

Wireless Crafters Devices Co., Ltd. Policy & Guidelines responsible to ESG Sustainable.

Environment dimension policy and guidelines (ECO-E1.1)

1. Extended Producer Responsibility (EPR)

Companies take responsibility for the entire lifecycle of their products, including take-back, recycling, and final disposal.

Guidelines:

Product Design: Design products with end-of-life management in mind, making them easy to disassemble, recycle, and dispose of safely.

Collection Programs: Establish and finance e-waste collection programs to facilitate the return of used electronics by consumers.

Partnerships: Collaborate with certified e-waste recyclers and local authorities to ensure proper recycling and disposal.

2. Take-Back Programs

Provide consumers with options to return expired or unwanted electronic products.

Guidelines:

Incentives: Offer trade-in incentives, discounts, or rewards for returning old products.

Drop-Off Locations: Set up convenient drop-off points at retail locations, service centers, or through mail-back programs.

Awareness Campaigns: Educate consumers about the take-back program and the importance of recycling e-waste.

3. Recycling and Disposal Procedures

Implement safe and environmentally friendly recycling and disposal practices for e-waste.

Guidelines:

Sorting and Segregation: Develop processes for sorting and segregating different types of e-waste (e.g., batteries, plastics, metals).

Certified Recyclers: Partner with recyclers certified by recognized bodies (e.g., R2, e-Stewards) to ensure compliance with environmental standards.

Documentation: Maintain detailed records of e-waste volumes, recycling methods, and disposal outcomes.

4. Environmental Health and Safety (EHS) Compliance

Ensure all e-waste management activities comply with relevant environmental health and safety regulations.

Guidelines:

Regulatory Awareness: Stay updated on local, national, and international e-waste regulations.

Training: Provide regular training for employees on safe handling, recycling, and disposal of e-waste.

Audit and Review: Conduct regular audits and reviews of e-waste management practices to ensure compliance and identify improvement opportunities.

5. Sustainable Product Design

Integrate sustainability into the product design process to minimize e-waste.

Guidelines:

Material Selection: Use recyclable and non-toxic materials wherever possible.

Modular Design: Design products in a modular fashion to facilitate easy repair, upgrade, and recycling.

Lifecycle Assessment: Perform lifecycle assessments to understand and minimize the environmental impact of products from creation to disposal.

6. Reporting and Transparency

Maintain transparency in e-waste management practices and report on progress and challenges.

Guidelines:

Annual Reports: Publish annual sustainability reports detailing e-waste management efforts, quantities collected, recycled, and disposed of.

Stakeholder Engagement: Engage with stakeholders, including customers, investors, and regulators, to communicate e-waste management practices and outcomes.

Continuous Improvement: Use feedback and data from reports to continually improve e-waste management strategies.

Weight of all electronics waste (ECO-E1.2)

Weight of e-waste process into new product (recycle) per batch 100units total 80 Kilograms (self-assessment of weight of e-waste)

Materials specified to 20% of PCB, 40% of plastic housing, 25% of electronics components, 5% of ESD bag, 10% of mechanical fitting

- Electronics components (LED, resistor, capacitor, transformer, diode and etc.)
 - o Evaluated as 60% of portion in product specified – 12 KG
- Bare printed circuit board (PCB, Semi PCB)
 - o Evaluated as 60% of portion in product specified – 19.2 KG
- Plastic bag ESD deflect (bag ESD)
 - o Evaluated as 80% of portion in product specified – 3.2 KG
- Plastic enclosure (housing, base)
 - o Evaluated as 80% of portion in product specified – 25.6 KG
- Mechanical fittings (screw, button)
 - o Evaluated as 30% of portion in product specified – 2.4 KG

Total recycled product expired = 62.4 KG (Material specification by vendor)

Weight of e-waste being reused (reused)

- Mechanical fittings (screw, button)
 - o Evaluated as 10% of portion in product specified – 0.8 KG
- Rework PCBA board (defect in process)
 - o Evaluated as 1% of portion in product specified – 0.48 KG
- Reused plastic bags ESD (collect from customer)
 - o Evaluated as 10% of portion in product specified – 0.4 KG

Total recycled product expired = 1.68 KG

Weight of e-waste that separated and collect through processing, and/or has components extracted from such waste for recycling (recovery)

- Bare printed circuit board (PCB, Semi PCB)
 - o Evaluated as 30% of portion in product specified – 4.8 KG
- Plastic bag ESD deflect (bag ESD)
 - o Evaluated as 100% of portion in product specified – 4.0 KG
- Plastic enclosure (housing, base)
 - o Evaluated as 100% of portion in product specified – 32.0 KG
- Mechanical fittings (screw, button)
 - o Evaluated as 60% of portion in product specified – 4.8 KG

Total recovery material through the processed = 45.6 KG (57% of recovered)

Weight of e-waste disposed by land fill

- **19.9% of electronic components was disposed by landfill**

ECO-E1.3 Product labeled with recommendation of disposal method of expired product

Product line manufacturing

- Controller product – 12 products approx.
- HMI product – 2 products approx.
- Sensor product – 5 products approx.

Product which labeled to do disposed recommended = 2 products

Total percentage of product recommended to disposal method = 10.52%

ECO-E2 Prevention the contamination of Toxic substances in products

All raw materials entering the facility must undergo consistent and rigorous quality inspections. We procure materials of the highest grade to guarantee the production of top-quality goods such RoHS compliant, CE/IEC/FCC standard and etc. thereby

preventing the contamination of toxic substances in both raw materials and finished products.

ECO-E2.1 Policy and guidelines to prevention of contamination of toxic substance in raw material and products.

- Temperature Control of Chemicals and Solder in Storage:**
Ensure strict control over the temperature conditions of chemicals and solder during storage.
- Hygiene and Sanitation Practices:**
Implement rigorous hygiene and sanitation protocols throughout our facility to maintain cleanliness of raw materials and products, including the enforcement of a comprehensive personal hygiene program for all personnel.
- Segregation and Secure Sealing of Toxic Chemicals and Raw Materials:**
Segregate toxic chemicals and raw materials from other products and ensure they are securely sealed to prevent contamination.
- Labeling and Identification via Color-Coding:**
Utilize a color-coding method for labeling and identifying different chemicals and raw materials to facilitate segregation and proper handling.
- Storage and Handling Protocols:**
Upon arrival of materials at the facility, personnel must ensure all packages are properly sealed. Any damaged packages should be promptly discarded. Additionally, personnel receiving shipments should verify the temperature of the delivery truck to ensure materials are maintained at appropriate conditions.

ECO-E2.2 Process of quality inspection and control for raw materials to prevent contamination of toxic substances in products or raw material.

Quality inspection and control for raw materials to prevent contamination of toxic substances in electronics products and components involve several meticulous processes. Here's a detailed overview:

1. Supplier Selection and Qualification

Process:

Supplier Evaluation: Assess potential suppliers based on their compliance with environmental and safety standards.

Audits: Conduct on-site audits of suppliers to verify their processes and controls for preventing contamination.

Documentation: Require suppliers to provide documentation of their quality management systems, environmental policies, and certifications (e.g., ISO 9001, ISO 14001).

Controls:

Contractual Agreements: Include clauses in supplier contracts that mandate compliance with specific standards for raw materials.

Approved Supplier List: Maintain a list of pre-qualified suppliers who meet the required standards.

2. Incoming Material Inspection

Process:

Sampling: Perform random sampling of incoming raw materials to test for the presence of toxic substances.

Testing: Use analytical techniques such as X-ray fluorescence (XRF), gas chromatography-mass spectrometry (GC-MS), and inductively coupled plasma mass spectrometry (ICP-MS) to detect contaminants.

Controls:

Acceptance Criteria: Establish clear acceptance criteria for raw materials, specifying permissible levels of various substances.

Rejection Protocols: Implement procedures for rejecting and returning non-compliant materials to suppliers.

3. Material Traceability

Process:

Batch Tracking: Track raw materials by batch or lot number to ensure traceability throughout the supply chain.

Documentation: Maintain detailed records of material sources, batch numbers, and inspection results.

Controls:

Inventory Management System: Use an inventory management system to log and monitor the movement of materials.

Traceability Audits: Regularly audit traceability records to ensure accuracy and completeness.

4. In-Process Quality Control

Process:

Process Monitoring: Continuously monitor production processes to detect and prevent contamination.

In-Process Testing: Conduct tests at various stages of production to identify any contamination issues early.

Controls:

Standard Operating Procedures (SOPs): Develop and enforce SOPs for handling and processing materials to minimize contamination risks.

Training: Provide regular training for employees on contamination prevention and quality control procedures.

5. Final Product Testing

Process:

Random Sampling: Randomly sample finished products for testing.

Comprehensive Testing: Perform comprehensive testing on sampled products to detect any traces of toxic substances.

Controls:

Quality Control Standards: Adhere to international standards (e.g., RoHS, REACH) for permissible levels of toxic substances in electronics.

Certification: Obtain third-party certifications for products to validate compliance with safety and environmental standards.

6. Corrective and Preventive Actions (CAPA)

Process:

Root Cause Analysis: Conduct root cause analysis to determine the source of any contamination issues that are identified.

Action Plans: Develop and implement corrective actions to address identified issues and preventive actions to avoid recurrence.

Controls:

CAPA System: Maintain a robust CAPA system to document, track, and verify the effectiveness of corrective and preventive actions.

Continuous Improvement: Regularly review and improve quality control processes based on findings from CAPA activities.

7. Regulatory Compliance

Process:

Regulatory Monitoring: Stay updated on relevant regulations and standards regarding toxic substances in electronics.

Compliance Audits: Conduct regular compliance audits to ensure adherence to regulatory requirements.

Controls:

Regulatory Database: Maintain a database of applicable regulations and standards.

Compliance Training: Provide training for employees on regulatory requirements and changes.

ECO-E2.3 Number of cases where contamination of toxic substances is detected in products or raw materials, along with explanation of mitigation measures.

2 Cases of Contamination of Toxic Substances in Electronics Products and Components

Case 1: Lead Contamination in Solder

Situation:

Lead, a toxic heavy metal, was historically used in soldering materials for electronics. Despite regulations like RoHS (Restriction of Hazardous Substances), lead contamination can still occur if suppliers or processes are non-compliant.

Mitigation Measures:

Supplier Verification: Ensure all suppliers comply with RoHS and similar regulations. Perform regular audits and require certifications.

Alternative Materials: Use lead-free solders (e.g., tin-silver-copper alloys) in manufacturing.

In-Process Testing: Regularly test solder materials using XRF to ensure compliance.

Employee Training: Train staff on handling and identifying compliant materials.

Case 2: Mercury in Backlights of LCD Screens

Situation:

Mercury, used in cold cathode fluorescent lamps (CCFLs) for backlighting LCD screens, is highly toxic. Non-compliance with regulations can lead to mercury contamination.

Mitigation Measures:

Regulatory Compliance: Ensure all products comply with global regulations such as RoHS, which restrict mercury use.

Alternative Technologies: Adopt mercury-free backlighting technologies like LED.

Supplier Certification: Only source from suppliers who provide mercury-free components.

Disposal and Recycling: Implement safe disposal and recycling practices for old or non-compliant backlights.

General Mitigation Measures

Adopt Green Manufacturing Practices:

- Integrate sustainable practices and materials into manufacturing processes.
- Use eco-friendly alternatives to hazardous substances wherever possible.

Strengthen Regulatory Compliance:

- Stay updated with global and local regulations regarding hazardous substances.
- Implement compliance checks throughout the supply chain.

Enhance Quality Control Systems:

- Develop robust quality control systems that include regular testing and monitoring.
- Use advanced analytical techniques to detect contaminants at trace levels.

Employee Training and Awareness:

- Regularly train employees on handling hazardous materials, compliance requirements, and safety protocols.
- Promote a culture of safety and environmental responsibility within the organization.

Supplier Collaboration and Development:

- Work closely with suppliers to improve their processes and ensure compliance.
- Provide support and resources for suppliers to adopt better practices and technologies.

Continuous Improvement and Innovation:

- Invest in R&D to find safer, more sustainable alternatives to hazardous materials.
- Continuously review and improve processes based on the latest scientific and technological advancements.

By implementing these measures, electronics businesses can effectively prevent and mitigate the risk of toxic substance contamination, ensuring product safety, regulatory compliance, and environmental sustainability.

ECO-E3 Climate change risks

ECO-E3.1 Climate change risks assessment with explanation of potential impacts on business operations

Climate change risks for electronics businesses can be categorized into several key areas, and each risk has corresponding mitigation strategies:

1. Supply Chain Disruptions

Risks:

Natural disasters (e.g., hurricanes, floods) can halt production, delay shipments, and damage critical infrastructure.

Mitigation Strategies:

Diversify suppliers and geographic locations to avoid over-reliance on any single region.

Develop robust disaster recovery and business continuity plans.

Invest in advanced forecasting and monitoring systems to anticipate and respond to disruptions.

2. Increased Costs

Risks:

Rising energy costs and scarcity of raw materials due to climate impacts can increase production costs.

Mitigation Strategies:

Increase energy efficiency through improved processes and technology.

Invest in renewable energy sources to reduce dependence on fossil fuels.

Optimize resource use and reduce waste through circular economy principles.

3. Regulatory Pressures

Risks:

Governments are imposing stricter environmental regulations and carbon taxes, which can lead to increased compliance costs.

Mitigation Strategies:

Stay ahead of regulatory trends and proactively adopt sustainable practices.

Engage in policy advocacy to shape favorable regulations.

Invest in R&D for eco-friendly products and processes to ensure compliance and innovation.

Risks:

Negative public perception regarding environmental impact can lead to reduced customer loyalty and sales.

Mitigation Strategies:

Implement transparent sustainability reporting and communication strategies.

Achieve certifications (e.g., ISO 14001) and adhere to recognized environmental standards.

Launch green product lines and engage in corporate social responsibility (CSR) initiatives.

5. Technological Obsolescence

Risks:

Rapid advancements in sustainable technologies can render existing products obsolete, impacting market share and profitability.

Mitigation Strategies:

Invest in continuous innovation and stay ahead of technological trends.

Develop modular products that can be easily upgraded or recycled.

Collaborate with research institutions and industry groups to leverage cutting-edge developments.

6. Physical Risks to Infrastructure

Risks:

Manufacturing facilities, data centers, and distribution networks are vulnerable to extreme weather events and climate impacts.

Mitigation Strategies:

Conduct climate risk assessments for all facilities and operations.

Invest in resilient infrastructure and design buildings to withstand extreme weather.

Implement comprehensive emergency response and recovery plans.

Overall Strategic Approaches

Sustainability Integration: Embed sustainability into the core business strategy, making it a key driver of innovation and competitiveness.

Stakeholder Engagement: Work closely with suppliers, customers, regulators, and communities to foster a collaborative approach to sustainability.

Risk Management: Continuously monitor and evaluate climate-related risks, integrating them into the broader enterprise risk management framework.

By addressing these risks proactively, electronics businesses can not only mitigate potential negative impacts but also seize opportunities for growth and leadership in a sustainable economy.

ECO-E3.2 Goals, plans, and measure to mitigate climate change risks

To effectively mitigate climate change risks, electronics businesses should establish clear goals, detailed plans, and measurable actions. Here's a comprehensive approach:

Goals

1. Reduce Carbon Footprint

- Achieve carbon neutrality by a specific year (e.g., 2030 or 2040).
- Reduce greenhouse gas emissions by a certain percentage (e.g., 50% reduction by 2030).

2. Enhance Energy Efficiency

- a. Improve energy efficiency in manufacturing processes by a specific percentage (e.g., 30% improvement by 2025).

3. Increase Use of Renewable Energy

- a. Source 100% of electricity from renewable sources by a set year (e.g., 2025 or 2030).

4. Sustainable Product Design

- a. Design all products to be fully recyclable or reusable by a specific year.
- b. Increase the use of recycled materials in products to a certain percentage (e.g., 50% by 2025).

5. Minimize Waste

- a. Achieve zero waste to landfill in all operations by a specific year.
- b. Reduce electronic waste generated by customers through product take-back and recycling programs.

Plans

1. Carbon Footprint Reduction

- a. Implement energy-saving measures in factories and offices.
- b. Invest in carbon offset projects, such as reforestation or renewable energy projects.
- c. Transition company fleet to electric or hybrid vehicles.

2. Energy Efficiency

- a. Upgrade to energy-efficient machinery and lighting.
- b. Implement energy management systems to monitor and reduce energy use.
- c. Conduct regular energy audits and implement recommendations.

3. Renewable Energy

- a. Install solar panels or wind turbines at manufacturing facilities.
- b. Purchase renewable energy certificates (RECs) or enter into power purchase agreements (PPAs) for renewable energy.
- c. Encourage suppliers to use renewable energy.

4. Sustainable Product Design

- a. Apply eco-design principles to new products to minimize environmental impact.

- b. Use life cycle assessment (LCA) to evaluate and reduce the environmental footprint of products.
- c. Collaborate with suppliers to source sustainable materials.

5. Waste Minimization

- a. Implement recycling programs for manufacturing waste.
- b. Design products for easy disassembly and recycling.
- c. Offer product take-back programs and incentives for customers to return used electronics.

Measures

1. Key Performance Indicators (KPIs)

- a. Track and report greenhouse gas emissions annually.
- b. Monitor energy consumption and energy efficiency improvements.
- c. Measure the percentage of renewable energy used in operations.
- d. Track the percentage of products designed for recyclability and the amount of recycled content used.
- e. Measure waste generated, recycled, and diverted from landfills.

2. Regular Reporting

- a. Publish annual sustainability reports detailing progress toward goals.
- b. Use recognized frameworks (e.g., GRI, SASB, TCFD) for reporting.
- c. Communicate progress to stakeholders, including investors, customers, and employees.

3. Third-Party Audits and Certifications

- a. Obtain third-party certifications (e.g., ISO 14001 for environmental management, ENERGY STAR for energy efficiency).
- b. Conduct regular audits to ensure compliance with environmental standards and regulations.
- c. Participate in external sustainability rankings and benchmarks.

4. Stakeholder Engagement

- a. Engage employees through training and awareness programs on sustainability practices.
- b. Collaborate with industry groups, NGOs, and governments on sustainability initiatives.
- c. Solicit feedback from customers and suppliers to improve sustainability efforts.

Social dimension ECO-S1 Access to digital technology

Policy and guidelines aimed at promoting access to digital technology

Affordability and Accessibility Initiatives Affordable Products and Services

Policy:

Ensure that products and services are priced affordably to reach a broader audience, including low-income populations.

Guidelines:

- Entry-Level Products:** Develop and market low-cost, entry-level versions of products without compromising on essential features.
- Discount Programs:** Offer discounts and subsidies for students, educators, and low-income families.
- Bulk Purchasing:** Facilitate bulk purchasing programs for educational institutions and non-profits.

Financing Options

Policy:

Provide flexible financing options to make digital technology more accessible.

Guidelines:

- Installment Plans:** Offer interest-free installment payment plans for purchasing devices.
- Leasing Programs:** Provide leasing options for schools and small businesses to reduce upfront costs.
- Trade-In Programs:** Allow customers to trade in old devices for credit towards new purchases.

2. Inclusive Design and Accessibility

Universal Design Principles

Policy:

Design products that are accessible to all users, including those with disabilities.

Guidelines:

Accessibility Features: Integrate accessibility features such as screen readers, voice commands, and customizable interfaces.

User Testing: Conduct extensive user testing with diverse groups, including people with disabilities, to identify and address accessibility issues.

Compliance Standards: Adhere to global accessibility standards such as the Web Content Accessibility Guidelines (WCAG) and the Americans with Disabilities Act (ADA).

Assistive Technologies

Policy:

Develop and support assistive technologies to enhance accessibility.

Guidelines:

Software Solutions: Provide software solutions that assist users with disabilities, such as text-to-speech and speech-to-text applications.

Hardware Adaptations: Design hardware adaptations like adaptive controllers, ergonomic keyboards, and hearing aid-compatible devices.

3. Digital Literacy and Education

Educational Programs

Policy:

Promote digital literacy through educational programs and initiatives.

Guidelines:

Training Workshops: Offer workshops and online courses to teach digital skills to students, educators, and the general public.

Partnerships with Schools: Partner with educational institutions to integrate technology into the curriculum and provide teacher training.

Community Outreach: Conduct community outreach programs to increase digital literacy in underserved areas.

Support for STEM Education

Policy:

Encourage and support STEM (Science, Technology, Engineering, and Mathematics) education.

Guidelines:

Scholarships and Grants: Provide scholarships and grants for students pursuing STEM fields.

Mentorship Programs: Establish mentorship programs connecting students with professionals in the tech industry.

Educational Content: Develop and distribute educational content and tools to support STEM learning.

4. Sustainable and Ethical Practices

Sustainable Product Development

Policy:

Commit to sustainable and ethical practices in product development and lifecycle management.

Guidelines:

Eco-Friendly Materials: Use recycled and eco-friendly materials in products and packaging.

Energy Efficiency: Design energy-efficient products to reduce environmental impact.

End-of-Life Management: Implement take-back and recycling programs to manage electronic waste responsibly.

Ethical Sourcing

Policy:

Ensure ethical sourcing of materials and components.

Guidelines:

Supply Chain Transparency: Maintain transparency in the supply chain to ensure materials are sourced ethically.

Fair Labor Practices: Enforce fair labor practices and humane working conditions throughout the supply chain.

Conflict-Free Materials: Source conflict-free materials to avoid contributing to human rights abuses.

5. Community Engagement and Corporate Social Responsibility (CSR) Community Support Programs

Policy:

Engage in community support programs to enhance digital access and inclusion.

Guidelines:

Donations and Grants: Provide donations and grants to schools, libraries, and community centers for purchasing digital devices and internet access.

Employee Volunteering: Encourage employees to volunteer in digital literacy programs and technology education initiatives.

Partnerships with Non-Profits: Partner with non-profits and other organizations to expand digital access and literacy.

ECO-S1.2 Projects to promote access to digital technology

Crafter's Team knowledge sharing in organization

To integrate technology into classrooms and improve digital literacy and education quality.

Key Components:

Smart Classrooms: Provides interactive whiteboards, tablets, and software to enhance learning experiences.

Teacher Training: Offers professional development for teachers to effectively use technology in education.

Educational Content: Develops and provides access to digital educational content.

Impact: thousands of schools across the globe have transformed their teaching methods and improved student engagement and learning outcomes.

Crafters Team x Silpakorn University Initiative

Crafters Team collaborates with Silpakorn University to enhance technology education for students majoring in Electrical Engineering and Mechanical Engineering, fostering a deeper understanding of theoretical principles and practical applications.

Key Components:

Advanced Technology: Utilizing LoRa, an advanced long-range communication technology, to enhance connectivity between devices, surpassing the limitations of Wi-Fi or Bluetooth.

Training: Providing extensive training sessions for educators to effectively integrate cutting-edge technology into their teaching methodologies.

Infrastructure: Supporting Silpakorn University in establishing advanced wireless networks and infrastructure necessary for seamless technology integration.

Impact: this initiative has benefited numerous educational institutions, enhancing digital literacy and significantly improving educational outcomes for thousands of students.

ECO-S2 Promotion of female workforce

ECO-S2.1 Policy and guidelines related to promoting gender equality in the workplace

1. Equal Employment Opportunity Policy

Policy:

Commit to providing equal employment opportunities based on merit and without discrimination based on gender.

Guidelines:

Recruitment and Hiring: Ensure recruitment processes are fair and unbiased, with job descriptions and qualifications free from gender bias.

Promotion and Advancement: Implement transparent criteria for promotion and career advancement, ensuring equal consideration for all employees.

Salary and Benefits: Conduct regular reviews to ensure pay equity and provide equal benefits and opportunities for career development.

2. Anti-Discrimination and Harassment Policy

Policy:

Prohibit discrimination, harassment, and retaliation based on gender or any other protected characteristic.

Guidelines:

Training: Provide regular training to employees and managers on recognizing and preventing discrimination and harassment.

Reporting Mechanisms: Establish confidential reporting channels and procedures for addressing complaints of discrimination or harassment promptly and effectively.

Support Systems: Offer support to victims of discrimination or harassment and take appropriate disciplinary action against offenders.

3. Flexible Work Arrangements Policy

Policy:

Support work-life balance and accommodate diverse needs by offering flexible work arrangements.

Guidelines:

Telecommuting: Allow employees to work remotely or from home when feasible.

Flexible Hours: Offer flexible scheduling options to accommodate personal and family responsibilities.

Job Sharing: Facilitate job sharing arrangements to allow employees to balance work commitments.

4. Parental Leave and Family Support Policy

Policy:

Provide equitable parental leave and family support policies to support employees in balancing work and caregiving responsibilities.

Guidelines:

Paid Parental Leave: Offer paid parental leave for both primary and secondary caregivers, ensuring gender-neutral policies.

Childcare Support: Provide access to affordable and quality childcare services or subsidies.

Return-to-Work Programs: Implement programs to support employees returning from parental leave, such as phased return-to-work schedules or lactation support.

5. Leadership and Mentorship Programs

Policy:

Promote gender diversity in leadership and foster mentorship opportunities for women in the organization.

Guidelines:

Diversity Goals: Set measurable goals for increasing representation of women in leadership roles and monitor progress regularly.

Mentorship Programs: Establish formal mentorship programs pairing senior leaders with women employees to provide guidance and career development opportunities.

Leadership Training: Offer leadership development programs and workshops aimed at empowering women to advance in their careers.

6. Workplace Culture and Inclusion Initiatives

Policy:

Foster an inclusive workplace culture that values diversity and promotes respect for all employees.

Guidelines:

Diversity Training: Conduct diversity and inclusion training for all employees to raise awareness and promote understanding of gender issues.

Employee Resource Groups: Support and encourage employee resource groups focused on gender equality and women's empowerment.

Recognition and Awards: Recognize and celebrate achievements of employees contributing to gender equality and diversity initiatives.

7. Transparency and Accountability

Policy:

Ensure transparency in policies, practices, and decision-making processes related to gender equality.

Guidelines:

Regular Assessment: Conduct regular audits and assessments to evaluate the effectiveness of gender equality policies and initiatives.

Public Commitment: Communicate the organization's commitment to gender equality internally and externally.

Reporting: Publish annual reports or updates on progress towards gender equality goals and outcomes.

ECO-S2.2 Number of female employees categorized by employment level:

Employment Level	Total number of employees (People)	
	Female	Male
Senior manager Level	0	2
Management Level	0	2
Staff Level	1	0

ECO-S3 Combating Child Labour

ECO-S3.1 Policy and guidelines regarding combating child labour within the organization

Company Policy on Combating Child Labor

1. Policy Statement:

Commitment: Wireless crafters devices Co., Ltd. is committed to upholding the rights of children and preventing child labor within its operations and supply chain.

Compliance: We adhere to all applicable laws and regulations related to child labor, including the International Labour Organization (ILO) conventions and national legislation.

2. Scope:

This policy applies to all employees, contractors, suppliers, and business partners associated with Wireless crafters devices Co., Ltd.

3. Definitions:

Define what constitutes child labor according to international standards (e.g., ILO Convention No. 138 and Convention No. 182).

4. Prohibited Practices:

Explicitly state that Wireless crafters devices Co., Ltd. prohibits:

Employing children below the legal minimum age for work as defined by national laws or international standards.

Engaging in hazardous work that is harmful to the health, safety, or morals of children.

5. Responsibilities:

Management: Ensure that managers and supervisors are aware of their responsibility to prevent and report any suspected cases of child labor.

Employees: Encourage all employees to report any concerns or suspicions of child labor promptly and confidentially.

6. Recruitment and Employment Practices:

Verification: Implement procedures to verify the age of all employees during the hiring process and require proof of age documentation where applicable.

Supplier and Contractor Requirements: Include clauses in contracts requiring suppliers and contractors to adhere to our child labor policy.

7. Monitoring and Compliance:

Internal Audits: Conduct regular audits and assessments to monitor compliance with the child labor policy.

Supplier Audits: Assess and monitor suppliers' compliance through audits and assessments.

8. Training and Awareness:

Employee Training: Provide training to employees on recognizing and reporting child labor issues.

Supplier Engagement: Educate suppliers and contractors on our child labor policy and expectations.

9. Reporting and Investigation:

Establish procedures for reporting suspected cases of child labor and investigating allegations promptly and impartially.

Provide protections for whistle-blowers who report in good faith.

10. Continuous Improvement:

Commit to continuously review and improve our policies and practices related to combating child labor.

Guidelines for Implementing the Policy

1. Education and Awareness:

Educate employees, managers, and suppliers on the importance of preventing child labor and the specific requirements of our policy.

2. Due Diligence in Supply Chain:

Conduct due diligence assessments of our supply chain to identify and mitigate risks of child labor.

3. Supplier Engagement:

Include clauses in supplier contracts requiring compliance with our child labor policy and conduct regular audits to ensure adherence.

4. Monitoring and Reporting:

Establish mechanisms for monitoring and reporting child labor issues internally and with external stakeholders as appropriate.

5. Collaboration and Advocacy:

Collaborate with industry peers, NGOs, and government agencies to advocate for policies and practices that combat child labor.

6. Accountability and Review:

Hold management and employees accountable for adhering to the child labor policy through performance evaluations and regular reviews.

7. Transparency:

Communicate our efforts and progress in combating child labor through public disclosures and reports.

ECO-S3.2 Policy and guidelines regarding combating child labor within the supply chain

Company Policy on Combating Child Labor in the Supply Chain

1. Policy Statement:

Commitment: Wireless crafters devices Co., Ltd. is committed to preventing and eliminating child labor in its global supply chain.

Compliance: We adhere to all applicable laws and regulations related to child labor, including the International Labour Organization (ILO) conventions and national legislation.

2. Scope:

This policy applies to all suppliers, subcontractors, agents, and business partners involved in providing goods and services to Wireless crafters devices Co., Ltd.

3. Definitions:

Define what constitutes child labor according to international standards (e.g., ILO Convention No. 138 and Convention No. 182).

4. Prohibited Practices:

Explicitly state that Wireless crafters devices Co., Ltd. prohibits:

Using child labor as defined by the legal minimum age for work in the respective country or international standards.

Engaging children in hazardous work that jeopardizes their health, safety, or moral development.

5. Supplier and Contractor Requirements:

Contractual Obligations: Include clauses in contracts requiring suppliers, subcontractors, and business partners to comply with our child labor policy.

Due Diligence: Require suppliers to conduct due diligence within their own supply chains to identify and mitigate risks related to child labor.

6. Verification and Audits:

Supplier Verification: Implement procedures to verify that suppliers adhere to our child labor policy, including requesting documentation and conducting on-site audits where necessary.

Risk Assessment: Conduct risk assessments of suppliers and prioritize audits based on risk factors such as geographic location, industry sector, and known risks of child labor.

7. Monitoring and Compliance:

Monitoring Mechanisms: Establish mechanisms for monitoring supplier compliance with our child labor policy on an ongoing basis.

Corrective Actions: Outline procedures for addressing instances of non-compliance, including corrective actions and, if necessary, termination of supplier contracts.

8. Training and Capacity Building:

Supplier Training: Provide training and guidance to suppliers on our child labor policy, expectations, and best practices for ensuring compliance.

Capacity Building: Support suppliers in developing capabilities to implement and monitor child labor policies effectively.

9. Reporting and Investigation:

Reporting Channels: Establish confidential reporting channels for employees, suppliers, and other stakeholders to report suspected cases of child labor.

Investigation Protocol: Outline procedures for investigating reported cases promptly and impartially, ensuring confidentiality and protection for whistleblowers.

10. Continuous Improvement:

Commit to regularly reviewing and improving our policies, procedures, and practices related to combating child labor in the supply chain.

Engage stakeholders, including suppliers and industry peers, in collaborative efforts to address systemic issues and promote responsible sourcing practices.

Guidelines for Implementing the Policy

1. Risk Assessment:

Conduct comprehensive risk assessments of the supply chain to identify geographical, sectoral, and operational risks related to child labor.

2. Supplier Engagement:

Engage with suppliers to raise awareness about our child labor policy and collaborate on strategies to address risks effectively.

3. Monitoring and Auditing:

Implement a risk-based approach to monitoring and auditing suppliers, focusing resources on high-risk suppliers and sectors.

4. Capacity Building:

Provide training and capacity-building support to suppliers to enhance their understanding of child labor issues and improve their ability to implement effective policies and practices.

5. Collaboration and Advocacy:

Collaborate with industry associations, NGOs, and other stakeholders to advocate for stronger regulations and industry-wide initiatives to combat child labor.

6. Reporting and Transparency:

Publish annual reports or disclosures on efforts to combat child labor within the supply chain, including progress made, challenges faced, and lessons learned.

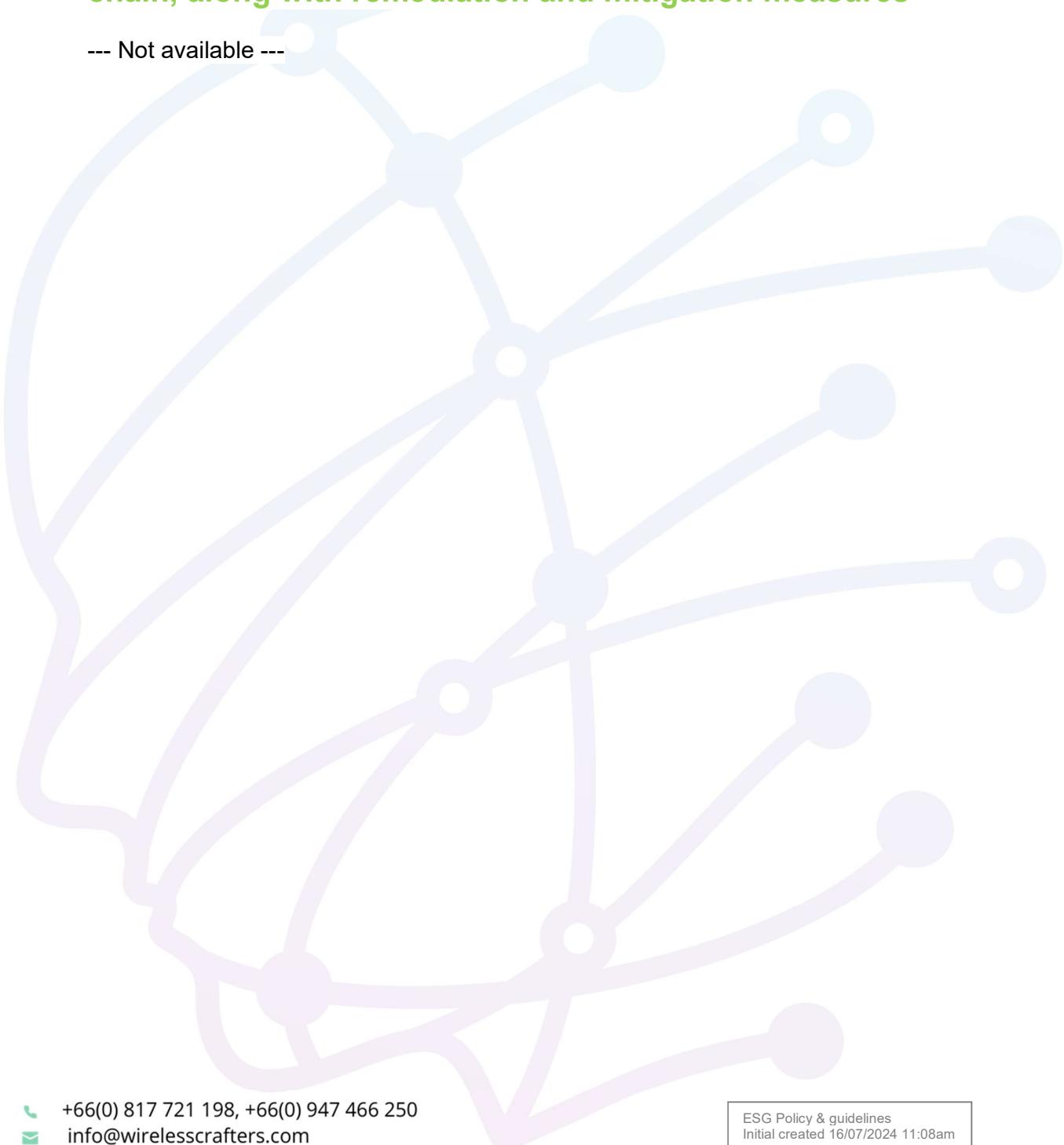
7. Accountability and Review:

Hold Wireless crafters devices Co., Ltd. and its employees accountable for adhering to the child labor policy through regular performance evaluations and reviews.

AN IIOT DEVICES COMPANY

ECO-S3.3 Number of incidents or complaints or cases of child labor detected within the organization and the supply chain, along with remediation and mitigation measures

--- Not available ---



ECO-G1 Cybersecurity and personal data protection

ECO-G1.1 Policy and guidelines on cybersecurity and personal data protection

Company Policy on Cybersecurity and Personal Data Protection

1. Policy Statement:

Commitment: Wireless crafters devices Co., Ltd. is committed to safeguarding the confidentiality, integrity, and availability of all electronic data and information assets.

Compliance: We comply with applicable laws and regulations regarding cybersecurity and personal data protection, including GDPR, CCPA, and other relevant standards.

2. Scope:

This policy applies to all employees, contractors, suppliers, and third parties who have access to Wireless crafters devices Co., Ltd.'s electronic data and information systems.

3. Definitions:

Define key terms related to cybersecurity, personal data, and information assets to ensure clarity and understanding across the organization.

4. Data Protection Principles:

Confidentiality: Ensure that personal data and confidential information are accessed only by authorized personnel for legitimate purposes.

Integrity: Maintain the accuracy and reliability of data throughout its lifecycle to prevent unauthorized modification or corruption.

Availability: Ensure timely and reliable access to data and information systems to support business operations.

5. Responsibilities:

Management: Allocate responsibilities for overseeing cybersecurity and data protection initiatives to designated personnel or teams.

Employees: Educate and empower employees to understand their roles and responsibilities in protecting data and reporting security incidents.

6. Data Governance:

Data Classification: Classify data based on sensitivity and apply appropriate security controls to protect each category.

Data Minimization: Collect and process only the personal data necessary for specified purposes and in accordance with legal requirements.

7. Information Security Controls:

Access Control: Implement measures to control access to systems, applications, and data based on the principle of least privilege.

Encryption: Encrypt sensitive data both in transit and at rest to protect against unauthorized access and data breaches.

Network Security: Secure networks with firewalls, intrusion detection systems, and regular vulnerability assessments.

8. Incident Response and Reporting:

Response Plan: Develop and maintain an incident response plan to promptly detect, respond to, and recover from cybersecurity incidents.

Reporting: Establish procedures for reporting security incidents, breaches, or suspected vulnerabilities to designated authorities and affected parties.

9. Third-Party Risk Management:

Supplier Contracts: Include cybersecurity requirements in contracts with suppliers, service providers, and third parties to ensure they adhere to similar standards.

Audit and Monitoring: Regularly assess and monitor third-party compliance with cybersecurity and data protection requirements.

10. Training and Awareness:

Employee Training: Provide regular training sessions on cybersecurity best practices, data protection principles, and emerging threats.

Awareness Programs: Conduct awareness campaigns to promote a culture of cybersecurity vigilance among employees.

11. Compliance and Audit:

Regulatory Compliance: Conduct regular audits and assessments to ensure compliance with cybersecurity regulations and standards.

Internal Review: Review and update the policy and guidelines periodically to reflect changes in technology, regulations, and business practices.

Guidelines for Implementing the Policy

1. Risk Assessment:

Conduct regular risk assessments to identify and prioritize cybersecurity risks based on potential impact and likelihood of occurrence.

2. Continuous Improvement:

Foster a culture of continuous improvement by soliciting feedback, monitoring industry trends, and adapting cybersecurity practices accordingly.

3. Incident Simulation Exercises:

Conduct tabletop exercises and simulations to test the effectiveness of the incident response plan and enhance preparedness for real-world incidents.

4. Collaboration and Information Sharing:

Collaborate with industry peers, government agencies, and cybersecurity forums to share threat intelligence and best practices.

5. Documentation and Accountability:

Maintain comprehensive documentation of cybersecurity policies, procedures, and incidents to facilitate accountability and transparency.

6. External Communication:

Establish protocols for communicating cybersecurity incidents to customers, stakeholders, and regulatory authorities, ensuring transparency and trust.

ECO-G1.2 Percentage of technology infrastructures that have been certified with cybersecurity standards, such as ISO 27001 or other relevant standards

Asset counted as company infrastructure

• Hostneverdie rent shared host	Applicable with ISO 27001
• SSL certificated	Applicable with ISO 27001
• Computer laptop	Applicable with other standard
• TV 55" Samsung	Applicable with ISO 27001
• Printer Epson mono printer	Applicable with other standard
• reTerminal Rasbberypie HMI	Applicable with other standard
• SMT machines	Not relevant
• Dashboard Wirelesscrafters	Not relevant
• AWS rent server	Applicable with ISO 27001

Total assets 9 Not relevant 2 Not applicable 0

77% of infrastructure were certified with cybersecurity standard

ECO-G1.3 Measures and guidelines related to personal data usage

Measures and Guidelines for Personal Data Usage

1. Data Collection and Consent:

Purpose Limitation: Clearly specify the purpose for collecting personal data and ensure it aligns with business objectives.

Consent: Obtain explicit consent from individuals before collecting their personal data, explaining how it will be used and processed.

2. Data Minimization and Retention:

Minimization: Collect only the minimum amount of personal data necessary for the intended purpose.

Retention Period: Establish and adhere to data retention periods based on legal requirements and business needs. Delete or anonymize data when it is no longer needed.

3. Data Security:

Encryption: Encrypt personal data both in transit and at rest to protect against unauthorized access.

Access Control: Implement strict access controls to ensure that only authorized personnel can access personal data.

Data Integrity: Maintain the accuracy and reliability of personal data by implementing measures to prevent unauthorized alteration or corruption.

4. Transparency and Privacy Notices:

Privacy Policy: Maintain a comprehensive and easily accessible privacy policy that informs individuals about how their personal data is collected, used, and protected.

Privacy Notices: Provide clear and concise privacy notices at the point of data collection to inform individuals of their rights and how to exercise them.

5. Data Transfer and Sharing:

Data Transfer: Ensure that adequate safeguards are in place when transferring personal data internationally to comply with data protection laws.

Third-Party Agreements: Enter into data processing agreements with third-party service providers to ensure they handle personal data in accordance with applicable laws and your business's privacy standards.

6. Data Subject Rights:

Access and Correction: Enable individuals to access their personal data and request corrections or updates as needed.

Data Portability: Facilitate the transfer of personal data to another organization upon request, in a structured, commonly used, and machine-readable format.

7. Employee Training and Awareness:

Training Programs: Provide regular training sessions for employees on data protection principles, privacy regulations, and company policies.

Awareness Campaigns: Raise awareness among employees about the importance of protecting personal data and mitigating risks associated with data breaches.

8. Incident Response and Breach Notification:

Response Plan: Develop and maintain an incident response plan to promptly detect, respond to, and mitigate the impact of data breaches.

Breach Notification: Establish procedures to notify affected individuals and regulatory authorities within required timeframes in the event of a data breach.

9. Privacy by Design and Default:

Principle Implementation: Integrate privacy considerations into the design and development of products, services, and business processes from the outset (Privacy by Design).

Default Settings: Ensure that privacy-friendly default settings are implemented to enhance user privacy and control over their personal data (Privacy by Default).

10. Regular Audits and Compliance Monitoring:

Audits: Conduct regular audits and assessments of data processing activities, security measures, and compliance with privacy policies and regulations.

Compliance Monitoring: Monitor changes in privacy laws and regulations to ensure ongoing compliance and adjust policies and practices accordingly.

ECO-G1.4 Percentage of employees who have been trained in cybersecurity and personal data usage

--- Not available ---

ECO-G1.5 Number of incidents or cases of cyberattacks against the company, along with mitigation measures

Case 1

Wireless Crafters Devices Co., Ltd. experienced a cybersecurity incident where our website was targeted by a Cronjobs program. This program automatically sent requests to our shared hosting server, inadvertently affecting other users sharing the same hosting environment.

To mitigate the impact of this incident, we promptly identified and addressed the unauthorized activity. Our team worked diligently to implement enhanced security measures to prevent future incidents and protect both our website and the shared hosting environment. We understand the importance of cybersecurity and remain

committed to maintaining the integrity and reliability of our services for all users involved.

This incident underscores our ongoing commitment to cybersecurity best practices and proactive monitoring to safeguard our digital assets and uphold the trust of our customers and partners.

ECO-G1.6 Number of incidents or cases of personal data breaches, along with mitigation measures

--- Not available ---

ECO-G2 Computer Systems and Information Technology Security

ECO-G2.1 Policy and guidelines on computer systems and information technology security

Company Policy on Computer Systems and Information Technology Security

1. Policy Statement:

Commitment: Wireless crafters devices Co., Ltd. is committed to maintaining the confidentiality, integrity, and availability of its computer systems and information technology resources.

Compliance: We comply with all applicable laws, regulations, and industry standards related to IT security, including GDPR, CCPA, and relevant data protection laws.

2. Scope:

This policy applies to all employees, contractors, suppliers, and third parties who have access to Wireless crafters devices Co., Ltd.'s computer systems and IT resources.

3. Definitions:

Define key terms related to IT security, such as cybersecurity, data breach, malware, and phishing, to ensure clarity and understanding across the organization.

4. Security Objectives:

Confidentiality: Protect sensitive and confidential information from unauthorized access, disclosure, or use.

Integrity: Maintain the accuracy and reliability of data and information by preventing unauthorized modification or deletion.

Availability: Ensure timely and reliable access to IT resources to support business operations and continuity.

5. Roles and Responsibilities:

Management: Assign responsibility for overseeing IT security initiatives to designated personnel or teams within the organization.

Employees: Educate and empower employees to understand their roles and responsibilities in maintaining IT security and protecting company assets.

6. IT Governance:

Risk Management: Conduct regular risk assessments to identify and mitigate IT security risks based on potential impact and likelihood of occurrence.

Compliance Monitoring: Monitor and enforce compliance with IT security policies, procedures, and standards through audits and assessments.

7. Access Control and Authentication:

Access Management: Implement strict access controls to ensure that only authorized individuals have access to IT resources and data.

Multi-Factor Authentication (MFA): Require the use of MFA for accessing sensitive systems and information to enhance security.

8. Data Protection and Privacy:

Data Encryption: Encrypt sensitive data both in transit and at rest to protect against unauthorized access and data breaches.

Data Handling: Establish guidelines for the collection, storage, processing, and disposal of data in accordance with legal and regulatory requirements.

9. Incident Response and Management:

Response Plan: Develop and maintain an incident response plan to promptly detect, respond to, and recover from cybersecurity incidents and data breaches.

Reporting: Establish procedures for reporting security incidents, breaches, or suspicious activities to designated authorities and stakeholders.

10. Security Awareness and Training:

Employee Training: Provide regular training sessions on IT security best practices, phishing awareness, password management, and social engineering prevention.

Awareness Programs: Conduct awareness campaigns to promote a culture of cybersecurity vigilance and proactive risk mitigation among employees.

11. Vendor and Third-Party Management:

Supplier Contracts: Include IT security requirements in contracts with suppliers, service providers, and third parties to ensure they adhere to similar standards.

Monitoring: Regularly assess and monitor third-party compliance with IT security requirements and contractual obligations.

12. Continuous Improvement:

Review and Update: Regularly review and update IT security policies, guidelines, and procedures to address emerging threats, technological advancements, and regulatory changes.

Feedback Mechanism: Solicit feedback from employees and stakeholders to continuously improve IT security practices and enhance organizational resilience.

Guidelines for Implementing the Policy

1. Risk Assessment:

Conduct periodic risk assessments and vulnerability scans to identify and prioritize IT security risks.

2. Incident Simulation Exercises:

Conduct tabletop exercises and simulations to test the effectiveness of the incident response plan and enhance preparedness for real-world incidents.

3. Collaboration and Information Sharing:

Collaborate with industry peers, government agencies, and cybersecurity forums to share threat intelligence and best practices.

4. Documentation and Accountability:

Maintain comprehensive documentation of IT security policies, procedures, incident reports, and compliance assessments to facilitate accountability and transparency.

5. External Communication:

Establish protocols for communicating IT security incidents and breaches to customers, stakeholders, regulatory authorities, and the public, ensuring transparency and trust.

ECO-G2.2 Number of testing instances to support emergency situations in computer systems and information technology

--- Not available ---

ECO-G2.3 Number of incidents or cases of failures in computer systems and information technology and their impacts on the business, along with mitigation measures

Denial-of-Service (DoS) Attack

Incident:

A malicious actor launches a distributed denial-of-service (DDoS) attack against Wireless crafters devices Co.,Ltd.'s website, flooding it with traffic and causing it to become inaccessible to legitimate users.

Impact on Business:

Service Disruption: The website outage prevents customers from accessing products, services, or information, leading to potential revenue loss.

Reputation Damage: Negative publicity and customer dissatisfaction may arise from the inability to serve customers effectively during the attack.

Financial Implications: Remediation costs, including investing in DDoS mitigation solutions and conducting post-attack analysis, can strain financial resources.

Mitigation Measures:

DDoS Mitigation Services: Partner with DDoS mitigation service providers to detect and mitigate attacks in real-time.

Scalable Infrastructure: Implement scalable hosting solutions and content delivery networks (CDNs) to absorb and mitigate DDoS traffic.

Incident Response Team: Establish an incident response team trained to quickly identify and mitigate DDoS attacks, minimizing downtime and disruption.

Regular Testing: Conduct regular penetration testing and vulnerability assessments to identify and address potential weaknesses in IT infrastructure that could be exploited in an attack.

ECO-G3 Conflict-free Minerals Sourcing

ECO-G3.1 Principles for suppliers regarding conflict-free mineral sourcing

Wireless crafters devices Co., Ltd.'s Principles for Suppliers on Conflict-Free Mineral Sourcing

1. Commitment to Ethical Sourcing:

Ethical Responsibility: Suppliers must commit to ethical sourcing practices, ensuring that minerals used in products do not finance armed conflict or human rights abuses.

Transparency: Suppliers should provide transparent information about their supply chain and sourcing practices to ensure traceability of minerals.

2. Compliance with Regulations:

Regulatory Adherence: Suppliers must comply with all relevant regulations and laws regarding conflict minerals, including the Dodd-Frank Wall Street Reform and Consumer Protection Act (Section 1502) and the EU Conflict Minerals Regulation.

Due Diligence: Suppliers are required to perform due diligence on the source and chain of custody of minerals used, following established frameworks such as the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

3. Supplier Collaboration and Engagement:

Collaboration: Engage with suppliers at all tiers to promote responsible mineral sourcing practices and support initiatives that improve traceability and ethical sourcing.

Training and Education: Provide training and resources to suppliers to help them understand and comply with conflict-free sourcing requirements.

4. Traceability and Reporting:

Supply Chain Transparency: Suppliers must maintain accurate records of mineral sources and make this information available to Wireless crafters devices Co., Ltd. upon request.

Regular Reporting: Suppliers should regularly report on their conflict-free sourcing practices, including providing evidence of due diligence efforts and third-party audits.

5. Third-Party Audits and Certifications:

Independent Verification: Encourage suppliers to undergo third-party audits to verify compliance with conflict-free mineral sourcing standards.

Certification Programs: Prefer suppliers who participate in recognized certification programs, such as the Responsible Minerals Assurance Process (RMAP) or similar initiatives.

6. Continuous Improvement:

Ongoing Efforts: Suppliers should continually seek to improve their sourcing practices, staying informed about emerging issues and evolving best practices in conflict-free sourcing.

Feedback Mechanisms: Establish mechanisms for suppliers to receive feedback and support from Wireless crafters devices Co., Ltd. on improving their conflict-free mineral sourcing practices.

7. Risk Management:

Risk Assessment: Suppliers must conduct regular risk assessments of their supply chains to identify and mitigate potential risks related to conflict minerals.

Mitigation Plans: Develop and implement plans to address identified risks, ensuring prompt action to rectify any issues related to conflict minerals sourcing.

8. Ethical Business Practices:

Code of Conduct: Suppliers must adhere to a code of conduct that emphasizes ethical business practices, including respect for human rights and environmental sustainability.

Zero Tolerance: Adopt a zero-tolerance policy towards the use of conflict minerals that fund armed conflict or contribute to human rights abuses.

Implementation and Monitoring

1. Supplier Agreements:

Incorporate these principles into supplier agreements and contracts to ensure formal commitment to conflict-free mineral sourcing.

2. Monitoring and Evaluation:

Regularly monitor supplier compliance through audits, assessments, and reviews, providing feedback and requiring corrective actions as necessary.

3. Collaboration and Support:

Work collaboratively with suppliers to address challenges and provide support for implementing conflict-free sourcing practices, including technical assistance and capacity building.

Percentage of suppliers acknowledging the conflict-free mineral sourcing principles

--- Not Available ---

Percentage of suppliers who have undergone training on the conflict-free mineral sourcing principles

--- Not Available ---

Mr. Thanat Khongyai
ESG Certified

Wireless crafters devices Co., Ltd.