AVIXA
Sustainability Advisory Group

SUSTAINABILITY BEST PRACTICES

for Audiovisual Manufacturers

Building a Sustainable Future Through Innovation

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WELCOME

Let's Start Here

As the demand for advanced AV technologies continues to grow, so does the urgency to address the environmental challenges that accompany their development and deployment. The AV industry, like many others, faces a critical need to adapt to the rising expectations surrounding sustainability. Manufacturers, in particular, have a key role in driving the transformation toward a greener future by adopting sustainable practices throughout the entire product lifecycle.

This guide serves as a comprehensive guide for AV manufacturers seeking to integrate sustainability into their business models.

By adopting best practices across areas such as product design, manufacturing processes, supply chain management, and end-of-life strategies, companies can not only reduce their environmental footprint but also position themselves as leaders in a rapidly evolving industry.

– AVIXA Sustainability Group's Best Practices Subcommittee

Building a Greener AV Industry

The AVIXA Sustainability Advisory Group seeks to gather manufacturers, consultants and integrators to develop and promote a unified framework for reducing the environmental impact of the AV industry. By addressing the following goals, AVIXA can lead the way in creating a greener, more sustainable AV industry while fostering collaboration and innovation among stakeholders.

Goals for the AV Industry

In order to create a more sustainable and environmentally responsible AV industry, the AVIXA Sustainability Advisory Group has outlined a set of key goals. These objectives will guide our efforts to reduce environmental impact, foster collaboration, and drive innovation in sustainability. Here are the core goals that will help shape a greener future for the AV sector:

1. Develop and standardize industry best practices
2. Promote collaboration across the industry
3. Advance sustainable product design
4. Minimize carbon emissions
5. Establish lifecycle management best practices
6. Increase energy efficiency
7. Reduce electronic waste (e-waste)
8. Educate and train industry professionals
9. Encourage circular economy practices
10. Align global sustainable goals and frameworks (e.g., UN SDGs, GRI)
11. Measure and track sustainable performance
12. Empower end users with sustainable choices
13. Drive innovation in green technology
14. Advocate for industry accountability
15. Build a sustainable AV future

Driving Sustainable Innovation: Best Practices for OEMs in the AV Industry

Original equipment manufacturers (OEMs) sit at the epicenter of sustainable innovation. AV and IT technology manufacturers play a critical role in accelerating environmental progress across global industries. Integrating sustainability into product strategies is no longer just a differentiator. It's an imperative driven by evolving customer expectations, increasing regulatory demands, and the urgent need to mitigate climate impacts.

By embedding best practices into product lifecycle, from sourcing and design to end-of-life, manufacturers can demonstrate leadership, ensure compliance, and create long-term business value. Transparency is key. Disclosing carbon footprint data, adhering to international standards like ISO 14001 or the GHG Protocol, and aligning with frameworks such as the UN Sustainable Development Goals and Science Based Targets initiative builds stakeholder trust and enables meaningful benchmarking.

To put these principles into action, manufacturers can prioritize sustainable sourcing, invest in R&D that advances energy-efficient designs, and set tangible goals for carbon reduction and waste minimization. Circular economy models, such as modular designs, hardware upgrades via software. refurbishment programs, and certified recycling, extend product lifespans and reduce reliance on virgin materials. Sustainable operations, including the use of renewable energy, zero-waste production targets, and traceable logistics, can amplify and extend a manufacturer's impact.

By publishing measurable results and engaging openly with customers, suppliers, and industry peers, OEMs can future-proof their operations and play a pivotal role in shaping a low-carbon, resource-efficient economy.Below is a collection of potential best practices to apply in manufacturing strategies to ensure the AV industry is creating a sustainable future for all.

Supply Chain Transparency and Ethics

01

ETHICAL SOURCING:

Choose suppliers who adhere to ethical labor practices and sustainable sourcing. Focus on materials that are responsibly harvested or manufactured, such as certified metals or conflict-free minerals.

02

LOCAL SOURCING:

Source materials locally when possible to reduce carbon emissions associated with transportation and support local economies.

03

COLLABORATE WITH SUSTAINABLE SUPPLIERS:

Partner with other companies that focus on sustainable practices, whether in terms of energy use, raw material sourcing, or

04

LOGISTICS:

Optimize transportation and distribution to reduce the number and distance of shipments from manufacturer to end user. This will reduce the related carbon emissions.

Sustainable Innovation and Research

INVEST IN RESEARCH AND DEVELOPMENT

Focus on developing innovative technologies that reduce energy consumption and improve efficiency in order to reduce the energy bill.

SUSTAINABLE PRODUCT LINES

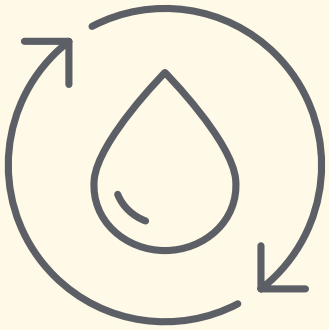
Develop products specifically designed with sustainability in mind, like energy-efficient AV systems or eco-friendly smart devices.

CERTIFICATION AND STANDARDS

Adhere to sustainability standards and seek certifications like Energy Star, RoHS and REACH or Cradle to Cradle (C2C).

Sustainable Manufacturing Process

- **Renewable Energy:** Shift your production facilities to renewable energy sources (solar, wind, etc.) to reduce your carbon footprint.
- **Energy Efficiency in Factories:** Improve factory operations by investing in energy-efficient machinery, optimizing production processes, and minimizing waste generation.
- **Water Conservation:** Implement water-saving measures and practices in manufacturing processes to reduce water usage.
- **Zero-Waste Manufacturing:** Minimize waste production by optimizing the use of raw materials and finding ways to reuse or recycle any leftover materials.



Sustainable Product Design

Energy Efficiency

Focus on creating energy-efficient products with lower power consumption, especially in equipment like displays, projectors, and speakers.

Modular Design

Develop products that can be easily upgraded or repaired rather than discarded, reducing waste and prolonging the product lifecycle.

Circular Principles

Design products for simple deconstruction for recycling and simple repair for refurbishment and reuse.

Eco-friendly Materials

Use recycled or sustainable materials in the manufacturing process. Avoid hazardous substances like PVC and heave and rare earth metals (lead, mercury, etc.) and opt for safer, recyclable alternatives.

Packaging

Minimize packaging material and ensure it's made from recyclable or biodegradable materials. Avoid plastic packaging whenever possible and adopt sustainable alternatives like cardboard or plant-based materials.

Sustainability Best Practices

Circular Economy

- **Product Take-Back and Recycling Programs:** Implement a take-back program for end-of-life products to recycle or reuse parts. Work with recycling companies to ensure that electronic waste is disposed of responsibly.
- **Refurbishment and Resale:** Refurbish old products or components to extend their lifespan. Encourage customers to buy refurbished items, reducing the demand for new resources.
- **Encouragement:** Encourage Manufacturers to provide second sale warranty.
- **Modular Components:** Design products that are easy to disassemble for recycling. If parts break, replace only the defective component rather than the entire system.

Corporate Social Responsibility

Promote Energy-Saving Features: Educate customers on how to use your products in an energy-efficient manner, whether it's through settings that minimize power consumption or practices that prolong the lifespan of the product.

Offer Sustainability Certifications: Display sustainability certifications or labels on products, which can help customers make informed decisions.

Support Circular Economy

Encourage customers to return old equipment for recycling or trade-in programs, making it easier for them to participate in sustainable practices.

Carbon Footprint Reduction

Carbon Inventory: Conduct a global company-wide carbon inventory of Scope 1, 2, and 3 greenhouse gas (GHG) emissions annually; set commitments and measurable targets to reduce the company's global carbon footprint.

Product Carbon Life Cycle Analysis: Conduct life cycle analysis (LCA) of each product according to ISO or other relevant standards during the manufacturing phase to publish the product carbon footprint when the product is placed on the market.

Carbon Offsetting: Invest in projects that help offset your carbon emissions, such as reforestation or renewable energy initiatives.

Transportation Efficiency: Optimize logistics to reduce transportation-related emissions. This can include improving distribution routes, shifting to electric vehicles, or partnering with logistics providers who prioritize sustainability.

Customer Education and Engagement

Offer Sustainability Certifications: Display sustainability certifications or labels on products, which can help customers make informed decisions.

Promote Energy-Saving Features: Educate customers on how to use your products in an energy-efficient manner, whether it's through settings that minimize power consumption or practices that prolong the lifespan of the product.

Support Circular Economy Initiatives: Encourage customers to return old equipment for recycling or trade-in programs, making it easier for them to participate in sustainable practices.

Collaboration and Advocacy

Industry Collaboration

Work with other manufacturers and stakeholders in the AV industry to share best practices, set sustainability standards, and collectively push the industry toward greener practices.

Government and Regulatory Engagement

Stay informed about environmental regulations and support policies that promote sustainable manufacturing practices and reduce industry-wide environmental impact.

Community and Consumer Engagement

Actively engage with customers, end-users, and local communities to raise awareness about sustainability initiatives, gather feedback, and encourage eco-friendly choices in product usage and disposal.

End of Life Management

- **Support Reuse:** Provide access to parts and repairs to refurbish products for a second or third life.
- **Longevity and Durability:** Design products that are durable and built to last, ensuring that they won't need to be replaced as frequently. Provide services like repairs and upgrades to extend the life of products.
- **Recycling and Disposal:** Ensure that your products can be recycled properly at the end of their lifecycle. Partner with certified e-waste recyclers to reduce environmental impact.

A GOOD CHOICE

Why is it Worth it?

Adopting sustainable practices in the AV industry is not just an ethical responsibility; it's a strategic advantage. By prioritizing sustainability, manufacturers and stakeholders can not only reduce environmental impact but also meet evolving customer demands for eco-friendly products, comply with tightening regulations, and enhance their brand reputation. Moreover, embracing sustainability drives innovation, improves operational efficiency, and opens new market opportunities, all of which contribute to long-term business success. In a world where sustainability is no longer optional, the AV industry has the chance to lead by example, creating a more resilient, responsible, and profitable future for all.

Glossary

AV (Audiovisual): Technology that combines sound and visual components, such as projectors, displays, speakers, microphones, and control systems, for communication, presentation, or entertainment purposes.

Circular Economy: An economic model aimed at eliminating waste and keeping products, components, and materials in use for as long as possible through reuse, repair, refurbishment, and recycling.

DaaS (Device as a Service): A service model in which hardware, software, and support are provided to clients on a subscription basis, enabling upgrades and reducing waste through refurbishment and reuse.

Ecodesign: A design approach that considers environmental impacts throughout a product's life cycle, aiming for energy efficiency, modularity, durability, and minimal use of hazardous materials.

EPEAT (Electronic Product Environmental Assessment Tool): A global rating system for greener electronics, evaluating products based on environmental criteria such as energy use, recyclability, and chemical content.

ESG (Environmental, Social, and Governance): A set of criteria used to evaluate a company's environmental responsibility, social impact, and governance practices.

GRI (Global Reporting Initiative): An international standard for sustainability reporting, providing frameworks and metrics for organizations to disclose their environmental, social, and governance performance.

IFRS S2: A sustainability disclosure standard issued by the International Financial Reporting Standards Foundation, focusing on climate-related risks and opportunities.

KPI (Key Performance Indicator): A measurable value that indicates progress toward specific objectives, such as energy savings, waste reduction, or increased use of refurbished equipment.

LCA (Life Cycle Assessment): A systematic method for evaluating the environmental impact of a product across all stages of its life, from raw material extraction to disposal.

Modular Design: A product design approach that uses interchangeable and upgradeable components, allowing for easier repairs, upgrades, and waste reduction.

PCF (Product Carbon Footprint): The total greenhouse gas emissions associated with a product's life cycle, measured in carbon dioxide equivalent (CO_2e).

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): An EU regulation aimed at protecting human health and the environment from risks posed by chemicals.

Remote Management: The ability to monitor, configure, and troubleshoot systems without traveling to the site, reducing emissions and improving efficiency.

RoHS (Restriction of Hazardous Substances): An EU directive that limits the use of specific hazardous materials in electrical and electronic equipment.

R2v3: The latest version of the Responsible Recycling standard for electronics recyclers, ensuring environmentally sound and safe management of electronic waste.

SLA (Service Level Agreement): A contractual commitment between a service provider and a client defining the quality, availability, and responsibilities for provided services.

Sustainable Packaging: Packaging designed to minimize environmental impact, typically recyclable, compostable, reusable, and compliant with regulations such as the EU Packaging and Packaging Waste Directive.

SDGs (Sustainable Development Goals): A set of 17 global goals established by the United Nations to address issues such as poverty, inequality, climate change, and environmental degradation by 2030.

WEEE (Waste Electrical and Electronic Equipment): An EU directive that sets requirements for the collection, recycling, and recovery of electronic waste to reduce environmental impact.