



## 4i. *How to: reduce Water waste*

### Why is it important?

Clean water is a valuable but finite resource, essential for not only the provision of healthcare but for the existence of human life. One in eight people globally lack access to safe, clean water. Even in countries where rainfall is plentiful, water treatment and pumping requires significant energy and infrastructure.

Conserving water use can therefore help to save both money, carbon and the use of chemicals in the cleaning process.

In some buildings, it may be possible to install a system to collect rainwater and use this for flushing toilets.

### What does sustainable practice look like?

#### Real life example

**At Stobhill Hospital, Glasgow**, installation of knee-operated taps for surgical scrubbing resulted in a 53% reduction in water use compared with standard elbow-operated taps.

#### Modelled example

Natali is a practice manager and at their last team meeting, the team discussed ways to reduce their water use in the dental surgeries and how to promote awareness of water waste in their patient cohort.

She has selected autoclaves and washer-disinfectors which use comparatively less water and advised staff that they should always be full when used.

The practice is considering whether to install motion-sensor taps, but in the meantime, posters beside sinks advise not to leave taps running, and not to over-fill the kettle. Rainwater is collected in a water butt and used to water practice plants. Patients are encouraged to turn off the tap when they are brushing teeth (for at least two minutes twice daily).



## Actions

### KEY:

**Implementation:** Easy = 😊😊😊 Less Easy = 😊

**Investment Cost:** Low = 💰 High = 💰💰💰

**Financial return on Investment (ROI):** Low = 🐷 High = 🐷🐷🐷

**Environmental benefit:** Small = 🌍 Large = 🌍🌍🌍

- Turn off taps whilst lathering during hand washing.



- Install motion-sensor taps



- Purchase water efficient appliances (e.g. dishwashers and sterilising equipment)



- Do not overfill kettles



- Encourage patients and staff to turn off taps when tooth brushing



## You can calculate both the money saved and carbon saved

•**Money saved:** compare costs of waste collection fees and purchasing of goods costs each month before and after implementation

•**Carbon saved:** Carbon calculator

<http://c.environmentalpaper.org/home>



## Resources

### Case study:

Somner J. et al. Surgical scrubbing: can we clean up our carbon footprints by washing our hands? *Journal of Hospital Infection* (2008) 70, 212-215

Sara Harford, Darshini Ramasubbu, Brett Duane, Frances Mortimer - Centre for Sustainable Healthcare (2018)

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## Resources *continued*

### More links:

#### Ecodentistry:

<http://ecodentistry.org/green-dentistry/what-is-green-dentistry/save-water/>

#### Colgate:

[https://www.colgate.com/en-us/oral-health/basics/brushing-and-flossing/](https://www.colgate.com/en-us/oral-health/basics/brushing-and-flossing/five-water-conservation-tips-0316)

[five-water-conservation-tips-0316](https://www.colgate.com/en-us/oral-health/basics/brushing-and-flossing/five-water-conservation-tips-0316)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5141651/>

Duane B, Ramasubbu D, Harford S, Steinbach I., Swan J, Croasdale K, Stancliffe R. (in press). Environmental sustainability and waste within the dental practice. *British Dental Journal*.

**Dental Susnet**, online network for improving the sustainability of dental services:

<https://networks.sustainablehealthcare.org.uk/dental-susnet>