# Smart Tanks for Smart Cities
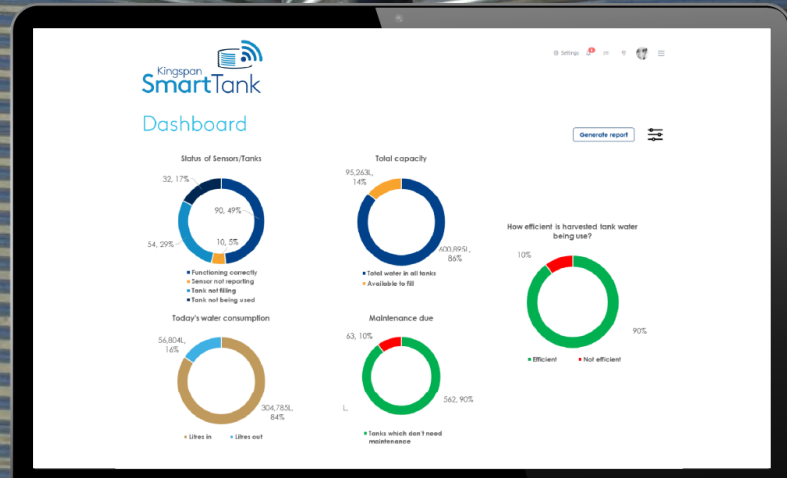
Innovative water tank sensor technology for effective and efficient water management for councils

Kingspan Made to Measure Round Water Tanks, Lismore Council NSW

## SMART ENVIRONMENTAL MONITORING TO MAKE INFORMED WATER MANAGEMENT DECISIONS

The Kingspan Smart Tank is a complete solution to all your rain harvesting needs featuring Kingspan's sensor technology. Innovative smart remote monitoring allows councils to view tank details and their water levels from anywhere over the web and mobile phone.

One of the keys to being able to use rainwater most effectively is knowing how much is in the tank, and when, where and how much is being used also if it is functioning correctly. Kingspan Smart Tank tracks:

- Rain event inflows
- Rainwater usage
- Storage volumes
- Functionality maintenance data and service logs

Reporting on water sustainability measures and goals is made easy as all data is accessible online. Each tank can be seen and grouped as part of an asset register along with location based data which can be managed.

## Councils can now understand their LGA rainwater harvesting data and report on their smart cities sustainability goals.

With Smart Tank, councils can determine how much water comes in and goes out, the amount of water the tank saves during a rainfall event and how much stormwater is prevented from entering the drainage system within their LGA. Councils can now understand the data and access reporting to help meet their smart cities sustainability goals.
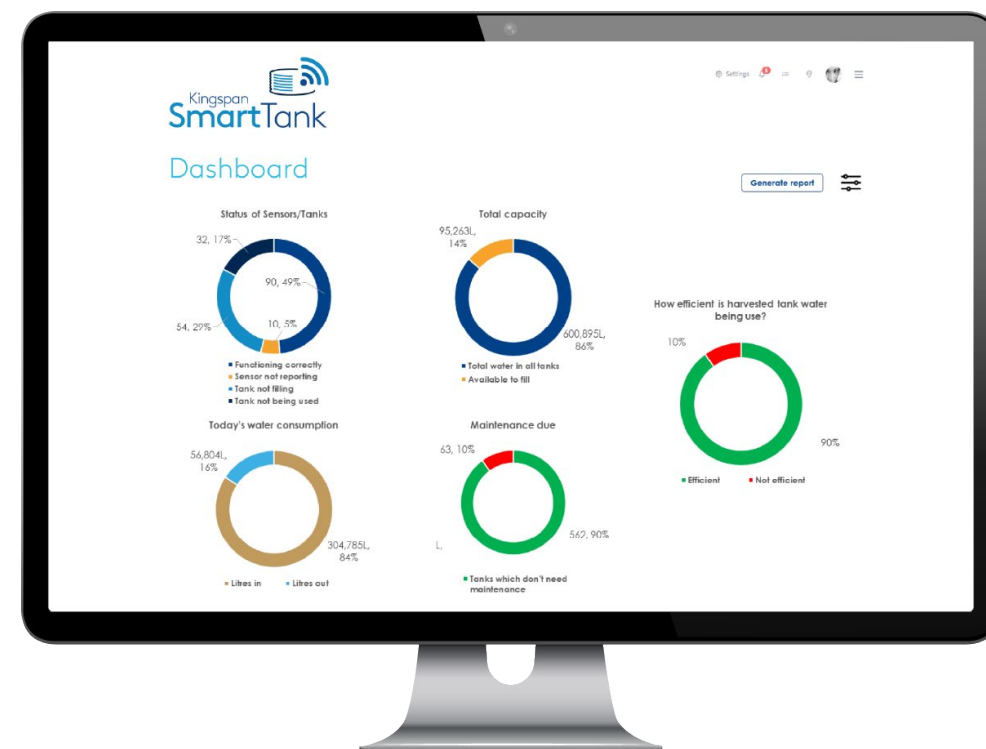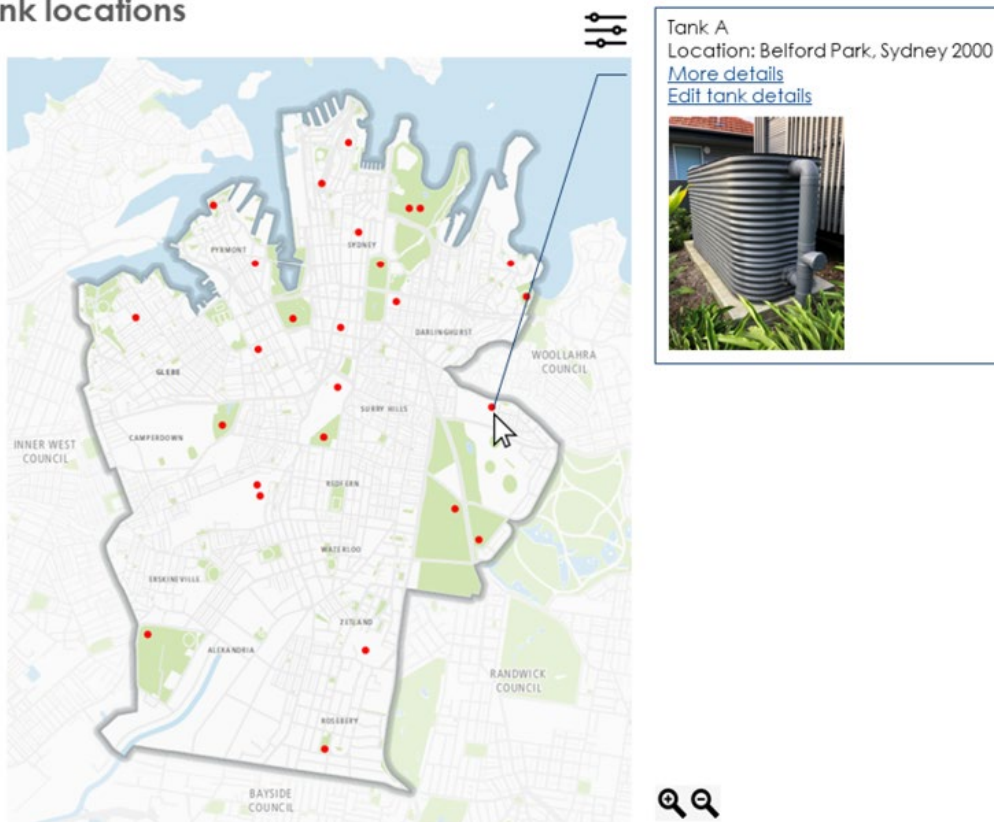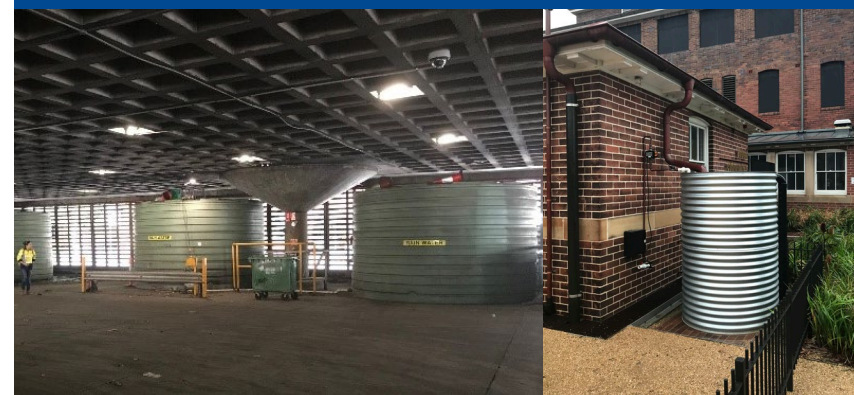
Figure 1a: Kingspan Smart Tank Dashboard.[1]

## Tank locations

Tank A
Location: Belford Park, Sydney 2000
More details
Edit tank details

## Tank details

| Tank name | Tank location | Capacity | Water level | Tank use | Last reporting date | Is there a pump? | Does pump have mains switch over? | Next maintenance | Notes | Request a service |
|-----------|---------------|----------|-------------|----------|---------------------|------------------|-----------------------------------|------------------|-------|-------------------|
| Tank A | 33 Square Place, Sydney 2000 | 5000L | 80% | Toilets / Toilets / Irrigation / Water storage / OSD / Other | 25/09/2020 | Yes | Yes | 06/09/2021 | | Request |
| Tank B | Alfred Park, 50 King Steet, Sydney 2000 | 8000L | 50% | | 01/06/2020 | Yes | Yes | 15/03/2021 | | Request |
| Tank C | Manning Public School, 24 Way Road, Sydney..... | 4000L | 100% | Irrigation | 09/07/2020 | No | N/A | 07/05/2021 | | Request |

Figure 1b: Each tank can be viewed and grouped as part of your asset register along with location based data.[1]

Overall, most rainwater systems were performing their function of collecting and storing rainwater for reuse, effectively reducing water usage.

Opportunities to use individual tank sensors to provide high value, low cost, information about how each tank and the whole system was performing in providing local water sources and managing stormwater is really exciting.[2]



Sensor technology that determines water captured in line with rain events. By monitoring rain harvesting and water tank assets data collection and analysis, remote monitoring and issue logging is made possible and simple.

[1] Dashboard shown here is subject to change. For illustrative purposes only.
[2] Findings from Rainwater Harvesting Asset Assessment for the City of Sydney by Kingspan Water & Energy, published in March 2020.

# REPORT AND DELIVER ON WATER SUSTAINABILITY GOALS

On-site detention (OSD) water tanks already help reduce the volume and peak flow of stormwater. By combining Kingspan's made to measure OSD systems with a Kingspan Smart Tank, the potential for councils to increase cost-efficiency and practicality.

This represents an important development in several facets of integrated water cycle management, including water sensitive urban design, flood management, cost effective water supplies, addressing urban heat island effects and managing major water infrastructure investments.

Councils now have the opportunity to manage water as part of their sustainability goals for their community better than ever before.



Kingspan Made to Measure Round Water Tanks, Marrickville Library and Precinct NSW. Photography credit: Philip Noller.
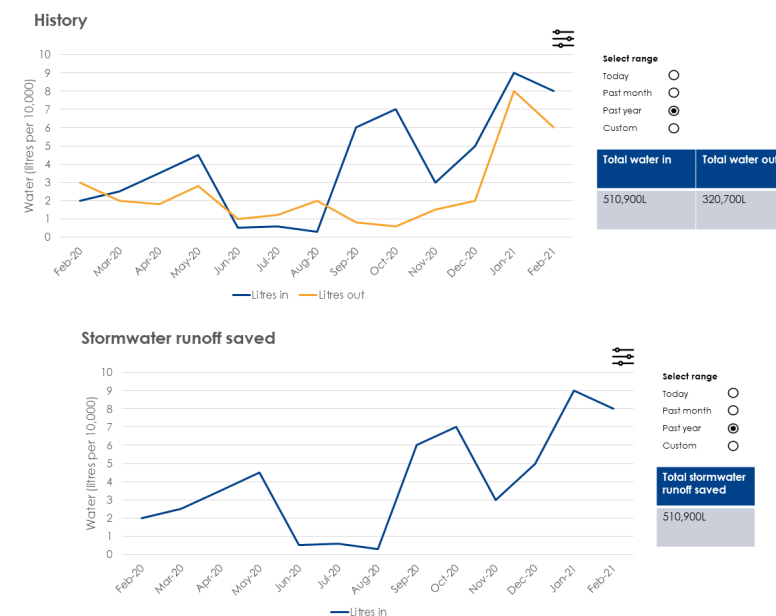
¹ Dashboard shown here is subject to change. For illustrative purposes only.



Figure 1c: Example graphs of water in, water out and stormwater runoff saved.[1]

*"It's about building resilience in our communities. The Smart Tank reconnects us to our rainwater and our tanks so we can understand and utilise local water to meet local water needs."*

- Michael Smit, Technical and Sustainability Manager at Kingspan Water & Energy

## LEARN MORE:
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## CONTACT INFORMATION:
1300 736 562 | SALES.AU@KINGSPAN.COM