

Briefing paper for the Hydro Nation Forum
17 January 2017



Consumer Participation in Water Policy

Background

During 2016-17, the Consumer Futures Unit used innovative, deliberative research methods to get beyond consumers' instinctive reactions, instead seeking a deeper understanding of the reasons, opinions and motivations that influence their preferences and priorities. In particular, the research focused on two water policy issues:

- 1) whether consumers think there should be similar service standards across urban and rural areas and if so, to what degree;
- 2) how engaged consumers are in matters related to water and the environment and what was required to increase their engagement in these matters.

Research findings will be used to inform Ministerial policy setting for the next Quality and Standards period 2021-27.

High level findings

Consumers' views on service standards across urban and rural areas were fairly clear: people felt that if they pay the same water and sewerage charges for similarly banded properties, they should receive the same level of service from Scottish Water. Any deviation from this due to for example, responding to adverse weather, should be the exception rather than the rule and may require compensation.

However, the second research question highlighted a number of deeper issues, but also opportunities for Scotland's water industry. Research showed that:

1. Consumers are largely disengaged with Scotland's water industry, and yet, are keen to be more involved in public body activities that impact their community.
2. Consumers strongly support measures that protect the environment, and yet do not associate their own behaviour in terms of inappropriate disposal of household waste, with negative consequences on Scottish Water assets, for example fatbergs, and the environment, such as sewerage debris on beaches.

There is clearly a disconnection between consumers and the industry.



CFU Recommendations

Scotland's water industry needs to re-engage with its consumers on a more conscious level, and move away from being largely 'silent' or 'paternalistic'.

More inclusive and positive engagement and consultation will produce educated and empowered consumers and communities that can influence public body activity and outcomes in their area.

Building stronger relationships between Scotland's water industry and its users will deliver mutual benefits: a greater voice for consumers within industry policy and practice, and service users that adopt positive behaviours that help to protect Scottish Water assets and the environment.

More needs to be done to embed the consumer interest and improve their experience of the industry, such as adopting a set of principles¹ that are consumer focused, to strengthen the development of policy and practice that delivers better outcomes for all.

Such improved outcomes would be more likely if:

- Consumers had better understanding of what they pay and the services they receive in return.
- There was a comprehensive consumer engagement framework to support stronger cooperation and partnership working between Scottish Water and consumers.
- There was increased support to develop more positive consumer behaviours that protect assets and the environment.
- The development of longer term 'lifewide'² learning' strategies focused on appropriate use of public services, linked to protecting and conserving the environment.

Consumer Principles



¹ The work of the CFU – and its predecessor bodies – has long been guided by seven consumer principles, (access, choice, safety, information, fairness, representation and redress). When applied to regulation, principles-based approaches enable an organisation to consider its products and services from a consumer perspective. These principles can then be used to ask important questions about consumer impact and engagement, and how products and services should look and feel to the consumer.

² 'Lifewide learning' recognises that learning occurs within multiple contexts within someone's life (school, home, work, etc.). In practice, children can be engaged at a young age and positive behaviours or values embedded. These can be reinforced societally during adulthood to ensure desired behaviours are sustained.

<http://www.lifewideeducation.uk/lifewide-learning.html>

Hydro Nation Water Innovation Service – Future iteration

This paper is to provide the forum with an update on discussions between the Scottish Government and Scottish Enterprise along with other key partners to develop plans for the future of the Hydro Nation Water Innovation Service (HNWIS).

Overall Aim and Objectives

It has been agreed that the overall aim and objectives for the future of HNWIS would be as follows:

Build an ambitious, well connected sector to drive growth through innovation. Provide integrated support to companies to accelerate the development of water technologies to domestic and international markets. Help to develop Scotland as a recognised centre of excellence for water technology companies.

In order to achieve this, the following strategic objectives have been set:

- Increase levels of innovation in sector by providing specialist support and access to test and demonstration facilities
- Build market awareness
- Build understanding of future opportunities
- Provide integrated support across public sector, linking to other businesses and academia where appropriate
- Increase international trade by bringing more products to market responding to global opportunities
- Encourage the sharing of knowledge and expertise
- Increase inward investment

No additions were made to the identified workstreams for delivering these objectives. It was agreed that the assessment and referral service and technical 1-2-1 support were the core workstreams:

- Assessment and referral service
- Technical 1-2-1 support for technical, testing and commercialisation
- Marketing and website
- Market insight reports
- Publish opportunities and calls
- Events
- Case Studies

Network Integrator

The delivery option agreed for assessment and referrals was to contract a network integrator to be the named contact and face for industry engagement. This should help stimulate the pipeline of companies and the role can also take on responsibilities to attend events, publish existing opportunities and develop case studies.

Steering Group

In addition to the network integrator, a steering group will be implemented to review work of the network integrator and manage the project. Details are to be confirmed, but it is intended the group meets regularly and has specific named individuals from each key partner organisation.

Events

It was agreed that events would not be prescribed in advance and that network integrators who bid for the contract would be invited to suggest what is most relevant to achieve the objectives of the project.

Publishing Opportunities

It was agreed that this project would not allocate funding to generate specific opportunities and calls but that the appointed network integrator would be invited to make suggestions (if applicable) and these would be taken into consideration for separate project funding.

Future Actions

1. Scottish Enterprise to scope the new product description, criteria and suggest funding to be allocated to it and the network integrator job description and funding to be allocated to it.
2. The Scottish Government shall review whether there should be further named contacts from Scottish Water on the HNWIS steering group.
3. The current HNWIS Steering Group shall review the product and job proposal from Scottish Enterprise for comment.

HYDRO NATION STRATEGY	
Project Name	Hydro Nation Strategy 2017-18
Senior User	Jon Rathjen
Project Manager	Barry Greig
Author	Jon Rathjen
Date	June 2017
VISION	
As a Hydro Nation, Scotland regards water as part of its national and international identity; it recognises that the sustainable management of its water resource is crucial to its future success and a key component of the flourishing low-carbon economy and the basis of growing international trade opportunities.	
DUTY	
Scottish Ministers must take such reasonable steps as they consider appropriate for the purpose of ensuring the development of the value of Scotland's water resources. (Water Resources (Scotland) Act 2013).	
HYDRO NATION FORUM	
The Forum exists to help develop the Hydro Nation vision and strategic work programme, aiming to secure the widespread understanding of the scope and potential of Scotland as a Hydro Nation and to contribute to its success. Key thematic areas of focus include: ' NATIONAL ' theme (focusing on key policy challenges within the domestic agenda – e.g. rural supply issues); ' INTERNATIONAL ' – covering international development, research projects and promoting and supporting commercial opportunity; ' KNOWLEDGE ' – growing our academic research community and developing and connecting them to collaboration opportunities; and ' INNOVATION ' - to support and add value to the work of the Hydro Nation Water Innovation Service. (It should be noted that the HN themes are mutually supportive and overlap, e.g. knowledge exchange contributing to the international activity etc.).	
HYDRO NATION – 'NATIONAL' THEME	
The Hydro Nation 'National' theme sets out the key activities in the domestic agenda being delivered under the Hydro Nation strategy – and developing the wider industry in Scotland and tackling key areas of policy concern.	
SCOTTISH WATER	
As Scotland's single publicly-owned water utility Scottish Water is a key player in the domestic Hydro Nation agenda making significant contributions through their work to deliver services to communities across the country. We work closely with Scottish Water to support activity across a wide range of key policy areas including rural provision, energy and water efficiency, R&D, technology, science and innovation.	

IMPROVED REMOTE RURAL COMMUNITY WATER & WASTEWATER SERVICES

Provision of high quality services in remote or sparsely populated areas presents unique challenges in many parts of the world. Scotland can demonstrate and develop innovative approaches to these challenges. Working through the public and private water governance structures and developing new service models to capitalise on technology advances, catchment management techniques and community participation to reduce energy consumption, raise quality standards, protect the environment and provide a sustainable, good value service.

HYDRO NATION COMMERCIAL & ADVISORY SERVICES

We recognise the potential that exists for public bodies to consider how their knowledge, skills and tools can be sensibly and appropriately exploited in response to domestic and international demand to generate revenue that can be used to support, or enhance core service delivery, or for other purposes. A number of Scottish public bodies are already working to commercialise aspects of their service or are considering how best to do so. We believe there is an opportunity in relation to chargeable activities on water services that could be better developed and aligned across the sector, and indeed potentially with the private sector's commercial activities. Hydro Nation Commercial & Advisory Services (HNCAS) describes a strand of work by leading partner bodies to share experience of commercialisation activity, explore the potential to work collaboratively, and the structures and models required to support that. Note: while this workstream supports the development of our domestic sector, it is anticipated that projects will have an international focus.

Commitment: The SG: Water Industry Team will act as Secretariat to the Group to deliver a work plan being developed from the key tasks for consideration and approval of the Group. The Secretariat will support two meetings of the Group each year, feeding into the next Hydro Nation Forum meeting thereafter. The Secretariat will develop common-themed marketing collateral to present member organisations' individual offerings in the context of a Scottish Government supported collaborative approach, offer a transparent procedure for handling opportunities and consider options for an appropriate web portal.

SCOTLAND AS AN ATTRACTIVE PLACE TO DO BUSINESS

Develop and support opportunities to Market Scotland as a prime location for water-dependent or water-intensive businesses. Support relocation of businesses to areas with available water resources. Promote the development and deployment of water efficiency and water and waste water management and treatment technologies. Support the supply chain to be better networked and informed.

HYDRO NATION – INTERNATIONAL THEME

In order to maximise the value of our water resources, Scotland: The Hydro Nation must reach out to the world to share our knowledge and expertise and invite collaboration that contributes to the water economy. We will do this by:

- helping our water sector identify and respond to international opportunities
- growing networks and awareness of our capacity and reputation for academic and research excellence
- exporting Scotland's expertise in governance and management practice
- delivering projects with partners in key territories to support our objectives.

We will align efforts principally with the Scottish Government's priority international development territories, specifically those where Scotland has already enjoyed a degree of success related to water, or where clear potential has been identified – focusing principally on India and Malawi. We will work with appropriate global organisations such as the OECD, and other UK and international advocacy bodies, including the UK Water Partnership, and Aqua Publica Europa, as well as key partner organisations in target territories (Government of Malawi, CGanga etc.) to bring Scotland's knowledge and experience to bear on key water challenges and other related aspects of international policy development and to identify commercial and scientific opportunities for collaboration.

HYDRO NATION INTERNATIONAL (HNI)

Also closely linked to the 'Knowledge' theme, the HNI project aims build on the strengths of the CREW model and approach to bring better alignment and consistency between the various strands of international Hydro Nation activity including delivering improved, and more actively-managed, networks across the academic sector, supporting commercial opportunities for the public sector being considered and helping to develop the role and profile of the UNESCO Category. 2 Centres for Water Law, Policy and Science at Dundee University. Overall, the HNI approach is intended to provide greater coherence across Scotland's response to UN Global Goal 6 on Access to Water and Sanitation.

INTERNATIONAL PROJECTS: MALAWI

Scotland enjoys a strong relationship with Malawi due to historical ties between the two nations, recognised within the Hydro Nation agenda through joint working at an official level on water resource management, governance and legislation. Peer-to-peer knowledge sharing on key issues has informed new water legislation introduced by both countries, and dialogue has highlighted many common areas of interest for further joint working. We will further support work on water stewardship in communities by working with food retailers and their supply chain partners.

Commitment – we will build on the Hydro Nation funded Climate Justice Fund ‘Water Futures’ project in Malawi, extending the reach of the project to bring benefits to help more people in rural Malawi access ground water while addressing the impact on water supplies as a result of climate change. We will extend the scope to include water pump enhancement trials and work with major UK retailers to ensure in-country water sustainability for key export products such as tea and coffee.

INTERNATIONAL PROJECTS: INDIA

The Scottish Government is committed to strengthening links between Scotland and India, building on the business and cultural links between the two countries. The Scottish Government's India Plan recognises the need for closely targeted activity to maximise economic opportunities and focuses on four key areas - tourism, education and science, trade and investment, and cultural links.

Commitment: working with partners in Scotland and India to build on collaboration agreements signed with Indian counterparts, we will seek to develop a collaborative pilot programme of India-relevant research projects delivered with a range of key stakeholders, including SDI and CGanga, and including International Fellow(s) of the Hydro Nation Scholars Programme, thereby contributing to research excellence and developing opportunities for Scottish research and business.

We will support efforts at a UK level to deliver increased on Water Security in India to ensure Scottish interests and opportunities are appropriately taken forward including through the work of the India-UK Water Centre (IUKWC).

HYDRO NATION – ‘KNOWLEDGE’ THEME

Scotland is internationally recognised for our networks of water industry leaders and academics – we are committed to supporting the scale and profile of expert networks to grow their influence and draw increased benefit for the sector from their collective knowledge.

HYDRO NATION SCHOLARS PROGRAMME

Contributing also as a discrete programme related to the 'National' theme, the Scottish Government has established the Hydro Nation Scholars Programme to support the Hydro Nation Vision and Strategy by:

- developing understanding of how and where best to develop the value of Scotland's water resources.
- focusing on enhancing Scottish capacity in areas of existing research excellence to tackle domestic and global water and sanitation issues.
- providing new research and insights where there are gaps related to managing water resources in Scotland or globally.

BUILD STRONG ACADEMIC NETWORKS

Develop the links between Scotland's internationally recognised networks of industry and academic experts e.g. CREW, Interface, Dundee UNESCO Centre for Water Law, Policy and Science to improve and grow research in support of the sector, and promote findings to the sector.

Build the scale and profile of the Hydro Nation School of Scholars, with the Scholarships recognised as a prestigious award for research excellence, and the Scholars and their work deployed to benefit the sector. Identify opportunities for Hydro Nation Fellows to support specific projects at home and internationally.

Support and develop improved networking opportunities for, and between, the academic water community and early-career stage professionals.

HYDRO NATION – 'INNOVATION' THEME

Supporting innovation is a major focus of the Hydro Nation agenda and the [Hydro Nation Water Innovation Service](#) (HNWIS) was established in August 2015 to assist the identification and exploitation of key opportunities for Scotland to bring new technologies forward that can reduce costs and raise standards. HNWIS aims to help Scottish businesses bring forward their innovative ideas to market more quickly providing benefits to them and to the wider economy as a whole. Working with key Hydro Nation partners we will develop the HNWIS model beyond August 2018.

HYDRO NATION OUTCOMES

GROW THE VALUE OF SCOTLAND'S WATER SECTOR

The water sector is worth in the region of [£1.8 billion](#) to the Scottish Economy. That value can be increased through action to improve Scotland's capacity for technological development, giving priority to effective knowledge transfer and ensuring focused support for water sector companies. We can create value from Scotland's unique governance of its water industry and the respected leadership.

BUILD STRONG BUSINESS NETWORKS

Encourage more Scottish businesses to apply for EU funding, in particular Horizon 2020 and Interreg and contribute to the development of improved support mechanisms to facilitate this.

Support Scottish businesses to bring new products to market, through the Innovation Service, including provision of advice, research, testing facilities to trial new products, certification and accreditation including the European Technology Verification Standard (ETV).

Build positive relationships with water customers, setting high standards for customer service, and engaging with consumer interest bodies. Support action to innovation and efficiency in customer service.

RAISE SCOTLAND'S PROFILE AS A HYDRO NATION

Promote knowledge exchange with developing countries including through the Climate Justice Fund Projects in Malawi, and with India.

Participate in domestic and international conferences, and events to communicate and promote the Hydro Nation vision and develop opportunities for the water economy, including supporting (at least) one international water event in Scotland each year related to the aims of the Hydro Nation strategy - Hydro Nation is supporting the Global ISO Conference in April 2018.

Support Scottish Water's development of its international business, which can share its governance, performance improvements and technical expertise on a commercial basis with other countries (e.g. Ireland, Qatar and Canada).

Raise visibility and engagement in the Scottish Parliament through progress reporting and celebrating success, and in trade / policy publications as appropriate.

DYNAMIC REGULATION (ECONOMIC, ENVIRONMENTAL AND QUALITY)

Build on our modern, respected, regulatory practices to further raise standards of quality, value for money and environmental management, reduce industry costs, supporting innovative approaches and setting good practice.

EFFICIENT USE OF WATER RESOURCES

Promote increased water efficiency in domestic and non-domestic settings. Reducing energy consumption in water and waste water services. Producing renewable energy from water resources and assets.

Hydro Nation Debate – 26 October 2017

The Scottish Parliament, following the debate, agreed to the Government motion as amended by Labour:

That the Parliament notes the importance of water to Scotland's national and international identity, and supports action to develop the water economy, as promoted by the Hydro Nation agenda, which is helping to make Scotland a world-leader in the responsible management of water resources by developing economic and non-economic value through the high level of performance demonstrated by Scottish Water, supporting the wider water industry and international activity, which, together, make a contribution to the UN's sustainable development goals and Scotland's low-carbon economy; reiterates the importance the Hydro Nation's support through the targeted Climate Justice Fund to water-scarce nations such as Malawi; calls on the Scottish Government to address the devolved barriers to the development of new hydro schemes, and recognises the value that excellent water resources add to Scotland's tourism and food and drink industries.

Some highlights of the debate:

- The debate was consensual and there were some very positive comments.
- The Conservatives generally welcomed the debate and progress made with the Hydro Nation agenda, although also highlighted some areas of concern. Donald Cameron made mention of pharmaceuticals and PCBs/plastics in the environment and the inability of waste water and water treatment to effectively filter this out and also the ability of rural areas to have access to the public drinking water supply. John Scott mentioned that more work needs to be done around water quality and river-basin management, as well as flood risk management specifically in his constituency. Maurice Golden closed the debate for the Conservatives, highlighting 3 main areas: phosphorous and priority substance recovery to protect the environment and biodiversity, ensuring river basin management plans and flood risk management plans are more effective across the whole of Scotland and improving the market for the business sector and the introduction of a not-for-profit company that runs on the energy service company model to share the benefits of water efficiencies.
- Scottish Labour comments were also highly positive. There was a suggestion by Claudia Beamish that communities looking to develop and deliver community energy schemes could benefit from a project manager to help them. A number of Scottish Labour MSPs also expressed concern over the revaluation of business rates and the impact on hydro schemes. Scottish Labour indicated that they supported the concerns mentioned by Conservatives over further waste water challenges and flood management, however expressed concern about what they viewed as possible implications of further privatisation of Business Stream.
- Bruce Crawford (SNP) focused on the history and importance of Loch Katrine in his constituency as the water supply for Glasgow as well as a visitor destination.
- There was significant discussion about the legacy of hydro schemes and community renewable schemes and the benefits to Scotland as well as some mention of marine energy.

- Stewart Stevenson (SNP) mentioned the potential to convert disused sewage treatment works into modern recycling plants. He also mentioned the potential to recycle phosphorous.
- Mark Ruskell (Green) expressed concern over the risk to environmental directives as a result of Brexit and the importance these have had on improving water quality. He also mentioned the importance of Scottish Water as a public body, of protecting domestic charges from competition, concerns about the impact of future trade agreements on the status of SW as well as concern over the cut to UK government support of renewables.
- Ben Macpherson (SNP) mentioned Seafield, noting that he is awaiting the outcome of a strategic review at the site.

Reducing Flood Risk Debate – 22 November 2017

The Scottish Parliament, following the debate, agreed to the Government motion as amended by the Conservatives and Labour:

That the Parliament recognises that efforts to reduce flood risk are a vital part of the Scottish Government's adaptation to a changing climate and are needed to provide a foundation for sustainable economic growth and thriving communities; agrees that the risk-based, plan-led, multi-agency partnership approach, as introduced by the Flood Risk Management (Scotland) Act 2009, has led to a better understanding of the causes and impacts of flooding, and consequently enabled significant progress towards delivering sustainable management of flood risk in Scotland; considers that, given the increasing rate of climate change, the importance of considering all measures of slowing down water transfer from the land to rivers throughout the catchment is vital; further recognises the work of local authorities, Scottish Water, SEPA and other partners to deliver new flood protection schemes, Floodline, the Scottish Flood Forecasting Service and advances in property level protection, which are providing protection to Scotland's communities and increasing their resilience; believes that no communities, whether urban or rural, should be left behind in these developments; considers that the Scottish Government must ensure that there is adequate research commissioned to assess the implications of climate change on flooding policy and that the strategies and sustainable management of flood risk are regularly reviewed, and believes that there must be adequate funding to ensure that the range of flooding interventions and policies can be taken forward.

Some highlights of the debate:

- The debate highlighted the interest in flood risk management and the potential impacts on communities across Scotland.
- The debate highlighted the good progress that has been made in reducing the level of flood risk in Scotland.

- Edward Mountain (Conservatives) talked about hard engineering not always being suitable. He raised big questions about land use issues. Land use issues were referred to by a number of other members as well.
- Claudia Beamish (Scottish Labour) raised a lot of issues that also relate to bigger land use questions. She talked about costs, as well.
- The Cabinet Secretary noted that, as part of the review of planning, the Scottish Government is considering the issue of permitted development rights, which was a particular concern that Claudia Beamish raised. The SG has commissioned a sustainability appraisal on the subject that will inform work on detailed proposals for future consultation.
- A number of members spoke about SEPA. The Cabinet Secretary made clear that its chief executive, Terry A'Hearn, is absolutely clear that flood risk management and flood warning work will continue to be an organisational priority and that it will be delivered through the available budget.
- A number of members, including Graeme Dey (SNP), talked about Flood Re and some of the issues around insurance. The Cabinet Secretary noted that it continues to be a challenge.
- John Scott (Conservatives) and others raised the issue of coastal erosion.
- A number of members, including Gillian Martin (SNP), talked about the impact of flooding on individuals and communities. Communities and individual householders are at the heart of the issue because they are hit the most. Gillian Martin also flagged up the concern that exists around peatlands and wetlands.
- Several members, including Mark Ruskell (Greens), Claudia Beamish and Bruce Crawford (SNP), talked about small communities. The Cabinet Secretary confirmed that the second national flood risk assessment, which is currently under way, follows a revised methodology that seeks to include small communities that face a significant flood risk.
- Oliver Mundell (Conservatives) raised concerns about Whitesands.
- The Cabinet Secretary noted that the change in climate presents us with challenges in the future that will require continued partnership working involving local authorities, SEPA, Scottish Water and others. Flood risk management is a key component of the suite of measures that this Government has in place to prepare Scotland for the changing climate.
- The Cabinet Secretary confirmed her intention to meet with Derek Mackay and Kevin Stewart, the ministers who are responsible for finance and planning, respectively.