Water shortages: how a more competitive water and sewerage market would help

Introduction
The current dry weather has revived the debate on how best to tackle water shortages and drought. Discussions, however, tend to overlook an important development that has already proved highly effective in reducing water usage in Scotland – namely the competitive market.

This has existed in Scotland for retail water and sewerage services for over three years. Competition could have a similarly beneficial effect south of the border.

About the market
The market for retail water and sewerage services in Scotland was opened to competition in April 2008. As a result, all 130,000 non-household customers (that is businesses, and public sector, charitable and not-for-profit organisations) are able to choose the retailer that best suits their needs.

Customers in Scotland are already saving water as a result of the competitive market.
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There are a number of different retailers, all competing to retain and gain customers by providing more tailored services, better prices or both. As well as bringing substantial cost savings to customers, the market is delivering wide-ranging environmental benefits including greater water conservation. This may come as a surprise to those who perceive that competition in the supply of water and sewerage services is likely to harm the environment.

Encouraging water efficiency
Understanding business customers’ need to become more water efficient, retailers have been competing to offer services that enable consumers to monitor how much water they use, when they use it, what for and how they dispose of it. The incentive to proactively engage, and to develop long-term relationships with customers, did not exist before the introduction of competition.

Bespoke environmental advice and solutions are being offered by retailers, along with an increased commitment to water saving measures and to leakage reduction at the customer’s property. Retailers also provide the services of specialist staff to work with customers to enhance their water efficiency and drive bills down further.

CASE STUDY 1
Consumption was cut by 44% at five schools in the West Dunbartonshire area when the local council asked their retailer to help reduce their water use. The retailer benchmarked consumption in 50 schools against national standards and identified 5 schools with excessively high levels. Leaks were repaired and smart meters installed. As a result, the annual water consumption in the schools fell by 31,000 cubic metres and the council is saving more than £56,000 a year in water and waste water charges.

Retailers are working with customers to help them conserve water and be more water efficient. They are also helping them to reduce leakage.

Under Section 29E of the legislation that created the market, retailers and their customers can benefit if their actions help Scottish Water to reduce its costs. Discounts on the wholesale charge are available to businesses and public bodies that work with their licensed provider to reduce the costs of Scottish Water serving them (for example by restricting water use to certain times of day or introducing pre-treatment of effluent).
One retailer provides a ‘water health check’ service which involves taking a snapshot of the customer’s water and sewerage system; the customer is told if there are any problems and given advice about how to make efficiency savings that can be effected easily, along with other longer term options. To date, the service has revealed significant opportunities to cut water use at around half of the sites reviewed.

As well as offering additional services, retailers also provide specific products to help conserve water – from simple devices that control taps to complete rainwater harvesting systems.

Businesses that use heated water are also seeing a reduction in their energy consumption when they lower their water use. This both reduces their business costs and improves their environmental impacts.

As part of the arrangements put in place when the market opened, the incumbent supplier Scottish Water was required to ensure that all non-household customers were metered. As a result, customers have much more accurate and detailed information about their water use. This has been particularly helpful for those who use large quantities of water – they now have the information they need to make choices about elements of discretionary water use.

**Encouraging better waste management**

Since competition was introduced customers in Scotland are also being offered more tailored services in waste management and surface drainage. The options available include water harvesting (if a customer has a need for non-potable water); the construction of a sustainable drainage system; or pre-treatment of waste before it is discharged to the sewerage system.

**Business Stream estimates that through the competitive market, more efficient water use has reduced CO2 emissions by over 12,400 tonnes. This is the same as taking more than 3,450 cars off the road.**

**CASE STUDY 2**

An independent salmon producer asked their retailer to help them improve the discharge performance at an eight-year old plant. They wanted to make sure that they continued to comply with strict environmental requirements. The solution was to install a biological treatment plant – an approach never before used in this sector – to act as a more rigorous, second stage treatment. As a result, the seafood company has dramatically improved its environmental performance and saved money by using less water.
In many cases adopting these approaches leads not only to lower water use but also to environmental benefits such as reduced power use in treating smaller volumes of waste water, less harmful discharges to the environment and less power used in pumping sewage flows to the nearest treatment works.

Cutting carbon emissions
The water industry currently accounts for 5 million tonnes of carbon dioxide emissions per year – almost one per cent of UK greenhouse gas emissions from 23 companies. Any reduction in water consumption has the benefit that less water needs to be treated and pumped around the distribution system, thereby cutting carbon emissions.

“Because it takes energy, chemicals and money to produce tap water, increasing water efficiency and promoting a more sustainable approach to water use is a low-cost, low-risk option for creating a greener water industry.”

Alan Sutherland, Chief Executive, Water Industry Commission for Scotland

According to the Carbon Trust, a 20% cut in energy costs represents the same bottom line benefit as a 5% increase in sales in many businesses.