), and certification systems (e.g., Green-e) for RECs or equivalent mechanisms (i.e., I-RECs, GOs, TIGRs) that define how a REC functions and what criteria it meets. All of these elements may not be part of any given REC program.

Green-e, I-REC, GO, etc.), while social and environmental safeguards are often assessed separately (e.g., in a permitting or financing process, where the permitting program or equivalent can serve as the standard). Each of these standards typically defines an auditing process and specific parameters (e.g., cadence, level of assurance, etc).

For these interventions that result only in the generation and transfer of RECs, it is not common practice for the standard to explicitly cover the emissions calculation step, as RECs typically do not include emissions outcome information (See 5.4 Accurate Emissions Outcomes below). In these cases, the audit is performed to confirm generation type and output underlying each REC issuance in a registry. Because the standards and audits cover the inputs to the emissions calculation step, and common practice in this sector is to assign a zero emissions factor to renewable energy generation, demonstrating that a REC was issued and/or certified under a program that assesses the generation type and output is sufficient to meet the requirement to undergo third-party assessment to an appropriate standard by an auditor to independently assess stated emissions outcomes.

Other Electricity Interventions

For interventions that result in a stated emission outcome, either as an emission factor or a quantity of emissions reductions, the main standard requirements and guidance apply. Various project standards or methodologies exist for non-REC generating projects (e.g., VERRA methodology VM0052: Accelerated Retirement of Coal-Fired Power Plants Using a Just Transition), which typically cover all criteria (emissions outcomes and social and environmental safeguards) and define auditing parameters.

5.3 System of Record and Record Information

Requirements:

- Intervention outcomes shall be conveyed to the reporting company using a system of record that meet the following "basic" requirements: defines and transparently discloses key data and assumptions, reflects intervention assurance, ensures unique records, and utilizes a chain of custody model when intervention outcomes are quantified per unit of product.
- Companies shall justify their use of an alternative system of record when a preferred registry exists but is not used. A "preferred registry" is one that meets basic requirements as defined in Section 5.3.1, and is independently governed, validates information, and is operated transparently.
- Accurate, verified information about the intervention shall be conveyed to the reporting company in an intervention record. Intervention records shall include all details that are relevant and necessary to assess conformance with quality criteria requirements, and to account for and report on the intervention.

Recommendations:

- Reporting companies and their intervention hosts should use the best available system of record – e.g., a preferred registry when available - for each intervention.

Implementation Guidance

Generation Interventions Conveyed with RECs

For interventions whose records are conveyed via a REC, reporting companies and their intervention host or supplier will most likely use an existing registry that meets preferred and basic criteria, as many exist for this intervention type. If the intervention host or supplier does not use a registry that meets preferred criteria, this must be justified.

These REC or equivalent registries[10] might not capture all information in every intervention record (each REC) that is needed to assess alignment with the criteria in the AIM Standard or to enable accurate accounting and reporting by the reporting company. Reporting companies might need to request supplemental documentation from their intervention host or supplier to ensure that they can meet all the requirements in this standard, including details on social and environmental safeguards, regulatory programs, and co-claims if applicable. This supplemental documentation does not need to follow a defined format and can be informal. For example, an intervention host or supplier could simply send one or several additional documents via email that include these additional data not included in the RECs themselves, enabling the reporting company to confirm that they can meet each quality criteria requirement.

Other Electricity Interventions

For interventions whose records are not conveyed via a REC registry (e.g., through a different type of intervention record that conveys emission factors or emissions reductions), reporting companies and their intervention host or supplier will use a system of record that likely captures all of this information, so will be able to follow the guidance in the main AIM Standard. If the system of record does not capture all information, the missing information can be similarly appended as supplementary documentation.

Intervention Quality Criteria

Sections 5.4 through 5.8 outline requirements and recommendations for intervention quality criteria, and how to implement each.

5.4 Accurate Emissions Outcomes

Requirements:

- The outcomes of interventions shall be calculated to reflect what is physically or chemically possible within the defined system boundary of the intervention in accordance with an appropriate standard or methodology.
- The outcomes of interventions shall be found to result from the specific implemented technology and/or process change according to an appropriate standard or methodology.

Recommendations:

- N/A – No recommendations in this chapter.

10 A REC registry is a digital tracking system for issuing, transferring, and retiring RECs or their equivalent in other jurisdictions (e.g., GOs, I-RECs, TIGR). In this guidance, REC registries are defined as one part of REC "programs", which may also include standards and certification systems that collectively define how a given REC functions and what criteria it meets.

Implementation Guidance

Generation Interventions Conveyed with RECs

For interventions whose records are conveyed via a REC, if the other quality requirements in the Standard are met, companies do not need to prove that the emission outcome was calculated following these requirements. The REC programs audit the inputs to the calculation, effectively confirming that the specific renewable electricity technology was implemented and generated a certain amount of electricity. If a REC was generated by an asset that is zero emissions at the point of generation, it can therefore be assumed that the REC represents an emission factor of 0 units of CO_2e/unit of electricity generation unless a different emissions factor is specified by the intervention record.[11] If the REC was generated by an asset that is not zero emissions at the point of generation, companies will use the non-zero emissions factor specified on the REC.

Other Electricity Interventions

For interventions where the outcome is quantified as an emission factor or emissions reduction, the main standard requirements and guidance apply.

5.5 Social and Environmental Impacts

Requirements:

- Intervention hosts shall apply sound stakeholder engagement practices and social and environmental safeguards to mitigate the risk of adverse social and environmental impacts, according to one or more appropriate standard or methodology.

Recommendations:

- N/A – No recommendations in this chapter.

Implementation Guidance

Generation Interventions Conveyed with RECs

For interventions whose attributes are conveyed using RECs, social and environmental safeguards are typically not covered in the scope of the audit that underlies those programs. Intervention hosts will likely demonstrate their implementation of social and environmental safeguards and stakeholder engagement practices through a separate standard or methodology, such as a valid permit where the permitting process included social and environmental requirements and/or financing-driven social and environmental requirements, which will need to be shared through supplementary documentation (e.g., will not be reflected in the REC itself).

If a company is working with an intervention supplier (as opposed to directly with the intervention host), it could be more difficult to obtain this information. In this case, supplementary documentation could consist of any of the following:

- Demonstrating that the RECs were issued by a program that checks for permitting requirements at issuance.

11 Note that this is consistent with GHG Protocol Scope 2 Guidance (2015), which indicates that companies will use emissions factors conveyed by energy attribute certificates or equivalent instruments to substantiate market-based emissions estimates, and that those contractual instruments represent a zero-emission rate from renewable energy. As the Scope 2 Guidance is under active revision, best practices for scope 3 electricity as described in this Guidance may shift to reflect those GHG Protocol Scope 2 updates when finalized.

- Evidence from a permit database or other resource that the electricity generator (intervention host) has applicable permits.
- If a company has a contract with an intervention supplier that includes requirements for interventions to abide by relevant safeguards and practices (e.g., requiring the supplier to ensure interventions it is sourcing follow all applicable laws and permitting, anti-corruption, and non-discrimination requirements), proof that the contract has been legally executed and information from the intervention supplier as to how they validate that interventions meet these safeguards and practices can together satisfy this requirement.

Example: Social and Environmental Impacts for RECs

An intervention host is developing a new wind farm in Croatia with a planned capacity of 50MW. The intervention host can demonstrate meeting the requirement for social and environmental safeguards by showing a valid permit that covers:

- An Environmental Impact Assessment covering biodiversity, protected species, noise and vibration, landscape, soil and water, construction, decommissioning, and other impacts
- A public consultation process

Beyond these permitting requirements, which in this case are already sufficient, this wind farm is financed by the European Bank for Reconstruction and Development (EBRD), which has additional requirements that go beyond Croatian law (e.g., as documented in an Environmental and Social Impact Assessment). In this case this documentation complements the permitting information. In cases where regulation might not adequately cover social and environmental criteria, this financing assessment would serve as adequate documentation to meet this social and environmental safeguards requirement.

Other Electricity Interventions

Other electricity interventions, and particularly interventions that are using project accounting methods under a defined program, typically will be using a standard or methodology that simultaneously evaluates emissions outcomes and social and environmental safeguards. However, if in any case a standard or methodology does not cover the social and environmental safeguards criteria, the above approach outlined for generation interventions can also be used to satisfy this criterion.

5.6 Regulatory Surplus

Requirements:

- Intervention outcomes, when reported by a company in a contractual inventory or impact statement, shall represent emissions benefits that exceed regulatory requirements placed on the intervention host or another entity in its immediate supply chain.[12]
- Reporting companies shall confirm with the intervention host that the intervention outcome does not represent emissions reductions that were required to comply with a regulatory requirement applicable to the host or another entity in its immediate supply chain.

Recommendations:

- N/A – No recommendations in this chapter.

12 Immediate supply chain refers to a direct supplier or customer of the intervention host that supplies or consumes part of the intervention.

Implementation Guidance

Generation Interventions Conveyed with RECs

There is not a universal approach to how existing REC registries treat declarations of regulatory surplus. In situations where the system of record is a REC registry, reporting companies will use one of the following approaches to meet the regulatory surplus requirements:

- Ensure the intervention host or supplier uses a REC program that already filters for regulatory surplus (e.g., Green-e, GreenPower), meaning that no regulations are disclosed on certificates because surplus has already been evaluated for issued units.
- Ensure the intervention host or supplier uses a REC registry that lists regulations on each certificate, in line with main standard. Evaluate regulatory surplus using that information.
- Receive supplemental documentation from the intervention host or supplier about regulations and evaluate surplus using that supplemental documentation.

Other Electricity Interventions

Other electricity interventions that are using project accounting methods under a defined program such as VERRA typically will be using a standard or methodology that already filters for regulatory surplus as part of a more comprehensive additionality assessment. If the standard or methodology or system of record does not already filter for or include a declaration to support regulatory surplus assessment, reporting companies will similarly need to request supplemental documentation in order to evaluate regulatory surplus.

As noted in the AIM Standard, if there is evidence from a credible public source that an existing law is not being followed, this can be used to justify why an action is not subject to a regulatory requirement. This is true for both generation interventions conveyed with RECs or other electricity interventions.

5.7 Unique Right to Report

Requirements:

- In order to make an associated claim, a company shall demonstrate a unique right to report the intervention record and its outcomes through possession of an appropriate, retired intervention record and a legally binding agreement with the intervention host/supplier that includes mechanisms for mitigating double selling, double issuance, and double claiming risks, and management of co-claims.
- Companies operating in different value chain layers (one company per layer) may co-claim intervention outcomes in cases where emissions from the related (sub)component would typically be reported in each of the value chain layers, up to the total quantity of intervention outcomes in each layer. The company and the intervention host/supplier shall agree the degree to which intervention outcomes may be co-claimed and how co-claims will be managed and tracked.

Recommendations:

- N/A – No recommendations in this chapter.

Implementation Guidance

Given the nature of electricity interventions, it is expected that companies will use a preferred registry as the system of record to convey intervention information (either a REC or equivalent registry conveying the attributes of a kWh of electricity generation or a registry conveying project attributes in tCO_2e).

Use of a registry can ensure that:

- Companies receive a retired intervention record retired in their name
- Double issuance, double selling, and double claiming risks are mitigated through the registry's requirements

Identifying a registry that comprehensively covers the above in an agreement with the intervention host or supplier would be sufficient to meet this requirement.

If the registry used is not structured to enable co-claims to be documented in the intervention record, co-claims (e.g., between a supplier claiming scope 2 emissions outcomes and the reporting company claiming upstream scope 3 emissions outcomes), where applicable, will need to be documented in supplemental documentation.

5.8 Record Creation Timing

Requirements:

- Intervention outcomes shall occur prior to the creation of their record in the system of record.
- Intervention records, at issuance, shall reflect the results of an audit.
- For interventions that are one-time actions which generate ongoing outcomes, companies shall establish a crediting period using the provided hierarchy (see Section 5.8.3).

Recommendations:

- Intervention outcomes should be recorded in a system of record within 24 months of the first intervention outcome occurrence. If doing so is not possible, the circumstances that prevent adherence to this recommendation should be transparently disclosed in a public emissions report.

Implementation Guidance

N/A – This section has no electricity specific considerations.

Chapter 6: Quantification and Accounting

Purpose of Quantification and Accounting

Chapter 5 detailed requirements and guidance to ensure interventions meet minimum quality criteria. Translating intervention outcomes into GHG inventory disclosures that can be used in a comprehensive multi-statement GHG report requires matching and correctly accounting for intervention outcomes in relation to the associated electricity subcomponent quantities in the reporting company's physical inventory.

Requirements:

- Companies shall use the intervention outcome information received in the intervention record (Section 5.3) as the definitive data inputs for quantifying and accounting for intervention outcomes relative to inventory (sub)components.
- When quantifying intervention outcomes relative to inventory (sub)components, companies shall ensure that the quantity of the outcomes applied to their targeted (sub)components does not exceed the quantity of those (sub)components in any given year's physical inventory.
- Companies shall use the Product Matching method with the Substitution accounting approach or the Emissions Matching method to demonstrate conformance with these requirements. If using the Emissions Matching method, companies shall ensure the intervention outcomes applied to their respective (sub)components are reflective of the decarbonization levels that are physically realized (e.g., through a technology, procedural, or process change) by the intervention. Companies using the Substitution accounting approach shall apply any relevant adjustments to adequately match the intervention with (sub)component(s) in their physical inventory.

Recommendations:

- N/A – No recommendations in this chapter.

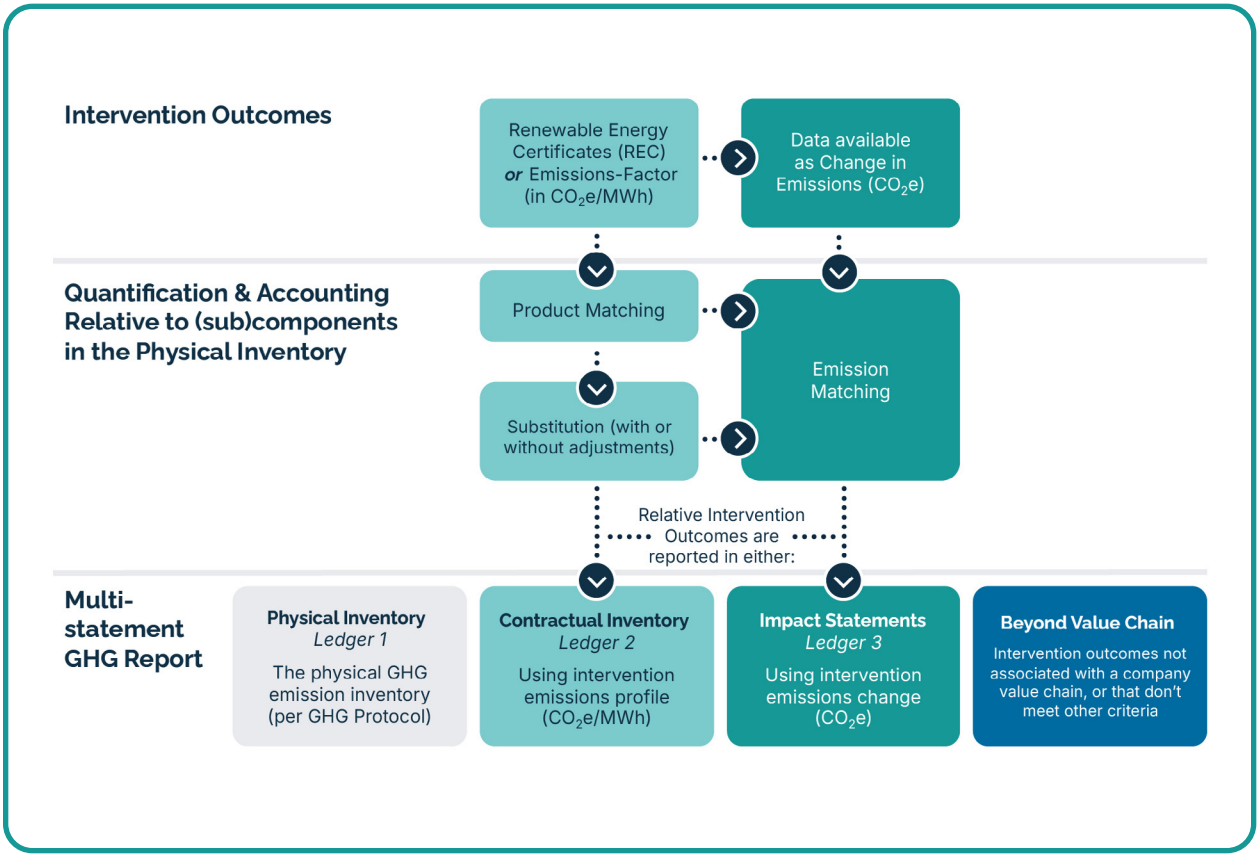
Implementation Guidance

As detailed in Section 5.4, if the intervention record is a REC, it can be assumed that the REC represents an emission factor of 0 units of CO_2e/MWh of electricity generation if the emissions factor is unspecified and the resource is zero emissions at the point of generation. If the resource generating RECs is not zero emissions at the point of generation, companies will need to use the emissions intensity value provided on the REC.

If the intervention record is not a REC, the intervention record or supplementary information will convey an emissions outcome (either an emissions factor or an emissions reduction quantity), which the reporting company will use as the definitive input.

See Figure 3 below for an illustration of the Product Matching and Emissions Matching pathways.

Figure 3: Pathways for Quantification and Accounting



6.1 Product Matching Method with Substitution Accounting Approach

6.1.1 Product Matching Method

Companies will use the Product Matching method if both the tested intervention's units and the targeted subcomponent's units are activity data in MWhs. There is no electricity-specific guidance for the implementation of the Product Matching method, and companies can refer to the AIM Standard for additional details.

Example: Product Matching Method for a PPA Intervention

A company has identified 80,000 MWh of electricity subcomponents across three countries in its value chain: 60,000 MWh from its Germany-based suppliers, 11,000 MWh from France-based suppliers and 9,000 MWh from Croatia-based suppliers. To address these subcomponents, the company signs a PPA in Croatia that generates 90,000 Guarantees of Origin (GOs) per year, with each GO representing one MWh of renewable electricity generation.

As 90,000 GOs is greater than 80,000 MWh, only 80,000 GOs meet the requirements of the Product Matching Method. The company retains the excess 10,000 GOs to apply to other subcomponents or to its next reporting year.

6.1.2 Substitution Accounting

To accurately account for electricity intervention outcomes in a contractual inventory (Section 7.1), companies will need to apply the Substitution accounting approach to the quantity of intervention outcomes that met the requirements of the Product Matching method. Through this, the emissions intensity of the intervention is substituted in place of the emissions intensity of the electricity subcomponent(s).

The following implementation guidance is written for electricity interventions where the outcome is a REC or an emissions factor with an emissions intensity of 0 kg CO_2e per MWh. If the intervention outcome has a non-zero emission factor, companies will follow the substitution accounting method steps in the AIM Standard.

1. Determine the intervention baseline (in CO_2e/MWh) and the emissions intensities for both the intervention and the targeted subcomponent.
    a. Because the intervention outcome is a REC or an emissions factor with an emissions intensity of 0 kg CO_2e per MWh, the emission intensity of the intervention has already been determined to be 0 kg CO_2e/MWh.
    b. Data for the emissions intensity of the targeted subcomponents will have already been collected to perform the Product Matching method.
    c. If the intervention baseline is not provided in the intervention record, companies will need to identify the most appropriate grid intensity where the intervention occurred. This intensity should reflect the most granular geography for which data is available. For example, if the intervention occurs within the Pennsylvania-New Jersey-Maryland Independent System Operator region (PJM ISO), a company should use a PJM-specific emissions intensity for the baseline because it is available, rather than an average United States intensity.
    d. If the company does not have all the data necessary to perform Substitution accounting, they will need to move to pathway 2 (Figure 5 above) and use the Emissions Matching method (Section 6.2).
2. Compare the intervention baseline and the targeted subcomponent emissions intensity. If these are the same, the company can perform substitution using an emissions intensity of 0 kg CO_2e/MWh for the targeted subcomponents in the contractual inventory up to the maximum quantity that met the requirements of Product Matching. If they differ, proceed to Step 3.
3. If the intervention baseline has a higher carbon intensity than the subcomponent emission intensity, the company can perform substitute following Step 2 above. This is because the result of Step 3b would be below zero, and therefore zero would be used as the adjusted emissions intensity. If the intervention baseline has a lower carbon intensity than the subcomponent, proceed with the following steps.
    a. Calculate the impact of the intervention on a per unit basis by subtracting the post-intervention emissions intensity from the intervention baseline.
    b. Calculate an adjusted targeted subcomponent emissions intensity for the contractual inventory by subtracting the output of Step 3a from the targeted subcomponent emissions intensity. This will be a positive number.
    c. Calculate the quantity of emissions for the contractual inventory by multiplying the adjusted targeted subcomponent emissions intensity by the quantity of intervention activity data that met the requirements of Product Matching.

Example: Substitution without Adjustments

Note: This example is a continuation of the example above. The company is accounting for its intervention outcomes given that it has met the requirements of the Product Matching Method.

A company has identified 80,000 MWh of electricity subcomponents across three countries in its value chain: 60,000 MWh from its Germany-based suppliers, 11,000 MWh from France-based suppliers and 9,000 MWh from Croatia-based suppliers. To address these subcomponents, the company signs a PPA in Croatia that generates 90,000 GOs. Because the intervention outcomes are GOs and represent zero emissions renewable energy, the post-intervention emissions intensity can be assumed to be 0 kg CO_2e per MWh. The company identifies an intervention baseline of 98 kg CO_2e per MWh.

The company decides they first want to address its 9,000 MWh Croatia electricity subcomponent emissions. The company checks whether the subcomponents have an emissions intensity that matches that of the intervention's baseline emissions intensity of 98 kg CO_2e per MWh. The company confirms the emissions intensities are the same and therefore can use direct substitution.

Since the company had 9,000 MWh of Croatia electricity subcomponent emissions in its physical inventory, and 90,000 GOs from the intervention, it can substitute all 9,000 MWh with the PPA's emissions intensity of 0 kg CO_2e per MWh in the contractual inventory. This leaves 81,000 MWh of intervention output to address the company's remaining electricity subcomponents.

Subcomponent in the physical inventory	Subcomponent in the contractual inventory
882,000 kg CO_2e (9,000 MWh * 98 kg CO_2e/MWh)	0 kg CO_2e (9,000 MWh * 0 kg CO_2e/MWh)

Details of how the company will use substitution with adjustments for the remaining subcomponents are in the following example boxes.

Substitution with Adjustments: Zero Adjusted Emissions Intensity

Note: This example is a continuation of the example above. The company is applying the remaining output from the same 90,000 GOs.

The company has identified 11,000 MWh of electricity subcomponent activity output from its France-based suppliers in its inventory, with an emissions intensity of 36 kg CO_2e per MWh. The company has 81,000 GOs remaining from its PPA (0 kg CO_2e per MWh), which has an intervention baseline of 98 kg CO_2e per MWh. The electricity subcomponent emissions intensity and intervention baseline are not the same, so the company would normally need to perform substitution with adjustments.

However, because the intervention baseline has a higher carbon intensity (98 kg CO_2e/MWh) than the subcomponent emissions intensity (36 kg CO_2e/MWh), the company can simply substitute the 0 kg CO_2e/MWh emissions factor.

Subcomponent in the physical inventory	Subcomponent in the contractual inventory
396,000 kg CO_2e (11,000 MWh * 36 kg CO_2e/MWh)	0 kg CO_2e (11,000 MWh * 0 kg CO_2e/MWh)

Details of how the company will use substitution with adjustments when there isn't a zero adjusted emissions intensity is in the following example box.

Example: Substitution with Adjustment

Note: This example is a continuation of the example above. The company is applying the remaining output from the same 90,000 GOs.

The company has identified 60,000 MWh of electricity subcomponent activity output from its Germany-based suppliers in its inventory, with an emissions intensity of 291 kg CO_2e per MWh. The company has 70,000 MWh of intervention output remaining from its PPA (0 kg CO_2e per MWh), which has an intervention baseline of 98 kg CO_2e per MWh. The subcomponent emissions intensity and the intervention baseline are not the same, and the intervention baseline has a lower emission intensity than the subcomponent. Therefore, the company will need to perform substitution with adjustments.

To calculate the adjustment needed, the company calculates the impact of the intervention on a per unit basis by subtracting the post-intervention emissions intensity from the intervention baseline:

Intervention Impact = 98 kg CO_2e/MWh – 0 kg CO_2e/MWh = 98 kg CO_2e/MWh

The company then calculates an adjusted targeted electricity subcomponent emissions intensity for the contractual inventory by subtracting the intervention impact from the targeted subcomponent emissions intensity:

Adjusted subcomponent emissions intensity =
291 kg CO_2e/MWh – 98 kg CO_2e/MWh = 193 kg CO_2e/MWh

The company uses 193 kg CO_2e/MWh as the adjusted emissions intensity.

Since the company had 60,000 MWh of Germany electricity subcomponent emissions in its physical inventory, and 70,000 MWh of intervention output remaining, it can substitute 60,000 MWh with the adjusted emissions intensity of 193 kg CO_2e per MWh in the contractual inventory. This leaves 10,000 MWh of intervention volume remaining that could be applied in future years or to other subcomponents.

Subcomponent in the physical inventory	Subcomponent in the contractual inventory
1.746×10^7 kg CO_2e (60,000 MWh * 291 kg CO_2e/MWh)	1.158×10^7 kg CO_2e (60,000 MWh * 193 kg CO_2e/MWh)

6.2 Emissions Matching Method

Companies will use the Emissions Matching method if either the tested intervention's units or the targeted subcomponent's units are denominated in tonnes of CO_2e. In this method, companies demonstrate conformance with the sizing requirement by demonstrating that the intervention's expected emissions reductions total per year is less than the total emissions of the targeted subcomponent. For example, the company could sign an offtake agreement with a battery energy storage system optimized around marginal emissions grid signals and compare the expected emissions reductions from the strategy with the company's electricity subcomponent emissions. If the emissions reductions from the battery storage project are expected to be less than or equal to the targeted value chain electricity emissions, the storage intervention would pass the Emissions Matching method.

The Emissions Matching method for electricity intervention has the following steps, which are simplified from the AIM Standard:

1. For the targeted electricity subcomponents, identify the quantity in tonnes of CO_2e in a given reporting year. If the subcomponent is in volume of activity data, apply a relevant emissions factor, referring to the guidance in 4.1 Quantifying Electricity Subcomponents above, to convert it to CO_2e. This is the quantity of CO_2e from that emissions source.

Note: In the AIM Standard, companies must determine what percentage of the targeted (sub)component's emissions are from the emissions source targeted by the intervention. For electricity interventions covered by this Guidance, companies do not need to complete this step to conform with the Emissions Matching method. This step is unnecessary because interventions addressing emissions from electricity generation will be targeting 100% of the emissions source of an electricity subcomponent.

For the intervention:

2. Determine the emissions reduction percentage of the intervention compared to a credible baseline (e.g., the energy efficiency intervention reduced electricity consumption by 40% compared to pre-intervention baseline). If the intervention outcome was calculated using project accounting, the intervention record will include a project baseline. If a baseline is not included in the intervention record, it can be identified using average data for the region/grid where the intervention occurs.[13]
3. Multiply this percentage by the quantity of CO_2e of the targeted emissions source (Step 1). The result of this calculation is the maximum quantity of CO_2e that a reporting company can address to meet the requirements of the Emissions Matching method, also known as the maximum addressable quantity of CO_2e. This step ensures that reported intervention outcomes are reflective of the decarbonization levels that are physically realized by the intervention.
4. Use the intervention record to determine the quantity of outcomes from the identified intervention in tonnes of CO_2e in a given reporting year. If the intervention outcome was calculated using project accounting, the quantity of outcomes will be provided in the intervention record in tonnes of CO_2e.[14]
5. Compare the intervention outcomes (Step 3) with the maximum addressable quantity of CO_2e (Step 2):
    a. If the intervention outcomes are less than or equal to the maximum addressable quantity of tonnes of CO_2e (Step 2), the intervention meets the requirements of the Emissions Matching method.
    b. If the intervention outcomes are greater than the maximum addressable quantity in tonnes of CO_2e:
        i. Intervention outcomes up to the maximum addressable quantity in tonnes of CO_2e meet the requirements of the Emissions Matching method.
        ii. Intervention outcomes in excess of the maximum addressable quantity in tonnes of CO_2e do not meet the requirements of the Emissions Matching method. Companies can choose not to purchase the excess quantity, can report the excess quantity in another reporting year, or can report the excess quantity as beyond value chain.

13 Companies will use the most granular region/grid data available as this average.

14 If the intervention is in volume of activity data, to meet the Emissions Matching method, the company needs to convert that activity data into CO_2e reduced. Companies can convert to CO_2e by multiplying the volume of activity data by the difference between the intervention emissions factor and a relevant baseline (see Appendix I in the AIM Standard).

Example: Emissions Matching for Electricity Interventions

1. A company identifies 30,000 tonnes of CO_2e from electricity consumption in its Philippines operations.
2. The company, as part of a buyers alliance, participates in an intervention to decommission the Sual Power coal plant in the Philippines and replace it with solar and storage. This intervention reduces the emissions intensity of electricity generation within the system boundary from 0.82 tCO_2e/MWh to 0 tCO_2e/MWh. The decarbonization reduction percentage is 100%.
3. The maximum addressable quantity of CO_2e is 30,000 tonnes of CO_2e * 100% = 30,000 tonnes of CO_2e .
4. Through its buyers alliance, the company contracts for 30,000 tonnes of CO_2e reductions per year.
5. Because the intervention outcome of 30,000 tonnes of CO_2e reduction is equal to the maximum addressable quantity of CO_2e, the intervention meets the requirements of the Emissions Matching method.

6.3 Additional Guidance for Quantification

The Emissions Matching requirement exists so that interventions reported in the impact statement have similar quantification outcomes to interventions reported in the contractual inventory. It does this by requiring companies to restrict the amount of intervention outcomes reported based on the decarbonization percentage of the intervention compared to a baseline (Step 3 above).

However, for some non-generation electricity interventions that compare the interventions' outcomes to a system-level baseline (e.g., balancing authority or grid), Step 3 can result in very small reduction percentages that disproportionally restrict the amount a company can report compared to the impacts of those interventions. In these circumstances, a company can remove Step 3 from the Emissions Matching method and justify their rationale for doing so.

For example, consider an intervention that implements dynamic line ratings to reduce curtailment of renewables. The intervention outcomes are quantified using a standard or methodology that defines the system boundary of the intervention at the balancing authority level. Under Step 3 of the Emissions Matching method, the company would need to compare the baseline emissions intensity of the grid to the emissions intensity of the grid post-intervention per MWh. Although the additional renewables generation could result in a significant total amount of emissions reduced or avoided, the overall grid emissions intensity might only decrease by a fraction of a percent. To avoid being able to only report a fraction of a percent of the emissions reductions, the company can justify excluding Step 3 from the Emissions Matching Method.

Chapter 7: Reporting

7.1 Separate Reporting Statements

Purpose of Reporting Statements

A comprehensive multi-statement GHG report provides companies with the opportunity to disclose the different actions they are taking to address emissions across their value chain and meet their climate goals. In alignment with the AIM Standard, companies pursuing electricity interventions can report intervention outcomes in either the contractual inventory or the impact statement.[15]

Requirements:

- Intervention outcomes reported in a contractual inventory or impact statement shall abide by the Association (Chapter 4), Quality (Chapter 5), and Quantification and Accounting (Chapter 6) requirements of the AIM Standard.
- Companies shall report a complete physical inventory separately from any reporting of intervention outcomes.
- Companies shall report intervention outcomes in reference to specific emissions scopes and categories, segmented by accounting approach, and in mutually exclusive ledgers.
- Intervention outcomes calculated using the Product Matching method with the Substitution accounting approach shall be reported in the contractual inventory.
- Intervention outcomes calculated using the Emissions Matching method shall be reported in the impact statement.
- Intervention outcomes that exceed the quantity of targeted (sub)components in a given year shall be reported as beyond value chain mitigation or in another reporting year.
- If removals are part of an intervention outcome, those shall be reported separately in each respective ledger.

Recommendations:

- N/A – No recommendations in this chapter.

Implementation Guidance

N/A – This section has no electricity specific considerations. See Section 7.1 in the AIM Standard for detail on what can be included in the physical inventory, the contractual inventory, and the impact statement. Refer to Figure 12 in the AIM Standard for an example of a multi-statement corporate GHG inventory.

15 At the time of publication, GHG Protocol is undergoing revisions and actively considering multiple ledgers for reporting different GHG inventories and climate outcomes. The AIM Platform will consider revisions to align with GHG Protocol terminology and requirements when those revisions are finalized.

7.2 Reporting Timing

Purpose of Reporting Timing

While reporting would ideally occur as soon as possible after the intervention outcome occurred, multiple factors influence the amount of time that may reasonably pass before reporting is possible.

Requirements:

N/A – No requirements in this chapter.

Recommendation:

- Intervention outcomes should be reported as soon as possible after record creation.
- Companies should consult sector- or intervention-specific best practices, where they exist, for reporting timelines relative to vintage.
- If not using sector- or intervention-specific best practices, intervention outcomes should be reported within 24 months of record creation.
- Reporting companies that do not report intervention outcomes within 24 months from the date of record creation should provide justification for the delay.

Implementation Guidance

Existing sector- or intervention-specific guidance and best practice can be used when reporting intervention outcomes. Examples include Green-e Energy Certified RECs and I-RECs, both of which have a vintage period of 21-months (The International Tracking Standard Foundation, 2024).

7.3 Reporting Intervention Details

Purpose of Reporting Intervention Details

In order to support credible value chain claims, companies will need to be transparent about the interventions that they are supporting, how those interventions relate to their physical emissions inventory, and how intervention outcomes are calculated.

Requirements:

- Companies shall supplement their multi-statement GHG report with:
  - A list of interventions (listed individually or in aggregate) reported in the contractual inventory or impact statement (i.e., the project, product, or process being supported).
  - The physical inventory (sub)component(s) and/or emissions source(s) being addressed by the interventions.
  - The ledger(s) where the interventions were reported.

Recommendations:

- N/A – No recommendations in this chapter.

Implementation Guidance

N/A – This section has no electricity specific considerations. See Section 7.3 in the AIM Standard for an example of information that can be reported alongside the intervention.

Chapter 8: Assurance to the AIM Platform Standard and Guidance

Purpose of Assurance to the AIM Platform Standard and Guidance

Undergoing third-party assessment to evaluate conformance with the AIM Standard provides assurance that the requirements of the standard were applied.

Requirements:

- N/A – No requirements in this chapter.

Recommendations:

- Companies should secure third-party, limited assurance that they meet the requirements of the AIM Standard in order to report intervention outcomes in their comprehensive multi-statement GHG report.
- Assurance providers should be independent of, and have no conflicts of interest with, the intervention or intervention reporting process.

Implementation Guidance

Companies who apply the Electricity Guidance and pursue assurance will need to have assurance done against both the AIM Standard and the Electricity Guidance.

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