

Support for Implementing Measures on Environmental Protection and Sustainability



While the economy is developing and standard of living is improving, there is a rising concern over environmental pollution that requires urgent attention on taking measures for sustainable development.

Need to resolve various environmental issues simultaneously with industrial development and urbanization

In the course of economic development, there has been a rapid increase in the emission of exhaust gas and wastewater from factories due to industrial development, which is raising concern of industrial pollution, including pollution in surrounding areas and damage to residents' health. Furthermore, various environmental issues, such as generation of large amount of waste and exhaust gas from automobiles are becoming apparent with urbanization. Also, in many cases, it is difficult to establish an environmental policy that address all of these various environmental problems simultaneously.

The SDGs (Sustainable Development Goals) that are being advocated by the United Nations also include sustainable targets to strike a balance between economic development and environmental protection, and require activities and collaboration by various governments and companies.

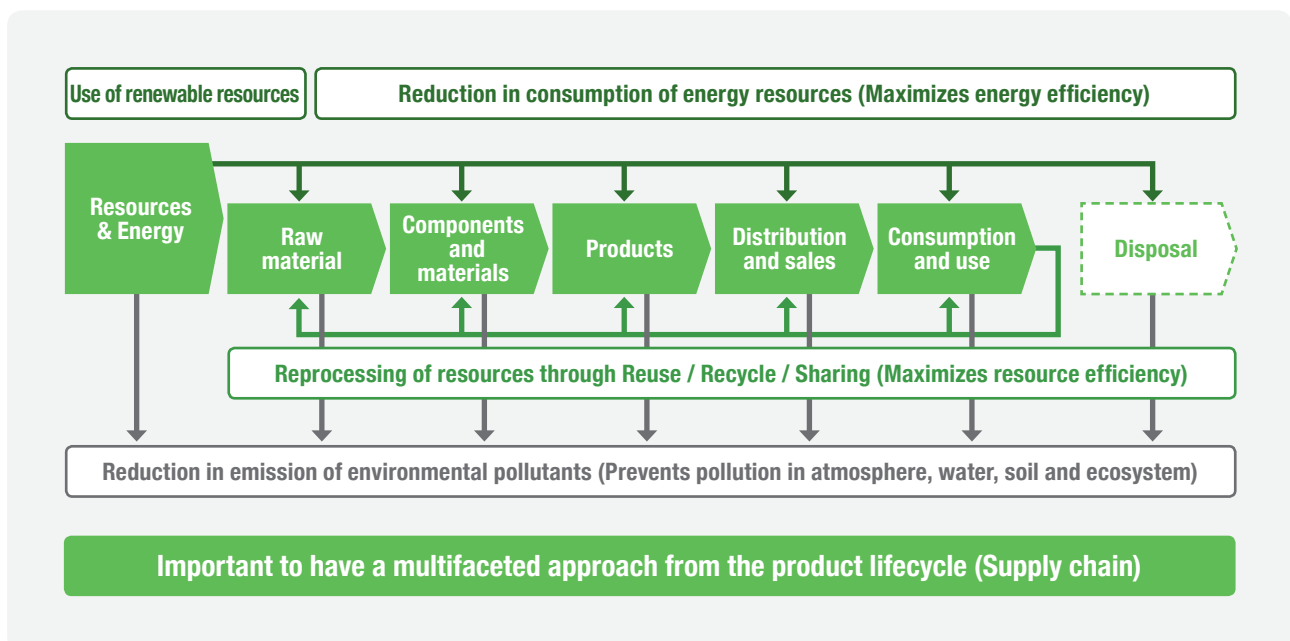
Sustainable development requires a multifaceted approach from the product lifecycle

Sustainable development requires implementation of measures against factories that are the source of industrial pollution as well as development of various multifaceted solutions throughout the product lifecycle of manufacturing companies.

If we look at the product lifecycle, environmental pollution is not only caused by the energy that is consumed or pollutants that are emitted while the product is in use, or due to inappropriate disposal of a used product, but also by various pollutants that are generated during the production of a product.

Companies are required to ensure environmental protection not only when manufacturing a product in their own factory, but during the entire supply chain, including manufacturing of components, materials and/or resources. With an aim of developing sustainable social systems, it is important to expand the policies and systems to take into account the whole product lifecycle.

Environmental Protection and Sustainability from the View of Product Lifecycle



NRI specifies the issues related to environmental protection and sustainability from the perspective of product lifecycle, proposes policies, designs systems and provides execution support.

Support for conducting research, formulating plans and implementing technical demonstration related to appropriate disposal and recycling of waste

It is anticipated that with improvement in standard of living, the waste discharged will also increase significantly. Therefore, it is necessary to organize the social systems for appropriate disposal and recycling of waste.

NRI extends various support related to waste processing and 3Rs (Reduce, Reuse, Recycle), which includes implementing research, proposing policies, formulating plans and designing systems. In order to develop a recycling system, it is necessary to implement various researches related to the product lifecycle, such as emissions from a used product, initiatives taken at the manufacturing stage, case studies of best practice and recycling technology of overseas companies.

Moreover, we support the implementation of demonstration projects and subsidy-funded projects to develop and introduce technologies and systems related to waste processing and 3Rs. Further, execution support is also provided to government and companies which includes taking charge of the office that manages these businesses and participating as a joint proponent in demonstration business, etc.

Support for implementing research about the current situation, creating guidelines and formulating standards to promote green buildings

In order to solve the climate change issue associated with consumption of fossil resources, wide-scale adoption of green buildings (ZEB/ZEH*) has become a challenge to promote energy conservation or renewable energy use in buildings.

NRI provides support for the planning and execution of policies that promote green buildings. In order to materialize green buildings, mutual understanding between the parties, including building owners, developer, designer and construction company, and the initiatives. In addition, various building materials, facilities and design-related knowhow are required for such buildings, is necessary as well as their proactive engagement. Therefore, we have been involved in activities, such as creation of policy roadmap, guidelines and standards for building material in collaboration with the related entities.

Moreover, from the perspective of technological development and resource training associated with green buildings, we are also working on a “design / demonstration competition” of green buildings through universities and private companies.

*ZEB/ZEH: Zero Energy Building / House

NRI’s Solution Menu for Environmental Protection and Sustainable Buildings

