

# The Princess Alexandra Hospital, Harlow

Following a successful trial earlier this year, the Princess Alexandra Hospital NHS Trust in Harlow has chosen to refurbish all of its public toilets using the Propelair WC system. In addition to the obvious water savings and reduction in utility bills, the technology brings substantial hygiene benefits that are of particular importance in a healthcare setting. Propelair’s flush efficiency has also added value by eliminating blockages in areas of extreme high usage where issues had previously arisen on a daily basis.



## Environmental

The new toilets are expected to save almost **2 million litres** of water per year. This will result in a substantial reduction in carbon footprint, as the energy saved by reducing the amount of water that needs to be supplied and treated will reduce annual emissions of CO2 equivalents by around **2023 kg** (DEFRA conversion factors for greenhouse gas reporting 2016). This is the same amount produced by **66 car journeys from London to Leicester!**

## Financial

Propelair is an economically viable solution for organisations wishing to reduce their water consumption and carbon footprint at a relatively low cost. Collectively the Propelair units installed at the Princess Alexandra Hospital NHS Trust are expected to pay for themselves in just **1.9 years** via the water savings and associated reduction in bills.

## Hygiene

Propelair provides washroom users with a number of hygiene benefits. Every time a conventional toilet is flushed particles of contaminated water become airborne, landing on washroom surfaces. Propelair’s unique displaced air technology efficiently removes all waste with one flush, reducing the spread of aerosols by 95% and removing over 99.9% of waterborne contaminants (ensuring less risk of cross-contamination during subsequent flushes). This helps to maintain the highest standards of hygiene for staff, patients and visitors at the hospital.

*“We were experiencing blockages nearly every day in one public toilet located outside maternity which was very heavily used. Since replacing this with a Propelair unit 10 months ago there have been no reported blockages. The women’s staff toilet used to block on a daily basis too, but this hasn’t happened since installing Propelair 4 months ago. The toilets work really well and offer savings not just on water but on maintenance costs and call-outs too.”*

Bill Dickson (Energy & Environment Manager, Estates & Facilities Department)

Metered Water Charge	Flushes Per Day	Previous Flush Volume	Annual Savings		Payback
			Water	Financial	
£3.13/m3	55	8 litres	130,488 litres	£408.43	1.9 years

(All figures represent a single Propelair unit)