



ENVIRONMENTAL POLICY & STANDARDS

Sonnedix Novi Fossati, Ita

MESSAGE FROM OUR CEO



Axel Thiemann CEO

"Sonnedix's purpose is to harness the power of the sun to build a bright future, make a positive difference to for the communities we partner with, and the environments in which we operate. We don't just talk about the potential for solar energy to transform the way people across the world live, work, and play-it's what drives us to do what we do every day.

Our Environmental, Social and Governance program is fundamental to how we work, whether we are striving to protect environment. the empower tomorrow's problem-solvers, support local communities or adhere to the highest standards of accountability, transparency and diversity. Two of our company values - 'do the right thing' and 'sustainable growth' - act as our compass in how we operate and are at the heart of our business.

I believe that sharing our commitments, goals and progress will enable. and potentially inspire, others to join our ESG iourney. We are ambitious - and committed - to do more. We want to be at the forefront of raising standards, driving transparency and ultimately accelerating progress towards a world where the future of solar power is limitless. Thank you in advance for vour continued commitment to achieving this ambition."



Sonnedix' approach to sustainability is governed by the Sonnedix Sustainability Strategy. The Sustainability Strategy outlines our strategic, voluntary commitment to sustainable growth and our contribution to the United Nations Sustainable Development Goals. Feeding into the Sustainability Strategy are our ESG policies and standards, which represent our compliance framework and set out the rules and guiding principles for our day-to-day operation. These policies and standards ensure Sonnedix' continuous regulatory compliance and implementation of good international industry practice, both in our offices and on our projects.

Integrating responsible, forward-thinking corporate ESG policies and standards into our daily business practices is key to achieving our purpose to harness the power of the sun to build a bright future. And it is what allows us to behave sustainably, ethically and accountably as we develop, finance, build and operate solar plants around the world, together with ensuring that we have a positive impact on our people and the environments and communities within which we work.

In order to proactively identify and assess ESG risks and opportunities for our projects and operations, and to put in place appropriate measures to mitigate these risks across our business lines, Sonnedix has developed a set of the following ESG policies and standards:





Social policy and standards



Governance policy and standards

CORE INITIATIVE

In order to respond to the global climate change challenge and preserve the local environments in which Sonnedix operates, our environmental core initiative is to become carbon neutral and maximise efficient sustainable resource use. As such, we aim to make carbon emissions in our direct sphere of influence neutral worldwide by 2021. We will also be working on establishing baseline and making annual reductions to indirect emissions related to our supply chain and end-of-life treatment.

This will be achieved through a number of sub-initiatives implemented at the corporate, office and project level as part of our Sustainability Strategy, and through effective implementation of the Sonnedix environmental policy and standards.



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THE ENVIRONMENTAL POLICY

At Sonnedix, we are harnessing the power of the sun to build a cleaner, healthier future for people and our planet. We are proud that the clean energy we generate helps us to power households and businesses across the globe, to make a positive difference for the communities we partner with, and the environment in which we operate in.

That is why we are committed to not only identifying, evaluating, mitigating and, where possible, avoiding, the negative impact of our projects on the local and global environment, but, more importantly, ensuring that our work enhances the environment.

We will achieve this by:

- Ensuring environmental management activities are driven by senior management;
- Implementing an environmental management system which is integrated into the lifecycle of our projects and offices globally;
- Assigning environmental accountabilities across the business;
- Meeting the statutory obligations set out under local, regional, national and international law, as applicable;
- Striving to not only meet, but exceed, the recognised international industry standards such as those set out by the World Bank Group/ International Finance Corporation;
- Ensuring that environmental impact is considered in the procurement of all our products and services, the management of all our assets, and in all of our investment decisions;
- Communicating this policy and its supporting standards and procedures both internally and externally with our Global Partners;
- Ensuring that our Global Partners understand and demonstrate that they conform to our policies and meet the standards we expect of them;

- Resolutely investigating environmental incidents and communicating any lessons learned across Sonnedix;
- Undertaking regular audits and reviews to ensure that our environmental management system is effective and that our projects are implementing all relevant requirements;
- Providing senior management with periodic assessments of the performance and effectiveness of our environmental management performance;
- Establishing a formal grievance management procedure for receiving, investigating and responding to concerns raised by internal and external stakeholders relating to environmental issues;
- Ensuring employees feel comfortable reporting their environmental concerns;
- Taking pollution prevention into account throughout the lifecycle of each project; and
- Proactively developing and implementing project and corporate initiatives that create a positive impact.

We are a responsible renewable energy producer, and it is our duty to ensure that our generation of clean electricity is not detrimental to the environments in which operate.



OBJECTIVES

To provide leadership, management and employees with guidance on the application and administration of Sonnedix' environmental commitments.

SCOPE

This standard applies across the Sonnedix Group, including employees and those Global Partners working with us or on our behalf.

RESPONSIBILITIES

The content and intent of this standard is the responsibility of the Global Head of Legal and Compliance. The maintenance, revision and distribution of this standard is the responsibility of the ESG Manager. Everyone who works for Sonnedix, either directly or indirectly, is expected to understand and assist in implementing this standard.

- Project leads are responsible for ensuring these standards are applied on their projects.
- Office managers are responsible for ensuring these standards are applied in Sonnedix offices.
- → Contractors are responsible for ensuring that they meet the requirements of this standard.

REQUIREMENTS

As a responsible group of companies, Sonnedix, and Global Partners working on our behalf, must seek to minimise the impacts that our projects, and their associated activities, have on the environment. Our mechanism for understanding and mitigating these risks is an environmental and social impact assessment (ESIA), where applicable, and the risk assessment method statement (RAMS). It is the duty of everyone working on our projects and in our offices to ensure that they are familiar with any environmental risks and controls detailed within the ESIA and RAMS which are relevant to them.

The environmental risks resulting from a contractors' activity on site must be addressed within their risk assessment method statements (RAMS) which should be shared with Sonnedix before commencing works.

The environmental standards outlined below apply at all stages of a projects life cycle and the information / assessments generated at each phase of the project should be retained in the project folder and reviewed as part of any project handover process.

These standards are the minimum expected and where local legislation provides higher standards, then these should be adopted.

Environmental Policy and Standards









1. AIR QUALITY

Whilst Sonnedix and its operations do not have a significant impact on air quality, it is important that we take steps to minimise the impacts we do have. This is especially relevant during the construction phase of a project when the increased level of project activity may result in elevated emissions. The minimisation of dust and other emissions should be a consideration throughout the lifecycle of a project from planning/design to decommissioning, as well as in the everyday running of the business.

- Prior to undertaking any activity which may generate dust or other emissions, documents must be reviewed to assess whether potential sources have been identified and suitable control measures have been specified. Where potential sources of air emissions, including dust, have been identified, Sonnedix and its contractors must make reasonable efforts to minimise the emissions;
- Where potential sources include dust due to vehicle movements on paved and unpaved surfaces, controls should prioritise low impact measures such as traffic reduction, water suppression and speed reduction, over higher impact solutions such as chemical stabilisation, bitumen and adhesives;
- Where open material stockpiles are used on site, consideration must be given to the use of dust control methods such as covers or wind breaks, water suppression or increasing moisture content
- Materials should be suitably stored to prevent dust or air pollution;
- Open burning of solid waste, whether hazardous or non-hazardous, can result in uncontrolled pollution emissions and should be avoided;
- In any area where dust levels are elevated, controls to protect workers will need to be implemented in accordance with the following hierarchy of control.



AIR QUALITY HIERARCHY OF CONTROL

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2. BIODIVERSITY

Minimising the impacts our projects and their associated activities have on the environment and its biodiversity is fundamental to our success. Therefore, impacts on biodiversity and ecosystem services must be considered throughout a project's lifecycle and respond to changing conditions/ activities.

The avoidance of negative impacts on biodiversity and ecosystem services should be considered at site selection and project design stages by a competent professional. When avoidance of impact is not possible, commercially reasonable efforts should be made to minimise any impacts and offset any shortfall on a 'like for like or better' principle. This includes deforestation, which is to be avoided on all Sonnedix projects. Where this is not possible, measure to minimize deforestation and achieve biodiversity net gain, for example by planting trees in other suitable areas must be considered. Wherever possible, projects should be located in areas of modified habitat and other viable alternatives should be explored prior to affecting areas of natural or critical habitat.

If Sonnedix have not been involved in the project development or design, then prior to undertaking any work activity on site, Sonnedix and its contractors shall ensure that the risks and impacts on biodiversity and ecosystem services have been assessed by a competent professional. The mitigation and control measures identified must be implemented in accordance with the best practice advice provided by the competent professional to the extent feasible at the time. This should include mechanisms to avoid the introduction or spread of invasive species.

Any contractor starting work on the project shall review the identified environmental risks and impacts to ensure that their proposed works fall within the coverage of the control measures identified.

Risks and control measures should be subject to regular review over the lifetime of a project by a competent proffessional and reflect any significant changes which may increase the risks or impact on the necessary control measures.



Any project which may impact natural and critical habitats, legally protected area's and/ or species, or an internationally recognised protected area, should be referred to the ESG Manager for review and may require approval at board level.



3. CLIMATE ADAPTATION AND GREEN-HOUSE GAS (GHG) EMISSIONS

It is becoming widely recognised that extreme weather events are increasing in terms of frequency and intensity due to climate change. At the planning and design stage, projects should consider changing weather patterns, climate variability and extreme weather events in the designs and technical specification of projects. This should include an assessment of a project's vulnerability to climate change and damage from climatological events, including the health & safety of employees and nearby communities in such an event. Sonnedix is committed to contributing to and/or participating in global climate change initiatives that promote best practice in this area. As such, no direct partnerships that promote the use or consumption of fossil fuels should be made as part of Sonnedix projects and operations.

All Sonnedix projects should implement technically and financially feasible options to reduce project-related GHG emissions during the design, construction and operation of the projects. GHG emissions related to Sonnedix offices and projects should be monitored and opportunities for reduction, as a priority, and offsetting should be identified. To the extent possible this should include indirect emissions arising from our supply chain and end-of-life treatment. When selecting equipment, suppliers, and contractors. additional beneficial weiahtina should be given to those able to demonstrate use of climate-friendly solutions and business practices. All Sonnedix offices and projects should monitor and provide regular reporting on their GHG emissions. Where possible, suppliers and contractors should provide similar reporting. This will allow us to quantify, manage and report on the emissions related to our projects and operations in accordance with the emerging state of practice on accounting and reporting.

All Sonnedix offices should promote use of sustainable office supplies and run sustainable events (which may include, but is not limited to, eliminating single use plastic, using recycled paper products, buying sustainably produced food and drinks, and partnering with local food banks), together with implementing a strategy to maximize efficient resource use (which may include, but is not limited to, using LED lights and motion sensors, and appropriate waste segregation).

For further information on our approach to eliminating or mitigating our carbon footprint refer to the Sustainability Strategy.





4. ENVIRONMENTAL NOISE

Prior to any activity starting on site, potential noise receptors should be identified. Where there is any likelihood of project noise impacting on receptors, the contractor should arrange for noise monitoring to be undertaken in accordance with recognised standards to, where feasible, obtain existing ambient noise levels in comparison to the values set out below. At all times, the noise from project activities should not result in a maximum increase in background levels of 3dB at the nearest receptor location, or exceed the levels in the following table.

NOISE LEVEL GUIDELINES (ONE HOUR LAEQ DBA)

	Daytime (07:00 -)	Night-time (22:00 -)
Residential, Institutional	55	45
Industrial, Commercial	70	70





During the planning and design phase of a project, consideration must be given to the location of permanent noise producing equipment in relation to noise receptors. For example, transformers should be located such that their noise impacts are minimised on neighbouring premises.

During the construction phase of a project, consideration must also be given to the location of construction and temporary noise producing equipment in relation to noise receptors. For example, generators should be located away from boundaries near receptors.

Where noise impact levels exceed the above, then measures must be taken to reduce the noise impacts to the acceptable levels in accordance with the following hierarchy of control:



NOISE MANAGEMENT HIERARCHY OF CONTROL



5. HAZARDOUS MATERIALS

All projects and contractors should seek to eliminate the use of hazardous materials wherever possible and commercially reasonable efforts should be made to identify suitable substitutes which are not hazardous.

When no alternative is available, an assessment of the hazards presented by the hazardous material must be undertaken by a competent professional. This assessment should establish the level of risk and must consider the following:

- The type and amount of hazardous material on the project;
- The hazard it presents and mechanism/ nature of the hazard;
- → Potential spill and release scenarios;
- → Potential for uncontrolled reactions; and
- → Potential consequences on the project environment and water course etc.

The assessment should detail the control measures required on the project site and these should be implemented accordingly.

Control measures may include, but are not limited to:

- → Overfill protection;
- Secondary containment of tanks and storage vessels;
- Bunded and covered drum and container storage areas;
- Plant nappies and leak protection on plant;
- Use of environmentally friendly oils and lubricants;
- Suitable spill equipment with suitably trained users; and
- → Appropriate firefighting provisions.

Control measures must include training and familiarisation for the use, handling of and emergency procedures for the hazardous materials present.

In addition to the assessment of the hazards listed above, the project team must consider the occupational health issues presented by chemicals, substances and materials. Please refer to the Control of Substances Hazardous to Health (COSHH) section of the Sonnedix Social Standard.







6. PEST MANAGEMENT

Where a project or office identifies the need for pest management, the project team must seek the support of a competent professional to draft an Integrated Pest Management Plan which takes into account the following:

- The selection of chemical pesticides low in human toxicity and with minimal effects on non-target species;
- The selection of pesticides which are safely packaged, clearly labelled with instructions for use and manufactured by a licensed entity;
- A regime designed to avoid/minimise damage to natural enemies of the target pest;
- Considers the Food and Agriculture Organisation's International Code of Conduct on the Distribution and Use of Pesticides; and
- → Is in accordance with good international industry practice.

Sonnedix, or contractors working on its behalf, are not permitted to purchase, store, use or trade in any product which falls within WHO Hazard Class Ia (extremely hazardous) or Ib (highly hazardous) (additional information can be found at http:// www.who.int/ipcs/publications/pesticides_ hazard_2009.pdf).

Furthermore, Sonnedix, or contractors working on its behalf, will not purchase, store, use or trade in any product in WHO Hazard Class II (moderately hazardous) without ensuring they have the appropriate controls and storage facilities. Note appropriate controls include suitable sufficient training and instruction and the correct equipment, including protective equipment and adequate washing/welfare facilities (additional information can be found at http://www.who.int/ipcs/ publications/pesticides_hazard_2009.pdf).



7. POLLUTION

Prior to any acquisition or project work commencing, formal enquiries should be made to ascertain if the project site has a history of pollution or exhibits any indication of contamination. These enquiries should include responsibilities and liabilities for any pre-existing contamination which may be identified either during the project construction phase or over the project's operational lifetime.

During the lifetime of a project, all persons and contractors working on site are responsible for helping to avoid and minimise the release of pollutants on the project. All activities should be assessed in terms of their potential for causing pollution, in accordance with the following hierarchy of control:

HIERARCHY OF CONTROL





All materials or liquids which have the potential to pollute the project site or adjacent environment should be stored and used in such a way that accidental spillage or overfill is contained. This may include the use of bunded storage containers and the provision of emergency spill kits. See also "Hazardous Materials" above and the Sonnedix Social Standard. Local legislation may require certification of storage once specified thresholds are reached.



8. RESOURCE EFFICIENCY

Sonnedix and its contractors should implement technically and financially feasible technical measures for improving efficiency in its consumption of energy, as well as other resources and material inputs. Water is identified as an especially high usage/impact resource for solar projects. As such, commercially reasonable efforts should be made to reduce water consumption on project sites and in our offices and measures to prevent adverse impacts of project related water use on communities or the environment must be implemented.

When selecting products and contractors, additional beneficial weighting should be given to those able to demonstrate efficiencies in resource use, in particular water, or who propose the viable reuse of resources locally. An example of this may be contractors who collect, filter and reuse the water when cleaning panels or collect and filter rain water.

All Sonnedix projects and offices should monitor and provide regular, monthly reporting on their water, energy, and other resources usage and measures implemented to reduce and/or reuse resources. Where benchmarking data are available, a comparison will be made to establish the relative level of efficiency.

9. VISUAL

Our sites and offices are often the first impression we give to our communities, employees, contractors, investors, officials and other stakeholders. Therefore, all sites and offices should provide a positive and professional image of the organisation.

All offices should be clean and well presented with appropriate signage.

All projects should consider the following:

- → General screening of the project site;
- → Screening of any waste storage area;
- Clearly defined entry/exit gates with appropriate signage to site offices and parking etc;
- Project signage which includes emergency contact details and details of any grievance procedure; and
- Ensuring the project is clear of litter or any accumulation of rubbish.



Environmental Policy and Standards

10. WASTE

The waste hierarchy should be considered throughout the lifecycle of a project from planning/design to decommissioning, and in the everyday running of the business. Where waste is unavoidable, the simple approach of **"Reduce, Reuse, Recycle"** should be adopted with disposal only as the last resort as outlined in the figure below. Waste management should be promoted via posters, notices, campaigns, toolbox talks and briefings, and awareness training should be provided to staff and, as required, contractors.

WASTE HIERARCHY



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When waste is temporarily retained, it should be suitably stored to prevent contamination or pollution of the site and the local environment.

Where waste includes hazardous materials (for example, used transformer oil), containers must be properly labelled to include the identity and quantity of the contents, hazards and contact information. The vehicles carrying the waste should be of a suitable specification, with a competent operator, and may require suitable external signage. Local legislation may require the use of a specialist hazardous waste contractor licensed for the specific type of waste being disposed of and transported. The storage, collection, transport and treatment (recycling) or reuse of the waste arising from electronic and electrical equipment (including broken or replaced PV panels, inverters and used batteries) must be undertaken in accordance with applicable national regulation, following any manufacturer recycling schemes and the waste hierarchy (reduce, reuse, recycle). All broken or replaced panels, inverters and used batteries should be diverted from landfill through the use of the approved recycling schemes, such as for example PV Cycle in Europe. Please contact the ESG manager for further advise in relation to the electronic and electrical equipment waste and identifying suitable disposal options.

The quantities of all non-hazardous and hazardous waste reused, recycled or disposed of on Sonnedix projects or offices should be recorded and the information reported monthly to the ESG Manager.







When developing a new project, or acquiring an existing one, Sonnedix and those working on our behalf must ensure that the environmental and social risks and impacts of the project are identified in accordance with good international industry practice.

New projects will likely require an environmental and social impact assessment (ESIA) as part of the permitting requirements, that is commensurate with the project risks and impacts. Therefore, the new projects should be made the subject of an ESIA, undertaken by a competent professional.

Acquisitions of existing assets should already benefit from an ESIA undertaken during their development phase, which should form part of the pre-acquisition disclosure information. If this is not the case, then the Sonnedix ESG team may approve a reduced scope environmental and social impact assessment to be undertaken at the earliest opportunity.





In accordance with good international industry practice, the ESIA process should be aligned with the following 8-stage process:

8-STEP ESIA PROCESS



GLOSSARY OF TERMS

Biodiversity is the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

Biodiversity net gain is the approach that ensures habitats for wildlife are enhanced and left in a measurably better state than they were pre-development.

Critical Habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregator species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.

Ecosystem services are the benefits that people, including businesses, derive from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services.

Emissions are the production and discharge of something, especially gas or radiation.

Environmental and Social Impact Assessment (ESIA) is the process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. **Global Partners** are all of Sonnedix' suppliers, contractors, subcontractors, joint development partners, consultants, agents, and other parties with whom Sonnedix does business.

Green-house gas is the emission into the earth's atmosphere of any of various gases, especially carbon dioxide, that contribute to the greenhouse effect.

Hazardous waste is materials that represent a risk to human health, property, or the environment due to their physical or chemical characteristics.

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

Modified Habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin and/or where human activity has substantially modified an area's primary ecological functions and species composition.

Natural Habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.

Noise receptor is any occupied premises outside a site used as a dwelling (including gardens), place of worship, educational establishment, hospital or similar institution, or any other property likely to be adversely affected by an increase in noise level.



Pollution is the presence in or introduction into the environment of a substance which has harmful or poisonous effects.

Sonnedix refers to Sonnedix Power Holdings Limited and its subsidiaries and affiliates.

Waste refers to unwanted or unusable (at the incident location) material, substances or by-products.

WHO Hazard Class refers to the World Health Organisations Recommended Classification of Pesticides by Hazard Class.

Environmental Policy and Standards

Standard Owner:	Legal & Compliance
Applies to:	Across Sonnedix Group, including employees and those working with us or on our behalf
Review Period/s:	Q3
Effective Date:	Policy statement 01/01/2018; Environmental standards 01/01/2018
Modified date and version	20/06/2018; 01/01/2020
Supporting Documentation:	Sonnedix Sustainability Strategy, Environmental Review Checklist, Project RAMS, HSE tracking smartsheets, HSEC inspection checklists.



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