



SOLAR SUPPLY CHAIN TRACEABILITY PROTOCOL 1.0

INDUSTRY GUIDANCE

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FOREWORD

The ability to trace the provenance of components through the supply chain, from input materials to the finished product, is necessary and important for a variety of reasons. From upholding corporate social responsibility principles to quality assurance and environmental performance, robust product traceability provides openness and transparency.

The solar energy industry delivers sustainability solutions to customers by producing energy with low greenhouse gas impacts, improving energy security, and creating jobs and economic development. These considerations, however, are only part of the industry's role in sustainability. More broadly, the solar energy industry has a responsibility to mitigate and manage its full range of social and environmental impacts, which include respecting the human rights of workers, ensuring that the rights of communities and other stakeholders are respected, and making business operations safe and environmentally responsible.

To help meet these obligations, in 2013, SEIA launched the Solar Industry Commitment to Environmental & Social Responsibility (Solar Commitment). The Solar Commitment, developed through a multi-stakeholder process, is an industry code of conduct which defines common practices and expectations for environmental, health, and safety issues and related management systems. A key principle of the Solar Commitment is transparency.

In this context, the U.S. government has identified forced labor as an area of concern for the solar supply chain. U.S. solar customers are also increasingly seeking assurances that the products they purchase are truly sustainable, e.g., free of forced labor. To address these concerns and building upon the industry's existing corporate social responsibility platform SEIA has developed this Solar Supply Chain Traceability Protocol 1.0 (Protocol).

The Protocol is a set of recommended policies and procedures designed to (i) identify the source of a product's material inputs, and (ii) trace the movement of these inputs throughout the supply chain. By implementing the key principles of the Protocol, companies are better able to meet their U.S. import compliance obligations and provide customers supply chain transparency. The Protocol also incorporates an independent, third-party audit mechanism to measure a company's implementation of traceability policies and procedures.

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INTRODUCTION

Transparency of supply chains is paramount. Equipment purchasers, electricity end-users, and other stakeholders demand transparency for reasons ranging from sustainability to corporate social responsibility to import compliance. In this environment, manufacturers must have the proper systems in place to meet stakeholder needs and build trust. To assist the industry, SEIA, with the support of Clean Energy Associates (CEA) and Senergy Technical Services (STS), has developed this Solar Supply Chain Traceability Protocol 1.0 (Protocol) to help manufacturers and importers demonstrate the provenance of their products by developing and implementing a traceability program consistent with the general principles herein.

The Protocol is organized into three primary sections: (i) Principles of Transparency; (ii) Integration of Transparency into Management Systems; and (iii) Integration of Transparency into Operational Processes. The document also provides a case study applying the Protocol to the solar module supply chain and Annexes on Risk Management and Product Traceability Due Diligence.

The Protocol is also intended to help importers meet their U.S. customs law reasonable care obligations and improve an importer's ability to respond to U.S. Customs and Border Protection (CBP) requests for information and audit inquiries. By following the Protocol and producing the documentation recommended herein, an importer should be well-positioned to demonstrate both provenance (where something comes from) and avoidance (locations that are not involved in the production of the product).

Looking forward, questions will arise as suppliers implement and use the Protocol, and new challenges and needs may also come up. To that end, the Protocol will be regularly reviewed and updated to improve clarity and usability and offer additional guidance.

1. SCOPE

The Protocol is intended to have universal application across product lines intended for export to the U.S. market.

Key adopters of the Protocol will include:

- Equipment manufacturers; and
- U.S. importers.

While the Protocol focuses on the provenance of material inputs, it also recognizes the importance of independent, third-party audits and a strong corporate social responsibility and import compliance platform.

In assessing conformance, auditors shall apply a holistic approach which recognizes an organization's unique business processes. No single factor will be dispositive.

2. TERMS AND DEFINITIONS

Accountability - State of being answerable for decisions and activities to the organization's governing bodies, legal authorities, and, more broadly, its stakeholders.

Documentation - Documents and attestations sufficient to generally establish place and date of manufacture and/or transfer of goods.

Due diligence - A comprehensive, proactive process to investigate, appraise, or evaluate a product or organization. Due diligence is conducted to identify the actual and potential consequences of an organization's decisions and activities over the entire life cycle of a project or organizational activity, with the aim of avoiding and mitigating negative impacts.

Governance or management processes - Processes that provide direction and commands for the operational processes. Management processes are usually under the responsibility of the top management of the organization. Examples include planning activities, monitoring, and control processes.

Operational processes - Processes transforming inputs into outputs by providing added value. Examples include sales, design and development, purchasing, and production.

Organization - Company implementing the Protocol.

Principle - Fundamental basis for decision making or behavior.

Sphere of influence - The range and extent of relationships through which an organization can affect the decisions or activities of individuals or organizations.

Stakeholder - Individual or group that has an interest in any decision or activity of an organization.

Supporting processes - Processes supporting project execution by providing resources or other means to other processes. Supporting processes are usually cross functional.

3. PRINCIPLES OF TRANSPARENCY IN THE SUPPLY CHAIN

3.1. GENERAL THEMES: TRANSPARENCY, ACCESSIBILITY, RESPONSIVENESS

The core principles of this Protocol are derived from SEIA's Solar Environmental and Social Responsibility Commitment.

Companies and organizations that participate in international trade have a responsibility to ensure that social, environmental, and quality standards are not compromised by its decisions and activities. The organization should therefore be transparent in its decisions and activities that impact the traceability of its products.

The organization should disclose in a clear, accurate, and complete manner, and to a reasonable and sufficient degree, the policies, decisions, and activities for which it is responsible, including their known and likely impacts on product traceability.

This information should be readily available, directly accessible, and understandable to those who have been, or may be, affected in significant ways by the organization.

The information should be timely, factual, clear, and objectively presented to enable stakeholders to accurately assess the impact of the organization's decisions and activities on their respective interests.

The principle of transparency does not require that proprietary or privileged information be made public. This extends to publishing information whose disclosure would breach legal, commercial, security, or personal privacy obligations. An organization may need to disclose sensitive information to comply with relevant laws or under confidentiality and non-disclosure agreements.

All levels of the supply chain that utilize this Protocol must make reasonable efforts to cooperate in the execution of due diligence to ensure supply chain transparency. A participating organization should be transparent regarding:

- The purpose, nature, and location of its activities;
- The nature, origin, and characteristics of the materials in its products;
- How decisions are made, implemented, and reviewed, including the definition of the roles, responsibilities, accountabilities, and authorities across the different functions in the organization;
- Standards and criteria against which the organization evaluates its own performance and its suppliers' performance relating to transparency in the supply chain;
- Performance on relevant and significant issues of transparency;
- Known and likely impacts of the organization's decisions and activities on its stakeholders; and
- Its stakeholders, and the criteria and procedures used to identify, select, and engage them.

3.2. CORE ATTRIBUTES

3.2.1. ACCOUNTABILITY

An organization should be answerable for decisions and activities to the organization's governing bodies, legal authorities and, more broadly, its stakeholders. The organization should accept appropriate scrutiny and also accept a duty to respond to this scrutiny.

3.2.2. AUDITS

The organization should allow for independent, third-party audits of its supply chain to measure the organization's (i) corporate social responsibility commitments, and (ii) implementation of and compliance with traceability policies and procedures.

In assessing conformance, auditors shall apply a holistic approach which recognizes the organization's unique business processes. No single factor will be dispositive.

3.2.3. RESPECT FOR STAKEHOLDERS' INTERESTS

The organization should respect, consider, and respond to the interests of its stakeholders.

Although an organization's objectives may be limited to the interests of its owners, members, customers, or constituents, other individuals or groups may also have rights, claims, or specific interests that should be considered. Collectively, these individuals or groups comprise the organization's stakeholders.

The organization should:

- Identify its stakeholders;
- Recognize and have due regard for the interests as well as the legal rights of its stakeholders and respond to their expressed concerns;
- Recognize that some stakeholders can significantly affect the activities of the organization;
- Assess and take into account the relative ability of stakeholders to contact, engage with, and influence the organization;
- Take into account the relation of its stakeholders' interests to the broader expectations of society and to sustainable development, as well as the nature of the stakeholders' relationship with the organization; and
- Consider the views of stakeholders whose interests are likely to be affected by a decision or activity even if they have no formal role in the governance of the organization or are unaware of these interests.

3.2.4. RESPECT FOR THE RULES OF LAW

The organization should accept that respect for the rule of law is mandatory. An organization must comply with all applicable laws and regulations, including those of the final destination of its products.

The organization shall take steps to be aware of applicable laws and regulations, to inform those within the organization of their obligation to observe and implement those measures.

An organization must:

- Comply with legal requirements in all jurisdictions in which the organization operates, even if those laws and regulations are inadequately enforced;
- Know its legal obligations; and
- Periodically review its compliance with applicable laws and regulations.

3.2.5. ORGANIZATIONAL GOVERNANCE

Organizational governance can be comprised of both formal governance mechanisms based on defined structures and processes and informal mechanisms that emerge from the organization's culture and values, often influenced by the organization's leaders. Organizational governance is a core function of every organization as it is the framework for decision making within the organization.

Organizational governance is the most crucial factor in enabling an organization to take responsibility for the impacts of its decisions and activities and to integrate social responsibility throughout the organization and its relationships.

3.2.6. PRODUCT TRACEABILITY

Product traceability is the ability to trace the history, application, or location of a product. It follows the movement of a product and its components or material inputs through specified stages of production, processing, and distribution.

Implementing a product traceability system is crucial to develop and enhance transparency in the supply chain, by providing evidence of origin and characteristics of the products the organization offers.

3.2.7. SUPPLY CHAIN SECURITY

Supply chain security is the resistance to intentional acts designed to cause harm or damage to or by the supply chain.

People, goods, infrastructure, and equipment, including means of transport, should be protected against security incidents and their impact on the traceability of the products and, as a consequence, on the transparency of the supply chain.

The level of security in the supply chain should be evaluated and improved to enhance transparency in the supply chain.

3.3. DRIVERS FOR TRANSPARENCY IN THE SUPPLY CHAIN

3.3.1. GENERAL

The motivations of organizations for practicing transparency in the supply chain differ depending on the type of organization and the context in which they operate. Drivers for transparency should be analyzed to help define the transparency objectives and goals for the supply chain and to aid internal communication.

This section provides examples of drivers for the implementation of a transparency system in the supply chain.

3.3.2. EXAMPLES OF DRIVERS

3.3.2.1. Legislation and Regulations

Adherence to this Protocol should help improve a company's compliance with state and federal law.

For example, Section 307 of the Tariff Act of 1930, 19 U.S.C. § 1307 (Section 1307), prohibits the importation of merchandise mined, produced, or manufactured, wholly or in part, in any foreign country by forced or indentured labor. Such merchandise is subject to exclusion and/or seizure by the U.S. government and may lead to criminal investigation of the importer(s).

When information reasonably but not conclusively indicates that merchandise within the purview of Section 1307 is being imported, the Commissioner of U.S. Customs and Border Protection (CBP) may issue a withhold release or detention order pursuant to 19 C.F.R. § 12.42(e). If the Commissioner is provided with information sufficient to make a determination that the goods in question are subject to the provisions of Section 1307, the Commissioner will publish a formal finding to that effect in the Customs Bulletin and Federal Register pursuant to 19 C.F.R. § 12.42(f).

In responding to Section 1307 inquiries, the organization may be asked to provide information regarding the organization's import compliance practices, including:

- Policies and procedures to prevent forced labor in the supply chain, including specific language in supply contracts; and
- The extent to which the supply chain has been certified by independent auditor.

3.3.2.2. Customers

Suppliers should recognize that consumers may have a preference (or requirement) regarding where a product is made or the source of material inputs.

3.3.2.3. Competitive Advantage

In competitive markets the ability to offer goods or services considering a transparent value proposition supported by the supply chains can be a key competitive differentiator.

3.3.2.4. Innovation

Increasing transparency of the supply chain helps stimulate supply chain innovation, leading to greater shared value and new market opportunities.

3.3.2.5. Investor Confidence

Transparency in the supply chain may significantly increase the organization's rating by independent agencies and attract investment.

3.3.2.6. Supply Chain Resilience

Transparency in the supply chain could help avoid supply chain disruption resulting from, e.g., product recalls, financial penalties, or supplier failure.

3.3.2.7. Cost Optimization

Transparency in the supply chain can help identify costs savings opportunities such as economies of scale, leaner supply chain organization, and improved return on investment.

3.3.2.8. Employee Satisfaction

As satisfaction of employees is an increasing concern in many companies, transparency in the supply chain may lead to increased satisfaction, productivity, and attractiveness of the company in its retention and recruitment efforts, and more generally in the employee management cycle.

3.4. ORGANIZATIONAL SPECIFICITY

Industry supply chains are highly dynamic and consist of many transformational processes and different chain of custody models. This Protocol recognizes the complexity of these supply chains and the related challenges and complexity of implementing a thorough traceability system.

The Protocol has been developed to allow individual organizations to apply the Protocol's recommendations in conformance with the organization's particular business model and its role and function in the international supply chain.

3.5. MANAGEMENT OF TRANSPARENCY IN THE SUPPLY CHAIN

3.5.1. RISK APPROACH

One key to establishing a robust supply chain transparency system resides in addressing risk – both internal and external. Risk management should therefore be integrated in the decisional and operational activities and conducted in a dynamic, iterative, and responsive manner.

The organization should identify, prioritize, and address risks to increase its resilience to events which can impede product traceability. This includes considering how suppliers are capable of meeting traceability requirements such as monitoring and auditing. It is recommended that the organization conduct an initial review to create a baseline of the risks and opportunities in relation with its products' traceability.

3.5.2. ADDRESSING IMPACTS

As the organization can cause or contribute to adverse impacts on the product traceability, it should put a strong focus on its operational processes such as:

- Its own procurement practices as well as the practices of its suppliers; and
- The design, execution, use, or disposal of the goods or services it provides or procures from external sources.

The organization should implement a due diligence process to identify and address adverse impacts on its supply chain through a structured risk management process, including taking proportionate actions to resolve adverse impacts.

3.5.3. EXERCISING INFLUENCE

The organization should identify and deploy the means to positively influence the behavior of its suppliers and other stakeholders towards an improved product traceability.

Means of influence may derive from direct control over the stakeholder(s), commercial agreements, incentives, reputational advantage, procurement collaboration with other organizations, partnerships with financial institutions, and government authorities' engagement in improvement of the public policies and regulations.

3.5.4. AVOIDING COMPLICITY

The organization should avoid in any way being complicit in wrongful acts of its personnel, management, or other organizations that can have adverse impacts on product traceability. The organization shall avoid being complicit either:

- Directly, by assisting the commission of wrongful acts;
- Beneficially, by benefitting from the commission of the wrongful acts; or
- Silently, by failing to raise the issue of wrongful acts when it becomes known to the organization.

3.5.5. CONTINUOUS IMPROVEMENT

Effective performance of the product traceability system depends in part on monitoring, review, and evaluation of business activities and resource allocation. The organization, based on the context it operates in, should identify the relevant activities that need to be monitored and reviewed by taking into consideration the impact the activities may have on product traceability, with a broad view of the entire supply chain.

The organization may make use of indicators and perform regular reviews of those indicators against defined objectives aligned with the organization's strategies and processes. Based on these regular reviews, the organization should identify ways in which it could improve the performance of product traceability. Improvements may include changes to the scope covered, targets and objectives to adapt to a changing context, evolution of resources, or deployment of new programs to address new opportunities.

3.6. RELATIONSHIP BETWEEN PRODUCT TRACEABILITY AND MANAGEMENT SYSTEMS

This document provides recommendations for organizations to increase confidence in their products' traceability. The objective is not to build a new management system in parallel to existing ones, but rather to provide recommendations that can be easily integrated into existing management systems.

The recommendations are therefore structured around international standards, e.g., ISO9001:2015, which covers governance or management processes, operational processes, and supporting processes.

The structure of the Protocol does not provide a hierarchy or a recommended structure for the product traceability system to be implemented by the organization, but rather aims at identifying similarities with existing management systems for ease of integration.

4. INTEGRATION OF TRANSPARENCY INTO MANAGEMENT SYSTEMS

4.1. CONTEXT

The organization should consider product traceability as a priority issue, internally and externally, in its contextual analysis. Stakeholders should be identified and engaged, and information relevant to material provenance monitored and reviewed.

4.2. STAKEHOLDER ENGAGEMENT

4.2.1. IDENTIFICATION

Stakeholders that have the potential to affect the organization's ability to determine the provenance of materials, and meet customer and applicable statutory and regulatory requirements, must be identified. These shall include upstream suppliers and their suppliers.

4.2.2. ENGAGING STAKEHOLDERS

Stakeholders must be informed of all obligatory, statutory, and regulatory requirements with respect to product traceability.

4.3. MANAGEMENT SYSTEM SCOPE

In determining the management system scope, the organization shall consider product traceability as an internal and external issue, and how to meet applicable obligatory, statutory, and regulatory requirements. The organization must contribute a reasonable best effort to determine material provenance.

4.4. LEADERSHIP AND ACCOUNTABILITY

Top management shall demonstrate leadership and commitment with respect to material provenance by:

- Ensuring integration of product traceability into its management system and business processes;
- Ensuring the resources needed for this additional management system aspect are available;
- Communicating the importance of product traceability and good record keeping;
- Engaging, directing, and supporting persons to contribute to the effectiveness of product traceability;
- Promoting continual improvement; and
- Being ultimately accountable for an effective product traceability process.

4.5. PLANNING

When integrating supply chain traceability into management system planning processes, the organization shall consider:

- How to ensure transparency of the supply chain;
- How to evaluate the effectiveness of the traceability process; and
- What actions to take when stakeholders cannot or will not comply with request.

4.6. RESOURCES

The organization shall determine and provide the resources needed to implement an effective material traceability program by considering the capabilities of, and constraints on, existing internal resources, and obtaining external providers when necessary. Important aspects for personnel resources with respect to material traceability are access to information.

4.7. COMPETENCIES

The organization shall determine the necessary training and competencies required for effective material traceability and ensure personnel completing tasks related to material traceability are competent based on training or experience. The organization shall maintain a training and evaluation program and retain records as evidence of competence.

4.8. AWARENESS

The organization must ensure that personnel completing tasks related to material traceability are aware of the traceability program and its objectives. Personnel must understand their contribution to the effectiveness of the traceability program, and the potential implications of not conforming to the requirements of the program.

4.9. COMMUNICATION

The organization shall determine the most effective way to communicate information relevant to the traceability program to internal and external stakeholders, including:

- What and when to communicate;
- With whom to communicate internally and externally; and
- Who communicates and on what platform(s).

4.10. DOCUMENTATION

The following information has been designated to respond to both audit inquiries and government requests for information.

4.10.1. ESSENTIAL INFORMATION

The organization should be prepared to provide information to relevant stakeholders that includes the following elements:

- Legal name of the company;
- Length of time in business;
- Company structure, including organizational chart; and
- Importer status, when relevant.

4.10.2. TRANSACTIONAL EVIDENCE

The organization should be prepared to present, at a minimum, the following documents related to the transactions throughout the supply chain that resulted in the product being imported:

- Transaction details, e.g., purchase order(s) and contracts between and among the links in the supply chain, associated commercial invoice(s) between and among the links in the chain, and proofs of payment against said invoices;
- Customs entry documents, e.g., CBP Form 7501;
- Freight forwarder notice of arrival;
- International Bill of Lading/Packing List with shipper and product description;
- Foreign inland freight documentation from the manufacturer to the Port of Export for any inter- or intra-link transaction that includes transportation across an international border; and
- Customs broker instructions.

With respect to possible evaluation by CBP of goods suspected to have been produced with forced labor, or, in the event CBP investigates a shipment due to the possibility that something in the shipment is suspected of being tied to a region connected to forced labor, CBP may request additional information.

The organization should expect even further scrutiny from CBP if goods are detained. Detention notices may request the following types of documentation (this is not an exhaustive list and additional documentation may be required):

- Affidavits from each producer in the supply chain that identify where the input material was sourced;
- List of production steps and production records for the product, including records that identify the input materials; and
- Supporting documents related to employees that could include documents related to wages and hours worked as well as daily production output from each factory in the chain.

Additional documents demonstrating social characteristics of the supply chain may also be required. For example, supporting documents related to employees that could include documents related to wages and hours worked as well as daily production output.

4.11. PERFORMANCE EVALUATION

To evaluate the performance of the traceability program, the organization shall determine:

- What must be monitored and measured;
- The methods needed to ensure valid results;

- The frequency of monitoring; and
- When the results from monitoring shall be analyzed and evaluated.

The organization shall retain documented information as evidence of traceability program compliance and performance.

4.12. IMPROVEMENT

The organization shall determine opportunities for improvement and implement actions necessary to meet stakeholders' requirements. In the event of non-conformities to the traceability program the organization will take action to control and correct the non-conformity. The organization shall review and analyze the non-conformity to determine the root cause and implement a corrective action plan to prevent reoccurrence.

4.13. GRIEVANCE MECHANISM

There shall be a grievance and reporting procedure in the event an employee suspects or becomes aware of non-compliance, which should include a non-retaliation provision.

5. INTEGRATION OF TRANSPARENCY INTO OPERATIONAL PROCESSES

5.1. PRODUCT DEVELOPMENT

The organization should factor traceability considerations into the product design process.

5.2. SUPPLY CHAIN MAPPING

The organization should be able to present a description of the entities involved in creating the product that is being imported. This description can include an illustration of the links in the supply chain in a step-by-step flow from raw materials to finished goods, i.e., supply chain map. While the map can take many forms, the essential elements of a map are illustrated here:



Figure 1: Three-step Supply Chain Map

The map should identify individual steps in the process and each step should include information about that step's entity, such as the item being produced, a description of the overall manufacturing process(es) being employed, the name of the producer, and the location of production.

In the case of multiple suppliers of the same item, the map would indicate multiple entities. In the event there are multiple production locations for an entity that are in the supply chain for the final product, the relevant locations should be identified.

Each time there is a transaction between steps in the supply chain, the importer should disclose the nature of the document that codifies the transaction, i.e., a purchase order, supply contract, etc., as well as identify the business unit of the individual who places the order.

Complex products and products with many components or suppliers can lead to complex supply chain maps. These can be simplified by addressing raw materials or intermediate items that are of particular importance, either because of location, cost, uniqueness of the time, or other factors.

A more detailed map is illustrated here:

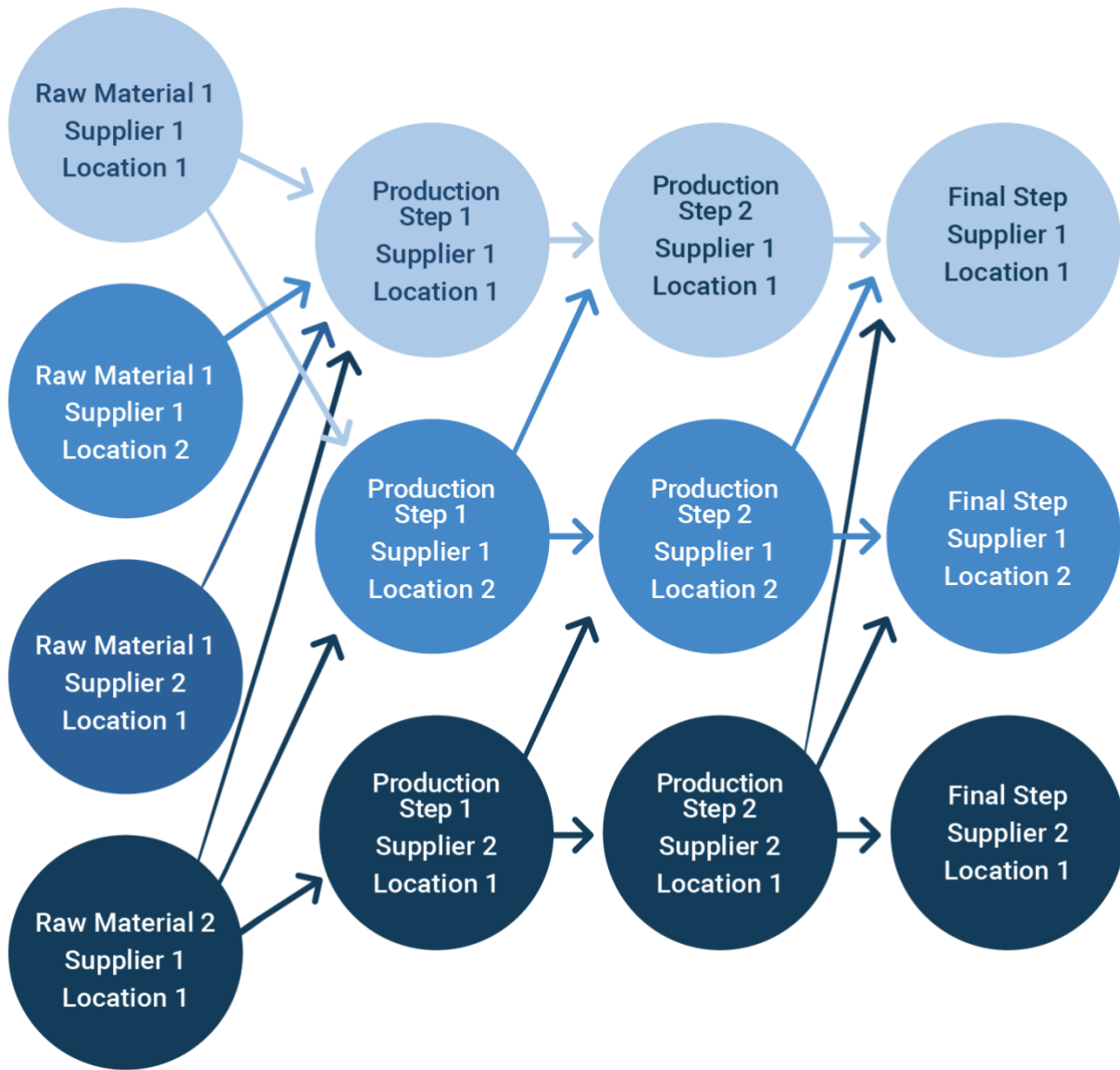


Figure 2: Multi-Location, Multi-Step Supply Chain Map

5.2.1. SUPPLY CHAIN MODELS

5.2.1.1. Mass Balance

An optional additional element of traceability is a match between what comes into a factory and what leaves the factory. For example, a factory shipping 1,000 refrigerators a week (on average) should also be able show purchase and receipt of approximately 1,000 compressors each week (on average) and the source of the

compressors. Applying this to, e.g., solar modules, for a factory that ships 3,000 modules per day (with the equivalent to 72 full-size cells per module), the factory should be bringing in approximately 6.5 million cells per month.

5.3. PROCUREMENT PROCESS

Each step in the solar module supply chain shall have a procurement process that addresses input material traceability explicitly. Documented information shall be retained that identifies specific quantities and volumes of materials, e.g., modules, cells, wafers, etc., that are transformed at each step in the supply chain and transferred between steps. Documented information may include, but is not limited to:

- Requests for quotations and quotations;
- Commercial invoices;
- Purchase orders;
- Bills of lading;
- Export packing lists;
- Airway/vessel bills;
- Dock/warehouse receipts;
- Certificates of origin;
- Warehouse inventory control;
- Production orders;
- Manufacturing / process control; and
- Finished good warehousing.

To the extent reasonably possible, unique identifiers should be used to track individual units through the supply chain. Manufacturers that use input materials from different vendors should have a robust and auditable process for demonstrating, when necessary, control and separation of materials throughout their manufacturing process.

5.4. SUPPLIERS' RELATIONSHIP MANAGEMENT

5.4.1. COMMUNICATION OF THE REQUIREMENTS

Manufacturers shall determine the necessary criteria for effectively tracing input material through their manufacturing process and communicate those requirements to their suppliers. Successful fulfillment of the requirements will provide a clear history of the input material from door-to-door at the supplier's facility as well as a clear link to the previous step in the supply chain.

5.4.2. SELECTION PROCESS

The ability and willingness of suppliers to provide traceability information shall be considered in an organization's supplier selection and qualification process. Organizations at each level of the solar module supply chain should determine and apply the criteria necessary for their suppliers to satisfactorily provide input material to their manufacturing processes. Those criteria should be periodically re-evaluated jointly with the supplier for the supplier to maintain qualification.

5.4.3. PRODUCT TRACEABILITY PERFORMANCE MONITORING

Organizations at each level in the solar module supply chain shall retain the documented information required by their customers and provide such information with shipments or when otherwise requested. Manufactures

at each level of the solar supply chain shall periodically re-evaluate the effectiveness of their suppliers' traceability programs and provide feedback in the form of corrective action requests.

5.4.4. SUPPLIERS' NONCONFORMITIES MANAGEMENT

In the event of non-conformance to the traceability program requirements by a supplier, the buyer will:

- Immediately quarantine the material in questions to prevent possible mixing of inputs;
- Take action to determine the provenance of the material in question before release; and
- Reject the material as non-conforming if true provenance cannot be determined.

If the provenance of the non-conforming material is resolved, then the buyer and supplier shall determine what actions are necessary to prevent recurrence of the non-conformance. If the non-conformance cannot be resolved, the non-conforming supplier's status as "qualified" should be reviewed according to the buyer's supplier selection process.

5.5. PRODUCTION CONTROL

5.5.1. MATERIAL CONTROL

The organization should integrate traceability and security requirements into its receiving process.

Receiving process should include as a minimum:

- Documentary review to identify the source of materials against purchase orders;
- Availability of traceability information, including where applicable access to supplier's traceability system;
- Correct identification of the materials;
- Where applicable, serialization of the materials;
- Integrity of the materials packaging;
- Presence and condition of security elements, including where applicable transportation seals; and
- Documentary review of logistic documentation including bill of lading and transportation information.

The organization should maintain records of receiving control. The receiving process shall be conducted by qualified personnel having received supply chain security training.

5.5.2. TRACEABILITY AND IDENTIFICATION

The objective of the Protocol is to identify all materials and the sources used to produce the product being imported into the United States. Since many products are produced with materials from different factories, the Protocol is designed to examine all factories in the supply chain.

At each point during the production process when an item changes ownership, location (e.g., city, province, country), or form of packaging, a unique identifier should be created and data regarding the item should be recorded and linked to the identifier, to the extent possible. That data should "move" with the item into the next step in the process. Individual steps may require more data than what is needed for traceability. At a minimum, the "moving data" should include for each material input used to produce the finished article:

- Unique identifier for each material input, e.g., lot number, serial number, etc.;
- Vendor name;
- Place of manufacture; and
- Date of manufacture.

For items that are being sold from one entity to another, the information should also include:

- Seller's name;
- Buyer's name; and
- Buyer's purchase order number.

Manufacturers should be aware that government agencies may request additional information, e.g., how labor is secured, whether labor is provided or sourced from any government program, and whether labor is sourced by the factory or via brokers of government programs.

5.5.3. BASIC TRACEABILITY SCENARIO

Supply chains do not always move information from one factory to the next and often only basic information is transferred, such as volume and product name. This Protocol seeks to define the additional information that should go from any step in the total production process to the subsequent step (or factory).

For any individual step, e.g., "N," there is factory information about date of production, factory location, product name, and product identifier. The identifier may be a serial number, a lot number (whereas a "lot" is later divided into amounts of the item as used in the factory), a container number, and eventually the buyer.

Traceability between seller and buyer is straightforward. A seller has an item with some form of identifier and production information; a buyer procures the item, with reference to the identifier and the quantity. The Protocol adds the above production information from N-1, e.g., factory location, production date.

Assume the product from N-1 goes into inventory at N. When N is in production, N should identify the specific item, e.g., lot number, serial number, etc., being pulled from inventory to make N's item.

There may be additional information such as equipment used to make the item, operators who produced the item, quality metrics collected during the production, etc. For purposes of this Protocol, the key information to be collected and made available to step N+1 from step N-1 and step n includes:

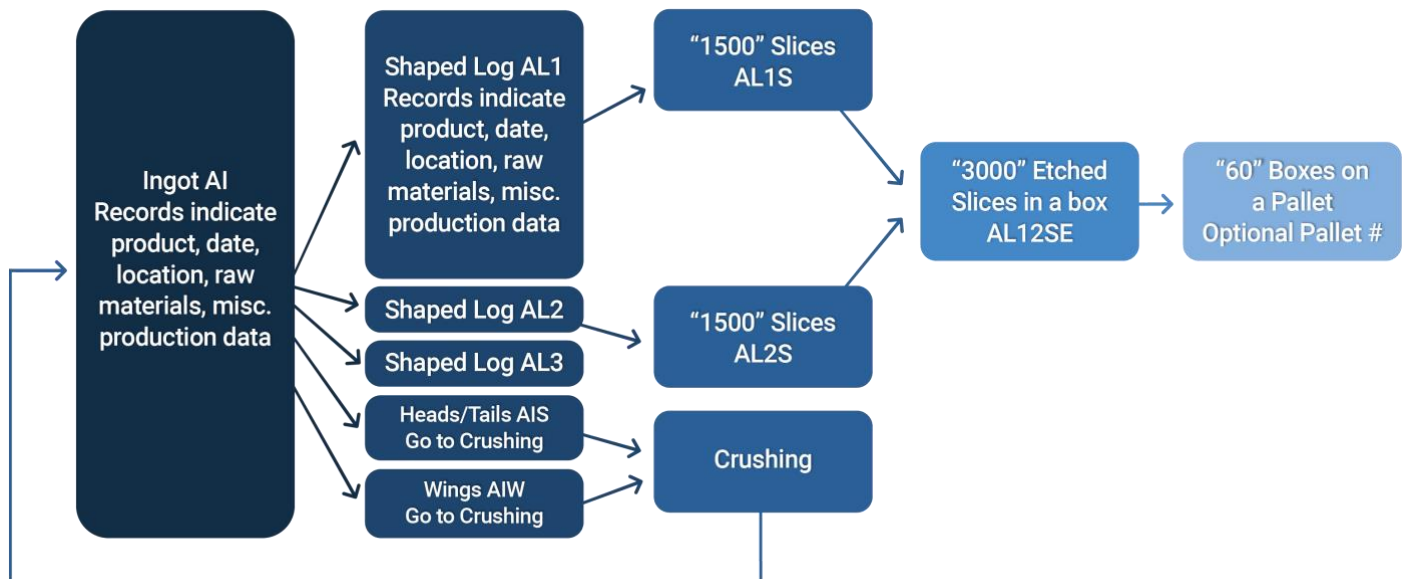
- Date of production;
- Production location (factory identification and city/town); and
- Unique identifier(s) of the materials/items going to the subsequent step.

Within a factory, there may be transformation of materials from one form into another or from an identified item to a collection of items within individual unique identifiers. This type of transformation, even if it takes place within an entity, is akin to a transaction between entities, and information about the "before" and "after" item should be collected.

For example, in the illustration below, an ingot of silicon, with a unique identifier, is shaped into "logs" (each log is given a unique identifier) that are then sliced into wafers. The wafers are not individually identified. The wafers, however, can be identified (such as by a label on a box of wafers) as having come from a particular log or batch of logs.

If wafers from different logs are combined, then a new and unique identifier should be assigned to the mixed batch and the provenance of the wafers in the batch should be linked to the batch identifier.

Figure 3: Processing Ingots and Wafers



In short, for a pallet of wafers, perhaps identified only by a unique pallet number, the purchaser of the wafers should be able to trace the provenance back to a specific ingot or ingots.

5.6. RELEASE OF PRODUCTS

The organization should integrate traceability and security requirements into its product releasing process.

The release process should include, as a minimum:

- Availability of traceability information for the products to be shipped;
- Correct identification of the product;
- Where applicable, serialization of the materials;
- Integrity of the products packaging;
- Presence and condition of security elements, including where applicable, transportation seals; and
- Documentary review of logistic documentation including bill of lading and transportation information.

The organization should have documented procedures to prevent shipment of products that have not passed through the release process.

Releasing process shall be conducted by qualified personnel having received supply chain security training.

6. REFERENCES

[SEIA Solar Industry Environmental and Social Responsibility Commitment](#)

[ISO 9001:2015 \(Quality Management Systems\)](#)

[ISO 22095: 2020 \(Chain of Custody - General Terminology and Models\)](#)

[SA8000](#)

[ISO 19011:2018 \(Guidelines for Auditing Management Systems\)](#)

[Fair Labor Association Workplace Code of Conduct](#)

[Combatting Forced Labor: A Handbook for Employers & Business \(International Labor Organization\)](#)

[OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#)

ANNEX A: APPLICATION OF THE PROTOCOL TO THE SOLAR MODULE SUPPLY CHAIN

1. RECOMMENDED DOCUMENTATION

Most companies across the solar module supply chain already have advanced systems in place that track materials through the various manufacturing processes. The Protocol envisions organizations' integrating product traceability to upstream suppliers into the applicable management system in such a way that will allow consumers to determine the provenance of material inputs from a specific module all the way back to the plant that produced raw materials. Organizations are responsible for developing and implementing a traceability program that facilitates the vision of the Protocol.

Weaving product traceability into the entirety of the solar module supply chain will necessarily require organizations at each level to cooperate and share sensitive information. The use of non-disclosure agreements and third parties is recommended to maintain operational and intellectual property security. The traceability program implemented by organizations should include specific metrics that are monitored, measured, and evaluated. The effectiveness of the system should be periodically reviewed to determine areas for improvement.

The logistics documents associated with each shipping unit should preserve the upstream provenance of the input material and that information should be linked to the serial number or other relevant identifier of each individual output product. Possible documents include, but are not limited to:

- Purchase orders;
- Shipping manifests;

- Bills of lading;
- Inventory lists;
- Internal delivery notes;
- Consumption records; and
- Other logistics documents.

Each production output should have a unique serial or batch number that can be used to trace input material. The unique identifier should provide access to information relevant to the production of the output product, including but not limited to:

- Production facility details;
 - Name and address of the manufacturer;
 - Names of executives and corporate officers;
 - Production capacity and employee count;
 - Order fulfillment process and timeline;
- Date and time of manufacturing;
- Production order;
- Relevant production process details, e.g., polysilicon reactor number;
- Finished goods warehouse inventory; and
- Shipping/consumption notice.

The following demonstrates the Protocol as applied to the full production cycle of a solar module, from metallurgical grade silicon to the finished solar panel. Users of the Protocol will need to decide which segments of the supply chain are relevant to their given circumstances.

1. METALLURGICAL GRADE SILICON

Inputs for production of metallurgical grade silicon (MGS) that is destined for use in solar modules should be delivered in designated, serialized shipping units. Each individual MGS output should have a unique serial number or equivalent identifier.

In addition to conservation of the provenance of the MGS output product, manufacturers should also, where necessary, maintain auditable processes for keeping input material from different sources physically separated.

2. POLYSILICON

Inputs for production of polysilicon (poly-Si) that is destined for use in solar modules should be delivered in designated, serialized shipping units. The logistics documents associated with each shipping unit should preserve the upstream provenance of the input materials and that information should be linked to the output products.

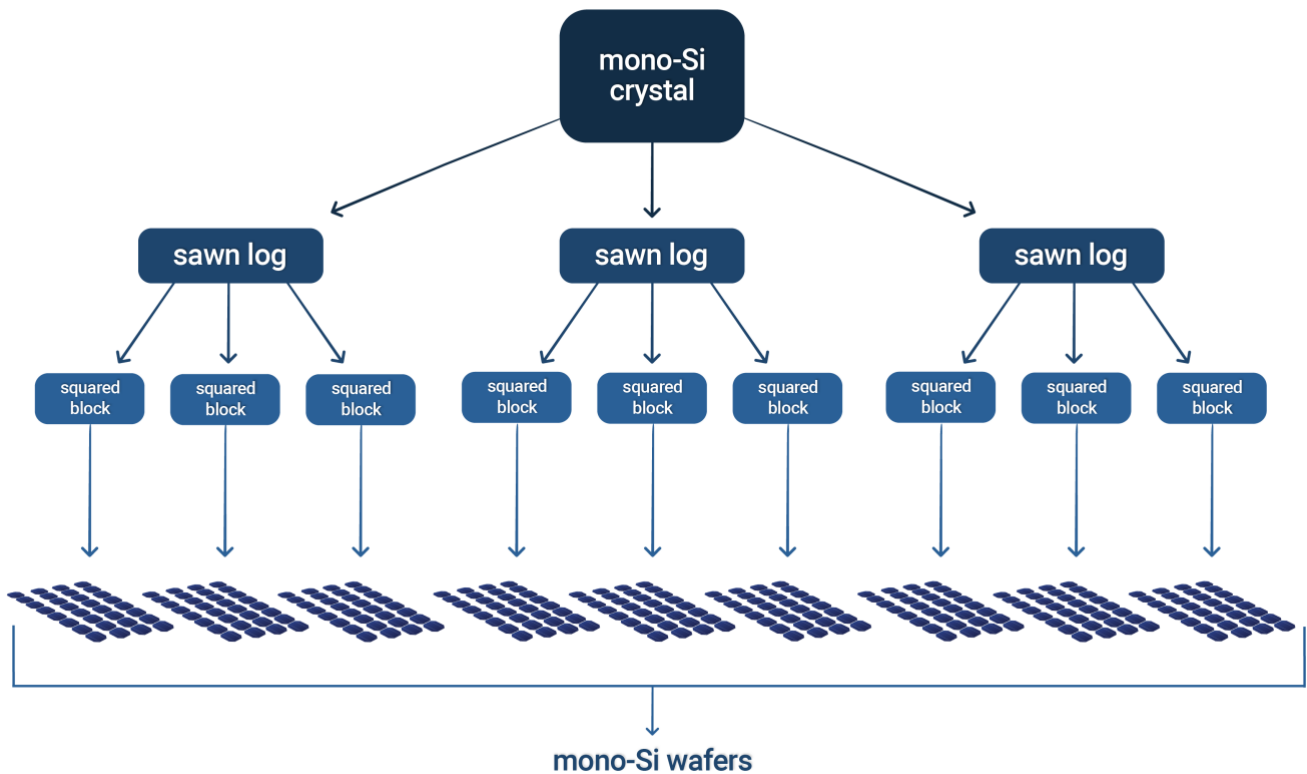
The manufacturing processes for poly-Si should include rigorous controls to prevent mixing of input material from different sources. Poly-Si outputs should be grouped and stored with clear physical and digital separation by input material. Poly-Si output material should be stored and shipped in designated and serialized shipping units. Each shipping unit should have a unique serial number that can be used to trace the input MGS material.

In addition to conservation of the provenance of the poly-Si output product, manufacturers should also maintain an auditable process for keeping input material from different sources physically separated.

3. SOLAR WAFER

Poly-Si inputs for production of monocrystalline silicon wafers destined for use in solar modules should be delivered in designated and uniquely identifiable shipping units, e.g., lot or batch number. The logistics documents associated with each shipping unit should preserve the upstream provenance of the input material and that information should be linked to the output product.

The manufacturing processes of solar wafers should include, when necessary, rigorous controls to prevent mixing of input poly-Si from different sources. Additionally, there may need to be rigorous controls to prevent mixing of intermediate products on the production floor. Each intermediate product generated during solar wafer production should be tracked with a Manufacturing Execution System (MES) that can link each intermediate product to its parent product and resulting product(s).



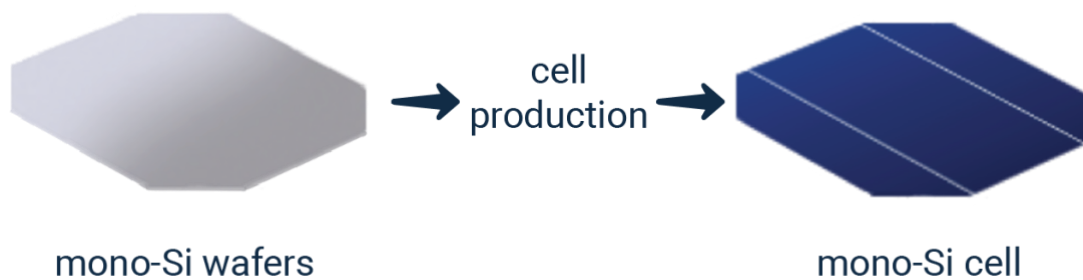
Solar wafer output material should be boxed in defined and easy to handle amounts, e.g., 100 wafers per box. Each shipping unit above should have a unique serial number that can be used to trace the input poly-Si material.

In addition to conservation of the provenance of the solar wafer output product, manufacturers should also maintain, when necessary, an auditable process for keeping input material from different sources physically separated at each intermediate step in the solar wafer manufacturing process.

4. SOLAR CELL

Solar wafer inputs for the production of solar cells should be delivered in designated and traceable shipping units. The logistics documents associated with each shipping unit should preserve the upstream provenance of the input material and that information should be linked to the output product.

Where material inputs from different sources are mixed or blended together, the manufacturing process should include rigorous controls to maintain provenance, e.g., the source of both inputs travels across the supply chain. Each intermediate product generated during solar cell production, should be tracked with a Manufacturing Execution System (MES) that can link each intermediate product to its parent product and resulting product.



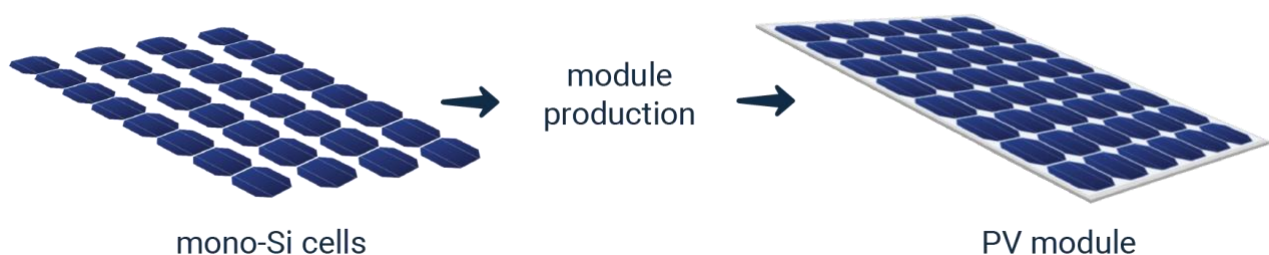
Solar cell output material should be boxed in defined and easy to handle amounts, e.g., 100 wafers per box. Boxes of cell may be combined into larger boxes which are then combined on a pallet. Each shipping unit should have a unique identifier, e.g., unique box number, that can be used to trace the input solar wafer material.

When necessary, manufacturers should also maintain an auditable process for keeping material from different sources physically separated at each intermediate step in the solar cell manufacturing process.

5. SOLAR MODULE

Solar cell inputs for production of solar modules should be delivered in designated, serialized shipping units. The logistics documents associated with each shipping unit should preserve the upstream provenance of the input material and that information should be linked to the output product.

The manufacturing processes of solar modules should include rigorous controls to prevent mixing of input cells from different sources. Additionally, there must be rigorous controls to prevent mixing of intermediate products on the production floor. Each intermediate product generated during solar module production should be tracked with a Manufacturing Execution System (MES) that can link each intermediate product to its parent product(s) and resulting product(s).



Solar Supply Chain Traceability Protocol 1.0

Solar module outputs should be palletized in defined amounts, e.g., 20-30 modules per pallet. Each pallet should have a unique serial number that can be used to trace the input solar cell material.

In addition to conservation of the provenance of the solar module output products, manufacturers should also maintain an auditable process for keeping input material from different sources physically separated at each intermediate step in the module manufacturing process.

ANNEX B: GUIDANCE ON RISK MANAGEMENT

6. RISK FACTORS

Supply chain risks can be associated with the following:

Factor	Associated risk
Planning	Failure to determine the extent, duration, number, location of the due diligence activities
Resources	Insufficient time, equipment, training for developing the due diligence program
Competence	Selection of due diligence team, insufficient competence to conduct related activities
Communication	Insufficient/ineffective communication means and channels
Information	Ineffective determination of the necessary documentation to perform a correct evaluation
	Confidentiality of the information collected
	Language, cultural and social issues
Stakeholders	Availability and cooperation of the organizations subjected to due diligence process
	Travel and auditing restrictions

7. RISK MANAGEMENT CHARACTERISTICS

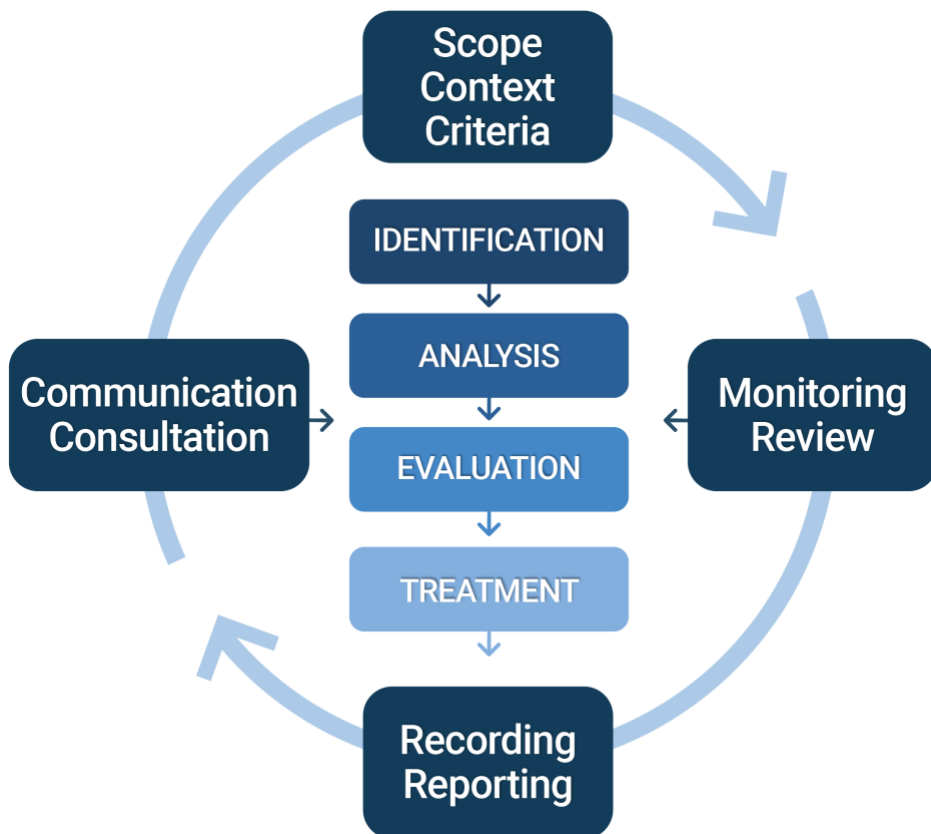
Risk management processes should have the following characteristics:

- **Integrated** - Risk management should be integrated by the organization as part of all its operational activities.
- **Structured and comprehensive** - A structured and comprehensive approach to risk management contributes to consistent and comparable results.
- **Customized** - The risk management framework and process should be customized and proportionate to the organization’s external and internal context.
- **Inclusive** - Appropriate and timely involvement of stakeholders enables their knowledge, views, and perceptions to be considered.

- **Dynamic** - Risks can emerge, change, or disappear as an organization's external and internal context changes. Risk management anticipates, detects, acknowledges, and responds to those changes and events in an appropriate and timely manner.
- **Best available information** - The inputs to risk management are based on historical and current information, as well as on future expectations. Risk management takes into account any limitations and uncertainties associated with such information and expectations. Information should be timely, clear, and available to relevant stakeholders.
- **Human and cultural factors** - Human behavior and culture significantly influence all aspects of risk management at each level and stage.

8. RISK MANAGEMENT PROCESS

Risk management processes shall follow an improvement cycle based on the inputs gathered.



9. RISK IDENTIFICATION

In the risk identification phase, the organization should create an objective list of the risks taking into consideration a variety of factors, such as the nature of risk and changes in risk profile.

The organization may use different techniques such as interviews, surveys, and auditing to increase reliability in the characterizations of the risk.

It is recommended that the organization identifies risk emerging from all its stakeholders.

10. ANALYSIS AND EVALUATION

The organization should prepare a risk evaluation matrix to assess:

- **Severity** - Impact of the risk on the reliability of the product traceability through an evaluation of the consequences of the risk materialization.
- **Likelihood** - The probability of the risk to actually materialize.

During the evaluation phase, the organization shall also consider the existing measures and controls in place that might affect either the severity or the likelihood or both.

11. RISK TREATMENT

Based on the evaluation phase, the organization shall take appropriate and proportionate actions to address the identified risks.

Risk treatment may follow a gradation in the actions according to the impact or the likelihood for the risk to materialize, and should consider the following:

- Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
- Removing the risk source;
- Changing the likelihood;
- Changing the consequences;
- Sharing the risk, e.g., through contracts, buying insurance, etc.;
- Taking or increasing the risk to pursue an opportunity; and
- Retaining the risk by informed decision.

ANNEX C: GUIDANCE ON DUE DILIGENCE

1. DUE DILIGENCE PRINCIPLES

Due diligence is a comprehensive and proactive process to identify the actual and negative impacts of the organization's decisions and activities on supply chain transparency with the aim of avoiding and mitigating those impacts.

Due diligence may also help the organization identify opportunities to exercise influence and positively impact decisions and activities on supply chain transparency.

Due diligence should be an essential part of an organization's effort to monitor and evaluate the performance and efficiency of the various systems deployed by the organization.

1.1. CHARACTERISTICS OF DUE DILIGENCE

1.1.1. RISK BASED

The measures that the organization takes to conduct due diligence should be proportionate to the risks identified. The due diligence approach should therefore be tailored to the likelihood and the severity of the impact of risks and take into account the nature the risks.

Where it is practically not possible to address all the risks in the due diligence process, the organization should prioritize its actions according to the level of the different risks it has identified.

1.1.2. CONTEXT RELATED

The nature of the risks and threats to supply chain security may be affected by different factors such as the size of the organization, its position in the supply chain, the stakeholders involved, and social, political, and geographic context in which it operates, or the nature of its operations, including the products it purchases and delivers and the processes involved in their transformation.

The nature and extent of due diligence should be adapted to the context to effectively identify and manage the risks.

1.1.3. PREVENTIVE AND CORRECTIVE

Due diligence is intended foremost to avoid causing or contributing to the materialization of the risks identified and to prevent adverse impacts.

Where adverse impacts cannot be prevented, due diligence may be used as a means to identify potential opportunities to mitigate the risks and prevent recurrence.

1.1.4. MULTI-DIMENSIONAL

The organization should establish a defined scope for due diligence which addresses risks related to different processes, resources, or products.

1.1.5. DYNAMIC

Emergence, likelihood, and severity of risks vary in time. Therefore, due diligence should not be static but continuous and responsive to the evolution of the situation and able to respond to changes. For that purpose,

efficiency of the due diligence process should be monitored and reviewed, and if needed, improved to achieve its objectives.

1.1.6. COMMUNICATION DEPENDENT

The due diligence process involves many stakeholders whether internally in the organization or externally with business partners, authorities, auditing third parties, and other organizations having an interest or that could be affected by the organization’s activities or decisions.

Communication is a major part of the due diligence process itself, and a key success factor in this process is the engagement of stakeholders. The organization should communicate timely and appropriately throughout the due diligence process.

1.2. DUE DILIGENCE FOCUS AREAS

	FOCUS AREA	DESCRIPTION
1	MANAGEMENT SYSTEM	
	Corporate governance	Structure, policies, and procedures
2	INFRASTRUCTURE	
	Facilities	Physical locations (facilities) involved in the supply chain, suitability organization
	Information technology	Ability of the system to ensure traceability
3	PEOPLE	
	Training and awareness	Risks, threat awareness, employee training
4	DOCUMENTATION	
	Data management	Storage and backup of data
5	OPERATION	
	Purchasing	Traceability requirements in purchasing contracts
	Design and development	Integration of traceability in products development
	Receiving of materials	Control of traceability for incoming materials
	Storage of materials and products	Management of materials and products
	Production	Identification throughout the manufacturing process

		Segregation of materials
		Non-conformity management
		Packaging
	Shipping	Dispatch, loading, shipping sealing

1.3. RISK ASSESSMENT

Prior to establishing the due diligence program, the organization should identify and evaluate the risks to prioritize and define the scope of the due diligence program. Please refer to the Annex B: Guidance on Risk Management for further information.

2. ROLES AND RESPONSIBILITIES

2.1. LEADERSHIP

Due diligence should be an integral part of the decision-making process when addressing supply chain security issues.

Top management of the organization should take ownership of due diligence by:

- Sponsoring the due diligence program;
- Providing the necessary resources needed to ensure correct implementation of the program;
- Reviewing the results of the due diligence; and
- Validating the actions needed to improve the due diligence program and ensuring their implementation.

2.2. ACCOUNTABILITY

Each organization has a responsibility to ensure traceability of the part of the supply chain under its control.

3. DUE DILIGENCE PLANNING

3.1. GENERAL

Due diligence should be carefully planned to achieve the objectives set by the organization. The organization should consider all the factors that may impact the security of the supply chain when planning and designing the due diligence process. The organization should also consider factors such as flexibility and reactivity in the due diligence process to adapt to dynamic supply chains.

3.2. ESTABLISHING A DUE DILIGENCE PROGRAM

The due diligence program should consist of:

- Identifying the scope or extent of the program, e.g., the parts of the supply chain under due diligence;

- Due diligence processes, including communication processes;
- Resources assigned to each activity and the required competence;
- Implementation schedule;
- Documentation necessary for the implementation of the program; and
- Due diligence metrics.

3.3. SCOPE OF THE DUE DILIGENCE

The scope of the due diligence should be based on and tailored to previous cycles of due diligence and review of those results, as well as the risks identified during risk analysis. For that purpose, the organization should establish a clear mapping of the supply chain.

3.4. DUE DILIGENCE CYCLE

The organization should, based on the scope and the risks identified, determine the frequency of the due diligence to be conducted.

The frequency may be adapted based on the results of previous due diligence activities and may vary in scope for the different parts of the supply chain.

The organization should conduct a full due diligence cycle annually.

3.5. DILIGENCE PROCESS DESIGN

Due diligence may be performed through different forms with different characteristics. It is understood that the different forms of due diligence may be combined to increase reliability and efficiency.

4. SUPPORT

4.1. RESOURCES

Depending on the forms of due diligence the organization has selected, it should plan for and provide the appropriate resources to conduct the due diligence process. Resources may consist of human resources, tools, and software according to the form of process selected.

The organization should consider the internal capabilities of and constraints on existing resources while developing the due diligence process.

4.2. COMPETENCIES

4.2.1. GENERAL

The organization should ensure that the necessary competencies are available within the organization to conduct the due diligence process, especially within the functions of the organization impacted by the due diligence and its impact on the decision-making process of the organization.

The organization should evaluate the existing level of knowledge available and where applicable, take the necessary action to acquire the competencies necessary to conduct the due diligence activities, through the form of training to the relevant personnel of the organization.

When determining the necessary competencies for the due diligence process, the organization should consider:

- Size, nature, complexity, products, and processes of the organization being subjected to due diligence;
- Due diligence forms and methods;
- Extent of the due diligence scope; and
- Nature and level of risks identified in the planning phase.

4.2.2. EXPECTED COMPETENCE OF DUE DILIGENCE PERSONNEL

Personnel conducting the due diligence process should possess the necessary attributes to enable them to act in accordance with the required principles. Personnel should exhibit professional and ethical behavior during the performance of due diligence.

Where due diligence is performed by a team, the organization should take into consideration the ability of the team leader to:

- Plan due diligence activities and assign tasks;
- Make effective use of resources;
- Manage the uncertainty of achieving the intended results of the due diligence;
- Protect the health and safety of the team members;
- Direct team members in their activities;
- Prevent and resolve conflicts and problems that may occur during the due diligence process; and
- Lead the team in reaching conclusions and report on findings.

Audits shall be conducted by third-party organizations who are qualified and independent of the customer-supplier relationship and free of conflicts of interest, e.g., recognition by a national public authority or an accreditation body which is a member of the International Accreditation Forum or conducts audit in conformance with ISO 19011.

4.3. COMMUNICATION

4.3.1. GENERAL

The organization should establish a communication plan to the different stakeholders of the company in relation with the due diligence process. The plan should establish:

- What to communicate;
- When to communicate;
- To whom to communicate (internally and externally); and

- How to communicate.

The organization should ensure that the communication plan considers its legal requirements and answers its interested parties' requirements. The organization should also be ready to respond to requests for communication coming from inside and outside of the organization.

4.3.2. INTERNAL COMMUNICATION ON DUE DILIGENCE

The organization should communicate the results of its due diligence process, especially to the functions of the organization involved in the management of business partners such as purchasing and quality management.

The organization should ensure that internal communication allows for improvement of the due diligence process by internal personnel.

4.3.3. EXTERNAL COMMUNICATION ON DUE DILIGENCE

The organization should communicate information relevant to the due diligence process with external stakeholders and take into account its legal requirements such as authorities' requirements during the importing/exporting process.

4.4. DOCUMENTATION

The personnel responsible for the implementation of the due diligence program should ensure that records are generated, managed, and maintained to demonstrate implementation of the program.

Specific attention should be paid to information security and the management of confidentiality while maintaining records.

Due diligence records could include:

- Schedule of due diligence activities;
- Due diligence program objectives and scope;
- Risks and opportunities identified;
- Reviews of due diligence program effectiveness;
- Due diligence reports, evidence and findings;
- Corrective actions reports;
- Competence evaluation of due diligence personnel; and
- Training records of due diligence personnel.

5. IMPLEMENTATION OF THE DUE DILIGENCE PROGRAM

5.1. OVERVIEW OF DUE DILIGENCE PROCESS

The implementation of the due diligence process will consist of the repetition of individual due diligence activities, combined and summarized to provide an overview of the whole supply chain in the scope of the due diligence program.

5.2. DUE DILIGENCE ACTIVITIES CYCLE



5.2.1. INITIATING DUE DILIGENCE ACTIVITY

The audit team should first establish a dialogue with the organization's compliance department and confirm communication channels, including:

- Confirm authority to conduct due diligence activity;
- Provide relevant information on the due diligence process (e.g., scope, criteria, methods, teams, schedule);
- Request access to relevant information to conduct due diligence activity;
- Determine applicable statutory and regulatory requirements;
- Confirm management and treatment of information, especially the management of confidentiality;
- Confirm arrangements including schedule, access, health and safety, and security;
- Confirm attendance of observers where applicable;
- Determine relevant areas of interest or concern with the organization subjected to due diligence activity

5.2.2. PREPARING DUE DILIGENCE ACTIVITIES

The organization should review the documented information collected at the initiating phase of the due diligence activity to:

- Gather information to understand the operations of the organization; and
- Establish an overview of the extent of the documentation to determine possible conformity to the due diligence criteria.

Documentation should include, but is not limited to, security related management systems documentation, procedures, work instructions, and records.

The organization should especially focus on documentation related to management of suppliers, such as code of conducts, agreements, and training material and evaluation.

5.2.3. CONDUCTING DUE DILIGENCE ACTIVITY

Auditing is recognized as an essential element of due diligence activity.

Where the due diligence activities include onsite activity such as auditing the organization should conduct an opening meeting to: (i) confirm the agreement of all participants; (ii) introduce the due diligence team and their roles; and (iii) ensure that the planned activities can be performed.

The opening meeting should be attended by the management of the organization subjected to due diligence and, where appropriate, the personnel responsible for the processes impacting supply chain security.

The organization should retain records of attendance to the opening meeting.

5.2.4. COLLECT AND VERIFY INFORMATION:

During the audit activity, the information relevant to the due diligence objectives, scope, and criteria should be collected by means of appropriate sampling and should be verified as far as practicable.

Due diligence evidence should be evaluated against the criteria to determine findings, which can demonstrate conformity or nonconformity with the due diligence criteria and provide opportunities for improvement and recommendations.

5.2.5. DETERMINE AUDIT CONCLUSIONS

Audit conclusions should address the conformity of the processes evaluated against the defined criteria and may address recommendations for improvement.

5.2.6. CONDUCT CLOSING MEETING

A closing meeting should be held to present the audit conclusions. As appropriate, the following should be explained to the auditee:

- Audit evidence collected;
- Method of reporting;
- How to address audit findings;
- Presentation of audit findings; and
- Post audit activities.

Diverging opinions regarding findings should be discussed, if possible resolved, and otherwise recorded.

The figure below shows how information is managed during due diligence activities:



5.2.7. PREPARING THE REPORT

The due diligence personnel should report the due diligence conclusions and provide complete, accurate, concise, and clear records of the due diligence activities. At a minimum, the due diligence report should include the following:

- Due diligence objectives;
- Due diligence scope, including functions and processes subjected to due diligence and where applicable exclusions;
- Identification of the team having performed due diligence activities;
- Date and locations where due diligence activities were conducted;
- Due diligence criteria;
- Due diligence findings and related evidence;
- Due diligence conclusions; and
- Any diverging opinions recorded during the closing meeting.

The due diligence report should be issued within an agreed period and distributed in accordance with the due diligence program.

5.2.8. COMPLETING DUE DILIGENCE ACTIVITIES

Due diligence is complete when all planned activities have been carried out, or when the exclusions have been duly approved by the relevant authority.

Documentation pertaining to the due diligence should be retained as evidence for follow up activities or disposed of by agreement with the organization subjected to the due diligence and applicable requirements.

Unless required by law, the organization should not disclose any information obtained during the due diligence process to other parties unless otherwise agreed by the organization subjected to the due diligence process.

5.2.9. CONDUCTING DUE DILIGENCE FOLLOW-UP

The outcome of the due diligence can, depending on its objectives, indicate the needs for corrective actions arising from issues identified during the due diligence process. Such actions and the timeframe for their implementation should be agreed upon between the relevant parties.

The implementation and effectiveness of these actions should be verified. The verification process may take the form of documented evidence or be part of a subsequent audit, depending on the nature and the severity of the issue identified.

6. DUE DILIGENCE PERFORMANCE EVALUATION

Personnel managing due diligence for the organization should ensure the evaluation of the due diligence program. Evaluation should include:

- Respect of the schedules set for the program;
- Achievement of the objectives of the due diligence program;
- Performance of the personnel involved in the due diligence program;

- Feedback from relevant interested parties, including employees, business partners, and authorities; and
- Audit reports and performance of the organizations subjected to due diligence.

7. SOCIAL COMPLIANCE SYSTEM

7.1. POLICIES AND PRACTICES

Numerous stakeholders have an interest in not only respecting the rule of law but also in pledging that products and goods bought and sold are manufactured in an ethical way, e.g., where labor is treated with respect and dignity.

The supplier should have an established environment, health, and safety (EHS) code of conduct (sometimes referred to as a code of ethics or social compliance system) that highlights, among other things, the company's position with respect to human rights and requirements for its vendors to have an equal policy regarding forced labor.

The EHS code of conduct should be available to the public and should be supported by a clear and consistent process for communicating the code to the entity's employees and vendors.

7.2. SOCIAL COMPLIANCE DUE DILIGENCE DOCUMENTS

The organization should be prepared to present the following documents:

- Audit and inspection reports;
- Factory certifications;
- Factory capabilities;
- Human resources information, such as number of employees and labor recruitment policies;
- Factory owners/corporate information;
- Production reports indicating when production took place that was used to make the final product; and
- Records indicating when raw materials were received (for raw materials that were used to make the material or the product).

8. REASONABLE CARE

CBP and importers have a “shared responsibility” for import compliance. CBP has a duty to inform the public concerning the trade community's rights and responsibilities under CBP regulations and related laws. In turn, importers must use “reasonable care” to provide documentation to CBP (see *Reasonable Care*, wherein CBP highlights key issues related to, among other topics, forced labor).¹

¹ Available at <https://www.cbp.gov/sites/default/files/assets/documents/2020-Feb/icprescare2017revision.pdf>.

U.S. law prohibits the importation of goods made with forced labor. As part of their reasonable care obligations, companies should take steps to prevent forced in their supply chains and be prepared to respond to government requests for information.

For example, CBP may request copies of the supplier's EHS code of conduct and inquire specifically as to whether the code:

- Provides for freedom of association and collective bargaining;
- Prevents discrimination in employment;
- Prevents child labor, e.g., specifically prohibits forced child labor and describes the prohibited forms of child labor;
- Prevents forced labor and trafficking in persons, e.g., describes prohibited forms of forced and involuntary labor;
- Addresses fair compensation, e.g., prohibits workers from paying costs to obtain a job and prevents the withholding of wages; and
- Addresses occupational health and safety, including industrial hygiene, emergency preparedness, safety equipment, sanitation, and access to food and water.

The importer should also be prepared to describe how its EHS code of conduct is communicated throughout the organization and the supply chain, how it is monitored with respect to understanding and enforcement, and how stakeholders are asked for input. CBP may also inquire about independent third-party audits related to the code of conduct and whether the importer or any element of the supply chain has made changes to the code of conduct as a result of CBP advisory notices.

9. CONTINUOUS IMPROVEMENT

9.1. GENERAL

Personnel managing due diligence for the organization should ensure that the program is continually improved based on the evaluation conducted. The review should include:

- Results and trends of the due diligence process;
- Evolving needs and expectation of relevant interested parties;
- Due diligence program records;
- Alternative or new due diligence methods;
- Effectiveness of the actions to address risks and opportunities; and
- Confidentiality and information security.

9.1.1. NONCONFORMITY MANAGEMENT

In this section, nonconformity refers to findings identified during the due diligence process or to a nonconformity arising from the process itself.

Nonconformity arising from the process itself may include:

- Failure to perform due diligence as agreed;
- Unresolved diverging opinions on the outcome of the due diligence process;
- Reported Impartiality or ethical issues occurring during due diligence;
- Competences issues identified during the diligence process; and

- Breach of confidentiality or information security occurring the due diligence process.

The organization should establish a process, including reporting, investigating, and taking actions to determine and manage nonconformities.

When a nonconformity occurs during due diligence, the organization should as applicable:

- React timely to control the nonconformity;
- Take actions as applicable to correct the nonconformity and deal with the consequence; and
- Take actions to prevent reoccurrence of the nonconformity.