

SIMP@CT

SMART IRRIGATION MANAGEMENT FOR PARKS AND COOL TOWNS

SIMP@CT focusses on creating urban coolth by maximising the Cool Island Effect and mitigating the Urban Heat Island Effect. In Australia extreme heat kills more people every year than all other natural disasters combined. By optimising the health of large-canopy trees in Bicentennial Park at Sydney Olympic Park, we have encouraged maximum shade and evaporative cooling by up to 4°C. This cooling effect has also been felt in the surrounding precincts, improving the comfort and livability of nearby residential areas and reducing heat-induced health issues.

The system delivered a measurable and positive impact on human comfort and health during the hotter neutral and El Niño phases of the El Niño-Southern Oscillation phenomenon.

Using an innovative approach to urban cooling based on smart technology, SIMP@CT leverages IoT technology, sensors, and data analytics, to enhance the efficiency of irrigation systems, optimise water usage and conserve resources. Our digital platform enables irrigation management based on

Machine Learning (ML), digital twinning and scenario modelling. This provides improved human thermal comfort and a thriving urban green infrastructure protected from drought impacts.

SIMP@CT supercharges the maintenance of parks and public spaces anywhere, addressing both social and environmental challenges. It represents a unique approach that transforms public parks and other green spaces into effective urban cooling assets.

SIMP@CT is a 13-times finalist in national and international competitions and has won six of these important awards in the IoT, Sustainability and Technology sectors. The judges of these competitions rewarded the team with praise for its elegant and safe digital solution for a pressing real-world problem.

We thank IoT Alliance Australia, InnovationAus, World Smart City, Banksia Foundation, Australian Institute of Landscape Architects, and Parks and Leisure Australia for shining a spotlight on us and rewarding us in categories including Smart Places and Infrastructure, Research, IoT for Good, Industry, GovTech, People's Choice, Energy and Environment, Placemaking, Climate Technology, Healthy Planet, Healthy People, Policy and Communication, and Technology.

PROJECT DOCUMENTATION

To learn more about SIMP@CT, its architecture, strategies and future, the project Overview, Blueprint and Roadmap to Scalability documents can be downloaded from here www.simpact-australia.com/news-and-resources.

PROJECT
OVERVIEW



BLUEPRINT



ROADMAP



Visit our website for supporting documents, contact details, news and resources.

