SOLAR STEWARDSHIP INITIATIVE

Solar Stewardship Initiative

Buyers Guide

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The Solar Stewardship Initiative

The Solar Stewardship Initiative (SSI) collaborates with industry participants, including manufacturers and buyers of solar photovoltaic modules, as well as civil society, NGOs, intergovernmental institutions, international financial institutions, academics, and independent experts. Together, they work to promote responsible production, sourcing, and stewardship of materials, enhancing sustainability, ESG performance, and transparency across the solar value chain. The SSI's mission is to enhance sustainability and environmental, social, governance (ESG) performance, as well as end-to-end transparency across the solar supply chain. Businesses actively involved in the solar value chain can apply to join the SSI and get certified against the SSI Standards.

The SSI's core objectives are to:

- Ensure the energy transition is just, inclusive, and respects human rights.
- Establish mechanisms to enhance supply-chain integrity in the global solar industry.
- Enable continuous improvement of ESG performance and level of transparency.
- Prepare the industry for relevant upcoming laws and regulations on ESG, transparency and responsible supply chains.

About This Document

The Solar Stewardship Initiative (SSI) Buyer's Guide offers practical guidance for implementing responsible sourcing across the solar photovoltaic (PV) value chain — from quartz extraction to the final assembly of PV modules. It is designed primarily for buyers of solar modules and related components, including developers, EPC contractors, system integrators, and corporate off takers, providing actionable recommendations for supplier engagement and compliance with sustainability and due-diligence obligations.

Developed for an international audience, the Guide helps procurement teams and organisations operate responsibly across diverse markets by aligning practices with both EU and global frameworks, including the Corporate Sustainability Due Diligence Directive (Directive (EU) 2024/1760), the Corporate Sustainability Reporting Directive (Directive (EU) 2022/2464), and the OECD Due Diligence Guidance for Responsible Business Conduct.

Key focus areas

- **Integrating standards and certifications** — Positioning the SSI ESG Standard and the SSI Supply Chain Traceability Standard as central discussion points with suppliers to drive transparency and accountability.
- **Supporting practical implementation** — Providing tools and guidance for procurement teams and leadership to embed responsible sourcing and due-diligence processes effectively.
- **Leveraging SSI tools for visibility and risk management** — Encouraging both SSI members and non-members to use the SSI Digital Platform, self-assessment templates, and traceability tools to enhance supply-chain transparency, identify and mitigate risks, and strengthen compliance across the solar PV sector.

Version History

Version	Date	Description
1.0	November 2025	First version issued as approved by the SSI Secretariat.

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Target Audiences

This guide is intended for organisations of all sizes and geographies involved in the procurement of photovoltaic (PV) products or investments that entail PV purchasing. It addresses the needs of diverse buyer categories — including off-takers, developers, EPC contractors, system integrators, distributors, and small electrical companies — and is equally relevant for investors assessing supply-chain risks and sustainability performance. By outlining good practices on responsible sourcing, traceability, and ESG criteria, the guide supports the evaluation of solar companies' long-term resilience and regulatory compliance, ensuring alignment with international standards, applicable legislation, and the UN Sustainable Development Goals (SDGs).

Scope

Due diligence is the process of assessing and managing risks associated with potential and existing suppliers in a systematic, ongoing and proactive manner. In the context of responsible sourcing, due diligence involves evaluating suppliers' practices in areas such as human rights, environmental sustainability, labour conditions, and legal compliance. By conducting due diligence, companies can identify and mitigate risks related to human rights abuses1, environmental degradation, unethical labour practices, and other factors that may affect the integrity of their supply chain.

General Guidelines

1. Embedding Responsible Sourcing

This chapter outlines how companies establish the internal systems, policies, and governance structures that underpin responsible-sourcing commitments. It explains *what* to embed and *why* — creating the organisational foundation for identifying and managing risks across the solar PV supply chain.

It reflects the first step of the OECD Due Diligence Guidance for Responsible Business Conduct and the corresponding obligations under the Corporate Sustainability Due Diligence Directive (Directive (EU) 2024/1760) while demonstrating how participation in the SSI programme supports compliance with these frameworks.

1.1. Responsible-sourcing commitment

A clear and well-communicated responsible-sourcing commitment is the foundation of an effective due-diligence system. Companies should adopt and publish a **Responsible-Sourcing or Human-Rights Policy** that articulates expectations for ethical, environmental, and social performance across the value chain. The policy should reference internationally recognised frameworks, including the **UN Guiding Principles on Business and Human Rights (UNGPs)**, the **OECD Guidelines for Multinational Enterprises (2023 edition)**, and the **ILO Fundamental Conventions**.

1.1.1 How to define commitments

For organisations active in the solar sector, the Solar Stewardship Initiative (SSI) provides a practical mechanism to translate these global principles into measurable practice. Companies joining the SSI formally endorse the **SSI Principles**, signalling their commitment to transparency, continuous improvement, and collaboration across the solar supply chain. This signature establishes a shared baseline for environmental, social, and governance performance, complementing each company's internal policies and codes of conduct.

A strong policy should:

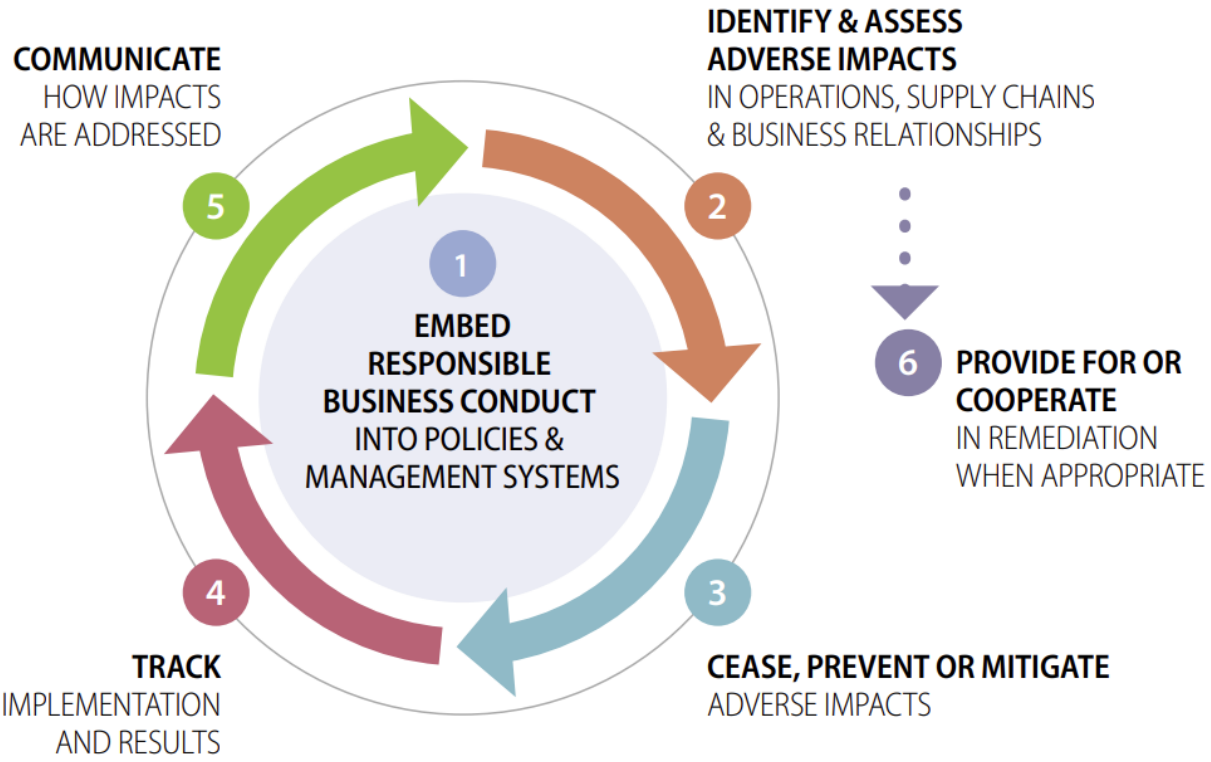
- Define clear objectives for responsible production and procurement, explicitly covering human rights, labour conditions, environmental protection, and integrity.
- Specify how these commitments apply across subsidiaries, suppliers, and contractors, and require suppliers to adopt equivalent standards.
- Reference participation in the **SSI programme** as part of the company's due-diligence framework, explaining how SSI membership, certification, and assurance processes support compliance with the **Corporate Sustainability Due Diligence Directive (Directive (EU) 2024/1760)** and the **EU Forced Labour Regulation (Regulation (EU) 2024/3015)**.
- Describe how responsible-sourcing requirements are integrated into procurement decisions, contractual clauses, and supplier-performance evaluations.
- Commit to public disclosure of progress, including certification status against the **SSI ESG Standard** and **SSI Supply-Chain Traceability Standard**.

Embedding the SSI within corporate policy ensures alignment with both international norms and sector-specific expectations. It allows companies to demonstrate that their commitments are not only aspirational but operational—supported by an independently verified system that measures progress, drives supplier engagement, and provides credible evidence of due-diligence implementation.

- **CSDDD (Directive (EU) 2024/1760)** – requires companies to adopt due-diligence policies, integrate them into management systems, and conduct risk analyses across their value chains.

- **CSRD (Directive (EU) 2022/2464)** – mandates disclosure of due-diligence processes and outcomes under the European Sustainability Reporting Standards (ESRS).
- **OECD Due Diligence Guidance** – defines six iterative steps forming the basis of the SSI Buyer's Guide structure.

When conducting their own human rights and environmental due diligence and setting their responsible sourcing strategy, companies should at a minimum, follow the due diligence 6-steps process described in the OECD Guidelines for Responsible Business Conduct, as visualize in the figure below:



Source: OECD

Figure 1 – OECD 6 steps process for due diligence

1.1.2 Fast-Evolving Global Regulatory Landscape

Regulatory frameworks on responsible business conduct are rapidly evolving worldwide, requiring companies to stay informed and adapt. Emerging trends include:

- **Mandatory due diligence** – Laws and regulations increasingly require companies to assess and mitigate human rights and environmental risks (e.g., the EU's CSDDD, Germany's Supply Chain Act, and France's Duty of Vigilance Law).
- **Supply chain transparency** – Recent regulations demand greater disclosure on sourcing practices (e.g., the EU CSRD)
- **Trade restrictions** – Governments are implementing bans on goods linked to forced labour and unsustainable practices (e.g., the EU Forced Labour Ban Regulation, U.S. Withhold Release Orders, the U.S. Uyghur Forced Labor Prevention Act)..

Where to find updates:

- **International institutions** – The OECD and United Nations provide global guidance on corporate responsibility, human rights, and supply chain due diligence.
- **Regional and national governments** – Regulatory bodies like the European Commission, the U.S. Department of Labor, and Asia-Pacific trade regulators regularly update policies on responsible sourcing, trade restrictions, and sustainability reporting.
- **Trade associations** – Organisations like SolarPower Europe (SPE) and Solar Energy UK (SEUK) offer industry-specific policy updates, advocacy, and compliance support.
- **Sustainability standards and certifications** – Initiatives such as the Solar Stewardship Initiative (SSI) and the Responsible Business Alliance (RBA) provide frameworks, tools, and assurance schemes to help companies meet ESG and due diligence requirements.

To remain compliant in this dynamic environment, companies should:

- Assign internal responsibility for tracking regulatory developments.
- Subscribe to industry and legal briefings (e.g. SolarPower Europe, Business & Human Rights Resource Centre).
- Participate in MSIs such as the SSI, which provides members with regular updates on relevant policy and legal changes affecting the solar sector.

Companies operating across jurisdictions should anticipate tighter enforcement and harmonise compliance efforts across regimes. Proactive alignment with EU and international standards minimises regulatory risk and signals leadership to investors and customers.

1.1.3 Data-sharing constraints and traceability challenges

While global regulation pushes for greater transparency, national laws in several key manufacturing countries restrict data disclosure and cross-border information sharing.

Country	Relevant legislation	Key restrictions
China	• China's Anti-Espionage Law (2023) • Anti-Foreign Sanctions Law (2021)	Limits disclosure of supplier data; potential sanctions for information sharing with foreign entities
Vietnam	• Vietnam's Data Law (effective 2025)	Classifies critical supply-chain information as protected national data
India	• India's Official Secrets Act	Restricts disclosure on grounds of national security

Given these constraints, buyers should:

- Determine what information suppliers can legally disclose and adapt expectations accordingly.
- Clarify the **scope** of local laws (e.g. whether they apply to certain data types or foreign subsidiaries).
- Use **multi-layer verification** to maintain due-diligence credibility: combine supplier self-declarations with independent third-party assessments, trade-documentation reviews, and digital traceability tools such as the **SSI Supply Chain Traceability Standard**.

This layered approach helps maintain robust, verifiable due diligence even where full transparency is restricted by local legislation.

1.2. Governance and accountability

1.2.1 Governance and leadership

Responsible sourcing must be anchored in strong governance. Buyers should expect suppliers to have clear roles and responsibilities for ESG and traceability, senior-level oversight, and credible internal controls that ensure policies translate into practice.

Buyers can review their supplier's:

- **Governance structure:** documented RACI (a responsibility matrix defining who is Responsible, Accountable, Consulted and Informed for each process) or organigrams showing who owns ESG, traceability, procurement, grievance management.
- **Policies & SOPs** (a Standard Operating Procedure outlining the step-by-step method for carrying out a specific process): ESG policy, responsible sourcing policy, anti-corruption rules, traceability SOPs, supplier onboarding protocols.
- **Internal controls:** approval workflows for supplier selection, risk escalation procedures, conflict-of-interest checks.
- **Management review:** annual governance review minutes, KPIs dashboards, corrective action trackers.
- **Cross-functional working:** procurement + ESG + legal reviews for high-risk suppliers.

The SSI Standards require:

- ESG & traceability management systems with defined roles (ESG 2.1–2.3; Traceability 1.2–1.7).
- Senior management endorsement and accountability.
- Documented controls, record-keeping, verification, and annual system reviews. The Assurance Manual ensures governance is verified onsite—not simply declared.

1.2.2 Reporting and targets

Buyers need transparent, verified supplier data—production volumes, locations, certification status, progress towards responsible sourcing targets—to inform compliant procurement decisions. In practice, this can look like:

- Standardised reporting templates covering site lists, MW output, shipment volumes, and certification status.
- Data validation controls (cross-checking internal systems, ERP data, audit results).
- Forward planning tools (timelines for upcoming certifications, capacity forecasts).
- Procurement triggers: e.g. "only source from certified sites once available", or "priority to suppliers that meet SSI annual targets".

The SSI introduces mandatory reporting for manufacturer members (Annex 10), requiring:

- Site-level data submission by 1 April every year.
- Certification milestones (two certified sites in year 1; 80% certified shipments by 2026; 100% by 2027).

  The SSI shares aggregated insights publicly and member-level detail confidentially with Buyers to support responsible sourcing planning.

1.3. Training and Capacity Building

Responsible sourcing is effective only when teams and suppliers understand expectations, risks, and procedures. Buyers should ensure staff know how to identify risks, engage suppliers, and interpret SSI assurance information. Embedded training and capacity building can include:

- **Role-specific training:**
  - procurement → supplier due diligence, red flags, interpreting SSI certificates
  - ESG/Human Rights → risk assessment, stakeholder engagement
  - operations/logistics → traceability segregation and documentation
- **Supplier onboarding kits:** supplier codes, compliance instructions, SSI-aligned checklists.
- **Scenario-based training:** case studies on forced labour risk, high-risk countries, grievance handling.
- **Knowledge-sharing spaces:** internal communities of practice, supplier webinars, learning repositories.

The SSI provides:

- **Guidance documents and implementation tools for both Standards, available to Members through the Member Portal**
- **Clear assurance outputs buyers can train teams to use (public summary reports, certification scopes, CAPs).**
- **Supplier resources to help close compliance gaps.**

Competent teams and capable suppliers reduce delays, improve audit outcomes, and support consistent decision-making aligned with due-diligence expectations.

1.4. Complaints and Remediation Processes

The OECD Due Diligence Guidance for Responsible Business Conduct states that remediation refers both to "the processes of providing remedy for an adverse impact and to the substantive outcomes that can counteract, or make good, the adverse impact, including: apologies, restitution or rehabilitation, financial or non-financial compensation (including establishing compensation funds for victims, or for future outreach and educational programs), punitive sanctions (whether criminal or administrative, such as fines), as well as prevention of harm through, for example, injunctions or guarantees of non-repetition" (OECD due diligence guidance for responsible business conduct). This definition underpins the UN Guiding Principles on Business and Human Rights (Principle 25–31) and has now been embedded in EU law through the Corporate Sustainability Due Diligence Directive (Directive (EU) 2024/1760).

Under the CSDDD, companies are required not only to identify and prevent adverse impacts, but also to establish accessible, fair and transparent complaint mechanisms (Article 9). Such processes can include:

- **Grievance channels:** multilingual, anonymous, accessible by workers and external stakeholders.
- **Clear operating procedures:** logging complaints, timelines for response, escalation rules.
- **Root-cause analysis tools:** CAP templates, risk trend analysis, senior-level review.
- **Remedy frameworks:** compensation, rehabilitation, preventive changes.
- **Integration with procurement:** supplier performance reviews, triggers for escalation or suspension.

Within the SSI, the complaints and remediation framework is multi-layered:

- **Site-level grievance mechanisms** are required under the **SSI ESG Standard**, which aligns with the UNGP effectiveness criteria (legitimacy, accessibility, predictability, equitability, transparency, rights-compatibility, and continuous learning). Manufacturers must demonstrate that affected workers and communities can raise concerns without fear of retaliation.
- The **SSI Assurance Manual (v2.1)** provides a formal complaints procedure for any stakeholder to raise issues about a member's conduct, an assessment, or an

Assessment Body. These are managed by the SSI Secretariat, with escalation to the SSI Board where necessary.

- The **SSI governance system** allows for suspension or withdrawal of membership or certification where credible evidence of violations is found and remediation is not undertaken. Buyers engaging with SSI members can reference this mechanism as part of their own due-diligence process and are encouraged to integrate SSI findings into internal grievance and escalation systems.

In practice, remediation should focus not only on compensating harm, but on **addressing root causes** and ensuring guarantees of non-recurrence — for example, by reforming recruitment practices, improving supplier monitoring, or supporting affected workers through collective processes.

1.5. Documentation and Communication Channels

Responsible sourcing requires complete, accurate, and retrievable documentation, together with communication channels that ensure information flows reliably across teams and with suppliers. Buyers should expect suppliers to maintain records of assessments, audits, training, grievances, and remediation processes, supported by structured communication that enables collaboration and continuous improvement.

To embed this practice, buyers can encourage their suppliers to adopt:

- **Record-keeping systems:** centralised digital folders or document-management systems storing audit reports, SAQs, CAPs, training logs, traceability records and grievance outcomes.
- **Retention procedures:** clear SOPs requiring records to be kept for at least five years, aligned with SSI requirements and good practice under ISO 9001, ISO 14001 and SA8000.
- **Supplier communication channels:** regular review meetings, dedicated supplier portals, real-time updates on improvements, and documented follow-up on CAP progress.
- **Internal communication mechanisms:** cross-functional working groups linking procurement, ESG, compliance and legal with defined roles and escalation pathways.

- **Continuous improvement loops:** feedback mechanisms to suppliers, co-developed action plans, and joint problem-solving (e.g. adjusting lead times or providing training support when gaps are identified).

The SSI Standards require manufacturers to:

- maintain documentation and records relevant to assessments for at least five years.
- keep audit evidence, traceability documentation, worker and grievance records, and management-system files retrievable and up to date.
- ensure information is available for independent verification during assessments.
- integrate communication between site management, workers and stakeholders (ESG 1.4, 2.6; Traceability 1.7).

The Assurance Manual reinforces documentation requirements through on-site verification, review of historical records, and evaluation of CAP implementation.

Why does this matter for buyers: Embedding responsible sourcing is not only good practice—it is a commercial and regulatory necessity. Clear governance, reliable documentation, robust communication channels, and transparent reporting systems enable buyers to make procurement decisions based on verified data rather than assumptions. This reduces exposure to forced-labour allegations, environmental non-compliance, and supply-chain disruptions, while supporting credible engagement with regulators, investors, customers, and civil society. By working with suppliers that follow structured, SSI-aligned practices, buyers strengthen the resilience of their sourcing strategies and ensure they are prepared for the rapidly evolving expectations of the EU, UK and global markets.

2. Identify And Assess Adverse Impacts

Identifying and assessing adverse impacts is at the core of responsible sourcing. By aligning with the OECD Due Diligence Guidance and the UN Guiding Principles on Business and Human Rights (UNGPs), companies can move from reactive risk management to proactive prevention and mitigation across the entire solar PV value chain.

For buyers, robust risk identification is the foundation of a resilient, ethical and compliant supply chain.

2.1. Understanding Risks in the Solar PV Supply Chain

Identifying adverse impacts starts with understanding where risks concentrate across solar PV manufacturing. Because the value chain spans multiple tiers and geographies, buyers must look beyond direct suppliers and integrate environmental, social and governance risks into their assessment.

To keep this section clear and actionable, you can organise it into the following recommended subsections:

2.1.1 Complexity of the solar PV value chain

Companies map their value chain beyond Tier 1 and understand where human-rights, environmental and governance risks are concentrated—especially in upstream silicon and mineral supply. This includes a clear view of Tier 1, 2 and 3 suppliers and alignment with reporting requirements (e.g. ESRS S2 under CSRD). In the solar sector, suppliers are often categorised into tiers:

- **Tier 1 suppliers**: Direct suppliers providing finished products or major components such as solar panels, inverters, and batteries.
- **Tier 2 suppliers**: Suppliers that provide raw materials or intermediate components to Tier 1, such as polysilicon, glass, or EVA film.
- **Tier 3 suppliers**: Supply raw inputs like quartz, silver, copper, or rare earths elements for Tier 2 manufacturing.

Figure 2 – The solar panel supply chain

Source: SSI 2025

The further upstream the supply chain extends, the more complex and indirect the relationships become — and the more difficult it is to verify ethical and environmental practices. Managing risks across all tiers is essential for sustainability, regulatory compliance, and investor confidence. Restricting visibility to Tier 1 alone can obscure serious issues such as forced labour, unsafe mining, or environmental degradation.

2.1.2 Key ESG risks

Upstream manufacturing presents specific environmental; social and governance risks that buyers should proactively monitor:

- **Environmental risks:** Polysilicon, ingot and wafer production is energy- and water-intensive and relies on hazardous chemicals that can contaminate air, soil and water if poorly managed.

- **Health & safety risks:** Workers face elevated risks from chemical exposure, high-temperature processes and industrial accidents.
- **Human-rights risks:** Documented risks include forced labour, excessive overtime, discrimination and limits on freedom of association, especially in upstream regions.
- **Governance risks:** Opaque ownership, weak compliance and corruption make reliable due-diligence information difficult to obtain.

These risks also affect interconnected components (e.g. inverters, mounting systems), which should be included in comprehensive risk assessments.

2.1.3 Why supply-chain mapping is essential

Solar PV supply chains are long, global and involve hundreds of suppliers, often with limited visibility at Tier 2–3. Materials such as quartz, silicon and aluminium are regularly mixed or processed across sectors, making traceability challenging without structured, collective approaches. In practice, when selecting suppliers, buyers can look for:

Supplier collaboration:

- Joint site visits combining buyer, supplier and ESG specialists.
- Co-developed risk registers and Corrective Action Plans (CAPs).
- Supplier workshops focused on high-risk topics (e.g. forced labour, worker voice, chemical management).

Data sharing:

- Secure sharing of SAQs, audit reports, worker-voice data and grievance statistics.
- Use shared digital platforms to track CAP progress and outstanding issues.

Sector and multi-stakeholder initiatives:

- Buyers can participate in industry-level risk analysis, joint mitigation measures and shared guidance.
- Buyers can use MSI outputs (e.g. hotspot analyses, country risk profiles) as inputs to your own risk matrix.

Civil-society engagement:

- Buyers can consult NGOs, trade unions and community organisations for local insight and validation of company information, especially in high-risk regions.

2.1.4 Legal and reputational drivers

Current discussions on the **Corporate Sustainability Due Diligence Directive (Directive (EU) 2024/1760)** indicate that initial enforcement may prioritise direct suppliers (mirroring the German "***Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten" or "Act on Corporate Due Diligence Obligations in Supply Chains"***). However, international frameworks — **including the OECD Due Diligence Guidance and the UN Guiding Principles on Business and Human Rights (UNGPs) — clearly establish value-chain-wide responsibility extending beyond Tier 1.**

- Companies that are signatories to initiatives such as the UN Global Compact or RE100 are expected to map their supply chains beyond Tier 1 as part of standard due-diligence practice. Failure to do so can create gaps in compliance and expose organisations to reputational risk where stated commitments are not supported by verifiable action.
- Taking a proactive approach to mapping through Tiers 2 and 3 demonstrates leadership and preparedness, strengthens resilience, and signals to investors and regulators that the company is managing material ESG risks effectively rather than reactively.

The first companies subject to the Corporate Sustainability Reporting Directive (CSRD) must apply the new rules for the 2024 financial year, with reports due in 2025. These companies must report in line with the European Sustainability Reporting Standards (ESRS).

The topical standard ESRS S2 – Workers in the value chain – outlines the required disclosures regarding workers in the value chain. According to the ESRS, a company's value chain includes all activities, resources, and relationships critical to its business model, involving both upstream and downstream actors. This covers external operations relied on to produce and deliver products or services—from raw material extraction to transport, consumption, and recycling. Value chain workers are those involved in these activities, regardless of their contractual relationship with the company. ESRS S2 also defines a supplier as "an entity upstream from the organisation… which provides a product or service that is used in the development of the organisation's own products or services," including both direct (first tier) and indirect business relationships.[2]

[2] ESRS S2 to S4 Delegated-act-2023-5303-annex-1_en.pdf

The SSI is a **multi-stakeholder initiative** with a board and governance structure designed to balance industry and non-industry voices.

Under the CSDDD, companies may use well-governed industry and multi-stakeholder initiatives to support their obligations (identify, prevent, mitigate, monitor, report). The SSI aims to play this role for the solar sector by:

- providing shared risk assessments and guidance;
- coordinating collective responses to systemic risks (e.g. upstream forced labour);
- enabling joint problem-solving through working groups and member forums.

While the SSI Traceability Standard currently focuses on the silicon-based PV value chain, it is designed to be scalable to other critical materials. The Initiative is already exploring recognition pathways with other sectoral schemes — such as the Copper Mark, Aluminium Stewardship Initiative, and Responsible Minerals Initiative — to ensure interoperability across the renewable-energy sector. This cross-recognition approach allows buyers to integrate SSI data into broader responsible-sourcing systems covering materials such as copper, aluminium, and zinc.

• *Joint Risk Assessment*

By working together, suppliers and buyers can identify potential risks more comprehensively and design more effective mitigation strategies. Joint risk assessments offer a way to ensure that all parties in the supply chain are held accountable for upholding labour standards, environmental regulations, and community welfare. Incorporating a collaborative approach to risk assessment is particularly crucial in industries like solar, where supply chains span multiple countries, cultures, and regulatory environments.

Collaboration With Suppliers

Buyers should actively engage suppliers in identifying, prioritising, and mitigating ESG risks, using the SSI ESG Standard and Supply Chain Traceability Standard as common reference points. This can include:

- **Joint site visits** – bringing together buyer and supplier teams to assess working conditions, environmental practices, and traceability systems on the ground.

- **Supplier workshops** – building capacity to understand risk hotspots, share mitigation strategies, and align on corrective action plans.
- **Data sharing** – using the SSI digital platform to exchange relevant documentation, audit outcomes, and worker voice feedback.
- **Collective problem-solving** – addressing systemic risks (e.g. forced labour, upstream transparency barriers) through dialogue and industry initiatives coordinated within the SSI network.

This approach helps ensure that due diligence is not a one-way audit exercise but a collaborative process that builds trust and drives continuous improvement.

2.2. Sources and Tools to Use in Risk Assessments

2.2.1 SSI-specific data sources

The SSI provides some of the most reliable and sector-specific data available for solar PV risk assessments. Buyers should make the SSI their **first reference point**, as it offers independently verified information across membership, certification, audit findings, and grievance outcomes. The SSI digital platform provides a centralised database for tracking certified manufacturers and assessment results.

a) Membership status and pre-membership due diligence

Before a manufacturer can join the SSI, it must undergo pre-membership due diligence. This screening assesses governance, compliance history, labour-rights controversies, sanctions exposure, and overall suitability. Only companies that pass this check can join.

Once accepted, the manufacturer must sign the SSI Principles, which include binding commitments to transparency, responsible production, continuous improvement, and collaboration with the SSI Secretariat. This signature activates a set of mandatory deadlines that buyers should use to gauge supplier reliability:

- **Within 6 months of joining:**
  Submission of Self-Assessment Questionnaires (SAQs) for at least two sites (or one if only one exists).
- **Within 12 months:**
  Completion of third-party assessments for those sites against *both* SSI Standards (ESG and Supply Chain Traceability).

- **Every year by 1 April:**
  Reporting under Annex 10 (site list, MW output, shipments to EU/UK, planned certification timelines).
- **Annually thereafter:**
  Additional sites must enter the assessment cycle until all relevant module-production sites are certified.

For buyers, membership is therefore not a declaration of intent, but a structured, time-bound commitment with measurable milestones.

b) Certification status and site coverage

Certification provides independent proof that a facility meets the SSI ESG and Traceability Standards.

Buyers should check:

- which sites are certified and to which Standard
- the date of certification and next surveillance audit
- the certification level (Bronze/Silver/Gold)*
- whether certified sites match expected procurement volumes
- future certification plans and whether timelines align with Annex 10 targets (80% certified shipments in 2026; 100% in 2027)

Certification status is a crucial indicator of operational maturity, risk mitigation, and traceability robustness.

c) Corrective Action Plans (CAPs)

For sites achieving Bronze or Silver, a Corrective Action Plan is mandatory.

- CAP submission deadline: within 4 weeks of receiving results
- CAPs outline actions, responsible roles, deadlines and supporting evidence
- Ongoing CAP progress is tracked by the SSI and visible to buyers
- Repeated failure to submit or implement CAPs may trigger suspension

CAP progress tells buyers whether a supplier can meaningfully address ESG issues.

d) Audit history and performance trends

The SSI Assurance Manual requires detailed documentation of:

- non-conformances and root-cause analysis
- resolution timelines
- repeated issues across audit cycles
- improvements achieved
- scope changes and significant incidents

For buyers, this history offers insight into:

- systemic issues (e.g. recurring OSH gaps, overtime, lack of worker voice)
- supplier responsiveness and accountability
- maturity of internal management systems

Suppliers with improving audit trends typically pose lower risk.

e) Complaints and grievance outcomes

The SSI maintains a formal Complaints & Appeals Mechanism covering:

- allegations about certified sites
- concerns about SSI members
- misuse of SSI claims
- issues with auditors or assessment bodies

Buyers should assess:

- whether complaints exist
- the nature of allegations
- supplier cooperation, remediation and resolution
- recurrence of similar issues

Complaint history is a strong indicator of reputational or operational risk.

2.2.2 News monitoring and civil-society reports

Buyers should periodically track:

- allegations of forced labour, OSH violations, land use conflicts, chemical spills, or governance failures;
- high-risk regions

Tools may include media aggregators, specialised ESG alert services and NGO monitoring platforms.

Grievance mechanisms complement surveys by providing confidential channels for workers to report concerns, helping uncover hidden issues. Integrating these findings strengthens overall risk assessments. Established surveys like the Fair Labor Association's Worker Voice Platform offer proven approaches for collecting and analysing feedback.

SSI members also have access to the SSI newsletter and member briefings, offering curated updates on sector trends and regulatory developments. NGOs often uncover risks not visible through audits—for example, recruitment practices, labour-broker abuses, or community concerns about environmental impacts.

These sources are indispensable for triangulating supplier-provided information.

2.2.3 Academic research and experts' studies

Academic and research institutions regularly publish work on:

- carbon intensity of polysilicon,
- water consumption in wafer production,
- chemical management risks,
- labour violations in upstream manufacturing,
- mining risks for quartz, silver, copper and aluminium.

These studies help buyers understand systemic and emerging risks, including those related to new technologies or production geographies.

2.2.4 Reference standards and schemes

Several standard, assurance and certification schemes are applicable to the solar sector. However, despite being applicable, only the Solar Stewardship Initiaitve is a sector-specific assurance scheme. While there are significant differences in terms of governance, verifications and scope, they all cover the human requirements that should be included in minimum supplier expectations.

The SA8000 Standard provides a framework for organisations of all types, in any industry, and in any country to conduct business in a way that is fair and decent for workers and to demonstrate their adherence to the highest social standards.

The Responsible Business Alliance (RBA) is the largest global coalition promoting responsible business conduct in supply chains. Its Code of Conduct outlines social, environmental, and ethical standards, referencing international norms like the Universal Declaration of Human Rights, ILO Labor standards, OECD guidelines, and ISO and SA standards. Originally designed for the electronics industry, the code is now used across various sectors.

The International Responsible Business Conduct Agreement for the Renewable Energy Sector brings together companies, governments, and organizations to address impacts on people, the environment, and biodiversity in supply chains. Signatories commit to OECD and UN human rights standards, with annual progress reviews. Focus areas include improving due diligence, collective action on human rights and the environment, and responsible procurement practices. The Agreement also supports projects on worker welfare, solar due diligence, and human rights in copper supply chains.

2.3 Methodology for selecting and using tools in solar-sector risk assessments

Solar PV supply chains require a structured and evidence-based approach to risk assessment. Because information across different tiers varies in quality, buyers should use a combination of SSI-verified data, external intelligence, and sector-specific tools to build a defensible assessment. This section outlines how buyers can organise and apply available tools effectively.

2.3.1 Triangulate multiple sources

No single tool gives a complete picture of risk in the solar value chain. Buyers should systematically combine:

- **SSI-verified information** (certification results, audit trends, CAPs, complaints)
- **External intelligence** (NGO investigations, news, worker-voice data)
- **Technical and sector standards** (RBA, SA8000, IRBC, mineral initiatives)
- **Country-risk profiles** (forced labour prevalence, governance quality, conflict risks)
- **Internal procurement knowledge** (past performance, delivery reliability)

Triangulation increases accuracy and reduces the likelihood of relying on incomplete or biased data.

2.3.2 Prioritise solar-specific risk hotspots

In the solar sector, risks are highest in upstream stages such as quartz mining, metallurgical-grade silicon, polysilicon, ingots and wafers. Buyers should prioritise:

- suppliers linked to regions with systemic forced-labour concerns
- facilities with high energy, water and chemical use
- suppliers with opaque ownership or complex subcontracting chains
- components and materials shared across multiple industries (aluminium, copper, silver)

Tools and data selected should reflect these solar-specific hotspots.

2.3.3 Apply findings consistently to procurement decisions

Once data is collected and triangulated, buyers should:

- classify suppliers by risk level,
- request targeted CAPs or additional verification where needed,
- prioritise sourcing from certified or improving suppliers,
- document decisions in line with OECD, UNGP and CSDDD expectations.

This ensures responsible-sourcing commitments translate into clear procurement actions.

Why does this matter for buyers: Effective risk identification positions buyers to act before problems escalate. Understanding where human-rights, environmental and governance risks concentrate—especially upstream—allows buyers to prioritise due-diligence resources, select suppliers more confidently, and demonstrate compliance with emerging laws such as the CSDDD, CSRD and the EU Forced Labour Regulation. Strong risk assessment also strengthens investor confidence, reduces reputational exposure, and ensures that solar deployment aligns with ethical and sustainable expectations. By leveraging SSI's Standards, risk tools and verified information, buyers can transition from reactive compliance to proactive risk management—building a supply chain that is transparent, responsible and future-proof.

3. Cease, Prevent and Mitigate Adverse Impacts

Once risks have been identified, buyers must take proportionate action to cease ongoing harm, prevent recurrence, and mitigate remaining impacts. These actions must protect affected people and align with international expectations including the OECD Due Diligence Guidance and the UN Guiding Principles on Business and Human Rights (UNGPs).

Disengagement should remain a last resort. As highlighted in the European Commission Guidance on forced labour, companies may need to maintain relationships with critical suppliers while increasing monitoring, applying leverage, and supporting corrective action. Throughout this process, transparent communication and senior-level oversight are essential.

The SSI provides verified data, Standards and a grievance mechanism that help buyers take consistent, defensible decisions when adverse impacts are confirmed or likely.

3.1. *Immediate response: Ceasing or containing harm*

When serious adverse impacts are identified, buyers must act quickly to stop or contain the harm. In alignment with the SSI Principles and the UNGPs, these measures should protect affected people while maintaining business integrity. Practical steps include:

- **Immediate suspension** – halting contracts or deliveries where there is credible evidence of forced labour, child labour, or other gross human rights abuses.
- **Responsible disengagement** – where remediation is not possible, formally ending supplier relationships in line with SSI's Policy of Association, ensuring transparency and minimising unintended harm.
- **Supply chain reallocation** – rapidly shifting orders to SSI-certified or equivalent suppliers to avoid business disruption and ensure continuity of responsible sourcing.
- **Crisis protocols** – activating internal escalation procedures and documenting decisions to demonstrate compliance with due diligence requirements.
- **Public communication** – where appropriate, disclosing cessation measures in sustainability reporting to reinforce accountability.

The SSI's Complaints & Appeals Mechanism provides a formal, independently managed channel for reporting and assessing allegations against certified sites or members. Complaints—along with audit history and CAP progress—help buyers quickly understand whether a supplier has previously faced serious concerns, how they responded, and whether similar risks are recurring. Stopping harm is only the first step. Once the immediate risk is contained, buyers must focus on preventing recurrence and addressing the root causes of the impact.

3.2 SSI decision tree: choosing the right response to an adverse impact

This decision tree helps buyers determine whether to cease, prevent, mitigate, or disengage based on the severity of the impact, supplier willingness to improve, and available remediation pathways..

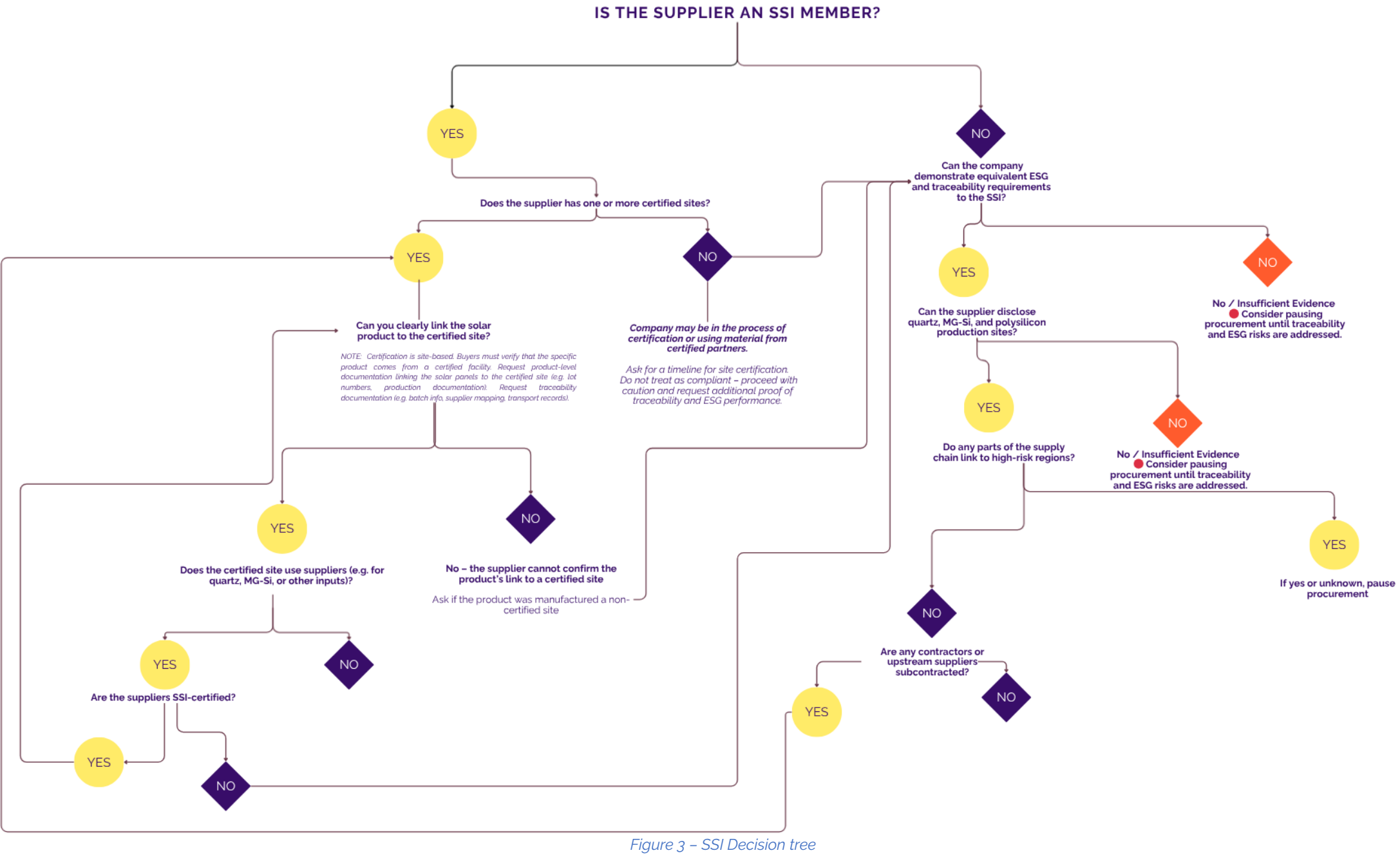


Figure 3 – SSI Decision tree

This tool should be read alongside SSI evidence (assessments, CAPs, complaints), the SSI Principles and the Policy of Association. It provides guidance only and does not substitute legal due diligence or company-specific risk assessments.

3.2 Strengthening supplier performance: preventing recurrence and mitigating risks

After urgent risks are controlled, buyers should work with suppliers to reinforce their systems and reduce the likelihood of recurrence. These actions should be collaborative, practical, and based on verified evidence.

3.2.1 Preventing recurrence

Buyers can use SSI assessment results and root-cause analysis to identify weaknesses in management systems, traceability processes or labour practices. Procurement contracts may be updated to include SSI ESG and Traceability expectations, and suppliers can be encouraged to expand certification to more sites. Example: requesting a supplier to integrate a formal worker grievance system that meets SSI ESG requirements.

3.2.2 Mitigating ongoing impact

SSI CAPs provide a structured framework for mitigation, with clear milestones, responsibilities and evidence requirements. Buyers may request suppliers to upload progress evidence through SSI channels where applicable. Enhanced monitoring—such as targeted worker-voice surveys—may be used for high-risk sites until conditions consistently improve.

Example: requiring regular evidence of improved chemical-handling procedures after an audit finding.

SSI's consistent methodology and CAP framework ensure mitigation efforts are structured, time-bound and measurable, enabling buyers to assess progress credibly and determine whether supplier engagement remains appropriate. Some risks—especially those in upstream silicon production—are systemic and cannot be fully resolved through bilateral engagement.

3.3 Acting collectively on systemic risks using SSI data and frameworks

Some risks in the solar value chain—particularly those related to upstream quartz, metallurgical-grade silicon, polysilicon, ingots, and wafers—are too complex for a single buyer to address alone. These risks often involve shared facilities, multi-tier subcontracting, or high-risk regions where individual leverage is limited. In these cases, buyers can use SSI's shared data and frameworks to align expectations and act more effectively.

Buyers can draw on SSI assessment results to form a shared understanding of risk. For example, repeated non-conformances across several buyers' audits of a polysilicon facility send a unified message that improvements are necessary. CAP progress, certification status and Annex 10 reporting can also be used to coordinate expectations, such as agreeing that a supplier should certify a high-risk site before a lower-risk one.

SSI's consistent Standards and traceability requirements allow buyers to ask suppliers for the same types of documentation or verification steps, reducing duplication and preventing fragmented demands.

When visibility is limited, buyers can reference **SSI's consistency of standards and traceability requirements** to request the same documentation or verification steps from shared suppliers. This avoids suppliers receiving conflicting demands from different customers. For example, buyers can align around requesting consolidated origin information for silicon inputs, or harmonised CAP milestones for recurring issues such as worker grievance systems or subcontractor oversight.

By grounding their actions in SSI's verified information, buyers send a clear and consistent message that systemic risks must be addressed. This approach increases leverage, reduces duplication, and allows suppliers to focus on meaningful improvements rather than responding to fragmented requests.

Why does this matter for buyers: Taking credible action when harms occur is where due diligence becomes real. Buyers who rely on SSI's verified information, structured CAP processes, and grievance mechanism can respond to impacts in a proportionate and transparent way. This strengthens compliance with the CSDDD, and the EU Forced Labour Regulation, reduces reputational and operational risk, and shows investors and regulators that the company is actively preventing and addressing harm—not just identifying it on paper. Using a clear escalation pathway also makes procurement decisions defensible, consistent, and easier to communicate internally and externally.

4. Track Implementation and Results

Once actions have been taken to cease, prevent, or mitigate risks, buyers must track whether improvements are real, sustained, and verifiable. Solar PV supply chains — especially upstream in quartz, metallurgical-grade silicon (MGS), polysilicon, ingots, and wafers — require ongoing monitoring. Risks in these stages often evolve quickly, workers may lack strong protections, and OSH and environmental hazards can vary across production cycles. The SSI provides consistent, independently verified data to support this monitoring and help buyers benchmark supplier performance over time.

4.1 Establishing Monitoring Systems

To ensure that corrective action plans (CAPs) and supplier improvement efforts are effective, companies should establish a structured framework for tracking progress.

4.1.1 Tracking methodology

Tracking implementation requires a structured and repeatable approach so that buyers can evaluate supplier progress consistently across sites, suppliers, and regions. A robust methodology should include:

- **Risk-based approach to prioritisation:** Buyers should focus their monitoring efforts on suppliers and locations where risks are highest. This can include upstream silicon-based production, sites with repeated non-conformance, sites with Corrective Action Plans.
- **Triangulation of evidence:** No singled data source is sufficient, buyers should encure to include a diversity of data sources
- **Time-bound monitoring cycles: Tracking** should follow a regular cadence so that issues are not allowed to resurface. SSI's CAP timeline (submission within four weeks and verification at surveillance) provides a natural backbone for buyer monitoring cycles.
- **Escalation pathways:** When progress is insufficient, buyers should increase monitoring, require additional evidence, or consider measures outlined in the SSI Policy of Association.
- **Documentation of decisions:** Keep records of supplier performance, CAP milestones, and escalation actions to support internal decision-making and CSDDD/ESRS reporting.

4,1,2 Selecting KPIs and data sources

Progress should be measured against defined key performance indicators (KPIs), which can provide a consistent basis for evaluation and continuous improvement. Examples of relevant KPIs include:

- **The percentage of suppliers that meet ESG requirements** and, once available, SSI supply chain penetration and market coverage targets.
- **The rate at which identified risks**, such as cases of forced labour or environmental violations, are resolved.
- **The improvement of audit scores across suppliers over time**.
- **Supplier-specific KPIs tailored to high-risk areas**, such as labour rights compliance or carbon footprint reduction.

A monitoring system should combine **quantitative data** (KPIs, audit results, grievance metrics) and **qualitative insights** (worker feedback, supplier engagement quality) to create a complete picture of progress.

4.1.2 Assigning roles and responsibilities

This includes assigning clear roles and responsibilities for monitoring across internal teams, such as procurement, sustainability, and legal departments.

Monitoring progress requires coordinated input from procurement, sustainability, compliance, and legal teams.

- **Procurement** tracks timelines and follows up with suppliers.
- **Sustainability/ESG teams** review evidence submitted by suppliers.
- **Legal/Compliance** assesses severity, escalation needs, and documentation requirements.

  Clear ownership reduces delays and ensures consistency across suppliers and geographies.

4.2 Periodic Supplier Assessments

Buyers should verify progress using several complementary sources of information. Assessments must go beyond traditional audits, especially in the solar sector where upstream risks require ongoing visibility.

4.2.1 SSI Audit Process

SSI assessments provide an independent, structured evaluation of supplier performance against ESG and traceability requirements. They examine environmental impact, labour conditions, governance, and the traceability of silicon-based materials.

Buyers should regularly consult:

- the **public list of certified sites** on the SSI website;
- the **non-conformances and observations** noted in each site's summary report;
- the **date of certification** and any pending surveillance audits;
- whether the supplier is required to submit a **Corrective Action Plan** (CAP) based on a Bronze or Silver rating.

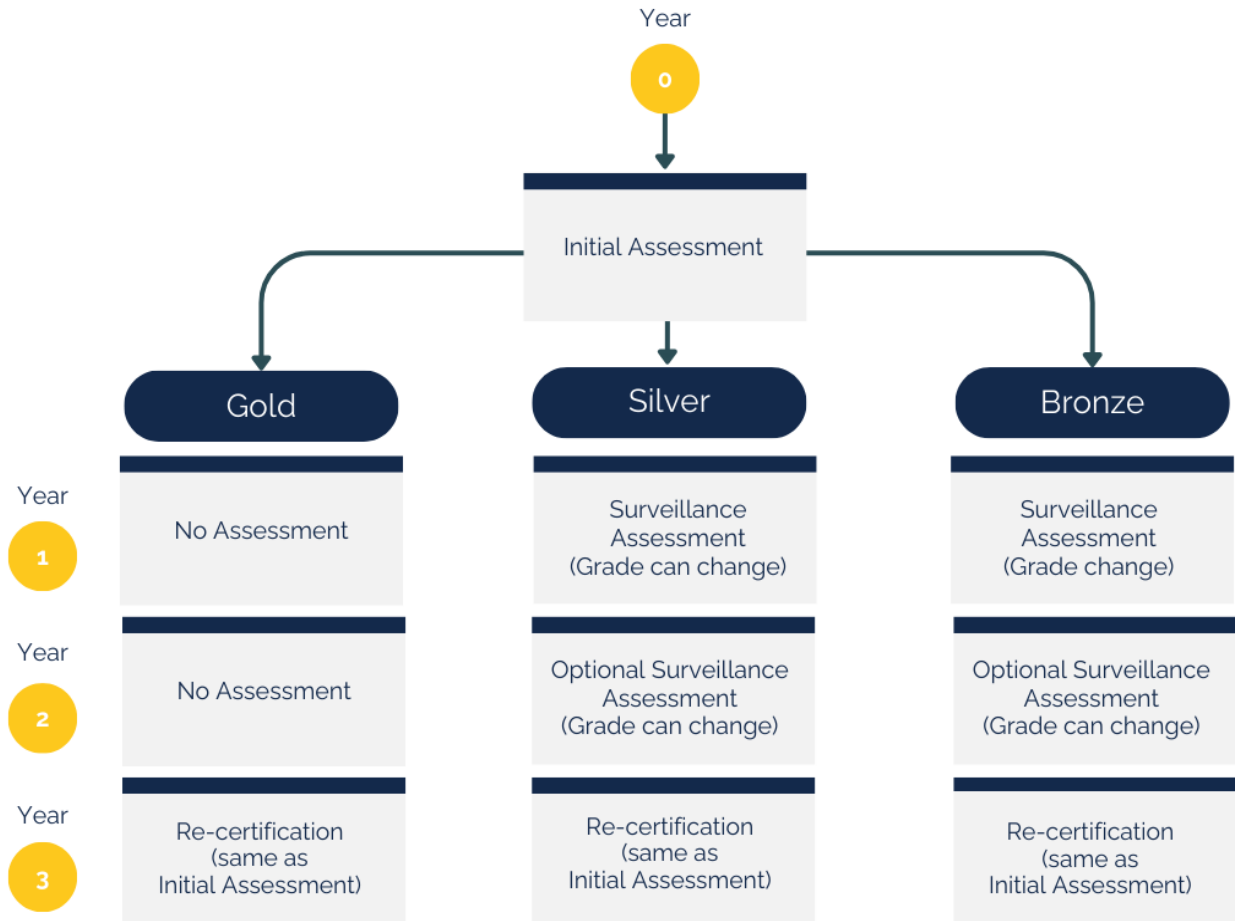


Figure 4 - The SSI assessment cycle

The SSI assurance process requires facilities with non-conformances to develop and implement Corrective Action Plans (CAPs) within strict timelines, subject to review and follow-up during surveillance assessments

After receiving a Bronze or Silver certification, SSI-certified sites must follow these steps:

1. **Drafting the CAP**
    - Within **4 weeks** of the final assessment, the site—supported by its Assessment Body—must submit a CAP to the SSI Secretariat.
    - The CAP must detail how, when, and by whom each non-conformance will be addressed.
2. **Assessment Body Review**
    - The Assessment Body **may not** draft the CAP, but **must evaluate** its adequacy in resolving non-conformances.
3. **Surveillance Assessment**
    - In the following year, the Assessment Body conducts a Surveillance Assessment to verify implementation of CAP actions.

For SSI members: Member organisations have access to the SSI Digital Platform. This provides visibility into the certification status of sites, the existence and timing of pending assessments, and the progress of Corrective Action Plans. This enables members to integrate CAP monitoring into their procurement decisions, conditioning future sourcing on demonstrable improvements.

For non-members: You can refer to the public summary reports, which show the site's grade (Bronze, Silver, or Gold) but not whether a CAP is pending or its deadlines. Buyers outside SSI membership can still use this information to open dialogue with suppliers—for example, by asking whether a CAP was issued, what its focus areas are, and what progress has been made. This allows non-members to leverage SSI transparency as a tool for supplier engagement, even without direct platform access.

Balancing the frequency of audits is essential to ensure that suppliers are regularly assessed while avoiding audit fatigue, which can lead to disengagement or non-compliance. The SSI assessments are conducted at intervals that are sufficient to monitor ongoing performance but not so frequent as to overwhelm suppliers. SSI assessments are planned in collaboration with the manufacturer, SSI Secretariat and Assessment Body.

4.2.2 Worker-voice insights and grievance data

Worker-voice surveys provide early detection of issues that audits may miss. Grievance systems required under the SSI ESG Standard ensure workers can raise concerns safely and anonymously.

Concrete examples:

- Identify excessive overtime early through worker feedback.
- Detect ongoing recruitment-fee issues in high-risk regions.

4.2.3 Supplier self-assessments

Supplier self-assessments are widely used in the solar sector, particularly for upstream suppliers where site access is limited and buyers rely heavily on documents, declarations and questionnaires. Suppliers often submit self-reported information on labour practices (e.g. working hours, grievance systems, recruitment processes), traceability (e.g. silicon origin, bill of materials), and ESG policies.

- **Use self-assessment as a screening tool, not verification:** Self-assessments help buyers quickly identify red flags or areas needing deeper investigation. For example, a wafer plant claims "full traceability to ingot level" → buyers should ask for chain-of-custody evidence or SSI audit results:
- **Compare self-assessed data with independent information:** cross-check with audit findings, grievance data and publicly available reports. Example: supplier claims "no excessive overtime," but worker surveys indicate 72-hour weeks during peak season.
- **Evaluate the *quality* of the responses, not just the content:** Indicators of a weak self-assessment include vague answers, copy-pasted policy statements, missing evidence.
- **Use self-assessments to prepare for supplier engagement:** Self-declarations can shape follow-up discussions or capacity-building needs. For example, a polysilicon supplier admits limited visibility over quartz sourcing → buyer can request upstream mapping or encourage SSI Traceability certification.

4.3 Tracking Corrective Action Plans (CAPs)

Corrective Action Plans translate audit findings into concrete steps with clear responsibilities and timelines. They are central to ensuring continuous improvement, especially where non-conformances are identified in upstream stages of the solar value chain.

4.3.1 Monitoring CAP progress

Buyers should request regular updates — monthly or quarterly depending on risk severity — that specify:

- which actions have been completed;
- which remain pending and why;
- revised timelines where delays occur;
- evidence of implementation (e.g. new SOPs, photos of improvements, training logs).

4.3.2 Evaluating CAP effectiveness

Tracking should not only confirm completion but verify whether risks have been meaningfully reduced. Buyers can cross-check CAP outcomes using worker feedback, updated audit findings, or performance metrics.

Examples of effective improvements:

- documented reduction in excessive overtime;
- safer chemical-handling practices verified during site visits;
- functional worker grievance systems with increased uptake.

SSI verifies CAP implementation during required Surveillance Assessments, but buyers should request interim evidence to ensure transparency between audit cycles.

Why does this matter to Buyers Tracking implementation is where responsible sourcing becomes measurable. By combining SSI's verified assessments, CAP requirements, and digital tools with internal monitoring, buyers can distinguish genuine improvement from superficial compliance. Effective tracking reduces operational and reputational risk, strengthens compliance with the CSDDD and EU Forced Labour Regulation, and provides confidence that solar procurement supports real improvements across the value chain.

5 Communicate About Your Impact

Transparent communication is a central part of responsible sourcing. Buyers should demonstrate how they identify risks, work with suppliers, and verify improvements. Clear

communication builds trust with investors, civil society, customers and regulators, while showing leadership in responsible solar procurement.

5.1 Transparency and reporting on responsible sourcing

Transparent communication is a core expectation of responsible supply-chain due diligence. Companies should publicly explain how they identify, prevent, and mitigate adverse impacts in their solar supply chains, using annual sustainability reports, company websites, and other accessible channels. This strengthens accountability, builds trust with stakeholders, and demonstrates that due diligence is an active, ongoing process rather than a one-time exercise.

5.1.1 Regulatory expectations and global standards

The Corporate Sustainability Reporting Directive (CSRD) requires companies to disclose value-chain impacts, due-diligence processes, and remediation outcomes under the European Sustainability Reporting Standards (ESRS). ESRS S2 – Workers in the Value Chain – is particularly relevant for solar buyers, requiring transparent reporting on upstream risks and mitigation steps.

The Corporate Sustainability Due Diligence Directive (CSDDD) complements this by obliging companies to publicly report on due-diligence policies and remediation results (Article 15). While proposed changes under the EU's "Omnibus I" simplification package may adjust certain thresholds or timelines, the core expectation for transparent due-diligence reporting remains unchanged.

For global comparability, companies may also align disclosures with the International Sustainability Standards Board (ISSB), which consolidates TCFD and SASB into IFRS S1 and S2. These frameworks are widely recognised and complement ESRS, reinforcing investor confidence. The SSI Equivalence Matrix helps buyers map SSI certification, audit results and CAP evidence to these broader frameworks, reducing duplication and ensuring that public disclosures are accurate and consistent.

5.1.2 Communication methodology

Buyers should follow a communication methodology that ensures information is accurate, actionable and tailored to different audiences, while avoiding unverified or misleading claims.

- **Be transparent about both risks and progress**: Acknowledge ongoing challenges in the solar supply chain (e.g. forced-labour indicators, OSH risks, energy-intensive

polysilicon production) and explain how you are addressing them. This prevents overclaiming and builds trust.

- **Tailor information to different audiences**: Investors expect risk-mitigation metrics and regulatory alignment; customers need simple, credible claims; civil society expects visibility on remaining risks and remediation.
  Use the same verified data but adjust tone and detail.
- **Base claims on data:** Any claim should be based on verified information.
- **Align internally before publishing:** Ensure procurement, sustainability, legal and communications teams validate claims, evidence and required disclaimers to maintain consistency.

5.1.3 Using the SSI in reporting and communications

Companies sourcing from SSI-certified facilities can strengthen their public reporting by sharing:

- the percentage of modules sourced from SSI-certified sites;
- improvements in traceability coverage;
- closure of non-conformances through CAPs;
- remediation outcomes verified in SSI Surveillance Assessments;
- progress toward supplier targets under Annex 10 (manufacturers) and future buyer targets.

The **SSI Communication Guidelines** (members-only) explain how to communicate responsibly about:

- membership status vs certification status (what each means and does **not** mean),
- the scope of SSI ESG and Traceability Standards,
- what can and cannot be claimed about responsible sourcing,
- how to reference SSI in public documents,
- appropriate phrasing when suppliers are "in process" (e.g., assessment scheduled),
- how to avoid misleading claims or over-statement of coverage,
- visual identity rules (e.g., logo usage, disclaimers).

They ensure all communication about SSI is accurate, consistent, and avoids greenwashing.

The **SSI Claims Guide** defines the types of claims companies may make, including:

- **Organisation-level claims** (e.g., "Company X is an SSI member"),
- **Site-level claims** (e.g., "This facility is certified to the SSI ESG Standard"),
- **Product-level claims** (restricted until traceability claims are launched),
- **Temporal claims** (e.g., "certified for the period 2026–2029"),
- **Prohibited claims** (e.g., implying products are "free from forced labour"),
- Mandatory disclaimers for specific types of communication.

It also provides **examples of compliant and non-compliant claims**, ensuring buyers' public messaging remains factual, verifiable, and aligned with the SSI Assurance System.

Why does this matter to Buyers Transparent, accurate communication is essential for demonstrating credible due diligence and maintaining trust with investors, customers, regulators and civil society. Buyers increasingly face pressure to prove—not just claim—responsible sourcing, especially under the CSRD, CSDDD, and forced-labour regulations.

Civil society organisations, journalists and public-interest groups actively monitor and report on solar supply chain practices, and their assessments rely almost entirely on publicly available information. When companies publish less or communicate inconsistently, it creates information gaps that fuel suspicion, weaken trust and undermine investor confidence. Transparent communication is therefore not only good practice—it is a critical safeguard in a context of growing scrutiny.

By grounding communication in SSI-verified information, following the Communications Guidelines and Claims Guide, and aligning disclosures with global frameworks, buyers can avoid greenwashing, strengthen regulatory compliance, and clearly articulate the impact of their procurement decisions. Effective communication also enhances investor confidence, supports market differentiation, and builds long-term credibility in a sector where sustainability claims are scrutinised closely.

6.Remediation and Remedies

Remediation ensures that when harm occurs in the supply chain, companies take meaningful action to address it, support affected stakeholders and prevent recurrence. It is a core element of responsible sourcing and must be aligned with international frameworks such as the UN Guiding Principles on Business and Human Rights (UNGPs), the OECD Due Diligence Guidance, and the Corporate Sustainability Due Diligence Directive (CSDDD).

The SSI supports remediation by establishing clear expectations in its ESG Standard, requiring Corrective Action Plans (CAPs) where non-conformances are identified, embedding grievance-system requirements, and—over time—providing digital tools that allow members to track and report remediation progress more consistently.

6.1 Establishing a Remediation Process

A credible remediation process requires clear procedures that outline how concerns are raised, investigated, resolved, and followed up. Companies should structure their remediation systems around the following elements:

6.1.1 Accessible channels to raise concerns

Companies should establish safe, confidential and culturally appropriate grievance channels for workers, communities and contractors. These may include:

- on-site grievance mechanisms,
- anonymous digital tools or hotlines,
- union or worker-representative channels,
- worker-voice surveys.

The SSI ESG Standard requires certified facilities to maintain grievance mechanisms that meet basic effectiveness criteria, and to keep records of complaints, actions taken and outcomes. These logs support buyers in understanding how suppliers handle concerns internally.

6.1. 2. Intake and assessment procedures

Complaints should be logged systematically; their severity, legitimacy and scope should be assessed promptly. Companies should define:

- how complaints are categorised,
- who reviews them,
- what constitutes a high-risk or urgent case,
- expected timelines for initial response.

SSI audit findings and CAPs can flag weaknesses in a supplier's grievance system. These insights allow buyers to prioritise facilities where remediation processes may be less mature.

6.1. 3. Fair and impartial investigations

Investigations should be conducted by trained staff or independent experts. Depending on severity, they may involve:

- document review,
- interviews with workers or affected communities,
- collaboration with unions or NGOs,
- cross-checking with SSI audit data.

SSI assessments identify non-conformances, root causes and required corrective actions, which serve as a verified baseline for fact-finding.

6.1. 4. Agreeing and implementing remedies

Remedies must address harm meaningfully and may include:

- reimbursement of recruitment fees,
- compensation for wage loss,
- reinstatement of employment,
- OSH improvements,
- stronger subcontractor oversight,
- updates to grievance or HR systems.

The SSI ESG Standard explicitly requires facilities to remediate adverse human-rights

impacts. Article 13.4 sets strict requirements for child-labour cases, including immediate withdrawal from work and structured rehabilitation and education plans.

6.1.5. Monitoring and follow-up

Companies must verify whether remedies were implemented effectively. This may involve:

- CAP progress checks,
- worker interviews,
- updated documentation (e.g. payroll, contracts),
- monitoring grievance trends,
- follow-up audits.

SSI surveillance assessments independently verify whether CAPs and remediation actions have been completed and sustained.

6.2 Types of Remedies

Remediation should aim to restore affected individuals, address root causes, and strengthen supplier systems. Remedies include:

6.2.1 Financial remedies

- repayment of recruitment fees,
- compensation for lost income,
- funds for rehabilitation or support services.

6.2.2 Non-financial remedies

- revising HR policies,
- improving OSH conditions,
- reinstating workers,
- providing training on safe working conditions or labour rights.

6.2.3 Systemic remedies

Many solar-sector risks—especially in upstream quartz, MGS, polysilicon, ingot and wafer production—require broader action, such as:

- facility-wide CAPs,
- adoption of SSI ESG and Traceability requirements,
- upgrades to chemical-management systems,
- enhanced grievance mechanisms,
- MSI-driven sector improvements.

SSI CAPs formalise systemic remedies and ensure suppliers move beyond one-off fixes to long-term improvements.

6.3 Collaborative approaches to remediation

Some impacts cannot be addressed by a single company. Collaboration increases leverage and supports systemic improvement.

6.3.1 Working jointly with suppliers

Buyers should co-develop Corrective Action Plans that include:

- root-cause analysis,
- clearly assigned responsibilities,
- time-bound milestones,
- evidence requirements,
- escalation steps.

SSI Corrective Action Plans provide a structured format for identifying actions, assigning responsibilities and tracking progress transparently.

6.3.2 Engaging affected stakeholders

Remedies are most effective when developed with those who experienced harm. Engagement should include:

- workers and unions,
- community representatives,
- grievance committees,
- NGOs with local expertise.

The SSI encourages stakeholder engagement throughout remediation, and worker-voice tools help validate whether remedies were successful.

6.3.3 Using multi-stakeholder initiatives (MSIs) for collective remediation

Sector-wide issues—forced labour risks, chemical hazards, subcontracting—require coordinated responses. Buyers should leverage:

- MSI remediation frameworks,
- coordinated supplier engagement,
- shared risk assessments,
- joint follow-up.

The Initiative provides shared assessments, CAP tracking, traceability frameworks and sector-level data to support collaborative responses and reduce duplication.

6.4 Tracking and Monitoring Remediation Outcomes

Monitoring is necessary to determine whether harm has been genuinely resolved. Tracking outcomes provides assurance that remedies are implemented, that affected workers receive meaningful redress, and that systemic issues are resolved rather than temporarily patched. In the solar sector—where upstream risks often recur—robust monitoring is essential for ensuring that remediation leads to real change. The SSI strengthens this process by providing consistent verification through Corrective Action Plans (CAPs), surveillance assessments and grievance requirements embedded in the ESG Standard.

6.4.1 Key tracking tools

Tracking should combine quantitative indicators with qualitative insight. Examples include:

- **Follow-up audits and surveillance assessments:** The SSI requires that *"a Surveillance Assessment shall be conducted in the year following the initial assessment to verify implementation of the Corrective Action Plan"* (SSI Assurance Manual V2.1). These assessments give buyers independent confirmation that CAP actions were implemented properly.
- **Corrective Action Plan (CAP) milestones:** Each CAP must specify actions, responsible persons and timelines. Buyers can request periodic updates showing evidence of progress (e.g. updated payroll, training attendance records, OSH inspection logs).
- **Worker feedback:** Worker-voice surveys and grievance data provide direct validation from those affected. For example, if recruitment fees were reimbursed, worker interviews should confirm payments were actually received.
- **Documentation checks:** Verifying evidence such as revised policies, new safety equipment purchase orders, improved chemical-management SOPs, or updated subcontractor registers.
- **Trend analysis in grievance systems:** The SSI ESG Standard requires sites to maintain grievance records. Article 11.2 states: *"The Facility shall document all grievances raised, actions taken and resolution timelines."* Reviewing these logs helps buyers identify whether similar issues continue to arise.

6.4.2 Reporting cycles

Buyers should define regular intervals for suppliers to report on remediation progress. Common approaches include:

- **30-day updates** for high-severity human-rights issues (e.g. recruitment-fee reimbursement).
- **60–90 day updates** for systemic issues requiring process changes (e.g. improving chemical handling or OSH controls).
- **Quarterly progress reviews** for long-term CAPs covering multiple non-conformances.

To ensure accountability, each update should include:

- completed actions and pending tasks,
- evidence of implementation,

- justification for any delays,
- updated risk assessment (if relevant),
- worker feedback where applicable.

The SSI Assurance Manual allows Assessment Bodies to review CAP progress and report discrepancies to the Secretariat, creating an additional accountability layer.

6.4.3 Escalation

If remedies stall, buyers should escalate by:

- involving senior management,
- placing conditions on future orders,
- increasing monitoring,
- suspending business where appropriate.

SSI's CAP deadlines, surveillance assessments and Policy of Association provide a structured escalation pathway and independent verification layer. Under the SSI governance framework: *"Where a member repeatedly fails to address non-conformances, the SSI Secretariat may initiate suspension procedures."*

6.5 Preventive measures linked to remediation

When harm has occurred, remediation must address the immediate impact — but it should also serve as a learning process. Effective due diligence requires companies to take insights from grievances, audits, CAPs and worker feedback and translate them into preventive measures that strengthen long-term supplier performance. This "feedback loop" is essential in the solar sector, where recurring risks in upstream quartz, MGS, polysilicon, ingot and wafer stages require structural, not one-off, solutions.

The SSI supports this preventive approach by requiring suppliers to analyse root causes of non-conformances (through CAPs), strengthening management systems, and embedding continuous improvement expectations across its ESG and Traceability Standards.

6.5.1 Integrate remediation learnings into policies and contracts

Recurring issues should trigger updates to:

- **supplier codes of conduct**,
- **contract clauses related to SSI ESG and Traceability compliance**,
- **sub-contracting policies**,
- **responsible recruitment expectations**.

For example:

- If repeated excessive overtime is identified at a wafer plant, buyers may update contractual clauses to include maximum working hours aligned with ILO standards and require quarterly reporting.
- If recruitment-fee issues persist, buyers can mandate "no-fee recruitment" policies and require suppliers to align with SSI ESG Standard Article 12.3, which requires facilities to provide or cooperate in remediation where they caused or contributed to adverse impacts.

The SSI requires that Corrective Action Plans must address **root causes**, not just symptoms. The Assurance Manual states: *"The Corrective Action Plan shall outline actions that address root causes and prevent recurrence of identified non-conformances."* Buyers may leverage the CAP as a starting point for corrective actions.

6.5.2 Strengthen supplier training and capacity building

Patterns emerging from remediation can highlight knowledge gaps among supervisors, managers or subcontractors. Buyers should adapt training programmes accordingly. Examples:

- providing new OSH training after repeated chemical-handling failures in ingot production,
- introducing worker-engagement or grievance-handling training,
- training procurement and HR teams on responsible recruitment standards,
- requiring suppliers to train labour agents when recruitment-fee cases occur.

SSI assessment results often include recommendations for improvements in training and management systems, which suppliers are expected to address through the CAP.

6.5.3 Improve internal procurement practices that contribute to risk

Some risks arise or worsen due to buyer behaviour. Preventive steps may include:

- improving forecasting to avoid production surges and excessive overtime,
- ensuring fair purchasing practices and adequate lead times,
- aligning orders with suppliers' staffing and capacity limits,
- reducing last-minute design changes that increase pressure and OSH risk.

In solar, short procurement cycles can exacerbate forced-labour indicators (e.g., debt-financed recruitment) or OSH failures. Buyers can mitigate this by stabilising orders and reducing unnecessary time pressure.
The SSI Principles encourage members to support suppliers' continuous improvement and avoid contributing to adverse impacts through purchasing practices.

6.5.4. Feed remediation insights into risk mapping and prioritisation

If repeated grievances or non-conformances arise in:

- specific regions (e.g., high-risk quartz supply regions),
- specific tiers (e.g., polysilicon plants reliant on labour agents),
- specific suppliers,

…buyers should update their risk assessment methodology accordingly.

Examples:

- A recurring pattern of recruitment-fee risks should elevate a supplier to a "high-risk" category, triggering increased monitoring or mandatory SSI Traceability certification.
- Region-specific OSH issues (e.g., chemical exposure in wafer plants) should trigger more frequent audits or worker-voice checks in that region.

The SSI Traceability Standard and risk-management expectations provide structured tools to identify where preventive adjustments are needed.

6.5.5 Strengthen internal escalation and oversight mechanisms

- Lessons from failed or delayed remediation should lead to stronger internal processes, such as: clearer escalation thresholds (e.g., when to involve senior management),
- mandatory step-back reviews after major non-conformances,
- structured oversight committees for high-risk suppliers.
- The SSI's Policy of Association provides examples of escalation pathways, including conditions for suspension when persistent non-conformance is not addressed.

Why does this matter to Buyers Remediation is at the heart of responsible sourcing: it protects affected workers, prevents harm from recurring, and demonstrates that companies respond meaningfully when issues arise. For buyers, credible remediation reduces legal and reputational risk under the CSDDD and forced-labour regulations and ensures that supply-chain improvements are real rather than superficial. Using SSI tools—CAPs, surveillance assessments, grievance requirements, ESG Standard provisions, and verified evidence—gives buyers a structured, reliable foundation for addressing harm and engaging suppliers effectively. Strong remediation systems also build more resilient supplier relationships, reduce recurring disruptions, and show stakeholders that the company is committed to responsible solar procurement throughout its value chain.. Ultimately, it enables buyers to make informed decisions rooted in robust, credible evidence.

Glossary

Assessment Body	SSI-approved Assessment Bodies responsible for conducting independent, third-party audits, to certify member sites against the SSI Standards. The SSI accepts assessment bodies (ABs), and individual assessors associated with approved ABs, based on the requirements defined in the SSI core document: 'Assessment Body and Assessor Approval Procedure'.
Buyer	Any organisation that purchases or finances solar products or projects. This includes developers, EPCs, installers, distributors, and investors. Buyers support responsible sourcing by aligning procurement or investment practices with SSI standards.
Certified Site	A solar supply chain facility that has been independently verified as meeting the Solar Stewardship Initiative (SSI) Standards. SSI certification applies to individual sites, not entire companies. Each site is independently assessed for compliance. SSI manufacturer members' sites are required to undergo assessments for both the SSI ESG Standard and the SSI Supply Chain Traceability Standard.
Manufacturer	Any company that produces solar products or materials, including module makers, component suppliers, and OEMs. An OEM can join as a manufacturer member with the same rights and obligations. However, to have a site certified, specific steps must be taken at the site level, including audits and compliance with the SSI ESG Standard.
Segregated chain of custody	The SSI Supply Chain Traceability Standard defines a 'segregated' chain of custody model for specific silicon supply chain tiers and requires a traceability system to demonstrate a chain of entities to supply the material. The material may have been produced at a number of separate SSI-certified sites; however, it cannot be mixed with other uncertified materials. This way, any product user can be confident that the material they receive has been made at sites that meet the requirements of the SSI Standards.

Self-Assessment Questionnaire	The Self-Assessment Questionnaire (SAQ) is the first step in the SSI assessment process. There is one SAQ for each SSI Standard—ESG and Supply Chain Traceability. It collects key information about the site (e.g. size, location, production type) and provides an overview of the site's current practices in relation to the requirements of each standard.
SSI Member	An organisation that supports the Solar Stewardship Initiative's mission to advance sustainability and human rights in the solar value chain. Members can be buyers (e.g. project developers, EPCs) or manufacturers (e.g. module or material suppliers). To join, they must sign the SSI Principles and pay an annual membership fee. Membership is now also open to national solar associations.