

National Institute for Environmental Studies

The National Institute for Environmental Studies (NIES) was founded in 1974 in Tsukuba, Ibaraki Prefecture, as a unique research institute designed to provide scientific and technological foundations for Japan's environmental policy and address a broad range of environmental research topics in an integrative manner. Ever since, with a high level of professionalism and profound expertise, NIES has promoted a broad spectrum of research including topics ranging from global warming, a recycling society, ecosystem deterioration, and air pollution. NIES has been contributing to environmental policy-making in Japan and overseas, as well as striving to disseminate appropriate information to help solve environmental problems.



Commitment to Environmental Emergency Research

Since the Great East Japan Earthquake in March 2011 (also known as the Tohoku Earthquake), NIES has been undertaking various environmental and disaster-related research (environmental emergency research) in collaboration with national and local governments to support disaster-affected areas using the environmental research expertise it has accumulated over the years. NIES has been engaged in a broad spectrum of research including those related to the treatment and disposal of disaster waste (such as debris) and radioactively contaminated waste, the environmental behavior of radioactive substances and its biological and ecological impacts, the impact of the earthquake and tsunami on the environment, and community reconstruction programs in disaster-affected areas and the formation of regional community environments.



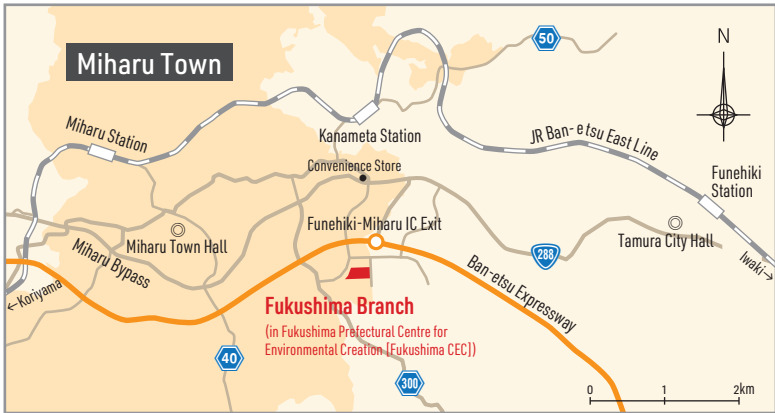
Disseminating Information

NIES' Fukushima Branch disseminates information on environmental emergency research, as well as achievements through its website and publications. The Fukushima Branch also organizes a lecture series on its research for the general public at various locations.



NIES Fukushima Branch Website
<http://www.nies.go.jp/fukushima/index-e.html>

ACCESS



By Train

Koriyama St. → (Ban-etsu East Line, approx. 13 min.) → Miharu St. → (Taxi, approx. 12 min.) → Fukushima CEC
Koriyama St. → (Ban-etsu East Line, approx. 20 min.) → Kanameta St. → (Taxi, approx. 7 min.) → Fukushima CEC

By Car

Approx. 5 min. drive from the Funehiki-Miharu IC Exit of the Ban-etsu Expressway.



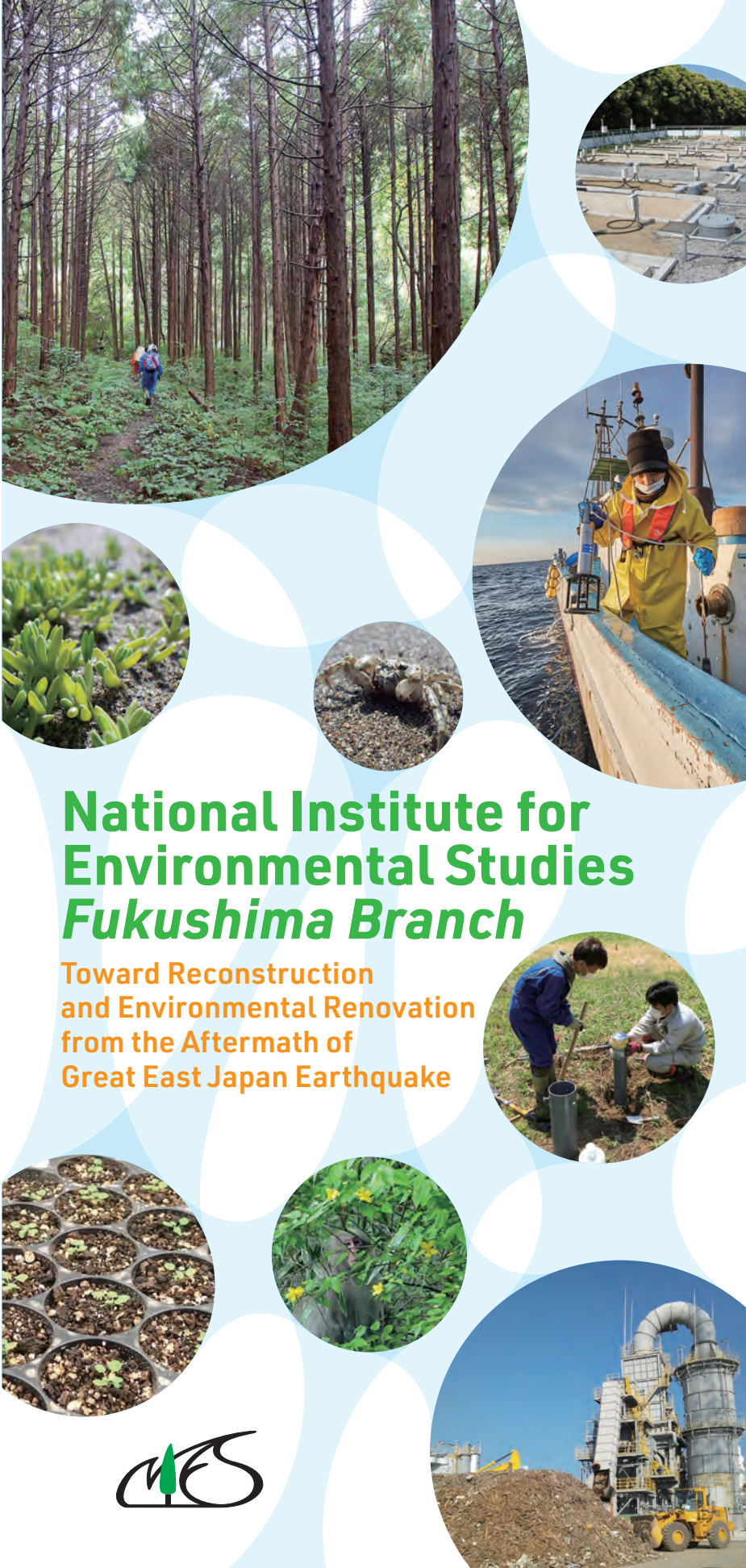
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National Institute for Environmental Studies Fukushima Branch

Toward Reconstruction and Environmental Renovation from the Aftermath of Great East Japan Earthquake



Introduction of Fukushima Branch

In 2016, National Institute for Environmental Studies (NIES) established Fukushima Branch in the Research Building of Fukushima Prefectural Centre for Environmental Creation (Fukushima CEC) located in Miharu Town, Fukushima Prefecture. The objective of Fukushima Branch is to promote and maintain rigorous scientific research activities focused on disaster-affected areas.

NIES uses its Fukushima Branch as a collaboration hub to conduct environmental emergency research aimed at environmental recovery and renovation in disaster-affected areas. The collaborating partners include various relevant organizations, including Fukushima Prefecture and Japan Atomic Energy Agency (JAEA). NIES also extends support to Fukushima CEC's efforts to collect and disseminate environmental information, as well as cooperating on education, training, and exchange programs by providing environmental emergency research expertise. The overall goal is to make Fukushima Branch into a globally recognized hub in environmental emergency research.

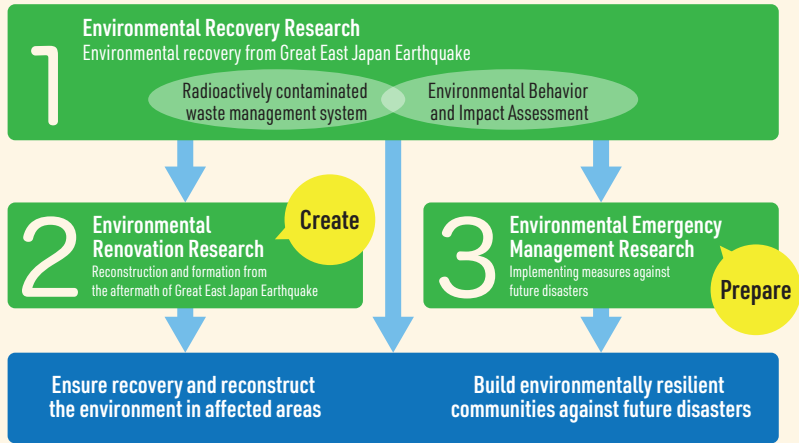


• The Fukushima Prefectural Centre for Environmental Creation is a research and forum complex for Fukushima's environmental recovery and formation established by Fukushima Prefecture in Miharu Town of Tamura District and Minamisoma City.

Environmental Emergency Research Conducted at NIES Fukushima Branch

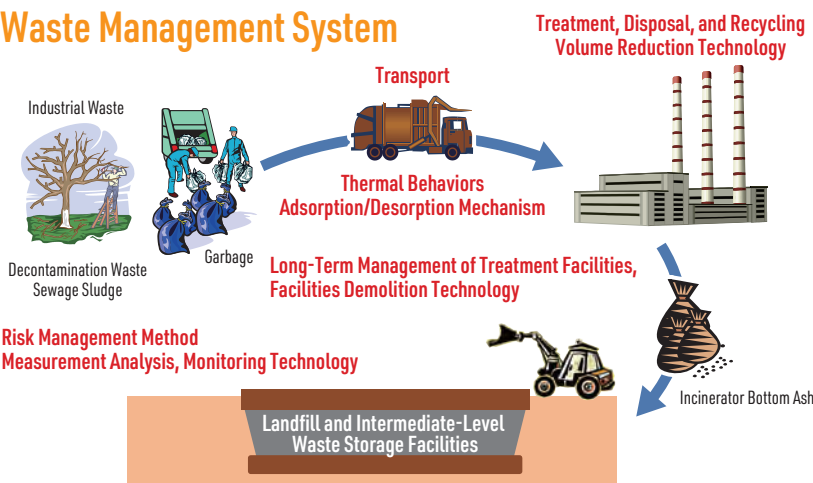
The environmental emergency research performed by NIES consists of three programs: environmental recovery; environmental renovation; and environmental emergency management. Researchers in Fukushima Branch, together with counterparts in the Tsukuba Headquarters, support environmental recovery and reconstruction in disaster-affected areas from a scientific and technological basis, and contribute to the formation of an environmentally-friendly community that is better equipped to face future disasters.

The research will be conducted in cooperation with a number of other relevant organizations in the industry, government, and academia including Fukushima Prefecture and JAEA.



1 Environmental Recovery Research

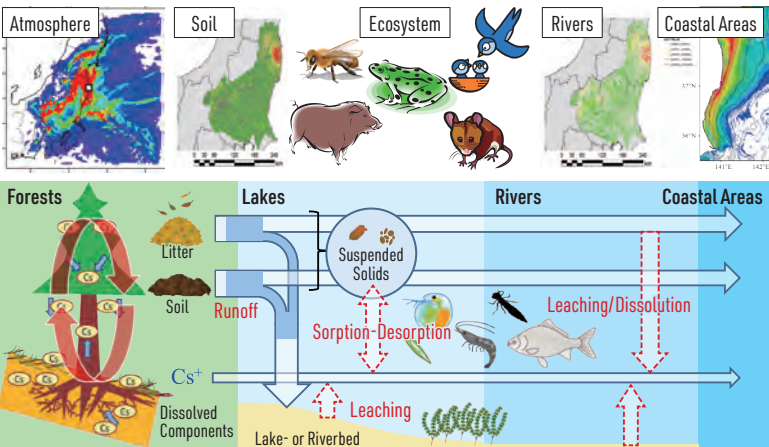
Our research facilitates fast environmental recovery in areas contaminated with radioactive substances derived from the nuclear power plant accident. We will strive for research that will ensure secure and safe lives for local residents.



- How does radioactive substance behave within the waste treatment process?
- What are the most appropriate management methods for various types of contaminated waste?
- How can we ensure long-term safe management of waste treatment facilities?

We develop and provide overall assessment for all technologies and systems related to various work necessary for the processes including production of radioactively contaminated waste and soil to their appropriate management and disposal.

Environmental Behavior and Impact Assessment

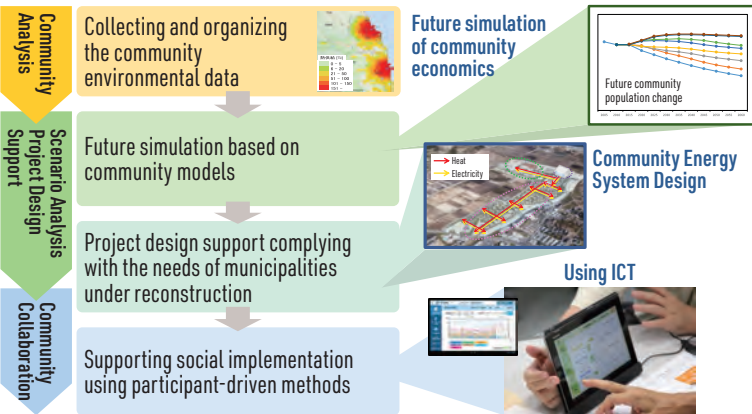


- Where and how much radioactive substances remain and how do they behave in the environment? What will happen in the future?
- How much internal and external radiation have local residents been (and will be) exposed to?
- How are wildlife and the natural ecosystem in the evacuation zones affected by the disasters?

Our field measurements and model simulations help reveal the behavior of radioactive substances in the environment, as well as ecosystem changes and radiation exposure. We conduct medium- and long-term predictions of these data, and assess the effectiveness of various measures implemented against these hazards (decontamination, etc.).

2 Environmental Renovation Research

This research will help design reconstruction programs that are well adapted to the environments in the disaster-affected areas.

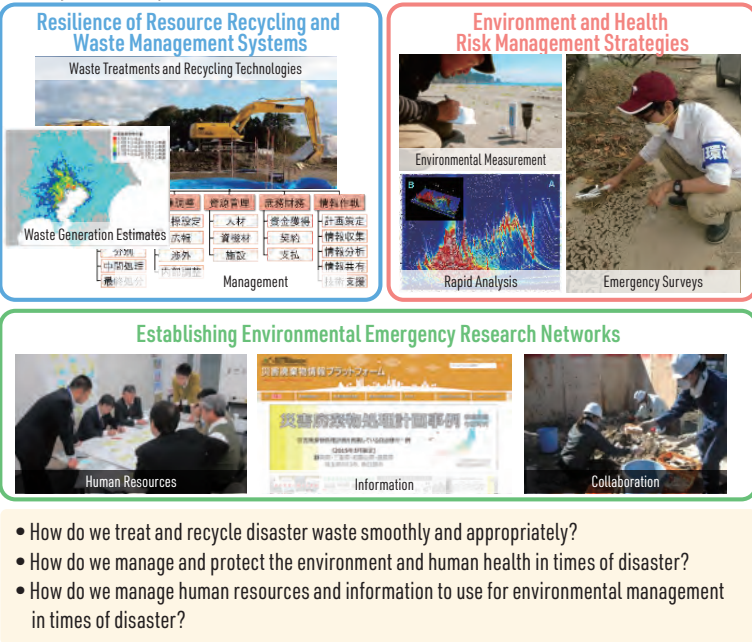


- What is the advantage of regional community in terms of environment, resources, lifestyle, industry?
- What would a regional community that accomplishes reconstruction, and achieves a high quality of life and environment look like?
- What are the most effective methods for incorporating the opinions of local residents?

Our research encompasses the formulation of future community scenarios based on individual regional community analysis, development of energy-saving technology and community project design, community planning involving residents, and communication support. In this way, our work will facilitate regional communities' environmentally-friendly reconstruction programs that are optimized for their communities.

3 Environmental Emergency Management Research

This research ensures preparedness for future disasters in terms of environment, security, and safety.



Our on-site field research, technology development, social research, and social implementation will help construct resilient resource recycling and waste management systems, formulate environmental and health risk management strategies, and develop human resources, as well as domestic and international networks to support these systems and strategies.