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Feature Expanding Activities to Conserve the Future Global Environment



Mitsubishi UFJ Financial Group Global Initiatives in Response to Climate Change

Mitsubishi UFJ Financial Group (MUFG) announced a "MUFG Carbon Neutrality Declaration" in May 2021. In the following month, MUFG was elected as a member of the Steering Group in the Net Zero Banking Alliance (NZBA), which consists of 12 banks from different regions around the world. Launched in April 2021 with 43 founding banks, NZBA is an alliance convened by the United Nations Environment Program Finance Initiative as part of the Glasgow Financial Alliance for Net Zero. NZBA aims to achieve net zero greenhouse gas (GHG) emissions from financed portfolios by 2050. MUFG has also joined the Partnership for Carbon Accounting Financials (PCAF), which was established in 2015 as a global initiative with the objective of standardizing the measurement and disclosure of financed GHG emissions. PCAF has now expanded to more than 140 financial institutions across 44 countries.



MUFG Carbon Neutral Project Team members (Photo from August 2021)

https://www.mufg.jp/dam/pressrelease/ 2021/pdf/news-20210813-001_en.pdf



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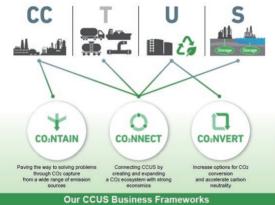
Feature Expanding Activities to Conserve the Future Global Environment



Mitsubishi Heavy Industries

The "Breeze Concept": Leaving a Gentle Breeze to the Children of the 22nd Century

Mitsubishi Heavy Industries (MHI) Group is working to promote a strategic energy transitioning in order to leave a gentle breeze to the children of the 22nd century. Meeting the global target of carbon neutrality by 2050 will require both the reduction of CO_2 emissions and the recovery of CO_2 through energy transition. One of the Group's paths to decarbonization is building a CO_2 ecosystem which has not yet been created by market forces in the world. This CO_2 ecosystem comprises three parts: (1) capturing CO_2 from its various sources (CO_2NTAIN), (2) building the carbon capture, utilization and storage (CCUS) value chain by networking from CO_2 emitters to CO_2 utilization and storage, including " CO_2NNEX " as a digital platform (CO_2NNECT), and (3) reusing and recycling CO_2 to something of value (CO_2NVERT). In order to promote CO_2 recovery, MHI Group is expanding and commercializing its lineup of CO_2 carbon capture technologies by 2023. At the same time, the Group will push forward to take a leadership role with many stakeholders in the CO_2 ecosystem.



Three frameworks in order to address CCUS technical and scaling challenges.

Video clip

https://c-hotline.net/Viewer/Default/ 2245002acf2f8cde2b393c6d43d1073cf411



Presentation Material

https://www.mhi.com/finance/library/ business/pdf/2021_ccus.pdf



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Mitsubishi HC Capital HSE Invests in a Wind Power Company in Vietnam

Mitsubishi HC Capital's subsidiary HSE Ltd. (HSE), engaged in the renewable energy business, has completed the acquisition of a 35.1% share in the Trung Nam Wind Power Joint Stock Company (TNWP), a subsidiary of the Trung Nam Construction Investment Corporation (TNCI), one of the leading companies in the renewable energy business in Vietnam. Upon HSE's acquisition, TNWP became a Mitsubishi HC Capital affiliated company using its equity. HSE has established a representative office in Ho Chi Minh City and now is promoting a strategic partnership with TNCI in developing new wind power projects to contribute to decarbonization and to the safe and stable development of the energy sector and of society in Vietnam.



Among ASEAN countries, Vietnam is known for its abundant wind resources, and the government is targeting a wind power production of over 16,000 megawatts by 2030.

https://www.mitsubishi-hc-capital.com/english/ investors/library/pressrelease/20210514e.pdf



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Dai Nippon Toryo **Reducing CO₂ Emissions with** Thermal-insulating ECO-COOL Paint

Dai Nippon Toryo (DNT)'s ECO-COOL paint series delivers outstanding thermal-insulating performance when applied to building surfaces exposed to the rays of the sun. This thermal-insulating effect that stems from ECO-COOL's reflection of ultraviolet rays restricts temperature rise in buildings and structures and brings savings in power used for air conditioning. The ceramic mix used in these paints delivers outstanding dirt prevention, anti-mold and anti-algae properties and maintains the paint's thermal-insulating properties for years. The use of ECO-COOL, classified as a carbon offset product, will contribute to the Japanese government's CO₂ reduction target and achievement of the UN's Sustainable Development Goal 13: Climate Action; the company will issue a carbon offset certificate to customers upon demand.



ECO-COOL offers outstanding durability and weather resistance to give long-term protection of coated surfaces.



The lineup contains fluorine, silicon and urethane resin products in a wide range of colors.



The use of different undercoats allows ECO-COOL to be used on everything from metallic to inorganic surfaces.

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Tokio Marine & Nichido Fire Insurance Industry-first Insurance for Solar Power Operators

Tokio Marine & Nichido Fire Insurance has built an insurance system for solar power operators and will start providing the coverage in December 2021. Today, as the introduction of solar power facilities expands rapidly, the environment and risks surrounding operators are changing in major ways. In response to these changes, the company, working with the Japan Photovoltaic Energy Association, has designed a line of products that indemnify against disposal costs before and during external funding as well as against liability risks in the ownership, use and management of solar power facilities amid sharply increasing cyber risks. The company will roll out this insurance system more widely as it works to support the healthy growth of the solar power industry and the further uptake of renewable energy.



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Mitsubishi Materials **Appropriate Management Aims for "Materials' forests"**

Mitsubishi Materials (MMC) currently owns around 14,000 hectares of forestland in Japan. The company originally began acquiring forests for the purpose of supplying wooden supports for its own mines and coal mining activities. Currently, under the slogan "Materials' forests leading the way for forests throughout Japan", the company is managing these forests for the purpose of harnessing their ecosystem services to a high degree. Those services include not only the production of lumber as a renewable resource but also the provision of public recreational spaces, the prevention of global warming through carbon capture and fixation, and biodiversity conservation. The company divides its forests into four categories (zones) depending on their location, topography, growth potential, need for conservation and other features so as to maximize the functions they are expected to fulfill. The company will continue to contribute to a decarbonized society, a recycling-oriented society, local communities, and the conservation of biodiversity through appropriate forest management and effective utilization.



Japan's largest woodpecker, this Black Woodpecker is an endangered species.



The company makes reference to and borrows from Swiss "close-to-nature" silviculture methods and invites Swiss foresters to Japan to participate in its forestry management.



Teine Forest in Sapporo City, Hokkaido. The company makes part of the forest, with its nature trails and camping sites, available to those living in Sapporo City.

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Mitsubishi Kakoki Kaisha

Started demonstration Operation of a Photobioreactor for Microalgae Biomass Production in an Urban Area

Mitsubishi Kakoki Kaisha (MKK) has started a demonstration operation of microalgae-culturing production on the premises of their Kawasaki Works, Japan. MKK has been involved in culture technology related to microalgae such as chlorella since the 1980s. One of their main products, the centrifugal disc separator "Mitsubishi Disc Separator", is also being used for research on biojet fuels using microalgae oil and so on in recent years. This time, the demonstration operation is being expected to accelerate their development of microalgae-culturing production processes, new equipment and devices suitable for urban areas, furthermore inside Japan and in Southeast Asia by using fresh microalgae biomass.



MKK's photobioreactor features an original reactor frame with seismic isolation structure (patent pending) to minimize damage by vibration as well as flying objects as countermeasures against large earthquakes and typhoons.

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Mitsubishi Electric Fulfills Major Targets of Environmental Vision 2021

Mitsubishi Electric has fulfilled the major targets of its just-completed Environmental Vision 2021, introduced in 2007. This long-term environmental vision aimed at promoting a Low-carbon Society, a Recycling-oriented Society and a Society in Harmony with Nature by 2021, the company's 100th anniversary. More specifically, in terms of greenhouse gas (CO₂) emissions the company achieved a 56% reduction from the FY2001 level in emissions from manufacturing operations, thereby exceeding the original 30% reduction target. By reducing the sizes and weights of its products, the company reduced its resource inputs by an average of 43% across 64 product groups, which surpassed the original 30% target. The company is now working to achieve the targets of its current long-term environmental vision, Environmental Sustainability Vision 2050, under which it aims to contribute to an increasingly sustainable world.



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https://www.MitsubishiElectric.com/sites/ news/2021/pdf/0831.pdf



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