

ENVIRONMENT RESEARCH AND TECHNOLOGY DEVELOPMENT FUND FY2023

Carbon Neutral



Circular Economy



Nature Positive



Ministry of the Environment



What is the Environment Research and Technology Development Fund?

Objective

To contribute to the promotion of environmental policy through research and technical development

The aim of the Environment Research and Technology Development Fund (ERTDF) is to collect scientific knowledge and accelerate technological development as necessary to promote policies such as measures for coping with climate change, creation of a sound material-cycle society and establishment of a society in harmony with nature, while ensuring security and safety through environmental risk management. The fund promotes research and development in the area of environmental issues overall.

Features

Adopting and executing research proposals which meet administrative needs in accordance with environmental policies

The ERTDF is a policy-oriented, competitive fund. It calls for proposals from industry, academia and government institutes. Proposals are expected to address major issues shown under "Promotion Strategy for Environmental Research and Environmental Technology Development" (in accordance with a decision by the Minister of the Environment on May 21, 2019) and administrative needs. They are competitively examined and selected by the committee and appropriate subcommittees.

The ERTDF strongly promotes research and development in accordance with strategic administrative needs. For example, the "Strategic Research and Development Area (I and II) *" consists of competition among research teams based on an outline for selecting research themes and project leaders established by the Ministry of the Environment.

* Strategic Research Project (I)

A large-scale research and development project that should receive particular focus or is expected to produce pioneering results. Call for research topics that constitute the strategic research theme will be made by the Ministry of the Environment. The research period is within 5 years.

Strategic Research Project (II)

A medium-scale research project that should focus on efforts in a short period of time. Call for research topics that constitute the strategic research theme will be made by the Ministry of the Environment. The research period is within 3 years.

Ensuring a transparent and fair evaluation process by using committees composed of outside specialists

The ERTDF comprises a committee and several subcommittees consisting of outside specialists. The committee is responsible for selection of proposals, intermediate evaluation and ex-post evaluation. Proposals are examined and selected by the committee and appropriate subcommittees in terms of necessity, efficiency and effectiveness of the research.

To ensure transparent, fair and efficient fund management, the Ministry of the Environment refers to evaluation results to decide which research projects to adopt and allocate a research budget in order to support appropriate progress in the research projects.

Research Fields

Starting in fiscal 2019, research has been done in the following five fields in line with the "Promotion Strategy for Environmental Research and Environmental Technology Development."

Common to All Fields / Cross-sectional through Different Fields

Presentation of visions and principles toward the realization of a sustainable society

Research and technical development toward the realization of visions and philosophies

Values and lifestyle changes toward the realization of a sustainable society

Discovery and utilization of new technology "seeds" that contribute to solving environmental issues

Research and technical development that contribute to responses to environmental issues caused by disasters

Research and technical development that contribute to the solution of global issues (corresponding to the marine plastic waste problem)

Other related measures

Climate Change Field

Research and technical development of mitigation measures for climate change

Research and technical development toward adaptation to climate change

Clarification, forecasting and assessment of measures in response to global warming phenomena

Other related measures

Sound Material-Cycle Field

Research and technical development on construction of waste treatment systems contributing to creation of a Circulating and Ecological Economy

Research and technical development on thorough resource circulation throughout its life cycle

Research and technical development on securing appropriate sustainable waste disposal in response to changes in social structure

Other related measures

Harmony with Nature Field

Research for the enhancement of scientific knowledge that contributes to conservation of biodiversity and technological development of countermeasures

Research and technical development for sustainable use of ecosystem services and elucidation of systems

Other related measures

Safe & Secure Field

Research for promoting inclusive risk evaluation and management of chemical substances

Research to advance, assess and clarify countermeasure techniques for managing and improving air, water and soil environments

Other related measures

* Research and technological development for CO₂ emission reduction at energy origin is funded by the Special Account for Energy Policy.

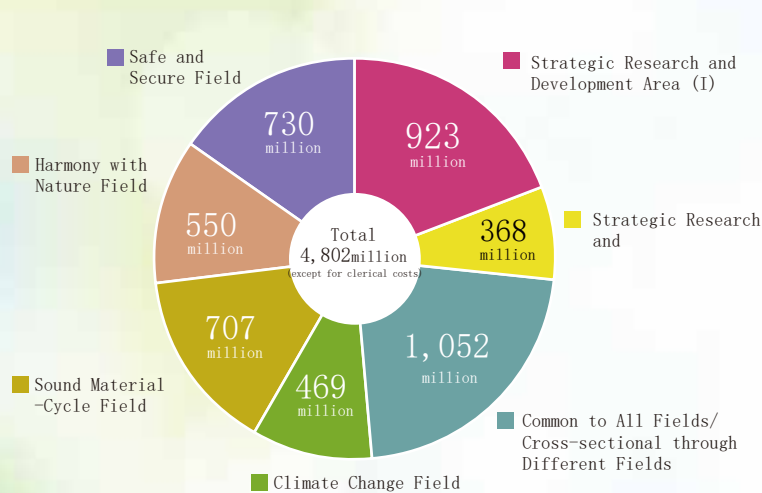
History of the ERTDF

The ERTDF originated through the integration of three competitive research funds, the Global Environmental Research Fund (GERF), the Environment Technology Development Fund (ETDF) and the Grant-in-Aid for Scientific Research about Establishing a Sound Material-Cycle Society.

In 2012, we established a reconstruction framework funded by the Great East Japan Earthquake Reconstruction Special Account, through which we promoted accumulation of scientific knowledge and technological development essential for expedited reconstruction of the affected areas. Research on subjects within the reconstruction framework was concluded in 2014.

In 2022, we have newly established a "medium funding framework," for which the annual amounts of fees for supporting research project development have been revised, is aimed at providing opportunities for many researchers to make research proposals, including young researchers in a variety of fields such as natural sciences and humanities & social sciences.

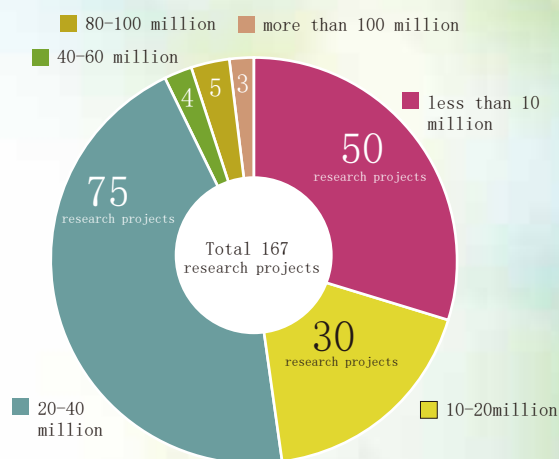
Since October 2016, a part of the ERTDF's funding operations was entrusted to the Environmental Restoration and Conservation Agency of Japan (ERCA), to promote the Fund's effectiveness and efficiency.



Budget allocated for research fields

Number of Research Projects Underway and Budget in Fiscal 2023

In fiscal 2023, 1 new project in Strategic Area (I), 2 new projects in Strategic Area (II) and 56 new projects in Environmental Problem Research Area have been newly adopted. As a total in fiscal 2023, the research projects conducted comprise 8 Strategic Area projects (4 in Area (I) and 4 in Area (II)) and 159 others.



Numbers of research projects per budget size

- The ERTDF system is explained on the following Ministry of the Environment (MOE)



<https://www.env.go.jp/policy/kenkyu/suishin/english/index.html>



<https://www.env.go.jp/policy/kenkyu/suishin/english/gaiyou/index.html>

- Information on calls for proposals is provided at the Environmental Restoration and Conservation Agency's (ERCA's) ERTDF website:



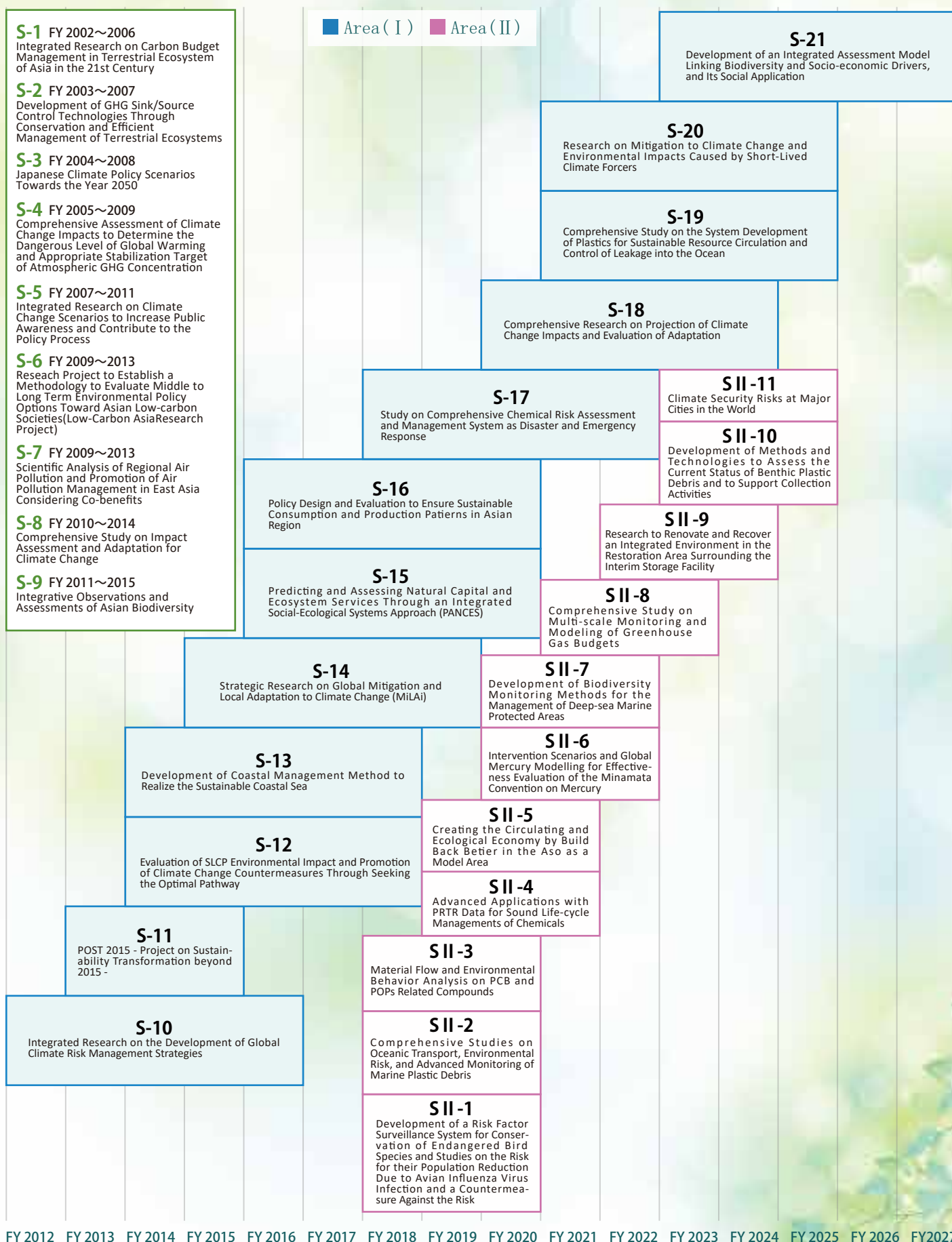
<https://www.erca.go.jp/suishinhi/english/>



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Strategic Research Project (II):

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Strategic Research and Development Area (I)

Total 4 research

- S-18** Comprehensive Research on Projection of Climate Change Impacts and Evaluation of Adaptation
- S-19** Comprehensive Study on the System Development of Plastics for Sustainable Resource Circulation and Control of Leakage into the Ocean
- S-20** Research on Mitigation to Climate Change and Environmental Impacts Caused by Short-Lived Climate Forcers
- S-21** Development of an Integrated Assessment Model Linking Biodiversity and Socio-economic Drivers, and Its Social Application

Strategic Research and Development Area (II)

Total 4 research

- SII-8** Comprehensive Study on Multi-scale Monitoring and Modeling of Greenhouse Gas Budgets
- SII-9** Research to Renovate and Recover an Integrated Environment in the Restoration Area Surrounding the Interim Storage Facility
- SII-10** Development of Methods and Technologies to Assess the Current Status of Benthic Plastic Debris and to Support Collection Activities
- SII-11** Climate Security Risks at Major Cities in the World

Common to All Fields / Cross-sectional Through Different

Total 48 research

- 1-2205** Development of Bio-recycling Technology for Waste Plastics
- 1G-2201** Development of Next-generation Marine-coating Film and Process Realizing Energy Saving and Low Environmental Load
- 1G-2202** Development of Rapid Boron Removal Method with a Spring Filter
- 1MF-2201** Study on Detection and Image Analysis of Asbestos on the Surface of Waste Building Materials and Its Application to Disaster Sites
- 1MF-2202** Development of Near-Infrared Electrochromic Materials for Heat-Shield Control
- 1MF-2203** A Comparative Study on the Governance of Follow-up and Review for the Achievement of the SDGs
- 1MF-2204** Effects of Micro / Nanoplastics on Marine Life: Environmental Impact Assessment with an Ecological Perspective
- 1RF-2201** Realization of a Digital Twin of Water Environment in Closed Water: Establishment of Data Assimilation Method for Ecosystem Model and Development of Long-term Water Quality Reanalysis Database
- 1RF-2202** Analysis of Biological Effect of Polymer Molecules and Their Degradation Products for Designing Biosafety Materials
- 1RF-2203** Development of Fabrication Route of Environment-Friendly Polysaccharide Particles
- 1RF-2204** Evaluation of Lung Toxicity of Micro / Nano Plastics by Inhalation Exposure and Investigation of Lung Toxicity Caused by Different Surface Functional Groups
- 1CN-2201** Research and Development of the Carbon Fixation Technology by Synthesis of Calcium Carbonates from Seawater Mimicking the Biomineralization
- 1CN-2203** Establishment of Biomass Powder Extrusion Molding and Insolubilization System Using Cellulose Derivative as an Auxiliary Agent
- 1CN-2206** Research on Developing a Roadmap and Supporting Implementation of Transition Strategies for Mitigation and Adaptation towards Realizing Climate-neutral and Resilient Societies in Developing Countries and Sub-regions in Asia
- 1CN-2207** Reduction of CO₂ Emission and Boost of Ecosystem Services by Applying Biochar to Forest Ecosystems
- 1-2301** Assessment of Effects on Marine Organisms Exposed to Microplastics via Water and Sediment
- 1-2302** Analysis of Japan's Decarbonization Scenarios Considering Prefecture Level Measures
- 1-2303** Evaluation of Climate Change Effects on Ariake-Yatsushiro Sea for Water Environmental Conservation Adapting Increase of Natural External Impacts
- 1-2304** Construction of a Comprehensive Plastic Litter Observation System from the City to the Coast Using AI in Conjunction with Remote Sensing
- 1-2305** Development of a Regional CO₂ Visualization System Using ICT and an Evaluation Process for Decarbonization Hub Projects and Decarbonization Policies Using the System
- 1-2306** Development of Detection and Countermeasure Methods for Water Quality Accidents by Continuous Monitoring and Comprehensive Targeted and Non-targeted Analysis, and Optimization of Basin Monitoring
- 1-2307** Study on the Effects of Extreme Temperatures on Heat-related Health and the Necessary Adaptation Measures
- 1MF-2301** Study on Environmental Risk Management and Information Systems of Chemicals in Emergency and Accidental States Through a Collaboration of Jurisprudential and Engineering Approach
- 1MF-2302** Actual Situation of Microplastics Derived from Polymer-coated Fertilizer on Agricultural Land
- 1MF-2303** Chemical Risk Governance Including Normal, Disaster and Accidental Situation
- 1MF-2304** Development of Passive Sampling Devices for Rapid Chemical Exposure and Risk Assessment
- 1MF-2305** Development of Liberal Arts Environmental Education and Verification Methodology for Regional Decarbonization
- 1-2101** A Study on Global Decarbonization Pathways Considering Technological, Economic and Social Feasibility
- 1-2102** Development of Advanced Energy Conversion Technology Systems for Utilization of Radioactively-contaminated Biomass and Implementation Scenarios Towards Decarbonized Society
- 1-2103** Development of a Continuous Measurement System for Characterization of Marine Microplastics Using Raman Microscope
- 1-2104** SDGs Localization Research: Pursuing Solutions to Sustainability Challenges
- 1-2105** Exhaustive Analysis of Reduction Effect of Environmental Burdens in Collection, Transportation and Treatment of Johkasou Sludge by Using Sludge Thickening Vehicles and Proposal of the Optimal Method for Utilization
- 1G-2101** Promotion of Expanded Use of Biomass-based Plastics Cellulose Nanofiber Reinforcement
- 1G-2102** Development of High-throughput Analysis and Remediation Technology of Per- and Polyfluoroalkyl Substances
- 1RF-2101** Development of Main-Group-Catalyzed Systems for Hydrogen Purification from Crude Hydrogen Gases / Biogases via Sequential Hydrogenation / Dehydrogenation Reactions of Organic Compounds
- 1RF-2102** Development of Accelerated Weathering Tests to Explore Fragmentation of Marine Plastic Debris, and Assessment of Actual Behavior in the Environment Considering Influence of Additive Chemicals
- 1RF-2103** Prediction System for Radionuclides Redistribution due to Wild Fire in Contaminated Regions
- 1RF-2104** Development of Porous Oxide Materials for Promoting Recycling of Lithium from Spent Batteries
- 1RF-2105** Development of Microbial Cultivation and Crystallization Strategies for the Production of Valuable Materials Using Methane as a Carbon Source
- 1-2201** Elucidation of the Process of Marine Microplastic Fragmentation and Removal from Surface Waters Based on Long-term Time-series Sample Analysis
- 1-2202** Research on Quantification of Roadmap Toward Climate Neutral Society in Asian Developing Countries
- 1-2203** Proposal for a New Management Technique Using Top-down Controls of Tidal Flat Ecosystem: Balancing Fisheries and Biodiversity Conservation
- 1-2204** Study on Microplastic Pollution and Ecotoxicological Impact in Aquatic Environments Based on Physico-Chemical Characterization

1RF-2301	Development of Concurrent Synthesis at High Rate for Green Hydrogen and Adipic Acid	3G-2103	Demonstration Development of Recycling Technology for Woody Biomass Combustion Ash for Geopolymer Concrete
1RF-2302	Development of Environmentally Begin Deuteration Processes	3RF-2101	Demonstration of Heat Discharging Process of Thermal Energy Storage and Transport System for Recovering Unused Heat from Waste Incineration Plant in Vicinal Industries
1RF-2303	A Study on Interaction between Microplastics and Their Adsorbents to Promote Marine Pollution	3RF-2102	Development of Kolbe Electrolysis System for Complete Utilization of Soapstock Discharged from Vegetable Oil Refining
1RF-2304	Efficient Direct Chemical Conversion System for Atmospheric CO ₂ Using Waste Heat	3-2201	Material Flow Structures in Japan in Harmony with a Carbon Neutrality Target
1RL-2301	Innovative CO ₂ Utilization by Biocatalyst	3-2202	Development of Processes for Chemical Upcycling of Polyolefinic Waste Plastics
Climate Change Field		Total 20 research proj-	
2-2101	Impact Assessment of Climate Change on Water and Nutrient Transport with Adaptation Options for Toyama	3G-2201	Studies on Infection Prevention Measures During Collection and Transportation of Municipal Solid Waste
2-2102	Study on Responses to Compound Risks of Climate Change	3G-2202	Model and Scenario Formation of Plastic Recycling System Based on Regional Characteristics
2-2104	Decarbonization Transition: Multi-model Assessment of Innovation and Lifestyle Change	3MF-2201	Physical and Monetary Evaluation of Circular Economy / Decarbonized Society Scenarios Using SEEA / SDGs
2-2105	Development of National and Local Governments' Carbon Management System for Building Sector	3MF-2202	Design of Pilot-Scale Wet Milling Separation Process for Polyvinyl Chloride Coverings and Copper Recovery from Waste Wire Harness Cables Toward Practical Implementation
2-2106	Research on the Heat Risk Related to Urban Heat Islands Using Population Flow Data and a Thermal Simulator	3MF-2203	Effectiveness of Measures Using ICT and Other Tools for Preventing Household Food Waste
2RF-2101	Development of Highly Effective CO ₂ Conversion by the Electro-magnetic-Wave Assisted Chemical Process Using Spinel Catalysts with Ultra-High Specific Surface Area	3MF-2204	Study on Stabilization of Sea Area Landfill Sites and Decomposition of Residual Chelate
2-2201	Prompt Quantification of National SLCFs Emissions from Combustion Sources in East Asia, and Its Methodological Development	3RF-2201	Development of Catalyst Synthesis Technology for Highly Efficient Conversion of Cellulosic Waste by Using Low-temperature and Environment-friendly Plasma
2-2202	Communications on Future Changes of Extreme Weather with Reduced Uncertainty Based on Physical Understandings	3RF-2202	Energy Conversion System Using Wood-derived Carbons that Contribute to Organic Waste Resource Recycling
2G-2201	Development of a Support System for Designing Regional Climate Change Adaptation Options in Consideration of the Effects and Limitations	3RF-2203	Innovative Molecular Catalytic Technology for Precise Molecular Transformation that Enables Carbon Resource Recycling
2MF-2201	Synergies of Mitigation and Adaptation of School Buildings to the Heat Risks of Climate Change	3RF-2204	Research on Assessing Environmental Impact Reduction Potential for Service-oriented Circular Economy Businesses
2MF-2202	Development of the Novel Hybrid Energy Assisted Quick Lime Production Process to Achieve a Great Decarbonization	3CN-2202	Maximizing Environmental and Economic Effects Through Wide-area Carbon Neutral Circular Economy of Combustible Waste Including Plastics and Regional Circulation of Food Waste
2RF-2201	Mapping to Reduce Abandoned Cultivated Land Using Suitable Growth Area in Pear for Global Warming	3CN-2204	Proposal for the Local Circulation System for LMO-based Lithium Ion Batteries Managed by the Conglomerate Among the Local Companies
2RF-2202	Practical Research for the Site Selection of CCS in Green Tuff Region	3CN-2205	Elucidating the Effects of Polymer-Based Flocculants on Lipid Extraction from Microalgae
2-2301	Evaluating Long-term Changes in Aerosols and Their Radiative and Climate Impacts Related to the Arctic Climate	3-2301	Assessing Chemical Additives in Plastic Recycling to Enhance Chemical Management in a Circular Economy
2-2302	Nature-based Solutions Contributing to Climate Change Adaptation and Mitigation - Research at the Watershed Scale	3-2302	Development of Environmentally-friendly Rare Metal Recycling Solvent that Substitutes Inorganic Acids and Organic Solvents
2-2303	Creation of a Climate Change Vulnerability Atlas of Heat, Strong Winds and Snow for Major Cities Across Japan	3-2303	Investigation of the Discharge Mechanism of POPs and PFASs Contained in Leachate from Final Disposal Sites and Development of Risk Reduction Technique
2MF-2301	Study on the Climate Change Adaptation in Forests, Villages, and Rivers in the Nagara River Basin and the Sustainability of Livelihoods and Well-being	3-2304	Recommendation of Maintenance and Shift Measures of Onsite Domestic Wastewater Treatment Systems Through Scenario Design toward Decarbonization
2MF-2302	Assessing the Function of Benthic Animals for Water and Sediment Quality and Estimating the Risks Caused by Their Decline	3-2305	Forage Crop Cultivation Using Resources from Wastewater and Its Treatment Toward Regional Circular and Ecological Sphere
2RF-2301	Bio-utilization of Carbon Dioxide under Normal Temperature and Pressure Environment	3MF-2301	Effective Treatment of Composite Materials and Recovery of Resin by High-voltage Pulse Liberation
2RL-2301	Proposed Method for Prevention and Improvement of Anoxia in Closed Water Bodies	3MF-2302	Ultra-fast Carbonization of Organic Wastes by Power-combined Microwave Heating
Sound Material-Cycle Field		Total 35 research proj-	
3-2101	Appropriate Management Measures of Lithium-iron Batteries at Recycling and Disposal Processes Based on Investigation of Fire Accidents	3RF-2301	Recovery and Decomposition of Fluorine Compounds via Nanospace Engineering
3-2102	Toward the Environmentally Sound Management of Waste Containing New Fluorinated POPs: Elucidating their Occurrence and Decomposition Behavior	3RF-2302	Development of Low-energy Chemical Recycling Method of Polyester Fibers
3-2103	Establishment of Landfill Emission Model for Determining the Post-closure Care Period by Physics- and Statistics-combined Approach	3RF-2303	Development of Photo-self-regenerative Heterogeneous Fenton Catalyst for Sustainable Advanced Degradation Treatment of Organic Wastes
3G-2101	Development of Contactless Garbage Collection Systems and Scenarios Construction for Social Implementation	3RF-2304	Life Cycle Thinking for Promotion of Biomass Resource Recycling with a Focus on Social Acceptability
3G-2102	Development and Application of Cost-effective High-strength Titanium Alloys Using In-process Wastes	3RL-2301	Portable Solid-oxide Fuel Cell System Driven by Bioethanol

Harmony with Nature Field

Total 24 research proj-

- 4-2101
- Ex Situ Conservation of Endangered Wildlife Using Germ Cells
- 4-2102
- Prediction of Sea Ice and Ocean Variations and Climate Change Risk Assessment on Marine Ecosystems in the Southern Sea of Okhotsk Including Shiretoko, a World Natural Heritage
- 4-2103
- Development of a High-Resolution Image Analysis System for Monitoring and Forecasting Plankton Dynamics in Lake Ecosystems
- 4G-2101
- Developing Application Methods for Preventing Fire Ants (*Solenopsis* spp.) Nesting in Container Yards by Filling Silicone Resin and Its Infestation in Marine Containers by Placing Microencapsulated AITC
- 4G-2102
- Development of the Radar Image Analysis System for Distinguishing a Flight of Birds and Bats Aiming at an Application to Environmental Impact Assessment
- 4RF-2101
- Study on Cryopreservation of Butterfly Ovary for Future Utilization of the Cryopreserved Tissues of *Celastrina ogasawaraensis*
- 4RF-2102
- Establishment of New Basic Technology for Risk Assessment of Environmental Pollutant in Wildlife by Using Culture Cells
- 4RF-2103
- Genetic and Epigenetic Changes Against Urbanization and Gene Flow Swamping Local Adaptation
- 4-2201
- Database Establishment and Development of Data Acquisition Technique for Conservation of Plant-Insect Interaction Network in Ogasawara Islands
- 4-2202
- Ecophysiological Studies and Real-time Monitoring Technology for Enabling Growth of Endangered Plant Seedlings in in situ Habitats
- 4-2203
- Development of Evaluation Methods for Environmental Values and User Fee Policies in National Parks
- 4MF-2201
- Evaluation of Ecosystem Functions of Vegetated Coastal Habitats and Their Use for Environmental Restoration of Coastal Ecosystem and Reconstruction of Coral Reefs
- 4MF-2202
- Assessment of Viability Based on Conservation Genomics for Species Subject to Protection and Propagation Under the Law for the Conservation of Species
- 4RF-2201
- Ecological Research of Finless Porpoise as Top Predator in Coastal Ecosystem
- 4RF-2202
- Development of the System for Early Detection and Elimination in Newly Invaded Sites of the Invasive Alien Species *Aromia bungii*
- 4RF-2203
- Investigation of Zooplankton Diversity in the Global Oceans to Understand Future Impacts of Climate Change on Marine Ecosystems

- 4-2301
- Development of an Integrated Database for Vascular Plants Based on Genome-based Accurate Identification, and Mapping Methods for Diversity Indices and Conservation Priority Measures
- 4-2302
- Data Integration and Development of Indices for Quantification of Biodiversity Trends
- 4-2303
- Natural Park Design to Optimize Biodiversity Conservation, Climate Change Mitigation, and Regional Development: Interdisciplinary Research and Practice in Konsen District, Eastern Hokkaido, Japan
- 4-2304
- Development of Biodiversity Assessment Indicators and Supply Chain Analysis Tools Toward TNFD
- 4-2305
- Hotspots of Secondary Nature Generated by History: Visualising Environmental Values and Conservation Effects
- 4G-2301
- Developing Efficient and Reliable Control Measures for Invasive Species such as Fire Ants Based on Damage Prediction
- 4RF-2301
- Advancing Environmental DNA Analysis Techniques to Promote Sustainable Generation of Biodiversity Big Data
- 4RF-2302
- Investigation of the Invisible Death of Parasitoid Insects Caused by Fungicide Spraying on Plants

Safe and Secure Field

Total 32 research proj-

- 5-2101
- Development of Behavior Prediction Methods and Effective Removal Technologies for Perfluorinated Compounds in Soil and Water Systems
- 5-2102
- Re-Consideration of Ozone Formation Mechanism and Proposal of Scientific Basis for Oxidant Control Based on Regional Characteristics
- 5-2103
- Airborne Microplastics and Health Impacts
- 5-2104
- Proposition of a Comprehensive Human Biomonitoring Method to Assess Co-exposure to Chemicals

- 5-2105
- Development and Application of a Standard Method to Predict Ozone Reduction Caused by Strategies
- 5-2106
- Diagnosis of Dynamics and Chemistry of Reactive Nitrogen Oxides in the Formation of Photochemical Oxidants
- 5G-2101
- Implementation of Target Screening Analysis for“Items to Be Surveyed” in Water Environment
- 5RF-2101
- Monitoring of Coastal Environments and Assessment of Benthos Response to Global Warming and Hypoxia Based on Bivalve Sclerochronology
- 5RF-2102
- Development of Measurement System for Individual Components of Ambient Nitrogen Oxides by Thermal Dissociation Method and Clarification of Their Behaviors by Year-round Continuous Observation at Multiple Locations in Kanto Region
- 5RF-2103
- Development of a New Method for Determining Phosphorus Flux from Lake Sediments Using a Passive Sampler
- 5-2201
- Development of an Avian in Ovo Method for Evaluating Abnormalities in Sexual Differentiation Induced by Chemicals and Proposal to Establish a Test Guideline
- 5-2202
- Development of Assessment Method for Nutrient Management in Specific Sea Areas
- 5-2203
- Studies on Non-Exhaust Particle Emissions Including Tyre, Brake and Road Surface Wear
- 5-2204
- Research on the Development of Methods for Evaluating the Effects of Environmental Pharmaceuticals on Fish: Establishment of Integrated Evaluation Platform Based on Environmental Analysis, Molecular Biological Analysis, and Behavioral / Reproductive Analysis
- 5-2205
- Development of Ecological Risk Assessment Methods for Multiple Chemicals Based on the Similarity of Activity / Structure and Exposure Profile
- 5MF-2201
- Development and Test Experiment of a New Air Pollution Prediction System Integrated with Observational Data by Machine Learning
- 5MF-2202
- Nationwide Environmental Epidemiological Study to Quantify Health Effects of Short-term Exposure to PM2.5 Components
- 5MF-2203
- Improvement of Prediction Accuracy of VOCs and Related Pollutants by Identifying Background Concentrations and Advancement of Health Risk Assessment
- 5RF-2201
- Development of Atmosphere Emission Asbestos On-site Detection Technology at Demolition of Buildings
- 5RF-2202
- Model Development for Predicting Concentrations of Cationic Surfactants in Japanese Rivers
- 5-2301
- Comprehensive Japanese Nitrogen Management for Reducing Nitrogen Waste
- 5-2302
- Development of a Quantitative Digital Archiving Strategy for Environmental Pollutants by Data-independent Acquisition Method
- 5-2303
- Identification / Classification of Thyroid-hormone-function Disrupting Chemicals Based on Practical Environmental Samples and Development of Method for Assessment of Their Compositive Effects
- 5-2304
- The Study for Establishing a New Fish Acute Toxicity Test Concerning Animal Welfare
- 5G-2301
- Verification of Automated Monitoring System for Airborne Asbestos
- 5MF-2301
- Projection of Ground Level Ozone in Japan in 2050 Carbon-neutral Environment and Proposal of Co-benefit Strategy of Low Ozone and Decarbonization
- 5MF-2302
- Validation of an in vivo Screening Method for Thyroid Hormone Disrupting Potential Using Pre-self-feeding Medaka Fry and Development of an Index for Evaluating the Adverse Effects: Correlation with Amphibian Screening Methods
- 5RF-2301
- Genomic Analysis of Antimicrobial-Resistant Bacteria in Environmental Waters in Japan
- 5RF-2302
- Investigation into Three-dimensional Structure of Transboundary Photochemical Oxidant Based on Drone Measurements and Seamless Regional Numerical Modeling
- 5RF-2303
- Development of New in vivo Screening Assay for Detecting Thyroid Hormone Disrupting Activity by Using Japanese Medaka
- 5RL-2301
- Development of the Japanese Exposure Factors Database
- 5RL-2302
- Experimental Study of the Effects of LED Light Control on Sleep and Lifespan



Information on calls for proposals



Schedule

The schedule and arrangements are announced on ERCA's and MOE's ERTDF webpages.
The call for applications is announced and assignment proposals are accepted from September to October.

Application Procedures

The necessary application forms for proposals can be downloaded from ERCA's ERTDF webpage.
Proposals are accepted through the Cross-ministerial R&D Management System (e-Rad).

Selection of Research Projects

After the application forms have been checked, the Planning Committee for Environment Research and its subcommittees composed of outside specialists will evaluate the proposed research projects. First, the proposals will be narrowed down in an initial screening of the written descriptions. The remaining proposals will then be evaluated for final selection on the basis of interviews. Notification of approved proposals will be made every March. The results of the evaluation will be sent to the applicants after the selections have been made.



Inquiry



Ministry of the Environment

Ministry of the Environment, Government of Japan

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