

## Panasonic Energy to Collaborate with Australia's National Science Agency CSIRO to Develop Nickel Laterite Processing Technologies for Lithium-ion Battery Applications

**Future collaboration projects will aim to contribute to a sustainable supply chain for the company's battery business and ensure efficient use of Australia's natural resources**

**Osaka, Japan** – July 19, 2024 – Panasonic Energy Co., Ltd., a Panasonic Group Company, today announced that it has entered into an agreement regarding joint development with Australia's national science agency, [CSIRO](https://www.csiro.au). The agreement covers the development of new nickel laterite processing technologies for recovering nickel, an essential raw material in the manufacture of lithium-ion batteries.



Yasushi Naito, Consul-General of Japan in Perth (back row, left), Michael Neimanis, Manager, Critical Minerals Office, Department of Industry, Science and Resources, Australian Government (back row, right), Dr. Shoichiro Watanabe, CTO of Panasonic Energy (front row, center left), and Dr. Robert Hough, Director CSIRO, Mineral Resources (front row, center right)

Through this collaboration, Panasonic Energy and CSIRO are laying the groundwork for the future utilization of Australian nickel laterite resources and the creation of a low-cost, low-environmental-impact raw material and supply chain. The joint development leverages CSIRO's expertise in mineral processing and Panasonic Energy's extensive knowledge of battery materials. The goal is to strengthen Australia's nickel industry and secure high-quality nickel resources to meet the global demands of future battery production.

CSIRO excels in industrial technology development and is engaged in a wide range of research areas including agriculture, the environment, information technology, healthcare, materials,

manufacturing, minerals, and energy. Leveraging its location in resource-rich Australia, it plays a leading role in in the research and technological development related to minerals.



Photo Credit: Chamika Yapa Appuhamilage Don, Sean Paton

In the current global market, while countries like Indonesia lead in nickel production, Australia boasts the world's second-largest reserves of the mineral. Given its significant lateritic reserves and the growing global demand for lithium-ion batteries, Australia has the potential to become a key player in producing nickel, a crucial cathode material especially for high-capacity batteries, using eco-friendly processes.

Panasonic Energy is committed to fostering collaborations like this one with CSIRO, driving advancements in the global lithium-ion battery industry, and ultimately contributing to a more sustainable society.

### **About Panasonic Energy**

Panasonic Energy Co., Ltd., established in April 2022 as part of the Panasonic Group's switch to an operating company system, provides innovative battery technology-based products and solutions globally. Through its automotive lithium-ion batteries, storage battery systems and dry batteries, the company brings safe, reliable, and convenient power to a broad range of business areas, from mobility and social infrastructure to medical and consumer products. Panasonic Energy is committed to contributing to a society that realizes happiness and environmental sustainability, and through its business activities the Company aims to address societal issues while taking the lead on environmental initiatives. For more details, please visit <https://www.panasonic.com/global/energy/>.

### **About CSIRO**

CSIRO is Australia's national science agency and innovation catalyst. We solve the greatest challenges through innovative science and technology. Our collaborative research turns science into solutions for clean energy and resources; food security and quality; health and wellbeing; resilient and valuable environments; innovative industries; and a secure Australia and region. CSIRO has one of the largest minerals research and development groups in the world, with a proud track record in delivering innovation and solutions across the mineral resources value chain. CSIRO is working from exploration to processing and beyond, to maximise Australia's position as a trusted global supplier of critical minerals and ensure success on the path to Net Zero. For more details, please visit <https://www.csiro.au/en/about/people/business-units/mineral-resources>.