



Asset Details



Customer:	INSEAD Business School
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Asset Class:	Education
GFA:	300,000 sqft
Air-conditioning Capacity:	1,335 RT
Date of Acquisition:	2013
Capex Savings (SGD):	\$ 2.2 Million (chiller plant)
	\$ 4.3 Million (air-side)
Annual Opex Saving:	\$ 615,000



Asset History & Upgrading

Kaer took over the operations of the existing chiller plant with a Kaer Water contract in 2013 (the deliverable for Kaer Water is chilled water at a pre-agreed temperature). In 2015, INSEAD upgraded to Kaer Air to include all of the air-side systems (the deliverable for Kaer Air is cool air at pre-agreed temperature, RH and IAQ metrics).

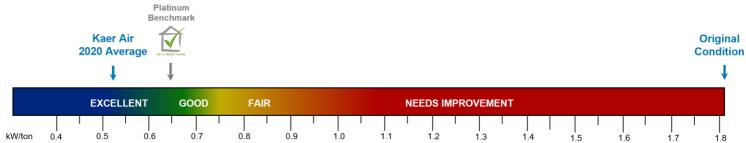


The campus was served by an 18-year-old air-cooled chiller plant



In six months, with zero disruption to campus operations, Kaer installed a state-of the art autonomous water-cooled chiller plant with AI-enabled controls





"The partnership with Kaer Water has played a crucial role in helping INSEAD achieve its sustainability goals and to be awarded Green Mark Platinum status for our new development. We are extremely happy with the Kaer Water model as it allows us to simply buy chilled water and focus on other activities, all in the knowledge that the chiller plant is being run at the highest possible levels of efficiency"

James Middleditch, Director of Operations and Campus Services, INSEAD Singapore

https://www.youtube.com/watch?v=5cp9V7ahF-k



Kaer Air at INSEAD Business School

Bringing product-as-a-service benefits to Singapore's most innovative educational campus

The Challenge

In 2015 James Middleditch, the director of operations and campus services at INSEAD Business School in Singapore was embarking on an expansion program to add a new sixstory, 10,000 square meter Leadership Development Centre to his existing campus. In addition to the objective of adding space, INSEAD used the opportunity to evaluate and upgrade all of their building systems to provide better conditions to their students and set new benchmarks in sustainability.



After a holistic review, the air-conditioning system was identified as the major hurdle in achieving their goals and the traditional approach of spending huge amounts of capital to upgrade their equipment would not deliver against their long-term operational and environmental targets.

Like many building owners in Singapore INSEAD owned and operated its air conditioning system. The campus was served by an 18-year old chiller plant and although upgrading the equipment would allow INSEAD to make use of more innovative technology to improve the energy efficiency of the system, it did not address the operational and financial objectives of the facilities team to maximize their time improving the experience for their students.

The Solution

The solution did not come from technology, but instead from a product-as-a-service business model that is giving building owners easy access to the most reliable and efficient air-conditioning systems in the world. As Dave Mackerness of Kaer says, "We proposed to James that we could meet his aspirations with Kaer Air, an air-conditioning as a service solution. It is a natural extension of the service economy which is so normal to us now with the likes of Grab and Spotify."

Kaer assumed all financial and operational responsibility of the entire air-conditioning system to deliver the ideal conditions required for the campus. This Kaer Air service was provided with no upfront cost to INSEAD who simply buys air-conditioning from Kaer through a fixed pay-asyou-use \$/RTH rate. In providing this service, Kaer is responsible for all costs associated with running the airconditioning system including the electricity used by the system.



Results

- A new global standard in air-conditioning performance delivering 50-70% improvements against key metrics
- Asia's most environmentally sustainable campus
- Singapore's highest Green Mark Platinum rating for Green buildings

James Middleditch said, "Partnership with Kaer has played a crucial role in helping INSEAD achieve its sustainability goals and to be awarded Green Mark Platinum status for our new development. We are extremely happy with the Kaer Air model as it allows us to simply buy air-con and focus on other activities, all in the knowledge that the air-conditioning system is being run at the highest possible levels of efficiency."