



Water Efficiency

Guidance for Building Managers

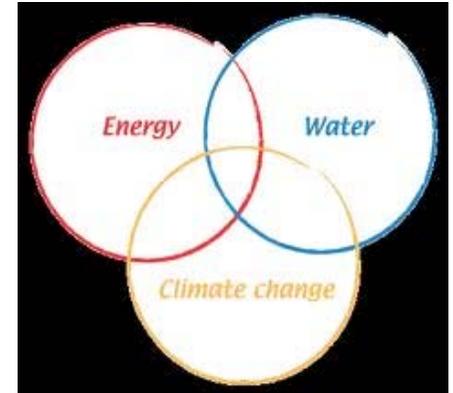
Reducing Water Use

- Water is essential to everyday life
- Water demand in Scotland still increasing
- Climate Change is likely to reduce future water supply, particularly during summer
- It is prudent to reduce our water use



Benefits of Reducing Water Use

- 09/10 Council Water Bill £1,688,000
- Water Use up to 6% of UK's Co2 emissions
- Water Efficiency could reduce water bill and associated emissions by up to 33%
- Reducing water use supports our valuable ecosystems



Water Waste

- We each use 150 litres of water a day
- We waste a third of this!
- One dripping tap wastes up to 5,500L a yr
- Significant savings achieved through technical upgrades and behaviour change



Water Meters

- Scottish Government Requirement for all Businesses
- You only pay for the water you use
- Identifies high consumption sites
- Enables water leaks to be detected



Don't Flush Savings Away!

- WC's can account for up to 75% of water use in washrooms
- A Hippo bag can reduce each flush by 3 litres
- Hippos can be fitted in 6.5 + litre cisterns
- Easy to install
- Council supplies free Hippos to all Buildings



Low/Dual Flush Toilets

- Water Byelaws require low flush toilets
- Council recommends low/dual flush replacements
- Can reduce flush by 30%
- Variety of systems/sizes available
- Dual Flush systems should be labeled
- Ultra low flush systems not recommended



Urinals

- Over 50% of business water use
- Most urinals flush continuously
- Urinal controls can save up to 75%
- Motion sensors can be retrofitted
- Installation cost of £320



Waterless Urinals

- Only use water for routine cleaning
- Water Savings of up to 90%
- Easy to clean
- Odour may be problem
- Retrofit available but not recommended



Washroom – Spray Taps

- 33% of water use through taps
- Spray taps can reduce flow by 80%
- Retrofit available
- £4 per tap with payback time of 1 yr
- Does not regulate water pressure
- Requires maintenance to prevent blockages
- Not recommended for infrequent use



Washroom – Push Taps

- Self closing tap
- Prevents flooding and wastage when taps left running
- Retrofit available - £10-20 per tap
- Payback of 2-3 yrs
- Some maintenance required



Kitchen – Tap Aerators

- Mixes air with water to reduce flow without any visible difference
- Retrofit available - £5 per tap
- Saving of approx. £13 per tap/year
- Payback time of 6 months
- Pressure regulating aerators available



Key Considerations

- Water Efficiency Labeling Scheme
- Water Supply (Water Fittings) Regulations (1999)
- Water Byelaws Scotland (2004)
- Installation Costs

Useful Links

- www.highland.gov.uk/waterminimisation
- www.waterwise.org.uk
- www.water-efficiencylabel.org.uk
- www.water-efficiency-buidings.org.uk

Conclusions

- We need to reduce our water use to adapt to Climate Change
- Water Efficiency Saves Water, Money, Energy and Reduces Emissions
- Savings of up to 33% can be achieved