The importance to our company

To support sustainable development of society, the TDK Group unites in the quest to reduce CO_2 emissions, effluents and waste in production activities, and otherwise use its business activities to minimize the global environmental load.

Expectations by stakeholders

TDK complies with all environmental laws and regulations, working to lower the environmental load of its business activities, promote and invigorate the natural environment and advance other basic initiatives. Through its products, the Group also contributes to reducing energy consumption and implementing climate change countermeasures.

Important CSR Issues

4 Develop and Prosper in Harmony with the Global Environment

Important Themes

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

Basic Policy

As stated in the TDK Environmental Charter, “Develop and Prosper in Harmony with the Global Environment” is one of the TDK Group’s most important business themes. “TDK Environmental Vision 2035” has been established to contribute to developing a sustainable society. Based on this vision, “TDK Environment, Health and Safety Action 2025” has been formulated as a basic action plan for specific steps. The Company also strives to formulate industry standards for gauging product contribution, thereby promoting greater social understanding of the value of its eco-friendly contributions

Summary of Fiscal 2016, Outlook Going Forward

Throughout fiscal 2016, which marked the start of both TDK Environmental Vision 2035 and TDK Environment, Health and Safety Action 2025, concerted efforts were advanced to instill greater awareness of these schemes throughout the TDK Group. With the expression of the Environmental Vision based on our specific corporate vision, activities are being steadily expanded with aim of motivating each Group employee to devote profound thought to these issues and take concrete action. With the new Environmental Vision stressing the importance of lifecycle perspectives, strong moves are afoot to deploy foundations for activities in domains beyond the scope covered to date. Looking ahead, preparations will be advanced for conversion of each TDK environmental load factor into CO_2 levels, seeking to provide valid standards for quantification of the ideal targets of our Environmental Vision. Efforts will likewise be redoubled in moving toward shared standards across the electronic components industry for computation of the specific magnitude of CO_2 reduction contributions.

Reduce Environmental Load throughout Life Cycle Stages

At TDK, we view promotion of long-term environmental action as a vital key in realizing sustained development for our society. Within TDK Environmental Vision 2035, newly launched from fiscal 2016, the goal is outlined for reducing the overall environmental load, from procurement through disposal, firmly rooted in a constructive lifecycle perspective.

Formulation of the TDK Environmental Vision 2035

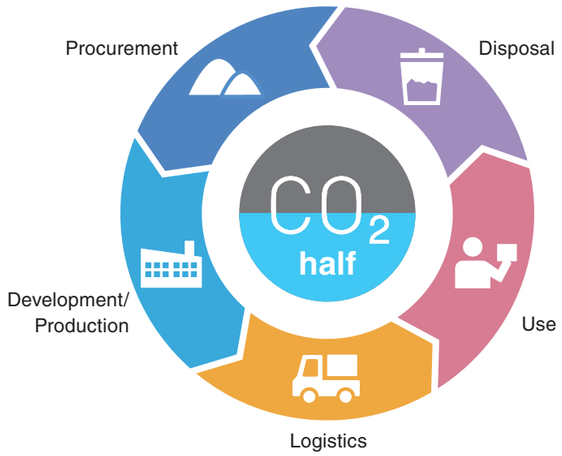
Trends in TDK Environmental Activities

2003	2006	2011	Until 2035
TDK Environmental Action 2010 Strengthened EMS Addressing risk management and a recycling-oriented society	TDK Environmental Action 2015 Implementation of environmental management Moving from image generation to management essentials	TDK Environmental Action 2020 Environmental growth strategies Envisioning an era of environmental performance driven product differentiation	**TDK Environmental Vision 2035**

Revitalizing and Protecting the Global Environment in Preparation for the TDK Centennial Anniversary

The TDK Group achieved its carbon neutral target, originally outlined in our third basic environmental action plan TDK Environmental Action 2020, far ahead of schedule in fiscal 2014. Announced in 2015, prior to the formulation of our next regular environmental vision was Vision 2035, a corporate commitment keyed to the Company's centennial year still two decades away. In Vision 2035, TDK pledge to strive to achieve further innovation and create value for customers through the delivery of outstanding quality products and services, by utilizing the diverse global resources. Based on this corporate motto, TDK will continue to "contribute to culture and industry through creativity", by revitalizing and protecting the global environment and creating a pleasant and safe society. Our Environmental Vision comprises one phase of Vision 2035, we envision business operations under the environmental load within natural circulation. According to this idea, the goal of **"to halve the CO_2 emission basic-unit in a life-cycle perspective by 2035"** has been formulated as "TDK Environmental Vision 2035." 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.

TDK Environmental Vision 2035



Expanding Action Spheres from a Lifecycle Perspective

Within TDK Environmental Vision 2035, the declaration is made to reduce the environmental load from a lifecycle perspective. This represents an initiative not limited to measures at the manufacturing stage in factories and the use stage for customers, aspects outlined in the conventional TDK Environmental Action 2020 policy. To expand in this way, we deem it critical for all TDK Group employees to share the same vision and move forward with the same objectives in mind.
The "revitalizing and protecting the global environment" expressed in this corporate vision refers to the skillful operation of our business hand in hand with the natural environment. Without that commitment, there will be no sustainable development on the horizon. Going forward, the aim is for all members of the TDK Group to share the same vision, while structuring their activities in means friendly to the formulation of autonomous initiatives.

"TDK Environment, Health and Safety Action 2025" Basic Environmental Action Plan

Conceived on the cornerstone of TDK Environmental Vision 2035 was a new basic environmental plan extending through year 2025, namely TDK Environment, Health and Safety Action 2025. The action categories and target figures of "TDK Environment, Health and Safety Action 2025" reflect dual consideration for "backcasting" from TDK Environmental Vision 2035, and continuity and "forecasting" from "TDK Environmental Action 2020. At present, seven action categories have been determined. In the near future, plans call for integrating the environmental loads of these targets through CO_2 conversion, followed by the promotion of action plans targeting the ideal targets enumerated in TDK Environmental Vision 2035.
With regard to safety and health as well, steps will be taken to newly stipulate original action categories and goals, thus moving to realize truly safe and healthy workplace environments.

* Details on the TDK Environment, Health and Safety Action 2025 Action Plan may be assessed on the following website:
http://www.global.tdk.com/corp/en/csr/environmental_responsibility/csr03200.htm

Environment, Health and Safety Action 2025 Action Plan

backcasting

Super-Long-Term Environmental Vision 2035

The operation under the environmental load within natural circulation

Halve the CO_2 emission basic-unit in a life-cycle perspective by 2035

TDK Environment, Health and Safety Action 2025

Continuity from "TDK Environmental Action 2020"

+

- Mitigation of the environmental burden in the process and revitalizing the global environment
- Deliver products to contribute customers and society
- Creating a pleasant and safe work place

forecasting

Conversion of Pure Water Production Heat Sources

Due to the risk of electronic component metal plating acting to undermine quality due to impurities in the water, pure water is used for this work. At the Iwaki Factory of TDK Akita Corporation, conversion from the fuel heating method to heat pump style electric heating has been engineered in the heat source for producing and heating the pure water used in electronic component plating. This approach allows easier temperature management, while also lowering CO_2 emissions. For fiscal 2016, CO_2 emissions reduction volume was computed at 117 tons for the year.

Heat pump type electric heating equipment installed at the factory

Achievements in Fiscal 2016

CO_2 emissions from production activities*
(environmental load)

1,463 thousand t-CO_2

Die Bonder Systems Contribute to Lower Environmental Load

Die bonders are mounting devices mobilized within the manufacturing process for semiconductors embedded substrates (SESUB)—components used to downsize and slim electronic machinery. More specifically, these bonders serve to actually embed the slimmed IC in substrates. TDK mobilizes its advanced production technology, one of the Company's core technological strengths, in structuring these bonders to meet the needs of actual production sites. The reduced installation area and energy-efficient design are instrumental in lowering the environmental load upon their delivery to customers, as well as upon actual operation. In terms of CO_2 conversion, the environmental contribution of these products is 289 tons.

Die bonder equipment

Achievements in Fiscal 2016

Reduction of CO_2 emissions through products*
(environmental contribution)

1,675 thousand t-CO_2

*The calculation method was subjected to a third-party review. For the contents of that review, please refer to the following URL:
http://www.global.tdk.com/corp/en/csr/csr_data/csr05900.htm

Building Factories with Maximum Environmental Consideration

When constructing new factories or other buildings, TDK works closely with the architects to adopt designs and execution methods based on maximum environmental consideration. The new factories in Akita, completed in 2016 as cutting-edge *Monozukuri* site, were designed with keen attention to raising energy efficiency. For example, taking advantage of the winter weather in Akita Prefecture, the Honjo Factory East Site is able to store accumulated snow in pits. The snow is then channeled through heat exchangers to assist in cold energy recovery, while accumulated rainwater is used to flush toilets. Solar power generation there reaches a maximum of 125kW. That capacity is sufficient to supply up to 70% of the total lighting power consumed across the entire Honjo Factory East Site. The angles of solar panels installed on the rooftop are optimized, while adoption of panels capable of generating power on both sides ease the impact of winter snowfall to help raise power generation efficiency. On a related front, the workplace environments here are engineered to be superbly employee-friendly. Parking lots, for instance, are installed with in-factory arcades and snow-melting systems to prevent damage from wind and snow. The parking lot snow-melting equipment utilizes terrestrial heat and factory waste heat—further examples of the concerted push to realize a factory based on maximum environmental consideration.


Honjo Factory East Site


Solar power generation (located not only on the rooftop, but also installed vertically as blind walls)


Arcade and snow-melting system installed in the parking lot


Snow use pit (left: Input port; right: pit interior)

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

Expand reduction of CO_2 emissions through products (product contributions) is one of the core initiatives within TDK Environmental Vision 2035 and Environment, Health and Safety Action 2025. To mount potent appeals for the social contributions by TDK products as the fruits of technical initiatives, these product contributions have been calculated and disclosed from TDK Environmental Action 2020 (the Company's previous medium- to long-term plan). Public awareness activities are also being advanced to gain understanding of the contributions of electronic components as intermediary parts, along with moves to formulate coherent industry standards for calculation methods positioned to serve as the basis for earning appropriate evaluations of product contributions performance.

During fiscal 2016, TDK held a lecture event at Electronics Goes Green 2016+, in an international environmental related conference convened in Berlin, Germany in September, under the title of Methods to Calculate GHG Reduction Contributions of Electronic Components. At a later date, employees from TDK Group company EPCOS familiarized German industry groups with the contents of that presentation. In November, at the JEITA 3rd Environmental Seminar—IT and Electronics Contributing to Prevention of Global Warming, TDK represented the electronic components industry with a talk used to discuss Contributions by Electronic Components to Reducing CO_2.


Lecture delivered at JEITA Environmental Seminar