NET ZERO
CARBON & ENERGY

Intelligent Energy
+
Combatting Heat

AN INITIATIVE BROUGHT TO YOU BY:

NET ZERO
CARBON & ENERGY

one green solutions
energy waste water

OceanBreeze
AIR CONDITIONING & ELECTRICAL

good earth group

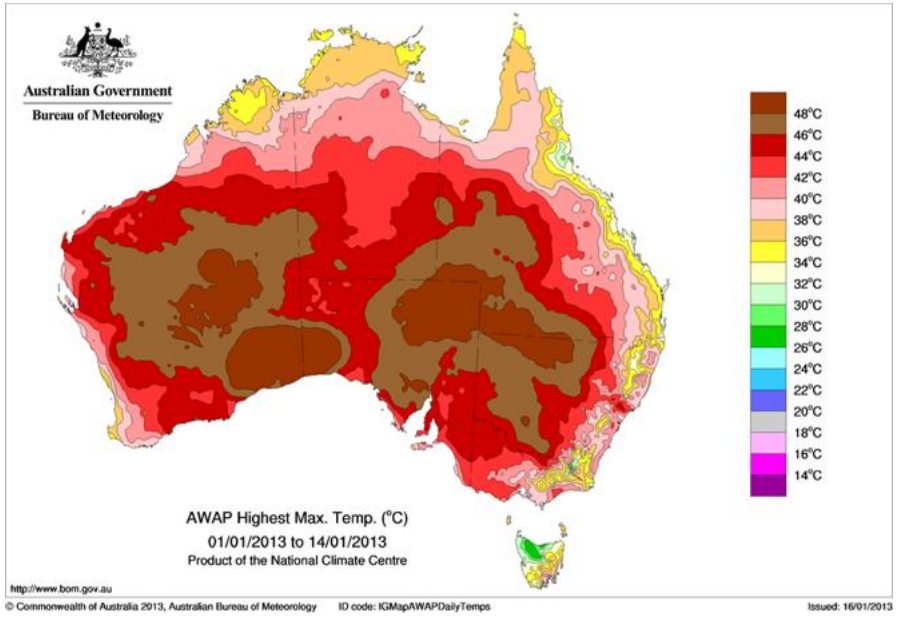
NET ZERO
CARBON & ENERGY

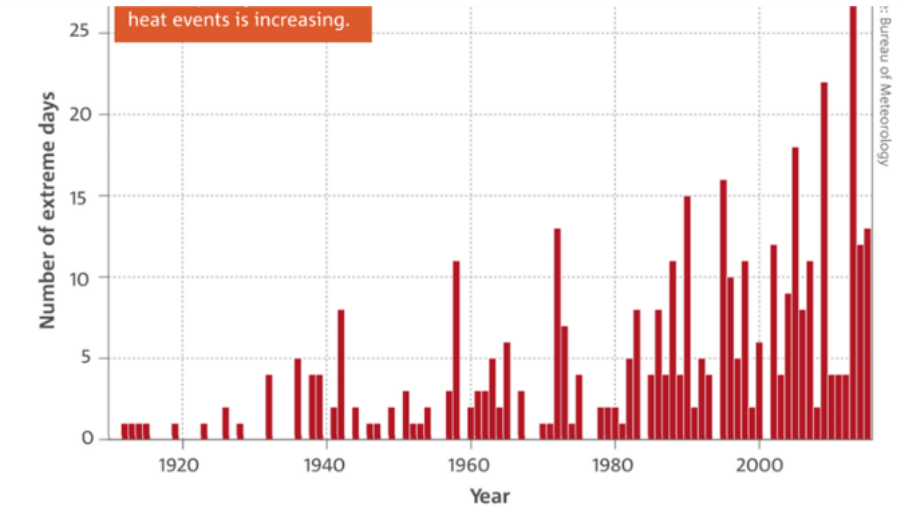
COMBATTING EXCESS HEAT

Since the year 2000, there has been an increase in the amount of extreme weather events particularly with extreme heat days.

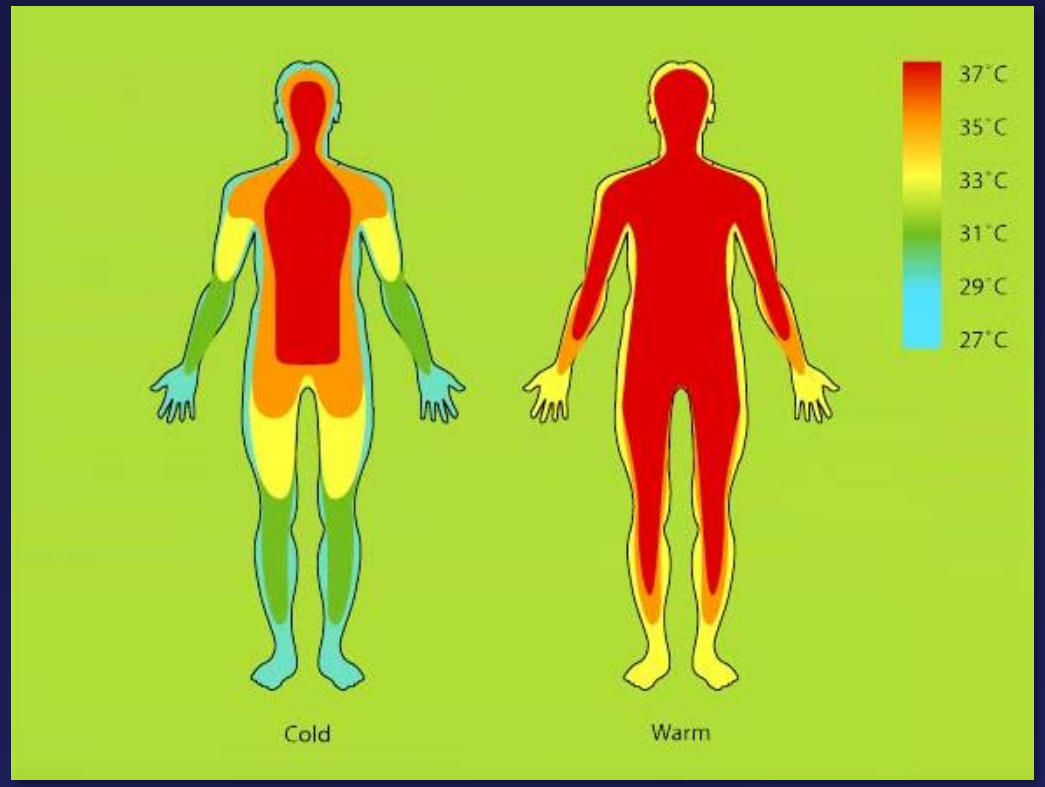
These periods cause extensive problems to the way our existing buildings perform, from energy levels, building stresses and personal comfort. Australia has always been a hot dry continent, but this is now increasing.

With increases in temperature and the escalation in extreme heat days, the opportunity is to introduce a range of products specifically designed to control these extremes without impacting on light or view, while reducing energy costs.





NET ZERO
CARBON & ENERGY



THE ISSUES

Australian buildings have been designed to keep the cold out, but not heat. Anything built pre-2003 has no energy ratings, so typically the buildings have a considerable amount of glass.

> Glass is a thermal hole for heating or cooling; the bigger the windows, the bigger the gains or losses.

With the onset of climate change, increases in heat and extreme heat days sees most homes struggling with excess heat. This has typically been combated by using air conditioning to make the internal area of the house more comfortable. But as temperatures rise, so too do energy costs and, in the case of extreme heat waves, this solution can be lost when the grid is closed down.



Even with significant improvements in building design there are still issues in staying cool in your home or business.

NET ZERO
CARBON & ENERGY

We combat the heat gains with a range of solutions that offer the necessary benefits to treat windows, walls and implement air conditioning.

Our one-off solution for domestic homes and businesses means:

- ✓ minimal running costs
- ✓ no issues with blackouts
- ✓ a return on investment

In spaces like schools and day care facilities we can control both the heating and cooling in the space required particularly during day light hours.

This document spells out the products that will make these differences to your house or business for the next decade.

NET ZERO
CARBON & ENERGY

GLASS INSULATION



Our Window Insulation will reduce the heat load in your house of business by 72%, reduce glare by 80% and UV by 90%.

This revolutionary product was developed for the space industry by NASA. It is a best of class window treatment that takes existing single glazed windows, outperforms double glazed windows at a fraction of the cost, and is effective in both the heating and cooling of spaces.

"The installation of these blinds have reduced the heat entering Lismore Library through the windows on every floor.

"My office windows face south and in summer the heat coming from the sun in its south-westerly position made the room very uncomfortable, even with air conditioning. Now, with these blinds, the room is at the set room temperature, even in the afternoon.

"The public areas of the Library are comfortable, and the blinds have also taken the glare from the windows, allowing those using their devices to do so in comfort.

"I recommend installation of these blinds to reduce heat and glare."

– Lucy Kinsey – Head Librarian, Lismore Regional Library NSW



NET ZERO
CARBON & ENERGY

FREE COOLING & HEATING SOLAR AIR CONDITIONING WITH PHI AIR CLEANING

Solar Air Conditioner – This relatively new development has just been released in Australia in last 12 months. Initial trials in NSW and QLD show that these units remove about 80% of the ongoing costs of running an air conditioner through the day. The units can work in inclement weather as well as work during daytime blackouts.

With a maximum operating range of 52 degrees Celsius and Bluetooth control, pre-cooling rooms has never been free before until now. This is also applicable for heating.

PHI Air Cleaning continuously cleans the air intake within the space. These units are a hybrid ACDC unit or straight off grid.







"These units are incredible! I can get up to 11 hours of free cooling in the summer months, which has saved me a considerable amount of money."

– Mark Edwards – Managing Director, Raycon QLD

NET ZERO
CARBON & ENERGY

AIR CONDITIONING AIR BALANCING

Destratification fans can reduce your ongoing air conditioning costs by 26% for cooling and 35% in heating.

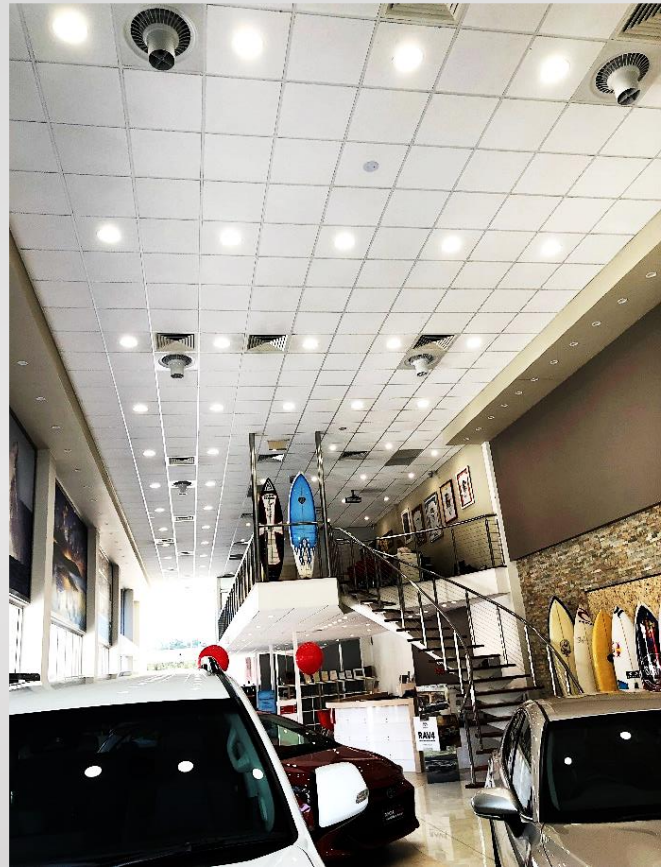
Air Pear fans circulate the heavy, dense, cold air a lot quicker and much more efficiently than regular air handling units, ceiling fans and assorted duct fans.

Regular units are often located many metres away from the space, meaning while the fans are circulating cool air, they are also having to push it along metres of ducting - an inefficient and costly process.

When using our thermal balancing fans in summer cooling mode, the air conditioning system's compressor operates more efficiently, so it is switching off the AC Unit.

> "I've always run the air conditioning with the ceiling fan but it still didn't mean I had the best working conditions; it was either still too cold in the lounge room or too hot it the kitchen. Once the air balancing fan went in, it made everything coordinate perfectly and meant I had one less thing to worry about. They work brilliantly."
>
> - Nadine the Cake Queen, NSW





NET ZERO
CARBON & ENERGY

COMBINING TECHNOLOGIES

Initial studies have led to the following results:

- ✓ 80%+ reduction in daily air condition costs
- ✓ 8-10 C Degrees of heat reduction in the hottest glassed spaces
- ✓ Improved indoor air quality & thermal comfort
- ✓ Minimum 5 year warranties on fans and air conditioning, 7 Year Warranty on the window insulation.

We consider this to be the best and most cost effective way to protect your home and business from the effects of excess heat, and significantly improve thermal comfort with significantly reduced running costs.

NET ZERO
CARBON & ENERGY

INTELLIGENT ENERGY +

AIR CONDITIONING
REMEDIATION



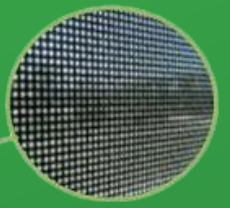
SOLAR POWER &
BATTERIES



SOLAR ACDC HYBRID
AIR CONDITIONER



WINDOW
INSULATION



ENERGY
MONITORING

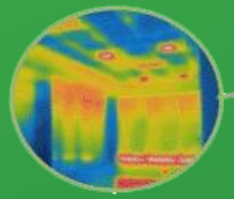




LED LIGHTING



ROOF & WALL
INSULATING
COATINGS



MOTOR CONTROL



DESTRATIFICATION
FANS



DOMESTIC HOMES -
AUSTRALIA