



Future50

Industry, Manufacturing
and Resource Management

Low-GHG Materials,
Materials Recycling



SPACECOOL



<https://www.spacecool.jp/en/>

#BuiltEnvironment #ClimateTech

Highlights

SPACECOOL claims that it has **more than 100 customers in Japan**, including major companies, such as **Honda⁴⁵** and **ENEOS⁴⁶**. Supported by the Japan External Trade Organisation (JETRO), the company has been venturing into the Middle East. With JETRO support, SPACECOOL exhibited at GITEX in the UAE in both 2021⁴⁷ and 2022,⁴⁸ and reports participating in Saudi Arabia's **LEAP in 2023⁴⁹**.

Strategic alliances:

- Manufacturing Companies
- Businesses (Large Companies/SMEs)
- Construction Companies
- Governments (Central Authorities)

List impact technologies:

High-Efficiency Heating and Cooling, Smart Buildings, Food Waste Technology

Headquarters:

Japan

Middle East operational countries:

Egypt, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates

Summary

SPACECOOL has developed a **radiative cooling material solution**, which, as the company notes, lowers the temperature to below that of ambient air without consuming any energy.⁴⁴ The company explains that this unique patented optical control technology involves optical films that block heat from the sun, suppress heat absorption and radiate heat into space.

SPACECOOL claims that when used in living and energy transportation applications, its product creates comfortable spaces by controlling internal temperatures and consequently **reducing the environmental impact of air conditioning**.

Impacts

SPACECOOL notes that its product was shown to **reduce summer power consumption by 20%** in pilot tests, contributing to energy conservation and CO2 emissions reduction, as well as to deliver a 15-degree reduction in temperature when installed in a part of a client's building in Japan.

