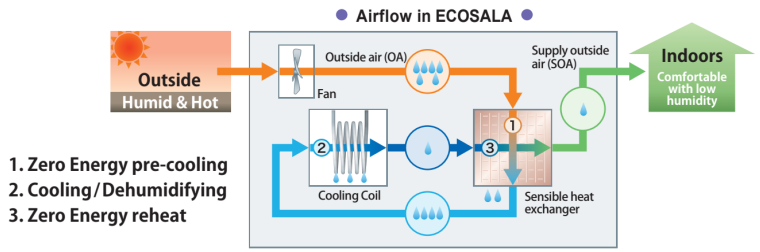
Registration Date: Jul. 31, 2026

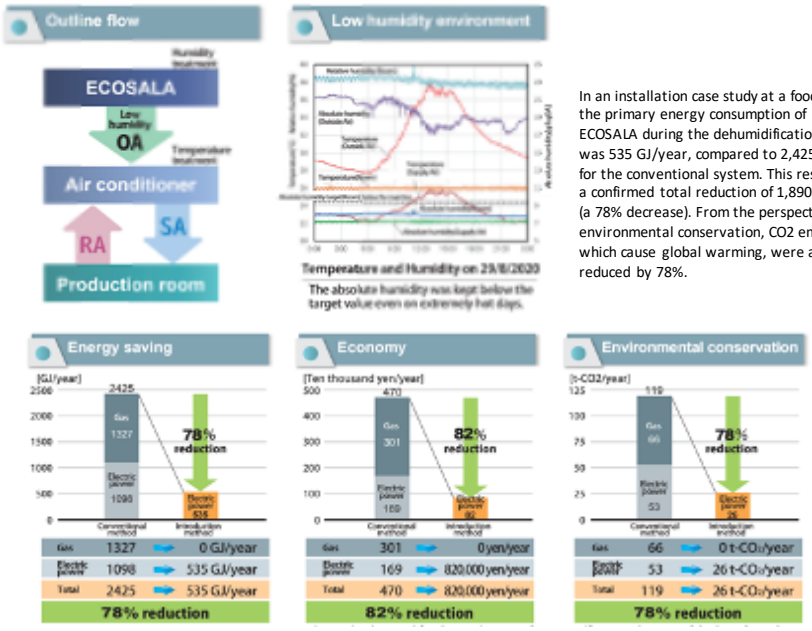
Company Information	Company Name	SANKEN SETSUBI KOGYO CO., LTD.	Industry	Constructin / General Contractor
	Website	https://skk.jp/en/		

Technology / Solution	Tech/Solution Name	Dehumidification air supply unit (“ECOSALA”)					
	Which field does the tech/solution contribute to?	Smart City					
	“Smart City” Which problem can the tech/solution solve?	Traffic/Mobility	×	Energy	○	Disaster Prevention	×
		Infrastructure Maintenance	×	Community Activation /Sightseeing	×	Health/Medical	×
		Agriculture, Forestry and Fisheries	×	Environment	×	Security	×
		Logistics	×	Urban Planning /Maintenance	○	Others(Free Writing)	
	Key words	Latent heat removal, Energy savings					
	Overview of the tech/solution	The ECOSALA dehumidifying air supply unit features a unique cooling-dehumidification and reheating system. It utilizes the thermal energy from the incoming hot outdoor air to reheat the chilled, dehumidified air, which simultaneously pre-cools the intake air. By offsetting the thermal energy between pre-cooling and reheating, it achieves zero-energy pre-cooling and reheating.					
	Discription of the tech/solution	Ecosala process flow diagram. The following shows the process flow of ECOSALA. Outdoor air ① is pre-cooled through sensible heat exchange with the cooling coil outlet air ③, becoming the cooling coil inlet air ②. Afterwards, the outlet air ③, which has been cooled and dehumidified by the cooling coil, is reheated via sensible heat exchange with the outdoor air ① and delivered to the indoor space as low-humidity air. Since pre-cooling and reheating are achieved with zero energy consumption through the sensible heat exchanger, the energy required by ECOSALA is solely for cooling and dehumidification at the cooling coil.					



・All-in-One Design for Short Installation Lead Time: As an all-in-one unit, it incorporates all necessary equipment for operation—including instrumentation, control panels, and inverter panels. Since factory testing and trial runs are completed before shipment, on-site construction work is minimized, enabling rapid installation with a short lead time.
・Open ICT Control System: The control system utilizes an open, ICT-based architecture, allowing for smooth implementation regardless of the existing instrumentation manufacturer.
・Multifunctional Touchscreen: Features a multifunctional touch-panel screen that provides real-time visualization of air conditions and displays energy reduction rates.
・Multi-Site Remote Monitoring: Equipped with a multi-site remote monitoring system that shares identical screens across smartphones, tablets, and PCs, simplifying post-installation commissioning and maintenance.

Global Expansion	Asia	Considering development	Africa	No plan to develop	Middle East	No plan to develop	Europe	No plan to develop
	Russia	No plan to develop	Oceania	No plan to develop	North America	No plan to develop	Mid/South America	No plan to develop

Case Study	Country	Japan
	City	Saitama Prefecture
	Project name	Demonstrating that the dehumidification air supply unit achieves a low-humidity production environment and energy savings in a food factory
	Project Overview	Ecosala was implemented in a manufacturing room in a food factory to assess its dehumidification performance and energy-saving capabilities compared to a conventional system.
	Discription of the project	
	Website of the project	https://skk.jp/products/#products01

SDGs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Note (Award etc.)	Awards: 2021 Energy Conservation Grand Prize, Chairman's Award in the Product and Business Model Category by the Energy Conservation Center, Japan (Topic: Energy-efficient HVAC solution utilizing a "Zero Energy Precooling and Reheating" dehumidification air supply unit) Verification Number Issued: Ministry of the Environment, Environmental Technology Verification (ETV) Program Climate Change Mitigation Technologies Category (FY2025) – Verification No. 140-2503