



Morley stresses need for global solutions

Former Defra Minister, Elliot Morley, has focused on the water sector since he cut his Parliamentary teeth on its privatisation 20 years ago, and used his knowledge to provide a powerful and intriguing address.

The MP, who chairs the influential All Party Parliamentary Water Group, reminded his audience that their debates had global relevance.

"I think water will be one of the flashpoints of this century, politically and economically. We are already seeing tensions in Jordan, India, Pakistan, and along the US-Mexico border," said Morley.

"There are wider influences on water supply, including ice melt and the level of glaciers. We have our own issues, such as

areas of water scarcity. A new form of market is developing, but markets do not always give the answers to the issues we face."

Morley conceded that his views on metering had changed dramatically.

"I opposed it originally, but now believe that if we have the right kind of structure, for the right social types, that metering can be a tool for social justice," he said.

"There is an enormous debate about smart metering for gas, electricity and water. Why aren't we looking at combined meters, so we can enjoy the benefits of remote monitoring, and give consumers information about their water?"

Turning to innovation, the MP recognised the good work done by both Defra and Waterwise Technology, but admitted much more was needed.

Morley says metering can be a tool for social justice



"In terms of domestic efficiency, there is a great deal to do. Energy labelling is important, and is becoming more sophisticated, but I'd like to see more innovative products and services," he said

Morley also advocated research into sustainable urban drainage, pointing out that most of the flooding problems of recent years had been caused by surface run-off, rather than alluvial issues.

"When I tell people overseas that we have water problems, they are amazed, but parts of this country have less rainfall than parts of Africa and Asia. We can devise models that can be applied across the world."



Environment Agency chief asks poor performers to learn from the good

Environment Agency chief executive, Dr Paul Leinster, was in forthright mood when discussing the need for a sustainable water sector.

“It’s just not about water supply to households, we need to consider whether rivers have the capacity to take sewage work effluents,” he said. “We (all) need a strategic view, looking at water quality and quantity and the impact on the ecology as a whole – we at the Environment Agency have not always done that previously.”

Leinster admitted that climate change was presenting new challenges for the collection of water, and further along the infrastructure network.

“Changing weather patterns are giving us a different kind of rain, with more intensive downpours.

Flooding is also causing a real problem for the sub-stations which power treatment centres,” he said.

His most intriguing comment accompanied a graphic showing that pollution incidents – in categories one and two – appear to have fallen between 2005 and 2007.

“The number of incidents is down, but I am not convinced this is a continuing downward trend,” observed Leinster.

“Sometimes incidents are down to ageing infrastructure, but often they are about management decisions. I’d like to see the worst-performing water firms learn from the best.”



Stern moots water trading model

Jon Stern presented some lessons of potential relevance to the water sector from energy market liberalisation.

He suggested that at least three, and preferably five, upstream competitors were needed to create significant benefits to downstream customers, and that separating network and services was crucial.

Stern advocates market-based mechanisms for improving environmental sustainability, as well as for improving efficiency. He argues that they improve environmental outcomes much more effectively than do administrative controls.

He pointed out the relevance of the EU gas market model in helping to think about the water sector in England and Wales. Despite media headlines to the contrary, gas is not transported thousands of kilometres across Europe, but is injected at entry points nearest the upstream supplier and delivered by swap trading to the final customer. The same could apply to a market for trading bulk water.

Stern’s most far-reaching suggestion was that England and Wales should establish a bulk water trading system with more interconnection between pipe networks, at both intra-regional and inter-regional level.

“Even in the water-stretched south-east, there are areas of water surplus and, looking at the overall water resources in England and Wales, there have to be potential gains from trading water between different areas,” he said.

Stern emphasised that these ideas looked promising, but should be seen as a series of suggestions to be tested in experiments and not as a formal blueprint.



Retail separation brings rich rewards

Business Stream Chief Executive Mark Powles outlined how Scotland opened up its water and sewerage market, and how Business Stream has responded to the challenge.

The non-household retail water and sewerage market officially opened on 1 April 2008. Business Stream's first challenge was to separate from Scottish Water.

"To get our licences to operate in the new market, we had to be independently financed and governed," said Powles. "The relationship between ourselves and the wholesale business had to change, moving from parent and child to supplier and wholesaler, and operating in a wider market with the regulator, the CMA and other licensed providers. Everyone in the market had to work together.

"It was important to transform ourselves into a customer-focused business. To complement the expertise within the business, we had to create completely new

functions, like sales, marketing and IT. We have worked hard to create a strong performance culture."



The figures certainly stack up – Powles revealed that Business Stream has generated a £34 million gross profit from revenue of £350 million.

"The numbers also stack up for our customers. A quarter of our customers are paying less and our customer satisfaction rating has risen by 14%," he said.

"Looking forward, we have to maintain our focus on the end customer; by continuing to develop new products and services and improving our efficiency."

CBI's Cridland backs benefits for business

The CBI's deputy director-general, John Cridland, said it was right for Ofwat and the government to examine the possibility of greater competition in the water sector, as the sustainable use of water was of increasing importance.

Mr Cridland said the proposals suggested by Professor Martin Cave in his interim report had considerable merit and added that the CBI was keen to learn more about the experience of water competition in Scotland.

He said: "Our environmental affairs committee has seen potential benefits, but also possible downsides, to unbundling, and our water company members did not dissent from that view, but I came here to learn about what Scottish Water and Business Stream had achieved."

Mr Cridland reminded his audience that the key issues of safety and security of supply, which applied to the energy sector, were equally critical for water and there should be detailed cost-benefit analysis before decisions were made.

He added: "I do not claim that CBI members are demanding water competition given the other pressing issues they face, but presented with the question, they have expressed cautious support for it."



More innovation needed to benefit consumers

Treasury Secretaries are by definition discreet, even more so in the run-up to the most important Budget for decades.

Ian Pearson's presentation was therefore understandably light on detail, although he did depart from his brief – with evident animation – when quizzed from the floor.

“We need innovations more than ever before, not just of products, but in terms of services and business models,” he said.

Pearson underlined the government's commitment to Ofwat, and pledged that the current ‘special merger’ concept, established in 1991, would also remain.

He added that catchment area management plans and potentially, in the longer term, upstream

competition could deliver efficiency benefits downstream, and suggested water companies should be tied into the drive to make homes more energy-efficient.

“Innovations have been driven by the regulator, and I believe the regulatory regime is needed to foster (more) innovations for the benefit of customers,” he said.

With the final Cave report expected in late April, Pearson was naturally unable to say what might lie within. However, he did say that he was keen to see water trading included in the final report.

“Moving water around intelligently is one way in which we can open up the market to competitive practices,” he said.



Pace of innovation must increase

The water sector must address its failure to drive forward technological innovations, according to delegates at the Ofwat sustainability conference.

Dr Paul Leinster said it was “scary” how many of the current technologies developed are decades old in concept.

It was suggested that the sector was instinctively risk-averse, although Elliot Morley considered that a criticism which could be levelled, on occasion, at all industries.

“I'd like to see innovation in management models and pricing,

especially in the south-west, which is out of sync because so much is spent on treatment and sewerage,” he added.

Morley believed there had been a decline in innovation in the sector – not just in supply and treatment but also in energy management. Dr Leinster agreed, with a bluntness which clearly surprised some delegates.

“While we still pee into drinking quality water, we cannot accept we have a sustainable water supply and treatment approach,” he suggested.

Entrepreneurship and risk-taking are key to innovation



Indepen's Hargreaves pulls no punches

Indepen economist John Hargreaves may have begun by revealing his recent acquisition of a bus pass, but showed no signs of intellectual slowdown during his provocative analysis.

He asserted that although both entrepreneurship and risk-taking were key to innovation, they were not qualities associated with the water sector.

Hargreaves suggested that while it is not clear if we have the right amount of innovation in the water sector, if we can achieve more by doing things differently, then we should.

“Unless regulation is outcome-focused, it is inimical to innovation. The cost cannot be recovered by the water companies; it therefore becomes about risk and not reward, and the benefits (of innovation) are soon appropriated by the regulator.”

He continued: “Can water companies innovate more, without innovation in regulation? Can regulation provide incentives for continuous improvement?”

All privatised utilities looked to develop earnings outside activities ring-fenced by their regulator, but

Hargreaves believes they were discouraged by their experiences.

“There was a lot of diversification in the early days of privatisation, but investors hated it, and there has been no systematic analysis of how efficient it was,” he added.

Hargreaves considered it likely that the final Cave report would formally propose the introduction of a fund, to encourage innovation in R&D, but conceded that water companies would face significant challenges in adopting such strategies.

“If you choose the route of innovation, it is very risky and it must be both long term and considered,” he said.

Hargreaves also suggested that water companies needed to be more open to welcoming outside influences which might bring forward innovation, saying it was hard to gain access to the right people, and internal communications needed improving.



Green shares Queensland experience

Queensland Water Commissioner, David Green, offered a comprehensive and enthusiastic presentation about the industry's reforms in his state.

He admitted that Australia's ageing infrastructure was incapable of capturing all the rain which fell on the country, before supply problems were heightened by the worst drought in its history.

"Historically, almost all our water came from climate-controlled sources. Although our (South-East Queensland) coastline is only 240 kilometres long, the weather conditions do vary significantly, and with an inadequate supply, we initially had to manage demand," said Green.

"Restriction regimes are very blunt, and economically damaging, and the government has been criticised for imposing restrictions."

"However, we did have to introduce penalties for overuse of water, and even suggested that consumers should limit their shower-time to just four minutes – although we did give out egg-timers, which proved very popular."

The urgent need for reliable and sustainable water supplies has seen South-East Queensland invest nine billion Australian dollars in new infrastructure.

"We obviously faced significant challenges in passing on the cost of our infrastructure investment to consumers, which we managed through a pass-through mechanism over time, but we had to act because of the severe supply constraints and the increasing threat of climate change," said Green.

The investment programme, which includes the construction of two

new dams and the installation of 400 kilometres of pipeline, required the entire pipe building capacity across Australia for two years and has already seen dramatic supply-side changes.



"We were 95% reliant on climate-controlled supply, but that figure is now down to 70%, thanks to more efficient use of existing resource and the introduction of new sources, such as desalination plants," said Green.

Infrastructure in South-East Queensland is still publicly owned, but they have introduced water trading in abstractions and legally separated the water value chain. They have also introduced a single grid manager. This optimises movement of water across the network and makes best use of treatment and other facilities.

While Green conceded that this model was more a central control approach than a competitive market mechanism, he defended this decision by admitting that Australia's water sector did not have sufficient commercial expertise to initially adopt a more competitive system.

"Reform needs to have regard to the capabilities of the industry, and the people within it. We will become competitive, once the environment is prepared."



Ballance backs regional trading model

Dr Tony Ballance of Severn Trent proposed a similar model of water trading to that set out by City University's Jon Stern.

The latter agreed with his fellow economist, that there was potential to move resources around England and Wales, and that trading water would help the sector become more competitive.

There were differences in approach, which were about scale, with Dr Ballance advocating inter-regional water transfers, as a result of the cost structure of water (compared with other utilities).

"If we look at gas, then 71% of its cost is related to production. In the water sector, just 11% of the

price represents the cost of abstraction, and even if we include treatment costs, the figure rises to only 39%," said Dr Ballance.

"The cost of delivering water depends strongly on transportation costs, so the level of distribution costs will have a significant impact on the scope for market competition."

Dr Ballance did not believe that increased competition would lead to substantially lower bills as water trading would not affect the bulk of water companies' costs, which were driven by maintenance and new quality standards.

He is equally convinced that, regardless of the apparent logic in trading, water companies will

require greater commercial incentives to consider adopting such strategies.



"We need to provide greater incentives for companies in regions of lower cost to create surpluses to supply their neighbouring companies," suggested Dr Ballance.

His preference, from three possible theoretical models for realising greater water trading, would be for a marginal cost-based trading regime for bulk water, rather than a common carriage model or one requiring an independent procurement entity.

Is competition key to sustainability?

One of the UK's best-known authorities on regulation, Professor George Yarrow (right), said that he still favoured the workings of the market to drive sustainability, but conceded that it would be a tricky task.

"In general terms, I'd always prefer a free market to 'command and control', but it has to be recognised that there is no existing model out there which we can look at and learn from," he said.

For Jon Stern, the answer was to use competition plus market-based environmental tools.

"If you have enough upstream competition, we will see things happen. Markets should be the

servants, not the master, but I would like to see us build via a learning experience, rather than the imposition of a blueprint."

Severn Trent's Dr Ballance also preferred to see the development of market mechanisms to achieve sustainable outcomes and the development of the regulatory framework to achieve this.

"A commercial upside for the water companies would also help to achieve a focus on sustainability," he added.



Rethinking water

By Regina Finn
Ofwat Chief Executive

The water sector has undoubtedly delivered a lot over the past 20 years. About £80 billion of investment has resulted in significantly improved services: leakage is down a third on its mid-90s peak; we have transformed our reputation as the 'dirty man of Europe' into one of a leader in water quality standards; and bills are about 30% lower than they would have been because of economic regulation.

But although we have risen to the challenges of the past, our Sustainable Water event underlined the fact that future challenges are very different, and will need different responses.

Elliot Morley started our event by summarising the global challenges, noting that, internationally, water has the potential to be one of the "flashpoints of this century".

Paul Leinster put this in the UK context. Despite perceptions that we have plenty of water, increasing population and changing weather patterns combine to present us with a huge challenge. We need to tackle water scarcity, develop infrastructure to cope with potential increases in flooding and ensure a sustainable water supply for customers now and for future generations.



Sustainable water.



Meeting these challenges successfully will require us to think beyond the status quo. David Green, Jon Stern and Tony Ballance all talked about different ways of doing this. A key theme was the need to use market mechanisms, for example water trading, to reveal the value of water. Only then will we be able to drive sustainable behaviours by the sectors and by customers.

We must innovate if we are to rise to these challenges. Ian Pearson spoke about how innovation is not just about new technologies, but relates to whole business models. Mark Powles showed how competitive pressure drives innovation in customer services. By opening up markets, we can encourage innovation through a system where winners prove themselves.

We face huge challenges in the coming decades. We have the time to develop new ways of doing things, but cannot afford the luxury of delay. We need to work together to develop the knowledge and expertise to rethink water and meet these challenges head on.

Want to know more?

If you want to speak to us about any of the issues raised in H₂orizons, please contact Christine Spillane in our Markets team on christine.spillane@ofwat.gsi.gov.uk or 0121 625 1481.

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Future events

We will be hosting a range of breakfast briefings to build on the issues raised at our Sustainable Water event. The first two will be held at the Marriott County Hall at Westminster Bridge in London from 8 am to 9.30 am:

6 May: Water resource management and abstractions
17 June: Flooding and urban drainage

Places are limited, but if you would like more details about either event, please contact Lisa Naim on 0121 625 1480 or lisa.naim@ofwat.gsi.gov.uk.