



You are invited to attend
the i-Hub Outcomes Summit
Tuesday, May 17 from 12 noon–5pm
in Sydney and online

[LEARN MORE + RSVP](#)

The full program is available to download [here](#).

We look forward to seeing you for this event, featuring complimentary registration via Eventbrite!

IN-PERSON	ONLINE
Novotel Brighton-Le-Sands corner of Princess Street and The Grand Parade Brighton-Le-Sands, Sydney	via Zoom A link will be shared with registered attendees prior to May 17

The Innovation Hub for Affordable Heating and Cooling (i-Hub) brings together leading universities, researchers, consultants, building owners, and equipment manufacturers to create a connected research and development community in Australia.

Come and hear about the road travelled, the successes, the pitfalls, and the next steps to facilitating the HVAC&R industry’s transition to a low-emissions future that will stimulate jobs growth and support HVAC innovation in buildings.

Space is limited. Please RSVP for this event.

Improve
HVAC&R
integration with
renewables

Demonstrate
the value of
open data
platforms in
buildings

Unlock
new demand
response
opportunities

Fast-track
technology
adoption with
independent
validation in
real buildings

I-HUB'S AIMS

Engage
whole of industry
to maximise
knowledge
sharing

IHUB.ORG.AU

Build
industry
capability and
best practice



Accelerate
the energy
transition within
the built
environment

KEY PERFORMANCE INDICATORS (on track)

Validation of 8 new
technologies for
decarbonisation
of buildings

Demonstration across 3 building types:

- Improved control of HVAC&R/renewable systems by 25%
- Integrations to significantly reduce peak demand
- Increased hosting capacity of solar PV

Pathway to 100MW
of available demand
response potential

DCH open platform
delivering savings
across 6 applications

IDS process
deployed across
14 projects

Project updates

i-Hub comprises 32 individual sub-projects. Nine have been completed and 23 are scheduled to be completed by the end of June 2022.

Please click [here](#) to see an update produced for ARENA, with details on the integration of innovative platforms, models, and renewable energy technologies in the HVAC&R sector.

Living Laboratories	<p>Technology evaluations were continuing in all four labs, with eight to 12 technologies expected to be evaluated within the i-Hub period. The ACT schools living laboratory, in partnership with ACT Education, will extend the Living Laboratory evaluations a further 16 months and include an additional technology trial of gas boiler replacement by CO₂ heat pump – creating the first all-electric school in the ACT.</p> <p>The two sector-wide projects have established the Renewable Energy and Enabling Technology and Services Evaluation Framework (REETSEF) for each sector and are now developing the roadmaps to tie it all together. The roadmaps will draw on all the activities undertaken – technology evaluations as well as sector-wide activities – to present a guidance document and checklist that will assist organisations to develop a bespoke renewable energy and enable a technologies plan for individual buildings or sets of assets in their portfolios.</p>
Integrated Design Studios	<p>All 14 studios have now completed “in semester” design work. Six are finishing feasibility vetting and final reporting, which is on track to issue by the end of June.</p> <p>All building typologies completed to date show that significantly reducing a building’s operational energy compared to BAU, through correct and early application of integrated design, is achievable.</p>
Data Clearing House	<p>There are nine active DCH sub-projects, with all scheduled for completion. Under DCH1, the Data Clearing House platform is up and running with a Plug and Play IPMVP Application for building baselining. As well as developing the platform, DCH1 is continuing its air conditioning DR mapping work and is about to commence a chilled water thermal inertia trial. The other eight sub-projects are running a series of demonstrations and bringing buildings and applications to the platform.</p> <p>Up to 60 buildings have been pledged for connection, and up to eight applications are deployed or in development. The team is switching its focus to the needs of system integrators. The DCH team will create a range of guidelines and implementation material, with a plan to establish a “panel” of trained integrators to support/facilitate the deployment of the platform.</p>

Leaders’ profiles



Dr Wendy Miller, Affil.AIRAH
Associate Professor, School of Architecture and Built Environment
Queensland University of Technology

What is your role within the university?

My role is to initiate and conduct applied research relating to buildings, their energy services and energy systems, and occupants.

Why did you get involved in the i-Hub?

I have been involved in the i-Hub since the early conceptual stage because of the opportunity it presented to link researchers with product manufacturers and building owners and operators – all with an interest in addressing climate change, renewable energy, and energy efficiency.

What do you expect or what you are getting out of the i-Hub and how can it be used in the future?

The i-Hub has provided me great insight into the energy issues associated with healthcare facilities, and the complexities of designing, building, and operating healthcare facilities to meet their primary need (provision of healthcare) while also addressing climate change. The i-Hub projects have enabled a deeper and broader connection with private and public healthcare providers, and the resultant mutual trust and respect, which will lead to ongoing research collaboration.



Dr Georgios Kokogiannakis, M.AIRAH
Associate Professor, Sustainable Buildings Research Centre (SBRC)
University of Wollongong

What is your role within the university?

I am an Associate Professor at the Sustainable Buildings Research Centre at the University of Wollongong, where I teach and do my research. We have a strong connection with industry, so I am often lucky to work on projects that investigate challenging issues related to the built environment. One of those projects is the i-Hub.

Why did you get involved in the i-Hub?

First, there are the reasons around personal development. Every project is a learning opportunity for me, because we collect and analyse data and I get to collaborate with people I can learn a lot from. The i-Hub is full of such people.

The i-Hub is a challenging project that includes several sub-projects with strong “demonstration of benefits” components. It is rewarding to see the very many stakeholders we worked with in both the Living Labs and the integrated design studios being happy with the progress of the projects so far. Our partners in the Living Lab projects, for example, are now asking us to investigate ways for extending these projects beyond the i-Hub official timeline.

What do you expect or what you are getting out of the i-Hub and how it can be used in the future?

Personally, I met many interesting people from industry and government, and that can lead to further collaborations. Even over the online knowledge sharing presentations – which are not ideal for discussing potential collaborations with people – we were contacted by several innovative companies

in the space. But apart from our own benefits, the projects deliver new knowledge and demonstrate the benefits of HVAC technologies for better using the available renewable energy on each site, such as shifting demand, etc.

In the Living Lab projects we are quantifying energy-related KPIs across the school and health sectors. The school sector stakeholders, for example, have expressed a strong interest in the outcomes of the projects so that they can use them to demonstrate the feasibility of moving towards a full electrification of the buildings in this sector.

Stay connected with the Innovation Hub



This project has received funding from ARENA as part of ARENA's Advancing Renewables Project. 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.

For more information, visit [this page](#).

AIRAH – National office
James Harrison Centre
Level 3/1 Elizabeth St Melbourne Vic 3000
T: (03) 8623 3000

[View this email in your browser](#) | [Update your mailing preferences](#) | [Unsubscribe](#)

