CAIRNGORM MOUNTAIN RESORT DEVELOPMENT PROPOSALS

Economic Impact Assessment

for

Highlands and Islands Enterprise

by

Steve Westbrook, Economist & Bryden Associates

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Steve Westbrook, Economist, Bellevue, Seafield Street, Nairn IV12 4HL Tel / Fax: 01667 455308 E-mail: srwestbrook@aol.com

Cairngorm Mountain Resort

Development Proposals

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1.0 INTRODUCTION

- 1.1 This impact assessment was commissioned by Highlands and Islands Enterprise (HIE) to assess the direct, indirect and induced employment, income and GVA impacts of proposals by Natural Retreats (NR) to carry out a set of development projects at Cairngorm Mountain Resort. The August 2016 version of this report included mountain bike trails, but this revised report excludes this component, which NR are not now pursuing.
- 1.2 At a total cost estimated at £4.6 million, the proposal to invest funds comprises the following components:

£

(1)	Artificial ski slopes	1,571,790
(2)	Expansion of the Ptarmigan	1,572,635
(3)	Sheiling garage extension	100,000
(4)	Car park, landscaping and signage	25,000

Total Cost 3,269,425

- 1.3 NR's funding scenario for this includes loans from HIE and SportScotland.
- 1.4 The impacts from components 1-2 above are considered separately below from Business Plan information provided by NR and brought together to indicate the cumulative impact of the project as a whole.
- 1.5 HIE's brief for this impact study asked for:
 - A brief overview of the business plan aspirations.
 - An outline of the strategic fit and alignment of the developments with HIE's priorities.
 - Estimates of the impacts for the local area (interpreted as Badenoch & Strathspey), the Highlands and Islands, and Scotland.
 - Any displacement implications that might arise locally, regionally or nationally to be highlighted.
 - Comment on the wider socio-economic benefits likely to be generated.
- 1.6 The impact estimates derived in this report drew on:
 - A Business Plan provided by NR that focuses on the developments.
 - Discussions with David Kemp, NR's Resorts and Lodges Vice President, on the projections.
 - Liaison with HIE staff Susan Smith and Nicholas Sobey.
 - Previous impact work carried out by Steve Westbrook on Cairngorm Mountain developments, including the funicular railway, and (with Ewan Snedden) a report for HIE

- on NR's original business plan when bidding to take on the lease for operating the resort and committing future investment.
- A report produced principally by colleague Duncan Bryden (Appendix 1), which assessed
 the market background for the mountain biking and artificial slope components of the
 project from supply and demand perspectives, including a synopsis of relevant existing
 provision locally, regionally and nationally. This report drew on a number of studies and
 data sources which are given. It should be noted that mountain biking is no longer part of
 the overall project.

1.7 NR's rationale for the investments included:

- The need to increase summer visitors and spend to stabilise seasonal cash flows by reducing dependence on unpredictable winter sports through providing new activities in summer to generate income from participants and position the resort as a year round destination.
- To increase visitors' overall time within the resort's buildings to increase food and beverage (F&B) and retail spend.
- Providing the best visitor experience in the National Park.
- 1.8 In its Business Plan, NR gives projections for the base case (its expected scenario up to 2022 following the developments), a breakeven sensitivity analysis, and sensitivity analyses based on 30% and 50% of base case visitor numbers for each project component.
- 1.9 This EIA focuses on the 50% of base case scenario having assessed the base case projections and agreed with Susan Smith that this 50% scenario represents a more likely outcome than the base case, which is considered over-optimistic in the light of our market assessment and the inevitable risks involved in predicting demand for new activities in increasingly competitive markets. Impacts (both gross and net of displacement) would be higher if out-turns were to exceed the 50% projections (broadly pro-rata), but out-turns could also be lower than the 50% scenario given the cautions highlighted in our Appendix 1 paper.
- 1.10 On the 50% scenario, NR would still make a reasonable return on their investment (i.e. it will have been worthwhile from an improved viability perspective), although we would note that their assumptions that underlying performance (as illustrated in their 2015 accounts and 2016 pre-project projections) will remain broadly stable up to 2022 are optimistic. In particular, global warming and a shrinking market of skiers will tend to reduce annual average skiing income and the summer funicular market might well decline (as it has since it opened) due to weak repeat visit strength and lack of the investment in the Ptarmigan that is part of the development project.
- 1.11 These concerns strengthen the rationale for NR's package of developments, but the overall viability of the resort in 2022 could be weaker than illustrated in its Business Plan even if these 50% scenario projections were to be achieved.
- 1.12 Nevertheless, the increased visitor numbers in summer and improved profile of the mountain operation as a year-round resort, together with Aviemore's popularity as a place to stay, should have a broader positive impact on its trade throughout the year. NR's projections do not include all of the spin-off expenditures that usage of the new facilities will generate for them (e.g.

parents spending on F&B and retail purchases while their children are using the artificial slope), and these extra expenditures will to an extent compensate for the underlying reductions in its markets summarised above.

2.0 THE MAIN COMPONENTS OF THE DEVELOPMENT

2.1 These are summarised in NR's Business Plan as follows:

(1) Artificial Ski Slopes

- Weather resilient with usage in the summer, and in the winter as a supplement/alternative to snow skiing¹.
- A 30m x 60m nursery slope (1,800m²).
- A 60m x 20m intermediate slope (1,200m²).
- Waves, rollers, kick ramp and air bag on the intermediate slope.
- Offering of year-round kids fun activities, e.g. tubing.
- Revenues from intermediate day passes, beginner snow school packages (lessons and ski hire), F&B and retail spend by slope users.

(2) Ptarmigan Expansion

- Expansion of F&B space to double covers from 100 to 200, with a new "grab and go" F&B offering.
- A wrap around walkway terrace on the roof of the extension.
- An external 30-40 metres boardwalk along the top of the funicular tunnel, with an exit onto the roof terrace (but not to the mountain to maintain the "closed system").
- Dedicated space for family oriented visitor experience.
- Revenues from additional funicular ticket sales and from F&B and retail spend by these additional visitors.

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¹ No extra income is allocated by NR to winter usage.

3.0 THE DRIVERS OF INCREASED IMPACT

- 3.1 The figures below are taken from NR's Business Plan (28 July 2016), which supersedes its earlier document. This Plan is a set of slides, and not all additional operating costs are fully considered (although NR provided more detailed spreadsheets that were drawn upon).
- 3.2 As stated in Section 1 above, the figures used in this EIA are taken from NR's 50% scenario and relate to calendar year 2022 at 2016 prices. NR's projections show how visitor numbers and spend are expected to increase annually from 2017 to 2022, with 2017 figures reflecting project completion during the year.
- 3.3 NR's notes relating to the 50% scenario state that a lower level of capex has been assumed than in the base case due to lower visitor numbers, but, for the purposes of this impact study, the total development cost of £4,625,725 given at 1.2 above is taken for estimating development stage impacts as this relates to the scenario that NR expect to apply.
- 3.4 NR's current business revenue (as anticipated for 2016) is as follows:

	£'000
Funicular	1,223
Ski Uplift	1,244
Season Ticket Sales	340
Snow School	311
Guided Walking	39
Guided Biking	23
F&B	962
Retail	504
Hire	180
Events Hire	20
Other Income	17
Total	4,862

3.5 These totals are assumed by NR to apply in 2022 (at 2016 prices), with the following new income in 2022 on the 50% scenario:

	£'000
Artificial Ski Slope	405
Ptarmigan Expansion	278
Overall Total	5,545

- 3.6 This represents income growth of £683,000 (+ 14%).
- 3.7 More detailed additional income in 2022 is projected as follows from the additional visitor numbers expected by NR. The figures are net of VAT. Customers would pay an additional 20% VAT on most purchases.

Artificial Ski Slopes

New Visitors 6,975

	£
Intermediates Income	22,000
Beginner Snow School Income	336,000
F&B Income	32,000
Rental Income	17,000
Total Additional Revenue	£405,000
	(£58.06 per visitor)

Ptarmigan Expansion

New Visitors 17,500

	£	
Funicular Income	158,000	
F&B Income	79,000	
Retail Income	41,000	
Total Additional Revenue	£278,000	
	(£15.89 per visitor)	

3.8 The above figures are used in assessing impacts in Section 5 below, but it should be noted that we believe that some of this impact will be job retention rather than creation as, without the development package, the resort's income (and hence impacts) would be expected to fall over the next 20 years, and to an extent by 2022 (see 1.10 above).

4.0 CAPITAL EXPENDITURE IMPACTS

- 4.1 It is not possible at this stage to estimate area impacts from the development stage of the project with any accuracy i.e. in advance of knowing who the main contractors, subcontractors, and suppliers of equipment and materials will be for the different project elements. The local construction workforce is limited, and thus Badenoch & Strathspey impacts are likely to be lower than they would be for construction projects in other Highlands and Islands local areas.
- 4.2 Very approximately, impacts from the £3.27 million development project are indicatively estimated as follows. It is assumed that each £1 million of expenditure will support 15 full time equivalent job years (FTE years) in Scotland, 10 in the Highlands and Islands, and 5 in Badenoch & Strathspey inclusive of indirect and induced impacts. The local induced impacts include spending by contractors and suppliers from further afield while in the area overnight.
- 4.3 Average income per FTE year is assumed to be £25,000, and GVA per FTE year £45,000².

Indicative Capital Expenditure Impacts

	FTE Years	Earnings £'000	GVA £'000
Badenoch & Strathspey	16	409	736
Highlands and Islands	33	818	1,472
Scotland	49	1,226	2,207

Conventionally, FTE years are converted into FTEs (assumed to last for ten years) by dividing them by 10. This would give (to the nearest 0.5 of an FTE) development stage impacts of 1.5 FTEs in Badenoch & Strathspey, 3.5 FTEs in the Highlands and Islands, and 5 FTEs in Scotland. These are relatively insignificant compared with the annual impacts over a period of ten years or longer estimated in Section 5 below.

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² These ratios are based on previous experience of comparable impact studies for HIE.

5.0 OPERATIONAL IMPACTS IN 2022

5.1 These impacts are estimated below in relation to direct employment (i.e. NR's employees at Cairngorm), indirect employment through its annual purchases, induced employment through the spending of direct and indirect employees, and externalities through the wider spending of new visitors drawn in by the new and improved facilities. All of these impacts are estimated net of displacement.

Displacement

5.2 Based on the market and competitor analysis reported in Appendix 1, the following assumptions are made on displacement by activity and area:

	Badenoch & Strathspey %	Highlands & Islands %	Scotland %
Artificial Slopes	40	45	60
Ptarmigan Expansion	80	85	90

- 5.3 The logic for these assumptions is principally that:
 - There is currently only small scale provision elsewhere in Badenoch & Strathspey and one
 artificial slope competitor in the Highlands and Islands outwith Badenoch & Strathspey (at
 Glencoe), but there will be some substitution for other activities on particular days of a
 person's holiday both within Badenoch & Strathspey and in the wider Highlands.

A group of snowsports enthusiasts are currently considering a multi-activity centre centred around a dry ski slope in or close to Inverness. Inverness Backcountry Snowsports Club and Cairngorm Ski Club have been assisted by Snowsport Scotland to take forward discussions on a facility which would include a dry ski slope for all levels, a café and possibilities for activities such as tubing, mountain biking, and orienteering as well as general facilities. A working group is surveying potential demand. This would be a competitor for a new Cairngorm facility – although the rationale for such a facility in Inverness would reduce if the Natural Retreats project goes ahead.

- The majority of new Ptarmigan patrons will already be in the Badenoch & Strathspey area, perhaps re-visiting after an earlier funicular ride through NR's publicity and the increased "buzz" of the resort from the greater summer activity. A proportion of new visitors, however, will be accompanying artificial slope users (e.g. their partners or children) and will go up to the Ptarmigan to pass the time. Other new Ptarmigan customers will include special event visitors.
- 5.4 Artificial slope users are less likely to create displacement from other snow sport activities. Indeed, first time users may be prompted, once they go home, to take lessons at their local facility and return to Cairngorm to experience real snow. Displacement may be from other family attractions and pursuits on offer in the area, but equally, as 66% of people make repeat visits to the National Park, having an expanded choice of activities for a range of ages adds to the attractiveness of the destination.
- 5.5 The levels of displacement shown at 5.2 above are considered acceptable when balanced against the scale of the externalities considered at 5.16-5.18 below i.e. other businesses taken

together will benefit more from the Cairngorm Mountain developments than they will lose through displacement.

Direct Employment

5.6 NR's projections for the 50% scenario in 2022 show the following staff costs (including our estimate of 25% for how much of maintenance and miscellaneous operating costs relate to labour costs):

	£
Artificial slopes	299,000
Ptarmigan expansion	45,000
Total	£344,000

- 5.7 The artificial slope labour costs are high in relation to visitor numbers as ski school instructors are projected to be paid £181,000.
- 5.8 Although catering and retail staff are paid below the average wage, jobs generated include ski instruction (see above), guides and maintenance workers. Average earnings per FTE of £24,000 (plus employers' NI costs of 12%) are assumed for direct employment, giving 13 direct FTEs (prior to displacement) and £307,000 in earnings. GVA is estimated at £0.7 million.

Indirect Employment

5.9 Total operating costs in 2022 are projected as follows, excluding top-up rent to HIE and management fee to NR. In practice, there will also be some additional general overhead costs to the resort not budgeted.

	£
Artificial slopes	318,000
Ptarmigan expansion	87,000
Total	£405,000

5.10 Subtracting the staff costs above from this gives other operating costs of £61,000. Taking into account the types of purchase, gives the following indirect impacts (prior to displacement):

	B&S	H&I	Scotland
FTEs	0.5	1	1
Earnings (£)	10,000	20,000	30,000
GVA (£)	20,000	40,000	60,000

5.11 Estimated induced multipliers are assumed as 0.1 for Badenoch & Strathspey, 0.25 for the Highlands and Islands, and 0.3 for Scotland. Average earnings per FTE are assumed as £20,000 and GVA as 2 x earnings. This gives the following induced impacts (prior to displacement).

	B&S	H&I	Scotland
FTEs	1.5	3.5	4
Earnings (£)	27,000	70,000	84,000
GVA (£)	54,000	140,000	168,000

5.12 Applying the displacement ratios at 5.2 above gives the following approximate net direct, indirect and induced impacts.

	B&S	H&I	Scotland
FTEs	8	10.5	8
Earnings (£)	194,000	240,000	183,000
GVA (£)	387,000	480,000	366,000

5.13 Net direct impacts are as follows:

	B&S	H&I	Scotland
FTEs	7	7.5	5.5
Earnings (£)	172,000	177,000	125,000
GVA (£)	409,000	399,000	282,000

Externalities

- 5.14 It is assumed that extra non-displaced visitors spend on average an additional 1.25 nights in Badenoch & Strathspey associated with their visit, 1.5 nights in the Highlands and Islands, and 1.6 nights in Scotland. This takes into account other places they might visit on their trip. Some trips will be day trips, but in view of the distance most non-displaced visitors will have travelled, most will stay at least one night some taking the opportunity to mountain bike or carry out other activity on more than one day of their trip. These assumptions also take account of people who might accompany those using the artificial slope facilities at Cairngorm, but not participate. Also, for slope users, we have increased visitor numbers from NR's assumptions to allow for intermediates and young people tubing etc who would use the facilities for less than the 8 hour day ticket assumed in their projections.
- 5.15 This gives the following non-displaced visitor nights by area:

Badenoch & Strathspey 13,227 x 1.25 = 16,533 Highlands and Islands 12,801 x 1.5 = 19,201 Scotland 9,815 x 1.6 = 15,705

5.16 Spend per person per 24 hours, excluding expenditure at Cairngorm Mountain, is assumed to average £40, giving the following spend impacts and employment, earnings and GVA impacts assuming ratios of 1 FTE to £50,000 spend, £20,000 earnings per FTE, and GVA of 2 x earnings – all inclusive of the multiplier³.

	B&S	H&I	Scotland
Total Spend (£)	661,320	768,040	628,200
FTEs	13	15.5	12.5
Earnings (£)	264,000	307,000	251,000
GVA (£)	529,000	614,000	502,000

³ These ratios are based on experience from previous impact studies for HIE.

6.0 SUMMARY OF QUANTIFIED IMPACTS

6.1 Adding the net impacts estimated in Sections 4 and 5 above gives:

	B&S	H&I	Scotland
FTEs			
Development Stage	1.5	3.5	5
Operational Year	8	10.5	8
Externalities	13	15.5	12.5
Total	22.5	29.5	25.5
Earnings (£)			
Development Stage	40,900	88,180	147,200
Operational Year	194,000	240,000	183,000
Externalities	264,000	307,000	251,000
Total	498,900	635,180	581,200
GVA (£)			
Development Stage	73,600	147,200	220,700
Operational Year	387,000	480,000	366,000
Externalities	529,000	614,000	502,000
Total	989,600	1,241,200	1,088,700

7.0 WIDER SOCIO-ECONOMIC BENEFITS

- 7.1 A key factor in impact will be the extent to which the additional employment generated will be taken up by people resident in Badenoch & Strathspey, and the wider Highlands and Islands, given that most of the jobs will be summer only and there is already dependence on migrant workers in summer tourism in the local area and the wider Highlands and Islands.
- 7.2 Impacts in the Highlands and Islands will be maximised if people can be trained in advance in the new or expanded types of work that require particular skills, e.g. ski slope instruction; with the availability of year-round work available to those who would currently be employed by NR only during the winter skiing season.
- 7.3 The externalities estimated in Section 5 show that a wide range of local tourism-related businesses will obtain increased custom, and this will enhance their overall annual viability as well as giving those currently focused on the skiing season more year-round trade.
- 7.4 The new sustainable jobs will increase demand for housing in the local travel-to-work area, and this is consistent with housing projects planned for Aviemore, Kingussie and other communities. It is valuable in areas that are attractive for retirement or second homes to create new employment for younger people, some of whom might have families to improve local age balance further.
- 7.5 Analysis by the Cairngorms National Park Authority shows good evidence that in Badenoch & Strathspey the kind of youth migration often experienced elsewhere in the Highlands and Islands is offset by young people attracted into the area to work in outdoor leisure industries. Many are well qualified, and the availability of these new jobs should build further the area's evolving reputation as a centre of excellence for adventure and mountain sports. Skiing or similar sports define their life choices, and even if they cannot make a full career within their sport they might move into other Highland based employment or study and maintain a strong leisure interest.

8.0 STRATEGIC FIT WITH HIE'S PRIORITIES

8.1 In relation to HIE's four priorities to achieve sustainable growth in the region and contribute towards Scotland's objectives, the development will make the following contributions.

Supporting businesses and social enterprises to shape and realise their growth aspirations

HIE's loan will be essential in enabling Natural Retreats to realise their growth aspirations, improving the resort's year-round trade and protecting its continuing operation as a viable business unit.

Strengthening communities and fragile areas

As illustrated in Section 6, the developments will have a significant employment impact in Badenoch & Strathspey communities, increasing year-round employment for many of those who will obtain new summer work, with population retention and growth and age balance benefits (as summarised in Section 7).

Developing growth sectors, particularly distinctive regional opportunities

Tourism is the principal growth sector in the Highlands and Islands in terms of employment, with a need annually for new developments to sustain existing visitor numbers and hence employment as well as to increase employment and earnings in particular areas. Cairngorm is one of the best known tourism areas in the Highlands and Islands nationally and internationally, and this owes much to Cairngorm Mountain being the UK's leading ski resort. Sustaining the resort is therefore very important for tourism in Badenoch & Strathspey, Cairngorms National Park, the Highlands and Islands, and indeed Scotland.

Creating the conditions for a competitive and low carbon region

Ski slope usage is a low carbon activity.