

# Sustainable Product Design and Development

To sustain the ecology of a product-friendly environment and ensure the safety and health of customers, Wistron designs and develops its products based on the concept of sustainable designs. In other words, the product life cycle is considered to determine the environmental impacts and potential risks, all the way from material acquisition to product disposal. Wistron is able to achieve sustainability through reduction of raw material use and energy consumption, recycling and reusing products and packaging materials, avoiding the use of hazardous substances, and adoption of easy-to-dismantle materials. We construct product development management (PDM) and green product management (GPM) systems that integrate product raw material use. Systematic management is conducted to ensure that our products pose no risks to the ecosystem and health and safety of our customers. Additionally, we establish standard electromagnetic safety regulations and energy consumption verification processes to conduct product verification. Therefore, the entire product life cycle, including raw material use, product manufacturing, service delivery, and final disposal,

Impact on Health and Safety in Each Stage of the Product/Service Lifecycle

Stages in Product Lifecycle	Assessment Implemented
Development of Product Concept	Yes
R&D	Yes
Certification	Yes
Manufacturing and Production	Yes
Marketing and Promotion	N/A [ Note ]
Storage Distribution and Supply	N/A [ Note ]
Use and Service	Yes
Disposal, Reuse or Recycling	Yes

[ Note ] Wistron is an ODM company and not a branded company; therefore, the impacts of these stages are not taken into consideration.

can comply with customer specifications and local regulations concerning environmental protection, safety, and energy consumption. Wistron confirmed in 2016 that the company was not involved in any violations of voluntary regulations as well as laws and regulations concerning the health and safety impacts of products and services within their life cycle.

## Elimination of Hazardous Substances

The raw materials of Wistron parts must abide by international or regional environmental regulations (e.g., RoHS, REACH, etc.), local government environmental policies (e.g. China RoHS, Japan RoHS, California Proposition 65, etc.), voluntary environmental regulations (China Compulsory Certificate (CCC), Electronic Product Environmental Assessment Tool (EPEAT), etc.), and special environmental regulations (e.g., conflict minerals, etc.) All of Wistron's product lines comply with EU RoHS regulations. As requested by our customers, we also avoid using specific hazardous substances that are harmful to the human body or the environment (e.g., halogen-free perfluorooctane sulfonic acid and polycyclic aromatic hydrocarbons).

## Compliance with Energy and Safety Regulatory Requirements

Wistron develops products in compliance with customer requirements, local energy laws and regulations, and safety regulation labels from different regions, such as Energy Star, Lot 3/Lot 6 of the Energy-related Products (ErP), TCO Certification, etc. These labels are then affixed on product exteriors, packaging, or instruction manuals. All of Wistron products (NB/DT/AIO/MNT/TV) are certified by Energy Star, with differing product lines having

passed energy consumption regulations of different regions, such as the European Union's ErP Lot 3, South Korea's E-Standby, and China Energy Label, as requested by our customers. In 2016, Wistron was not involved in violations of voluntary regulations as well as laws and regulations concerning product and service information labeling.

## Using Recycled Materials and Eco-Friendly Materials

In addition to avoiding use of prohibited materials, Wistron also uses a portion of post-consumer plastics to meet customer requests. To reduce waste generation, Wistron products (NB/DT/AIO/MNT/TV) must comply with the Waste Electrical and Electronic Equipment Directive (WEEE). As requested by our customers, Wistron uses cardboard boxes or product instruction manuals that either contains a fixed amount of recycled paper or conform to the procurement regulations of the U.S. Environmental Protection Agency. Moreover, green printing techniques are also used.

## Easy-To-Dismantle, Recyclable Materials

We integrate easy-to-dismantle and recyclable designs in our manufacturing techniques. 1. Modular design ; 2. Uses fewer bolts ; 3. Easy-to disassemble designs: Only common tools are needed for product disassembly ; 4. The electronic components are easy to separate ; 5. The product design incorporates recyclable materials ; 6. The accessory box uses recycled corrugated paper.