



The Innovation Hub

for Affordable Heating and Cooling

Lesson Learnt Report

Net-zero energy and resilient hospitals

Project IDS 13 and 14

20 May 2022

QUEENSLAND UNIVERSITY OF TECHNOLOGY



About i-Hub

The Innovation Hub for Affordable Heating and Cooling (i-Hub) is an initiative led by the Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH) in conjunction with CSIRO, Queensland University of Technology (QUT), the University of Melbourne and the University of Wollongong and supported by Australian Renewable Energy Agency (ARENA) to facilitate the heating, ventilation, air conditioning and refrigeration (HVAC&R) industry's transition to a low emissions future, stimulate jobs growth, and showcase HVAC&R innovation in buildings.

The objective of i-Hub is to support the broader HVAC&R industry with knowledge dissemination, skills-development and capacity-building. By facilitating a collaborative approach to innovation, i-Hub brings together leading universities, researchers, consultants, building owners and equipment manufacturers to create a connected research and development community in Australia.

This Project received funding from ARENA as part of ARENA's Advancing Renewables Program. The views expressed herein are not necessarily the views of the Australian Government, and the Australian Government does not accept responsibility for any information or advice contained herein.



ARENA



Primary Project Partner



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The i-Hub Initiatives



**SMART BUILDING
DATA CLEARING HOUSE**



**LIVING LABORATORIES -
GREEN PROVING GROUNDS**



**INTEGRATED
DESIGN STUDIOS**

i-Hub Lessons Learnt Report

Guidance notes for completion of the Lessons Learnt Report:

- This report is intended to be made public.
- Please use plain English, minimise jargon or unnecessary technical terms.
- Please use your organisation's branding for the report.
- The report should meet your organisation's publishing standards.
- Please use one template per each major lesson learnt and include as many as are relevant for your sub-Project. If what you learnt is more technical, this is the section to include technical information.
- The content of these Lessons Learnt Reports can be compiled (and updated, where necessary) for inclusion in the (public) Project Knowledge Sharing Report, for submission at the completion of your sub-Project.

Lead organisation	Queensland University of Technology		
Sub-Project number	LLHC5		
Sub-Project commencement date	03/03/2021	Completion date	30/06/2022
Report date	25 May 2022		
Contact name	Wendy Miller		
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Lessons learnt

Lesson learnt #1							There is no mechanism to support a national approach to NZE for public and private healthcare facilities to achieve NZE						
Category		Commercial (contract management)											
<i>Choose from:</i>		<i>Technical</i>	<i>Commercial</i>	<i>Social</i>	<i>Regulatory</i>	<i>Logistical</i>	<i>Other (specify)</i>						
Describe what you learnt about this aspect of the Project.													
<p>Most of the organisations who participated in this project had net zero emissions goals and renewable energy targets. Some were aspirational whilst others appeared to be more embedded into organisational activities. The targets were varied in scope and timing. Both the asset managers side of healthcare organisations, and clinical side, had such aspirations but there was not a lot of collaboration evidence between them. There was also little collaboration between the public and private hospital sectors; the hospital sector and aged care sector. These organisations face common challenges – impact of future climate; impact of pandemics; etc. Great collaboration – in a more formal and structured way – may help fast track the transition required.</p>													
Please describe what you would do differently next time and how this would help. What are the implications for future Projects?													
<p>There is a need for a formal national collaboration vehicle. We support the recommendations of the DEA and Australian Medical Association (AMA) for the establishment of a national Sustainable Healthcare Unit (SHU) as an appropriate vehicle for this collaboration. The SHU would conceivably incorporate clinical perspectives (DEA, AMA and medical colleges); hospital asset management perspectives (AHIA and private hospitals); aged care providers and/or overarching bodies; the air conditioning industry (AIRAH), the renewable energy industry (e.g. Clean Energy Council); NABERS; the Energy Efficiency Council (IEE) and academia. It could potentially be co-funded through the Department of Industry Science Energy and Resources (DISER), ARENA, AHIA and others.</p>													
If your Project learnings have identified any knowledge gaps that need to be filled, please state it below.													
<p>Please include any other information you feel is relevant or helpful in sharing the knowledge you learnt through this stage of the Project. This may be qualitative or quantitative and may include a graph, chart, infographic or table as appropriate.</p>													