



News Release

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Electric Power Development Co., Ltd.

Joint Examination of Social Implementation for Carbon Neutrality in Australia: Using Low-Carbon Materials for Sequestration and Obtaining CO₂ Reduction Credits

Electric Power Development Co., Ltd. (J-POWER, headquartered in Chuo-ku, Tokyo; President: Toshifumi Watanabe) and Central Queensland University (CQU, based in Brisbane, State of Queensland, President: Nick Klomp) have agreed to jointly develop and implement in society a low-carbon material (an alternative to concrete) made using a large amount of local industrial byproducts (locally produced materials^{*1}).

J-POWER and CQU also intend to jointly examine the expected reduction in CO₂ emissions from the new material and through blue carbon^{*2} from seaweed that adheres to the material's surface in order to help resolve local environmental problems. A memorandum of understanding (MOU) was signed today at the head office of J-POWER in the presence of Hitoshi Kanno, Executive Vice President of J-POWER, and Stirling Hinchliffe, Minister for Tourism, Innovation and Sport of the Queensland State Government (QLG).

Specifics of the joint examination:

- to develop a low-carbon material made from locally produced materials that can coexist with living organisms as well as to implement this material into society as marine blocks
- to develop and test ways to reduce CO₂ emissions from concrete-related construction
- to increase CO₂ fixed by the attachment of seaweed (blue carbon^{*2}).

By using this material in society by the time of the Brisbane Olympics in 2032, the parties aim to showcase to the world their various initiatives for carbon neutrality.

In February 2021, J-POWER announced J-POWER BLUE MISSION 2050 for achieving carbon neutrality in the energy supply chain and is now working on the development of related technologies. The company has been conducting demonstration tests in the sea in Japan using blocks made of J-Blue Concrete, a low-carbon material. In fiscal 2021, we became the first private organization in Japan to receive J Blue Credits^{*3} issued by the Japan Blue Economy Association. J-POWER will continue thoroughly researching the social implementation of low-carbon materials.

CQU—sharing QLG’s goal of working on ways to ensure that the 2032 Brisbane Olympics are held at a level that *exceeds* carbon neutrality—is developing a concrete substitute material using locally produced materials and preparing for their use in society. At the same time, CQU is beginning work on the social implementation of blue carbon.*²

Notes:

1. Slag from smelting nickel, zinc, and aluminum, etc.
2. *Blue carbon* refers to using carbon that was sequestered in the ocean by marine organisms, such as seaweed. Blue carbon use is expected to increase through initiatives such as the restoration of seaweed beds and the construction of breakwaters designed for coexistence with living organisms. Using blue carbon is one way of getting sequestration-based credits.
3. J Blue Credits are issued by the Japan Blue Economy Association, which was established and authorized by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). The aim is to create a blue carbon offset system as specified in the Green Growth Strategy Through Achieving Carbon Neutrality in 2050 formulated by the Ministry of Economy, Trade and Industry (METI) and other organizations. J Blue Credits have been approved for the amount of carbon sequestered (15.6 t-CO₂) by seaweed attached to blocks made of the low-carbon material in the test (see above for details on the demonstration tests).

Attachment:

(1) Relationship of parties involved in this MOU



(2) J-POWER’s seaweed cultivation initiative awarded J Blue Credits (Wakamatsu-ku, Kitakyushu, Fukuoka Prefecture)



(3) Seaweed cultivation at CQU (port in Queensland, Australia)

*Specific port facilities have not yet been determined.

Image of port (provided by QLG representative office in Japan)

