

## Regeneration at Context

Sustainability has always been a key factor in the business success and longevity of Context. Our approach goes beyond social responsibility projects or educating people on practical measures we can take to make meaningful change.

Sustainability is no longer just green-wash – it needs to be measurable and have demonstrable lifecycle, energy and social returns. Returns that we can show our team, our clients, and the world.

In 2022, we committed to a shift from 'sustainability' (the practice of 'do no harm' or 'do less harm') to 'regeneration,' wherein we actively aim to solve the climate crisis by creating places and environments that regenerate our world socially, economically, and ecologically.

Our role is to show how little changes can become big environmental gains, and to work out which ones are right for our clients and their projects.

Buildings and construction account for nearly 40% of carbon dioxide (CO2) emissions. What we do in the construction industry has a huge impact on our surroundings. Part of our role as responsible designers is to reduce these emissions.

It is our duty and responsibility as a group of individuals, and as a business, to design for life, and improve the environment we live in. We can do more than just reduce our impact; we can make positive gains through new technologies and smart thinking.

As founding signatories of Architects' Declare (you can read the Declare at the bottom of this document) pledging to advocate for faster change towards regenerative design practices, we are ready to take our clients, suppliers and people we work with on the journey towards a more sustainable, better future.



### We have a team skilled in a wide variety of sustainability disciplines:

- Homestar and Green Star: Homestar is designed to be an independent rating tool for assessing the health, efficiency, and sustainability of homes across Aotearoa. Homestar is a holistic tool to rate a home's performance and environmental impact. A 10 Homestar rating recognises world-leading standards for design, construction and efficiency in operation. A 6 Homestar rating recognises a home that has been built above the current standards set by the New Zealand Building Code. Gaining a Green Star qualification shows knowledge leadership in healthy, less polluting green building practices. At Context, we have several sustainability experts.
- Craig Birch: Principal Registered Architect -Green Star Accredited Professionals Status
- Ben Frost: Associate Passive House Designer -Homestar Designer
- Peter Quenault: Associate Homestar Assessor
- Judith Taylor: Associate Homestar Assessor

We also focus highly on energy modelling and lifecycle assessments to reduce operational resources and energy use across a building's lifecycle. This also incorporates sustainable specification writing in all aspects of our designs.



# Ngā Kāinga Anamata

Supporting our commitment to sustainability

Kāinga Ora asked us to be involved in a research and development pilot programme to change the future of sustainable residential development. The organisation's ambition was to understand what high-performance; low-carbon social housing would look like using New Zealand-sourced materials and building systems.

We designed five almost identical apartment buildings, each from a different structural system: steel, concrete, light frame timber, mass/cross-laminated timber and a hybrid combination of light and mass timber.

Sustainability and lifecycle carbon mitigation was at the forefront from the programme's inception, along with aspirations for each building to achieve Passive House certification and be net-zero energy.

5 Systems has continued to evolve and has since been gifted the name Ngā Kāinga Anamata, te reo Māori for 'Homes of the Future.' The data and learnings from this programme will influence and catalyse system transformation in the construction industry for years to come.

Ngā Kāinga Anamata featured at the COP26 Built Environment Virtual Pavilion Build Better Now - one of just 17 exemplary sustainable projects selected from around the world for the virtual reality (VR) online pavilion. You can find out more by visiting https://virtualpavilion.co/nga-kainga-anamata

#### Architect's Declare Manifesto

We have signed up to the Architects' Declare Manifesto, so our work and services need to embody and exemplify the Architects' Declare principles.

The twin crises of climate breakdown and biodiversity loss are the most serious issue of our time. Buildings and construction play a major part, accounting for nearly 40% of energy-related carbon dioxide (CO2) emissions, whilst also having a significant impact on our natural habitats.

For everyone working in the construction industry, meeting the needs of our society without breaching Earth's ecological boundaries will demand a paradigm shift in our behaviour. Together with our clients, we will need to commission and design buildings, cities and infrastructures as indivisible components of a larger, constantly regenerating and self-sustaining system.

The research and technology exists for us to begin that transformation now, but what has been lacking is collective will. Recognising this, we are committing to strengthen our working practices to create architecture and urbanism that has a more positive impact on the world around us.

#### We will seek to:

- Raise awareness of the climate and biodiversity emergencies and the urgent need for action amongst our clients and supply chains.
- Advocate for faster change in our industry towards regenerative design practices and a higher Governmental funding priority to support this.

- Establish climate and biodiversity mitigation principles as the key measure of our industry's success: demonstrated through awards, prizes and listings.
- Share knowledge and research to that end on an open source basis.
- Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.
- Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice.
- Encourage life cycle costing, whole life carbon modelling and post occupancy evaluation as part of our basic scope of work, to reduce both embodied and operational resource use.
- Adopt more regenerative design principles in our studios, with the aim of designing architecture and urbanism that goes beyond the standard of net zero carbon in use.
- Collaborate with engineers, contractors and clients to further reduce construction waste.
- Accelerate the shift to low embodied carbon and non-toxic materials in all our work.
- Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail.

Aotearoa NZ
Architects
Declare Climate
& Biodiversity
Emergency