Develop and Prosper in Harmony with the Global Environment

Reduce environmental load throughout life cycle stages
Creating a framework for gauging product contributions

Reduce Environmental Load throughout Life Cycle Stages

TDK Environmental Vision 2035

Themes

At TDK, we believe that long-term environmental action plays a key role in the effort to achieve sustainable deveropment in society. TDK Environmental Vision 2035, newly launcheded in fiscal 2016, sets the goal of "to halve the CO₂ emission basic-unit in a life-cycle perspective by 2035", based on operating businesses with low enough environmental load not to disturb natural cycles. This stance stems from the belief that minimizing the environmental load in business activities, and revitalizing the natural environment, is the duty of companies that supply products designed to contribute to its customers and the society. Moreover, modeled on the United Nations Climate Change Conference (COP 21) Paris Agreement, which seeks to curb global warming by achieving a balance between greenhouse gas emissions and absorption sources, this is also considered the ideal corporate posture for all TDK activities.



Major achievements





*1 A third party review of the calculation method was performed. Please refer to the detailed information on TDK web. https://www.global.tdk.com/corp/en/csr/csr_data/csr05900.htm



Osamu Hikita General Manager of Production Engineering HQ, and Deputy General Manager of Technology and Intellectual Property HQ, and General Manager of Intellectual Property Rights Center of Technology and Intellectual Property HQ Corporate Officer TDK Corporation

Increasing corporate value by reducing environmental impact at every life cycle stage

Creating a safe, healthy work environment that does the least harm to the global environment is a foundational premise of our business activities. TDK Environmental Vision 2035 will guide our efforts with regard to the global environment as we continue to deliver products and services that benefit customers and society. We must understand environmental impact from the perspectives of various stakeholders, as we generate impact through the entire life cycle of our products. Our formulation and implementation of a plan that incorporates efforts to reduce environmental impact into all business processes will shape our path forward. Toward that end, in fiscal 2018 we made an organizational change, integrating the departments in charge of production technology and environmental policy. This decision unifies environmental considerations and manufacturing initiatives, and it advances the pursuit of "zero defect quality" which will eliminate waste generated by defects and yields. Going forward, we will continue to improve corporate value by reducing environmental impact as our business contributes to society.



Tetsuya Kuwashima General Manager of Production Engineering and Environmental Planning Group Production Engineering HQ TDK Corporation

Environmental load reduction, merit indicators and a lifecycle perspective

In the effort to halve our CO₂ emission intensity by 2035 as outlined in TDK Environmental Vision 2035, TDK has adopted standards for CO₂ conversion that calculate full-lifecycle environmental impact that extends across a series of business activities. The main life cycle stages for emissions in electronic components are generally: materials procurement, company operations, and product use. For this reason, we have augmented our efforts beyond improvements to the Group's manufacturing facilities and products themselves and begun working with procurement departments to ascertain the current status at suppliers so that we can visualize the environmental load in the supply chain. I also consider it important to set goals matching actual conditions at our business locations rather than basing goals on CO₂ conversion or numerical targets. Collective motivation toward goals is much easier to maintain when those goals can be mapped to practical circumstances. I aim to improve the TDK infrastructure so that all employees feel motivated to contribute via their autonomous actions to reducing our environmental load at all business sites.



Asking Suppliers to Take Further Environmental Action

TDK invites suppliers to briefing seminars for business partners. Issues to be addressed in fiscal 2018 will include reducing environmental impact at the procurement stage. TDK recognizes how important it is in management to assess environmental impact throughout the full lifecycle of products.

Through these seminars TDK plans to emphasize to suppliers the importance of issues both societally and for business, and we will ask suppliers to take further environmental action and cooperate by making the necessary improvements.



Briefing seminar for suppliers (October 2017)

Reducing Energy in Manufacturing and Fostering the Next-generation

TDK has been working to support improvements and other projects aimed at reducing environmental impact, particularly targeting manufacturing sites in the Group that have high CO₂ emissions. As a result, in fiscal 2017, the Group as a whole achieved a 2.1% year-on-year reduction in emissions, equivalent to 31.388 t-CO₂.

We have also been fostering the next-generation, sending energy specialists to provide training at each site, especially with regard to energy management.



On-site training by persons in charge of energy

Ag-stacked Film Reduces Environmental Impact

TDK's Ag-stacked film (transparent conductive film) is used as a light-control film for windows and communication antennas. It features high transmittance with low resistance, and will have great potential for use in the fields of energy and organic solar cells in the future. Because of its low power consumption, Ag-stacked film can be used as a driving electrode for light-control film to reduce annual CO₂ emissions by 3.2 tons. The potential for saving energy will only increase with the further expansion of applications.

Creating a Framework for Gauging Product Contributions

Striving through formulation of industry-shared standards, steps are taken to promote social understanding of the Company's environmental contribution value.

Efforts at TDK

TDK has quantified and announced its greenhouse gas (GHG) emission reduction contribution by product, and is also working to establish industry standards for methods to quantify the reduction contribution of electronic components. In fiscal 2017, the Electronic Components LCA Working Group of the Electronic Components Board of JEITA, in collaboration with Mizuho Information & Research Institute, Inc., collected and classified examples of greenhouse gas emissions mitigation by electronic components, and outlined a basic approach to quantification. Based on this guideline, JEITA estimated the contribution potential of Japanese electronics manufacturers in the global market presently and in the future (2030), which it announced at the 13th Meeting of The Institute of Life Cycle Assessment, Japan in March 2018. Additionally, information on the contribution potential of electronic components in 2030 was provided to the Liaison Group of Japanese Electrical and Electronics Industries for Global Warming Prevention and will be adopted as explanatory materials for the Electrical and Electronics Industries' "Action Plan for Commitment to a Low-Carbon Society" being promoted by the Japan Business Federation, a government advisory council.

