Written evidence submitted by Susan Crosthwaite (EB 14)

1. I am a Community Councillor and Tourism Business Operator in Ballantrae, South West Scotland. Among many of my investigations into impacts of windfarms, I have attended a UNECE meeting in Geneva to support and contribute to Christine Metcalfe’s complaint ACCC/C/2012/68. I have attended a Blue Carbon Meeting - April 2012 in the European Parliament, Brussels. I am the author of ‘Winds of Justice’ web site set up to raise awareness of the impacts of windfarms on the UNESCO Biosphere in Galloway and South Ayrshire and I have submitted a Request for Action under ELD2004/35/CE.

Cutting subsidies as the UK Government has pledged to do is correct and overdue.
The reasons are:

- Request for Action under ELD2004/35/CE on Water contamination
- Flooding and siting of windfarms on peat
- Natura 2000 and the Habitats Directive
- On the vexed issue of constraint payments.
- Plans to protect endangered porpoises around the Scottish coast have been blocked by the Scottish Government
- When it can happen to animals, it can happen to humans too

2. Actions throughout Scotland induced by this Scottish Government’s obsession with wind power are being imposed on a vulnerable population without crucial checks and balances and in breach of Habitats and Water Framework Directives.

- A Request for Action under ELD2004/35/CE on water contamination was lodged with the Scottish Government and agencies in July 2015. The Scottish Government response stated that SEPA is responsible for damage to the Water Environment: “In the Environmental Liability (Scotland) Regulations 2009 transpose the Environmental Liability Directive, article 7 of the 2009 regulations identify SEPA as the competent authority in respect of damage to waters or land.”

Thus SEPA has been instructed to 'review' the 'Request for Action'.

I am still waiting for a response on this ‘review.

3. The evidence of pollution of the water environment from Whitelee windfarms is irrefutable. The monitoring results from Whitelee were collected by SPR, SEPA, Scottish Water and academic institutions. The Department of Planning and Environmental Appeals (DPEA) has not yet made a decision on the evidence presented by the objectors and by the Appellants, Scottish Power Renewables, to the Whitelee 3 PLI which was due at the end of November 2015.

4. There is enough evidence of water supplies abandoned in the public and private sectors, of monitoring results which show frank deterioration of surface and ground-waters and of the appearance of category 1 pollutants in GW that a serious breach in the WFD has occurred; therefore the Scottish Government should invoke the Precautionary Principle with regard to the hydrology of pending windfarms:

   DIRECTIVE 2004/35/CE

   Whereas:

   (1) Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such.
As set out in Article 174 of the Treaty, the Community policy on the environment is to contribute to pursuit of the objectives of preserving, protecting and improving the quality of the environment, in prudent and rational utilisation of natural resources, and to be based on the precautionary principle and on the principles that preventive action should be taken, environmental damage should, as a priority, be rectified at source and that the polluter should pay.

Copies of the Request for Action have been sent to DECC and DEFRA (to which there has been no response), the Secretary of State for Scotland and the Directorate of the Environment in Brussels. David Mundell’s Scottish Office response to my request that DEFRA take action, as there are concerns for catchment areas which drain from Scotland into England and therefore has joint ministry responsibility, is that this does not include operational matters such as compliance with Strategic Environmental Assessment Directive.

The WFD states:

(35) Within a river basin where use of water may have transboundary effects, the requirements for the achievement of the environmental objectives established under this Directive, and in particular all programmes of measures, should be coordinated for the whole of the river basin district. For river basins extending beyond the boundaries of the Community, Member States should endeavour to ensure the appropriate coordination with the relevant non-member States. This Directive is to contribute to the implementation of Community obligations under international conventions on water protection and management, notably the United Nations Convention on the protection and use of transboundary water courses and international lakes, approved by Council Decision 95/308/EC (15) and any succeeding agreements on its application.

(36) It is necessary to undertake analyses of the characteristics of a river basin and the impacts of human activity as well as an economic analysis of water use. The development in water status should be monitored by Member States on a systematic and comparable basis throughout the Community. This information is necessary in order to provide a sound basis for Member States to develop programmes of measures aimed at achieving the objectives established under this Directive.

Those activities should be identified, in principle, by reference to the relevant Community legislation which provides for regulatory requirements in relation to certain activities or practices considered as posing a potential or actual risk for human health or the environment and the success of this Directive relies on close cooperation and coherent action at Community, Member State and local level as well as on information, consultation and involvement of the public, including users.

This clearly is not happening.

There are 34 proposals being considered by the Scottish Government’s Planning and Environmental Appeals Division (DPEA), with 16 of those requiring a full public local inquiry. In almost every case, the wind farm has been refused planning consent by the local council and the operators have appealed to SNP Ministers to overturn the verdict.

The Scottish Ministers impose conditions on consents for wind farms granted under S.36 of the Electricity Act 1989 and associated deemed planning permissions granted under S.57 of the Town and Country Planning (Scotland) 1997, and the local Council does not have power to change such conditions, post-determination.

The reason it is so important that the subsidies are stopped is that the Scottish Government and its agencies – particularly SW and SEPA are using delaying tactics whilst the UK onshore wind sector take all last minute opportunities in 2016 preparing unprecedented construction levels with at least 1.2GW due to go live in the next 12 months, according to Renewable UK figures revealed at the end
of last year. Apparently they expect more than 50 wind farms to reach full operation during the boom, dwarfing the 400MW that came online in 2015.

10. The rush leads to short cuts in mitigation and the use of ‘liquid’ cement which leaches into the surrounding water environment and ultimately into the sea affecting marine life. This ‘rush’ also adds pressure to SEPA, SNH and councils in any ability to monitor what is happening. Each windfarm project SHOULD have a PMO but from FOI’s to councils, many have not stipulated a PMO in the conditions of consent, and rely on SEPA with the occasional ‘non-expert’ site-visit from a planning officer.

11. Developments are proceeding even though:

DIRECTIVE 2004/35/CE Article 5 Preventive action: 1. Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures. 2. whenever an imminent threat of environmental damage is not dispelled despite the preventive measures taken by the operator, operators are to inform the competent authority of all relevant aspects of the situation, as soon as possible. 4. The competent authority shall require that the preventive measures are taken by the operator. If the operator fails to comply with the obligations laid down in paragraph 1 or 3(b) or (c), cannot be identified or is not required to bear the costs under this Directive, the competent authority may take these measures itself.

12. We have enough evidence on several fronts to show that significant European Directives have not only been breached, but knowingly breached and that our own Environmental Agency is not fit for purpose in terms of upholding EU Law transposed into Scottish Law. The fact that the public purse are having to pay for a very expensive 20 -30 mile pipeline, to by-pass two public reservoirs rendered unusable because of an industrial development at Whitelee windfarm should raise some searching questions in UK Government and at the EC. Many other reservoirs in Scotland, including Loch Bradon in Ayrshire have sub-standard test results and one wonders what plans Scottish Water has to by-pass these? The Scottish Government is ignoring the basic human rights of its vulnerable citizens in favour of the funds received from leasing SW and FCS land to developers.

13. • Flooding and siting of turbines on peat

It is clear in some cases that windfarm development has accelerated run-off and that that may have been a contributory factor to recent above normal flooding incidents. Clear felling of forestry for windfarm development (and in some cases larch disease) has been a contributory factor in worse than normal flooding of the rivers in South West Scotland. It is ironic that in trying to encourage renewable energy generation developers, particularly encouraged by Scottish Government approval, are succeeding in tearing up areas of natural carbon regulation unsurpassed by anything in human technology. The sphagnum moss which drives peat formation holds significant amounts of water and releases it only slowly. This means it is held for long periods in the uplands before it finally filters towards the lowlands, so providing a degree of natural regulation which helps prevents downstream flooding also purifying the water before it enters the reservoirs and the rivers. Industrialisation, on this massive scale, of these pristine protected water catchment zones has led to deteriorating water quality for many people in Scotland. The Scottish Government has been complicit in promoting industrial scale exploitation of designated water catchment areas, by passing and promoting the legislation drafted in 2010, to allow commercial industrial windfarm development on publicly owned land, being owned by Scottish Water as well as Forestry Commission Scotland.
14. Impacts of siting wind turbines on peat bogs:
   Historically, drainage ditches were used to lower the water table in an attempt to make peatland more suitable for farming or forestry (Armstrong et al., 2009). The water table is naturally high on peatland and lowering it, in the first instance, changes the ecology of a peatland by simplifying the micro-topography and species composition of the bog (Lindsay, 2010). A very small change in water table can result in substantial alterations to the bog moss communities (Lindsay, 2010). Reducing the water table also exposes peat to more aerobic conditions (altering the microbial community) which increases decomposition and mineralisation rates (Holden et al., 2007; Anderson et al., 2013).
   Increased mineralisation from the underlying mineral material (not the peat itself) would result in the leaching of nutrients (calcium, magnesium, manganese, aluminium and potassium) and increases in suspended sediment (from erosion), ammonium and Dissolved Organic Carbon (DOC) in water ways (Leeks & Roberts, 1987; Duxbery & Peverly, 1978; Holden et al., 2007; Worral et al., 2007). The hydrological response of peatland also changes with the lowering of the water table as water pathways change. In undisturbed peatland, most water movement occurs in the upper acrotelm layer (the living plant layer) and is controlled by the amount of water held there (NE, 2010). However, lowering the water table can result in the settlement of peat (drying) and a reduction in its porosity (Holden et al., 2007). This leads to a reduction in the storage capacity of the peat and faster discharge of water as it and the acrotelm layers ability to store water will be reduced. Ditches create more sub-surface storage but they also provide a rapid conduit for run-off (Holden et al., 2006; Ballard et al., 2012) which results in changes in the volume of runoff (Leeks & Roberts, 1987) and the frequency of flooding peaks (Holden et al., 2004; Ballard et al., 2012). However, the magnitude of change is variable and is linked to factors that include; density of ditches, the soil properties of the specific peat and the slope of the site (Holden et al., 2004; Lane & Milledge, 2013). In addition, drainage can increase the occurrence and or efficiency of naturally occurring soil pipes (tubes within the peat that can transport water) which can further increase sedimentation and runoff (Holden et al., 2007).
   Another potential consequence of drainage ditches at wind energy facilities on blanket bogs is the risk of peat slides. These have been recorded at a number of wind energy facilities in Ireland and Britain (e.g. Derrybrien, Co. Galway and Garvagh Glebe, Co. Leitrim) and the construction of drainage ditches associated with roads have been linked as a secondary causal factor (Lindsay & Bragg, 2005 ; Long et al., 2011b). In their paper classifying peat movements, Dykes & Warburton (2007) define a peat slide as “failure of blanket bog involving sliding of intact peat on a shearing surface at the interface between the peat and the mineral substrate material or immediately adjacent to the underlying substrate”.

15. Natura 2000
   Compliance with Natura 2000 is being breached by allowing developments close to and within areas of environmental protection. Many of these developments will affect the water environment of the UNESCO Galloway and Southern Ayrshire Biosphere. The Biosphere covers an area of 5268 square kilometres and includes 45,000 dwellings and 95,000 people, many hundreds of whom are on private water supplies. There are 14 Special Areas of Conservation and 4 Special Protection Areas. The article by Euan Mearns http://euanmearns.com/the-destruction-of-scottish-power/ on January 6th 2016 gives the reason for this non compliance:
The January 2017 model

Figure 3 The brave new world of distributed generation designed by politicians results in power stations and power lines everywhere. There seems to be a form of cognitive dissonance among those who believe that covering the countryside in infrastructure is somehow better than having a handful of centralised generators. The Green notion that distributed generation is somehow good, repeated over until it is accepted by many, as far as I am aware is not underpinned by any scientific or engineering evidence. It is simply dogma.

16. The "Natura" Directives on the protection of Habitats and Birds are also linked to the Water Frame Works and environmental Liabilities Directives through the protected area provisions.
The Directive requires Member States to put in place systems for managing their water environments, based on natural river basin districts and underpinned by extensive environmental monitoring and scientific investigation, called "river basin management.

17. Despite protests from all over the world, developers are planning to build giant wind turbines around Loch Ness in Scotland. The Scottish Government is doing nothing to curb the applications for hundreds of turbines on these iconic hills and mountains.

In Bulgaria: “This judgment creates a loud and clear need for the Bulgarian government to take immediate action to remove impacts on the damaged Natura 2000 sites. It is also important that Natura 2000 sites all over the country are properly protected and the Government should ensure that it does not allow damaging projects in Natura 2000 areas, but instead encourages sustainable development that is profitable both for nature and people,.” The European Court of Justice’s judgment is available to view here: http://goo.gl/W10cJp

18. • On the vexed issue of constraint payments.
"Excessive benefit" is an interesting concept. It is understood that generators should be compensated when they are prevented from selling their electricity, but "compensation" implies that nobody is left worse off. The way the UK constraint system works under OFGEM’s auspices, is that the generators make more money for not producing electricity and the consumer pays more money for not getting it. OFGEM needs to take urgent action to prevent licensed generators gaining excessive benefit when constraints occur, because each and every constrained wind generator currently gains excessive benefit. Shockingly, without the efforts of the Renewable Energy Foundation having shone a light on the completely predictable outcome of allowing wind farms to be built, and connected to a transmission system incapable of carrying the output to supply a market which does not need that output, no-one would know. A graphic example is Gordonbush wind farm, which was being paid large sums to switch off and is currently planning an extension. This year alone (as of the 5th Jan) Gordonbush has been paid every day to switch off, making a total for 2016 of £137,394. There are several occasions over the years when it has been paid over £100,000 in a single day. Since becoming operational in June 2012 it has been paid over £100,000. This is consumers’ money paid to the developer to do nothing - making justification for an extension untenable. The total for all wind farms to date is about to hit £200m.

19. Plans to protect endangered porpoises around the Scottish coast have been blocked by the Scottish Government to help clear the way for new offshore wind farms
This is just further evidence of how the Scottish Government will stop at nothing to achieve their energy policy.

20. • When it can happen to animals, it can happen to humans too
And finally this film about the Mink Farm in Denmark -3 years on (with sub titles)
Statement by Kaj Bank Olesen at the public meeting in Isenvad, Denmark on November 25, 2015.

21. DESPITE more than five million trees felled to make room, Hundreds of miles of bulldozed tracks, our finest landscapes trashed by multinationals, giant pylons scarring our beautiful countryside, Drumochter Pass completely vandalised, thousands of tons of concrete dumped on our fragile upland ecosystems, millions of birds and bats needlessly slaughtered, wind farms visible from 60 per cent of Scotland, tourists deterred by industrialised landscapes, the highest energy bills in Europe, countless millions extorted from the poorest bill payers, multinationals and landowners trousering
millions – despite all this, during our coldest night so far, when we need power most wind’s contribution to the National Grid, to the nearest round figure is zero (precisely 0.15 per cent). Letter by George Herraghty The Herald Jan 21st 2016

22. I do not therefore support the amendments proposed by Caroline Lucas.

January 2016