Governments around the world are recognising that a ‘carbon-constrained future’ lies ahead, and that leadership is needed to transition economies to low carbon operation. By the end of 2014 the world’s largest economies had set ambitious greenhouse gas emissions targets with:

- China committing to 40 to 45 per cent by 2020 (compared to 2005 levels),
- European Union committing to reducing emissions by at least 40 per cent by 2030 (compared to 1990 levels),
- United States of America committing to 26-28 per cent by 2025 (compared to 2005 levels), and
- India committing to 20-25 per cent by 2020 (compared to 2005 levels).

These ambitious targets will create significant pressure to reduce emissions in the coming decades in a manner that delivers ongoing prosperity, jobs, and well-being. This means that Australia will need to quickly move from amazing showcases of green buildings and lighthouse projects that are showing the world how to be more sustainable and transition into updating the structures of our economy.

Objectives

The goal of the Carbon Structural Adjustment Roadmap is to inform the Australian Built Environment Sector’s contribution to achieving a global average temperature change of no greater than 2°C. The low carbon transition provides Australia with the potential to become a regional hub for technologies and industries associated with lower greenhouse gas emissions. According to the Sustainable Development Solutions Network, led by Professor Jeffery Sachs, ‘There are strong reasons to believe that the necessary technologies for deep decarbonization are within reach from an engineering and cost standpoint. But their commercial readiness needs to be accelerated by providing appropriate policy support and by building public-private partnerships on research, development, demonstration, and deployment.’

Industry Outcomes

The purpose of the carbon structural adjustment roadmap is not to persuade the implementation of items contained but rather to inform such activities at such a time when a focus on significantly reducing the greenhouse gas emissions of the built environment sector in Australia is called for. The project has focused on the following key structural areas which have a direct impact on the greenhouse gas emissions of the built environment sector:

- Standards and Codes,
- Government Requirements (Local, State, Federal, and Statutory Agencies),
- Taxation and Subsidies,
- Investment and Procurement Policies (government and private),
- Professional Accreditation Requirements, and
- Education Program Accreditation and Requirements (Higher and Vocational).

Once the willingness to transform sectors and economies to reduce greenhouse gas emissions in a meaningful way is achieved it will be imperative that a strategic and holistic approach is taken, and this roadmap is intended to be a contribution to such an approach. In order to inform the development of carbon structural adjustment strategies the following steps are recommended:

1. Identify Key Aspects of Areas to Adjust,
2. Identify Potential for Value Creation,
3. Identify Steps, Enablers, and Actors,
4. Identify Roadblocks, Challenges, and Delays,
5. Identify and Map Tools, and
6. Develop Strategic Approaches.

The Carbon Structural Adjustment Roadmap is created when each of the steps (or ‘stops’ on the roadmap) are undertaken for each of the ‘structure areas’ identified above. This approach stands to provide a strategic platform for harnessing the opportunity to strengthen the Australian Built Environment Sector as part of the global low carbon transition.