

Monday, March 9, 2020

Green Walls bridge gap between urban cities and nature

There is now a simple and easy way to remove pollution from the air, promote biodiversity and naturally control the temperature in your home – and it's all thanks to a new community focused resource designed to help urban dwellers go green.

[“It's time to grow up”](#) is a free online resource developed by researchers at the [University of Technology Sydney](#) (UTS) through a [Hort Frontiers Green Cities](#) funded project.

The greening tool simplifies vertical greening (or green walls) with an aim to encourage the community to help bridge the gap between fragmented urban habitats and nature.

Green walls refer to walls with plants growing either directly onto a wall or on supporting structures, such as frames, that adjoin a wall. Green structures have gained popularity as a means of mitigating a range of environmental impacts associated with urbanization.

Hort Innovation Head of Research and Development, Byron De Kock, said the aim of the project was to simplify vertical greening at a community level and provide the knowledge and resources needed to assist in the planning, designing and management of green walls within urban spaces.

“Green walls allow plants to be grown in dense urban areas where spatial constraints may limit the presence of traditional urban forestry, such as parks and street trees,” he said.

“Green walls provide a modern approach to urban greening that works to effectively increase biodiversity in urban areas, especially if plants native to the region are used. Additionally, green walls not only enable the presence of nature, but also allow people to connect with nature as they build, plant and maintain these living systems.”

Lead researcher from UTS, Dr Peter Irga, said plant-based systems such as green walls helped to mitigate poor urban air quality, provided acoustic insulation and helped with thermal regulation.

“Thermal regulation is one of the most researched benefits of green walls. This means green walls can reduce high temperatures within buildings by intercepting solar radiation and through evaporative cooling. Additionally, green walls have been shown to have beneficial insulating effects in cold climates,” he said.

“These mechanisms enable less reliance upon heaters and air conditioners for temperature maintenance and allow reductions in energy consumption associated with temperature maintenance.

“Most exciting though is that Green Walls are able to remove air pollution from the air. The plants within green walls can capture airborne particles from the air on their foliage, while the biological components of green walls, including the plants and associated microbial community, are able to degrade a range of gaseous pollutants, such as volatile organic compounds (VOCs). The natural air cleaning ability of this biological system leads to improved air quality in the home and in urban settings.”

To check out Green Wall resources and start your green wall project, visit: <http://www.itstimetogrowup.com.au/>

ENDS