

Highlands and Islands Enterprise, CairnGorm Mountain and the Climate Emergency

Description

In March 2019 the First Minister of Scotland declared a Global Climate Emergency. The Scottish Government has set a net-zero emissions target for 2045 and to increase the targets for 2030 to 70% and to 90% in 2040. These are ambitious targets which will certainly not be achieved simply by stating them and the Scottish Government have said that they will be placing climate change at the heart of everything they do.

This post looks at how their development agency, Highland and Islands Enterprise, has responded at their subsidiary CairnGorm Mountain.

Hydro Power Generation

Parkswatch has previously documented the failure, by HIE, to take forward run of river Hydro Power Generation following the receipt of a report commissioned from John Duncanson Engineering in 2012 ([see here](#)). That failure has led to the loss of the potential for considerable tariff payments with an 80Kw turbine in Coire Cas and a 120Kw turbine in Coire na Ciste. It has also left the CairnGorm Mountain business entirely reliant on purchasing electricity from the National Grid or by producing it with generators that burn highly polluting Diesel fuel.

The mountain torrents on Cairn Gorm flow strongly and are not subject to freezing or to considerably reduced flows in dry periods. That's due to the amount of groundwater that helps to feed them. Desktop hydrological surveys have provided data on the likely flow levels for each month of the year. However, if HIE were serious about investigating the potential for run of river hydro schemes then they would long since have installed flow meters into the burns in both Coire na Ciste and Coire Cas. However, a year after taking back full control of Cairngorm Mountain (Scotland) Ltd, nothing has been done.



A strongly flowing Allt na Ciste. Photo credit Alan Bratney

The June 2019 minutes from the Funicular Response Group, obtained under FOI but not on the HIE website, had this:

“the cost of electricity is [amount redacted] and the need to reduce it is imperative.”

What then has been done to reduce the cost?

Power and Water Supply

In an update published in July 2019 HIE had this to say:

“In addition to exploring options to upgrade mains power on the mountain through the national grid the potential to generate Hydro and other renewable power is being investigated”

That was of some interest given that the potential to generate Hydro Power had already been investigated in 2012.

An FOI request was duly submitted to ask for the details of the Hydro investigations that HIE said were being done. On 28 October 2019 this response was received from HIE:

"HIE intends to undertake investigative work into renewable power sources that could be used at CairnGorm. However, as this work has not commenced, I can confirm that this information is not currently held."

Clearly, the press release in July 2019 contained bogus information because 3 months later HIE admitted that no investigations had yet taken place. With HIE's infamous glacial speed of decision making, any renewable power supply is a long time away and the electricity bill will remain high for the foreseeable future

It is fairly widely known that an upgraded mains power supply has to be brought up to the mountain. Has there been any progress with that? An FOI request revealed that communications with SSE have taken place but no agreement has yet been made to install an upgraded supply. Some investigations have been done and Forestry and Land Scotland have said that they will not permit a new cable to be routed through their land. It looks like the cable route may therefore have to follow the route of the road.....cue considerable cost.

Snowmaking

There was considerable concern expressed, last winter, when diesel burning generators were used to produce the power for the Snowfactory and the snowcannons.

The Scottish Government were asked for their views on this and the office of the Cabinet Secretary for Environment, Climate Change and Land Reform, Roseanna Cunningham MSP provided the following response:

"With the Funicular out of operation, snow making was the only option available to the new operator to offer skiers any access at all to the mountainside. In effect, HIE & CMSL were left with a choice between using Diesel to make snow or shutting down operations for the rest of the 2018/19 season".

That was nonsense and it seems that the Cabinet Secretary was poorly informed by HIE. Access to the mountainside could have been enabled through use of the Ridge Poma at times during the 2018/19 season and the Coire Cas T-Bar and M1 Poma both operated, without the use of artificial snow, from mid-mountain.

There were 54,000 litres of Diesel used to make snow that was principally used to provide a learners' area parallel to the Daylodge. With only 9,000 skier days on CairnGorm last season then it's clear that snowmaking was a commercial failure and burning around 6 litres of Diesel for every paying snowsports customer shouldn't have been done.

It was pleasing to find that several members of the so-called Funicular Response Group did express concern: From the minutes of the April 2019 meeting:

“several members of the Funicular Response Group expressed concern at the use of Diesel burning Generators for snowmaking last season. All agreed that this was an undesirable option”

Of course, the FRG is an impotent talking shop and, as might have been expected, the minutes contained no action point and it was left as a pointless item with no follow up proposed.

HIE have now had 2 seasons during which snowfactories have operated, at times, on Cairngorm. HIE purchased an SF200 TechnoAlpin Snowfactory in late 2018. That tells us that Snowmaking will be undertaken each year, into the future. Now that the Scottish Government have declared a Climate Emergency, then what has been done to produce snow without burning Diesel? The Climate Emergency should have made the power issue a top priority but the evidence suggests that a third season using generators has already begun. The SF200 Snowfactory has been operating since late October and the Diesel Generator that sits beside it has been used to provide the power.

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Snowfactory, Large Generator and 10,000 litre Diesel tank

During the 2018/19 snowsports season the Snowfactory operated for approximately 1100 hours. The Generator used to power it consumed 34,375 litres of Diesel during that time. That equates to around 750 litres of Diesel used in each 24 hour time period. On 29 October 2019 the Snowfactory was switched on again to make the snow for a proposed opening date of 7 December. Up to Monday 2 December and allowing for monthly maintenance, it could now have operated for 34 days if there has been no unreported downtime with choked filters. If it has been working continuously throughout each 24 hour time period and it consumes diesel at the same rate as before then it could potentially have used 25,500 litres of Diesel already, this season.



The net amount of snow remaining from a month of production on 27 November. Photo Credit Alan

This is all HIE has to show from using over 20,000lts of diesel.

The Snowfactory may well be used continuously through to around mid-March by which time it would have been in operation for around 135 days. During this time 101,250 litres of Diesel could have been

used to operate the generator that powers.

This practice is very clearly at odds with the Scottish Government's Climate Emergency declaration and HIE are making a mockery of the 1st Minister saying that the Scottish Government will place Climate Change at the heart of everything they do.

Generators and fuel cubes have now been delivered to the hill for use with the TechnoAlpin Snow Cannons

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2 large Generators and associated fuel cubes as pictured on Tuesday 19 November 2019

HIE would seem to be unaware that there have been multiple Climate Change protests by groups such as Extinction Rebellion and Greenpeace. They are foolishly running the risk of similar protest being held on CairnGorm with all the attendant negative publicity that would bring.

HIE Press Release on Thursday 28m November

After responding to several FOIs about diesel use, HIE issued a press release last week (not on the news section of their website) which made extravagant claims about using Biofuel rather than fossil fuel diesel .

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Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

28 November 2019, 08:30

Biofuel to slash emissions at Cairngorm Mountain

Snow making, road clearing and other diesel-fuelled machinery at Cairngorm Mountain is set to be powered by biofuel in the new year.

The move is expected to cut carbon emissions from the equipment by up to 90%.

Operator, Cairngorm Mountain (Scotland) Limited (CMSL), has issued a tender to biofuel traders on the National Fuels Framework to supply the centre with hydrotreated vegetable oil (HVO), as a replacement for diesel.

HVO is a premium quality second-generation biofuel made from renewable, sustainable raw materials. The fossil-free fuel can be used in many modern diesel engines and off-road machinery.

Last year the centre introduced a snow factory and added eight new snow cannons with funding from Highlands and Islands Enterprise (HIE), which owns Cairngorm estate.

These currently run off diesel-powered generators as an interim measure until the mains electricity supply can be upgraded.

CMSL plans to replace the diesel with HVO by the end of December. HVO will also be used in the centre's two road-clearing Unimog truck and CMSL has approached the manufacturer of its new piste grooming vehicle for confirmation that it too can be run on HVO.

Changing to biofuel aligns with the Scottish Government Climate Change Plan to drive down emissions by using innovative solutions to protect and enhance our natural environment.

Susan Smith, CMSL interim chief executive, says making greater use of green energy is very much part of the company's plans for the future. She said:

HIE say that they are looking for a supplier for Hydro treated vegetable oil BioFuel for their machinery operations. HVO BioFuel is generally made from Palm Oil the production of which is responsible for widespread environmental destruction ([see here](#)). Half of all palm oil imported in the EU is for biofuel. So where is HIE's biofuel coming from?

The EU report on the Land Use Change Impact of BioFuels Consumed in the EU makes it clear that emissions of 231gCO₂/MJ for Palm Oil based biodiesel can be assumed. This is almost 3 times worse than fossil Diesel at 73gCO₂/MJ. That makes it clear that while emissions may be reduced on CairnGorm, the overall impact on the planet will be worse. The First Minister did declare a Global Climate Emergency and HIE would do well to take note before putting out fake news which isn't fooling anyone.

What should happen now

The Scottish Government should show leadership and bring this ongoing madness to an end. If climate change is truly to be at the heart of everything they do then it is incumbent upon them to act decisively. The use of Diesel burning generators yet again this season is unacceptable. Further production of artificially made snow should cease until the power can be provided by means other than highly polluting diesel burning generators.

HIE have certainly overstayed their welcome on CairnGorm and it also falls to the Scottish Government to remove them from all strategic and operational control. The local Community, through the auspices of the Aviemore and Glenmore Community Trust are ready, willing and able to take ownership and control.

Category

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Tags

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Date Created

December 2, 2019

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