

**THE SOCIO-ECONOMIC IMPACTS OF DOUNREAY
DECOMMISSIONING**

Final Report

To

**Highlands & Islands Enterprise
Dounreay Site Restoration Ltd**

February 2012

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1 INTRODUCTION

OBJECTIVES

This is the final report of a socio-economic study to update the 2006 report “*Opportunities arising from the decommissioning of Dounreay*”, and to evaluate the activities undertaken since then to mitigate the effects of decommissioning and to take advantage of emerging opportunities.

The objectives and key tasks of the study were to:

- Update the existing socio-economic research.
- Review the impacts of decommissioning of Dounreay.
- Review the activities and impacts of the CNSRP and individual partner agencies in diversifying the local economy.

METHOD

The study was undertaken through:

- Analysis of available socio-economic statistics.
- Review and analysis of data provided by DSRL:
 - Staff profile (2010)
 - Detailed breakdown of DSRL purchases.
 - Analysis of geographic sources of DSRL purchases.
- Survey of DSRL staff and on-site contractors covering:
 - Personal and family characteristics.
 - Place of residence.
 - Job category.
 - Employment of spouse/partner.
 - Voluntary work.
 - Qualifications and skills.
 - Alternatives to employment at Dounreay.
- Survey of businesses.
- Review of documentation relating to CNSRP.
- Consultations.

STRUCTURE OF THE REPORT

Chapter 2: Socio-economic context and performance.

Chapter 3: Analysis of skills.

Chapter 4: Impact of site activity.

Chapter 5: Wider impacts.

Chapter 6: Review of CNSRP and partner activities.

Chapter 7: Dependency and diversification.

Chapter 8: Conclusions.

2 SOCIO-ECONOMIC CONTEXT AND PERFORMANCE

INTRODUCTION

This Chapter provides a socio-economic assessment of the Caithness & Sutherland area and compares it with the assessment undertaken in 2006 as well as assessing the economic performance of Caithness & North Sutherland (CNS) where data allows.

SUMMARY FROM 2006 REPORT

To provide a broad context, we report below the key summary points of the economic profile of Caithness & Sutherland (C&S) from the 2006 study (Note that some of the data in the 2006 study has been revised and may not align totally with the analysis later in this chapter. These differences are not significant.)

Population:

- C&S's population (2001) of 38,669 accounts for 9% of the HIE area population.
- C&S's population fell by 3.9% (1991-2001) compared to 0.8% growth for the HIE area.
- C&S's population structure is older than that of the HIE area and Scotland, and is aging at a slightly faster rate than that for the HIE area.

Economic Activity:

- Overall economic activity rate in C&S of 66% is 2 percentage points lower than for the HIE area.
- In 2001, 28,238 people of working age and 18,668 economically active.
- Self employment rate in C&S of 10.5%, is almost identical to that for the HIE area.
- In 2004 and 2005, C&S was the worst performer of the HIE LEC areas in terms of business start-ups per head of population and also lower than the Scottish average.

Employment Structure:

- Based on Census data, compared to the HIE area, residents of C&S have a greater share of employment in:
 - Agriculture & Hunting.
 - Mining & Quarrying
 - Manufacturing
 - Electricity, Gas & Water Supply
 - Construction
 - Financial Intermediaries
 - Real Estate & Renting and Business Activities

Unemployment:

- C&S’s unemployment rate was 3% at July 2005.
- Unemployment rates in C&S tend to be above those for the HIE area and Scotland.
- C&S’s unemployment rate is generally more seasonal than for the HIE area.

SOCIO-ECONOMIC PROFILE 2011

In all cases we are using the latest available official data.

Population

Table 2.1 shows the trend in population between 2001 and 2010 for Caithness, Caithness & North Sutherland, Caithness & Sutherland, the Highlands & Islands and Scotland.

TABLE 2.1: Population					
Year	Caithness	Caithness & North Sutherland	Caithness & Sutherland	HIE	Scotland
2001	25,552	28,463	38,426	433,448	5,064,200
2005	25,012	27,911	38,051	439,231	5,094,800
2010	25,124	27,893	38,116	448,392	5,222,100
2001-2010	-1.7	-2.0	-0.8	3.4	3.1
2001-2005	-2.1	-1.9	-1.0	1.3	0.6
2005-2010	0.4	-0.1	0.2	2.1	2.5

For the Highlands and Islands and Scotland as a whole the trend has been of overall population growth since 2001. Over that period the Highlands & Islands had a higher growth rate than Scotland, 3.4% compared to 3.1%. In the first half of the decade the Highlands & Islands grew at double the Scottish rate, but by the second half of the decade Scotland’s growth rate was slightly higher than that for the Highlands & Islands.

In comparison, over the decade the populations of Caithness, Caithness & North Sutherland (CNS) and Caithness & Sutherland (C&S) fell by between 1% and 2%, with CNS experiencing the largest percentage decline and C&S the smallest. In the second half of the decade the population of Caithness grew by 0.4%.

A closer analysis of the data for Caithness, Sutherland, North Sutherland and Rest of Sutherland is presented in **Table 2.2**.

TABLE 2.2: Population				
Year	Caithness	Sutherland	North Sutherland	Rest of Sutherland
2001	25,552	12,874	2,911	9,963
2005	25,012	13,039	2,899	10,140

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2010	25,124	12,992	2,769	10,223
2001-2010	-1.7	0.9	-4.9	2.6
2001-2005	-2.1	1.3	-0.4	1.8
2005-2010	0.4	-0.4	-4.5	0.8

The analysis suggests that while the population of Caithness & North Sutherland has been declining over the decade as a whole this appears to be largely due to relatively large falls in the population of North Sutherland rather than in Caithness which showed an increase in population of 0.4% since 2005.

However, it appears that while the population of Caithness has grown since 2005 the two main population centres of Thurso and Wick have continued to experience a reduction in population.

TABLE 2.3: Population of Thurso and Wick (% change)

Year	Thurso	Wick
2001-2010	-3.3%	-6.7%
2001-2005	-2.6%	-4.6%
2005-2010	-0.7%	-2.2%

Almost 65% of Caithness' population is concentrated in Thurso and Wick. Between 2001 and 2010 the population of Wick fell by 6.7% while Thurso declined by 3.3%. Most of this reduction (73%) occurred in the first half of the decade with much slower reductions of -0.7% (Thurso) and -2.2% (Wick) since 2005. These changes in population will be attributable to a number of causes and reflect long-term trends in the area. HIE in their *Area Profile for Caithness and Sutherland* published in January 2011 suggest that "the decrease in population in these two settlements is partly associated with the long-term decommissioning of the Dounreay facility".

This is likely to be more the case for Thurso where Dounreay based staff are an important element of the settlement and surrounding area.

Age Structure

Table 2.4 reports the age structure of Caithness & Sutherland, HIE and Scotland.

TABLE 2.4: Population Structure (%) by Age 2010			
Age Band	Caithness & Sutherland	HIE	Scotland
0-4	4.9	5.3	5.6
5-19	16.6	16.8	16.9
20-44	25.9	28.4	33.5
45-64	31.0	29.9	27.1
65-84	19.4	17.3	14.8
85+	2.3	2.4	2.0
Total	100.0	100	100

Caithness & Sutherland has an older population than that for the Highlands & Islands and Scotland as a whole. In 2010, 21.7% of Caithness & Sutherland's population was 65 years or older compared to 19.7% for the Highlands & Islands and 16.8% for Scotland as a whole.

In contrast a smaller proportion of the population in Caithness & Sutherland was younger than 45 years compared to the Highlands & Islands and Scotland (47.4% compared to 50.5% and 56.0% respectively).

In addition to having an older population structure, Caithness & Sutherland also has an aging population. Between 2001 and 2010 the percentage share of the population younger than 45 years has declined by 12% (from 53.9% to 47.4%) while that aged 65 and over has increased by 18% (from 18.4% to 21.7%).

Having an older (an ageing) population with a smaller share of working age would tend to suggest that Caithness and Sutherland is economically less robust than HIE and Scotland as a whole.

However, it is worth analysing the population structure for Caithness and Sutherland separately, given that the vast majority of people working at Dounreay are based in Thurso and Wick areas.

Tables 2.5 and **2.6** report the age structure for Caithness and for Sutherland for 2001, 2005 and 2010.

TABLE 2.5: Caithness: Population Structure (%) by Age			
Age Band	2001	2005	2010
0-4	5.2	5.3	5.4
5-19	19.3	18.3	17.4
20-44	32.3	30.7	27.8
45-64	26.4	27.7	29.8
65-84	15.1	16.3	17.7
85+	1.6	1.7	2.0
Total	100.0	100.0	100.0

TABLE 2.6: Sutherland: Population Structure (%) by Age			
Age Band	2001	2005	2010
0-4	4.4	3.7	3.9
5-19	17.3	17.1	15.1
20-44	26.5	24.4	22.1
45-64	30.1	32.3	33.5
65-84	19.4	20.3	22.6
85+	2.4	2.2	2.8
Total	100.0	100.0	100.0

In each of the three years Sutherland has an older population distribution than Caithness. In fact Caithness' age profile is slightly younger than that for the Highlands & Islands as a whole with 50.6% of the population younger than 45 years and 19.7%, 65 years or older. This compares with 47.4% and 21.7% respectively for Sutherland.

In conclusion although Caithness has an ageing population it is marginally younger than that for the Highlands & Islands as a whole. The population of Caithness is also aging slower than that for Sutherland. This suggests that the Caithness economy is more robust as it is supporting a younger population profile and certainly over the past five years has been aging more slowly than Sutherland.

Economic Activity: Annual Business Inquiry

Data on employees in employment by sector (which does not include self-employment) is currently available for 2006 and 2008. This allows a comparison of economic activity at the time of the last study compared to the latest available data. In addition, local data has been made available for Caithness & Sutherland (C&S) as well as Caithness & North Sutherland (CNS). By subtraction we therefore also have a dataset for the rest of Sutherland (ROS). This will allow a finer analysis for the area of immediate concern and potentially demonstrate the different experience of CNS compared to HIE and ROS.

Tables 2.7 to 2.8 report the employment data by industrial sector for 2006 and 2008 for each of the areas.

TABLE 2.7: Caithness & Sutherland					
Sector	2006		2008		% change
	Nos	%	Nos	%	
Agriculture & fishing	340	2.1	356	2.2	4.7
Manufacturing, energy & water	2,482	15.4	2,260	13.7	-8.9
Construction	912	5.6	896	5.4	-1.8
Distribution, hotels & restaurants	3,782	23.4	3,975	24.1	5.1
Transport & communications	565	3.5	707	4.3	25.1
Banking, finance & insurance	1,974	12.2	2,616	15.9	32.5
Public administration, education & health	5,411	33.5	4,978	30.2	-8.0
Other services	688	4.3	686	4.2	-0.3
TOTAL	16,154	100.0	16,474	100	2.0

TABLE 2.8: Caithness & North Sutherland					
Sector	2006		2008		% change
	Nos	%	Nos	%	
Agriculture & fishing	203	1.6	246	1.9	21.2
Manufacturing, energy & water	2,308	18.6	2,042	15.8	-11.5
Construction	659	5.3	694	5.4	5.3
Distribution, hotels & restaurants	2,644	21.4	2,948	22.8	11.5
Transport & communications	472	3.8	586	4.5	24.2
Banking, finance & insurance	1,739	14.0	2,315	17.9	33.1
Public administration, education & health	3,897	31.5	3,632	28.1	-6.8
Other services	462	3.7	456	3.5	-1.3
TOTAL	12,384	100.0	12,919	100.0	4.3

TABLE 2.9: Rest of Sutherland					
Sector	2006		2008		% change
	Nos	%	Nos	%	
Agriculture & fishing	137	3.6	110	3.1	-19.7
Manufacturing, energy & water	174	4.6	218	6.1	25.3
Construction	253	6.7	202	5.7	-20.2
Distribution, hotels & restaurants	1,138	30.2	1,027	28.9	-9.8
Transport & communications	93	2.5	121	3.4	30.1
Banking, finance & insurance	235	6.2	301	8.5	28.1

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Public administration, education & health	1,514	40.2	1,346	37.9	-11.1
Other services	226	6.0	230	6.5	1.8
TOTAL	3,770	100.0	3,555	100.0	-5.7

TABLE 2.10: Highlands & Islands					
Sector	2006		2008		% change
	Nos	%	Nos	%	
Agriculture & fishing	4,790	2.4	4,710	2.3	-1.7
Manufacturing, energy & water	19,750	10.0	19,847	9.8	0.5
Construction	14,014	7.1	14,067	6.9	0.4
Distribution, hotels & restaurants	50,363	25.5	50,677	24.9	0.6
Transport & communications	9,952	5.0	12,428	6.1	24.9
Banking, finance & insurance	20,051	10.1	24,017	11.8	19.8
Public administration, education & health	68,705	34.7	66,856	32.8	-2.7
Other services	10,134	5.1	11,176	5.5	10.3
TOTAL	197,759	100.0	203,779	100.0	3.0

Clearly, CNS has experienced a change in its structure that is different from the changes experienced elsewhere in HIE. CNS has also performed differently from the rest of Sutherland. ROS is more representative of a remote highland rural economy and, compared to CNS in 2008 had a greater share of employees in agriculture & fishing; distribution, hotels and restaurants; and public administration. Conversely, ROS had a smaller manufacturing sector compared to CNS. However, the most distinguishing characteristic is that while ROS experienced an almost 6% decline in total number of employees in employment, CNS achieved a 4.3% increase (compared to an increase of 3% for the Highlands and Islands as a whole).

In 2006, compared to the Highlands & Islands, Caithness & North Sutherland had a **smaller share** of employees in six of the eight industrial sectors:

- Agriculture & fishing.
- Construction.
- Distribution, hotels & restaurants.
- Transport & communications.
- Public administration, education & health.
- Other services.

Strikingly, CNS had 86% more employees in manufacturing, energy & water (18.6% of employees compared to 10.0% in the Highlands & Islands) and almost 40% more in banking, finance & insurance.

By 2008, although the pattern was the same in general terms, the gap between the structure of the CNS and HIE economies had narrowed. In those sectors where CNS had a greater share in 2006, by 2008 the sector either declined or grew more slowly than in HIE, with the converse true for those sectors where HIE had the greater share in 2006.

Only in transport & communications and other services did HIE achieve a higher (absolute) change in numbers employed. In all other sectors, CNS experienced generally significantly greater changes (positive and negative) in the number of employees comparing 2008 to 2006.

Within CNS the largest absolute increases in employment were in banking, finance & insurance (+576) – this seems especially large but may reflect a combination of factors including the growth in call centre activity; distribution, hotels & restaurants (+304); and transport & communications (+114). The largest decreases were manufacturing, energy & water (-266); and public administration, education & health (-265). It would be reasonable to assume that the reductions in the numbers employed in manufacturing, energy & water could be accounted for by reduced numbers at Dounreay and possibly of suppliers to Dounreay. However, there are likely to be a range of interacting causes and the information on employment at Dounreay will also shed light on these changes.

Finally **Table 2.11** presents a summary of the percentage change in employment by sector between 2006 and 2008 for each of the geographical areas identified. The shaded cells are those with the largest percentage increase (or smallest decrease).

TABLE 2.11: Comparison of percentage change over 2006-2008				
	C&S	CNS	ROS	H&I
Sector				
Agriculture & fishing	4.7	21.2	-19.7	1.7
Manufacturing, energy & water	-8.9	-11.5	25.3	0.5
Construction	-1.8	5.3	-20.2	0.4
Distribution, hotels & restaurants	5.1	11.5	-9.8	0.6
Transport & communications	25.1	24.2	30.1	24.9
Banking, finance & insurance	32.5	33.1	28.1	19.8
Public administration, education & health	-8.0	-6.8	-11.1	-2.7
Other services	-0.3	-1.3	1.8	10.3
TOTAL	2.0	4.3	-5.7	3.0

In conclusion, based on this data, over the period 2006-2008, it appears that CNS experienced some major changes in its growth and structure compared to elsewhere in Caithness & Sutherland and the Highlands & Islands.

Economic Activity: Business Register and Employment Survey

The Business Register and Employment Survey (BRES) is a new Office for National Statistics (ONS) survey and since 2008 provides the basis for annual estimates of employment and replaces the Annual Business Inquiry (ABI) estimates. ***The ONS note that there is a discontinuity with the ABI data.***

Based on this data, **Table 2.12** provides estimates of the share of employment by sector for 2008, 2009 and 2010. It should be noted that to protect confidentiality that the absolute employment numbers were rounded to the nearest 100 employees. Thus, very broadly individual percentages, especially for the smaller sectors could be up to 0.5 percentage points out.

TABLE 2.12: Employees in Employment: Caithness & North Sutherland			
Industry	2008	2009	2010
Manufacturing	7.0	8.4	6.9
Construction	6.2	5.9	5.2
Motor Trades	0.8	0.8	0.9
Wholesale	2.3	1.7	2.6
Retail	10.1	10.1	9.5
Transport & storage	3.1	3.4	3.4
Accommodation & food services	9.3	9.2	7.8
Information & communication	1.6	1.7	1.7
Financial & insurance	1.6	0.8	0.9
Property	0.8	0.8	0.9
Professional, scientific & technical	7.0	7.6	6.9
Business administration & support services	8.5	5.0	6.9
Public administration & defence	3.1	5.0	5.2
Education	8.5	9.2	8.6
Health	17.1	16.0	17.2
Arts, entertainment, recreation & other services	2.3	2.5	2.6
Agriculture, forestry, fishing, mining & quarrying	10.9	11.8	12.9
Total	100.0	100.0	100

Source: NOMIS (BRES) Figures rounded to 100 to protect confidentiality.

Based on this data and the underlying (rounded) data it would appear that employment in the following sectors has fallen between 2008 and 2010:

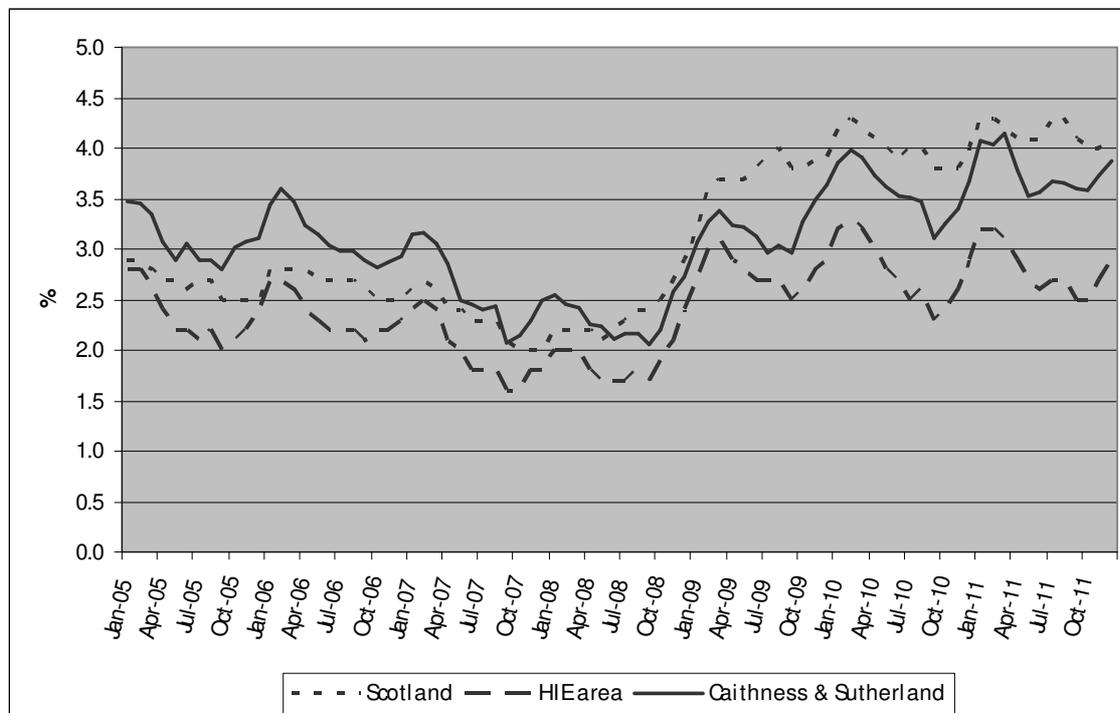
- Construction.
- Retail.
- Accommodation and food services.
- Financial and insurance.
- Business administration and support services (falling significantly and then recovering to a degree).
- Health.

This is in the wider context of an 11.6% decrease in the number of employees in Caithness & North Sutherland between 2008 and 2010. Although not directly comparable **Table 2.8** based on ABI data reports a 4.3% increase in employees in employment in CNS between 2006 and 2008 suggesting growth in employment until 2008 followed by a reduction, in part reflecting the global economic downturn.

Unemployment

Figure 2.1 charts the trends in unemployment rates since 2005 for Caithness & Sutherland, HIE and Scotland.

Figure 2.1: Claimant Unemployment Rates (%) January 2005-December 2011



At the start of the period Caithness & Sutherland had an unemployment rate of around 3.5% compared to under 3% for HIE and Scotland as a whole, with HIE posting, as it does over the whole period, lower unemployment than for Scotland.

Unemployment rates were generally on a downward trend until mid to late 2008 with the onset of the financial crises and recession. Since late 2008 Scotland’s unemployment rate has been higher than for Caithness & Sutherland and HIE. Currently the unemployment rate is around 4% for both Scotland and Caithness & Sutherland while that for HIE as a whole is under 3%.

GDP per head of Population

GDP per head of population provides an indicator of relative economic performance. It is available for the combined economies of Caithness & Sutherland and Ross and Cromarty. **Table 2.8** reports GDP per capita as a percentage of the level for the Highlands & islands overall.

TABLE 2.8: GDP per Head of Population (% of Highlands & Islands)							
Area	2002	2003	2004	2005	2006	2007	2008
Highlands & Islands	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Caithness & Sutherland and Ross & Cromarty	90.4	92.4	88.5	85.4	88.2	91.2	87.7

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Inverness & Nairn and Moray, Badenoch & Strathspey	110.2	106.4	105.2	106.5	108.0	110.6	111.0
Lochaber, Skye & Lochalsh, Arran & Cumbrae and Argyll & Bute	92.2	93.6	92.7	93.0	93.4	86.6	87.7
Eilean Siar	82.5	91.9	95.8	93.0	87.3	88.9	89.0
Orkney	93.4	99.4	108.4	100.0	99.1	103.7	103.2
Shetland	125.3	127.3	138.2	142.7	125.9	122.7	128.3

Out of the six areas in the Highlands & Islands, between 2002 and 2008 the combined area of Caithness & Sutherland/Ross & Cromarty had the lowest GDP per head in three of seven years, lying 4th or 5th in the remaining years. It should be noted however that this ranking will also reflect the level of activity within Ross & Cromarty.

Business Start-Up Rates

Table 2.9 reports the business start-up rates for Caithness & Sutherland, HIE and Scotland for 2005 and 2008. The basis for reporting this data changed in 2009 so that data is not presented for what were the Local Enterprise Company areas.

TABLE 2.9: Business Start-Up Rates (per 1,000 population)		
Area	2005	2008
Caithness & Sutherland	3.4	4.6
HIE	4.7	4.0
Scotland	4.2	3.9

In 2005 Caithness & Sutherland had the lowest business start-up rate (per 1,000 of population) in the Highlands & Islands at 72% of the rate for the Highlands & Islands. In 2008 the start-up rate in Caithness & Sutherland was 4.6 which was 115% of the HIE rate. This is a significant absolute and relative increase which HIE suggested reflected the changing structure of the Caithness & Sutherland economy.

3 ANALYSIS OF SKILLS

INTRODUCTION

The skills currently available on the Dounreay site, both DSRL and contractor, will be one of key assets that will determine the ability of the Caithness and North Sutherland economy to benefit from the remaining opportunities arising from decommissioning, and perhaps more importantly to support those emerging activities that will allow the area to diversify.

The assessment of the available skills was based on the survey undertaken of DSRL staff and contractors on site. It is important to note that this analysis is based on a survey of DSRL staff so that the comparative analysis should be taken as indicative of potential changes.

Respondents were asked a series of questions relating to their qualifications and skills, specifically to identify:

- Job title/activity.
- Highest level of qualifications attained.
- 'General' and 'nuclear specific' skills areas in which they were competent.

ACTIVITY WITHIN DOUNREAY

Respondents were asked to identify their job title/activity from the following choices:

- Managers & senior officials.
- Professional occupations.
- Technical occupations.
- Administrative & secretarial
- Skilled trades.
- Sales & customer service.
- Personal services.
- Process, plant and machine operatives.
- Elementary occupations.

The distribution of responses for DSRL staff is reported in **Table 3.1**. These results are compared to those for UKAEA staff in 2006 to provide an indication of how activity may have changed over the past five years.

Activity	DSRL (%)	UKAEA 2006 (%)	% change
Managers and senior officials	9	7	+29
Professional occupations	33	33	0
Technical occupations	30	23	+30
Administrative & secretarial	12	18	-33
Skilled trades	5	7	-29

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Sales & customer service	0	<0.5	0
Personal services	<0.5	0	0
Process plant & machine operatives	11	12	-8
Elementary occupations	<0.5	<0.5	0
Total	100	100	-

As in 2006, professional occupations, at one-third, represent the largest share of DSRL staff, closely followed by technical occupations. The most noticeable differences are the increase in the share of DSRL staff employed as managers & senior officials and in technical occupations and the reduction in the share of administrative & secretarial staff and skilled trades.

Table 3.2: Job Titles/Activity (Contractors)			
Activity	Contractors 2011 (%)	Contractors 2006 (%)	% change
Managers and senior officials	17	4	+325
Professional occupations	34	29	+17
Technical occupations	15	24	-38
Administrative & secretarial	13	13	0
Skilled trades	10	15	-33
Sales & customer service	3	1	+200
Personal services	0.5	2	-75
Process plant & machine operatives	7	8	-13
Elementary occupations	0	4	-100
Total	100	100	-

The most significant difference in contractor job titles/activities is the much larger share of staff in managerial, senior official and professional occupations and the reduction in importance of technical, trades, operatives and elementary occupations. However, it should be noted again that the percentage changes are indicative and in the case of contractors where there was a much lower response rate the results could be more indicative of who actually responded rather than describing significant changes since 2005.

In 2006 the contractors tended to be more concentrated in the skilled trades and process, plant and machine operative activities, while a greater share of UKAEA staff occupied the senior and professional job roles. In 2011 the pattern has shifted significantly with the contractors having the greater share of staff in managerial, senior and professional roles (51%) compared to DSRL (42%). However, DSRL has double the share of staff in technical roles compared to the contractors. In 2006 their shares will almost equal. Finally, although the relative share of contractor staff in the skilled trades category, they still have double the share of DSRL staff, as was the case in 2006.

QUALIFICATIONS ATTAINED

Respondents were asked to specify the **highest** qualification they have attained to date. The results are reported for DSRL staff in **Table 3.3**.

Table 3.3: Highest Qualification Attained (DSRL)

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Activity	DSRL (%)	UKAEA 2006 (%)	% change
Standard grade or equivalent	13	14	-70
Higher/A-level or equivalent	8	9	-11
HNC	21	24	-13
HND	12	9	+33
SVQ (1-5)	14	10	+40
Ordinary Degree	8	8	0
Honours Degree	15	17	-12
Post Graduate Degree	6	8	-25
PhD	2	2	0
Total	100	100	-

What is noticeable, very broadly, is that there appears to be a drop in the share of both school level qualifications and University graduate and postgraduate qualifications and an increase in qualifications towards the middle of the spectrum. This could tie in with the fact that since 2006 around half of the DSRL staff surveyed had indicated that they had acquired new qualifications. In general it would be expected that training would enhance the qualification held and thus account for the lower proportion of staff with more basic qualifications. Similarly, it is perhaps less likely that many of the staff would acquire new qualifications at graduate and postgraduate levels, so that any increase in qualifications would be seen in the middle.

Highest qualifications attained by contractor staff are reported in **Table 3.4**.

Table 3.4: Highest Qualification Attained (Contractors)			
Activity	Contractors 2011 (%)	Contractors 2006 (%)	% change
Standard grade or equivalent	21	24	-13
Higher/A-level or equivalent	9	14	-36
HNC	20	18	+11
HND	13	9	+44
SVQ (1-5)	14	8	+75
Ordinary Degree	6	10	-40
Honours Degree	11	12	-8
Post Graduate Degree	6	4	+50
PhD	0.6	1	-40
Total	100	100	-

The changes for contractors are broadly similar to those for DSRL with a reduction in the school level and university level qualifications with the exception of a 50% increase in the share of contractors with post graduate qualifications. As with DSRL staff there has been growth in the share of mid-level qualifications.

As in 2006, contractors tend to have larger share of school level qualifications and DSRL staff to have a larger share of university level qualifications. However, the gap between DSRL and contractors for both mid level and university qualifications has narrowed, most notably with a similar share of staff having post graduate qualifications.

SKILLS

Staff were asked to select from a list of eighteen **general skills** areas and eleven nuclear specific skills all those areas where they were competent. The list was based on skills areas identified by DSRL. The results for DSRL staff are reported in **Table 3.5**.

Table 3.5: DSRL Staff General Skills (% of staff responding)			
Skills Area	DSRL (%)	UKAEA 2006 (%)	% change
Audit, financial & accountancy	16	15	+7
Human resource	11	11	0
IT	35	45	-22
Public affairs, publicity, communications, liaison, media, political	6	6	0
Safety management, advice, audit	31	28	+11
Emergency planning and services provision	11	11	0
Security	7	5	+40
Business planning and process	13	10	+30
Hazardous materials management	17	15	+13
Facility management	20	16	+25
Project management	30	28	+7
Project planning, design, engineering and costing	22	22	0
Property and estate management	4	2	+100
Environmental protection/remediation	13	12	+8
Health related	5	5	0
Plant operation and maintenance	37	36	+3
Trades related (e.g. electrician, joiner etc.)	21	20	+5
Construction	13	10	+30

For the majority (two-thirds) of general skills the percentage of DSRL staff with these skills has increased since 2006. For almost all of the remaining skills the percentage of staff with these skills was unchanged. Only in the case of IT has there been a decline (of over one-fifth) in the share of staff with these skills. This is likely to reflect the outsourcing of the IT function. These changes in the skill sets will reflect the changing requirements of the organisation and the types of activities that are now sub-contracted rather than carried out in-house.

The results for contractor staff are reported in **Table 3.6**.

Table 3.6: Contractor Staff General Skills (% of staff responding)			
Skills Area	Contractors 2011 (%)	Contractors 2006 (%)	% change
Audit, financial & accountancy	15	10	+50
Human resource	13	4	+225
IT	30	26	+15
Public affairs, publicity, communications, liaison, media, political	8	6	+33
Safety management, advice, audit	23	26	-12
Emergency planning and services provision	7	13	-46
Security	12	7	+71
Business planning and process	11	17	-35
Hazardous materials management	9	10	-10
Facility management	15	7	+114
Project management	31	27	+15
Project planning, design, engineering and costing	27	30	-10
Property and estate management	5	3	+67
Environmental protection/remediation	8	14	-43
Health related	5	6	-17
Plant operation and maintenance	32	32	0
Trades related (e.g. electrician, joiner etc.)	25	28	-11
Construction	20	15	+33

In exactly half of the skills areas the share of contractors with that skill has increased since 2006. However, unlike for DSRL staff 44% of the skills areas showed a reduction in the proportion of contractors with that skill.

As was the case in 2006, the most commonly held skill set in 2011 related to plant operation and maintenance. While the remaining top 5 contractor skills are the same as in 2006 IT and project management have become more common while project planning and trades related have become less important. Again, in the case of IT this probably reflects the outsourcing of these activities to contractors.

Staff were also asked to select from a list of eleven **nuclear specific skills**. Again the list was based on skills areas identified by DSRL. The results are reported in **Table 3.7**.

Table 3.7: DSRL Staff Nuclear Specific Skills (% of staff responding)			
Skills Area	DSRL (%)	UKAEA 2006 (%)	% change
Nuclear licensing & safety case	14	n/a	-
Nuclear decommissioning management	19	n/a	-
Nuclear decommissioning operations	35	n/a	-
Nuclear fuel management	6	8	-25
Radwaste inventory management & decommissioning strategy management	9	11	-18
DSRL specific knowledge and skills e.g. site management	36	26	+38
Reactor physics awareness	9	10	-10
Regulatory requirements awareness & implementation	25	25	0
Research & technology development	7	9	-22
Radiation safety	33	11	+200
Nuclear industry specific knowledge & skills-market analysis, material accounts management etc.	8	5	+60

Three additional skills areas were identified by DSRL and we have no comparable information for UKAEA staff in 2006. For those areas where a comparison could be made, a smaller percentage of the DSRL staff had skills in nuclear fuel management, radwaste inventory management & decommissioning strategy management, reactor physics awareness, and research & technology development. However, there were significant increases in the share of DSRL staff with DSRL specific knowledge and skills, and nuclear industry specific knowledge and skills. However the largest change was a tripling in the share of staff with radiation safety skills.

The results for contractors are reported in **Table 3.8**.

Table 3.8: Contractor Staff Nuclear Specific Skills (% of staff responding)			
Skills Area	Contractors 2011 (%)	Contractors 2006 (%)	% change
Nuclear licensing & safety case	8	n/a	-
Nuclear decommissioning management	28	n/a	-
Nuclear decommissioning operations	58	n/a	-
Nuclear fuel management	4	4	0
Radwaste inventory management & decommissioning strategy management	12	7	+71
DSRL specific knowledge and skills e.g. site management	32	14	+129
Reactor physics awareness	9	18	-50
Regulatory requirements awareness & implementation	29	22	+32
Research & technology development	14	6	+133
Radiation safety	39	21	+86
Nuclear industry specific knowledge & skills-market analysis, material accounts management etc.	11	5	+120

For the areas that could be compared in every nuclear specific skills area, except reactor physics awareness and nuclear fuel management there was an increase in the share of contractors with nuclear related skills.

In 2011 contractors had a greater share of skills in seven of the eleven skills areas compared to DSRL. This compares to 2006 where UKAEA had a greater share of skills in five of the eight skills areas compared to contractors.

4 IMPACT OF SITE ACTIVITY

This Chapter provides an assessment of the impact of decommissioning activity at Dounreay on the local (Caithness & North Sutherland) economy.

Three types of **on-site** impacts are estimated:

- **Direct:** these arise from those employed on-site by DSRL at Dounreay.
- **Indirect:** these impacts are created by the purchases of goods and services required to undertake the current activities at Dounreay, including the on-site contractors and project managers.
- **Induced:** these arise from the spend in the wider economy of the wages of those directly and indirectly employed.

In addition, there will be **off-site** impacts, including employment of spouses/partners of site workers who would not otherwise be living and working in Caithness and North Sutherland.

DIRECT EMPLOYMENT IMPACTS

Direct employment associated with Dounreay is effectively the number of DSRL employees. It is recognised that a significant proportion of the total on-site employment is associated with a number of long-term contractors who are effectively permanent on-site staff. However, to avoid double counting these non-DSRL employees are considered as part of the indirect employment impacts of Dounreay.

Information provided by DSRL for 2010 indicates that a total of 900 people are employed by the organisation at Dounreay. Of these almost 93% are full-time. Thus DSRL employ a total of 867 FTE (full time equivalent) staff. This is a reduction of almost 27% of the 1,184 FTE staff employed at Dounreay in 2005. This reduction is partly explained by the formation of UKAEA Ltd, followed by the sale to Babcock International Group PLC and the outsourcing of ISaT staff.

It is also notable that the share of part-time staff has increased since 2005. In 2006 UKAEA provided a time profile of expected direct labour requirements. These were estimated for 2010 at 874 FTE, close to the actual direct DSRL FTE employment level for 2010.

INDIRECT AND INDUCED EMPLOYMENT IMPACTS

As noted in 2006, the indirect impacts of Dounreay are increasingly associated with the provision of a range of services rather than simply the purchase of goods. Information provided by DSRL for the latest completed financial year (2010-2011) show total purchases of goods and services of £90 million. This compares to the £96 million predicted for 2010 in UKAEA's decommissioning time profile.

Of this £90 million, 13% was sourced from local companies and 57% from National (UK based) companies based in Caithness & North Sutherland. Thus a total of 70% (£63 million) of DSRL purchases of goods and companies were made within Caithness & North Sutherland. This compares with the 71% of total UKAEA purchases sourced in Caithness & Sutherland in 2006.

Estimation of the indirect impacts was based on the following approach (consistent with that used in the 2006 study):

- Purchases from the top 100 suppliers to DSRL at Dounreay were identified by contractor/supplier and type of work.
- These purchases were allocated to industrial sectors to allow:
 - Estimation of share of purchases by sector which was then applied to total expenditures.
 - Identification of the relevant turnover:employment ratios and indirect multipliers.
- The share of total purchases sourced from local businesses and national businesses with a base in Caithness and Sutherland was based on analysis undertaken by DSRL.

The FTEs associated with these expenditures were estimated as follows:

- The first round of indirect jobs was estimated on the basis of turnover:employment ratios expressed in 2010/11 prices based on information from the ABI.
- The later rounds of indirect jobs were estimated using the sectoral Type 1 multipliers from the Scottish Input-Output Tables.
- These multipliers were scaled to reflect the potential indirect linkages at the local level.
- The induced impacts derive from the spending of incomes earned by those directly and indirectly employed at Dounreay. Estimates are based on induced multipliers derived from the Scottish Input-Output Tables.

Table 4.1 reports the estimated direct, indirect and induced jobs associated with activity at Dounreay. These are compared to the estimates for 2010 as reported in the 2006 report.

TABLE 4.1: Total Employment Impacts (FTE)		
	2010/11 (Actual)	2010/11 (Predicted)
Direct	867	874
Indirect	714	1,063
Induced	265	182
Total	1,846	2,119

While there is less than 1% difference between the actual and predicted level of DSRL/UKAEA employment (expressed in FTE terms) the total employment impact, taking into account indirect and induced impacts, is almost 13% lower than predicted in 2006. However,

there are a number of factors that will account for some of this difference in indirect and induced impacts:

- The predicted value of purchases was higher than actual purchases in 2010. Actual purchases were less than 93% of those predicted.
- Inflation between 2005/6 and 2010/11 would reduce the purchasing power by almost 13%.
- Changes in the balance of types of purchases.
- Changes in turnover:employment ratios and multipliers as these statistics are updated over time.

Taking into account lower spend and inflation would reduce the total impact predicted in 2006 to around 1,880 FTE. Thus, taking these factors into account would suggest that **the current estimates of the impact of Dounreay on the local economy is broadly similar to that predicted in 2006.**

RELATIVE IMPACT OF DOUNREAY ON CAITHNESS AND SUTHERLAND

Dounreay continues to have a major economic impact on the local economy. There is also an expectation that as the decommissioning and site restoration process continues that inevitably the impact will decline over time.

One measure of Dounreay’s impact is the share of Dounreay related employment in total employment in Caithness & Sutherland. The impact of Dounreay is estimated in terms of the total of direct, indirect and induced employment in Caithness & Sutherland attributable to activity associated with the Dounreay site. Total employment in Caithness & Sutherland is sourced from the Annual Population Survey. Two estimates are provided-**employees in employment** and **total employment** (including self-employment).

Table 4.2 reports the employment/self-employment data for Caithness & Sutherland between 2005 and 2010.

TABLE 4.2: Employment in Caithness & Sutherland Employment			
Year	Employees in Employment	Self-Employment	Total
2005	20,000	2,600	22,600
2006	17,000	1,700	18,700
2007	17,700	1,800	19,500
2008	16,900	3,100	20,000
2009	15,100	3,000	18,100
2010	19,200	3,300	22,500

Total employment is highest in 2005 and at the lower end in 2006 (the two years that represent the previous baseline impact assessment for Dounreay). We have compared 2010 to both 2005 and 2006 effectively covering the range of potential scenarios in terms of employment change over the period.

Table 4.3 compares the employment impact of Dounreay in 2005, 2006 and 2010.

TABLE 4.3: Dounreay Impact on Caithness & Sutherland Employment			
	2005	2006	2010
Dounreay Impact (DI) (direct, indirect & induced FTE jobs)	2,470	2,470	1,846
Employees in employment (Caithness & Sutherland)	20,000	17,000	19,200
<i>DI as % of employees in employment</i>	<i>12.4%</i>	<i>14.5%</i>	<i>9.6%</i>
Self employed (Caithness & Sutherland)	2,600	1,700	3,300
Total employed (Caithness & Sutherland)	22,600	18,700	22,500
<i>DI as % of total employed & self employed</i>	<i>10.9%</i>	<i>13.2%</i>	<i>8.2%</i>

The percentage change in the share of the Dounreay Impact in employment in Caithness & Sutherland is reported in **Table 4.4**.

TABLE 4.4: Change in Dounreay Impact on Caithness & Sutherland Employment		
	2005/2010	2006/2010
% change in DI as % of employees in employment	-23%	-34%
% change in DI as % of total employment (inc. self-employment)	-25%	-38%

Both estimates show a significant decline in the importance of Dounreay in supporting employment in Caithness & Sutherland:

- Dounreay related employment impacts declining from 2,470 to 1,846 (25% reduction).
- DI as a share of **employees in employment** declining from 12.4% (2005) and 14.5% (2006) to 9.6% (2010). These represent 23% and 34% reductions respectively.
- DI as a share of **total employment** declining from 10.9% (2005) and 13.2% (2006) to 8.2% (2010). These represent 25% and 38% reductions respectively.

The larger reductions in impact between 2006 and 2010 is in the context of employees in employment increasing by 13% between 2006 and 2010 and total employment increasing by 20%. Thus, part of the reduction in impact is associated with the growth in overall employment in Caithness & Sutherland. In comparison employment levels were similar in 2005 and 2010.

IMPACTS ASSOCIATED WITH DSRL STAFF REDUCTIONS

Based on the staff survey we have estimated the numbers of DSRL staff who would stay in, or leave, Caithness & Sutherland and the type of economic activity they would subsequently undertake.

TABLE 4.5: EMPLOYMENT ACTIVITY ASSOCIATED WITH DSRL STAFF REDUCTIONS			
	Based on 2006 Survey	Based on 2011 Survey	% Change
Jobs Reduction	867	867	-
<u>Stay in Caithness & Sutherland</u>			
Retire	104	121	+16%
Work	342	419	+23%
<i>Area of employment for those intending to continue in work...</i>			
DSRL	131	200	+53%
Other Employment	183	161	-12%
Own Business	28	58	+107%
<u>Leave Caithness & Sutherland</u>			
Retire	34	42	+24%
Work	387	285	-26%

The key points to note are:

- An increase of 21% in the number of staff that would stay in Caithness & Sutherland.
- The 23% increase in the number of those who would stay in Caithness & Sutherland **and** work.
- The doubling in the number of those staying and working in Caithness & Sutherland who would consider setting up their own business.

Based on the data derived from the staff survey, estimates of the total number of people, including spouses/partners and children that would leave (or indicate that they would leave) Caithness are reported in **Table 4.6**. These estimates are compared with the results based on the 2006 survey.

TABLE 4.6: EMPLOYMENT ACTIVITY ASSOCIATED WITH DSRL STAFF REDUCTIONS			
	Based on 2006 Survey	Based on 2011 Survey	% Change
Jobs Reduction	867	867	-
<i>Of which indicate they will leave Caithness & Sutherland</i>			
Staff	421	327	-22%
Spouse/Partners	308	219	-29%
Children	240	217	-10%
Total	969	763	-21%

The results suggest that currently, over 20% less DSRL staff would intend leaving Caithness & Sutherland compared to the results for 2006 (327 staff in 2011 compared to 421 based on the 2006 survey). Similarly, the total number of people (including spouses/partners and children) that

indicated they would leave also fell by around 21% (from 969 to 763 in 2011).

5 WIDER IMPACTS

INTRODUCTION

Dounreay has a much wider impact on Caithness & North Sutherland than simply the associated employment impacts. Wider impacts are evident in terms of:

- Economic Activity of Spouses.
- Children of DSRL staff attending local schools.
- Voluntary work.

These impacts have been estimated in terms of DSRL employment in 2011 and are compared to the results of the 2006 survey of UKAEA staff.

Table 5.1 reports where staff would be located now if Dounreay had not existed.

TABLE 5.1: DSRL Staff-Current Location if Dounreay Not Existed		
Location	DSRL (%)	UKAEA 2006 (%)
Caithness & Sutherland	38	35
<i>Or elsewhere in...</i>		
Highlands & Islands	6	6
Scotland	24	23
Outside Scotland	32	36
Sub-total elsewhere	62	65
Total	100	100

It shows that 38% of staff currently employed by DSRL believed they would still be living and working in Caithness & Sutherland if Dounreay had not existed. This compares to 35% of UKAEA staff in 2006.

A further 6% would be based elsewhere in the Highlands & Islands-the same as in 2006. Overall, 62% of current DSRL employees believe they would be living and working outside of the Caithness & Sutherland area if Dounreay had not existed compared to 65% in 2006.

INCOME

Table 5.2 shows the importance of the contribution to household income made by the spouses of DSRL employees.

TABLE 5.2: DSRL Staff-Salary and Household Income Profiles		
Income	DSRL Salaries (%)	Household Incomes (%)
<£10,000	1	0
£10,000-£24,999	26	6
£25,000-£39,999	50	26
£40,000-£54,999	17	30
£55,000-£69,000	4	20
£70,000-£84,999	1	10
£85,000-£99,999	<0.5	4
£100,000+	0	3

Total	100	100
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While 73% of DSRL staff have salaries greater than £25,000, 94% of the associated households have incomes of over £25,000. This is evident towards the top end of the salary scale where 6% of staff have salaries of over £55,000 compared to 37% of households. In other words the combined earning power within DSRL families is particularly strong. It should be noted that a proportion of these households will have more than one household member employed on the Dounreay site.

EMPLOYMENT OF SPOUSE/PARTNER

Table 5.3 reports the extent to which DSRL spouses are also working and compares this to the results for UKAEA 'spouses' in 2006.

TABLE 5.3: DSRL Staff-Spouses and Partners		
Of DSRL Staff	DSRL (%)	UKAEA 2006 (%)
Married/Partner	83	82
<i>Of those married/partner...</i>		
Spouse/partner who works	84	85
<i>Of those who work...</i>		
Spouse/partner also works for DSRL	20	28
Spouse/partner works for other Dounreay business	11	11
Spouse/partner employed outside Dounreay	69	61

Of those DSRL staff who are married/with partner, 84% of the spouses/partners are also working. This is similar to the percentage in 2006. One-fifth of them also work for DSRL which is significantly less than the 28% of working spouses who worked for UKAEA in 2006. A similar percentage (11%) of DSRL and UKAEA 'spouses' worked for other 'Dounreay' business and a larger share (69% compared to 61%) worked for organisations outside of Dounreay.

Table 5.4 reports the distribution of spouses non-Dounreay based employment across the main sectors.

TABLE 5.4: DSRL Staff-Spouses and Partners Employed Outside Dounreay		
Sector	DSRL (%)	UKAEA 2006 (%)
Crofting, Farming, Fishing, Forestry	3	2
Construction	6	10
Manufacturing	2	5
Retail	13	15
Visitor Accommodation	<0.5	2
Education	11	18
Health	19	15
Other Public Sector	10	11
Professional Services	4	2
Other	31	21
Total	100	100

As in 2006, the most important sector was 'other'. The public sector (education, health and other public sector) accounted for 40%

compared to 44% in 2006. Finally, the importance of construction and retail was lower in 2011 than in 2006.

CHILDREN

Table 5.5 provides estimates of the percentage of all DSRL staff that have (non-adult) children. 61% of DSRL staff do not have any children (similar to the 59% in 2006). Only 6% of staff had more than 2 children compared to 9% in 2006.

TABLE 5.5: DSRL Staff Children		
Number of Children	DSRL (%)	UKAEA 2006 (%)
0	61	59
1	17	15
2	17	17
3	5	8
4	1	1
Total	100	100

Table 5.6 reports the education status of the children of DSRL staff.

TABLE 5.6: DSRL Staff Children-School Status		
School Status	DSRL (%)	UKAEA 2006 (%)
Not yet at school	23	25
Primary school	40	41
Secondary school	37	34
Total	100	100

Just under a quarter of children are not yet at school, while the largest proportion (40%) are at primary school. This is a similar pattern to 2006 although there is a greater share of children in secondary school in 2011.

VOLUNTARY WORK

Table 5.7 reports the proportion of DSRL staff that are involved in some type of voluntary work.

TABLE 5.7: DSRL Staff Voluntary Work		
Type of Voluntary Work	DSRL (%)	UKAEA 2006 (%)
Clubs	54	67
Charities	37	24
Lifeboats, Mountain rescue, etc.	9	9
Total	100	100
No Voluntary Work	70	62

Note: Multiple responses allowed.

A lower proportion of DSRL staff (30%) are involved in volunteering compared to UKAEA staff in 2006 (38%).

6 REVIEW OF CNSRP AND PARTNER ACTIVITIES

INTRODUCTION

In this chapter we evaluate the progress made by the Partnership (CNSRP) in achieving its objectives by focussing on the impact of its work in diversifying the local economy.

The evidence base for this evaluation is drawn from several sources using a variety of research methods. First, it reflects the quantitative analysis of earlier chapters (2&3) of the this report. It also reviews information gathered through the work of the Partnership and set out in its website. Finally, it assesses the views of stakeholders and partners interviewed in the course of this review.

The CNSRP provides a focus for the effort of public agencies working in response to the decommissioning at Dounreay to help diversify the local economy. As is discussed below much of the work is carried out by individual agencies, often jointly, with the CNSRP acting in an enabling capacity rather than as a delivery vehicle.

There is no ready means of establishing the economic impact of this kind of intervention. Assessing the effectiveness of partnership working and distilling from that the value of the contribution from one partner is problematic.

The assessment of quantitative impact at this time will tend to underestimate the CNSRP's role and that of the contribution by individual partners. In some cases it is too early to judge: notably, the benefits of new projects awaiting implementation such as the development of Scrabster Harbour and tourism development at John O'Groats. In other cases it is impossible to measure quantitatively. Evaluating the Partnership's operation and its impact cannot be approached as a mechanistic process. Many of the CNSRP projects and actions are more difficult to measure. Issues such as business and community confidence, shifts in attitude and behaviour, capacity building among project partners and new opportunities are all important aspects to consider. Therefore such evaluations are by necessity a combination of qualitative and quantitative indicators.

It is important to note that the key to CNSRP's impact is based on its role in facilitating the partners agencies in working jointly to deliver a common 'vision' for the area. It is the individual partners who make the investments that will eventually result in more jobs and economic activity. These outcomes and impacts reflect the influence of CNSRP although it is difficult to attribute the outcome in the absence of the Partnership.

BACKGROUND AND RATIONALE

The background to the development of the CNSRP and its rationale has origins in several distinctive features:

- Unlike many closures the planned decommissioning of Dounreay has been known about for many years. The original plan by UKAEA was published in 2000.
- The run down process is one that is being managed and will also take place over, on current estimates, a further period of possibly fifteen to twenty years.
- Dounreay will remain, during this time, a major, if declining, force in the local economy. As discussed earlier in this report it continues to generate significant employment and income effects locally and beyond.
- Given the significance of Dounreay as an economic and social force within the area any response had to deal with strategic, long term matters that would help effect structural change in the local economy. This was not 'simply' to be a job creation initiative.
- Not surprisingly, there was a well developed view that the need for diversification was essential. This included areas such as other manufacturing (principally engineering) markets, growth sectors where the area has strengths and could improve market share such as tourism, food, and more recently renewables.
- Linked to the above was the sense that agencies and partners considered that the approach adopted had to deal with complexity in terms of scale, duration, and mix of stakeholders combined with demands from the local community.
- Strong political support at all levels existed and continues to be a feature of the Partnership's work. Given the importance of the CNSRP's role in influencing and persuading, this aspect of its work is central to its effectiveness.

Good practice approaches dealing with regeneration are invariably based on partnership. Tackling challenges jointly is now regarded as a pre-requisite of effective local economic and social development in making a sustained impact. This is particularly true of the Highlands and Islands where collaborative working has long been a feature.

In Caithness and North Sutherland the Partnership that was developed reflected this and also the particular circumstances faced by the area. Longstanding partners, THC and HIE, with experience of working across the Highlands were joined by a new partner with a UK wide remit at the local level. The NDA was then both a new organisation and brought a new socio-economic focus. In addition as the area's engagement in Scotland's renewables agenda emerged prominently, the Scottish Government developed a direct involvement.

It is fair to say that partnership development has characterised the CNSRP. This is not surprising given that partners with a range of perspectives, different cultures and operating arrangements came together around a broadly based programme. CNSRP partners have

sought to bring together agreement on actions and to ensure that the partners decided and delivered, with the Partnership emerging as the focal point for discussions, agreement on priorities and a collective driving force behind priority projects.

STRATEGIC CONTEXT

While the Partnership evolved to suit local needs and requirements it operates in a wider context whose influence has to be taken into account when reviewing its effectiveness and efficiency.

In 2007 the Scottish Government launched the Government Economic Strategy (GES) with explicit aims and priorities for the development agencies and others to follow¹. It is underpinned by a strong clear emphasis on the importance of improving Scotland's rates of economic growth and of the need for public agencies to work together in pursuit of this goal. The latest version of the GES (2011) sets out six priorities for the Government and the wider public sector to pursue:

- Supportive Business Environment
- Transition to a Low Carbon Economy
- Learning, Skills and Well-being
- Infrastructure Development and Place
- Effective Government
- Equity

Scotland's economic development agencies, HIE and SE were subject to substantial reform with the abolition of the Local Enterprise Companies. Both agencies increasingly focussed effort and resources on account managed businesses and, in HIE's case, account managed community organisations, along with greater levels of investment supporting larger, higher impact, transformational projects. Scotland's local authorities, with this happening somewhat later in the Highlands and Islands, took on responsibility for the Business Gateway (discussed in more detail below) and for local regeneration. This was a significant shift in the institutional arrangements for economic development.

A further major development took place with the introduction of the NDA, as a major UK body charged with managing Britain's nuclear legacy safely and at best value to the taxpayer. In addition Parliament gave the NDA a responsibility for having regard to the socio-economic legacy of decommissioning. At the time this was seen as meaning that best value to the taxpayer is not necessarily either the cheapest or quickest option because the manner in which the NDA carries out its work will have a significant impact on the socio-economic legacy².

¹ Scottish Government, *The Government Economic Strategy, 2007*

² UKAEA response to the draft socio-economic strategy, Caithness Socio Economic Strategy Group, 2006

In 2009 the Government made a commitment that Scotland will achieve a headline target of 20% of total Scottish energy use coming from renewable sources by 2020. Scotland's Renewables Action Plan sets out a framework for action in the specific area of renewable energy³. The development of renewables has been recognised by both HIE and SE as a major priority now and going forwards.

During this period the UK, along with other nations experienced the banking crisis. In company with others the Scottish economy moved into recession. A consequent slowdown in world trade and falling business and consumer confidence has been accompanied by tight public sector funding settlements over the coming years. All of these factors are significant enough to have a bearing on the work of the Partnership and on its ability to stimulate investment in new areas.

More positively, the Partnership's work has been helped by timing. The growth of substantive interest in renewables, notably in the Pentland Firth with the first commercial leases being granted there by the Crown Estate, added a momentum for action to ensure the area was equipped to deal with the opportunities emerging from wind, tidal and wave energy. This may have been an 'accidental' strategic opportunity by providing a strategic rationale to a portfolio of projects that previously was lacking. As is noted later it has been where the Partnership was to play a significant role.

DEVELOPMENT OF THE PARTNERSHIP

The initial strategic focus for CNSRP was developed through the process of drawing up 'A Strategy for Caithness and North Sutherland' in 2006⁴. Its key strategic aim was

'to maintain and if possible to increase the GDP of the Dounreay travel-to-work area by actively working to promote existing employment, encourage new employment and promote the area as an attractive location in which to live and work'

This strategic focus has been retained with the refinement that the Partnership is now more explicitly concerned

'to support the transition of the area's economy away from its dependence on Dounreay decommissioning work'⁵.

Strategic goals set out were developed and refined through a consultation process led by independent consultants. The resulting broadly based programme of actions became the basis for the work

³ Scottish Government, Renewables Action Plan, 2009

⁴ A Strategy for Caithness and North Sutherland, Caithness Socio-Economic Strategy Group, 2006

⁵ CNSRP press statement June 2011

that the Partnership would tackle. The Caithness and North Sutherland Action Plan was launched in late 2007⁶. HIE committed £12 million in support of the Action Plan in support of both priority project and in building capacity among local organisations⁷.

There was agreement that a focus for implementation was required. It was also understood that the area did not need 'another' organisational layer. The Partnership, an informal agreement among stakeholders, has had from its inception an independent chair. Its wider governance includes operational, strategic and local input from the public agencies and the private sector.

It was therefore not intended, nor expected, to take the role of a delivery body. Instead it would provide strategic oversight, a means of drawing partners together and a route for facilitating actions that would support the implementation of projects being carried out by the partners. Somewhat confusingly the first 'Snapshot', one of the forms of progress reporting, in December 2007 described what was termed a 'Delivery Structure'. The following year the first newsletter summarised the Senior Officers' Group as being one that committed resources. In practice this was the means by which the partners allocated resources to take the action plan forward. Subsequent communication has set out the role of the partners within the CNSRP in providing support to various projects and wider initiatives.

COMMUNICATION

The Partnership places considerable effort and attention on communication. This has taken varying forms over the years ranging from attendance at meetings among various groupings, published minutes of the Executive and Advisory Boards, newsletters, the 'Snapshots', reports to the (then separate) Dounreay Stakeholders Group, and a weekly blog by the Programme Manager presenting a detailed overview of the Project manager's activity on behalf of the Partnership. Three Caithness Conferences, held in 2007, 2008 and 2009 helped promote the CNSRP plans and progress. More recently CNSRP has streamlined the progress reporting by drawing together reports from partners into one document for wide distribution⁸. This has included a classification of projects distinguishing between high priority actions and enabling activities. The clarification is a particularly useful way of understanding CNSRP activity.

This effort is quite separate from wider area promotion such as that for inward investment⁹ and tourism¹⁰.

GOVERNANCE AND METHODS OF WORKING

⁶ An Action Plan for Caithness and North Sutherland 2007-2010, CNSRP, 2007.

⁷ Socio Economic Spend-CNSRP internal paper.

⁸ Programme Update April 2011, CNSRP

⁹ See www.investcaithness.org.uk

¹⁰ See <http://northhighlandscotland.com>

Despite the informal nature of the Partnership it has quite elaborate governance arrangements.

- The Partnership's Executive Board, which meets quarterly, brings together the Chief Executives of Highlands and Islands Enterprise and Highland Council, together with senior officials from NDA and Scottish Government. Its independent Chairman is Sir Anthony Cleaver. The Board oversees strategic direction of the Partnership's activities.
- The Delivery Group, (formerly the Senior Officers' Group) comprises the key directors from the partners. Originally described as having responsibility for committing resources its role is to check on detailed delivery issues relating to the Plan.
- The Partnership's Advisory Board meets quarterly. It brings together a range of local and regional stakeholders such as MP, MSP, Highland Councillors, Community Councillors, Caithness Chamber of Commerce, Trade Unions, DSRL, North Highland College, Caithness Partnership, The Crown Estate, Dounreay Stakeholder Group (previously separate), Scottish Natural Heritage, Scrabster Harbour Trust and Wick Harbour Authority. Its Chairman is the Convener of the Highland Council. The Board provides advice and comment on the activities of the Partnership.
- The Partnership is resourced by a small team of secondees based in Thurso and led by a Programme Manager.

Meetings of both Boards have been held regularly and have been attended by partners and stakeholders. Minutes of these are readily available. A recent call for more formal communication and links between the Boards has resulted in proposals for a different schedule of meetings and a joint annual session.

KEY PROJECTS AND ACTIVITIES UNDERTAKEN BY CNSRP AND PARTNER AGENCIES

The Partnership Action Plan set out 50 actions with few identified priorities. The actions were set out under 5 broad areas known as overarching priorities:

- Investing in our Infrastructure and Services
- Developing our Business and Industry Assets
- Developing Our People
- Developing Dounreay Assets
- Developing New Opportunities through Inward Investment

Through a process of rationalisation and merger of actions the Action Plan was revised into its current format which sets out progress and

issues categorised into high and medium priority as well as completed actions.

Some actions were aimed at discrete projects, others at initiatives involving a range of projects and still others directed at policy issues. The Partnership set itself and the partners an ambitious array of actions and a substantial work programme. The programme is reviewed and updated quarterly and a public summary is produced.

Project progress over the past three years is documented extensively in a range of plans, progress reports to the CNSRP Groups, appraisals, reviews, newsletters and related communications. It is not our intention to replicate this reporting here: rather it is key aspects of progress that are the subject of attention¹¹. High priority projects led by partner agencies are summarised in **Table 6.1**.

TABLE 6.1: Summary of High Priority Projects	
High Priority Projects	Description
Development at Wick Harbour	Creation of 70 berth marina with £375,000 support by NDA
Development at Scrabster Harbour	Creation of infrastructure to support energy development. £20m multi agency (HIE, NDA, Scottish Government and ERDF) funding
Pentland Firth Tidal Energy	Originally multi-partner initiative that led to the Crown estate leasing round for wave and tidal energy.
Caithness Engineering	Assisting with engineering companies' diversification
John O'Groats Tourism	Development of new facilities at John O'Groats, £6m investment with HIE funding of £1.5m
Business Relocation	Attracting new businesses to the area through targeted inward investment programme
Food & Drink Industry	Support c 400 businesses now part of 'Mey Selections'
IT Connectivity	Upgrading of broadband connections across the area
Transport Connections	Improve access to and from the area by road, rail and air

In addition there is an array of other significant projects, many linked to the above, and others separate that have been brought forward.

This list of such projects is illustrative not exhaustive:

- The North Highland Regeneration Fund (NHRF)– NDA supported local fund.
- Caithness Chamber of Commerce – revitalisation of local organisation.
- Skills Transition - £2.3m investment in skills development including ESF, NDA and Skills Development Scotland support.
- North Highland College – c£15m major investment in two new Centres
- Wick High School – commitment by THC and the Government for a c £25m new school.

¹¹ See www.cnsrp.org.uk, www.nda.gov.uk/stakeholders, <http://archive.dounreaystakeholdergroup.org>

- Pulteneytown Peoples Project – supported now by £1m lottery funding with £200,000 from NDA and with THC assistance.

Support to individual businesses has resulted in an estimated:

- 25 companies invested in by NHRF.
- 40 start-up businesses **supported by the Business Gateway**.
- 40 investments by HIE (3 with NHRF) in local businesses and organisations.

More generally HIE reported its growing experience of supporting companies with growth plans that had already made in-roads into other markets such as distilling, oil and gas, chemicals and renewables. A cautionary note was expressed by some consultees that opportunities for new business activity in renewables remained slow to progress and that expectations over the pace at which the sector would develop had to be tempered.

Significant support has been provided to arts and culture to such as Caithness Horizons and Caithness Archaeological Trust and to the widely attended Royal National Mod in 2010. The tourism sector, and event-led development, were identified as a key priority, and led by HIE's Tourism Manager dedicated to Caithness and North Sutherland.

POTENTIAL IMPACTS OF HIGH PRIORITY PROJECTS

By their nature the high priority projects are of significance for the area. This significance is reflected in the scale of the projects and their potential to create jobs, for example, the investments at Scrabster harbour to allow it to take advantage of both offshore oil and gas activity and more importantly marine renewables in the Pentland Firth and the development of John O'Groats as a major visitor destination. Others will have much less of a direct employment impact but are critical to support the potential for economic diversification in the area by providing supporting infrastructure, for example, IT connectivity and transport connections.

Basically, these projects were prioritised because of their potential impact on regeneration and diversification. However, given their scale and ambition the economic impacts of these projects may not be evident for a number of years. In other cases the impacts will eventually be evident in the ability of companies to compete in different and wider markets.

Table 6.2 provides, where possible, estimates of the potential impacts of the high priority projects.

TABLE 6.2: Potential Impacts of High Priority Projects		
High Priority Projects	Description	Impacts
Development at Wick Harbour	Creation of 70 berth marina.	Diversification of harbour business and contribution to harbour income. In 2010 nearly 800 crew spent 460 days in Wick from 290 vessels.
Development at Scrabster Harbour	Infrastructure to support energy development.	Funding of development work with the potential to create 6 jobs at Scrabster Harbour Trust and c100 FTE (direct, indirect & induced) in C&NS
Pentland Firth Tidal Energy	Exploit renewables opportunities by local businesses	Potential for creation of 4,000 jobs in Scotland.
Caithness Engineering	Assisting with engineering companies' diversification	
John O'Groats Tourism	Development of new facilities at John O'Groats.	Create up to 120 FTE jobs (direct, indirect & induced).
Business Relocation	Inward investment programme.	Major initiative now underway. Following development work a number of investor visits have taken place.
Food & Drink Industry	Support businesses now part of 'Mey Selections'.	C400 businesses engaged as part of substantial initiative.
IT Connectivity	Upgrading broadband connections.	Caithness & North Sutherland part of new £35m superfast broadband resulting from HIE's successful bid to Broadband UK.
Transport Connections	Improve access to /from the area by road, rail and air	Support to enhance facilities at Wick Airport and enabling a study into Berriedale Braes.

Development at Wick Harbour: Wick Harbour has suffered from the reduction in commercial and fisheries related activity over the years. As part of its diversification strategy it has invested in its leisure/visitor facilities with the development of a 70 berth marina.

Development at Scrabster Harbour: Development of strategic marine renewable port infrastructure to address future needs of the marine energy sector, particularly in the context of the development of the Pentland Firth area. The development will be able to accommodate fabrication, commercial deployment and maintenance of marine renewable devices. The project will create 6 new FTEs within Scrabster Harbour Trust. The development will support in the region of 100 FTE (direct, indirect & induced) jobs in the wider Caithness & North Sutherland economy. However, this figure is likely to underestimate the true extent of the boost to employment supported by the renewables sector. Over the longer term as the sector develops and matures the development of Scrabster Harbour is likely to result in many more jobs being created at both the harbour and within the wider economy.

Pentland Firth Tidal Energy: The scale of the opportunity created by the development of marine renewables within the Pentland Firth and Orkney Waters Strategic Area is substantial with 1.6GW of generation proposed by 2020. Extrapolating from research undertaken for FREDS Marine Energy Group on the supply chain and economic impacts of the development of the marine (tidal and wave) renewables sector suggest that the development of 1.6GW of capacity in the Pentland Firth area could create in the region of 4,000 direct jobs in Scotland as a whole. A significant proportion of this activity (one-third) will be associated with fabrication of the structures themselves. It is expected that over two-thirds of these expenditures will occur elsewhere in Scotland, including locations elsewhere in the Highlands & Islands, such as Arnish. The challenge that is faced for Caithness & North Sutherland is to maximise the impact of the other expenditures required to develop the Pentland Firth area on the local supply chain.

John O'Groats Tourism: John O'Groats (JOG) has suffered from 20 years of decline as a visitor destination. The JOG Masterplan which is to be delivered in four phases over the next 5-10 years is focussed on transforming JOG into a 'destination of choice'. The project incorporates a range of accommodation, retail, visitor attraction and public realm investments. The projects included within the Masterplan could have a gross impact (direct, indirect and induced) of up to 120 FTE jobs in Caithness & North Sutherland.

MONITORING AND REPORTING

The Partnership has been the subject of extensive monitoring and reporting. There is an established planning process that has delivered a series of plans combining performance assessment with resources and actions to be applied in the coming period. CNSRP and partners along with the wider community have all been provided with progress

reporting on a regular basis. Key achievements have been highlighted as they arise and summarised in reports and newsletters. As mentioned earlier, there has been an array of reporting systems and methods recently rationalised into the 'Programme Update'.

As a result there is a substantial body of monitoring, reporting and individual project evaluation data and analysis. Individual projects such as those supported by EU Structural Funding or by other external funders have had their own monitoring and reporting. As one of the CNSRP functions is project management – in its widest sense – this focus on management information has been a feature of its operations.

OBJECTIVES – PLANNING PROCESS

The strategic objectives set for an intervention should be SMART: specific, measurable, achievable, relevant and time-bound. The Partnership's initial operational objectives were the five outlined above concerned with learning, the business environment, people, Dounreay assets and new opportunities.

Specific

The strategic objectives were cast quite widely. The Partnership, from its inception sought to work on a broad front: to engage and involve a wide set of groupings in these five strategic areas. They provided the early strategic steer and were rationalised into the two levels of priority: high and medium. What is less clear is the strategic cohesion of the projects and actions in the Action Plan. A strategic approach means that actions should be mutually re-enforcing with one contributing to the success of another. The over arching rationale of working to help diversify the economy onto a platform of sustained development has not been readily translated through to the actions to hand.

During the course of the Partnership's life its plans have become more focused on the key sectors of energy and business services and structured around high priority projects and enabling actions.

Measurable

Taking on major strategic initiatives such as engaging in Pentland Firth Energy is uncertain at best and liable to yield limited or no results at worst. Significant reputational risk is attached to much of what the CNSRP is involved in. An ability to demonstrate progress and for that progress to be demonstrable means that measuring actions becomes vital. This is all the more important in the area given the importance of shifting attitudes and influencing behaviour. Attempting to assess an outcome measure such as the impact of support for renewables on business competitiveness is a major hurdle to cross.

Tracking progress towards these objectives is helped by the earlier socio-economic analyses of Caithness and North Sutherland. In terms of specific interventions and the uptake of existing programmes is widely perceived to have been low, and understanding not assisted

by the lack of agreed Partnership output and outcome measures. CNSRP has addressed this in its action plans. Its focus is on progress – much of which is being achieved, or not, by partner agencies themselves. Tracking progress has become easier and actions related to interventions have become more specific and more measurable through time.

Achievable

Despite the broad nature of the action plan which makes it difficult to be definitive as to whether the strategic goal of sustaining and growing GDP that is attributable to CNSRP's existence has been achieved, it is evident that good progress has been made by the Partnership over the past three years of operation. Partners are clear it has done so based on:

- providing the means for joint working and for scrutinising individual agencies' commitments
- the level of investment secured for key projects
- the shift away from over-dependence on Dounreay

Relevant

The overall strategic objectives were developed within the CNSRP framework. They have been tested by planning and consultation with stakeholders and partners and remain as appropriate now as they were at the time of the original plan. This is evidenced by the planning and reporting documentation.

Time-bound

The objectives were time-bound, only in that the Partnership, due to the nature of its initial funding, had a limited lifespan. The long term nature of the decommissioning process, and the long term effort need to help shift the local economy away from its dependence on the local nuclear sector all contribute to the unusual timescales attached to socio economic development in the area.

The lack of sufficiently SMART objectives ought to have made an impact on how activity was shaped. This has not happened. A flexible strategic and operational approach has been adopted with Action Plan monitoring, in particular, being refined in the light of experience. It is, however, likely that the future will demand a more strategic, programme focussed approach allowing a more systematic monitoring and evaluation system.

LEVERAGE

Leverage refers to the extent to which other, additional resources have been attracted to the Partnership's work. Earlier references demonstrate the commitment of resources by partners, the private sector and external (e.g. ESF) sources. The larger levels of leverage come from:

- Partners committing resources e.g. THC's planned expenditure on Wick High School and new offices in Wick of c £30m
- North Highland College's new facilities for research, development, knowledge transfer and skills development of c£15m
- Scrabster Harbour with its HIE, NDA Scottish Government and ERDF support for the partners totalling c£20m

In 2010/11 NDA committed just over £3m in support of Action Plan projects. This funding is secured from a UK wide allocation and Caithness has 'won' a substantial share. DSRL also funded 'people' costs for various initiatives to the sum of £300,000.

This is significant and material. It demonstrates a growth in the area's capacity to address need, potential and new opportunities.

ASSESSMENT OF EFFECTIVENESS AND IMPACT OF CNSRP

There are few readily accessible and agreed measures of progress for the work of the Partnership. In reality the effort of the Partnership provides intermediate outputs that provide the basis for the delivery of outcomes and impact¹². Some stakeholders are interested in activity and output measures. The Partnership is focussed on both process and outputs.

Partnership performance

The Partnership's priorities and activities tend to suggest that it delivers a structured group of services. In reality there are multiple connections, a mix of engagement, approaches and methods. In large part this reflects its sensitivity to the quite varying needs and expectations of its partners and local stakeholders. Knowledge and expectations vary quite extensively as is to be expected in this context. A common strand of consultee comment was how well they understood their particular relationship with the Partnership.

Consultees are unambiguous about the level of energy and commitment surrounding the Partnership's work that means people now think that it has helped foster a more positive and pro-active attitude towards tackling the area's future needs and priorities.

One aspect underpinning this is the sheer volume of activities carried out by the Partnership year on year. It started out being very active and has continued accordingly. While some large projects such as Scrabster, North Highland College and John O'Groats are less likely to

¹² Intermediate outputs: In instances where there are no specific, measurable outcome indicators which capture the wider impact of a programme over the long or medium term, intermediate outputs that capture the direct result of project activity can be appropriate.

be repeated, the level of engagement and collaboration is now well developed across the business sectors and local communities.

Impacts

Although not an evaluation of final impact, it is useful to review the Partnership in relation to more traditional evaluation criteria. Ultimately this is about looking to assess the growth in business and community confidence – the legacy for a sustainable future.

Additionality

Additionality is the extent to which CNSRP supported actions and impacts would have taken place anyway – in its absence. Prior to the Partnership little sustained collective action took place. Plenty of individual steps were taken but few with real strategic or collaborative effort. There exists now a much stronger, shared sense of opportunities and challenges and of the means of tackling these. Above all, perhaps, consultees identify that some of the barriers to change have come down. There was a lack of a central resource where issues could be thrashed out, actions agreed and above all a resource to do all of this.

Ensuring Scrabster Harbour development was fully funded, including the contribution direct from the Scottish Government is regarded as a major achievement in which CNSRP played a vital role. Engagement of the community and genuinely attempting to meet its needs have added to the singular nature of the Partnership's contribution.

Attribution

Attribution is the extent to which change can be attributed to CNSRP. This is always a key issue. There is logic to the view that levels of attribution are relatively high. The Partnership was a purpose built initiative. It has shown flexibility and a capacity to adapt to changing circumstances and to new opportunities. The nature of its work: providing support to a challenging area has ensured a good degree of attribution. Within this the partner agencies have had responsibilities and have worked to deliver on them.

Value for money

Value for money deals with the issues of economy, efficiency and effectiveness of the Partnership. CNSRP is a central resource for many across the community. Its direct funding is very limited-it has no direct employees, instead using a manager and two clerical assistants seconded from partner organisations. In terms of the Action Plan there is no evidence of diversion of effort away from its central mission and priorities. There is little evidence of leakage or diversion to other programmes.

STRATEGIC ADDED VALUE

It is important to monitor and evaluate the effective working and impact of the Partnership itself. This is best assessed in terms of Strategic

Added Value (SAV). SAV encapsulates the Partnership's influencing role and describes the **value added by it over and above the sum of the activities of all the partner organisations**. It takes account of strategic leadership, strategic influence, promoting synergy and improving engagement. It assesses their contribution to the achievement of greater alignment of investment and actions, reducing duplication of effort and scaling up projects and programmes to higher levels.

In many ways this approach draws together the above findings. It provides a means of capturing the outcomes from CNSRP's role and is assessed in the following three ways.

Strategic/catalytic activity

Sustained action by the Partnership with the continuous support from its stakeholders and members led to a strategic and practical approach being taken. The Partnership's work was aligned to national and regional strategies.

As decisions on funding, investment and skills lay outwith of the scope of the Partnership itself, this means that in order to tackle these issues it had to work in collaboration and had to seek to influence the strategic perspective of partners and funders.

The evidence base illustrates that although much remains to be done and that some changes are only now becoming visible, the capacity of the Partnership has had an effect on local stakeholders, on partner agencies and on wider groupings. The Partnership has created increased confidence that investment will be in support of integrated strategic objectives.

Increasing co-ordination, alignment and partnership

One of the main reasons for the success of CNSRP has been the partnership approach between the public and private sectors. At a variety of groupings the Partnership has ensured that the business case has been made for investment.

The strength of a working partnership that underpinned the (informal) formation of CNSRP and the growth in working relationships across the area mean that any development of partnership activity in this area needs to be taken in context. CNSRP started strongly and has continued in that vein. There is evidence to support the view that the collective working here has helped build capacity and capability. The NDA is one partner, now joined by DSRL in focussing its socio economic efforts in line with the direction of the CNSRP.

CNSRP is cited by funders as the good practice example for other partnerships to consider. It is an example of a partnership referred to as offering good learning potential.

Improving intelligence, influencing & awareness raising

From the perspective of those interested in policy the role of the Partnership has been appropriate and valued. At a time when the thrust of policy has been to encourage sustainable growth, CNSRP has helped develop an agenda for the area and articulated this to policy to others. The resulting closer alignment with policy issues at a strategic and operational level forms part of what many see as the process of creating cultural change. Here, the Partnership's contribution has been decisive.

THE NATURE OF DIVERSIFICATION

The most direct form of diversification is where a company uses existing resources to develop a new activity for either existing or new customers - **Diversification Opportunities at BNFL and in the Local Economy**", ERM, 2006

Many areas seeking to diversify their local economy do so to reduce their dependence upon a sector, a single large employer or a when they face a general decline. Diversification is therefore part of many regional growth strategies¹³. The lack of diversification is associated with the decline of traditional sectors. Typically diversification efforts focus on the need for one industry to tackle opportunities afforded by another. Diversification from agriculture to tourism is often cited as an example.

Successful diversification means a stronger business base, a regional emphasis on growth and evidence that capacity building has taken place to help re-enforce individual companies' efforts. It is also about effecting a sustained change in the way the local economy operates. The role of innovation in fostering improved competitiveness through knowledge transfer, new product and process development is seen as being critical¹⁴.

The ultimate measure of the CNSRP impact is that of its contribution to the diversification of the local economy. That said, much of the effort of the Partnership and of its individual members has been directed at improving the conditions in which local businesses and organisations operate. Developing infrastructure projects, tackling renewables in the Pentland Firth are complex and long term by their nature. Investment in learning and research is at best indirect in its effects. Ultimately it is the owners and managers of businesses that have to decide to use these resources to assist in the diversification of their companies.

¹³ See for example Comprehensive Regional Diversification Strategy – Newfoundland and Labrador

¹⁴ www.hie.co.uk/support-for-business/innovation/

7 DEPENDENCY AND DIVERSIFICATION

The core of CNSRP's purpose is to:

'support the transition of the area's economy away from its dependence on Dounreay decommissioning work'.

An overarching objective of this study was to assess whether the local economy is diversifying; to what extent it had diversified since 2005/6; and the role that the CNSRP has played in this change.

This chapter responds to this objective and assesses whether the local economy has reduced its dependency on Dounreay and diversified into new markets. The assessment is based on the evidence collated in this report and on the results of an on-line survey of a sample of contractors who had undertaken work for, or at the, Dounreay site.

DOUNREAY CONTRACTORS SURVEY

The survey was undertaken in the last two weeks of February 2012 with the assistance of Caithness Chamber of Commerce and CNSRP. A total of 18 responses were received. Based on the survey we estimate that the total turnover of the 18 companies was in the region of £70m to £100m. However, it is important to note that this estimate is tentative as it is based on ranges of turnover rather than actual turnover.

The responses to each of the questions are analysed for:

- All companies responding to the survey.
- Companies whose turnover had increased between 2006 and 2011.
- Companies whose turnover had remained unchanged.
- Companies whose turnover had fallen.

All companies

Number of years undertaking work on Dounreay related contracts

Years	Number	%
6	8	44
5	2	11
4	1	6
3	0	0
2	4	22
1	3	17
Total	18	100

- In 2011, two-thirds (12) of the businesses were working on Dounreay related contracts.
- 55% of the businesses had undertaken work on Dounreay contracts for 5 or more of the six years.
- 39% of the businesses had undertaken work on Dounreay contracts for only 2 or less of the six years.

What has been the trend in your company's turnover since 2006

Trend	Number	%
Increased	14	78
Stayed about the same	1	6
Decreased	3	17
Total	18	100

What has been the trend in the share of your turnover attributable to Dounreay contracts since 2006?

Trend	Number	%
Increased	5	28
Stayed about the same	6	33
Decreased	7	39
Total	18	100

What has been the trend in the share of your turnover attributable to Non-Dounreay contracts since 2006?

Trend	Number	%
Increased	8	44
Stayed about the same	9	50
Decreased	1	6
Total	18	100

Over three-quarters (78%) of the companies had generally experienced growth in their turnover since 2006. However, only 28% reported that the share of their turnover attributable to Dounreay had increased with 39% (close to 30% more companies) reporting a lower share of turnover attributable to Dounreay. In comparison, 44% of companies reported an increase in the share of their turnover attributable to non-Dounreay work.

Companies whose turnover increased

What has been the trend in the share of your turnover attributable to Dounreay contracts since 2006?

Trend	Number	%
Increased	5	36
Stayed about the same	4	29
Decreased	5	36
Total	14	100

What has been the trend in the share of your turnover attributable to Non-Dounreay contracts since 2006?

Trend	Number	%
Increased	7	50
Stayed about the same	7	50
Decreased	0	0
Total	14	100

A larger percentage (compared to all companies) of those companies whose turnover has increased since 2006 experienced an increase in turnover from both Dounreay and non-Dounreay related

activity. Notably, every company that reported an increase in turnover also reported either an increase or similar level of turnover from non-Dounreay activity.

Companies whose turnover stayed the same

What has been the trend in the share of your turnover attributable to Dounreay contracts since 2006?

Trend	Number	%
Increased	0	0
Stayed about the same	0	0
Decreased	1	100
Total	1	100

What has been the trend in the share of your turnover attributable to Non-Dounreay contracts since 2006?

Trend	Number	%
Increased	1	100
Stayed about the same	0	0
Decreased	0	0
Total	1	100

For the one company whose turnover had remained roughly constant since 2006, they experienced a decline in Dounreay and an increase in non-Dounreay work.

Companies whose turnover decreased

What has been the trend in the share of your turnover attributable to Dounreay contracts since 2006?

Trend	Number	%
Increased	0	0
Stayed about the same	2	67
Decreased	1	33
Total	3	100

What has been the trend in the share of your turnover attributable to Non-Dounreay contracts since 2006?

Trend	Number	%
Increased	0	0
Stayed about the same	2	67
Decreased	1	33
Total	3	100

Of those companies whose turnover had decreased, this had occurred with both Dounreay and non-Dounreay related activity.

Diversification into new markets

Over two-thirds of the companies have diversified into new markets since 2006. Twenty six responses were made across the following sectors.

New markets diversified into...

Market	Number	%
Wave & Tidal	7	27
Oil & Gas	4	15
Offshore Wind	4	15
Nuclear Decommissioning:Non-Dounreay	2	8
Onshore Wind	2	8
Biomass	2	8
Other	5	19
Total	26	100

Of those companies that **hadn't** diversified into new markets, there are no particular defining characteristics other than they featured a greater share of companies with lower (less than £1m) turnover.

Conclusions

The results of this survey generally support the view that companies in Caithness (that have undertaken work in the past/presently on Dounreay related projects) are now, compared to 2006, less dependent on Dounreay and more dependent on other markets including new markets that they have diversified into over the past few years. The new markets tend to be associated with renewable energy.

ASSESSMENT OF DEPENDENCY AND DIVERSIFICATION

The assessment is based on:

- Official published socio-economic statistics comparing the area today (or as close to today as the data allows) with the situation in 2005/6.
- Comparison of survey of DSRL staff (2011) with survey of UKAEA staff (2006).
- Review of CNSRP and Partner activities.

Socio-economic analysis

In general, the socio-economic statistics tend to become available with a lag. There have also been a number of changes in the way the data is collected and presented over the period 2005 to 2011.

Bearing these caveats in mind the key trends in the data indicate that:

1. Although Caithness has an ageing population it is still marginally younger than that for the Highlands & Islands as a whole.
2. While the Caithness population is ageing faster than that for the Highlands & Islands as a whole (probably a combination of the

reduced employment at Dounreay and the impact of the recession on migration patterns), it is ageing more slowly than Sutherland. This suggests that within the North Highlands, the Caithness economy is more robust as it is supporting a younger population profile.

3. Between 2006 and 2008, Caithness & North Sutherland (CNS) experienced growth in the total number of employees in employment, and at a faster rate than that achieved by the Highlands & Islands as a whole. Over the same period employees in employment in the rest of Sutherland (i.e. excluding North Sutherland) declined significantly (almost 6%).
4. CNS tends to have a larger manufacturing sector compared to the rest of Sutherland and the Highlands & Islands. This reflects the importance of Dounreay and the associated supply chain. While this was still the case in 2008, CNS had experienced a reduction in the size of this sector of over 11%. At the same time the 'distribution, hotels and restaurants' sector grew by over 11%-this is the sector most closely associated with visitors and tourism.
5. Overall, it seemed that CNS experienced a change in its economic structure to one that was closer to that for the Highlands & Islands as a whole. These changes could be interpreted as evidence of diversification (in part a consequence of the smaller impact of Dounreay) in local economic activity.
6. It is also significant that between 2005 and 2008 the business start-up rate for Caithness & Sutherland grew significantly from 72% to 115% of the Highland & Islands rate. This is an indicator of potential greater dynamism within the local economy.
7. Since 2008, Caithness & North Sutherland has experienced a significant (almost 12%) reduction in the number of employees in employment. This is, however, in the context of reduced staffing levels at Dounreay and the impact of the global recession.
8. Despite the reduction in the number of employees in employment, Caithness & Sutherland as a whole did not suffer from as high unemployment rates as Scotland as a whole-between January 2005 and May 2008 Caithness & Sutherland had higher unemployment rates. Since then the Scottish unemployment rate has been higher.

DSRL/UKAEA staff surveys

Based on the DSRL (2011) and UKAEA (2006) staff surveys and estimated impacts of Dounreay decommissioning a number of key findings relevant to dependency and diversification emerged:

1. The estimated impacts of Dounreay directly and taking into account the supply chain (indirect) and household spending (induced) show that, based on 2011 data (provided by DSRL), the total employment impact on the local economy was similar to that predicted in the 2006 report. The total impact in 2011 was around 75% of the impact in 2005.
2. Compared to 2006 there was, by 2011, a 21% increase in the number of DSRL staff that would stay in Caithness & Sutherland following 'closure' of the site, and a 23% increase in the number of those who would stay and work.
3. There was also a doubling in the number of those who would stay and consider setting up their own business in Caithness & Sutherland.
4. All of these indicate a greater confidence in the local area as a place to stay and work and especially to set up new businesses.

Review of CNSRP and partner activities

The review of CNSRP and its partners focussed on evaluating the progress made by CNSRP in achieving its objectives and in particular in relation to diversification of the local economy. CNSRP, acting in an enabling capacity rather than as a delivery vehicle, provides a focus for the effort of public agencies. The key to CNSRP's impact is based on its role in facilitating the partner agencies in working jointly to deliver a common 'vision' for the area. It is the individual partners who make the investment that will eventually result in more jobs and economic activity.

Our review suggests that CNSRP has successfully led a major change process in Caithness and North Sutherland. The Partnership has engaged in a demanding and developing agenda, and it has maintained the support of its stakeholders – partners, funders and local stakeholders. Progress is identifiable in a number of areas across different parts of the area:

1. Significant investment has taken place by businesses in the area at a time of low or no growth in the national economy. A good group of start up firms has emerged. The area now has a cohesive and focussed approach to the attraction of inward investment.
2. Investment in projects improving local infrastructure in tourism, renewables, oil and gas has been committed. Some projects, notably Wick Marina have shown early success in attracting additional income and activity from new markets.

3. Local institutions from North Highland College to Caithness Horizons and the Caithness Chamber of Commerce are making major new contributions.

The partners are clear that CNSRP has made good progress based on:

1. CNSRP providing the means for joint working and for scrutinising individual agencies' commitments.
2. The level of investment secured for key projects.
3. The shift away from over-dependence on Dounreay.

Consultees are unambiguous about the level of energy and commitment surrounding the Partnership's work that means people now think that it has helped foster a more positive and pro-active attitude towards tackling the area's future needs and priorities.

Prior to the Partnership little sustained collective action took place. Plenty of individual steps were taken but few with real strategic or collaborative effort. There exists now a much stronger, shared sense of opportunities and challenges and of the means of tackling these. Above all, consultees identify that some of the barriers to change have come down. There was a lack of a central resource where issues could be thrashed out, actions agreed and above all a resource to do all of this.

Overall, the review of CNSRP suggests it has influenced the nature, scale, timing and quality of projects that have been supported.

CONCLUSIONS

The **socio-economic data** shows a local economy that is diversifying into new areas, for example the increased importance of tourist related activities, and one that is supporting a 'younger' population compared to neighbouring Sutherland. There is also evidence of an improved business start-up rate and despite the impacts of the recession since 2008, Caithness & Sutherland now have a lower unemployment rate than Scotland.

The **DSRL survey** suggests first, that the supply chain impacts have reduced since 2005/6 effectively indicating an enforced reduction in dependency on Dounreay. Second, there appears to be greater confidence by the current DSRL staff in the local area as a place to stay and work and especially to set up new businesses once Dounreay is decommissioned.

The **review of CNSRP** suggests it has influenced the nature, scale, timing and quality of projects that have been supported. It has levered in substantial funding behind the delivery of its plans. Overall there is progress evident towards the desired strategic outcome of a stronger, more diversified local economy.

The **Dounreay contractors survey** generally supports the view that companies in Caithness (that have undertaken work in the past/presently on Dounreay related projects) are now, compared to 2006, less dependent on Dounreay and more dependent on other markets including new markets that they have diversified into over the past few years. The new markets tend to be associated with renewable energy.

Overall, the evidence supports the view that the local economy has to some degree reduced its dependency on Dounreay, diversified into new activities and is generally more confident about the future post-Dounreay. It is also the case that CNSRP has played a role in achieving these outcomes.

8 CONCLUSIONS

This review has provided a wide range of evidence from which we are able to draw conclusions. These are presented below.

1. It is important to note at the outset that the key to CNSRP's impact is based on its role in facilitating the partners agencies in working jointly to deliver a common 'vision' for the area. It is the individual partners who make the investments that will eventually result in more jobs and economic activity. These outcomes and impacts reflect the influence of CNSRP although it is difficult to attribute the outcome in the absence of the Partnership.
2. The analysis suggests that while the population of Caithness & North Sutherland has been declining over the decade as a whole this appears to be largely due to relatively large falls in the population of North Sutherland rather than in Caithness which showed an increase in population of 0.4% since 2005.
3. Decline in the population of the two main settlements of Wick and Thurso. There are likely to be a number of reasons but it is suggested by HIE that this is partly associated with the long-term decommissioning of Dounreay. This is likely to be the case for Thurso in particular.
4. Although Caithness has an ageing population it is marginally younger than that for the Highlands & Islands as a whole. The population of Caithness is also aging slower than that for Sutherland. This suggests that the Caithness economy is more robust as it is supporting a younger population profile and certainly over the past five years has been aging more slowly than Sutherland.
5. The structure of the Caithness & North Sutherland economy is different from the rest of Sutherland and the Highlands & Islands as a whole with a much larger share of employees in manufacturing, energy and water. This is partly attributable to Dounreay and its associated supply chain.
6. However, the area also experienced a significant reduction (-11.5% between 2006 and 2008) in the number of employees in that sector compared to positive growth in the rest of Sutherland and the Highlands & Islands as a whole.
7. Since 2008 Caithness & North Sutherland has experience an almost 12% reduction in employees in employment, in large part reflecting the economic downturn in the global economy.
8. Caithness & Sutherland has also improved its business start-up rate. In 2005 it had the lowest business start-up rate (per 1,000 of

population) in the Highlands & Islands (72% of the rate for the Highlands & Islands). By 2008 the start-up rate in Caithness & Sutherland was 115% of the H&I rate. This is a significant absolute and relative increase which HIE suggested reflected the changing structure of the Caithness & Sutherland economy.

9. In terms of the impact of Dounreay site activity there has been a reduction in the number of direct (DSRL/UKAEA) staff of almost 27%. In part this can be explained by the increasing importance of outsourcing. Based on the staff survey, 9% of DSRL staff who were working at Dounreay in 2006 were working for contractors. In comparison 14% of contractors (who were at Dounreay in 2006) had been working for UKAEA, so there is evidence that part of the reduction is explained by activities/roles previously undertaken by UKAEA now being undertaken by contractors, in part through outsourcing.
10. There has also been a reduction in expenditures by DSRL/UKAEA on their supply chain. This in turn reduces the number of supply chain jobs supported by Dounreay.
11. A comparison of actual impacts in 2010/11 compared to those predicted in 2006 for 2010 suggests that there has been some reduction in the dependence of the local economy on Dounreay.
12. While Dounreay continues to have a major economic impact on the local economy, there is also an expectation that as the decommissioning and site restoration process continues the impact will decline over time. Measuring Dounreay's impact as the share of its direct, indirect and induced employment impacts in total employment in Caithness & Sutherland, there has been a decline in the relative importance of Dounreay locally.
13. Evidence from the survey (of DSRL staff) indicates that there was almost a doubling in the number of staff who would consider setting up their own business if they no longer worked for DSRL at Dounreay. This suggests a possible increase in confidence of DSRL staff in terms of what they would consider doing in the future.
14. **CNSRP** has successfully led a major change process in Caithness and North Sutherland. There is progress evident towards the desired strategic outcome of a stronger, more diversified local economy. Much of the progress at this stage is about the move towards achieving this end. It is premature to assess the work of the Partnership and of the individual partners in terms of the impact they are having. The Partnership has engaged in a demanding and developing agenda, it has maintained the support of its stakeholders – partners, funders and local

stakeholders. Progress is identifiable in a number of areas across different parts of the area:

- Significant investment has taken place by businesses in the area at a time of low or no growth in the national economy. A good group of start up firms has emerged. The area now has a cohesive and focussed approach to the attraction of inward investment.
- Investment in projects improving local infrastructure in tourism, renewables, oil and gas has been committed. Some projects, notably Wick Marina have shown early success in attracting additional income and activity from new markets.
- Local institutions from North Highland College to Caithness Horizons and the Caithness Chamber of Commerce are making major new contributions.
- CNSRP has influenced the nature, scale, timing and quality of projects that have been supported. It has levered in substantial funding behind the delivery of its plans.

15. **Strategic Fit:** By being developed by knowledgeable and informed project partners, CNSRP was aligned to a series of national and regional strategies from the outset. It took into account the strategic agendas of UK Government especially through the NDA, the Scottish Government, HIE, THC, and gained their support accordingly. It continues to be relevant to the evolving strategies of partners.

16. **Collaborative Environment:** The Partnership built on existing and devised new working relationships to create an environment of collaboration. Feedback from various groups supports this view. Their experience in working with the Partnership to shape market, business and community relevant proposals is relatively new but it is firmly embedded. This will be an important part of the long term legacy of CNSRP.

17. **Strategic Added Value:** CNSRP's principal impact has been achieved through the strategic added value brought by its resources and by how they have been directed towards its Action Plan. This value is made up of increased co-ordination and partnership in what was a pioneering role, and improved intelligence resulting in an agreed approach to economic and social development in a key area. The Partnership has created increased confidence that investment will be in support of integrated strategic objectives. This has to be qualified by the difficulty faced in assessing progress where much effort has been placed on major projects – important as they are – in

contrast to the development of a strategic programme with clearly defined objectives for each of its elements. This does not belittle the CNSRP's work: it suggests that for the future a more strategic approach will be desirable, especially in the face of tight funding rounds.

18. The strength of working partnership that underpinned the formation of CNSRP and the growth in working relationships across the stakeholders mean that any development of partnership activity in this area needs to be taken in context. The Partnership started strongly and has continued in that vein. There is evidence to support the view that the collective working here has helped build capacity and capability.
19. CNSRP is cited by partners as a good practice example for other partnerships to consider.
20. The priorities for 2011-14 set out by CNSRP provide the basis for a more strategic and more focussed set of actions. They build on what has been achieved to date and place weight on the attraction of inward investment and on the diversification of existing businesses.
21. For the future the Partnership should develop a more outcome driven approach to performance measurement. This would help to drive more consistency and a greater appreciation of CNSRP goals and achievements. Best practice in this area recognises that while it is vital to review and understand the changes taking place, there is a need to place these in relation to wider experience.
22. National and international experience in designing and developing monitoring and evaluation systems stresses the need for a focus on a limited number of meaningful measures or indicators of change and the use of realistic comparisons based on sensible expectations.
23. For CNSRP this means following through on some areas to find out the outcomes of Action Plan activities – primarily those of others, and capturing these systematically. Partners and funders are increasingly unconcerned about supporting roles and much more concerned about securing outcomes.
24. CNSRP and its stakeholders are engaged in a process of transformation. By helping to develop a shared understanding of the future and the various means of taking this forward the Partnership has resulted in significant groundwork and strong levels of investment. This represents a meaningful contribution to the kind of diversification needed to underpin a more sustainable development of the area. It is one in which CNSRP plays a central role.

25. The results of the Dounreay Dependency Survey generally supports the view that companies in Caithness (that have undertaken work in the past/presently on Dounreay related projects) are now, compared to 2006, less dependent on Dounreay and more dependent on other markets including new markets that have diversified into over the past few years. The new markets tend to be associated with renewable energy.
26. Overall, the evidence supports the view that the local economy has to some degree reduced its dependency on Dounreay, diversified into new activities and is generally more confident about the future post-Dounreay. It is also the case that CNSRP has played a role in achieving these outcomes.