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**Regional Skills Assessments (RSAs)**

First launched in 2014, the RSA’s purpose is to provide a robust evidence base to support partners in strategic skills investment planning. They have evolved over time based on an independent review carried out in 2015 and feedback from partners.

To ensure an inclusive approach to their development, dissemination and utilisation, RSAs are produced by Skills Development Scotland (SDS) in partnership with Highlands and Islands Enterprise, Scottish Enterprise, Scottish Government, the Scottish Funding Council (SFC), the Scottish Local Authorities Economic Development Group and the South of Scotland Economic Partnership.

RSAs include the use of published data sets. Inevitably, when using published data there is a time lag but the data contained is the most up to date available at the time of writing. The section on the Supply of People in the region is an exception to this rule. Whilst 2018 estimates exist, we have used data for 2016 for consistency with the 2016 based population projections which are the latest available.

RSAs also include forecast data that has been commissioned through Oxford Economics. A number of caveats need to be applied when using forecast data. The Technical Note\(^1\) provides full detail on this but broadly it should be noted that forecasts are based on what we know now and include past and present trends projected into the future. Their value is in identifying likely directions of travel rather than predicting exact figures. The more disaggregated they become, especially at smaller geographical units, the less reliable they are likely to be. Standard occupational classifications (SOC) and standard industrial classifications (SIC) are used to define occupations and industries. ONS has useful SIC\(^2\) and SOC\(^3\) hierarchy tools that can be used to understand the classifications in more detail.

In addition, we provide analysis by Key Sector. Key Sectors are central to our Skills Investment Planning approach. Each Key Sector has a tailored Skills Investment Plan (SIP) which gives a picture of the economic and labour market situation, trends in skills and qualification supply and employers’ perspectives on the big skills issues affecting sector growth. Regional SIPs have also been developed. SIPs and RSIPs are available on the SDS website\(^4\).

This year’s RSA is in three parts:

1. This report outlining Demand for Skills, Supply of People; and Skills Mismatches;
2. An infographic detailing key data for the area; and
3. A new interactive RSA Data Matrix\(^5\) that was launched in August 2019 that provides more detailed data.

Finally, in the sections which follow, the numbers and figures in the body of the text are rounded for ease of reference and readability and therefore may differ slightly from:

- The Oxford Economics data in the RSA Data Matrix; and
- The accompanying charts in the report which are also based on the Oxford Economics data.

This RSA report is for the Islands Growth Deal which covers the Na h-Eileanan Siar, Orkney Islands and Shetland Islands local authorities.

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1. https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/regional-skills-assessments/
5. https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/regional-skills-assessments/
Introduction
Introduction

We live in a world that is complex and is constantly evolving. Scotland’s businesses and people need the skills, knowledge and capabilities, not just to cope with this change but to thrive in it and influence it.

Scotland’s Economy

The latest ‘State of the Economy’ reported that Scotland’s economy continued its recent pattern of strong performance at the start of 2019 with the unemployment rate falling to record lows and strong growth in exports and output. Output growth increased in the first quarter to 0.5 per cent but this was driven partly due to by temporary factors such as stockpiling and firms completing orders in anticipation of the original end March Brexit deadline. Short term outlooks for the economy will be dominated by Brexit uncertainty with the likelihood of subdued growth and the potential for more exposure to downturns in international demand and growth.

Labour productivity grew by 0.5 per cent in Q4 2018 and by 3.8 per cent in 2018 as a whole – its fastest pace of growth since 2010. Whilst positive, Scotland’s ranking among Organisation for Economic Co-operation and Development (OECD) countries is 16th of 37 countries, placing it in the second quartile. This ranking of 16th place has been unchanged since 2007. Scottish Government has the aspiration of improving Scotland’s productivity to match the performance of the top quartile of OECD countries.

Boosting productivity is vital for our long-term prosperity

Scotland’s People

Scotland’s population has grown and is projected to grow in future. National Records of Scotland (NRS) confirms that Scotland’s population in 2018 was 5,438,100 and is expected to grow to 5.58 million in 2026 and to 5.69 million by 2041. This estimate for growth is based on a continuation of EU migration at pre-Brexit levels which is not guaranteed.

Despite this past and projected growth, Scotland is facing an ageing demographic structure. Based on the population in 2016, just under one in five people (18 per cent) were aged 65 and over but by 2041, one in four people (25 per cent) are projected to be in this age group.

If we examine dependency ratios for Scotland’s population this shows a growing dependency ratio at Scotland level and indeed some areas – particularly some of Scotland’s rural areas – having much higher rates of dependency than the national average. At Scotland level, the dependency ratio will increase from 55 per cent in 2016 to almost 70 per cent in 2041. Put simply, for every 100 people of working age there will be 70 people dependent by 2041.

This suggests that the supply of labour might contract over the longer term if projections are realised. This points to a tighter labour market and greater competition for skilled labour in the future. Uncertainty regarding the implications of Brexit also remain, and any decisions taken on the free movement of people could exacerbate this further.

A tight labour market will result in more competition for skilled labour – Brexit could exacerbate this
Although we are seeing record levels in relation to high employment and low unemployment and relative economic prosperity since the recession, not everyone is benefitting equally in this prosperity:

- The gender pay gap for women working full-time in Scotland was 5.7 per cent in 2018\(^\text{12}\).
- The unemployment rate was 4.2 per cent for working age people in Scotland, but this increases to 9.9 per cent for 16-24 year olds and to 10.8 per cent for males aged 16-24\(^\text{13}\).
- The employment rate for people aged 16-64 was 74.5 per cent, but 57.4 per cent for people from an ethnic minority and 45.9 per cent for disabled people\(^\text{14}\).

There are disparities in regional performance across Scotland. Based on an assessment of employment growth, productivity, earnings and unemployment, recovery since the recession has been stronger in Scotland’s urban areas and weaker in rural areas.

Since the recession we have seen a rise in ‘nonstandard’ jobs (such as part time and temporary employment), low wage growth and continued ‘in work’ poverty:

- Self-employment has risen by 22 per cent, compared to one per cent for full-time employment since the recession\(^\text{15}\).
- Median weekly earnings (gross) grew by 19 per cent in the five years leading up to the financial crash in 2008. A slower rate of 11 per cent has occurred over the past five years\(^\text{16}\).
- More than half a million (550,000) people in Scotland were living in relative poverty (after housing costs) in a household where at least one adult was in paid employment\(^\text{17}\).

Both people and place are considerations when working towards a more inclusive labour market.

**Our growth needs to be inclusive**

Scotland’s Response to the Climate Emergency

In April 2019, Scotland’s First Minister declared a climate change emergency with targets being set to reduce greenhouse gas emissions to net-zero by 2045. In May 2019, Scotland’s Climate Change Secretary set out Scotland’s response to the climate change emergency including action such as:

- A change in approach to airport departure tax;
- Funding to strengthen the rail freight industry and reduce the amount of freight that travels by road; and
- A new farmer-led initiative to drive low-carbon, environmentally sustainable farming practices.

The Cabinet Secretary for Environment, Climate Change and Land Reform confirmed that Scottish Government will be “placing climate change at the heart of everything we do”\(^\text{18}\) and this is at the core of the recently published Programme for Government.

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\(^{13}\) Annual Population Survey (April 2018-March 2019)

\(^{14}\) Annual Population Survey (April 2018-March 2019), EA core disabled has been used for the employment rate of disabled people.


All parts of Government will be expected to play a role in achieving these ambitious targets and SDS is to develop a Climate Emergency Skills Action Plan, as outlined in the Programme for Government. The development of appropriate skills will have a significant part to play in enabling this transition to a low carbon economy.

Our growth needs to be sustainable

Scotland’s Resilience

The world of work is constantly changing and the rate of change is rapid. Technological and societal disruptions are occurring at an increasing pace. Whilst we cannot predict the future, we can prepare for a future that is increasingly unpredictable. SDS has developed a Skills 4.0 model that focuses on developing ‘meta-skills’ to equip people with skills in resilience to thrive in a complex and ever-changing world (see Figure 1).

We need skills for resilience to thrive in a complex and ever-changing world

https://www.skillsdevelopmentscotland.co.uk/what-we-do/skills-planning/skills4-0/
**Issues and Challenges**

A fit for purpose, skilled workforce will be essential to address the challenges facing Scotland (see Figure 2).

The development of skills that are fit for Scotland now and in the future is essential to achieving a high performing, inclusive and sustainable labour market. To meet these challenges, a step change in how we align skills provision to meet labour market demand is planned.

### Figure 2: Drivers for change

<table>
<thead>
<tr>
<th>Scotland’s Economy</th>
<th>Scotland’s People</th>
<th>Scotland’s Climate Change Emergency</th>
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<tr>
<td>Boosting productivity is vital for our long-term prosperity</td>
<td>A tight labour market</td>
<td>Our growth needs to be sustainable</td>
<td>We need skills for resilience to thrive in a complex and ever-changing world</td>
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<table>
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<tr>
<th>Scotland’s Skills Issues</th>
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<tbody>
<tr>
<td>We need innovative workplaces and skills to boost productivity with employers and employees as active participants in the skills system</td>
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<tr>
<td>We need to maximise Scotland’s indigenous talent and attract new talent to fill jobs in future. We need to enable all of Scotland’s people to share in the nation’s prosperity</td>
</tr>
<tr>
<td>We need to develop fit for purpose skills to enable Scotland to achieve its ambitious target for greenhouse gas emissions</td>
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<tr>
<td>We need to develop sector specific skills for the economy and skills for resilience – ‘meta skills’</td>
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<th>To support this we will need:</th>
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<tr>
<td>Greater flexibility and responsiveness in skills provision to better align with the needs of employers and the Scottish economy</td>
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<tr>
<td>Investment in upskilling and reskilling throughout individual’s careers to respond to a rapidly changing environment</td>
</tr>
<tr>
<td>More personalised, relevant and flexible work-based pathways</td>
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</table>

Source: Skills Development Scotland
Scotland’s Skills Alignment Ambition
Skills Alignment (one of the workstreams in the Scottish Government’s Future Skills Action Plan) is focused on improving the skills system in Scotland.

Its purpose is “to ensure that Scotland’s people and businesses are equipped with the right skills to succeed in the economy, not just now but in the future.” To achieve this end, a new joint planning process is in development to align the relevant functions of SDS and the SFC (see Figure 3).

To lead this process a Director of Skills Alignment has recently been appointed and three pilot projects have been established to test approaches in:
- Regions – Glasgow College region; and
- Sectors – Early Years and Child Care and Financial and Professional Services.

Having a robust evidence base is crucial if we are to ensure a fit for purpose skills system. SDS and partners are working to develop evidence on the key strategic issues and challenges for Scotland. This and the evidence contained in the RSAs will help inform Step 1 of this model – the Demand Assessment.

Figure 3: Five-step Skills Alignment model

1. Demand Assessment
2. Provision Planning
3. Outcome Agreements/Commissioning
4. Performance Management/Monitoring
5. Review and Evaluation

Source: Skills Development Scotland
The Islands Economy
The Islands Economy

Current Economic Performance

Gross Value Added (GVA) is a measure of the value of goods and services produced in an area and is an indicator of the economy’s health.

GVA in the Islands in 2019 was £1.8bn, one per cent of Scotland’s output (£138.8bn).

In 2019, the highest value sectors in the Islands were:
- Real Estate Activities, £0.2bn;
- Human Health and Social Work, £0.2bn;
- Transportation and Storage, £0.2bn; and
- Construction, £0.2bn.

Past Economic Performance

From 2009 to 2019 the Islands economy, measured by GVA, grew by 0.5 per cent on average each year. This was a slower rate of growth than Scotland, which over the same period experienced 1.4 per cent growth on average each year.

Future Economic Performance

GVA in the Islands is forecast to grow by 1.2 per cent on average each year from 2019 to 2029. Whilst this rate of growth would be below that of Scotland (1.7 per cent) and the UK (2.0 per cent), it would be more than double the average annual growth rate that the Islands experienced from 2009 to 2019.

Economic growth across Scotland is expected to be relatively modest in the short term, as businesses show their reluctance to invest while operating under Brexit-related uncertainties. Slower GVA growth in Scotland is largely explained by its industrial mix, and specifically, the most dynamic sectors such as high value business services and digital sectors being underrepresented in Scotland compared to the UK.

GVA growth in the Islands is expected to be driven by the dominant Real Estate sector from 2019 to 2029, the GVA produced by the sector is expected to increase by £43.3m. The GVA output from the Real Estate sector is however inflated by owner-occupier imputed rent. Imputed rent captures, economically, the value of the service homeowners are providing to themselves by owning and living in their own home.\(^{19}\)

In addition to Real Estate, sectors forecast to have the greatest increases in GVA output are:
- Human Health and Social Work, £28.1m;
- Professional, Scientific and Technical Activities, £18.7m;
- Transportation and Storage, £15.8m; and
- Construction, £15.2m.

When compared to GVA output in 2019, it can be seen that the sectors that had the greatest GVA output in 2019 are expected to have the greatest actual growth from 2019 to 2029.

Percentage change provides an alternative viewpoint for considering the future GVA contribution from sectors. This approach captures sectors that might make smaller GVA contributions but are forecast to grow at a faster rate. Information and Communication is expected to have the greatest rate of GVA growth from 2019 to 2029 in the Islands. This was a relatively small sector in 2019 (in economic terms) but it is forecast to have an average annual growth rate of 2.4 per cent. While the Administrative and Support Service Activities sector, another smaller sector in the region, is expected to have a fast rate of growth too, averaging 2.3 per cent each year up to 2029.

Fiscal policy is likely to remain tight over the forecast period and, as a result, will weigh on the economic growth prospects for the Public Sector. Public Administration and Defence Activities and are expected to contract each year from 2019 to 2029 in the Islands. The forecast average annual rate of contraction is 0.9 per cent. While, Education is forecast to remain the same. However, the Human Health and Social Work sector is forecast to have GVA growth, growing by 1.3 per cent per year over the forecast period (see Figure 4). This will be as a result of increased demand for these services due to changes in the Islands’ population structure.

Figure 4
Forecast average annual GVA change by Industry (%) (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
The key sectors contributing most to GVA growth in the Islands from 2019 to 2029 are expected to be Health and Social Care, Energy and Construction (see Figure 5). These sectors are expected to have a higher overall contribution to growth as they have a relatively large presence in the regional economy already.

**Figure 5**
Forecast absolute GVA growth by Key Sector (£m) (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
Looking instead at percentage change for the key sectors for 2019 to 2029, Child-Day Care Activities is forecast to be the fastest growing. It is forecast to grow 3.9 per cent each year on average. This strong outlook reflects the Scottish Government’s childcare policy to double the number of hours of funded childcare by 2020. However, its small size in absolute terms means that its impact on overall growth is limited.

Relatively fast growth is also forecast in the Digital, Financial and Business Services and Life Sciences sectors. However, like Child-Day Care Activities their overall contribution will be lower due to their smaller size relative to the currently much larger, dominant key sectors in the region (see Figure 6).
Productivity

Productivity is the measure of goods and services produced per unit of labour input. Productivity has been calculated by dividing total GVA by total employment (measured by jobs).

The productivity of a region is influenced by the industrial mix that is present. Within the same industries productivity may differ from business to business.

Office for National Statistics (ONS) analysis tells us that:

GVA per worker [productivity] is generally lower in the accommodation and food service activities, administrative and support services activities, and wholesale and retail trade industries than in most other industries. The production sector, by contrast, has relatively high productivity.

Among the service sectors, the professional, scientific and technical activities, financial and insurance activities, and the information and communication sector also tend to have relatively high-productivity. Therefore, a relatively high aggregate productivity in a region may sometimes be a reflection of a relatively large share of more productive industries in that location.

In 2019, productivity in the Islands was £43,300. This was lower than the Scottish average of £50,400 (see Figure 7).

From 2009 to 2019, productivity in the Islands grew by 0.9 per cent on average each year. This rate of growth was slower than what occurred across Scotland. Average annual productivity growth across Scotland was 1.3 per cent over the period. The equivalent for the UK was 0.8 per cent.

Productivity in the Islands is forecast to grow at an average of 1.2 per cent per year from 2019 to 2029. This is below the growth rate expected for Scotland as a whole (1.4 per cent), and below that of the UK (1.5 per cent).

Figure 7
Productivity (2019)

Source: Oxford Economics

ONS (2019) Understanding spatial labour productivity in the UK
Employment in the Islands
Employment in the Islands

Current Employment

Total employment in the Islands (measured by jobs) was estimated to be 41,200 in 2019, one per cent of Scottish employment.

The employment rate for the working age population (aged 16-64) in the region was 84.5 per cent, which was above the rate for Scotland (74.5 per cent). Compared to Scotland, the region had above average employment rates for:

- Young people (aged 16-24), 70.9 per cent compared to 58.3 per cent;
- Males, 87.5 per cent compared to 78.1 per cent;
- Females, 81.4 per cent compared to 71.1 per cent;
- Disabled people, 68.5 per cent compared to 45.9 per cent;

The employment rate for ethnic minorities across Scotland was 57.4 per cent. The employment rate for ethnic minorities in the Islands is not available due to too small a sample size.

The region’s overall employment rate means that less than two in ten of the region’s working age population were unemployed (1.2 per cent) or economically inactive (14.5 per cent). Inactivity includes people who are studying, retired or looking after their family or home.

Across Scotland and within the region full-time jobs were most numerous, 25,400 jobs (62 per cent) were full-time in the Islands in 2019. This was a lower percentage share compared to Scotland where 68 per cent of jobs were full-time. Within the region more than two thirds of full-time jobs (17,100, 67 per cent) were held by males, and the remaining one third (8,300; 33 per cent) of full-time jobs were held by females.

Part-time jobs accounted for a greater percentage share of employment in the Islands compared to Scotland, 38 per cent compared to 32 per cent. Overall there were 15,800 part-time jobs in the Islands, females accounted for more than three quarters (12,400; 78 per cent). Whilst males accounted for 22 per cent, 3,400 jobs (see Figure 8).

Figure 8
Employment by gender and full-time/part-time (2019), Islands Growth Deal area

Source: Oxford Economics

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21 Equalities Act (EA) Core Disabled
22 Employment rate figures from Annual Population Survey, April 2018 – March 2019
23 Employment rate, unemployment rate and economic inactivity rate may not sum to 100 due to rounding.
In the Islands, the largest employing sectors, and their share of employment, in 2019 were (see Figure 9):

- Human Health and Social Work, 16 per cent;
- Wholesale and Retail Trade, 11 per cent;
- Construction, ten per cent;
- Agriculture, Forestry and Fishing, nine per cent; and,
- Education, nine per cent.

Real Estate Activities, the sector that made the greatest GVA contribution in 2019 (irrespective of the imputed rent consideration) accounted for a small share of regional employment. The sector accounted for 400 jobs, a one per cent share.
Large sectors are an important source of jobs, however regions also have sectoral strengths that make them unique. It means that smaller sectors can be more important than their size suggests as they are more concentrated in the region compared to the national average. In the Islands, Agriculture, Forestry and Fishing was the greatest specialism with the percentage of employment in this sector almost five times greater than the Scottish average. Other sectors that had above average concentrations in the Islands were Transportation and Storage (1.7 times more concentrated), Construction (1.5 times more concentrated) and Public administration and defence (1.3 times more concentrated).

Of the key sectors, Health and Social Care, as might be expected given the sectoral insight above, was the largest in the Islands in 2019. The sector accounted for 6,400 jobs. Food and Drink was the second largest with a total of 4,700 jobs (see Figure 10).

**Figure 10**
Employment by Key Sector and share of total employment (2019), Islands Growth Deal area

- Health and social care: 6,400, 16%
- Food and drink: 4,700, 11%
- Construction: 4,500, 11%
- Tourism: 3,400, 8%
- Engineering: 1,600, 4%
- Creative industries: 1,300, 3%
- Financial and business services: 1,200, 3%
- Energy: 600, 1%
- Digital: 500, 1%
- Child-day care activities: 400, 1%
- Life sciences: 300, 1%
- Chemical sciences: 0, 0%

Source: Oxford Economics
Sectors tell us about the industries that people work in, and occupations provide insight on the type of jobs people do. In 2019, more than one-third of all occupations (36 per cent) in the Islands were ‘higher level’, 37 per cent were ‘mid-level’ and 27 per cent were ‘lower level’. Compared to Scotland, the occupational structure of the Islands had a greater percentage of the workforce in ‘mid-level’ occupations and fewer elsewhere. Scotland had a greater percentage in ‘higher level’ (45 per cent) and ‘lower-level’ (30 per cent) occupations but fewer in ‘mid-level’ (25 per cent) occupations.

A detailed look at the occupational structure shows that the largest occupations in the Islands in 2019 were (see Figure 11):
- Administrative Occupations, ten per cent;
- Clerical and Services Elementary Occupations, nine per cent; and
- Caring Personal Service Occupations, eight per cent.

**Figure 11**
Employment by occupation and share of total employment (2019), Islands Growth Deal area

Source: Oxford Economics
Past Employment

Employment in the Islands decreased by 3.8 per cent from 2009 to 2019. This was largely caused by contraction in prominent, large employing sectors including:

- Human Health and Social Work, -1,700 jobs;
- Public Administration and Defence, -700 jobs;
- Wholesale and Retail Trade, -600 jobs.

Whilst these sectors experienced job losses, other sectors grew. The greatest absolute growth occurred in the Administrative and Support Service sector in the Islands. Compared to 2009, there were 700 more jobs in the sector in 2019. Growth also occurred in Construction (500 jobs) and Agriculture, Forestry and Fishing (400 jobs).

Beyond the sectors, other shifts in the region’s labour market have occurred. Both full-time and part-time employment decreased by 500 jobs and 1,100 jobs from 2009 to 2019 respectively. Male and female employment also declined by 1,300 jobs and 400 jobs respectively.

Employment Forecast

The employment decline that has occurred in the Islands in the past is not forecast to continue. From 2019 to 2029, employment is forecast to stay the same. Whilst, a three per cent increase in employment, or 0.3 per cent growth annually, over the forecast period is expected for Scotland. The growth rate for the UK is greater still, a five per cent increase, or 0.5 per cent annual change, is forecast.

The employment forecast for the local authorities within the Islands shows a variable outlook. Shetland Islands is forecast to have a net increase in the number of jobs, with an annual average increase of 0.1 per cent. Employment decline is forecast in Na h-Eileanan Siar (-0.1 per cent per year), while employment is not forecast to change in the Orkney Islands from 2019 to 2029.

Over the period to 2029, full-time employment is expected to increase in the Islands with 300 more full-time jobs in 2029 compared to 2019. This is expected to be driven by growth in male full-time employment (300 jobs) whilst female full-time employment will stay the same. Part-time employment is expected to decline by 300 jobs. Female part-time employment is forecast to decline by 700 jobs, but some of this decline is expected to be offset by growth in male part-time employment (400 jobs) (see Figure 12).

Figure 12

Forecast employment change, by gender and full-time/part-time (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
Although employment is not forecast to change in the Islands from 2019 to 2029, sectors will have varying performance. The greatest growth in jobs is forecast in Construction, with 300 more jobs expected in the sector by 2029 compared to 2019. Other sectors forecast to have growth over the forecast period are Administration and Support Services (200 jobs) and Professional, Scientific and Technical Activities (200 jobs).

Manufacturing is the sector forecast to have the second highest number of job losses from 2019 to 2029. During the forecast period a decline of 300 jobs is anticipated. This reflects the general trend of more capital intensive and higher value-added activity in the sector, which requires less labour-intensive methods.

Job losses in the Islands are also forecast in some sectors, notably in production sectors and the public sector. In the public services sector\(^\text{24}\), the Public Administration and Defence sector is forecast to have the greatest number of job losses from 2019 to 2029. It is forecast to contract by 400 jobs over the forecast period due to continued pressure on public finances. The Education sector is also expected to contract but by a lesser amount, -100 jobs. Human Health and Social Care is the only part of the public sector expected to grow, the sector is forecast to have 100 more jobs in 2029 compared to 2019 (see \textbf{Figure 13}).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure13.png}
\caption{Forecast employment change by Industry (2019 - 2029), Islands Growth Deal area}
\end{figure}

\begin{center}
\textbf{Figure 13}
\end{center}

\begin{itemize}
\item Construction: +300 jobs
\item Administrative and support service activities: +200 jobs
\item Professional, scientific and technical activities: +200 jobs
\item Arts, entertainment and recreation: +100 jobs
\item Human health and social work: +100 jobs
\item Accommodation and food service activities: +100 jobs
\item Other service activities: +100 jobs
\item Information and communication: +100 jobs
\item Real estate activities: +100 jobs
\item Financial and insurance activities: +100 jobs
\item Electricity, gas and steam: +100 jobs
\item Water supply, sewerage and waste management: +100 jobs
\item Transportation and storage: +100 jobs
\item Agriculture, forestry and fishing: +100 jobs
\item Wholesale and retail trade: +100 jobs
\item Education: +100 jobs
\item Mining and quarrying: +100 jobs
\item Manufacturing: +100 jobs
\item Public administration and defence: +100 jobs
\item Manufacturing: -300 jobs
\item Education: -100 jobs
\item Public administration and defence: -400 jobs
\end{itemize}

\textbf{Source: Oxford Economics}

\textsuperscript{24} Comprising Public administration and defence, Education, and Human health and social work.
The growth and contraction of employment by sector means that private services\textsuperscript{25} are expected to account for a larger share of jobs in the Islands over the forecast period. The percentage is forecast to rise from 42 per cent in 2019 to 44 per cent in 2029. In 2019 the Construction sector accounted for ten per cent of employment and this share is expected to be maintained in 2029. The share that the public services, primary industries and Manufacturing sectors each account for is expected to decline by one percentage point over the forecast period to 31 per cent, ten per cent and four per cent in 2029 respectively.

Looking ahead, the outlook for the key sectors largely echoes the broad sector trends summarised above – with Construction forecast to have the greatest growth (300 jobs). Tourism is forecast to have growth second only to Construction, growing by 200 jobs from 2019 to 2029 in the Islands. A number of other key sectors will experience growth over the forecast period, including:

- Child-Day Care Activities, 100 jobs;
- Health and Social Care, 100 jobs; and
- Financial and Business Services, 100 jobs.

Food and Drink, and Energy are the key sector forecast to have the greatest employment decline in the Islands, both are expected to have 100 fewer jobs in 2029 compared to 2019 (see Figure 14).

\textsuperscript{25} N.B. ‘private services’ comprise the following sectors: wholesale and retail trade; transportation and storage; accommodation and food services; information and communication; financial and insurance activities; real estate activities; prof. , scientific and technical activities; administrative and support services; arts, entertainment and recreation, and other service activities.

\textbf{Figure 14}

Forecast employment change by Key Sector (2019 - 2029), Islands Growth Deal area

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure14.png}
\caption{Forecast employment change by Key Sector (2019 - 2029), Islands Growth Deal area}
\end{figure}

Source: Oxford Economics
By occupation, employment is expected to grow in five occupations in the Islands from 2019 to 2029. These are:

- Skilled Construction and Building Trades, 100 workers;
- Caring Personal Services, 100 workers;
- Managers/Proprietors in Agriculture and Services, 100 workers;
- Business and Public Service Professionals, 100 workers; and
- Corporate Managers, 100 workers.

Growth in these occupations is closely related to the forecast rise in employment by sector.

Occupations likely to contract over the next decade tend to be those most closely associated with Public Administration and Defence, Education and Manufacturing, reflecting the declining numbers of jobs in each of these sectors. Examples include Administrative Occupations (-100 people), Teaching and Research Professionals (-100 people), Skilled Metal and Electrical Trades (-100 people) and Protective Service Occupations (-100 people) (see Figure 15).

Figure 15
Forecast employment change by occupation (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
Total Labour Market Requirement in the Islands
In the previous sections we presented what has happened, is happening and what is forecast to happen in the Islands economy and labour market. When looking at the labour market, we have until this section focused on how many jobs there will be in any given year and how that compares to another year. However, the labour market is more complex than this.

In this section, we provide greater insight on job openings. To do this we consider the jobs that will be created or lost due to expansion or contraction in the labour market and the jobs that will arise due to people leaving the labour market. People leave the labour market and jobs become vacant for a variety of reasons, retirement being the most common cause. This is called the replacement requirement.

In the Islands, 11,500 job openings are forecast from 2019 to 2029. These will arise almost completely due to the replacement requirement, which will create 11,600 openings. As shown in the previous chapter the number of jobs in the Islands is forecast to stay the same from 2019 to 2029 due to no jobs growth.

These opportunities are expected to be concentrated in a small number of sectors, with five sectors in the Islands forecast to account for more than two thirds (67 per cent) of the requirement. These are (see Figure 16):

- Agriculture, Forestry and Fishing, 2,500 jobs;
- Wholesale and Retail Trade, 1,700 jobs;
- Transportation and Storage, 1,400 jobs;
- Accommodation and Food Services, 1,100 jobs; and
- Construction 1,100 jobs.

These sectors were the largest in the region in 2019 except for Transportation and Storage and Accommodation and Food Services. Transportation and Storage sector was however a clear specialism within the region accounting for almost two times the number of jobs compared to Scottish average.

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26 Job openings can be full or part time and the job openings forecast could be higher or lower in reality. Please note that throughout this section totals may not equal the sum of constituent parts due to rounding.

27 Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.
Figure 16
Forecast net requirement by Industry (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
To fill these jobs, and others, there is a forecast requirement for 9,100 people in the Islands from 2019 to 2029. The difference between the people and job requirements is due to some people having more than one job, for example someone who has two part-time jobs. Although the number of jobs is forecast to stay the same in the Islands over the forecast period, the number of people working is expected to decline by 100. The replacement requirement of 9,100 people however creates a need for labour.

By occupation, the greatest number of people are forecast to be required in (see Figure 17):
- Clerical and Service Elementary Occupations, 1,500 people;
- Sales Occupations, 1,200 people;
- Teaching and Research Professions, 1,000 people;
- Trades, Plant and Storage Elementary Occupations, 900 people; and
- Science and Technology Associate Professionals, 500 people.

Figures are rounded to the nearest 100 and as a result totals may not equal the sum of the constituent parts.

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**Figure 17**

Forecast net requirement by occupation (2019 - 2029), Islands Growth Deal area

Source: Oxford Economics
Supply of People in the Islands
Supply of People in the Islands
Projection of Total Population

NRS produce population estimates for Scotland biennially. Their 2016 based forecasts cover the period up to 2041, so in this chapter we present a longer forecast period than the previous chapters.

In 2016, the population of the Islands was 72,000, one per cent of Scotland’s population.

By age, the largest group in the Islands were people of working age (16-64 years). There were 43,900 people in this age group, 61 per cent of the region’s population. Whilst it was the largest group, people of working age across Scotland accounted for a larger share of the population overall (65 per cent).

The number of people of working age compared to those of non-working age has implications for the Growth Deal region’s dependency ratio. The dependency ratio is important when considering the demand for public services, for example schools and healthcare services, and the funds available to provide these services, the income from taxes and National Insurance. In 2016, the dependency ratio in the Islands was 64 per cent. This means that for every 100 people of working age, there were 64 people of non-working age. Across Scotland it was 55 per cent.

Of those who were in age groups thought to be dependent, the oldest age group was the largest. There were 16,000 people aged 65 or older who accounted for 22 per cent of the region’s population. Across Scotland those aged 65 or older accounted for 18 per cent of the population, which suggests an overall older population in the Islands. The region accounts for two per cent of Scotland’s population aged 65 or over compared to one per cent for all ages.

Children and young people (0-15 years) accounted for the remaining 17 per cent, there were 12,100 individuals in this age group (see Figure 18).

Brexit has placed an increased focus on the nationality of people living and working in the UK. It has the potential to discourage EU migrants from coming to the UK to live and work, either through choice or eligibility. Migration is important to Scotland as without it the population would be declining. In the Islands, there

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Figure 18
Population by age (2016), Islands Growth Deal area and Scotland

![Population by age chart]

Source: National Records of Scotland
There were 1,000 people who were born in the EU and fewer than 1,000 people who were from the rest of the world. The EU born population accounted for one per cent of the region’s population and the region’s population who were born elsewhere in the world accounted for less than one per cent. The percentage of the region’s population born in the EU or rest of the world was lower than the Scottish average. Across Scotland four per cent of the population were born in the EU, and four per cent were born in other countries outside of the EU.

From 2016 to 2041, the population of the Islands is projected to decline by approximately 4,800 people. Equating to a seven per cent decrease, this contrasts with the national projected growth rate of five per cent over the same period.

The age structure of the region’s population is projected to change over the coming decades, with the percentage of the population who are of working age expected to fall from 61 per cent in 2016 to 53 per cent in 2041; a projected decrease of 8,000 people. The largest increases are expected in the 65 or older age groups, with a 71 per cent increase projected for those aged 75+ (an additional 5,000 people) whilst the population aged 65-74 is expected to stay the same. There is a forecast decline in all other age groups over the period, with the most substantial decline of 21 per cent projected for those aged 16-29, a projected fall of 2,200 people.

These shifts suggest that the region could have a smaller and generally older population by 2041. This has implications for the region’s dependency ratio. Brexit may also affect the population structure and exacerbate any challenges. By 2041, the region’s dependency ratio is expected to increase to 87 per cent. Ranging across the region from 79 per cent in the Shetland Islands to 95 per cent in Na h-Eileanan Siar (the second highest (joint) of all local authorities). Across Scotland the dependency ratio is expected to rise to 70 per cent (see Figure 19).

### Figure 19
**Dependency ratio (2016 and 2041)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>55%</td>
<td>70%</td>
</tr>
<tr>
<td>Falkirk and Grangemouth Investment Zone</td>
<td>56%</td>
<td>74%</td>
</tr>
<tr>
<td>Moray Growth Deal</td>
<td>61%</td>
<td>80%</td>
</tr>
<tr>
<td>Islands Growth Deal</td>
<td>64%</td>
<td>87%</td>
</tr>
<tr>
<td>Argyll Rural Growth Deal</td>
<td>66%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Source: National Records of Scotland
Skills Shortages, Gaps and Challenges in the Islands
Skills Shortages, Gaps and Challenges in the Islands

The Employer Skills Survey (ESS) gathered information on the skills challenges that employers encountered when recruiting, and any challenges that they had within their existing workforces. It is the primary source for this insight as it has taken a consistent approach across sectors and regions. The survey covered:

- Recruitment and skill-shortage vacancies;
- Skills gaps in the existing workforce;
- Skills under-utilisation;
- Upskilling - the need for staff to acquire new skills or knowledge;
- Training and workforce development; and
- High Performance Working practices.

The insight presented here is from the 2017 ESS which covered Scotland, England, Wales and Northern Ireland. The next ESS will be published in 2020 and unlike previous years, Scotland’s results will be published by the Scottish Government. Future ESS results for England, Wales and Northern Ireland will still be available and will be published by the UK Government.

As data is published for Regional Outcome Agreement (ROA) regions within the ESS, for this Growth Deal report data for Highlands and Islands ROA is provided.

Skills Shortages

Skills shortages are challenges that arise when employers are recruiting but are unable to find applicants with the required skills. When a vacancy cannot be filled due to a shortage of skills it is a skill-shortage vacancy (SSV). SSVs impact on the workplace and workforce in a number of ways, including:

- Increasing the workload for other staff;
- Creating difficulties when trying to meet customer service objectives; and
- Increasing operating costs.

In 2018, skills shortages were estimated to have cost Scottish employers £361.3 million, roughly £17,000 per organisation.

To understand the scale of the challenge that they present we can consider their incidence (how many employers are experiencing the challenge) and their density (how many vacancies are affected).

In 2017, the number of employers reporting at least one SSV in the Highlands and Islands was seven per cent, compared to six per cent for Scotland. This suggests a challenge that extends further across the region’s labour market compared to Scotland’s. The incidence of SSVs in the region was lower in 2015 (five per cent), whereas across Scotland the incidence of SSVs has remained the same (six per cent) from 2015 to 2017.

Density, which indicates how many vacancies were SSVs, was higher in the Highlands and Islands than Scotland in 2017 and 2015. In 2017, density in the region was 25 per cent, down from 26 per cent in 2015. Across Scotland, density was 24 per cent in 2015 and 2017. This suggests that employers in the region are facing difficulties across a number of roles, with greater challenges than employers across Scotland (see Figure 20).

Across Scotland, to overcome SSVs, the most common responses employers took were to:
• Increase their expenditure on advertising and recruitment;
• Use new recruitment methods; and
• Redefine existing jobs.

Skills are not the only reason employers can find it difficult to fill vacancies. Other factors like hours and location, particularly so in a rural region like the Highlands and Islands, can make it hard to fill vacancies. In the Highlands and Islands, 43 per cent of employers tried to recruit non-UK nationals to overcome hard to fill vacancies, compared to 41 per cent across Scotland. Of these employers and compared to employers across Scotland, a greater percentage in the Highlands and Islands sought to recruit EU nationals as a response to recruitment challenges (92 per cent, compared to 89 per cent).

Changes to migration policy as a result of Brexit will affect all regions in Scotland, but the evidence suggests that the Highlands and Islands may be more adversely affected if the changes affect supply.

Most employers took action to overcome SSVs, however 11 per cent of Scottish employers in 2017 took no action.
Skills Gaps
Skills gaps arise when existing employees are not fully proficient as they do not have all the skills necessary for their role – these can be people, personal, practical and/or technical skills. Similar to skills shortages, we consider the incidence (how many employers have at least one person not fully proficient) and density (how many employees are not fully proficient). Skills gaps have similar impacts to SSVs and can slow down innovation in the workplace. Across Scotland, the most common causes of skills gaps were:
• Employees being new to their role, or training being incomplete;
• A lack of staff motivation; and
• An inability to recruit staff with the required skills, creating a need to upskill employees/recruits.

In 2017, the number of employers who reported a skills gap in at least one employee was 13 per cent in the Highlands and Islands, compared to 16 per cent for Scotland. Of the 13 regions, the Highlands and Islands had one of the lowest incidences of skills gaps. Since 2015, the incidence of skills gaps in the region has decreased. In 2015, 14 per cent of employers experienced a skills gaps – greater than the percentage across Scotland (13 per cent).

Overall, 6.1 per cent of the workforce in the Highlands and Islands had a skills gap in 2017. This was an increase from 5.1 per cent in 2015. This was above the Scottish rate of 5.0 per cent in 2017, which increased from 4.9 per cent in 2015. This, alongside the insight on incidence, suggests that whilst skills gaps are not as far reaching in the Highlands and Islands, there are employers that have a greater concentration of skills gaps in their workforce (see Figure 21).

Across Scotland employers responded to skills gaps by:
• Increasing their expenditure on training, expanding trainee programmes and/or increasing training activity;
• Implementing more staff supervision; and
• Implementing a mentoring or buddy scheme.

Figure 21
Skills Gaps (2015 and 2017), Highlands and Islands

Source: Employer Skills Survey
Most employers in the Highlands and Islands acted to overcome skills gaps, and 11 per cent sought to recruit non-UK nationals as a response, compared to 15 per cent across Scotland. Across Scotland, most employers (93 per cent) who sought to recruit non-UK nationals considered EU nationals equivalent data for the Highlands and Islands is not available.

Most employers took action to overcome SSVs, however 15 per cent of Scottish employers took no action in 2017.

**Skills Under-Utilisation**
Employees are under-utilised if they have skills and qualifications more advanced than what is needed for their role. Addressing skills under-utilisation is important. In 2012 the economic cost to the UK of skills under-utilisation was estimated to be between £12-25bn. If skills-utilisation was on a par with the levels observed in Germany or France, UK GDP would be £5-9bn higher\(^\text{30}\). There are implications for individuals too, having their skills under-utilised can impact on their income, health and wellbeing\(^\text{31}\).

Similar to SSVs and skills gaps we can understand the incidence (how many employers have under-utilised employees) and density of the challenge (how many employees are under-utilised).

The number of employers reporting skills under-utilisation in their workforce was lower in the Highlands and Islands in 2017 compared to Scotland, 34 per cent and 35 per cent respectively. Whilst lower, this still suggests that more than one third of employers in the region had skills and talent going unused. The percentage of employers reporting skills mismatch has risen and skills under-utilisation increased in the region and across Scotland from 2015 to 2017, from 29 per cent and 32 per cent respectively.

The proportion of staff under-utilised has declined in the region, from 9.8 per cent in 2015 to 9.3 per cent in 2017. This suggests that whilst more employers in the region are experiencing skills under-utilisation, in general the number of their employees under-utilised has declined. Across Scotland, the percentage of staff under-utilised increased from 7.9 per cent to 9.2 per cent which suggests a skills challenge that is growing (see Figure 22).

### Figure 22
**Skills Under-Utilisation (2015 and 2017), Highlands and Islands**

<table>
<thead>
<tr>
<th>Percentage of employers reporting Skills Under-Utilisation</th>
<th>Percentage of the workforce Under-Utilised</th>
</tr>
</thead>
<tbody>
<tr>
<td>29%</td>
<td>9.8%</td>
</tr>
<tr>
<td>34%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Source: Employer Skills Survey


Upskilling

Skills are gained throughout life, and a need to upskill can arise due to:
- New legislative or regulatory requirements;
- The introduction of new technologies, equipment or working practices;
- Increased competitive pressure;
- The development of new products and services; and more recently
- The UK’s decision to leave the EU.

A need to upskill employees in the next 12 months was anticipated by 70 per cent of employers in the Highlands and Islands (as of 2017). This was higher, but close, to the percentage of employers across Scotland who anticipated a need to upskill (69 per cent). Within the region, operational and digital skills were the most commonly mentioned development area. Almost half of the employers who identified development needs mentioned these (both 49 per cent). The need to upskill operational skills was lower in the region compared to Scotland (57 per cent), whilst the expected need to upskill digital skills was the same (49 per cent). Fewer employers in the region expected a need to upskill the complex analytical skills of their employees (39 per cent) compared to Scotland (44 per cent) (see Figure 23). The evidence suggests that whilst more employers in the Highlands and Islands expect to upskill their workforce in the next twelve months, the upskilling requirement typically covered fewer skills.

Figure 23

Employers anticipating a need to upskill by type of skill (2017), Highlands and Islands and Scotland

<table>
<thead>
<tr>
<th>Skill Type</th>
<th>Highlands and Islands</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex analytical skills</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Operational skills</td>
<td>49%</td>
<td>57%</td>
</tr>
<tr>
<td>Digital skills</td>
<td>49%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Source: Employer Skills Survey
Conclusion
Conclusion

In 2019 the Islands made a GVA contribution to the Scottish economy of £1.8bn, one per cent of Scotland’s output (£138.8bn). Looking ahead, the economy is forecast to grow by 1.2 per cent on average each year up to 2029. Whilst this would be slower growth than what is forecast across Scotland, it would be more than double the average annual growth rate that the Islands experienced from 2009 to 2019. The forecast however reflects a point in time and the high levels of economic uncertainty could change the outlook.

Total employment in the Islands (measured by jobs) was estimated to be 41,200 in 2019, one per cent of Scottish employment. Employment in the region declined from 2009 to 2019, and the forecast suggests that employment will stay the same in the future from 2019 to 2029. Although employment is not forecast to change, sectors will have varying performance. The greatest growth in jobs is forecast in three sectors:

- Construction, 300 jobs;
- Administration and Support Services, 200 jobs; and
- Professional, Scientific and Technical Activities, 200 jobs.

Whilst both were one per cent, the region’s share of Scotland’s GVA was marginally lower in 2019 than its share of employment. As a result, productivity performance was slightly below average. Productivity was £43,300 in the Islands compared to £50,400 across Scotland.

Whilst employment is forecast to stay the same from 2019 to 2029, the need to replace workers leaving the labour market will create 11,600 opportunities.

To fill these jobs, and others, there is a forecast requirement for 9,100 people in the region from 2019 to 2029. The difference between the people and job requirements is due to some people having more than one job, for example someone who has two part-time jobs.

By occupation, the greatest number of people are forecast to be required in:

- Clerical and Service Elementary Occupations, 1,500 people;
- Sales Occupations, 1,200 people;
- Teaching and Research Professions, 1,000 people;
- Trades, Plant and Storage Elementary Occupations, 900 people; and
- Science and Technology Associate Professionals, 500 people.

Whilst there will be demand for people to fill jobs, the population projection suggests that the Islands could have a smaller and generally older population by 2041. This presents a number of challenges:

- Skills challenges could be exacerbated by a deficit of talent, created due to the growth of people reaching retirement age and the decline of the working age population;
- Pressures on public finances and services could increase due to a growing dependency ratio, the region’s dependency ratio is expected to reach 87 per cent by 2041, up from 64 per cent in 2016; and
- Migration has been a driver of population growth across Scotland and an important source of skilled labour. With de-population forecast in the region and one per cent of the region’s population born outside of the UK, changes to migration policy arising from Brexit could adversely affect future migration to the region and also impact on those who have already settled.

To address the current and future challenges in the labour market, and to make the most of the region’s strengths SDS is working in partnership with others on a range of actions.

There is a strong collaborative partnership developing between Scotland’s three Islands Councils – Shetland, Orkney and Na h-Eilean Siar. In 2014 they launched
Our Islands Our Future\textsuperscript{32}, their vision for a stronger future following the Independence Referendum. The vision seeks additional powers and resources to give a greater ability to shape the destinies of Orkney, Shetland and the Western Isles.

As a result of Our Islands Our Future, The Islands (Scotland) Act 2018 was granted Royal Assent in July 2018, and the first set of provisions came into force on 4 October 2018\textsuperscript{33}. The Act introduces a number of measures to underpin the Scottish Government’s key objective of ensuring that there is a sustained focus across Government and the public sector to meet the needs of island communities now and in the future.

Two important provisions within the Act are the development of a National Islands Plan and a duty for certain authorities to have regard to island communities in carrying out their functions.

The National Islands Plan will be a document that will include both what works well, and what the challenges faced by islands and their communities are. Moving ahead, the Plan will set out future strategies and objectives that will allow Scottish Ministers and relevant authorities to improve outcomes for island communities.

The Islands Growth Deal will unlock investment and drive inclusive growth across Orkney, Shetland and Na h-Eileanan Siar. The deal will form the basis of the next phase of the islands’ collaboration which will build on the successful Our Islands Our Future campaign they commenced in 2013. The island councils are currently working with partners to revise proposals and which are expected to be submitted for discussion and scrutiny to the Scottish and UK Governments shortly.

The RSA for the Islands highlights the current challenges and opportunities of the regional economy. Informed by the RSA, the Islands Growth Deal is anticipated to go some way to address these, working collaboratively to address the labour market challenges and contribute towards transformational change.

Contact Us: If you have any feedback or comments on this report, please email rsa@sds.co.uk

\textsuperscript{32} \url{https://www.cne-siar.gov.uk/your-council/our-islands-our-future/}