CHAPTER 10

Role of government

Governments of all levels play a pivotal role in providing information, setting standards and offering incentives for new ideas and technologies, especially with respect to the urban built environment. The implementation of living architecture – green roofs and living walls – is becoming one of the most exciting and increasingly important technologies that can play an important role in developing cities that are resilient to climate change. Living architecture forms part of the many essential tools or layers needed to make our increasingly dense cities more sustainable and liveable.

To encourage individuals to adopt this technology, governments have a variety of programs and mechanisms they can enlist, but there needs to be a political will, together with bureaucratic cooperation, for this to happen. The two main mechanisms are incentive-based and regulatory instruments, both of which have been used successfully in a variety of combinations in Europe and North America. Although we are not attempting to provide a comprehensive study of government policies at all levels, the following examples serve as a general indication of the role that governments can and do play in the development of green roof and living wall technology, and its uptake by the community. Given that the authors are more familiar with the situation in Australia, and in particular with South Australia, we draw mostly on this source. However, the general principals are equally applicable to all Australian states and territories, and to New Zealand's central and local governments.

Opportunities for national government

At a national level, the current focus on city-wide projects and solutions for climate change has challenged the traditional built environment solutions, requiring new sustainable techniques that mitigate and adapt to the build up of elements that contribute to climate change. We have seen that green roofs and living walls are one of the most effective tools or layers of design needed to combat the UHI effect and to reduce CO_2 produced from the built environment, and they are an essential part of the stormwater chain through WSUD practices.

In a recent article in the magazine *Landscape Architecture Australia*, Sigrid Ehrmann (2010) says, 'In Australia, the integration of green roof guidelines into existing standards and national building