

Sustainability & Hard Water

Or... the missed opportunity to have a real impact on the S word...

Sustainable development is development that meets the needs of the present without compromising the needs of future generations to meet their own needs.

Brundtland (1987)

The amount of damage caused by hard water is enormous, however advice on how to prevent it is sadly lacking from all the relevant Agencies. Search for the term *water treatment* on The Carbon Trust and/or Energy Savings Trust's website and no guidance is given to businesses, organisations or indeed consumers. Indeed these Organisations hardly recognise there is any problem with hard water or limescale whatsoever.

The Carbon Trust does advise that 1mm of limescale causes 7% increase in energy, but their

advice appears to be - *let the problem happen and then annually use chemicals to remove it.* Now that very effective non-chemical methods exist for preventing, indeed removing, limescale, surely this should be the preferred *sustainable* solution.



Of course, energy is only part of the equation. Scaling and chemical treatment methods both cause premature failure of water-fed equipment, appliances and sanitary-ware. Take for example direct-fired gas boilers. These have a very much shortened life in hard water areas. Scale builds up on the bottom surface, above the hottest part, causing the casing to split and emptying the contents on the plant room floor.

The boiler then has to be replaced. This involves *mining* raw materials somewhere in the world, processing them into components and assembling and transporting the replacement across the globe. Now multiply this simple

example with all the other items requiring premature replacement and plain common sense would conclude that this has an immeasurably massive impact on every aspect of sustainability.

1 in 10 irons sold are returned within 1 year; 65% of these are due to limescale damage. (Calgon 2009)

It is essential, for the good of our children's planet, that you encourage your organisation or company to consider water treatment as a positive step to making an impact on sustainability

www.electronicdescaler.com