

**Factsheet**

**SKYRISE GREENERY IN SINGAPORE AND AROUND THE WORLD**

The benefits of skyrise greenery are widely recognised. Apart from mitigating urban heat island effects, aiding in energy consumption, and acting as insulation for noise, skyrise greenery also creates a conducive and aesthetically pleasing environment for people to live, work and play in, and creates habitats to enhance biodiversity in urban areas.

Skyrise Greenery is a growing trend around the world. In North America, there was 30% increase in rooftop greenery implementation between 2006 and 2007, with 24ha of green roofs installed in 2007 alone<sup>1</sup>. In China, 50ha of skyrise greenery has been installed since 2003, and there is an annual target to install 10ha per year<sup>2</sup>. In Germany, the leading country in skyrise greenery technology and implementation, 1300ha of green roofs are installed annually<sup>3</sup>. In Japan, there was a ten-fold increase in vertical greening from 2000 to 2005<sup>4</sup>.

In Singapore, more than 10ha of skyrise greenery has been installed in Orchard and downtown core areas and public housing estates around Singapore. Under the Sustainable Development Blueprint, Singapore targets to add some 30ha and 50ha of skyrise greenery by 2020 and 2030 respectively.

To promote skyrise greenery in Singapore, the Urban Redevelopment Authority (URA) and National Parks Board (NParks) introduced the LUSH (Landscaping for Urban Spaces and High-rises) programme and GRIS (Green Roof Incentive Scheme) respectively. Both initiatives are complementary and offer building owners and developers incentives such as additional gross floor area if rooftop greenery is installed, as well as co-funding for rooftop greenery installation. The Housing Development Board (HDB) has also introduced a policy to implement rooftop gardens or green roofs in every multi-storey carpark in public housing estates since 2006.

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<sup>1</sup> Source: Green Roof Industry Survey 2007, Green Roof for Healthy Cities

<sup>2</sup> Source: China Daily 12 Aug 08

<sup>3</sup> Source: Environment in the News by Christian Werthmann, Harvard Graduate School of Design (United Nations Environment Programme) - 28 Apr 2006

<sup>4</sup> Source: WPC Corporation, Japan

Industry leaders in Singapore such as Prince, Uniseal and HDB have also birthed several rooftop greening product innovations, such as the patented low-cost PEG tray by HDB that requires minimal maintenance. Other products include green wall systems that were developed to suit local weather conditions.

NParks conducted several research projects to evaluate the benefits of skyrise greenery in Singapore, the selection of plants, and various rooftop and vertical greenery systems. Four books were also published on the same topics.

More information can be found at [www.skyrisegreenery.com](http://www.skyrisegreenery.com)

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