



FACT SHEET **Water Use Benchmarks for Irish Hospitals**

Introduction

The HSE is one of the largest users of water in Ireland, spending over €8 million annually at its 2,500 locations nationally. Water costs vary considerably across the country from a high of €3.04 per m³ to a low of €1.49 per m³ (non-domestic water charges 2016). However, regardless of how much water is costing in your area, a key goal for all HSE locations is to ensure that they are getting the most of the water that they pay for. In order to assist Irish hospitals address this, the GreenHealthcare programme has developed water use benchmarks for both Acute and PCCC hospitals.

Benchmarking involves gathering the annual water use for a hospital and comparing it to the **number of patient bed days** provided by the hospital (a standard benchmarking figure for the healthcare sector). Through doing this you normalise the water use data and can then compare different hospitals on a common basis (i.e. the water used for each patient bed day).

To calculate the water use benchmark for your hospital input the following information for the most recent 12-month period:

$$\frac{\text{Volume of water used (m}^3\text{) * 1000}}{\text{No. of Patient bed days (or number of beds * 365)}} = \text{benchmark (litres)}$$

While every hospital is different in terms of size, services and on site activity, benchmarking provides a useful initial indicator of how a hospital is performing relative to others.

Why Benchmarking is important



IT'S EASY TO THINK THAT ALL IS WELL IN TERMS OF WATER SUPPLY IN YOUR HOSPITAL BUT UNTIL YOU BENCH COMPARE TO OTHER HOSPITALS OF THE SAME YOU WON'T KNOW FOR SURE.

One of the main issues that Irish hospitals encounter regarding their water use is leaks. Leaks are a waste of water resources and expenditure but can also cause further problems including:

1. Contamination of water supply - this is of particular importance in hospitals where bacterial growth in water pipes can lead to legionella and/or pseudomonas issues
2. Reduced water pressure at points of use
3. Reduced hours of storage capacity

Benchmarking water use is an important first step in assessing if your hospital is using more water than it should be.

By comparing the water use benchmark of your hospital to other similar hospitals (i.e. Acute or Community Health Hospitals) you can determine how your hospital is performing. If your hospital is performing poorly in comparison, then it may be down to a number of issues, one of which is undetected leaks.

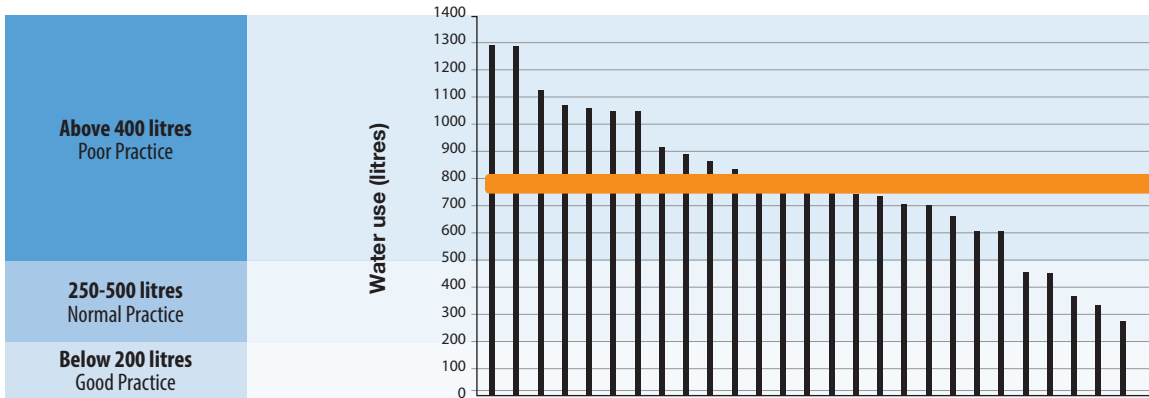
Various leak detection and control techniques can then be used to reduce leakage, or prioritise pipe repair/ replacement on a value for money basis.



Acute Hospital Benchmarks

The following profile shows the water use per patient bed day for over 50% of the Acute hospitals in Ireland. Based on these data good practice indicators have been statistically calculated.

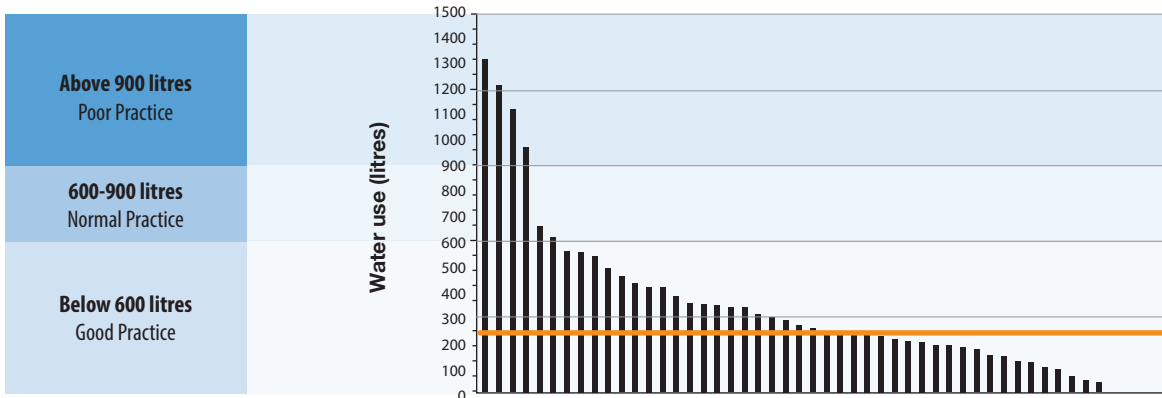
Water Usage (litres) per Patient Bed Day in 2015



Community Health Hospital Benchmarks

The following profile shows a similar profile for water use per patient bed day benchmarks for Irish Community Health Hospitals. To date (2017) data has been gathered for 25% of the Community Health Hospitals nationally and, based on these, good practice indicators have been statistically calculated.

Water Usage (litres) per Patient Bed Day in 2015



For more information contact Green Healthcare (www.greenhealthcare.ie) or the National Health Sustainability Office (www.hse.ie/sustainability)

