

# Developing an onshore wind farm on Bute – an experiential perspective on policy and planning

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## Abstract

The purchase of Ascog Farm on the Isle of Bute, Scotland in 2008 has plunged the author and his family into an otherwise unfamiliar world of conflict surrounding onshore renewable wind energy development. Ascog Farm has high average annual wind speeds and is proximal to existing operational wind farms on the mainland in North Ayrshire. Following initial, and inexpensive, investigations of potential conducted in 2009 a series of increasingly detailed, and expensive, feasibility studies have been commissioned culminating in the production of an Environmental Statement to support a planning application for three mid-sized (50m to hub, 74m to tip) community benefit wind turbines lodged with Argyll and Bute Council in October 2012. Over £120,000 has been spent researching and collating the planning application, which has taken around two years to produce. A significant proportion of project funding has been provided by the Scottish Government's Community and Renewable Energy Scheme (CARES) which aims to support the development of 500MW of community and locally-owned renewable energy generating capacity by 2020. Despite this support reaction to the project from a small but vociferous group of activists has been negative with a variety of print and online material suggesting wind turbines may harm wildlife, ruin views, discourage tourists or cause health complaints while doing little to combat climate change. This paper presents an experiential perspective on the policy and planning process providing a chronology of key events and analysing the several hundred public comments that the planning application has attracted. Whilst governments and public opinion support the transition to low-carbon energy generation systems concentrated negative campaigning risks off-putting all but the most determined landowners from exploring their development options in line with government policy aims.

**Key words:** policy, planning, cost, time, activism, text mining

## Introduction and Disclaimer

Late in the evening of 22 June 2012 Scottish First Minister Alex Salmond, Minister for Energy, Enterprise and Tourism Fergus Ewing and Cabinet Secretary for Rural Affairs and the Environment Richard Lochhead received an email (personal communication, Tear 2012) informing them of some of the difficulties faced in a bid to take to planning a community benefit wind energy project at Ascog Farm on the Isle of Bute.

Earlier that week Scotland's only Conservative Member of the European Parliament Struan Stevenson had 'blasted' plans for renewable energy generation at Ascog in local paper *The Buteman* (Ascog Farm 2012e) using the imagery of 'rape' and 'despoilment' of the Bute countryside (Stevenson 2011) which he expected turbines would bring. The email to the Scottish Ministers thanked them for the support of the Community and Renewable Energy Scheme (CARES) loan (Scottish Executive 2011), which was helping to fund production of the Environmental Impact Assessment (EIA) into the plans at Ascog, but pointed out that faced with such a tide of opprobrium many landowners or community groups in a similar situation elsewhere in Scotland would simply give up on, or never make, planning applications for onshore wind turbines. It was suggested that such an outcome would jeopardise Scottish Government policy to support the development of 500MW of community and locally-owned renewable energy generating capacity by 2020.

Stevenson's intervention and the long build-up to the planning application for turbines at Ascog Farm, detailed below, raises several interesting questions:

- Should individuals, elected politicians or officials be allowed to speculate on environmental impacts prior to publication of an Environmental Statement?
- Should dissemination of inaccurate or deliberately misleading material not in the Environmental Statement in print or online be controlled in some way?
- How can policies affecting planning that are highly unpopular with a minority but popular with the majority be politically supported?
- If no support at all is possible during planning, how do policy makers expect applicants to help deliver policy aims in the face of a committed opposition?

This paper examines some of the problems faced in developing an onshore wind farm on Bute based on personal experience of policy and planning. It covers the:

- Policy background to renewable energy generation in Scotland
- Financial support packages available to landowners or community groups
- Chronology of drawing up the Ascog Farm planning application
- Vociferous campaigning activities of anti-wind activists
- Classification of public views expressed in response to the plans

The author is a partner in and co-owner of Ascog Farm and has an economic interest in the wind energy project should it gain planning consent. His wife, and partner in the farm business, grew up on the Isle of Bute and her family have lived and farmed on the island for around 100 years. No funding has been provided for the creation of this paper nor for the development of the Ascog Farm website ([www.ascogfarm.com](http://www.ascogfarm.com)) where much of the material referenced resides. At the time of writing the outcome of the planning application is unknown.

## Policy background

Governments at national and local level support the development of renewable energy generating capacity as a legal or policy response to greenhouse gas reduction targets aimed at forestalling the threat impacts of anthropogenic global warming (AGW). In response to the Stern Review *Report on the Economics of Climate Change* (HM Treasury 2006), European Union requirements for CO<sub>2</sub> reduction (European Commission 2010) and continuing concerns about the potential impacts of AGW on ecosystems, populations and economies (cf. The World Bank 2012) governments at United Kingdom (DECC 2013), national (Scottish Executive 2003b) and local (Argyll and Bute Council 2011b) levels have all endorsed the greater use of renewable energy generation systems – including onshore wind power – as part of the transition to a low carbon economy.

Scotland has ‘one of the highest long-term average wind speeds in Europe, making it an attractive region for wind farm developments on all scales’ (Met Office 2012). The West Coast of Scotland in particular (Figure 1) is exposed to weather systems crossing the Atlantic bringing consistently high average annual wind speeds.

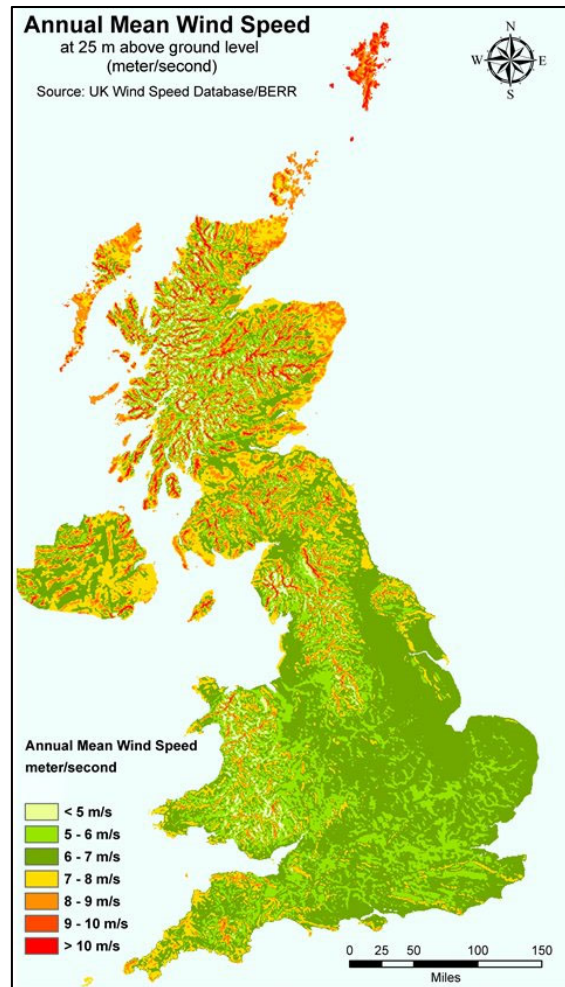


Figure 1 - National Objective Analysis of Boundary Layer (NOABL) UK wind speed map (DECC 2009)

The devolved Scottish Government, led by Alex Salmond of the Scottish National Party, has recognised Scotland's abundance of wind, hydro and tidal renewables potential and has embarked on a Low Carbon Economic Strategy which 'is an integral part of the Government's Economic Strategy to secure sustainable economic growth, and a key component of the broader approach to meet Scotland's climate change targets and secure the transition to a low carbon economy in Scotland' (Scottish Executive 2003a). From a planning perspective, amongst a wealth of guidance, Scottish Government policy states:

When identifying areas with potential constraints on wind farm development, planning authorities should consider the following:

- the historic environment,
- areas designated for their regional and local landscape or natural heritage value,

- tourism and recreation interests,
- likely impacts on communities, including long term and significant impact on amenity,
- impact on aviation and defence interests, particularly airport and aerodrome operation, flight activity, tactical training areas, aviation and defence radar and seismological recording, and
- impact on broadcasting installations, particularly maintaining transmission links.

A separation distance of *up to* 2km between areas of search and the edge of cities, towns and villages is recommended to guide developments to the most appropriate sites and to reduce visual impact, *but decisions on individual developments should take into account specific local circumstances and geography*. Development plans should recognise that the existence of these constraints on wind farm development does not impose a blanket restriction on development, and should be clear on the extent of constraints and the factors that should be satisfactorily addressed to enable development to take place. *Planning authorities should not impose additional zones of protection around areas designated for their landscape or natural heritage value.*

(Scottish Executive 2010, paragraph 190, our emphasis)

Significant public confusion has resulted from this wording on Bute and elsewhere in Scotland. The 'recommended separation distance' of 'up to 2km between areas of search and the edge of cities, towns and villages' is frequently taken to mean that no development should take place 'within' 2km of the edge of cities, towns and villages. On Bute, where outside the centre of Rothesay much of the housing development follows a narrow coastal strip backed by an ancient raised beach, it is not easy to determine where the edge of the 'town' actually is. The raised beach and intervening topography (Common, or Canada, Hill) largely obscures views of the proposed Ascog turbines both from the coastal strip and from the main population centre thus constituting 'specific local circumstances and geography'. Nonetheless, issues surrounding location, views or tourism have been persistent themes in relation to the planning application for community benefit wind turbines at Ascog Farm.

## Financial support

Many of the initial onshore and later offshore wind energy installations in Scotland have been financed and built by large national or international power companies. More recently, in an attempt to keep more of the wealth generated by wind energy in Scotland, political leaders such as Richard Lochhead (Cabinet Secretary for Rural Affairs and Environment) have urged farmers and landowners to 'unlock the green energy potential of their land', going on to state:

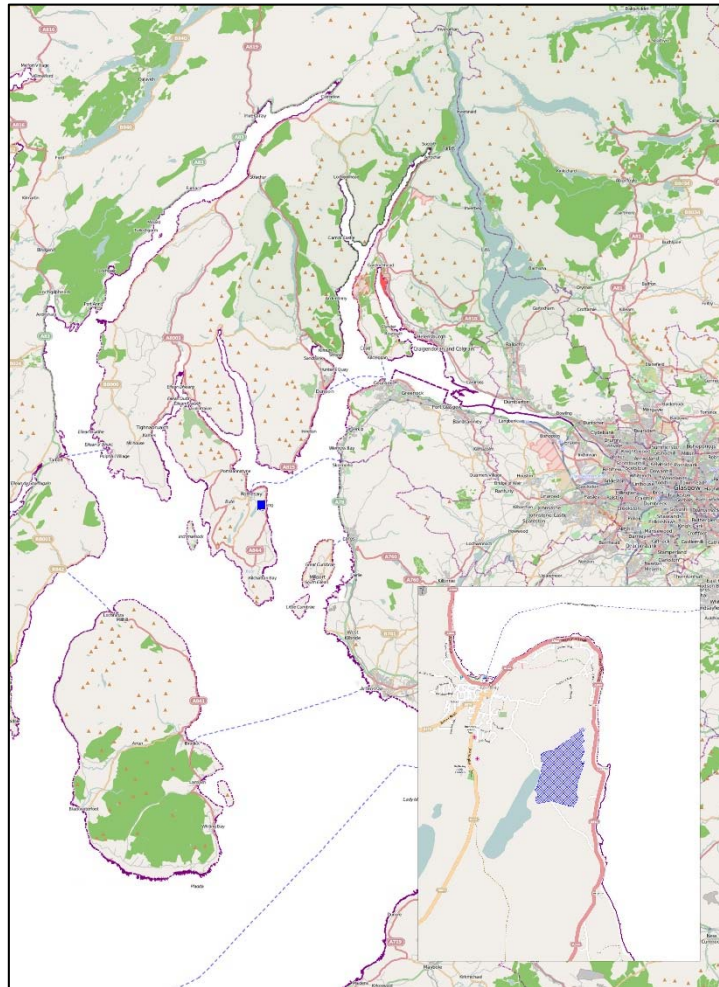
Scotland is currently experiencing a renewables revolution and I want to see farmers, crofters and land managers working with local communities to ensure they grasp the benefits for their businesses and the nation.

(BBC 2011)

One of the most significant policy initiatives to promote the take-up and development of renewables has been the establishment by the Scottish Government of the Community and Renewable Energy Scheme (CARES), announced on 15 February 2011, 'which aims to provide loans towards the high risk, pre-planning consent stages of renewable energy projects which have significant community engagement and benefit' (Scottish Executive 2011). CARES supports 'any renewable energy project, up to 5 MW, requiring financial outlay prior to planning consent' with loans of up to £150,000 covering up to 90% of agreed costs (Scottish Executive 2011). CARES loans are awarded on a competitive basis and any landowner or community group accepting a loan must commit to contribute a minimum of £10,000/MW installed capacity/year to a local and properly constituted arms-length beneficiary. In the event that CARES-supported planning applications are successful loans are repayable with a fixed rate of interest of 10%. If unsuccessful, or financing for capital expenditure cannot be sourced, the loans may be written off. Through CARES the Scottish Government aims to meet a target of generating '500 MW of community and locally owned renewable energy projects by 2020, which could be worth up to £2.4 billion to Scottish communities and rural businesses over the lifetime of those projects' (Scottish Executive 2012). CARES is administered on behalf of the Scottish Government by Community Energy Scotland (Community Energy Scotland 2012) with financing through the Energy Saving Trust (Energy Saving Trust 2013).

## Ascog Farm

Ascog Farm is situated (Figure 2) on the Isle of Bute in the Clyde Estuary on the West Coast of Scotland. The farm comprises approximately 60 hectares (150 acres) of hilly ground, rising to 104m (341ft) above sea level, of which 45 hectares (110 acres) is permanent pasture, the remaining 15 hectares (40 acres) comprising rough grazing (Ascog Farm 2013c). The nearest town is Rothesay, the historic centre of which is some 2.5km (1.5mi) away as the crow flies.



*Figure 2 - Location of Ascog Farm, Isle of Bute, Scotland*

The Isle of Bute is a small island of around 125km<sup>2</sup>, some 25km (15.5mi) long and 8km (5mi) wide at its maximum with a total population (2011 Census) of 6,695 (General Register Office for Scotland 2013). Around 89% of the land on the Isle of Bute has for several centuries been owned by the Crichton-Stuart family and forms the 10,900 hectare (27,000 acre) Bute Estate (Mount Stuart 2012). The Estate has not announced any plans to exploit the renewable wind resource on its landholdings on Bute despite a recent study suggesting that

the siting of up to 69 turbines offers ‘an internationally attractive wind resource [...] that if it were to be developed to its maximum potential [...] could contribute to a significant reduction in the island’s carbon footprint’ (Aecom 2011).

Ascog Farm is one of just five privately owned farms on the Isle of Bute, has never been part of the Bute Estate and has changed hands only twice in the last 25 years, most recently in 2008. Upon the last change of ownership a series of investigations into the potential for renewable onshore wind energy generation at the site culminated in a planning application for three Enercon E48 800kW wind turbines (Enercon 2013) lodged under reference 12/02202/PP with the local authority in October 2012 (Argyll and Bute Council 2012a). The remaining sections of this paper describe the time-consuming, costly and often fraught interactions that have occurred prior to and during the planning process.

## Chronology

In 2008 it was immediately apparent – from the number of large fallen beech trees at the top of the Hill of Ascog (Figure 3) in the centre of the farmland – that a significant wind resource was available.



*Figure 3 - Fallen beech trees at the top of the Hill of Ascog (picture dated 16/11/2008)*

Confirmation of wind strength was provided by the Department for Business, Enterprise and Regulatory Reform (BERR) National Objective Analysis of Boundary Layer (NOABL) wind



speed database (now readily available from, e.g., RenSMART 2011), which indicated an average annual wind speed for the 1km grid square containing Ascog Farm of 7.2m/s at a 45m hub height. Further confirmation was provided following the purchase (then under £200) and installation of a Better Generation Power Predictor anemometer (Better Generation 2013) at a height of 5m above ground from December 2009 for a period of around six months, data from which broadly agreed with the NOABL average for the 1km grid square of 5.7m/s at 10m above ground. A meeting was held on site with Scottish and Southern Electricity (SSE) Renewables in February 2010 and, although the site was not considered sufficiently large for SSE (power companies like to install ten or more 2MW+ and commensurately taller wind turbines), it was clear that a smaller-scale cluster of three or four mid-size (330-900kW) wind turbines appeared economically feasible as a self-build project.

### Pre-application

In early 2010 a small amount of money (the Power Predictor), some desk-work (NOABL wind speed database) and a meeting (SSE Renewables) had shown that the land at Ascog Farm had good potential for renewable wind energy generation. It was decided that an expert consultancy should be appointed to take the feasibility work further in order to determine what sort of installation might work and what form any wind turbines might take. Scottish Agricultural College (SAC) Consulting, who already provided agronomic advice for the farm, were approached and were engaged in February 2010. Their initial report on feasibility received March 2010 considered two options:

- Four Enercon E33 330kW wind turbines on 44m towers located outwith a 400m radius from next nearest neighbouring properties (Figure 4), with a capital expenditure cost estimated at £2.4m and payback within 5 years; and
- Three Enercon E48 800kW wind turbines on 50m towers located outwith a 400m radius from next nearest neighbouring properties, with a capital expenditure cost estimated at £3.3m and payback within 8 years

Both of these predictions were based on the Feed in Tariffs (FITs) extant at the time, and which have subsequently been reduced (Ofgem 2013), but illustrated the potential income from renewables for the farm, which was otherwise reliant on relatively insignificant

revenues from seasonal grazing yet required significant spending on both land and buildings.

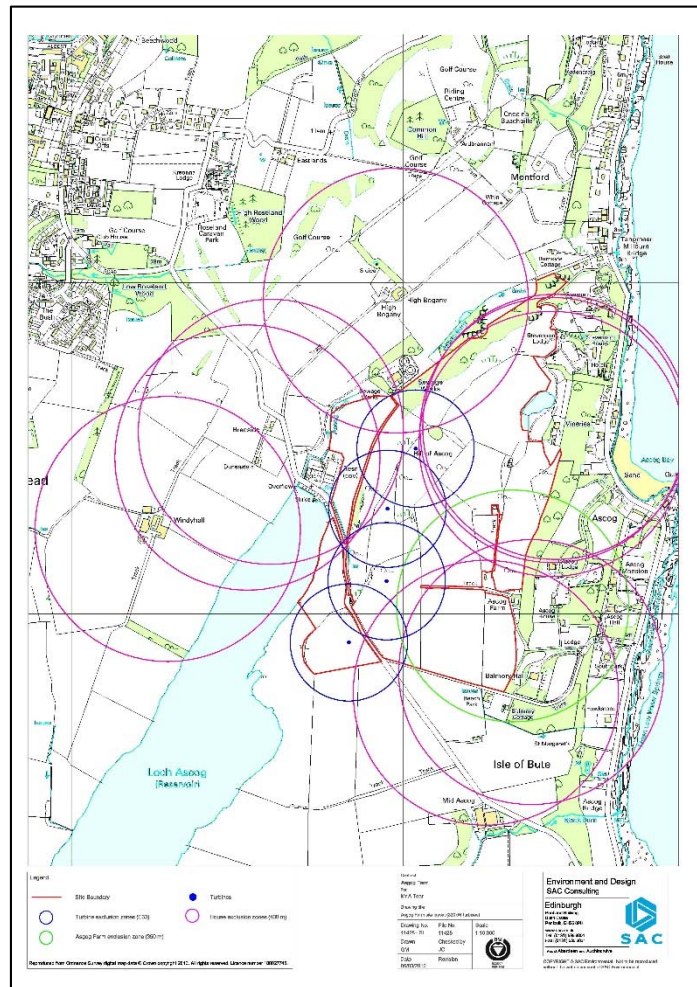


Figure 4 - Initial SAC Consulting design for four 330kW turbines at Ascog Farm

Despite these encouraging reports it was apparent, even in 2010, that a project at Ascog Farm faced time-consuming, probably expensive and possibly contentious challenges:

- **Additional data would be required** – Wind energy projects, and even those using mid-sized turbines, require significant investment in wind resource measurement, location planning advice and – quite often to proceed into planning – a detailed Environmental Impact Assessment.
- **Public hostility could be expected** – Driven in part by politicians, elsewhere by the media, a growing mood criticised the visual appearance of onshore wind turbines or sought to question their efficacy as an efficient means of low-carbon energy generation.

As SAC Consulting proceeded to collect data (contacting the Ministry of Defence regarding military over-flights, National Air Traffic Services for airport radar or the utility companies for details of microwave links or safe 'topple over' zones around power lines crossing the land) it was decided that the installation of a meteorological mast would a) provide accurate wind speed data for the site and; b) test the willingness of the local planning authority to consider even a temporary (yet 50m high) installation at the site.

### Heads above the parapet

Word soon emerged that a 50m meteorological mast was planned for installation at Ascog Farm. By this stage in late May 2011 (Argyll and Bute Council 2011a), and following the Scottish Government's announcement of the CARES programme (Scottish Executive 2011), Ascog Farm had already applied for and won approval – following a two-round inspection of SAC Consulting's earlier feasibility work and on-site visits by Community Energy Scotland (CES) – for CARES funding to help cover the 'high risk, pre planning stages' of a planning application for wind turbines at the site. The agreement stipulated that the CARES loan was repayable with interest at 10% if planning consent were granted (conversely, it could be written-off in the event the project failed) and that at least 20% of net profit from any consented installation should flow to the local community. Local organisation Towards Zero Carbon Bute (TZCB), part of registered Scottish charity Fyne Futures, was selected as the beneficiary and agreed to administer and disburse monies should the project succeed. Financial modelling indicated that the three Enercon E48 turbines envisaged at Ascog Farm could produce community revenues of around £1.5m or more over a twenty year period as well as offsetting roughly 3,500 tonnes CO<sub>2</sub> Equivalent annually.

Unfortunately, and despite the stated aim of sharing electricity generating revenues widely with the community, the wind energy project soon started to attract hostile comment. First amongst these was an article in local paper *The Buteman* (Ascog Farm 2011) which quoted Local Councillor Robert MacIntyre reporting that 'he had been told by local planning officer David Eaglesham that the [Argyll and Bute Council planning] authority had "received an avalanche of objections" to the application' for the meteorological mast (Figure 5). If this attribution was correct, following a total of only 22 public comments lodged on the Council's online planning portal, the choice of language by a planning officer appeared both incendiary and to set the tone of much of what followed in the local press.



Figure 5 - 'An avalanche' of concern over wind mast proposal (The Buteman, 29/07/2011)

The planning application for the meteorological mast was, nonetheless, later passed at a meeting of the Argyll and Bute Council Planning Protective Services and Licensing Committee at Lochgilphead on 21 September 2011, some four months after the application was lodged. Data from the mast (Figure 6) has subsequently confirmed the viability of the wind resource at the site recording an average speed to date of 7.62m/s.

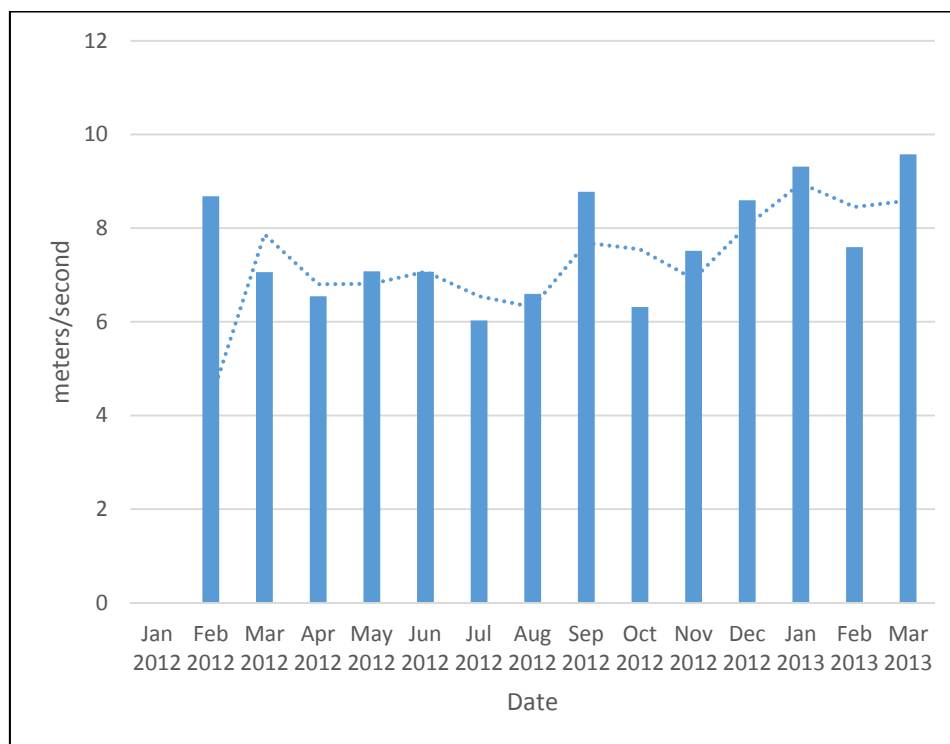


Figure 6 - Average monthly wind speeds (m/s) at the Hill of Ascog, Isle of Bute

Additional feasibility studies together with Screening and Scoping Requests and Opinions from Argyll and Bute Council were completed in early 2011, leading to the requirement by the planning authority for a full Environmental Impact Assessment under regulation 10 of the Environmental Impact Assessment (Scotland) Regulations 1999. The wind turbine plans at Ascog Farm had by this time become highly visible and locally contentious. The slow progress of decision-making and the time taken to gather and write-up rigorous Environmental Impact evidence (covering Alternatives, Site selection, Cumulative impacts, Zones of visual influence, Design principles, European species, Ornithology, Ecological assessment, Short term impacts, Archaeology/heritage resources, Tourism/recreation interests, Amenity issues and Technical issues) provided ample opportunity for activists opposed to onshore wind turbines at Ascog to organise. A small but vocal core of around twenty anti-wind campaigners, many of whom were also active objectors to the local planning authority on other planning matters (Ascog Farm 2012a), sought to highlight what they saw as the dangers of the plans for wind energy generation at Ascog Farm. The most visible output of the activists' work was a campaign of writing to the Letters pages of local paper *The Buteman* together with dissemination in print and online of a number of inaccurate, and quite often alarmist, messages.

In an attempt to document the interchange the Ascog Farm website has followed proceedings and interjected comments around Letters, Editorials or Articles (Ascog Farm 2013a, Appendix 1). To date around 150 scanned news items and/or pictures from the paper have been recorded in 58 articles on the Ascog Farm website. During this one and a half year period (starting with the 'Avalanche of Concern' in 07/2011 up to the time of writing in 03/2013) *The Buteman* has published:

- 2 Editorials
- 17 Articles
- 35 Letters
  - 10 for the scheme or green energy generally
  - 25 against the scheme or green energy generally
- From 28 individual Letter Writers

- 7 of whom have written more than two letters, of which:
  - 2 are for the scheme or green energy generally (7 Letters)
  - 5 are against the scheme or green energy generally (15 Letters)

The range of topics covered in Letters to *The Buteman* have been varied. Those for the scheme or green energy more generally have focused on:

- Economic and community benefits
- Response to climate change
- Need for distributed energy generation systems

Those against the scheme or green energy more generally have focused on:

- Visual impact
- Economic disbenefit (particularly impact on the tourism industry)
- Noise, shadow-flicker and perceived health impacts of turbines
- Wildlife impact
- Inefficiencies of wind energy
- Scepticism about climate change
- The motives of the site developers

Many of the letters against wind turbines have taken a personal angle, e.g. warning of the dangers of giving in to the 'greed [...] of the megawatt temptation' (Letter from R Lofting 12/08/2011) or suggesting that 'wind turbines are fast buck machines, three-armed bandits, for those who can afford to speculate on them to cash in on lucrative tariffs' (J Mitchell, 06/07/2012). Others have worried about whether tourists will 'be attracted to an island sporting forests of over-scaled wind turbines, dominating, dwarfing and destroying every aspect of the fragile beauty that is Bute' (T Burns, 20/07/12). Many appear unconcerned by mounting evidence of climate change, some even stating confidently that 'global warming stopped 16 years ago in 1996' (H Reid, 23/11/2012). Health fears have also been prevalent with T Harrison (16/11/2012) suggesting 'There is increasing concern that the infrasound or low frequency noise emitted from turbines is responsible for causing disorders that range from sleep disturbance, headaches, tinnitus, nausea, visual blurring, panic attacks to more general irritability.' Material along many of these lines has been posted up or delivered

door-to-door around Bute (Ascog Farm 2012b, Figure 6) and even presented to statutory consultee Bute Community Council (Ascog Farm 2012d) *before* publication of the impartial and rigorous Environmental Statement detailed the expected impacts of the plans.

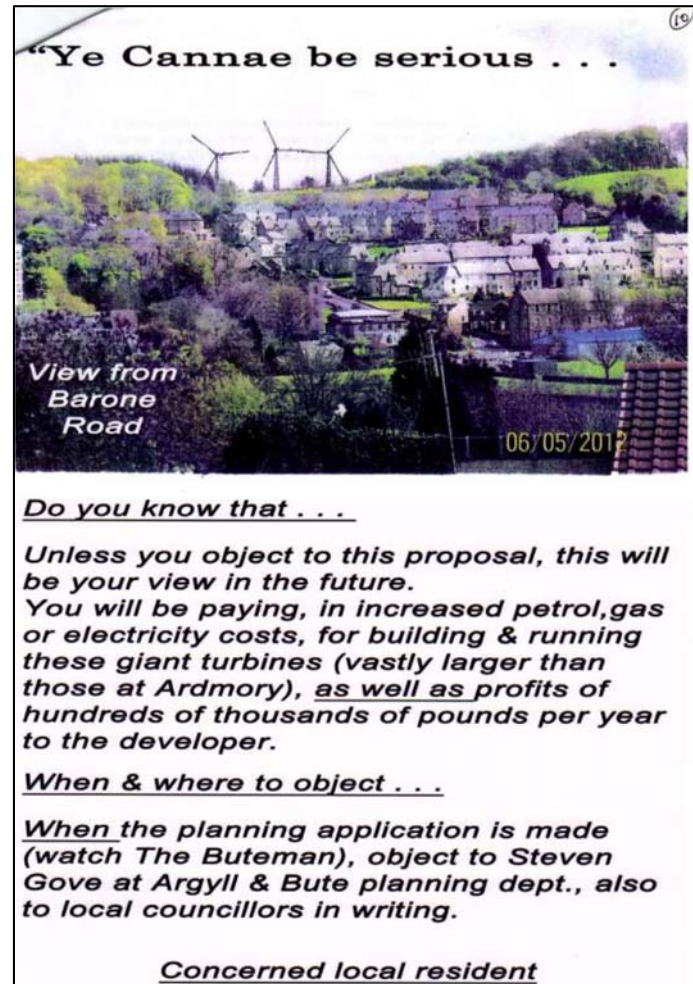


Figure 7 - One of several misleading anti-wind handbills posted up or delivered to locations around Bute pre-application

Given the frenzied atmosphere built-up prior to submission of the planning application on 10 October 2012 it was clear that strong public sentiment against the proposals – and a fairly large number of objections – were to be expected. Argyll and Bute Council eventually validated the planning application on 29 October 2012 and on that day the Environmental Statement and accompanying material (comprising well over 100,000 words across 556 pages of reports and appendices) became available publicly for the first time.

### Post-application

Following submission of the detailed planning documents:

- Public hostility to the wind energy project continued** – Despite the Environmental Statement concluding, essentially, that there would be little or no adverse impacts from the scheme (aside from significant but reversible visual impact affecting 8 properties near the turbine site) hostility to the project continued. *The Buteman* edition of 23/11/2012 featured coverage on pages 1, 2, 3, 4 and 5 (Ascog Farm 2012g) with 1 Editorial, 3 Articles and 6 Letters, 3 for and 3 against the proposals. Letters appeared in many subsequent editions of the paper and were generally negative (2 for and 8 against the proposals up to and including the edition of 22/02/2013).
- Local anti-wind activists sought to garner public objections** –The dissemination of handbills and, more interestingly, various inaccurate visual mock-ups bearing no relation to the photomontages in the Environmental Statement gathered pace with distribution either locally (Figure 8) or to contacts over the Internet. The inaccuracy of much of this content – some of which was intercepted, such as an email titled ‘Three HUGE Wind Turbines on BUTE’ featuring notes, a letter and attachment (Figure 9) sent to 51 recipients (personal communication, Anon 2012) – must undoubtedly have led to a growing number of objections on the Council planning website.

Meanwhile, the statutory consultees reviewing the Environmental Statement reported back to Argyll and Bute Council:

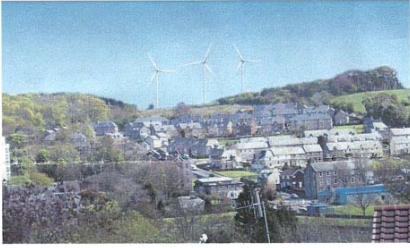
<b>Date</b>	<b>Consultee</b>	<b>Status</b>
07/11/2012	National Air Traffic Services	No objections
08/11/2012	Coal Authority	No consultation required
17/11/2012	Environmental Health	Further information required
27/11/2012	Ministry of Defence	No objections
05/12/2012	Scottish Government	Papers being circulated
07/12/2012	Bute Community Council	Objection
07/12/2012	Trunk Roads	No objections
07/12/2012	Royal Society for the Protection of Birds	No objections
11/12/2012	Scottish Natural Heritage	No objections (advice)
27/12/2012	Historic Scotland	No objections

*Table 1 - Time line and outcome of consultee responses*



The only Objection against the wind energy project from a statutory consultee has come from Bute Community Council (BCC) based on an 8/3 majority vote following a last-minute presentation from Ascog Farm and objectors at a meeting held on 21/11/2012 (Ascog Farm 2012f). At this meeting a show of hands requested by the applicant revealed that the majority of BCC members had not examined the Environmental Statement (556pp) but that all had studied the objector's material (40pp, Ascog Farm 2012d).

PLANNING APPLICATION NOW IN!!



(Estimated approximate view from Barone Road)

DO YOU WANT TO SEE (AND HEAR) THIS 24 HOURS A DAY,  
7 DAYS A WEEK,  
52 WEEKS A YEAR,  
FOR THE NEXT 20 YEARS?

IF NO, THEN OBJECT NOW

OTHER REASONS to object:  
WIND TURBINES close to housing are thought to cause  
HEALTH PROBLEMS because of  
Sunlight flicker (when the sun shines!)  
Low frequency noise and vibration (particularly at night)  
and not least,  
the HUGE IMPACT on Bute's skyline (and potentially visitor  
numbers)

— These reasons are all valid Planning Objections – you may have others.

HOW TO OBJECT

1 Write to Argyll & Bute, Planning Dept., Band C, Kilmory,  
Lochgilphhead, ARGYLL, PA31 8RT  
quoting ref. no. 12/02202/PP : 3 Wind Turbines, Ascog Farm, Isle of  
Bute. Include your objection (View, noise, etc) plus your name and  
address,  
OR (SEE OVER)

Figure 8 - Handbill featuring inaccurate photomontage and health scaremongering distributed post application

Scottish Natural Heritage (SNH), while not formally objecting to the project (and having no objections in terms of any wildlife impacts), have offered 'advice' to the local authority stating 'given the overall scale of the turbines and the proposed siting of the same, it is our advice that this development would not be appropriate in this sensitive location...' (Scottish Natural Heritage 2012). The SNH advice is in large part based around the conclusions of a 'Landscape wind energy capacity study' (Argyll and Bute Council 2012b) conducted by SNH and its consultants for Argyll and Bute Council themselves which did not examine the siting

of turbines over 50m to tip on islands such as Bute. Upon receipt of this consultee response, and requiring more noise monitoring data, the Council wrote on 11/12/2012 stating 'Given the concerns expressed by Scottish Natural Heritage (and shared by this Department) based upon the information already submitted in the Environmental Statement, it is unlikely that the further viewpoints which have been requested will diminish the concern at the visual impact of the proposed turbines' (Argyll and Bute Council 2012c) and asking whether Ascog Farm wished to withdraw the planning application for turbines or provide the further noise and visual data requested. Ascog Farm's planning consultants did not concur with the SNH report and withdrawal of the application at this stage (about £110,000 and two years in) appeared insensible so the additional noise and visual work was commissioned.



*Figure 9 - Another inaccurate (and widely-shared) photomontage featuring tightly bunched and incorrectly sized turbines*

However, It now appeared highly likely that the decision made by the planning officers would be based largely on the SNH 'advice' regarding views and the volume of public objections to the project, many of which were themselves the result of misleading information about views (or health or tourism) disseminated locally or over the Internet. This focus on views is a common concern in wind farm developments and had been a major component of the Ascog Farm application. While the matter is still under consideration by the planning authorities little can be said, although it is probably worth making the general

observation that wind turbines are by necessity tall structures and if we want more of them but we do not want to see them we will very soon run out of places to put them. Ireland's bid to host much of the UK's renewable capacity appears indicative of this trend (BBC 2013).

## Classification of public comments

In order to understand the sentiments submitted by the public in response to the Ascog Farm wind energy planning application it is necessary to categorise and analyse responses. Between 05/11/2012 and 25/02/2013 639 documents were lodged on the planning portal. Of these, 498 were classified by the Council 'Contributor Response – Objection – Public' and 63 'Contributor Response – Support – Public'.

## Methodology

All documents submitted to Argyll and Bute Council regarding a planning application are saved using an Idox (Idox plc 2013) document management system offering a web front end for public viewing of documents (Figure 10).

Planning Documents - Windows Internet Explorer  
[http://www.argyll-bute.gov.uk/Planning/ig/dialog.page?org.apache.shale.dialog.DIALOG\\_NAME=gfplanningsearch&Param=lg.Pj](http://www.argyll-bute.gov.uk/Planning/ig/dialog.page?org.apache.shale.dialog.DIALOG_NAME=gfplanningsearch&Param=lg.Pj)

### Associated Documents

Please click on the document number to view the document.

◀ ◀ 1 2 3 4 5 6 7 8 9 10 ▶ ▶

Document No	Description	Document Title	Document Date
20765375	Contributor Response - Objection- Public	Mrs Marion Holliday	Monday, March 25, 2013
20761876	Contributor Response - Objection- Public	Mr G Pyle	Monday, March 18, 2013
20761875	Contributor Response - Objection- Public	Ms Ishbel Crawford	Monday, March 18, 2013
20761874	Contributor Response - Objection- Public	Ms Glynis Shaw	Monday, March 18, 2013
20761873	Contributor Response - Objection- Public	Mrs Joan Kerr	Monday, March 18, 2013
20761601	Contributor Response - Objection- Public	J Martin	Saturday, March 16, 2013
20761393	General Supporting Documentation	Erection of 3 wind turbines Ascog Farm 1202202PP (attacment from email doc No. 20754875)	Friday, March 15, 2013
20757078	General Correspondence - Public	email from SAC 11 Mar 13	Tuesday, March 12, 2013
20756509	General Correspondence	Payment notification	Monday, March 11, 2013

Figure 10 - 'View associated documents' page of the Argyll and Bute Council planning portal

The list of documents (with unique Document No) from this web page (up to 25/02/2013) were copied and pasted into Microsoft Excel, saved and imported into the Microsoft SQL Server 2012 Relational Database Management System (RDBMS). Each document (e.g. the SNH consultee response 20701043) individually referenced by Document No can be downloaded from the URL taking the form:

<http://www.argyll-bute.gov.uk/Planning/StreamDocPage/obj.pdf?DocNo=20701043&PDF=true&content=obj.pdf>

The list of documents in the RDBMS (table DocList) was used to control an Adobe ColdFusion programme (get\_some.cfm, Appendix 2 – ColdFusion programme to capture public comments) scheduled to run every 90 seconds to capture and save 8 documents each time from all of those marked for retrieval (i.e. all those not submitted in the initial Environmental Statement supply, with DocList.GrabPDF=1, n=630) locally.

One of the peculiarities of the Argyll and Bute Council document management system is that almost all documents – even if they were originally supplied in PDF or as text (e.g. by submission of public comments on the Council website) – are either printed and redacted to remove, e.g., email addresses or phone numbers prior to scanning for reinsertion to the document management system or are converted from a text-based PDF to an image-based PDF in order to add a watermark. The Environmental Statement supplied by SAC Consulting to Argyll and Bute Council as part of the Ascog Farm planning application itself went through this process and was transformed from a 2.8MB text-based document of 314 pages to a 225MB image-based document with watermarking. Hardly a useful transformation in terms of either download size or readability since the image-based PDFs a) become unsearchable and b) must presumably be created at some human cost.

Grabbing 8 PDFs every 90 seconds the ColdFusion programme soon downloaded all 630 documents from the Council website. These were then converted from image-based PDFs back to text-based PDFs using Adobe Acrobat X Professional (10.1.6) which offers a batch processing mode for Optical Character Recognition (OCR). The resulting 630 OCR'd text-based PDFs were saved in a separate directory and a ColdFusion programme (process\_text.cfm, Appendix 3 – ColdFusion programme to read text-based PDFs into the database) was used to read the files and update the DocList table accordingly with separate fields for the entire document text and the identified 'comments' text.

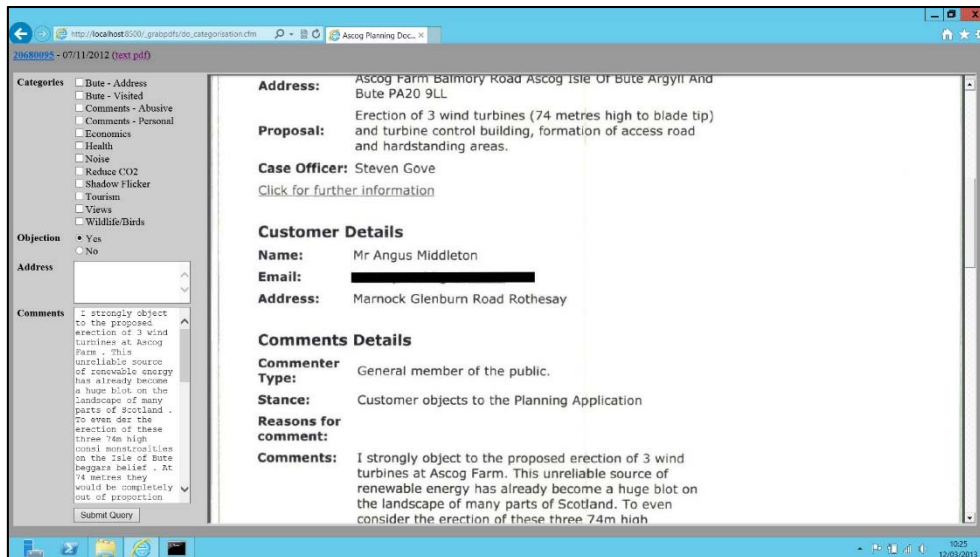


Figure 11 - Screen Grab of the categorisation system

Finally, having populated the database/file system with PDFs and extracted text another ColdFusion programme (Appendix 4 – ColdFusion programme to categorise Comments) was written to interactively categorise public comments (Figure 11).

The categories chosen were:

- Bute - Address
- Bute - Visited
- Comments - Abusive
- Comments - Personal
- Economics
- Health
- Location
- Noise
- Reduce CO2
- Shadow Flicker
- Tourism
- Views
- Wildlife/Birds

Each category could apply equally well regardless of whether the comment was in Support of (e.g. turbines will have no effect on tourism) or Objection to the application (e.g. turbines

will destroy tourism). All 630 records were manually inspected using the system in Figure 11 and each public comment was assigned to multiple categories (if possible at all) based on content.

## Results

The timeline of comments in Support of/Objection to the wind energy project at Ascog Farm is shown in Figure 12. Most responses (57 in support – 90.5% of total support, 371 in Objection – 74.5% of total objections) were received within one month of the submission of the application. Typically public statements must be lodged within one month of an application (or advertisement of an application), although Argyll and Bute Council in fact continue to take submissions until decision date.

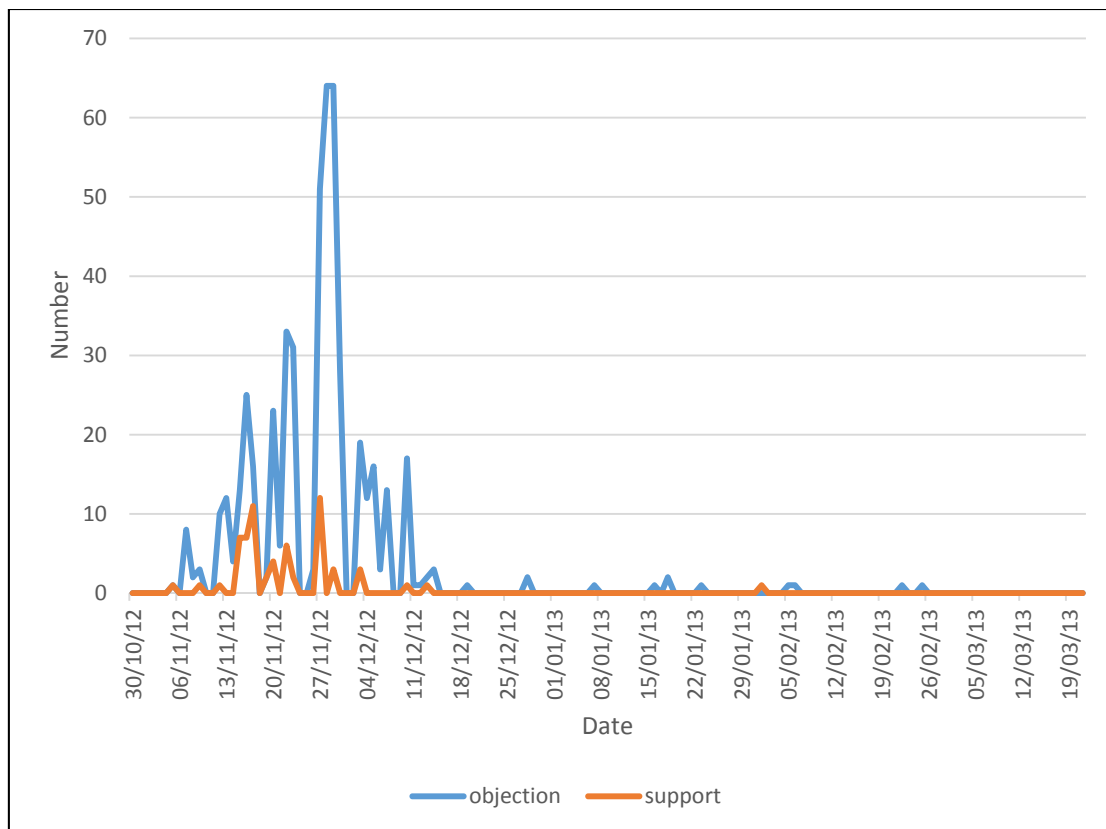


Figure 12 - Time line of Support and Objection

The text from all messages of Support and Objection were extracted from the database and copied/pasted into the TagCrowd ([www.tagcrowd.com](http://www.tagcrowd.com)) tag-cloud generating software in order to visualise sentiment both for (Figure 13) and against (Figure 14) the project.

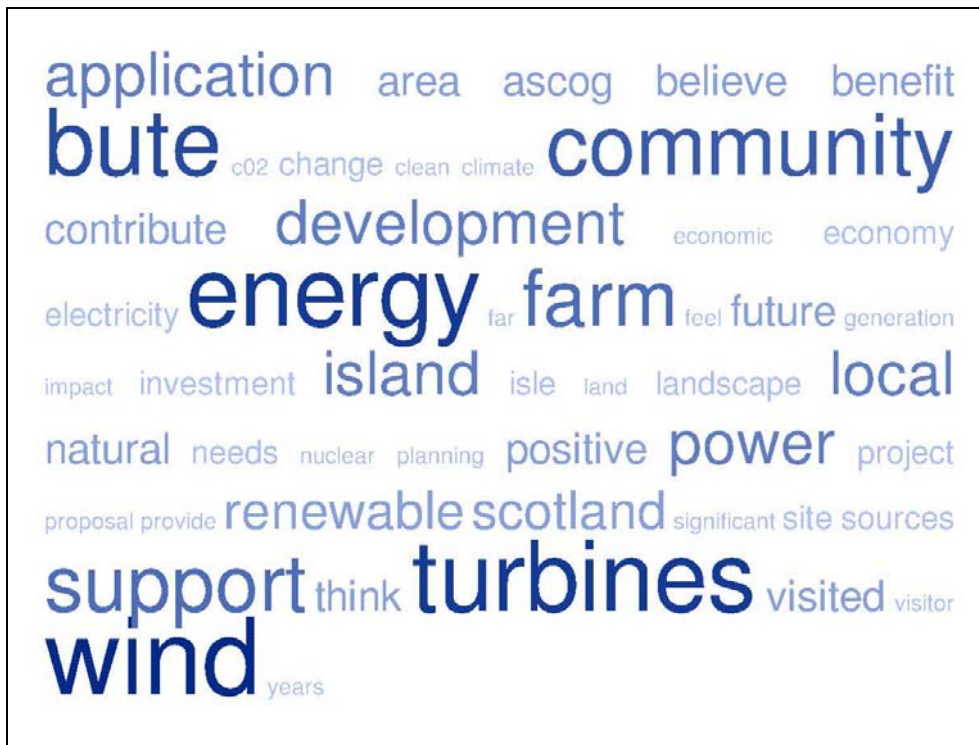


Figure 13 - Tag cloud of terms from Supporters of the planning application

Despite the difference in number (Supporters n=63, Objectors n=498) the tag clouds based on word frequency highlighted some interesting (although wide-ranging) areas of divergence in sentiment.



Figure 14 - Tag cloud of terms from Objectors to the planning application

Records were then categorised according to the textual comments within them (wherever possible; this was not always possible since some comments would simply state ‘I object to this proposal’ or ‘I support this proposal’ etc.). Numbers and percentages (against base) in Support and Objection to the plans are shown in Table 2.

Category	Support (n=63)		Objection (n=498)	
	N	Percent	N	Percent
Bute - Address	20	31.70	243	48.80
Bute - Visited	13	20.60	138	27.70
Comments - Abusive	0	0.00	9	1.80
Comments - Personal	2	3.20	84	16.90
Economics	34	54.00	217	43.60
Health	0	0.00	121	24.30
Location	7	11.10	240	48.20
Noise	0	0.00	150	30.10
Reduce CO2	47	74.60	109	21.90
Shadow Flicker	0	0.00	65	13.10
Tourism	12	19.00	303	60.80
Views	23	36.50	437	87.80
Wildlife/Birds	6	9.50	94	18.90

*Table 2 - Categorisation of Support (n=63) and Objection (n=498)*

It must be remembered that where Table 2 gives numbers or percentages for a particular category (e.g. a Supporter supporting ‘Reduce CO2’ and an Objector objecting to ‘Reduce CO2’) the comments were diametrically opposed – e.g. a Supporter thinks the project can reduce CO2 where the Objector thinks it cannot. Taking the categorised opinions lodged as a time series against Category (visualised in Table 3) it is again apparent that those in Support of the planning application consistently mention ‘Economics’ or ‘Reduce CO2’ whilst those who Object to the planning application consistently mention ‘Views’ and, to a slightly lesser extent, ‘Tourism’. It must be noted that no attempt has been made to determine whether individual public comments have any ‘material’ relevance to the Ascog Farm community benefit wind energy planning application, whatever category or categories they mention, although a professional Planner could presumably make this judgement.



Year	Issue	Comments	Supporter/Obj	Residence
2010	...	...	...	...
2011	...	...	...	...
2012	...	...	...	...
2013	...	...	...	...
2014	...	...	...	...
2015	...	...	...	...
2016	...	...	...	...
2017	...	...	...	...
2018	...	...	...	...
2019	...	...	...	...
2020	...	...	...	...
2021	...	...	...	...
2022	...	...	...	...
2023	...	...	...	...
2024	...	...	...	...
2025	...	...	...	...
2026	...	...	...	...
2027	...	...	...	...
2028	...	...	...	...
2029	...	...	...	...
2030	...	...	...	...

Year	Issue	Comments	Supporter/Obj	Residence
2010	...	...	...	...
2011	...	...	...	...
2012	...	...	...	...
2013	...	...	...	...
2014	...	...	...	...
2015	...	...	...	...
2016	...	...	...	...
2017	...	...	...	...
2018	...	...	...	...
2019	...	...	...	...
2020	...	...	...	...
2021	...	...	...	...
2022	...	...	...	...
2023	...	...	...	...
2024	...	...	...	...
2025	...	...	...	...
2026	...	...	...	...
2027	...	...	...	...
2028	...	...	...	...
2029	...	...	...	...
2030	...	...	...	...

Table 3 - Time line and categorisation of public comments in Support of (LHS) and Objection to (RHS) the application

The data, viewed in this way, affords a detailed description of Supporter/Objector residence (on Bute or elsewhere) and topic issues. It is not known whether Argyll and Bute Council, or other Councils, analyse public comments relating to planning applications in this way.

## Conclusions

Despite government support for renewable energy systems – including onshore wind – the process of developing a project seems, from experience, to be:

- **Incredibly time consuming** – over three years have elapsed between identification of the opportunity and submission of the planning application.
- **Incredibly expensive** – the need to conduct an Environmental Impact Assessment into the development has cost over £120,000 and taken months.
- **Highly contentious** – the visually divisive nature of wind turbines ensures that objector groups will attempt to derail applications by whatever means possible.
- **Politically uncertain** – political appetite for onshore wind or renewables more generally has waxed and waned at national and local level.
- **Economically uncertain** – Feed in Tariffs have reduced and are likely to reduce further in the future probably before anything can be built.

Many hurdles have been cleared to lodge a planning application for community benefit wind turbines at Ascog Farm. The site is a windy hilltop and development of three mid-sized turbines on Bute would appear to do much to generate green electricity, offset CO<sub>2</sub> emissions, diversify on-farm revenues and provide income over a twenty year period for local community partner Towards Zero Carbon. However:

- **Around 500 objections to the plans** – have been submitted by members of the public – yet just under half of these are from Bute residents; equating to 4.35% of Bute's adult population and broadly in line with opinion polls (e.g. VisitScotland 2012, YouGov/Scottish Renewables 2013) suggesting that a minority strongly oppose the use of onshore wind turbines even though the majority are in support of the technology.
- **Although most objections centre on views and tourism** – Bute's tourism industry has been in long-term decline since the 1950s (Brown et al. 2000) and, despite government or lottery funded initiatives, shows little sign of bouncing back in the face of competition from cheap and climatically more dependable overseas destinations or even other more accessible, cheaper or easier to reach destinations in Scotland.

- **Planning authorities cannot currently take community benefit into account** – whilst economic ‘disbenefit’ in the form of potential harm to the tourist industry (thought to be ‘anecdotal’ according to a recent report of The Scottish Parliament, 2012) or general civic amenity is considered, planning authorities do not currently take any account of the economic benefit that wind energy projects can bring; at Ascog this could amount to £1.5m or more (much more with community equity buy-in to the project) over a twenty year period at a time when Council spending is decreasing significantly (Ascog Farm 2013a), the Bute economy appears to be contracting and other sources of funding (e.g., lottery claims) remain undependable.

Set against these local concerns Arctic sea-ice has recently been found to be ‘thinning alarmingly’, the poor summer of 2012 has ‘cost rural Britain £1bn’, the independent Climate Change Committee has warned that a ‘dash for gas’ could be illegal, plans to extend the working life of Hunterston B nuclear plant have been ‘attacked’ by a local Councillor on Bute, ‘hundreds of problems’ have been found at EU nuclear plants, Ofgem has warned of ‘energy shortages’ by 2015 and ‘nowhere has been found’ in Cumbria or elsewhere to permanently store Britain’s nuclear waste (Ascog Farm 2012b). The World Bank, in its recent comprehensive report on the dangers of unabated global warming (2012), has warned that:

Warming of 4°C can still be avoided: numerous studies show that there are technically and economically feasible emissions pathways to hold warming likely below 2°C. Thus the level of impacts that developing countries and the rest of the world experience will be a result of government, private sector, and civil society decisions and choices, including, unfortunately, inaction.

It is hoped that ‘inaction’ will not be allowed to prevail at Ascog Farm and that wind turbines of some size, whether they are big enough to support community benefit payments or not, will be built and will go on to play their part in both reducing CO<sub>2</sub> emissions on Bute and diversifying the business at Ascog Farm to help ensure its long-term viability.

## Further Research

This paper is a result of a Call for Papers from the Royal Geographical Society with the Institute of British Geographers (RGS-IBG) received on 29 January 2013. The paper was written late March 2013 in time for an April 2013 submission. The author does not have any

particular specialism in planning policy or law but writes from experience of a recent planning application and presents meaningful data, much of it derived from content in the public domain. Ideas for further research include:

- A Freedom of Information request to Argyll and Bute Council for all public comments and addresses in text form to overcome the limitations of machine-based OCR.
- A more detailed textual or linguistic analysis of letters or comments submitted to either *The Buteman* newspaper and/or Argyll and Bute Council.
- A comparison of the Ascog Farm planning application with other applications of a similar scale currently in progress.

There is much to learn. The development of onshore wind turbines, and the sustainable transition to a low carbon economy that governments at all levels are encouraging, appears to be at risk from the campaigning activities of a small but vocal percentage of the population intent on preventing change in order to preserve views. Little thought appears to be given to the much greater potential for detrimental change to the environment, landscape or views arising from the predicted effects of global warming. At Ascog Farm the owners have persisted with a planning application for three community benefit wind turbines on their land, but what proportion of landowners in Scotland or elsewhere in the UK, faced with the same sort of opposition over a similar sustained time period, would simply have given up?

## Disclaimer

Adrian Tear is a partner and co-owner of Ascog Farm and has an economic interest in the wind energy project should it gain planning consent. No funding has been provided for the creation of this paper nor for the development of the Ascog Farm website ([www.ascogfarm.com](http://www.ascogfarm.com)) where much of the material referenced resides. Adrian Tear holds a B.A.(Hons) in Geography from the University of Durham and a M.Sc. in Geographic Information Systems from the University of Edinburgh. Adrian has previously co-founded two successful high technology companies, one in the GIS and the other in the Internet space. He is currently working part-time towards a Ph.D. in Geography at the University of Portsmouth when farm work, and the wind energy project in Scotland, allow.

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## Appendices

### Appendix 1 – News articles on the ascogfarm.com website

- **22.02.2013 - Hard times ahead**  
Council approves substantial budget cuts. Time to think about alternate sources of income?
- **08.02.2013 - Give up and do nothing**  
What Bute needs to ensure its future prosperity is more of the same - with some extra job cuts thrown in...
- **01.02.2013 - Argyll & Bute budget cuts put jobs under fire**  
Guess what? The Council are one of the largest employers on Bute...
- **25.01.2013 - Mount Stuart 'hits out' at Historic Scotland**  
As news comes in that parts of Rothesay are amongst the most deprived in Scotland...
- **18.01.2013 - Community Benefit payments (unfairly) called in to question**  
Better regenerate the place using all that public money sitting out there...
- **05.01.2013 - 'Up close and personal at Ascog turbine site'**  
*Buteman* article details a worthwhile open day held at the farm the other week...
- **28.12.2012 - 'Developer to press on with Ascog wind farm application'**  
The *Buteman's* article title says it all this week...
- **21.12.2012 - Not for the first time have planners expressed 'concern' over Ascog wind farm**  
A year ago an 'avalanche of concern' now there's more of the same!
- **14.12.2012 - Michael Russell MSP surprised by 'personal abuse' in wind farm debate**  
Local SNP MSP 'won't be drawn on Ascog Wind farm' plan while Scottish Natural Heritage get back to the Council...
- **11.12.2012 - Policy makers: Where should turbines go?**  
Governments want more renewable energy (and more community renewable energy projects) but where should turbines go?
- **10.12.2012 - Grossly inaccurate 'Scottish' Daily Mail article!**  
The media onslaught continues as the fanatically anti-turbine 'Scottish' *Daily Mail* joins the fray! Believe everything you read in the papers?
- **07.12.2012 - 'Nowhere in Scotland is safe'**  
Some letter writers comment about the creeping turbine monstrosities. Others have noticed they're already here...
- **30.11.2012 - Yet more wind turbine debate in *The Buteman* this week**  
The debate about wind turbines continues to 'rage on' and on and on and on and on...
- **23.11.2012 - This week's *Buteman* is a bumper wind edition!**  
Delayed reaction to planning application? Play catch-up in *The Buteman* this week...
- **21.11.2012 - Bute Community Council considers plans for wind turbines at Ascog**  
A last minute invitation to speak at the BCC meeting...

- **16.11.2012 - Infrasound myth raised again! Are the objectors trying to frighten everyone?**  
 Leading light in anti-wind campaign again raises spectre of infrasound and low frequency noise. Aaaaaaarrrrrrrgggggghhhhhh...
- **14.11.2012 - Understanding local demographics, and potential community benefits**  
 It is worth understanding and visualising economic conditions on Bute. This data should help a little...
- **11.11.2012 - The campaign of misinformation gathers pace!**  
 Flyers are being delivered door-to-door around Bute trying to frighten people into objecting to our community benefit wind energy scheme. Wonder who's to blame?
- **10.11.2012 - Blue water separates?**  
 Inhabitants of Bute are an Island-race. Are they immune to world events? Ask not for whom the bell tolls....
- **08.10.2012 - The calm before the storm...**  
 There has been a dearth of wind-related letters to *The Buteman* lately but we suspect that's about to change.
- **03.08.2012 - Love thy neighbour?**  
 It seems the same bunch of 'locals' are objecting to everything on or around Bute!
- **27.07.2012 - Wind debate rages on!**  
 Someone gets their facts wrong... someone else gets their facts right...
- **27.07.2012 - A bit more news of anti-wind objectors at Bute Community Council meeting**  
 Some only moved here three or four years ago, think it's beautiful and 'would like it to stay that way'...
- **20.07.2012 - Anti-wind campaigners get their objections in before planning application is even lodged!**  
 In what might be a first, 'very scared' local campaigners fight back against a planning application that hasn't even been made...
- **20.07.2012 - 'Squiffed logic' and 'Blighted horizons'!**  
 Two of our favourite letter writers have contributed this week...
- **13.07.2012 - Two steps forward one step back**  
 2:1 victory for wind energy in the local paper this week...
- **06.07.2012 - 'Wind turbines are three armed bandits'**  
 'Comedy horror' in *The Buteman* this week as local anti-wind protestor starts foaming at the mouth...
- **06.07.2012 - 'Reasons for hating wind farms'**  
 Apparently 'noise', the 'ease' of the planning process and 'subsidies' are the reasons for hating wind farms. Maybe for some...
- **28.06.2012 - A 'wind farmer's wife' writes...**  
 Elspeth writes our second letter to *The Buteman* following the anti-wind hysteria seen in the Letters pages just recently...
- **21.06.2012 - Deranged? Tory MEP 'blasts' Ascog wind farm plan**  
 Shale gas supporting Tory MEP blasts wind farm proposal! Brain-frying turbine terror and some talk of scaremongering...

- **21.06.2012 - Only Conservative MEP in Scotland 'opposes' Ascog windfarm. Quel surprise!**  
There aren't many of them around but they know what they like... oil, gas, shale gas, nuclear etc...
- **04.05.2012 - Trumpety Trumpety Trump!**  
First local mention of the 'wisdom of Trump'! No doubt more will come from his cronies later...
- **27.04.2012 - Does one swallow make a Summer?**  
Maybe, but there are more ways than wind turbines to lose visitors to the Island!
- **13.04.2012 - Ardbeg turbines: just the start of something big?**  
Three new masts 'already attracting interest' according to the *Buteman*...
- **30.03.2012 - A neighbouring turbine objector writes...**  
Local owner of solar-panelled £1m glass Eco house hates turbines and isn't afraid to throw stones!
- **29.03.2012 - Ardbeg Farm turbines are installed**  
Farmers at Ardbeg on Bute have installed three C&F turbines...
- **08.03.2012 - Community Energy Scotland endorses Ascog progress**  
Our Community partners are pleased with the met mast progress...
- **01.02.2012 - Less than Beautiful Bute?**  
The look of turbines usually comes in for a panning. But what's this on the doorstep...
- **26.01.2012 - Meteorological mast Day Three**  
*Buteman*, we have Lift Off...
- **25.01.2012 - Meteorological mast Day Two**  
*Buteman*, we have Ignition...
- **24.01.2012 - Meteorological mast Day One**  
It's down from Inverness and getting ready to go up on Bute.
- **20.01.2012 - Renewables survey: full results published**  
Quite a few people appear to support renewables on Bute. Surprised?
- **20.01.2012 - Sense and Non-sense?**  
The thought of power from the wind is certainly polarising opinion!
- **16.01.2012 - On farm movements**  
A good bit of power in the recent storm has moved another couple of things.
- **15.01.2012 - Wall damage**  
On closer inspection the march wall really has suffered in the storm.
- **14.01.2012 - Ten Shetland sheep are better than none!**  
How true! Something for the dog and jumper lover in all of us...
- **12.01.2012 - Storm damage**  
Following the severe storm on the night of 2nd January 2012 there is a lot of wind-blown damage at the farm.
- **06.01.2012 - Bute in the news**  
Soup kitchens and three day power cuts on Bute make the BBC Ten O'Clock News.
- **06.01.2012 - Why not use a Green Energy provider, just not one on Bute?**  
It's blowing a gale outside. Let's buy in green electricity from elsewhere or use small, less efficient turbines!

- **04.01.2012 - Lights out over Bute**  
Pass the candles, the lights are out!
- **23.12.2011 - Wind of Change in Bute's green attitude**  
Some welcome Christmas respite and a Wind of Change?
- **30.09.2011 - Ascog wind developer sets out his plans**  
Yes, 'the man behind plans' at Ascog is in *The Buteman* one more time...
- **19.08.2011 - Why is wind power being promoted?**  
A concerned resident wonders why wind power is being promoted. Heard of climate change?
- **19.08.2011 - In defence of wind (and capitalism?)...**  
Some consideration is required, and this letter sets out a balanced view.
- **11.08.2011 - A deputy lieutenant writes...**  
Must we give in to greed and the megawatt temptation? A civic official hopes not...
- **11.08.2011 - A professor writes...**  
Our plans for Ascog pale into insignificance against those for Hunterston, a local professor writes...
- **05.08.2011 - Further coverage regarding the wind mast proposal and wind energy**  
Our letter to the local paper is accompanied by a balanced editorial and a letter from another member of the public.
- **05.08.2011 - A 'wind farmer' writes...**  
We write to the paper to explain our hopes and plans for wind energy generation at Ascog Farm.
- **29.07.2011 - 'An avalanche' of concern over wind mast proposal**  
The local paper highlights the concerns of two dozen local residents.

## Appendix 2 – ColdFusion programme to capture public comments

### get\_some.pdf

```
<!-- run a query to select a few PDFs we haven't got yet --->
<cfquery name="get_some" datasource="Ascog">
    select top 8 * from doclist where grabpdf=1 and pdfgrabbeddate is null
</cfquery>

<cfif get_some.recordcount is not 0>
    <cfinclude template="_grab_pdfs.cfm">
</cfif>
```

### \_grab\_pdfs.com

```
<!-- loop over the query getting some PDF documents and saving them --->
<cfloop query="get_some">
    <cfset thispdf = get_some.docref>
    Getting <cfoutput>#thispdf#</cfoutput>...<br />
    <cfset thisurl = "http://www.argyll-
bute.gov.uk/Planning/StreamDocPage/obj.pdf?DocNo=" & thispdf &
"&PDF=true&content=obj.pdf">
    <cfoutput>#thisurl#</cfoutput><br />
    Done...<br /><br />
    <cfhttp url=#thisurl# path="C:\ColdFusion10\cfusion\wwwroot\_grabpdfs\pdfs_grabbed"
file="#thispdf#.pdf">
    <!-- update the database --->
    <cfquery name="update_doclist" datasource="Ascog">
        update doclist set pdfgrabbeddate=#now()# where docref=#thispdf#
    </cfquery>
</cfloop>
```

## Appendix 3 – ColdFusion programme to read text-based PDFs into the database

process\_text.cfm

```
<!-- run a query to select a few PDFs we haven't got yet -->
<cfquery name="get_some" datasource="Ascog">
    select top 50 * from doclist where grabpdf=1 and textprocesseddate is null
</cfquery>

<cfif get_some.recordcount is not 0>
    <cfinclude template="_extract_text.cfm">
</cfif>
```

\_extract\_text.cfm

```
<!-- loop over the query getting some PDF documents and saving them -->
<cfloop query="get_some">
    <cfset thispdf = get_some.docref>
    <cfset this_src = "C:\ColdFusion10\cfusion\wwwroot\_grabpdfs\pdfs_to_text\" &
#thispdf# & "_text.pdf">
    <!-- extract the text from the pdf file to a .txt file in c:\temp -->
    <cfpdf action="extracttext" pages="*" useStructure="true" addquads="false"
honourspaces="true" type="string" source="#this_src#" destination="c:\temp\#thispdf#.txt"
overwrite="yes">
    <!-- read the file just created -->
    <cffile action="read" file="c:\temp\#thispdf#.txt" variable="this_text">
    <cfset stringpos = find("Comments :", this_text, 1)>
    <!-- <cfoutput>stringpos=#stringpos#</cfoutput> -->
    <cfif stringpos is not 0>
        <cfset this_comment = mid(this_text, stringpos+10, len(this_text)-9)>
    <cfelse>
        <cfset this_comment = "">
    </cfif>
    <!-- sort out the ABC dateformat -->
    <cfset abcdate1 = trim(gettoken(get_some.docdate, 1, ","))>
    <cfset abcdate2 = trim(gettoken(get_some.docdate, 2, ","))>
    <cfset abcdate3 = trim(gettoken(get_some.docdate, 3, ","))>
    <cfset abcmonth = trim(gettoken(abcdate2, 1, " "))>
    <cfset abcday = trim(gettoken(abcdate2, 2, " "))>
    <cfset months =
"January,February,March,April,May,June,July,August,September,October,November,Decemb
er">
    <cfset abcmonthnumber = listfind(months, abcmonth, ",")>
    <cfset properdate = createdate(abcdate3, abcmonthnumber, abcday)>
    <!-- diagnostics to see what's what -->
    <cfoutput>#abcdate1# | #abcdate2# | #abcdate3# === #properdate#<br /></cfoutput>
        <cfoutput><b>#thispdf#</b><br />#this_text#<br /><br
/><b>#this_comment#</b><br /></cfoutput>
```

```
<!-- update database --->
<cfquery name="update_doclist" datasource="Ascog">
  update doclist
  set
    realdocdate = #properdate#,
    textprocesseddate = #now()#,
    doctext = '#this_text#',
    doccomments = '#this_comment#'
  where
    docref = #thispdf#
</cfquery>

  <!-- clear variables --->
  <cfset this_text = "">
  <cfset this_comment = "">
</cfloop>
```



## Appendix 4 – ColdFusion programme to categorise Comments

do\_categorisation.cfm

```
<!-- do_categorisation.cfm -->
```

```
<cfparam name="dosomething" default="nothing">
```

```
<cfif isdefined("dosomething") is 1 and dosomething is "nothing">
```

```
    <cfquery name="get_categories" datasource="Ascog">
```

```
        select * from categories order by category
```

```
    </cfquery>
```

```
    <cfquery name="get_one" datasource="Ascog">
```

```
        select top 1 * from doclist where grabpdf=1 and categorisationprocesseddate is null
```

```
order by docref asc
```

```
    </cfquery>
```

```
    <html>
```

```
    <head>
```

```
        <title>Ascog Planning Documents - Categorisation</title>
```

```
        <META HTTP-EQUIV="Pragma" CONTENT="no-cache">
```

```
        <META HTTP-EQUIV="Expires" CONTENT="-1">
```

```
    </head>
```

```
    <cfoutput><body bgcolor="##999999">
```

```
onLoad="top.mainframe.location.href='pdfs_to_text/#get_one.docref#_text.pdf';"></cfoutput>
```

```
    <cfoutput><strong><a href="pdfs_grabbed/#get_one.docref#.pdf" target="_blank">#get_one.docref#</a></strong> - #dateformat(get_one.realdocdate, "dd/mm/yyyy")# (<a href="pdfs_to_text/#get_one.docref#_text.pdf" target="_blank">text pdf</a></cfoutput>
```

```
    <br><br>
```

```
    <form action="do_categorisation.cfm" method="post">
```

```
    <table border="0" bordercolor="black" bgcolor="##CCCCCC" cellpadding="0" width="100%">
```

```
        <tr align="left" valign="top">
```

```
            <td width="20%" align="left" valign="top">
```

```
        <table border="0" bgcolor="##CCCCCC" cellpadding="2" width="100%">
```

```
            <tr align="left" valign="top">
```

```
                <td><strong>Categories</strong></td>
```

```
            <td>
```

```
                <cfoutput query="get_categories">
```

```
                    <input type="checkbox" name="mycategorisation" value="#id#">
```

```
                    >#category#<br>
```

```

        </cfoutput>
    </td>
</tr>
<tr align="left" valign="top">
    <td><strong>Objection</strong></td>
    <td>
        <cfif get_one.type is "Contributor Response - Objection- Public">
            <input type="radio" name="isobjection" value="1" checked="yes">Yes<br>
            <input type="radio" name="isobjection" value="0">No
        <cfelseif get_one.type is "Contributor Response - Support - Public">
            <input type="radio" name="isobjection" value="1">Yes<br>
            <input type="radio" name="isobjection" value="0" checked="yes">No
        <cfelse>
            <input type="radio" name="isobjection" value="1">Yes<br>
            <input type="radio" name="isobjection" value="0" checked="yes">No
        </cfif>
    </td>
</tr>
<tr>
    <td align="left" valign="top"><strong>Address</strong></td>
    <td>
        <textarea name="myaddress" rows="4"></textarea>
    </td>
</tr>
<tr>
    <td align="left" valign="top"><strong>Comments</strong></td>
    <td>
        <textarea name="mycomments"
rows="20"><cfoutput>#get_one.doccomments#</cfoutput></textarea>
    </td>
</tr>
<tr>
    <td>&nbsp;</td>
    <td>
        <input type="hidden" name="dosomething" value="submitform">
        <cfoutput>
            <input type="hidden" name="docref" value="#get_one.docref#">
            <input type="hidden" name="originalcomments"
value="#get_one.doccomments#">
        </cfoutput>
        <input type="submit">
    </td>
</tr>
</table>

</td>
<td align="left" valign="top">

```

```

        <cfoutput>
        <iframe name="pdfiframe" id="pdfiframe"
src="pdfs_to_text/#get_one.docref#_text.pdf" height="700" width="100%"></iframe>
        </cfoutput>
    </td>
</tr>
</table>
</form>

</body>
</html>

```

```
<cfelseif isdefined("dosomething") is 1 and dosomething is "submitform">
```

```
    <!-- <cfdump var="#form#">-->
```

```
    <!-- update doclist -->
```

```

    <cfquery name="update_doclist" datasource="Ascog">
        update doclist
            set
                <cfif myaddress is not "">DocAddress = '#myaddress#',</cfif>
                <cfif mycomments is not originalcomments>DocComments =
'#mycomments#',</cfif>
                CategorisationProcessedDate = #now()#,
                IsObjection = #isobjection#
            where
                DocRef = #docref#
    </cfquery>

```

```
    <!-- insert categorisation -->
```

```

    <cfif isdefined("mycategorisation") is 1 and mycategorisation is not "">
        <cfloop index="i" list="#mycategorisation#" delimiters=",">
            <!-- <cfoutput>#i#</cfoutput><br> -->
            <cfquery name="insert_one" datasource="Ascog">
                insert into Categorisation (DocRef, CategoryID) values (#docref#, #i#)
            </cfquery>
        </cfloop>
    </cfif>

```

```
    <!-- redirect to get next one; add a token to make sure page reloads properly -->
```

```

    <cfset gotourl = "do_categorisation.cfm?sometoken=" & createuuid()>
    <cflocation url = #gotourl#>

```

```
</cfif>
```