



# Hydropower business rates submission for the 'Barclay Review of Business Rates in Scotland'

**31<sup>st</sup> of May 2017**

## **Introduction**

This paper represents the views of the British Hydropower Association (BHA) and Alba Energy and was developed with input from Scottish Renewables.

## **Executive summary**

The 2017 Revaluation of non-domestic rates has resulted in Rateable Values (RVs) for small-scale hydro schemes that threaten the continuing ownership of existing schemes and undermine the prospects of future hydro development in Scotland. The cause of this is the rigid application of a wholly inappropriate valuation methodology, which fails to recognise the nature of the commercial arrangements between landlords and tenants.

**The 2017 RVs for small-scale hydro have been set at levels that equate to 25% or more of turnover, which is punitive in comparison with the burden placed on other commercial operations. The closest direct comparison is the small wind sector, where our analysis of 2017 RVs indicates that RVs equate to approximately 10% of turnover.**

The hydro sector is of the view that the excessively high RVs being applied to small-scale hydro are a consequence of the assessors' interpretation of The Valuation for Rating (Plant and Machinery) (Scotland) Regulations 2000 (referred to hereafter as the Plant and Machinery Order).

Prior to the 2000 Revaluation, the Wood Committee was reconvened to consider the implications on the valuation of plant and machinery arising as a consequence of public utilities being subject to conventional rating. With regard to plant used for power generation for sale to consumers rather than as part of a trade process, they recommended that a 'tools of the trade' exemption should apply. This recommendation was accepted by the then First Minister for Scotland.

The Plant & Machinery Order, as drafted, is presently interpreted by the assessor as not excluding plant and machinery used for the hydro generation of electricity for sale to consumers and therefore **it is considered that this anomaly can be rectified by minor redrafting of the Plant & Machinery Order which would have no wider impact on the rating system.**

It is the view of the hydro sector that RVs should ultimately be reflective of the commercial rents that apply across the sector. As at the tone date of April 2015, rental levels in the

small-scale hydro sector were at the historically high level of between 8% and 10% of gross turnover. Our view is that RVs for 2017 should be aligned to this range, and should not exceed 10% of gross turnover.

**It is imperative that the Scottish Government intervenes as a matter of urgency to address this inappropriate valuation methodology and ensure the continued viability of the hydro sector in Scotland. By doing so, the Scottish Government will create an environment of long-term confidence that allows developers and funders to make a contribution to achieving the ambitions detailed in the Scottish Government's Energy Strategy.**

## **Background**

While there has always been a number of small-scale hydro schemes (<5MW) operating in Scotland, it was the introduction of Feed in Tariffs in 2010 that provided the stimulus for the growth of small-scale hydro. There are now more than 400 hydro schemes of <5MW in Scotland, 70% of which have been commissioned since 2010.

The previous Revaluation in 2010 was the first to factor in subsidy payments, in the form of ROCs. These broadly doubled the value to the generator of each kWh produced. The 2010 Revaluation saw significant increases in Rateable Values for small-scale hydro, but as it coincided with the introduction by the Scottish Government of 100% relief from business rates for renewable energy schemes, the impact was not felt by those schemes operating at the time.

When the rates relief was removed in April 2016, those schemes that had been commissioned in the interim, and were in receipt of Feed in Tariffs rather than ROCs, had been issued with RVs that were commonly between 6% and 10% of annual turnover.

Hydro generators accept the obligation to pay rates, and the amounts payable, as a proportion of turnover, seemed broadly reasonable in comparison to other business sectors. In support of this was the fact that RVs for hydro were broadly aligned with rental levels being paid to landowners— in accordance with the underlying principle of Business Rates. However this scenario was a quirk of the fact that the RVs were based on ROCs whereas turnover was now supported by Feed in Tariffs, which had effectively doubled the amount received by generators per kWh.

## **The 2017 Revaluation**

Scottish Assessors took the position that Feed in Tariffs were significantly higher than ROCs; therefore RVs should increase accordingly. The average RV increase for small-scale hydro in the 2017 Revaluation was c. 150%, with many schemes facing significantly greater increases.

This resulted in RVs for hydro equating to 25% of gross turnover on average. It also had the effect of taking many schemes into the 'large business' category, meaning they were required to pay a higher rate poundage of 49.2p.

In financial terms the new level of rates payable has the effect of reducing the rate of return on investment by 2-3 percentage points and more critically, has created the very real prospect of schemes having insufficient cash to meet their bank debt obligations.

Clydesdale Bank, one of the leading lenders to the sector, has stated that it is extremely concerned about the ongoing ability of the 30 schemes it has financed, to meet their debt obligations. Clydesdale Bank has also indicated that it is likely to be less inclined to fund future hydro projects under the current rates scenario.

The short-term relief introduced by the Scottish Government in March 2017 created some temporary breathing space for schemes of up to 1MW, but not for those schemes of between 1MW and 5MW

### **Why has this happened?**

In principle, RVs are intended to reflect rental values. For the 2017 Revaluation, scheme owners submitted a substantial quantity of rental information, however none of this rental information was deemed useable by the assessors.

In the view of the assessors, the rental details provided related only to the right to develop and operate a hydro scheme, but did not include any allowance for the capital structures required to enable the scheme to operate. Scheme owners have attempted to challenge this point vigorously on the grounds that it is the tenants who pay for the entire infrastructure.

The assessors maintain that rating law requires them to treat any items that are classified as rateable by the Plant & Machinery regulations, as being owned by the landlord – regardless of whether these items have been funded in their entirety by the tenant. This means that assessors are looking for rental evidence for schemes that have been majority funded by the landowner. As far as we are aware, there are no such instances, therefore it is impossible for rental evidence to be provided for this hypothetical scenario.

In the absence of what they consider to be appropriate evidence, the assessors have been obliged to resort to the Receipts and Expenditure method of valuation for the 2017 Revaluation. This method starts with gross turnover and then makes deductions for operating costs, depreciation and a return on capital employed. However the underpinning assumption that rateable elements have been funded by the landowner means that the tenant is only allocated a minority share of the Divisible Balance after opex costs and depreciation.

In the case of hydro schemes, the majority of the infrastructure is deemed to be rateable, hence when the Divisible Balance is distributed under the Receipts and Expenditure method, the tenant is only allocated a 39.81% share, meaning that the residual amount (landlord's share) to be treated as rent + rates is greatly exaggerated.

It is worth noting that assessors do not actually use the rateable vs non-rateable proportions when determining the landlord and tenant shares. Were this to be the case, the tenant would only be allocated something like a 10% share – thus making rateable values even higher (c. 40% of turnover).

Importantly, there is a stage in the process where assessors collectively apply a valuation judgement. This has resulted in tenants being allocated a 45% share of depreciation and a 39.81% share of the divisible balance. It is not known whether there are any limits on whether the 'valuation judgement' stage could be used to resolve this issue, e.g. by allocating 80% of the divisible balance to tenants, but there has been no suggestion from assessors currently that they are willing to consider such a course of action.

**In summary, the conclusion has to be drawn that the small hydro sector is facing punitive charges in comparison with other renewable energy technologies as a consequence of the current interpretation of the Plant and Machinery Order as it relates to hydro plant and infrastructure.**

The Wood Committee, in undertaking their review, recognised that under Class 1 of the existing regulations, most of the plant and machinery used in the electricity generating industry would be rateable. The Committee considered that Class 1 of the regulations was devised to bring into rating plant which generated power for use in some other trade or process which was the principal business activity of the ratepayer. However, in the case of the power generators, the manufacture and supply of power was the very business which they carried on. Therefore, they recommended that a 'tools of the trade' exemption should apply to generating plant and machinery belonging to the power generators, although such plant which was in the nature of a building or structure and fell within Class 4, should continue to be rated.

In the case of small hydro generation this issue is not being taken account of in the current interpretation of the order being applied by assessors.

### **How does small hydro compare to other renewable energy categories?**

Analysis of data from the independent Variable Pitch website ([www.variablepitch.co.uk](http://www.variablepitch.co.uk)) and from the Scottish Assessors Association website ([www.SAA.gov.uk](http://www.SAA.gov.uk)) reveals that small-scale hydro rateable values as a proportion of turnover are dramatically higher than those for equivalent wind schemes. The 2017 RVs for small-scale hydro are broadly 25% of gross turnover on average. This compares to an equivalent figure of 10% for small-scale wind.

With regard to the reasons behind such disparity, it is noted that the Plant & Machinery Order is less ambiguous with regard to wind technology, clearly stating that wind turbines are excepted from rateability.

The alternative, but equally relevant comparison is with cumulo business rates agreements which mainly apply to larger scale operators, but which can include FIT projects within their portfolios.

The limited data we have been able to obtain suggests that, following the 2017 Revaluation, hydro schemes covered by cumulo agreements have RVs of c. 14% of turnover – roughly 60% of the level applicable to individually assessed small-scale hydro schemes.

Here again, it is apparent that hydro is getting a raw deal as compared to wind. Again, our data has been limited to date, however we understand that RVs for onshore wind under

cumulo arrangements are approximately £10,000 per MW. Assuming most of these schemes will be in receipt of ROCs and applying an average load factor of 25%, this means that Rateable Values for cumulo wind are approximately 4-5% of turnover.

**So, for all scales of development, it appears that hydro schemes are paying approximately two and a half times the level of business rates paid by wind as a proportion of turnover.**

Fuller details of the supporting analysis are contained in the appendices to this paper.

### **Bottom line impact**

While the comparisons with other renewable energy categories provide a compelling case for a radically revised approach to business rates assessment for small-scale hydro, the single biggest argument for immediate intervention is the impact on the profitability and hence viability of hydro schemes.

Hydro schemes are capital intensive investments. A typical 500 kW scheme commonly costs £2.5 million to build. A variety of funding options are utilised, but by far the most common is for developers to utilise unsecured bank debt (project finance) with repayment periods normally between 12 and 15 years.

In the early years of a scheme's operation, repayment of finance costs will represent a very high proportion of net income after operating costs. From a cash perspective, schemes can be highly marginal in this period, with it only being the progressive impact of FIT indexation that slowly creates a bit of 'breathing space'.

The impact of an average 150%+ increase in business rates is difficult to overstate, but it is reasonable to project that this extra burden on schemes is very likely to drive them into a negative cash position. The illustrative model in Appendix 4 demonstrates the bottom line impact of the business rates payable by a 500 kW scheme on the back of the 2017 Revaluation.

Such a cash flow is certain to result in banking covenants being breached, with the consequence that schemes are likely to be taken over by lenders and sold to a third party, most likely a London based pension fund or EIS investor. This will have a damaging knock on effect in the local communities.

### **The solution**

We would suggest that the looming crisis can be averted by some relatively minor wording changes to the Plant & Machinery Order, which apply solely to hydro and therefore would have no wider ramifications on the rating system. In essence, these changes would amount to the delayed implementation of the Wood Committee recommendations of 2000.

Our understanding of these recommendations, which have already been accepted by the Scottish Government, is that application of the 'tools of the trade' exemption should result in the power house building being the only rateable element of note.

In terms of how such a revised rateable vs non-rateable split would impact upon RVs, our concern would be that assessors could apply valuation judgements to amend the rateable portion in an upward direction, however we have been advised that valuation judgements can only reduce the rateable proportion. This point needs to be confirmed.

Ultimately, we believe that RVs for small-scale hydro should reflect actual rental levels in the market. As at the 2015 tone date for the 2017 Revaluation, rental levels were commonly between 8% and 10% of turnover. This represented the peak for rental as far as hydro is concerned, with newly negotiated rents now starting to fall back to pre-FIT levels of c. 5% or less.

As for how this should be achieved, it may be necessary to bypass the complexities of rating law and simply introduce a formula for the calculation of rateable value, based on a flat percentage of projected turnover, however there may be a reluctance to create such a precedent.

### **Other potential avenues for resolution**

The hydro sector has been invited to make a further submission to the Barclay Review to take account of the fundamental change in circumstances since the original submissions were made in autumn 2016. A slightly modified version of this paper will be provided to the Barclay Review, however we do not expect that route to yield the urgent solution required. The Barclay Review is tasked to consider Non-Domestic Rates in its entirety and is not designed to 'drill down' into sector specific issues, such as those included in this paper.

It is likely that any recommendations arising from the Barclay Review will take some time to be implemented, with the next Revaluation possibly representing an optimum time to change things. The hydro sector certainly does not have the time to wait for such an outcome.

The more traditional route for resolving disputes over rates is via the appeal process. This is very much the second strand of our activity at present, with much thought and effort currently being deployed into building a case to take to the Lands Tribunal.

The assessors have offered to work with the hydro sector to help ensure that any cases presented at appeal are sufficiently robust, and this offer is appreciated. However past experience with regard to hydro appeals points to a long drawn out and very expensive process without a satisfactory outcome. Indeed, without any change to the Plant & Machinery order, there would be limited scope for the appeals process to rectify the situation.

The appeals route to the Lands Tribunal will be pursued in the event that the Scottish Government is unable or unwilling to resolve this crisis through the means open to it, but this is definitely viewed by the hydro sector as a last resort.

## **Appendices**

- 1 Hydro scheme RV's as % of turnover
- 2 FIT scale wind RV's as % of turnover
- 3 Cumulo RV comparisons
- 4 Profitability impact

## Appendix 1 Hydro scheme rateable values as % of turnover

Rateable values for hydro									
Scheme	Commissioned	capacity	Load factor	2016/17 turnover			Increase in 2017 Revaluation	New RV as % of turnover	
				(est)	old RV	New RV			
Farr Hydro	Dec-15	500kW	25%	£	250,000	£ 26,000	£ 65,000	150%	26.0%
Glenkiln hydro	Jul-16	500 kW	33%	£	330,000	£ 24,750	£ 62,000	151%	18.8%
merk Hydro	Aug-15	985 kW	40%	£	650,000	£ 62,000	£ 133,000	115%	20.5%
Roroyere	Oct-11	780kW	28%	£	408,000	£ 54,800	£ 85,300	56%	20.9%
Keltneyburn	Apr-10	1800kW	50%	£	1,300,000	£ 103,000	£ 399,000	287%	30.7%
Ceannacroc - Glen Fada	Dec-16	1250kW	36%	£	707,143	£ 67,000	£ 170,000	154%	24.0%
Ceannacroc - ACS (Allt Coire Sgreumh)	Nov-16	500kW	38%	£	282,857	£ 28,500	£ 82,000	188%	29.0%
Mullardoch	Nov-16	500kW	35%	£	350,000	£ 26,000	£ 75,000	188%	21.4%
Cheanna Mhuir, Loch Arkaig	Dec-15	500kW	44%	£	385,000	£ 36,500	£ 123,000	237%	31.9%
Allt Dubh	Nov-15	750 kW	31%	£	577,500	£ 30,000	£ 84,500	182%	14.6%
Loch Blair	Dec-15	1250 kW	42%	£	962,500	£ 90,000	£ 256,000	184%	26.6%
<b>Average</b>								<b>172%</b>	<b>24%</b>

## Appendix 2 Rateable values for FIT scale wind

Rateable values for onshore wind									
Scheme	Location	Commissioned	capacity	Load factor	2016/17			Increase in 2017 Revaluation	New RV as % of turnover
					turnover (est)	old RV	New RV		
Udny Community Wind turbine	Aberdeen	Jul-11	800 kW	28%	£ 325,000	£ 15,750	£ 29,750	89%	9.2%
AGR Badentoul	Aberdeen	Mar-15	500 kw	30%	£ 325,000	£ 13,250	£ 35,000	164%	10.8%
North Threave	Turnberry	Nov-15	300 kW	35%	£ 175,000	£ 6,900	£ 18,400	167%	10.5%
Auchran Farm	Lesmahagow	Mar-14	480 kW	28%	£ 289,080	£ 9,000	£ 29,750	231%	10.3%
Beinn Bhuidhe	Acharacle	Jul-13	294 kW	35%	£ 225,300	£ 6,300	£ 19,750	213%	8.8%
North Lothian	Fraserburgh	Mar-15	489 kW	45%	£ 481,000	£ 10,500	£ 35,000	233%	7.3%
Slackdale Farm	Fintry	Sep-15	92 kW	38%	£ 70,284	£ 3,000	£ 7,200	140%	10.2%
Cortes Gardens	Fraserburgh	Sep-15	499 kW	40%	£ 349,699	£ 10,500	£ 33,500	219%	9.6%
Craig Garbil	Inverbervie	Nov-14	489 kW	45%	£ 443,356	£ 13,500	£ 33,000	144%	7.4%
Herscha	Laurencekirk	Nov-11	800 kW	27%	£ 283,824	£ 15,500	£ 28,250	82%	10.0%
Hillhead Wind Ltd	Shetland	Oct-14	79 kW	38%	£ 68,460	£ 8,500	£ 10,700	26%	15.6%
Loanhead Farm	Banff	Dec-14	220 kW	24%	£ 106,381	£ 5,200	£ 13,750	164%	12.9%
Mains of Auchreddie Renewables	Ellon	Aug-14	448 kW	16%	£ 144,420	£ 9,400	£ 21,250	126%	14.7%
Newtonhead Farm	Rigside	Nov-12	92 kW	24%	£ 59,830	£ 1,575	£ 6,700	325%	11.2%
Peattie Farm	Inverbervie	Nov-15	480 kW	41%	£ 327,553	£ 16,000	£ 35,000	119%	10.7%
Sandybank Wind Farm	Orkney	Nov-12	889 kW	26%	£ 303,717	£ 29,000	£ 32,000	10%	10.5%
Tippethill Farm	Bathgate	Jul-15	480 kW	30%	£ 252,288	£ 9,200	£ 28,600	211%	11.3%
								2665%	181.0%
<b>Average</b>								<b>157%</b>	<b>10.6%</b>

### Appendix 3 Cumulo RV comparisons

	Rateable Value per MW	Assumed average load factor	Revenue per MWh	Total revenue (per MW)	Rateable value as % of turnover
Onshore wind (ROC)	£10,000	25%	£100	£219,000	<b>4.5%</b>
Hydro (FIT)	£80,200	35%	£200	£613,000	<b>13.0%</b>
Hydro (ROC)	£44,500	35%	£100	£306,500	<b>14.5%</b>
Hydro (no subsidy)	£21,000	35%	£50	£153,250	<b>14.1%</b>

Sources: data provided by contacts within leading utilities, both of whom expressed a preference for anonymity

## Appendix 4 Profitability impact

500 kW run of river hydro	Impact of 2017 Revaluation							
		2016/17 year 1	2017/18 year 2	2018/19 year 3	2019/20 year 4	2020/21 year 5		5 year totals
Gross revenues		£ 293,495	£ 319,634	£ 327,625	£ 335,816	£ 344,211		£ 1,620,782
OPEX costs (exc rates)		£ 74,350	£ 78,088	£ 80,041	£ 82,042	£ 84,093		£ 398,613
Net revenues (exc Rates)		£ 219,146	£ 241,546	£ 247,585	£ 253,774	£ 260,119		£ 1,222,169
Loan repayment		£ 222,444	£ 222,444	£ 222,444	£ 222,444	£ 222,444		£ 1,112,220
Net cash (exc Rates)		-£ 3,298	£ 19,102	£ 25,141	£ 31,330	£ 37,675		£ 109,949
Rates payable	Original RV	£ 12,792	£ 12,792	£ 12,792	£ 12,792	£ 12,792		£ 63,960
	2017 Revaluation RV	£ 32,472	£ 32,472	£ 32,472	£ 32,472	£ 32,472		£ 162,360
Net Cash (after rates)	Original RV	-£ 16,090	£ 6,310	£ 12,349	£ 18,538	£ 24,883		£ 45,989
	2017 Revaluation RV	-£ 35,770	-£ 13,370	-£ 7,331	-£ 1,142	£ 5,203		-£ 52,411
<b>Key assumptions</b>								
Scheme capacity	500 kw							
Annual opex costs (excluding insurance)	£ 35,000							
Annual rental	10% of gross revenues							
FIT Generation tariff (2016)	£ 0.1603							
Export value of electricity (2016)	£ 0.0491							
Lease term	40 years							
Load factor (year 1)	32%							
Load factor (Year 2 onwards)	34%							
Hours p.a.	8,760							
Inflation assumption	2.5%							
Indexation assumption	102.5%							
Annual output (year 1)	1,401,600							
Annual output (year 2 onwards)	1,489,200							
Original RV	£ 26,000							
RV at 10% of year 2 gross income	£ 31,963							
2017 Revaluation RV	£ 66,000							
Poundage	£0.492							
Loan repayment	15 years							
Total loan	£2,000,000							
Loan as % of cost	80%							
Equity stake	20%							
Interest rate on debt	7.5%							
Equity investment	£500,000							
FIT pre-accreditation	Sep-14							