Z Z C LIVING

THE STCRY

Seven years ago Australians were building the biggest free-standing homes in the world. These homes were big 'Land Cruiser' type buildings, 'McMansions' that fill up a whole plot of land – fence to fence.

Buildings account for approximately 20% of total energy use and 18% of total greenhouse gas emissions in Australia. As consumers, we sometimes display an unrealistic faith that the products we buy are safe, effective and economical. Many of us trust that companies have our best interests at heart, and that government will protect us from harm. And it seems the bigger the price tag, the more naïve we can be.

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Housing is our biggest expense, whether we are renting or buying – and yet often we drive our heads into the sand and blindly believe that buying a home will not hurt us physically or financially.

Now, more than ever, we need to be conscious of what we purchase, especially when it comes to the place we spend so much of our time.

We need to start to demand better home-buying options with optimum energy efficiency, comfort, clean air, durability and affordability.



New homes are simultaneously better and worse than ever before. With the advent of better and more modern building codes over the years, homes are somewhat more energy efficient than in the past. In Australia, we are now required to have a Six Star minimum efficiency energy rating in order to obtain a building permit. Some of the variables that are considered in this rating include the average level of insulation, use of a water tank or solar hot water boosted by electricity or gas, and high efficiency lighting.

While these improvements might shave a bit from the energy bill, most new homes fall woefully short when it comes to common energy efficiency measures, such as proper insulation and systematic air sealing. Insulation is often not sufficient or properly installed (or both). Air sealing is the most cost effective way to improve energy performance, reduce uncomfortable drafts and the protect the home from condensation problems.



Homes and furnishings are packed with toxic chemicals from formaldehyde and VOC's to flame retardants which can cause allergies, sickness and other health challenges. Indoor combustion, in the form of gas stoves, gas furnaces and gas water heaters, is standard in many homes.

This is inherently problematic; the toxic byproducts, such as carbon dioxide, sulfur dioxide, carbon monoxide, and oxides of nitrogen must be actively removed for a home to maintain healthy indoor air. The answer to better health lies not in adding more alarms to detect and warn us of these poisons, but in building homes that do not contain this fundamental threat from indoor combustion from toxic materials and finishes, and from letting polluted outside air inside without filtering it.

One study found that "inhabitants of energy-efficient, mechanically ventilated homes rated the quality of indoor air and climate significantly higher" than those living in standard homes.

Most builders offer only the sizes, configurations and finishes that maximise their own sales and profits. As a result, consumers suffer a significant lack of choice. The real estate and housing industry bases their pricing on square metre, flashy finishes and bulky builds, meaning homebuyers are often stuck with homes that they fell in love with, but then cost more to own. Beyond that, they are unhealthy, need more maintenance and repair, are less comfortable and often unnecessarily noisy.

This is exactly why **ZERO** has developed a creative and elegant solution. Our cutting edge design ensures you have everything you need and nothing you don't.

No wasted spaces, excess rooms. The optimum of design, uncompromised living at its best. Less is definitely MORE.



WHAT WE DC

Through collaboration with Swinburne University, **ZERO** has engineered the world's first inner urban **ZERO** Energy homes that can be built just about anywhere in the world. **ZERO** builds some of the smallest homes designed to optimize every inch of space. This is done through clever storage systems, lofty ceilings, full kitchens, non-toxic paint, natural materials, more garden space for inner urban areas, inside/outside living, creating little nooks and crannies for reading, studying and meditation (to name a few). It's the design trend for a modern age; a triumph of form that never sacrifices function. **ZERO** has achieved successful smaller space living, and light is an important factor. **ZERO** articulates the inside/outside living areas as functional yet beautifully designed. The unique use of light, space and storage makes every room a delight to be in.

There is still the ability to have two and three bedrooms in these smaller size homes, but space is used effectively and specifically for the function of the home. You have flexibility and sustainability of its build, combined with the fact that you will no longer be paying for electricity AND live in absolute comfort... it doesn't get any better than that.

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ZERO homes are not just all shine and glitz - which tends to be what is often marketed to consumers. These homes are built with a solid structure, built for energy efficiency, durability and for long lasting value. **ZERO** puts in stone benchtops, beautiful natural wooden floors and Miele appliances - and that is merely the icing on a strong foundation.



The construction and use of buildings place significant pressure on the environment. Buildings consume 32% of the worlds resources, including up to 40% of the worlds energy consumption and 12% of worlds fresh water. In addition building produce 40% of waste going to landfill and contribute to 40% of air emissions.

(OECD 2003, Environmentally Sustainable Buildings: Challenges and Policies, OECD, France)

ZERO was founded in response to where we find ourselves today. The world has changed immensely over the past 30 years, the cost of living the freedom of living – long showers, heating the home, larger blocks of land - much has changed.

The pace of life has also changed; homeowners are concerned about heating and cooling their homes, due to the rising energy costs. **ZERO** understands the expense of electricity in our homes. We know how stressful the BILL SHOCK can be. It is a terrible reality homeowners experience every day and it decreases the freedom, health and comfort of the population.



The freedom to be cool in summer and warm and toasty in winter should be our fundamental right.

To be healthy and happy in our homes is what **ZERO** is all about.

THE ZERC DIFFERENCE

A **ZERO** energy home is just like any other home, with a world of added benefits. **ZERO** homes are better insulated, more durable, and designed from the roof down to be built better. These homes have thicker, more air tight walls, advanced window technologies, and promote fresh filtered air. They are healthier homes built to a higher standard. The **ZERO** design allows homes to circulate the cleanest air, and the temperature is always consistent and comfortable. These homes of the future offer their residents allergen-free and toxin-free environments, and a healthy sanctuary for you and your family to gather.

These homes use ZERO Energy.

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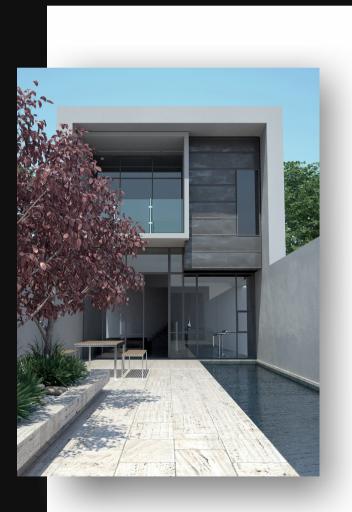
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These homes have ZERO Energy bills – in fact, you get paid for your excess energy.

These homes use ZERO Energy.
These homes have ZERO Energy bills - in fact you get paid for your excess energy.

These homes produce ZERO greenhouse emissions – in fact they offset the equivalent of 2-3 cars per ZERO Energy home.

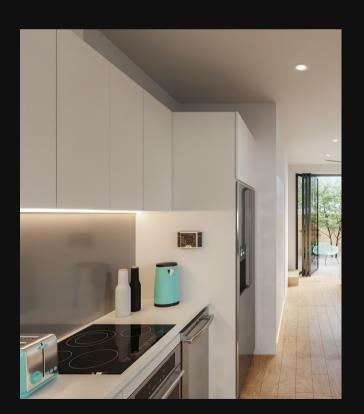
These homes offset the equivalent to what 11 trees offset in carbon per month - not per year - but per month. So five homes offset 55 trees per month, and we will quickly start to see that progress and sustainability in our neighbourhoods.



A house with a standard solar energy system installed is still required to be connected to the grid. With your home producing 100% sustainable power, and producing more than your home is using (and storing), it needs to go somewhere - and goes back to the grid.

When that grid experiences an outage, your system will too, to ensure the safety of anyone working to repair the grid. **ZERO** homes however, **don't suffer from black outs, brown outs or planned outages** due to their backup energy system.





ZERO Energy housing sets a new benchmark for sustainable living. **ZERO** houses don't use any fossil fuels to power them, AND they produce and store (using tri battery technology) 100% sustainable and renewable power. This stored power can then either be exported to the grid or to supply 100% renewable power to future EV smart charge bollards - located on the nature strip outside our **ZERO** homes (STCA). These bollards are used to power EV cars pared on the street (i.e. public EV charging – using excess solar power from the ZERO Energy Housing). Alternatively, you can simply charge your own EV with your own 100% free and 100% sustainable power.

WHY ZERC?

A **ZERO** home will save you money, from the moment you move in - and ten years down the track you will be still paying **ZERO** energy bills in comparison to a standard built home. Imagine in ten years time still paying the same price to keep your lights on, your heating and cooling providing you with your ideal climate – and no increase in costs as they will have remained and always will remain **ZERO**.

Be a pioneer for the future. These cutting edge designs, technology, sustainability and energy efficiency will allow you to feel good, knowing that you are building a legacy for yourself and your family. The **ZERO** homes power consumption is fully self contained, produces no greenhouse gases and incurs **no energy bills**.

On top of that, if you decide to sell your **ZERO** home, you will reap the benefits at the point of sale as well. As more homebuyers become interested in the benefits of ecofriendly solutions, demand for properties with the **ZERO** system implemented will continue to grow exponentially. This means you get to enjoy the benefits now and will benefit again when you sell your home.

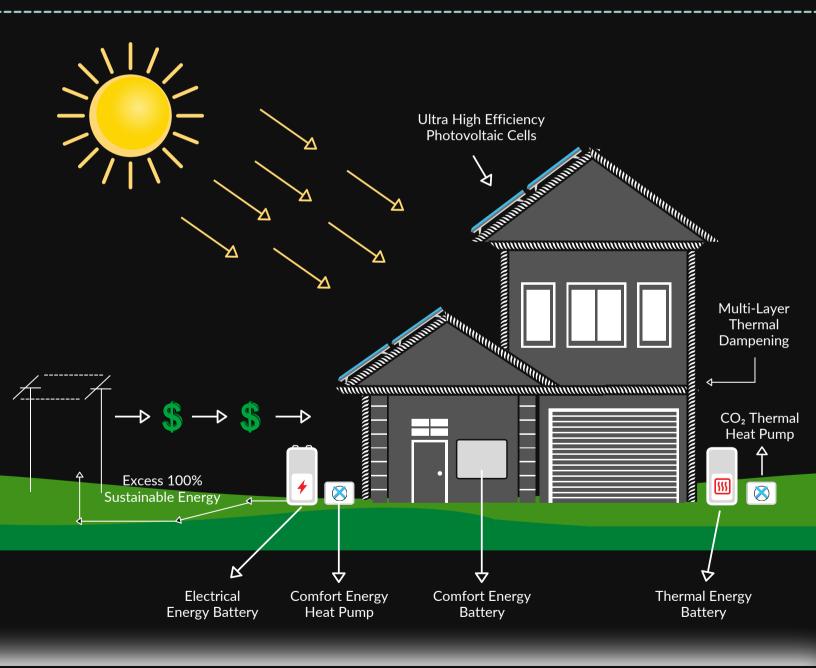


The following page shows a diagram example of our bespoke **ZERO** design.

BESPCKE ENGINEERING

Using Tri Battery Technology

This **ZERO** home is a fully engineered micro power station with Tri Battery Technology, micro inverters, window technologies, heat pumps, highly effective heating and cooling systems, and efficient water heating technologies.



SUMMARY

ZERO combines the best of both worlds - 100% energy independence but still connected to the grid. These inner urban 1,2 or 3 bedroom **ZERO** energy homes essentially cost no more to build, and nearly every house can be engineered and designed to be **ZERO** energy from the roof down prior to building. **ZERO** gives you the opportunity to allow you to live a worry free life, independent from government and corporate decisions, free from black outs, and the freedom to turn on your air conditioner as high and as long as you want.

ZERO brings you freedom and the possibility to use your savings for the delightful things we live our lives for. **ZERO** is both your and our legacy to future generations.



