

THE CHALLENGE:

- ▶ HIGH EMISSIONS
- ▶ HEATING CLIMATE
- ▶ UNEMPLOYMENT
- ▶ HOUSING CRISIS
- ▶ DECLINING BIODIVERSITY
- ▶ LINEAR ECONOMY
- ▶ ECONOMIC INSECURITY
- ▶ POLLUTED WATERWAYS
- ▶ DEGRADING SOIL

TRANSITIONS: SOCIAL INFRASTRUCTURE:

- ▶ HEALTHY PUBLIC HOUSING
- ▶ GREEN HEALTHCARE FACILITIES
- ▶ PUBLIC HEALTH INVESTMENTS
- ▶ LOW-CARBON HEALTHCARE PRODUCTS
- ▶ TARGETED SKILLS DEVELOPMENT
- ▶ GREEN EDUCATION FACILITIES



Transition: Social Infrastructure

CHALLENGE STATEMENT

Robust social infrastructure will be critical in enabling all of the transitions identified in this document. Transitions in social infrastructure will help create jobs, support health outcomes, reduce health and social inequalities and support New Zealand's low carbon transition. Key components of social infrastructure (including housing, education and health) are intimately connected. Closer integration of spending and desired outcomes can improve the total value realisation across the social infrastructure system. For example, securing long term employment through better education outcomes plus sustained levels of spending in a particular sector by region, and supporting health through better housing stock can lead to better social outcomes and reduce the cost of treating illness.

KEY OPPORTUNITIES

Beca buildings, healthcare, and community shaping specialists have identified key social infrastructure transitions that will support New Zealand's recovery and the transitions presented in this thought-piece.

Investment in healthy public housing: Accelerating programmes such as insulating homes,[1] and other energy efficiency measures will have co-benefits including supporting the healthcare focus, improving equality and creating jobs. Accelerated investment in public housing developments that are integrated with land-use and transit planning will create jobs in the short-term, plus support increased patronage of public transport and better access to housing and jobs in the long-term.

Investment in green healthcare facilities: Healthcare is the largest public sector electricity consumer in New Zealand.[2]

The majority of hospitals also use fossil fuels as a heat source and for back-up electricity generation. The indoor environment in hospitals are key to provide the best outcomes for patients and to support staff productivity and wellbeing.[3] The design of new healthcare facilities should be aligned to the potential outcomes of the Ministry of Health's working group for 'Greening Healthcare Infrastructure Guidance', while balancing capital cost so that money saved is available to deliver healthcare outcomes. Investments in existing healthcare asset upgrades including mechanical system upgrades, building and envelope upgrades, enhanced maintenance and fossil fuel transitions through Wave-3 will support the creation of jobs, improvements in healthcare environments, reductions in greenhouse gas emissions and reductions in operating costs. Furthermore, the development of health care facilities needs to consider broader community aspects such as healthcare precincts, associated accommodation and access via public transport.

Projects to improve public health: Projects should focus on primary prevention of health risks through public health initiatives, with investment targeted to reduce health inequalities. In the long term, a public health focus will lead to better health outcomes for more people, supporting New Zealand's growth and productivity as well as a more effective healthcare system.

Low-carbon healthcare products: Analysis of primary care prescription process for inhalers with a specific focus on high-carbon meter dose inhalers. Projects to collect data on medical gas use from public and private sector healthcare to support prioritisation of low-carbon anaesthetic gases.

Projects supporting targeted skills development: Research and development should be undertaken to address the skills gap for the transition to a low-carbon economy across key sectors, including identifying where workforce skills can be pivoted to create high-quality jobs. Investment in expansion of remote learning capacity through digital networks should be prioritised, including funding electronic hardware purchasing for education facilities and supporting equal access.

Investment in green education facilities: Projects that decarbonise heating and ventilation systems and support creating a healthy and comfortable learning environment will enhance the productivity and wellbeing of students and staff, create jobs and reduce emissions. Spaces should be designed to be flexible so that they can adapt to changes in future learning.