

# SEE HOW COMPANIES CUT UP TO 50% OF THEIR COOLING ENERGY COSTS\*

TURBOCHARGING THE EFFICIENCY OF REFRIGERATED AIR CONDITIONING SYSTEMS

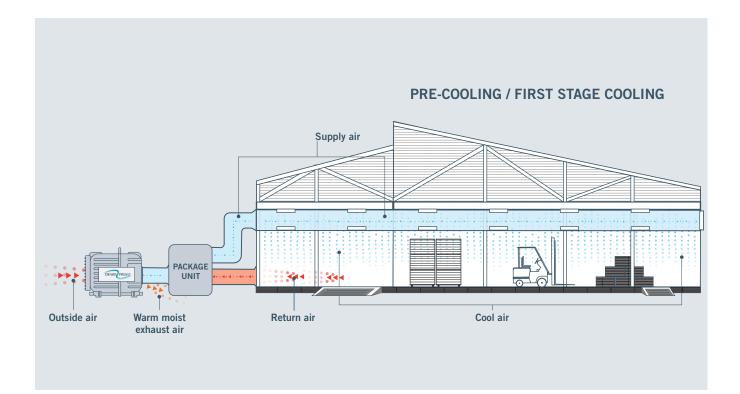
\*Compared to refrigerated systems performing the same duty. Based on actual case study data in pre-cooling applications.

#### THE CONCEPT OF PRE-COOLING AIR CONDITIONING SYSTEMS

Retro-fitted to existing or new reverse cycle air conditioning systems, Climate Wizard can provide pre-cooling or supplementary cooling into any commercial space with exceptional results. Acting like an efficiency turbocharger, the savings are immediate – up to 50% in cooling energy use.<sup>^</sup> Climate Wizard has been delivering these results as a pre-cooler within HVAC installations across Australia and around the world.

#### **How Pre-Cooling Works**

The key is to hyper-efficiently pre-cool air before it enters the refrigerated air conditioning system. Compressors don't need to struggle in extreme summer conditions when fed with pre-cooled 18°C degree air from Climate Wizard. This significantly reduces the load on the system's energy-hungry compressors.



### **CLIMATE WIZARD DELIVERS ROI IN MULTIPLE WAYS**

Beyond the immediate savings from using less energy for cooling:

- Significantly reducing the load on compressors extends the compressor's life, giving an aging system a new lease on life and delaying significant capital outlay.
- If you plan for a new refrigerated air conditioning system, Climate Wizard's boost to performance means the specified refrigerated system will be significantly downsized. System life is also extended with less maintenance required, due to reduced load and hours of operation with the refrigerated plant.
- Climate Wizard filters out particulates, improving indoor air quality and the comfort of occupants and helping to reduce sick building syndrome.
- Climate Wizard can also be used as the primary source of 100% fresh, cool, dry air, leaving the refrigerated system to run only when necessary.
- The hotter the environment gets, the better the performance. Never have your refrigerated cooling system struggle in extreme heat and consume excessive energy with less cooling performance.

#### INDUSTRY SECTORS WHO ARE USING CLIMATE WIZARD AROUND THE WORLD

- Food service / Restaurants
- Education
- Cinemas
- Retail / Showrooms
- Automotive / Dealerships
- Health & Aged Care
- Government
- Sports / Leisure Centres
- Manufacturing / Industrial
- Supermarkets
- Wineries
- Offices & Data Centres



#### **PRE-COOLING PERFORMANCE DATA OF CLIMATE WIZARD**

Location	Design condition	CW-H10		CW-H15 / P15		CW-80	
		Supply Air Temp (°C)	Pre-cooling Performance (kW)	Supply Air Temp (°⊂)	Pre-cooling Performance (kW)	Supply Air Temp (°⊂)	Pre-cooling Performance (kW)
Extreme	42 °C DB / 21 °C WB	19	23	18.4	32	18.9	180
Temperate	37 °C DB / 19 °C WB	17	20	17.4	27	17.9	153
Sub-Tropical	31 °C DB / 23 °C WB	22	9	21.7	12	22.2	64
Tropical	33 °C DB / 26 °C WB	25	7	25.7	10	26.2	55

#### THERE IS A SOLUTION TO SIGNIFICANT ENERGY REDUCTION. THIS IS YOUR NEXT STEP TOWARDS ULTRA-LOW USE OF ENERGY.

Up until now, you might have thought nothing more could be done with refrigerated air conditioning when it comes to energy demand reduction.

Some of the world's most experienced HVAC engineers and sustainability experts have performed extensive technical due diligence, including leading universities in the US and Australia. We have multiple case studies and engineering fact-based results to share.

### **NEED MORE INFORMATION BEFORE CONTACTING US?**

GO TO: SEELEYINTERNATIONAL.COM/PRECOOLING SEE HOW COMPANIES CUT UP TO 50% OF THEIR COOLING COSTS.



#### YOUR BUSINESS CASE IS WAITING. THESE SIMPLE QUESTIONS WILL HELP US DEMONSTRATE THE IMPACT ON YOUR COMPANY'S COOLING ENERGY USE:

# Refrigerated air conditioning system to be pre-cooled

If existing system, what is the approximate age and output?

If new system, what output is the efficiency of the system?

## For existing air conditioning systems

How much maintenance is required and what is it per year?

What is the current cost of energy per year?

At what temperature does the system begin to struggle?

How do you rate its performance for cooling, energy use and air quality? *1 (poor) 2 (needs improvement)* 

3 (fair) 4 (good) 5 (excellent)

#### Your building/facility

What is your outside air requirement?

How many people visit/work there in 24 hours?

What causes any significant peaks in the indoor heat profile?

How do you rate the air quality?

Do you wish to upgrade to achieve a NABERS, or Green Star rating?

Is there a lot of people entering and exiting the building?

For more information contact our sales team to see how Climate Wizard can work as a pre-cooler to deliver significant energy savings, new green credentials and the highest indoor air quality.

# PHONE: 1300 991 245 GO TO: SEELEYINTERNATIONAL.COM/PRECOOLING





For more information, please call 1300 991 245 or email commercial@seeleyinternational.com



#### We provide full technical support to ensure optimal design for each application.

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