

We can no longer pass on our heritage, but we can leave a legacy Sustainable Christchurch City

Dr. Susan Krumdieck

Associate Professor of Mechanical Engineering, University of Canterbury

The cathedrals and other heritage buildings are now a part of history. This fact leaves a painful gap in our sense of place. People died where they went to learn, work and enjoy. The investment and labour people put into making homes and neighbourhoods has been silted over and heaved into heaps. The basic infrastructures of modern life in a developed country have broken down. Those of us who suffered minimal damage cannot help thinking about those who have lost everything. And the aftershocks just keep coming. It is a time of grief, damage, loss and confusion.

Businesses, the council, the university, the hospital; we are all taking stock, focusing on core business, and re-starting. Finding temporary premises, patching together systems, pulling together to make things work – the effort of managing the disaster is keeping us going.

Looking forward, we realise that we have to re-define our role in the history of this place.

When the Pakeha first came here, they had a vision. That vision looked a lot like England: a port, a cathedral, a square, civic amenities, bustling business district, botanical gardens, fine schools, stately homes, then ¼ acre suburbs surrounded by pastoral countryside, but with a backdrop of stunning mountains. How sweet is that? That is why we all live here, right? We inherited this fine vision plus reticulated water, sewer, telephone and plenty of electricity. We were going to pass it on with our own vision: big shopping malls, unlimited automobile mobility, high tech industry, international tourism, world class university, architecturally designed town houses, lifestyle blocks, high speed internet, global export economy, piles of electronic gadgets from

Asia, and at the core - a vision of unlimited economic growth to keep it all working.

But even before the city was shaken, many people were starting to think about transition. Why would a people who have everything want to change those things? What is the transition vision? It is actually more of a realisation. Some of the good things were built on unsustainable foundations. The ever-increasing energy inputs required to keep up our appearance of prosperity are illusions. The accelerating destruction of environmental systems resulting from our continuous demand growth is a nightmare. Some people have been trying to transition from the illusions and the nightmares into a new vision of a fruitful way to live. They formed groups, watched movies, listened to speakers, and worked through ideas for positive action. But they still had the infrastructure and services and jobs provided by the growth economy. Then, a fault ruptured.

Looking forward, we realise that we have to re-define our expectations of this place.

The legacy we leave for the next 150 years will hinge on how we approach this turning point. The distinctions we use to frame up our debates; liberal, conservative, progressive, will be irrelevant to our great grandchildren. The only thing that will matter to them is whether we were right or wrong. It is absolutely possible that we can leave a legacy of empty expectations and dysfunctional assets. We will get it wrong unless we work out new ways to explore and develop our vision that is founded on our world-class science, design and engineering. We will have to use real facts and real modelling, not just speculative economic imagining. Our historical structures; central government, councils, corporations,

financial institutions, are not up to the task of creating a sustainable legacy. Their core business is managing the growth economy. At turning points in the past, people have discovered the ever more democratic structures they needed to realise their vision of a better way to live. We will need to develop a new systems-oriented transition structure in order to realise our legacy vision. This transition structure will have to be granted the power to do the right thing and to carry out the will of the people as a community with a future.

Looking forward, we realise that what really matters is quality of life.

Our legacy for the future is quality of life - not the trappings of the growth economy.

- A civil society with rule of law and human rights, justice and protection of the powerless
- A society committed to mutual help, charity, mercy, humanity, freedom, honesty, excellence, tolerance, and equality
- A free and quality education, and a world-class tertiary education for those with the capability
- Health care and wellness
- The infrastructures that provide our basic needs for health, safe shelter, clean water, sanitation, food, light, heat, communication
- A garden city where all people have access to participate in employment, markets, social and other activities
- Free and fair markets that reflect the social values and equity of labour and trade
- Energy supplies, materials, goods and production systems that work with natural systems in a biophysical balance
- A free, flourishing and diverse natural environment, nurtured agricultural land and humanely cared-for domesticated animals

The foundations of this legacy will be healthy ecosystems resilient to climate change,

infrastructures resilient to natural hazards, energy and transport systems resilient to the rapid decline of fossil fuel use, food and production systems resilient to weather extremes, manufacturing and economic systems resilient to recession of the global growth economy, and civil and social systems that are resilient and adaptable.

Looking forward, we realise that we are at a turning point and must build more than just new buildings.

How will we achieve this legacy? It may require some degree of grass-roots revolution, as there are powerful vested interests in un-sustainability. It will of course require vision and focus on the core business of humanity – working toward the best quality of life we can achieve. It will also require application of the scientific capabilities and understanding that we have built up over the last century, and the engineering capabilities and lessons learned from oh so many mistakes.

And finally, we will achieve a legacy of a safe, resilient and sustainable Christchurch city by putting together a new transition structure. My own thinking on this is the model of a commission. This Transition Commission must be independent, non-political, systems-oriented, and able to pull in expertise and input from all stakeholders. It must also be democratic and focused on the core business of sustainable quality of life through infrastructure design. The new Transition Commission must have the power to overcome embedded un-sustainability in governance and business. The Transition Commission would need to have the power over investment in infrastructure and buildings to ensure that un-sustainability is not built into our city any longer. I don't know what kind of an act of parliament or local democratic action it would take to establish a Transition Commission, but that would be the first group of experts needed to help set it up.

And so starts the legacy.