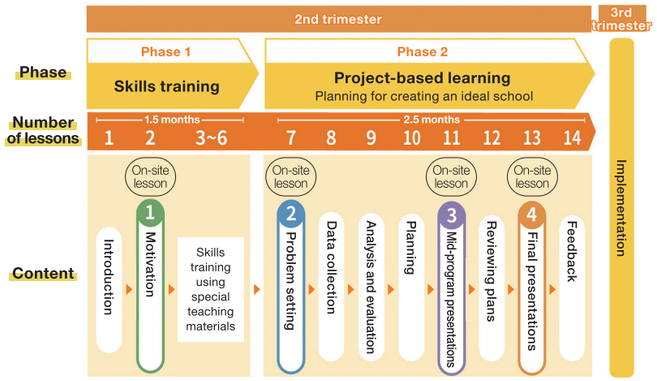
Human Development

Hitachi Future Innovator Program

On-site Lessons for FY2022



The Hitachi Global Foundation has developed the project-based learning "Hitachi Future Innovator Program" for fifth graders with the aim of fostering the problem finding and solving abilities required of future human resources in science and technology. Since 2016, we have collaborated with Hitachi Group companies to offer on-site lessons at schools.
The FY2022 program has been carried out amid the COVID-19 pandemic, as in the previous fiscal year, but schools in Japan are now returning to a normal pre-pandemic classroom setting. On-site lessons have been conducted at four schools, with two schools learning online and the other two in-person with thorough anti-infection measures in place.

Kashiwa City Sakaine Higashi Elementary School

We delivered the first on-site lesson at Sakaine Higashi Elementary School during the last fiscal year. The second lesson was held on June 30, 2022 and the third on September 22, 2022.
Lecturers were very surprised at how much the students had matured after reaching the sixth grade, with those who seemed quiet in the previous grade now actively asking lecturers questions and offering various opinions during group discussions.
During the second on-site lesson, students narrowed down the issues to a single problem and discussed it in groups with the lecturers. They were highly motivated to prepare mid-program presentations after receiving helpful advice from the lecturers.
In the third on-site lesson, the mid-program presentations took place in the classrooms of class 1 and class 2. Each group devised a solution to the problem of creating an ideal school and gave a presentation to lecturers and classmates.


In this fiscal year, the following three schools started the first round of on-site lessons in September.

Toda Minami Elementary School in Toda City

September 6, 2022

In the first on-site lesson for this fiscal year, students watched a video of Hitachi, Ltd. Executive Chairman, Toshiaki Higashihara, introducing Hitachi's social innovation initiatives for climate change solutions. They all showed serious interest.

Students downloaded worksheets provided by The Hitachi Global Foundation onto their iPads and linked to their teacher to share with the entire class.

Joyo Elementary School in Tamamura Town

September 14, 2022

The Jomo Shinbun newspaper carried an article on the students' experiment to discover whether tableware sinks in water.

Oomika Elementary School in Hitachi City

September 27, 2022

Fifth grade students of Class 1 at Oomika Elementary School enjoyed working together to conduct an experiment. The school has only one class of fifth graders.

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The Hitachi Global Foundation
Nurturing people, connecting to the future

HITACHI
Inspire the Next

News Letter Vol.43/Nov.2022

The Hitachi Global Foundation publishes news letters featuring its many activities. We offer various types of news about our Foundation, ranging from activity reports on symposiums, seminars, awards ceremonies, and other events to our latest topics. Please take a look to find out more.

Human Development

Girls in Science Support Project

Open Dialogue & Workshop Vol. 8

An open dialogue and workshop titled "Happy to Become Researchers – Tips on Academic Paths, Careers, and Parenting" was held on August 2. 23 female junior high school and high school students attended the event at Hitachi, Ltd. Central Research Laboratory, who were also given a tour of the facility.
As female role models in science and engineering, Ms. Yaemi Teramoto and Ms. Sachi Tanaka from the Hitachi, Ltd. Research & Development Group were invited to an open dialogue with science entertainer Ms. Miki Igarashi. In the workshop that followed, participants exchanged opinions in a group session on how their impressions about female scientists and engineers and their academic paths in science and engineering fields had changed before and after the dialogue. The students also discussed their future careers.

Ms. Yaemi Teramoto

Chief Researcher
Intelligent Information Research Department
Advanced Artificial Intelligence Innovation Center
Research & Development Group, Hitachi, Ltd.

Ms. Sachi Tanaka

Chief Researcher
Life Solution System Research Department
Center for Sustainability - Electrification
Research & Development Group, Hitachi, Ltd.

Ms. Miki Igarashi

Visiting researcher at the University of Tokyo Interfaculty Initiative in Information Studies and science entertainer. She organizes science shows across the country and is a regular member of NHK's high school "Basic Chemistry" program.


Promotion of Academic Research, Science and Technology

The Kurata Grants

FY2022 (54th) The Kurata Grants

The Kurata Grants is a research fund established in 1967 from a donation by Hitachi, Ltd.'s second president, the late Chikara Kurata, who advocated the advancement of science and technology in Japan.
The grants target creative and pioneering research in natural sciences and engineering as well as research in the humanities and social sciences that underly an advanced scientific and technological society. As of 2021, grants totaling approximately 2.5 billion yen have been awarded to 1,526 researchers.
Applications for FY2022 were accepted from July 1 through September 15 and are now being thoroughly reviewed by the selection committee. Recipients will be selected in January, 2023 (planned), followed by an announcement on The Hitachi Global Foundation's website and a presentation ceremony in March of the same year.

The Hitachi Global Foundation Asia Innovation Award

FY2022 (3rd) The Hitachi Global Foundation Asia Innovation Award

Overview

The Hitachi Global Foundation Asia Innovation Award is a program launched in FY2020 to promote innovations in science and technology that contributes to solving social issues and realizing a sustainable society in the ASEAN region. The award recognizes individuals and groups who have notably served the public interest through their outstanding research and development projects that envision an ideal society and incorporate plans to socially implement science and technology, with the aim of contributing to the Sustainable Development Goals (SDGs).
The Foundation presented twelve awards (two Best Innovation Awards, two Outstanding Innovation Awards, and eight Encouragement Awards) in FY2020, and twelve awards (one Best Innovation Award, three Outstanding Innovation Awards, and eight Encouragement Awards) in FY2021. We are currently in the process of selecting the FY2022 recipients. In January, 2023, we plan to hold an awards ceremony for the Best Innovation Award winners from FY2020 to FY2022 and to announce the FY2022 awardees on our website.

Types of awards

Best Innovation Award
3 million yen per recipient

Outstanding Innovation Award
1 million yen per recipient

Encouragement Award
500,000 yen per recipient

Application Details

Two goals and several relevant targets among the 17 SDGs and 169 targets are selected each year, and applicants are invited to present their research and development achievements contributing to our selected goals and targets. They are also asked to submit social implementation plans to envision an ideal society in their countries or the ASEAN region through their achievements.

Application Details for FY2022

Based on the FY2021 achievement status of SDGs in ASEAN countries, applicants present their research and development outcomes contributing to the targets related to SDG 6 (Clean Water and Sanitation) and SDG 11 (Sustainable Cities and Communities), as many of these goals remain unfulfilled.

Goal 6 "Clean water and sanitation"

Targets
- 6.1 Access to safe and affordable drinking water
- 6.2 Access to sanitation and hygiene
- 6.3 Reducing pollution, minimizing release of hazardous chemicals and materials
- 6.4 Increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater
- 6.5 Integrated water resources management
- 6.6 Protect and restore water-related ecosystems

Examples of R&D Themes

Access to safe water and sanitation	Water Resources Management	Pollution Reduction
e.g. Reduce waterborne diseases by ensuring safe drinking water and access to toilets, Installation of water storage tanks, Introduction of water purification technologies, Improving the quality of life of residents, Reduction of open defecation, Increased educational opportunities for women and girls	e.g. Development of high quality, reliable, sustainable and resilient infrastructure, Sustainable management and efficient use of natural resources, Management of water resources development, Monitoring of water resources	e.g. Reduction of untreated wastewater by the introduction of wastewater treatment technology such as living, industrial, sewage, Reduction of soil contamination, Suppression of release of harmful chemical substances

Goal 11 "Sustainable cities and communities"

Targets
- 11.1 Upgrade slums
- 11.3 Inclusive and sustainable urbanization
- 11.5 Reduce damage and economic losses caused by disasters
- 11.6 Paying attention to air quality and waste management
- 11.7 Access to green and public spaces
- 11.b Develop and implement disaster risk Examples of R&D Themes management

Examples of R&D Themes

Improving of quality of life	Reduction of waste emissions	Disaster risk management
e.g. Access to housing and basic services, Improving the quality of life of residents	e.g. Reducing emissions of chemical substances and wastes to air, water and soil, Prevention, reduction and reuse of waste products	e.g. Strengthening adaptation capacity to climate-related disasters, Resilience to urban flooding, Measures for reducing of impact on urban drainage system by heavy rainfall, Utilization of risk information, Early Warning System

Eligibility

Eligible countries, universities, and research institutes among ten ASEAN countries are selected each year based on our application requirements. Applicants must be researchers, faculty members, or students belonging to eligible universities and research institutes and be recommended by their schools or organizations. Both individuals and groups are accepted.

Eligibility for FY2022

Among ASEAN countries we selected Cambodia, Indonesia, Laos, Myanmar, the Philippines, and Vietnam, where many challenges remain unaddressed to achieve SDGs 6 and 11. In these countries, 23 universities involved in research fields related to these two SDGs are eligible.

Application documents

1. **Application form** (including a video describing research and development outcomes)
2. **Recommendation letter**
3. **Evidence** (published papers, patents, etc.)

Schedule

April-June	July-August	September-October	January
Call for applications	Screening	Remote interviews and selection committee meetings	Award ceremony

Selection Criteria

1. Relevance of research and development outcomes to the vision of an ideal society
2. Contribution to the SDGs
3. Inclusiveness
4. Utilization of science and technology
5. Innovativeness
6. Feasibility of social implementation plans
7. Sustainability and scalability of social implementation plans