

BHA Spotlight

ISSUE 4 • 2009

Hydropower - the pioneer of renewable energy



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Comment from the Chief Executive



David Williams

Merry Christmas everyone!

At a time when it should be getting easier to develop renewable energy we still seem to struggle to deal with barriers from various directions.

It seems to me that rather than hydropower being a developed and proven technology we are, in fact, very much a fledgling sector. You can understand how this applies to offshore hydro but we are dealing with regulators and agencies who are having to address new hydropower development for the first time in decades. The BHA during 2009 has therefore been working on many fronts to ensure that developers of all hydro get a fair deal. This continues into 2010 and you have my promise that we will keep up momentum!

May I wish you a very happy Christmas and a successful 2010.

David Williams, BHA CEO

Hydro power -

the pioneer of renewable energy

The British Hydropower Association is sponsored by:



British Hydropower Association www.british-hydro.org



This newsletter aims at keeping members up to date with a range of news articles including updates on BHA activities

UK Hydropower – Fighting new fires

Two hydropower conferences in as many weeks made October a busy month and one which allowed industry, regulators, government departments and agencies a chance to review progress. Are we going to be able to provide a significant contribution to UK and Europe renewable energy targets? Will we be able to get the best balance between sustainable hydropower generation and the regulatory demands made on us?



First Hydro - Dinorwig



Hydro 2009 Exhibition

The British Hydropower Association's 2009 conference was held in Liverpool. The choice of venue was not made by chance. The Northwest of England and North Wales commands much of the country's pumped storage, storage and run-of-river conventional hydro schemes. The north Irish Sea has a string of tidal impoundment schemes in various stages of study and implementation. It is also one of the best areas for the development of tidal stream generation. Past, present and future hydropower development of all types provided a good platform for a lively conference.

Less than two weeks later "Hydro 2009" was held in Lyon, France. This is now the premier global hydropower event attracting 1700 delegates from 90 countries. The accompanying exhibition was supported by over 150 companies.

"Hydro 2009" reviewed worldwide developments,

innovations and policies. The scale of global worldwide development is massive and hydro will always be an important component of energy generation. The urgent need to proceed with large hydropower developments especially in Africa was discussed and international involvement from financing to equipment supply debated at length. At the other end of the scale, a full-day session was devoted to small hydropower. Here we heard of new and more appropriate means to build smaller projects more cost-effectively. Despite general hydro technology being well developed, manufacturers are devising even more efficient and innovative plant and standardised construction methods to save on repetitive design and civil construction. At the end of the day, a panel discussion tried to put the developments into a form which could help the growth of small hydropower in developing countries.

Whilst the BHA's event

concentrated on UK development, there were parallels in the needs and direction of the UK hydropower sector and the goals of global hydropower.

Topics for presentation and debate included the all-important balance between hydropower and the environment. All hydropower was finally accepted as being sustainable and renewable by a global ministerial resolution five years ago. The World Bank led by example at the Nam Theun 2 project in Laos where a condition of financing was exhaustive mitigation of social and environmental issues. This came at a large financial cost but one which has set the standard for large storage schemes. However, prejudice rarely lies low for long and it is now no surprise that, at the scheduled Climate Change talks in Copenhagen, there is a move to limit the plant capacity of hydro schemes which can be regarded as sustainable and renewable. Arguing semantics perhaps but this continual

gnawing at an industry which has the ability to make a direct and quantifiable challenge to climate change can be very wearing.

Here in the UK the BHA spends an inordinate amount of time debating and battling with regulatory bodies on individual issues which rarely take the whole picture into account. Analogies such as Nero fiddling while Rome burns spring to mind! When will government, media and the public realise that the fire is getting nearer and more intense and we can no longer fiddle with small pieces of legislation?

Yes, we have to maintain a balance but some fairly basic policy decisions have to be made rather than fiddling around the edges. We have a splendid driver in the Renewables Obligation – let this lead rather than react to the barriers to progress. Renewable energy is one way to fight the fire, hydropower has the advantage of using water!

David Williams, BHA Chief Executive

Gilkes turbine



Archimedean Screw - River Dart Country Park



Departmental disputes raise concern over feed-in-tariff

Hopes of having a key government policy for smaller renewables technologies in place before the UN climate summit in Copenhagen were wiped out due to internal wrangling over the levels to set feed-in-tariffs (FiTs).

The Observer reported last month that the final announcement on FiTs, which was expected to be published around 9 December alongside Alistair Darling's pre-budget report, will now not happen until January 2010. According to

the paper, government sources have said that the Treasury and Ofgem have raised last-minute concerns about the potential cost of the policy to give fixed price incentives to renewable generation of less than 5MW.

In a recent consultation submission to the Department of Energy and Climate Change (DECC), Ofgem expressed its viewpoint that FiTs do not offer value for money and would prefer the Government to increase funding for provision of loft insulation for housing and for

installation of smart meters. It said the aim of offering a return on investment to households of 5%-8% as proposed by the industry was "disproportionately high compensation".

But Alan Simpson MP, a special advisor to energy and climate change Minister Ed Miliband, said: "The trouble is that the Treasury, Ofgem and government officials

have driven this policy with a towering lack of ambition.... If they were five times as ambitious, it would only cost the average family another £2 a year. But the energy companies and Ofgem don't want to go down that path".

With 1st April 2010 implementation approaching, it is important policy is settled quickly.

Source: *SmartestEnergy*

....STOP PRESS: Pre-Budget Report confirms tax-cuts on income from FiTs

Alistair Darling confirmed on 9th December in his pre-budget report tax exemptions on income from FiTs on both generation and export streams. However it has yet to be clarified if this will be extended to the commercial sector.

Source: *waterpowermagazine.com*

Micropower could provide 6% of the UK's electricity



Small-scale renewable energy could provide 6% of Britain's electricity by 2020 if Feed-on-Tariff (FiTs) rates are raised, Friends of the Earth (FoE) have claimed. Citing figures released by the Department of Energy and Climate Change (DECC), FoE said that introducing a more ambitious scheme than that proposed would produce three times the Government's current target of 2%. The campaign group also said that tariffs set to deliver a 10% return, rather than the current proposal of 5-8%, would result in 25TWh of small-scale renewable electricity generation by 2020.

FoE have accused the Government of ignoring the results of the research and said that as well as delivering 6% of Britain's electricity, a higher tariff would reduce UK dependency on fossil fuels and increase energy security. They are calling for the proposed tariffs to be increased to deliver an annual return of 10% for all small-scale green energy schemes installed during the first three years of the scheme until the payment system is reviewed in 2013.

Source: *NewEnergyFocus.com*

.....while electricity supplier calls for the scheme to be simplified

Renewable electricity supplier and BHA member, Good Energy, has called in the Government to simplify the proposed FiT arrangements for micro-generators and reward generators for their total generation.

Under current proposals, the FIT will be made up of two parts: A generation payment and an export payment. Generators will be paid a fixed sum per unit of electricity generation, varying across different technologies, for 20 years (25 for solar projects). They will also be paid for each unit of electricity they export to the grid. Currently a blanket price of 5p per unit is proposed for this export payment – almost 20p above the market rate.

Good Energy, which supports small to medium-sized generators, has been paying its own version of a FiT for five years through its HomeGen scheme. Good Energy's own experience and analysis suggests that for most generators the financial benefits from the generation payment and from avoiding importing

electricity are much more important than the export element.

Under the current proposals the administration of the export element of the FIT will be complex and the costs will be high. Juliet Davenport, founder and CEO of Good Energy, supports the introduction of a UK-wide FIT, but feels that the current Government proposals may be unworkable, suggesting that a blanket price for exported electricity will undermine the current market (whereby suppliers compete to offer generators the best price for their power) and generators may lose out as money that should be going to them becomes tied up in administrative costs and supplier compensation. She recommends that the FIT proposals be modified to focus on supporting generation payments and that the market should be left to determine the export price.

NEW REF MICRO-GENERATION DATA REVEALS **SMALL HYDRO AS A STAR PERFORMER**

The Renewable Energy Foundation (REF) has released the 9th issue of its Renewable Energy Data files, which were previewed at an invitation-only launch event on the 25 November 2009.

The first issue of its Renewable Energy Data files (the RED Files) was issued back in December 2006 and this 9th issue supersedes all previous versions and adds recent generation data bringing the dataset up to March 2009. Previous issues have given performance data for all 900 macro-generators subsidized under the Renewables Obligation. This publication adds all micro-generators, giving a total of 3,600 installations. The files have been generated for REF by Oswald Consultancy Ltd. The data files are accompanied by a presentation, given at the launch event, discussing all technologies, and written by Renewable Energy Foundation itself.

Amongst many points brought out in the data is the superior performance of micro-hydro installations. While both micro-wind and Solar PV are achieving Load Factors around or below 10% overall, micro hydro is achieving results of around 35%. This means that while it accounts for a tiny fraction of the total number of micro generators, and about 1/6 of the installed micro-generation capacity, micro-hydro generates more than half of the electricity produced from the micro-generation sector.

REF analysts Dr John Constable and Dr Lee Moroney said: "When considering the take-up of domestic-scale renewable micro-generation, photovoltaic panels are clearly the most popular with micro-wind only a little less popular. The energy return on these technologies, however, is disappointing. The Cinderella of the sector is micro-hydro, which

has a significantly higher load factor, nearly four times PV and micro-wind in fact. Indeed, mini-hydro has generated approximately half of all 'micro' renewable energy (MWh) since 2002. While the contribution from micro-generation of electricity

overall is very unlikely to be nationally or strategically significant in any foreseeable time-frame, it is clear that some generators may be valuable at a personal or domestic level. Anyone lucky enough to have a suitable resource should definitely

look into small-scale hydro."

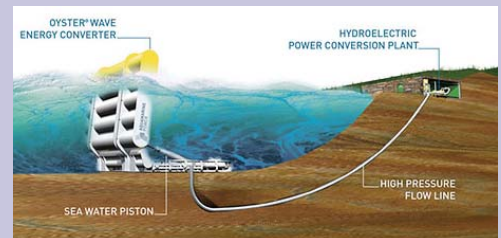
For more information please email Margareta Stanley on press@renewable-energy-foundation.org.uk or press@ref.org.uk or telephone 020 79303636.

World's largest working hydroelectric wave energy device connects to the National Grid

First Minister Alex Salmond switched on Aquamarine Power's Oyster - the world's largest working hydroelectric wave energy device - to the National Grid last month. He also announced new funding of £975,000 to help deliver 'Oyster 2', involving three linked devices with a total capacity of 2MW, by 2011 - the largest Scottish Enterprise R&D grant ever awarded to a marine renewables project.

The Oyster, which is located at Billia-Croo near Stromness, deploys a hinged flap fixed to the sea bed that uses the motion of waves to drive hydraulic pistons that pump high pressure water to an on-shore hydro turbine. It was developed by Edinburgh-based Aquamarine Power's marine energy researchers at Queens University, Belfast. A farm of 20 Oysters would provide enough energy to power around 9,000 homes.

The Scottish Government has previously provided £275,000 through the Wave & Tidal Energy Support Scheme (WATES) to support the development of the Oyster, as well as £500,000 to EMEC's on-shore works associated with the installation. EMEC, in Orkney, is the world's only accredited testing facility



The Oyster in situ



The Oyster

for wave and tidal devices. Additional funding from EMEC of £2.5m from Scottish Government, Highland & Islands Enterprise, Scottish Enterprise and Orkney Islands Council has been announced.

Source: Talent Scotland

BHA



Micro-hydro seminars 2009

Northumberland and Cheshire



Our fourth micro-hydro seminar of 2009 took place in September at the stunning Cragside National Trust property in Northumberland. Famous for being the first property in the world to generate electricity for the use of water, this made a very apt setting for yet another successful seminar. Over 50 delegates attended, including our furthest traveller yet – a gentleman all the way from Nigeria! The standard talks on project life-cycle, licensing, power purchase agreements and case studies were followed by a tour of the historic hydro equipment at Cragside – thankfully we had use of the National Trust minibus to get us up and down “cardiac hill”!

November saw the last of our 2009 seminars at another

National Trust property – Quarry Bank Mill in Styal, Cheshire. Once again we had excellent attendance with over 50 delegates comprising farmers, landowners, environmental regulators, and archaeologists to name but a few. Subjects included a talk by Paul Bromley of the Pedley Wheel Trust on waterwheels. Lunch was followed by a site tour of Torrs Hydro at New Mills, which is an Archimedean screw installation in an stunning location – although the method of clearing the trash rack was a little unusual requiring the donning of chest-waders!

The BHA is grateful to all the speakers who make these events so successful and we look forward to our programme of future seminars in 2010.



Torrs Hydro

The Micropower Manifesto is published

A set of proposals which will feed into a government review of microgeneration policy was launched by the Micropower Council last month. The Micropower Manifesto proposes four key objectives as a framework for future micropower strategy required of government within 12 months by the Green Energy Act which received Royal Assent in November. These are:

- Cohesive financial support for microgeneration installation
- Comprehensive retro-fitting of microgeneration technologies into existing building stock
- Clear information for consumers on the options an help available
- Credible career options throughout the industry

The manifesto claims that integrated financial support is necessary to cover the high capital costs of installation that might deter potential purchasers. It calls on government to produce a fiscal support strategy that defines a clear access route to financial support and integrated financial incentives, such as FITs, to be integrated into a wider policy framework.

Source: NewEnergyFocus.com



UPDATE: Northern Ireland

The Northern Ireland branch of the BVHA held its AGM on 27th November, where Andrew Frazer was re-appointed as Chairman. Andrew raised four main areas of concern for hydropower in Northern Ireland over the last year: down "cardiac hill"

Business Rates

As in Great Britain we wait for the announcement of the new rateable values; we have been promised large increases.

Consultation on RO

Following on from the Consultation in GB on the Feed In Tariff, the DETINI has announced its own consultation which does not include a proposal for a FIT for NI the foreseeable future; instead it is proposing that 4 ROC's should be issued for schemes up 250kW for wind and 100kW for hydro. This consultation is available on the DETINI website and will close on 12th December. We will reply making further suggestions on banding in line with the BHA FIT response and stressing the need for a FIT in NI which will give greater confidence to sources of finance.

Loughs Agency and the Good Practice Guide

The publishing of the GPG by the EA in August produced a reaction from Loughs Agency that, rather than accept these in NI, they would apply the Guidelines imposed by the Central and Regional Fisheries Board of the ROI which are based on no hydro schemes in salmonid rivers, 50:50 flow splitting and 6 mm bar spacings for screens. At a meeting organized by Loughs Agency in

October, there was disagreement between Water Management Unit of the Department of the Environment NI and Fisheries Division of the Department of Culture Arts and Leisure on one side and Loughs Agency of the Department of Agriculture and Rural Development on the other as to who was the competent authority for implementing the WFD and Fishery Protection policy.

We have always managed to have a good working relationship with both Fisheries Division and Water Management Unit but the adoption by LA of policies from a foreign country without consultation or discussion with us is unacceptable. We have responded that we will have no further involvement with Loughs Agency but we will continue to work closely with the other regulators. I am writing to the appropriate Ministers pointing out that to have two agencies in NI applying different regulations to the same issues is a clear waste of the taxpayer's money and what are they going to do about it. Watch this space, there is going to be a row!

In the mean time if you want to know about tourist opportunities or recreational angling go to Loughs Agency's web site; it is excellent!

Hydro development

The public register of abstractions run by the Water Management Unit reveal that there are over 80 small hydro schemes in existence in NI; on top of this, there is growing interest from within NI for developing more. Already there are schemes with Planning Permission waiting to be built and there are over 10 more in the Planning process.

Andrew Frazer, BHA NI Chairman

Planning reforms reach watershed

On 9 November the Government published six draft National Planning Statements (NPSs) to expedite the planning process for construction of major energy infrastructure projects (above 50MW onshore and 100MW offshore). These include one covering the whole of the energy sector and one for renewables. Once these have been consulted on they will guide the Infrastructure Planning Commission's (IPC) decisions on whether to consent to large energy projects.

Severn Tidal scheme decision on hold until 2010

Energy Minister, Lord Hunt, has said a decision on any Severn Tidal project is unlikely to be made until 2010, and any scheme would not contribute to renewable energy targets until after 2020. The delay has been put down to the barrage being a "very challenging project"

Rock fall may see Glendoe closed until 2012

Scottish & Southern Energy's (SSE) new hydro station at Glendoe could be closed until 2012 following the rock fall in a tunnel carrying water from the reservoir to the power station in August this year. SSE are considering a number of options, one of which is building a new tunnel.

Source: The Scotsman 12/11/09

HYDROPOWER for Local Authorities

Local authorities are in a pivotal position regarding action to combat climate change. It has been recognised by the government that the upper echelons of government or governmental co-operation (intergovernmental conferences, the EU and national government in London) cannot implement effectively policies on climate change because they are too remote. Whilst governments might properly develop policy, its effective delivery needs to be at local level.

Local authorities are themselves large landowners, they are big employers of local people and provide many services directly or by commissioning; they are, of course, also a regulatory body (eg town and country planning) and so have a multi faceted role. As such, they can promote schemes on their own land. But local authorities are also in touch with their communities and can have influence to help community groups take action themselves, whether this be energy efficiency or the provision of renewable energy. Even below the community level (ie at individual level) local government can influence the population and perhaps encourage or persuade people to take action.

It is for this reason that the unique role that local authorities have in the delivery of the government's climate change policies has been recognised.

On the local government side, there is also much to be gained from activity in this area. Whilst the emphasis coming up to the Copenhagen intergovernmental conference is on the environmental aspects, many local authorities are equally interested in the economic and other benefits that such activity might bring. The plan to establish ESCOs (energy services companies) is taking root in many authorities now and the fact that creating capacity to generate wholly green energy and heat creates opportunities for jobs, supply chain growth and income generation has not been lost. A progressive local authority can also use the environmental agenda to help stimulate community leadership and enhance its reputation. Whilst many of the public may not yet have realised the devastating consequences of dangerous climate change, authorities can be getting ahead and taking action now.

The three ways that any local authority can use to reduce its carbon footprint are: reducing energy usage by behaviour change; implementing a range of energy efficiency measures; and developing the capacity to generate its own electricity and/or heat from renewable sources. Whilst the latter

may not be the priority right now (the other two are potentially more effective, less costly and easier in the short term), it will take some time to develop that capacity and unless consideration is given to that in advance, it will be many years before an authority is in a position to benefit.

So far as types of renewable energy are concerned, local authorities are now examining the potential for establishing their own wind farms (as Oxford City Council announced recently), implementing biomass energy policies (such as in Barnsley MBC) or enjoying solar PV benefits (for example Tandridge DC). But what of hydropower?

Hydropower schemes have existed for centuries and there are many reasons why local authorities should examine them now. The primary one is the potential for objections from members of the public as part of the planning process. Hydropower installations are particularly un-intrusive and do not tend to whip up fervent opposition locally. The fact that many hydro schemes have been installed in our National Parks is testament to the fact that they are not seen as damaging to the visual or environmental aspects of an area, even one of outstanding natural beauty.

Hydropower is also more efficient than many other forms of renewable energy as its constantly on (droughts aside). The settled nature of flow prediction also helps the financial planning and makes possible longer term payback plans. Whilst the capital costs of a medium to large scheme may be high, projected income can support the necessary debt and the financial markets are comfortable with this. Such schemes also fall within the contractual and project experience of local government.

So are there lots of local government hydropower schemes to refer to? Well, no, actually! At the recent Annual Conference of the British Hydropower Association it was commented that there are few

such schemes in operation, with Kirklees MBC and Cornwall Council amongst the few that can boast a project. There are a number of community schemes (such as Settle Hydro) and some individual efforts but this is a surprisingly low amount, bearing in mind what local government has to achieve in climate change over the next decade.

The Yorkshire Dales National Park Authority recently commissioned consultants to survey the Park with a view to reporting on what hydropower projects would be possible. The Authority then published the results and are now promoting the potential for such schemes in the area, not necessarily directly themselves. An analogy in local government might be a County Council that

undertakes such a survey and then makes the detail available in the hope that local farmers and landowners might be prompted to move forwards with a micro scheme, as well as considering schemes on land that the authority itself owns. Whilst micro schemes may be the bottom end of the renewable energy chain, multiple projects start to add up.

So perhaps local authorities should take a small step forwards to promote community and individual hydro schemes using their position as the strategic authority in the area. With a little encouragement, many more schemes could come forwards, helping reach those stretching climate change targets.

Stephen Cirell, Programme Director for Green Cornwall and David Williams, BHA Chief Executive



NEW MEMBERS

The BHA would like to welcome the following new members:

- **Kenneth Grubb Associates Ltd** - A Company member offering a structural, mechanical and electrical engineering service to the construction industry.
- **RSA Insurance Group PLC** - A Company member offering insurance policies for renewable energy schemes.
- **Adrian Laycock Ltd** - A Correspondent member and small independent consultancy specializing in engineering for irrigated agriculture in developing countries.
- **Renewable Design Consultants** - A Correspondent member offering advice and assistance for the development of micro-generation projects. RDC is registered as a consultant under the Community Sustainable Energy Programme (CSEP).
- **Lakeland Marine Construction** - A Correspondent member specialising in marine and water based civil engineering, operating specialist plant and floating pontoons.
- **J C Hydro Ltd** - A private member and potential future generator/developer.
- **J & M Turner** - A private member and potential future generator/developer.
- **L Ross** - A private member and potential future generator/developer.
- **Thomas Thomson (Blairgowrie) Ltd** - A private member and potential future generator/developer.
- **Hydropol Project & Management a.s.** - An International Member based in the Czech Republic specialising in the planning, construction, management and financing of small and medium-sized hydro schemes and associated hydraulic structures.

HYDRO DEVELOPMENTS....

Settle Hydro switch-on

Green energy will soon be generated from Craven's first community-run hydroelectric plant at Settle. Work on the £420,000 scheme, which uses water from the River Ribble, began in the summer after the money was raised through grants and a share scheme, with pop band Take That's Jason Orange probably the most famous shareholder to date.

The new hydro station at Bridge End Weir uses age-old Archimedean screw technology and is expected to be up and running in weeks. Power from the river water running past the 7.5m long, 7.5 tonne screw turbine, next to the original millrace, will provide electricity for the National Grid. Profits will be divided between the shareholders and the community, with the community money being used to fund other projects.

Source: The Westmorland Gazette 12/11/09

Water of Leith to power homes

The water of Leith may be set to become a power generator again with plans to site five turbines along the waterway. It used to power dozens of mills stretching the length and breadth of Edinburgh. Renewables group Community Energy Scotland has awarded more than £30,000 to the city council and four community groups to assess the feasibility of installing small Archimedean Screw turbines.

Source: Edinburgh Evening News 04/11/09

Somerset Mill brought back to life

A green energy project in the heart of the Somerset countryside has brought a disused mill back to life by harnessing the power of the River Alham near Castle Cary. The scheme uses an Archimedean Screw turbine and can generate up to 1-kW of power when the river is in full flow. The owner, David Kerr, hopes that the turbine will pay for itself within ten years. The project was masterminded as a joint venture between hydro specialists Potential Energy, manufacturer Spaans Babcock and local consultant James Willder.

Source: The Journal 04/12/09

Ruswarp Weir to provide hydroelectricity

Plans to install a hydro scheme in Ruswarp Weir to provide up to 160 homes with electricity have been provisionally approved. Esk Energy submitted an application to the EA for permission to extract a maximum of 80m cubic meters of water a year from the weir. The voluntary agency is to install a 50kW Archimedean Screw turbine on the south side of the River Esk next to the existing fish pass. The North Yorkshire Moors National Park planning committee have approved the scheme, pending a report into potential noise hazards.

Source: The Whitby Gazette 20/10/09

Ludlow's River Teme could be generating power

The River Teme in Ludlow could be used to power homes in the town in the future. A survey of possible hydro sites is being undertaken and the river's three weirs are among those being examined across Shropshire and Herefordshire. The survey is being carried out by the Ludlow Hydro Generation Group, which has been set up with members drawn from the Teme Weirs Trust, Ludlow 21 and other interested parties. The group is working with Energy4All, which is carrying out a feasibility study as part of the shareenergy project funded by Advantage West Midlands. The study results are expected in January 2010.

Source: Energy4all



River Teme

HYDRO DEVELOPMENTS continued....

Welsh stream turns water into hard cash

A sheep farmer in the Brecon Beacons has found that low emissions can mean high profits. Howell Williams has spent £25,000 on a water turbine housed in a small shed over the stream just next to his farm. A £2,500 grant from the Brecon Beacons National Park helped him to reduce the cost. At maximum capacity it generates a constant 11kW – all of it sold to the local electricity company, resulting in an income of £900 per month, Williams claims.

He is now thinking of installing another turbine and has been an inspiration to other local farmers who see the potential for their own farms.

Source: BBC News 30/11/09



Henhyd Waterfall near Abercraf

More Northumberland landowners turn to renewable energy

The number of farmers and landowners interested in harnessing renewable energy to generate power in Northumberland has shot up in the last two years.

There has been a 70% increase in the numbers enquiring about installing equipment – including hydroelectric schemes – according to land management agency Strutt & Parker. It's Morpeth office said a combination of potential returns on investment, a desire for self-sufficiency and governments incentives appear to have provoked the interest.

Source: The Journal 04/12/09

More hydro for Gwent

A Monmouth man has built his own scheme after discovering the foundations of a 110-year-old hydropower station near the River Monnow. After Ronald Kear's initial discovery of the site he contacted the EA to find that they were looking at building a £600k fish pass at the Obaston Weir on the river to allow salmon to enter and spawn in the river – after being unable to pass for nearly 300 years due to the height of the 11ft weir. The pass was completed in 2008 and Mr Kear worked in partnership with the EA and invested £500k to build the power station alongside the fish pass. The power station took 15 months to complete and started generating in February 2009 using two Archimedean Screw turbines. A total of 670,000Kwh of electricity is now produced at the site per year.

Source: The Journal 04/12/09

Aberfeldy Common Good Fund delay decision on Birks of Aberfeldy lease

A meeting to decide whether developers of a hydro scheme at Birks of Aberfeldy can lease land has been pushed back to next year.

The proposed scheme would run down Urlar Burn around half a mile from the famous 'Birks falls', down the existing Urlar Road and into the Birks for a turbine situated underground at the car park.



The Birks of Aberfeldy

The Aberfeldy Common Good Fund was due to discuss whether the applicants could rent land at the Birks for the planned turbine house, which has been gifted to the people of the town. But it now claims that not all the information required to make a full and proper decision was made available at the council's development control committee meeting back in April when the proposal was unanimously agreed. Scottish Natural Heritage and Edinburgh's Royal Botanic Society have both raised concerns since then.

Source: perthshievertiser.com

INTERNATIONAL NEWS

Hydroenergia 2010 – call for papers

The European Small Hydropower Association (ESHA) and MHyLab (mini-hydraulics laboratory) have released a call for papers for Hydroenergia 2010, to be held from 16th to 19th June 2010 in Lausanne, Switzerland.

Hydroenergia 2010 will address the issues hydropower faces in its important role as a sustainable and renewable energy resource, and will gather together the small hydro sector's main stakeholders to debate the hot topics affecting the industry, exchange experiences and present new advances in technology.

Papers will be considered under the following topics:

- New regulation, administrative procedures and finance
- Technical innovations and engineering solutions
- Perspectives and development of small hydropower in the EU and the rest of the world
- Multi-purpose hydro schemes
- Environment
- Operation and maintenance
- Planning
- Education and training

For more information about submitting an abstract, please visit www.hydroenergia.eu.

Current Consultations

Government departments in London have issued a number of consultations recently which include:

Consultation on Permitted Development Rights for Small-scale Renewables

The Department of Communities and Local Government (CLG) has published a consultation document on extending permitted development rights in England for small-scale renewable and low carbon energy technologies. For hydropower its scope is limited to agricultural and forestry land. We shall prepare a response. Please send in any comments you may have on the consultation which closes on 9th February 2010.

Consultation on Environmental Permitting Guidance on Water Discharge Activities

Department for Environment, Food and Rural Affairs (Defra) and the Welsh Assembly have jointly published a consultation on guidance water discharge activities which closes on 18th February 2010. This consultation is on sewage discharges. It does not relate to discharges from hydropower plant.

Draft energy National Policy Statements

The Department of Energy and Climate Change has published draft energy National Policy Statements (NPSs) and accompanying documents for public consultation. These consist of:

- Overarching energy NPS (EN-1)
- Fossil fuels NPS (EN-2)
- Renewable energy NPS (EN-3)
- Gas supply infrastructure and pipelines NPS (EN-4)
- Electricity Networks NPS (EN-5)
- Nuclear NPS (EN-6)

The consultation closes on 22nd February 2010. We shall prepare a response. Please let us have your comments.

Royal Assent for the Marine and Coastal Access Bill.

The Marine and Coastal Access Bill received Royal Assent on 12th November. The Act:

- establishes the Marine Management Organisation (MMO) to be the strategic delivery body and will be responsible for consenting offshore generating stations under 100MW in English and Welsh waters and will provide advice to the Infrastructure Planning Commission (IPC) on larger offshore energy projects.
- introduces a new system of marine planning (a Marine Policy Statement (MPS) and a series of regional marine plans). The MPS will be subject to scrutiny by Parliament, national assemblies and opened to public consultation.
- enables public authorities to take marine authorisation and enforcement decisions primarily in accordance with the MPS or marine plans and to have regard to them when taking other decisions which affect the marine area. The IPC will decide on offshore energy projects in accordance with the relevant National Policy Statement, but must have regard to the MPS and marine plans.
- establishes a new system of marine licensing.
- sets common enforcement powers introduced for use by Marine Enforcement Officers.
- enables ministers to designate a network of Marine Conservation Zones (MCZs). Conservation objectives will be set for each MCZ.

For more details on any of the above consultations, please contact Adrian Abbott, Policy & Consultations Manager (Adrian.abbott@british-hydro.org).

exclusively supporting the British hydropower sector

The pace of hydropower development in the UK and worldwide is accelerating as the fight against climate change intensifies. Hydropower in all its forms and at all stages of progress is in the spotlight. The **BHA** is Britain's foremost supporter of hydro development and its industry.

Hydropower is:

Onshore	Pumped storage, Storage, Run-of-River, Micro Hydro, Refurbishment & Upgrade
Offshore	Tidal Range, Tidal Stream
Industry and support	Suppliers of Equipment and Services, Consultancies, Generators, Developers, Electricity Suppliers, Legal Services, Universities, Contractors, Financiers, etc. etc.

Hydroelectricity is produced where -

“all electricity is generated by water and turbines”

Government response to the consultation on the Renewables Obligation order 2009

Activities in 2009

UK Hydropower stands and workshops/receptions at:

- “Hydro 2009”, Lyon
- “All Energy”, Aberdeen

BHA Annual Conference, Liverpool

First BHA Annual Dinner, Edinburgh

Promotion of UK Tidal Energy resource review

Addressing Business Rate increases planned from 2010

Feed in tariff proposals for introduction in April 2010

Development of proposals for accreditation under the Microgeneration Certification Scheme


Development of final phase of Environment Agency Good Practice Guidelines for hydro licensing

Opposition to the DEFRA New Order for the Passage of Fish

Regional micro hydro seminars

Completion of England & Wales hydro resource study

During 2009 the **BHA** has implemented its Working Group strategy to address important issues which affect the potential success of our hydropower resources. We have fought for changes in policies which are barriers to hydro development and initiated measures that have helped to promote the technology and the industry.



Our profile and success has increased. The **BHA** is now the first contact on hydro matters from Government Departments, Agencies and Regulators. We also have continuing dialogue with other organisations and contribute to policy bodies such as the Scottish Government's Forum for Renewable Energy Development in Scotland – hydropower groups.

Actions for 2010

Continuation of Working Groups with on-going remits (Business rates, FITs, Accreditation, GPGs, Fish Passage etc.)

New Working Groups covering:

- Collaborative effort with agencies and regulators to produce a Code of Practice on hydro implementation
- Time-limited licensing
- Collaboration with the environment agencies on hydropower development – onshore & offshore

Maintaining UK Hydro presence at:

- Asia 2010, Sarawak, Malaysia
- Hydro 2010, Lisbon
- Hidroenergia 2010, Lausanne, Switzerland
- All Energy, Aberdeen
- Hydrovision 2010, Charlotte, N Carolina, USA

BHA Annual Conference, Glasgow

BHA Annual Dinner, Glasgow

Regional micro and small hydro seminar programme

Continuing promotion of UK tidal energy

Co-operation with European partners on development of Europe-wide programme of hydropower policies and implementation

Increased activity means increased work and demands on resources. The BHA will maintain momentum on all its activities to continue our successes.

We need to improve resource and by attracting new members we will benefit the whole of the hydropower sector.

**WE WORK FOR YOU!
PLEASE HELP US TO
GROW.**



BHIA
British Hydropower Association

Forthcoming BHA EVENTS 2009

Other EVENTS for your DIARIES

RUSHLIGHT CLEAN TECHNOLOGIES SHOW

28th January 2010 – Royal National Hotel, London

An event for clean technology companies, investors, major adopters of clean technology solutions, advisers, media, consultants and those involved in and following the sector. For more details visit www.eventremedia.co.uk/index.php/em/event/action/frmEventID/8/frmPageID/85/.



ENERGY NOW EXPO 2010

17th & 18th February 2010 – Three Counties Showground, Worcesterstershire

Conference focusing on all aspects of renewable energy, as well as practical demonstrations of products and services. Suppliers and developers will have the opportunity to exhibit over both days to increase market awareness and business levels. www.energynowexpo.co.uk

INTERNATIONAL CONFERENCE ON DAM ENGINEERING

15th to 17th February 2011 – Lisbon, Portugal
<http://dam11.Inec.pt>

For the perfect energy mix -
Just add **water!**



www.british-hydro.org

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Adrian Abbott, Policy & Consultations Manager
Nicki Salmond, Operations Assistant
Chairman: Chris Brett
Vice-Chair: Jon Needle

Below is a list of proposed BHA events for 2010. Further announcement will be made providing more details in the New Year. In the meantime for more information or to register interest, please contact us at info@british-hydro.org or tel: 01258 840934, or visit www.british-hydro.org.

LOCAL AUTHORITY TRAINING SEMINAR

2nd February – London

ASIA 2010 – BHA NETWORKING RECEPTION AND WORKSHOP

April – Glasgow (date & venue TBA)

MICRO-HYDRO SEMINAR

29th April – Hampshire

SMALL HYDRO SEMINAR

18th May – Oban

ALL ENERGY 2010 – BHA PAVILION AND HYDRO CONFERENCE SESSION

19th to 20th May – Aberdeen

HIDROENERGIA 2010

16th to 19th June – Lausanne, Switzerland

MICRO-HYDRO SEMINAR

8th July – Worcesterstershire

HYDROVISION – possible BHA activities

27th to 30th July – Charlotte, U.S.A

MICRO-HYDRO SEMINAR

2nd September – Cumbria

HYDRO 2010 – BHA PAVILION AND NETWORKING RECEPTION

27th to 30th September – Lisbon, Portugal

BHA ANNUAL CONFERENCE 2010

October – Glasgow (date & venue TBA)

DISCLAIMER: The information contained in this publication is correct to the best of our knowledge. However, we rely on information sources that are outside our control. The BHA is an independent organisation and does not specifically endorse products, services or organisations that are featured or mentioned. The BHA is the trade association representing the interests of all those involved in the UK Hydro Industry. BHA promotes the industry at home and abroad and aims to increase the awareness of its quality and scope in the wider world.

