



Energy  
efficient,  
sustainable  
cooling for hot  
& humid  
climates





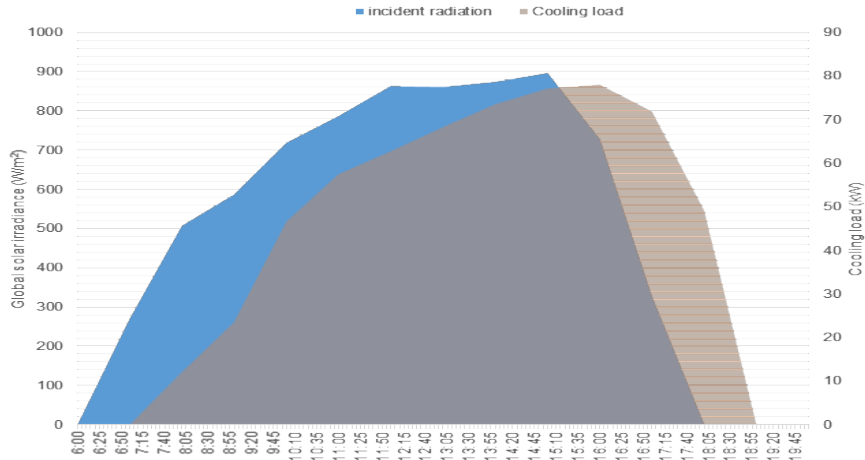
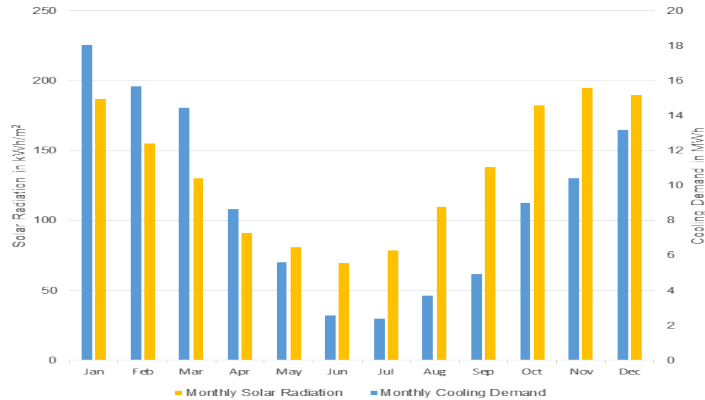
# The challenge is addressing: **growth, warming & humidity**

**200 GW  
by  
2040**

**300M+  
Units by  
2040**

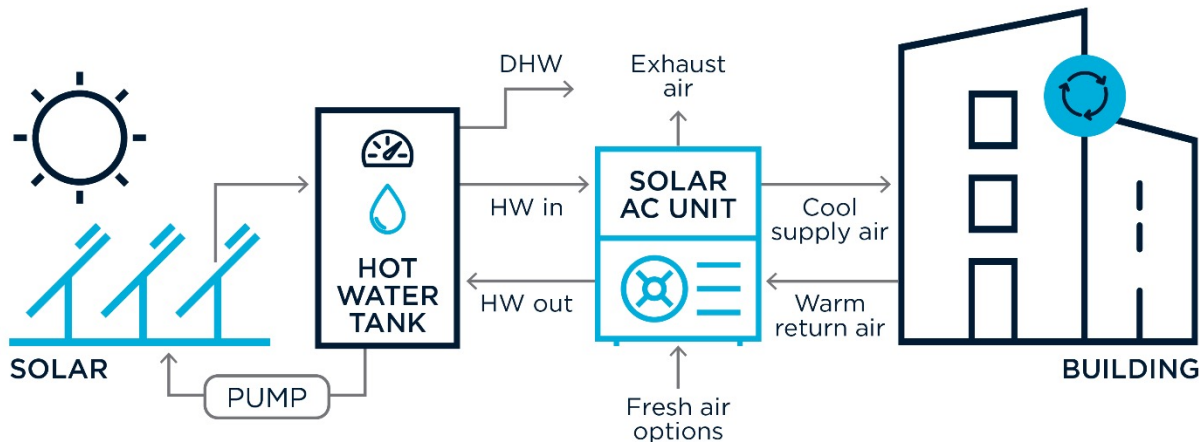
**Asia  
(tropic) =  
humidity  
>60% RH**

# Solar cooling : natural alignment



Still challenges remain : peak demand reduction, initial system cost

# Solar air conditioning



## Key benefits

- 1 **Solar driven** - lower grid electricity use
- 2 **Free hot water and heating**
- 3 **Fresh air cycling** (indoor quality improved COVID-19 support people's return to work to offices)
- 4 **Humidity benefits**



# Project partners & role



CSIRO : overall project lead

SJ : Local project lead



ITB : M&V partner

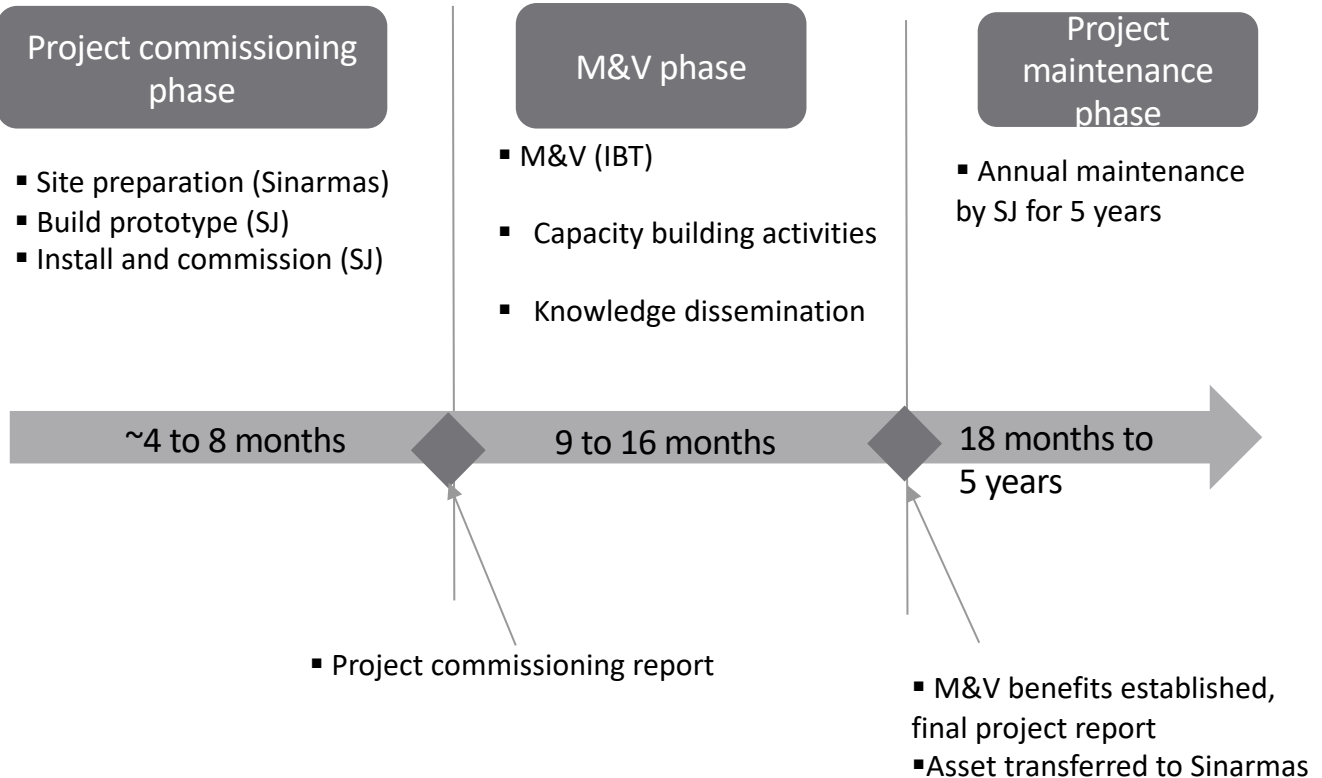


Sinarmas : pilot site owner





# Project timelines





# Our roadmap



## Done

- Develop technology & invested in
- Demonstrated in humid environment
- Understand supply-chain
- Understand market-barrier & have develop plans to address

## Doing (with TIC Grant)

- Pilot demonstration in development context (Indonesia)
- Securing early customers & partners
- Business model development, testing & refining
- Secure supply chain (emerging Asia)

## Next

- Demonstrate across emerging and developed Asia
- Trial & validate business model across the region
- Secure global supply chain
- Global expansion

# Thank you

**Energy Business Unit**

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