

PART II

Chapter 5

## Tourism and environment

*Tourism is one of Iceland's fastest growing sectors. Millions of international tourists have visited the country in recent years, many of them drawn by its unique but highly sensitive natural environment. After an overview of the key trends and features of tourism in Iceland, this chapter describes the environmental impact of tourism, including on landscape, flora and fauna. It reviews the institutions and the policy responses put in place to ensure that tourism promotion adequately takes account of environmental concerns. These include financing environment-related infrastructure, promoting green innovation and strengthening the quality of tourism operators.*

## Assessment and recommendations

Tourism is one of Iceland's fastest growing sectors. It is largely based on the country's unique combination of environmental assets (e.g. areas of pristine wilderness, natural hot springs, geothermal activity, lava fields, glaciers, northern lights). The number of visitors more than doubled over 2000-12 to reach 673 000. Some estimates suggest that over 1 million international tourists could visit Iceland each year by 2020, significantly more than the population of about 320 000.

After the financial crisis, the government recognised tourism's potential to contribute to a more diverse pattern of economic development. In 2010, tourism's contribution to GDP reached 6%, higher than the OECD average of 4.7%. In 2011, the sector employed 6.5% of the labour force. Its share of export revenue exceeded that of fisheries in 2013. The projected increase in tourism, as well as improvement of the relatively low value added of tourism products and services, should result in tourism accounting for a greater share of Iceland's economic activity.

Increased international arrivals and high seasonality place growing pressure on fragile ecosystems and on local ways of life and traditions. There is continuous pressure to locate large tourism developments in pristine areas. Receiving increased numbers of tourists also requires the construction of additional accommodation, as well as transport and environmental infrastructure. This intensifies a range of impacts, notably soil erosion, and damage to vegetation and biodiversity. Successive governments have recognised that unless adequate account is taken of such environmental impacts, the sustainability of tourism will be undermined. The continued rapid expansion of the sector makes this challenge all the more urgent.

Tourism strategies were developed for 2006-15 and 2011-20. While they considered environmental issues, they tended to be declarative rather than providing a framework for action. The 2011 parliamentary report on the strengthening of the green economy called for actions to stimulate an environmentally sustainable tourism industry. The report could provide a framework for co-ordinating tourism-related strategies and plans into a comprehensive action plan.

Development of such a plan should be accompanied by a simplified and better co-ordinated institutional framework for promoting environmentally sustainable tourism. Representation could also be improved: one of the key advisory councils for tourism policy does not include any environmental representative. A 2013 study for the Icelandic tourism sector provides a good basis for considering how these shortcomings could be addressed. It recommends establishing a tourism strategy task force, involving all stakeholders, to oversee a comprehensive tourism strategy. The study also recommends forming a tourism ministers committee, ideally chaired by the prime minister and bringing together ministers with tourism responsibilities, to agree on the required reforms and oversee implementation.

A key requirement for better integrating tourism and environmental policies is a clearly defined land-use policy. Given the importance of national parks – Vatnajökull National Park, the country’s largest, occupies 14% of the land area – nature conservation should be fully integrated into land-use policy. Outside national parks, there is a need to establish a clearer framework for decisions about the location of economic activities, particularly tourism and energy production, as conflicts between these sectors have been the source of considerable tension.

Better integration of tourism and environmental policies also requires a strengthened information base. A comprehensive set of tourism accounts was established in 2008, but information on the environmental impact of tourism is not included in official tourism statistics and indicators. While some gaps have been filled by independent research, information has remained partial and scattered. Research by the Environment Agency of Iceland to develop an action plan to protect the most damaged tourist sites could form one of the building blocks of a more comprehensive information base. The agency classified sites according to their degree of environmental vulnerability, and the Icelandic Tourist Board used this analysis in financing investment in infrastructure to help limit environmental damage.

In some areas, environmental impacts have reached such a level that public access is banned or severely restricted. It is not unusual for national parks to close trails for extended periods due to significant erosion and vegetation damage resulting from hiking. Off-road motoring has been banned since 1999, yet there is evidence that it still takes place. In 2010, a three-year action plan was prepared to strengthen enforcement.

A shortfall in financing infrastructure at tourist sites has existed for many years, and has become more acute with the sharp increase in tourist numbers. Access fees have been used to finance some infrastructure investment since 1994. To meet the new demand, an accommodation tax on lodging was introduced in 2011. In its first two years, the tax proved difficult to administer and raised less revenue than expected, in part because of design flaws and difficulties in collecting it from private homeowners. Beyond the needs related to infrastructure at tourist sites, further consideration should be given to how the much larger investment in hotels, transport and environment-related infrastructure will be financed. Facilitating private sector investment will be important in this regard.

Part of the revenue from the accommodation tax is used to finance the Tourist Site Protection Fund. In addition to helping finance infrastructure, the fund is used to increase the number of tourist sites so as to reduce pressure on the most frequently visited tourist destinations. In this connection, developing a multi-access “nature pass” has been considered, drawing on successful experience in other countries. Such a pass could provide access to a set of sites, both popular and less well known, again with a view to reducing pressures on the most visited sites.

The government has sought to improve the environmental performance of tourism operators. The VAKINN certification system, introduced in 2011, is a voluntary, fee-based quality assessment system that rates various aspects of tourism services, including environmental protection and sustainability. The VAKINN accommodation star rating is expected to be introduced in 2014. Only nine companies were participating in VAKINN as of August 2013, but the system has potential for growth and could help improve the environmental performance of tourism operators. Iceland took part in a 2011 OECD-Nordic Innovation project on green business model innovation in tourism.

### **Recommendations**

- Develop a comprehensive action plan for sustainable tourism development that is closely co-ordinated with policies for land use, infrastructure development and nature conservation, and that contributes to the government-wide initiative on sustainable development.
- Develop a comprehensive information base to help increase integration of tourism and environmental policies; strengthen co-operation with the research community; integrate environment into official tourism statistics and indicators; strengthen analysis of environmental impacts related to tourism, including carrying capacity limits; develop more effective ways of communicating information to tourists with a view to minimising the environmental impact of their behaviour.
- Consider establishing a body involving all relevant stakeholders to oversee the development and implementation of a comprehensive sustainable tourism policy; strengthen co-operation among ministries with responsibilities related to tourism and environment to ensure that measures are taken to support implementation of the tourism strategy.
- Consolidate national park and protected area management within a single authority under the ministry responsible for the environment to enable better integration of nature conservation and tourism development objectives.
- Conduct a comprehensive review of mechanisms that could be used to close the funding gap for infrastructure at tourist sites, including a revised accommodation tax, arrival/ departure taxes, entrance fees and a “nature pass”; consider how such mechanisms could help reduce pressures at the most visited sites.
- Promote the adoption of the VAKINN certification system with a view to improving the environmental performance of tourism operators, and, as experience develops, consider how its environmental provisions could be strengthened; continue to support green innovation in tourism.

## **1. Key tourism trends**

### **1.1. Visitor trends**


Since 2000 Iceland has been remarkably successful at attracting tourists, many of them drawn by the country’s unique but highly sensitive natural environment. The number of visitors more than doubled from 303 000 in 2000 to 673 000 in 2012. The growth was particularly strong in 2011 (16.6%) and 2012 (18.9%) (Figure 5.1). Other key trends and features of tourism in Iceland are presented in Box 5.1.

If the current trends continue, Iceland can expect over 1 million international visitors a year by 2020 (ITB, 2013a). This is a significant figure for a country with a population of just over 320 000. Analysis indicates that if Iceland puts in place a range of measures to attract a wider spectrum of visitors, the annual number of tourists could reach about 1.5 million by 2023 (BCG, 2013).

The increase in visitor numbers has in large part been due to the success of the hub-and-spoke model that the national air carrier, Icelandair, introduced in 1998 (PKF, 2013). It uses Iceland’s main airport, Keflavík, as its main hub for transatlantic flights. More recently the growth has been underpinned by the significant devaluation of the Icelandic króna following the financial crisis in 2008, along with new “budget” airline connections between Iceland and continental Europe. These developments made visits to Iceland affordable to a much wider range of visitors.

Figure 5.1. **Total international visitor arrivals and cruise passengers in 2000-12**

\* Accounts for approximately 96% of cruise ship passengers visiting Iceland.  
 Source: ITB (2013), *Tourism in Iceland in Figures*, April 2013.

StatLink  <http://dx.doi.org/10.1787/888933087933>

Iceland's attractiveness as a tourist destination was reinforced after Eyjafjallajökull volcano erupted in 2010, creating ash clouds that severely disrupted European air travel for several weeks. Iceland turned this negative event into a success story via an international campaign, "Inspired by Iceland".<sup>1</sup> The volcanic activity and the campaign raised awareness of the country and stimulated interest in visiting. The number of visitors was 17% higher in the winter of 2011 than in the winter of 2010, and Iceland was ranked a top destination for 2012 by many leading travel publishers, including National Geographic and Lonely Planet.

## 1.2. Tourism and the economy

Tourism has become an important sector of the Icelandic economy. In 2010, its contribution to GDP reached 6% (from 5.2% in 2000 and 4.6% in 2008), a higher share than the OECD average of 4.7% (Figure 5.3). When the activities of Icelandic tourism companies outside Iceland are included (e.g. the overseas operations of Icelandair), the real value of tourism exports grew 136% in the first decade of the century, from ISK 33 billion to ISK 78 billion. As a proportion of total export revenue, tourism increased from 18.8% in 2010 to 23.5% in 2012 (ITB, 2013a). Its share of export revenue exceeded that of fisheries in 2013. It is estimated that in 2013 tourists paid ISK 17 billion in direct taxes (ISK 27 billion including indirect contributions), equal to ISK 120 000 for every household in the country (BCG, 2013).

Employment in the tourism sector increased by 21% between 2000 and 2008, although it accounted for a stable 5.1-5.2% of total employment during that period. Despite an initial drop, employment in the sector increased by 13% between 2008 – the start of the recession – and 2011, while the decrease in total employment during the same period was 6.3%. In 2011 the sector included some 1 370 enterprises and employed about 12 000 people, or 6.5% of the total labour force (Júlíusdóttir, 2012). Over 60% of tourism jobs are in accommodation and catering, passenger transport or travel agencies, with the remainder in tourism-related sectors such as retail, entertainment, culture and leisure activities, as well as shops and services relating to passenger transport (ITB, 2012b).

### Box 5.1. Key characteristics of tourism in Iceland

In 2010, total travel consumption in Iceland amounted to some ISK 199 billion, with international visitors accounting for ISK 118 billion, or 59%. Of the remainder, Icelandic households accounted for 36% and Icelandic companies and public bodies for 5% (ITB, 2013a). The major overseas markets for Iceland are the Nordic countries (22%), North America (17.3%), the UK (14.4%), Germany (10.6%) and France (6.4%). These five markets accounted for over three-quarters of all overseas visitors in 2012 (OECD, 2012).

In 2012, Keflavík International Airport was by far the most common entry point, accounting for more than 96% of total international visitor arrivals (647 000).<sup>\*</sup> In line with increases in total international visitor arrivals since 2000, international cruise ship passenger numbers have also experienced significant growth, more than trebling, albeit from a relatively low base of 27 000 in 2000 to 95 000 in 2012. Of the latter figure, about 96%, or nearly 92 000 passengers, passed through Reykjavík, where 81 cruise vessels docked in 2012 (Figure 5.1).

Tourism in Iceland is highly seasonal. In 2012, 47% of all foreign visitors arrived in the summer months of June to August, while 30% came in the spring or autumn. The remainder (23%) arrived between November and March. Organised tour coaches are the most commonly used mode of transport in the winter (58.8%), while rented cars are the most popular mode in the summer (46%).

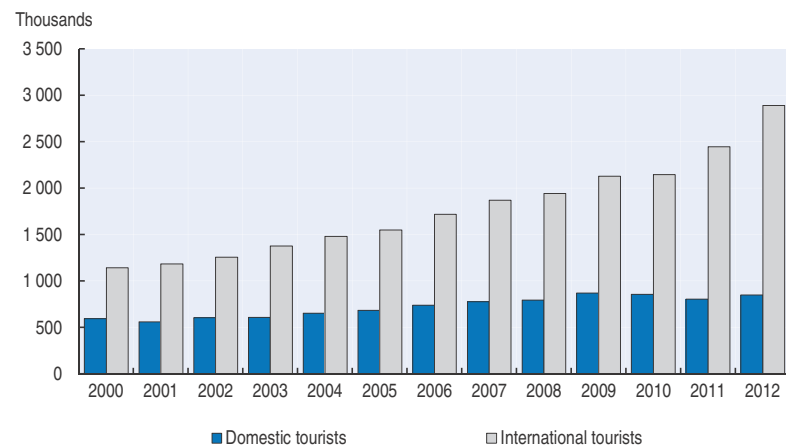
There were 3.7 million nights spent in all types of accommodation in 2012 (Figure 5.2), 48.3% of them spent in the capital area. Foreign visitors spent 2.9 million guest nights, representing 77% of the total for the year (up from 66% in 2000). Growth in the number of nights spent in all types of accommodation between 2000 and 2012 was approximately 8% for international and 3% for domestic tourists. The Icelandic Tourist Board (ITB), in its survey of international visitors for 2011/12, noted that, on average, foreign visitors stayed 10.2 nights in the summer of 2011 and 6.6 nights in the winter of 2011/12 (ITB, 2012a).

The proximity of many major attractions to Reykjavík gives visitors the option of staying in the capital and taking day trips to popular attractions. Recent surveys show that around 95% of visitors spend time in Reykjavík, with fewer than half visiting the north and only around a third making it to the east. This is largely due to the presence of Keflavík International Airport in the capital region and the concentration of accessible, high-quality attractions on the Golden Circle route (about 300 km), including Þingvellir National Park, Gullfoss waterfall and the Geysir geothermal area.

<sup>\*</sup> Just over 2% entered at the Seyðisfjörður seaport and less than 2% arrived by air through the Reykjavík, Akureyri and Egilsstaðir airports.

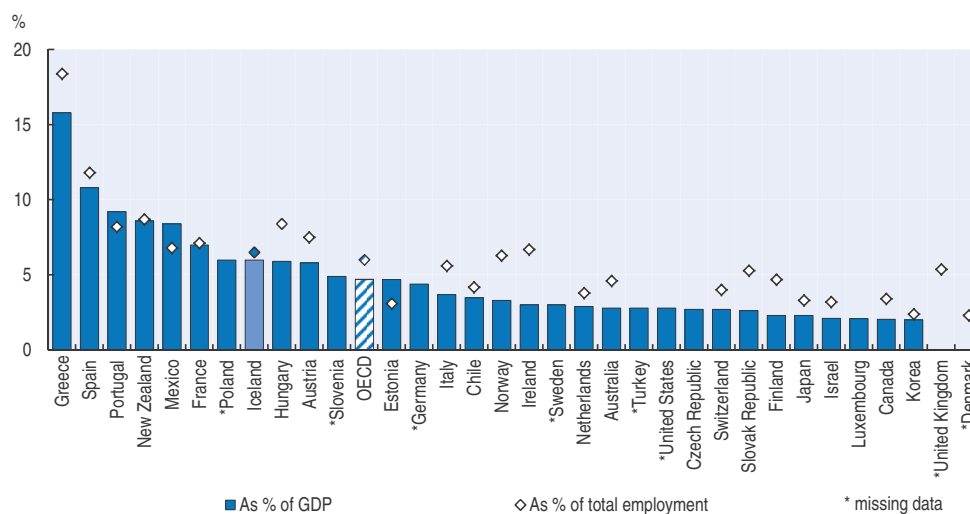
Source: ITB (2013a), *Tourism in Iceland in Figures*, April 2013.

In the aftermath of the crisis, the government recognised that tourism could create jobs, attract foreign investment and foreign currency, and stimulate national, regional and local economic growth. The projected rise in incoming visitors could more than double tourism's direct contribution to the economy to ISK 215 billion by 2023, with an indirect contribution of ISK 400 billion (BCG, 2013).

Figure 5.2. **Total nights spent in all types of accommodation in 2000-12**



Source: ITB (2013), *Tourism in Iceland in Figures*, April 2013.

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 Figure 5.3. **Direct contribution of tourism to OECD economies in 2012**


Note: 2012 or latest available year. Iceland: 2010 (% of GDP) and 2011 (% of total employment). Greece, New Zealand, Poland and Spain: data include indirect impacts.

Source: ITB (2013), *Tourism in Iceland in Figures*, April 2013; Júlíusdóttir, V. H. (2012), "Iceland's Tourism Satellite Account: The inconsistency between balance of payments statistics and tourism statistics"; OECD (2014), *OECD Tourism Trends and Policies 2014*.

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## 2. Role of environmental assets in tourism development

Tourism in Iceland is based largely on a unique combination of environmental assets (e.g. areas of pristine wilderness, natural hot springs, picturesque lava fields and glaciers, "white nights" and the northern lights) and its reputation as a destination for adventurous outdoor activities (e.g. hiking, mountain biking, white water rafting, whale, seal and bird watching, and fishing) (Box 5.2).

### Box 5.2. Selected natural attractions

#### Hiking and trekking

Silfra, a feature of Lake Þingvallavatn in Þingvellir National Park, south-west Iceland, is part of the rift between the North American and Eurasian tectonic plates. Its clear, cold water has led scuba divers to rank it among the world's top 50 diving destinations. Silfra is on the country's most famous tourist route, the Golden Circle, along with the spectacular waterfall Gullfoss, the spouting hot springs of Geysir and Strokkur (erupting every 5 to 10 minutes), and Þingvellir, a designated UNESCO World Heritage Site, where the Icelandic Parliament met from its founding in 930 until 1798.

The Diamond Circle is another popular tourist route, around the town of Húsavík and Lake Mývatn in the north. It covers an area rich in volcanic and geothermal features. The main stops are Dettifoss and Goðafoss waterfalls (the first is Europe's largest in terms of volume discharge), the "dark castles" of the Dimmuborgir lava fields (characterised by large hollow chambers and dramatic pillars), Ásbyrgi canyon (with cliffs up to 100 metres) and Lake Mývatn (surrounded by wetlands with an exceptionally rich diversity of water birds).

Vatnajökull National Park covers 14 200 km<sup>2</sup> or 14% of Iceland, making it Europe's largest national park. It offers a great variety of trekking and hiking opportunities through unspoilt landscapes, including Vatnajökull, Europe's largest glacier extending over 8 100 km<sup>2</sup>. Skaftafell, the jewel in the crown of the park, includes an impressive area of peaks and glaciers.

Jökulsárlón is a large glacial lake on the southeast border of Vatnajökull National Park. A host of spectacular, luminous blue icebergs that calve from the tongue of the Breiðamerkurjökull glacier is a major attraction.

Þórsmörk, in the south, is one of Iceland's most spectacular wilderness areas, sealed off by three glaciers, surging rivers and steep mountain slopes. Hiking on the glaciers is popular, as is trekking in Stakkholtsgjá canyon, with its waterfall, or to the summits of surrounding peaks, which offer rewarding views.

#### Bird, whale and seal watching

Many places in Iceland are of great interest for birdwatchers. Látrabjarg in the West Fjords is the world's largest bird cliff and hosts the largest razorbill colony in the world. The Westman Islands are home to Iceland's largest puffin population, and there is a major colony of great skua on the sandy coast of southern Iceland. Lake Mývatn in the north has more species of breeding ducks than any other place in Europe. Eiders, Arctic terns, waders and passerine birds can be observed in many spots.

Iceland is one of the most popular places for whale watching in Europe, attracting approximately 150 000 visitors each year. The clear North Atlantic waters encircling Iceland teem with minke and humpback whales as well as harbour porpoises and white-beaked dolphins. There are whale watching ports around the coastline. Harbour and common seals can be also observed in their natural habitat in several spots.

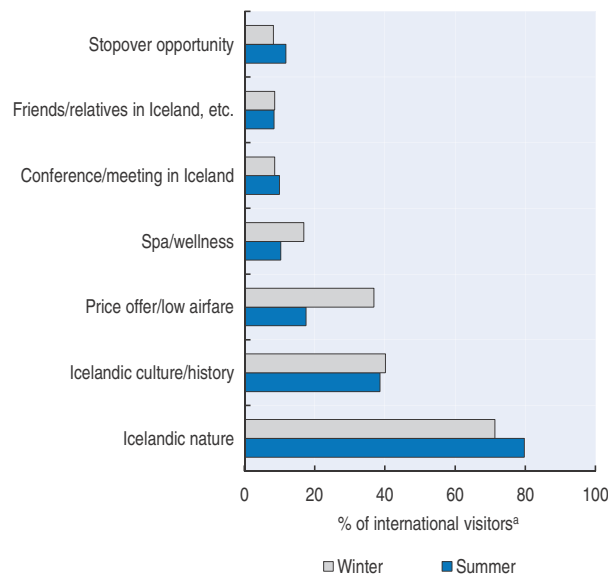
#### Northern lights and "white nights"

Iceland's northern latitude and limited urban light pollution make September to March an excellent time to view the aurora borealis and enjoy outdoor spas. At the height of summer, daylight lasting over twenty hours provides opportunities for extended touring and outdoor recreation.




The 2011 summer survey of international visitors pointed out that for 79.7% of visitors in the summer and 71.3% in the winter, an interest in nature affected their choice of destination (Figure 5.4). While in Iceland, 75.2% participated in one or more nature-related recreational activities, and 23.8% undertook five or more (ITB, 2012a).

Figure 5.4. **Factors influencing decision to travel to Iceland in 2011/12**



a) Internet survey among international visitors who arrived at Keflavik airport and Seyðisfjörður seaport between June 2011 and May 2012.

Source: ITB (2013), *Tourism in Iceland in Figures*, April 2013.

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A few figures show what high interest the most popular natural attractions generate. For example, the Gullfoss waterfall near Reykjavík attracts around 200 000 visitors a year. About 40% of all foreign summer visitors travel to the most popular tourist destinations in the central highlands and the number of overnights in the central highlands almost doubled between 1985 and 2009, from a little less than 48 000 to over 120 000 (Sæþórsdóttir, 2012).

### 3. Key issues in interaction between environment and tourism

#### 3.1. Degradation of soil and vegetation

Recent growth in visitor numbers has placed significant pressure on natural attractions, leading to environmental degradation at sensitive sites, including national parks and other protected areas. Research identifies trampling as one critical factor in the alteration and degradation of ecosystems. The most common indicators include trail widening and deepening, multiple tread formations, root exposure and damage, and soil erosion. Some studies reveal that in the southern highlands, severely deteriorated segments may account for 30% or more of trail systems (Ólafsdóttir and Runnström, 2013). It is not unusual for national parks to close trails for extended periods due to significant erosion and vegetation damage resulting from hiking (Vatnajökull National Park, 2013).

In the most vulnerable areas, relatively minor damage to the vegetation cover is enough to expose the underlying soil bank to wind and water. Trail deterioration usually leads to soil erosion that may trigger land degradation affecting larger areas. Reduction in species cover and density may occur at low trampling intensity, affecting visual quality and leading to lower perceived environmental value (Ólafsdóttir and Runnström, 2011).

Many trails in the central highlands have become popular for other types of recreation, which have had an even larger environmental impact. These include mountain biking, mountain marathon racing and off-road motoring. Although banned throughout Iceland since 1999, off-road motoring has been frequently reported. The increasing use of vehicles to and within sensitive sites damages vegetation cover and leads to soil erosion. Degradation by hikers and vehicles not only places considerable pressure on the natural environment, but also poses a threat to visitor safety and has the potential to generate negative visitor perceptions. Littering is also a problem in many tourist sites, especially as decomposition of waste is slow, leaving waste remains visible atop the permafrost.

### **3.2. Threats to fauna**

Many visitors come to Iceland to watch bird colonies. Because there are relatively few places where such sights are accessible and reliable, this tourist traffic is often concentrated. Colonies chosen for visits, including by cruise ships, tend to be large and spectacular. During a colony visit, passengers typically board smaller boats from the larger ships and cruise by colonies observing the seabirds and taking pictures. Occasionally passengers land at suitable sites and view the seabirds from above or below cliffs, which may cause local disturbance.

To prevent disturbance, especially during nesting periods, environmental authorities impose site restrictions or closures. This helps reduce negative impacts but upsets tour operators. Closure decisions have usually been taken by environmental authorities in the spring, for instance, impeding local operators' tour planning and making it hard to inform visitors about access in advance. Responding to complaints, the Environment Agency of Iceland (EAI) is now aiming to make closure decisions public five years in advance.

### **3.3. Degradation of landscapes**

As the value for recreation and tourism in parts of Iceland, such as the central highlands, lies in areas of pristine nature and primitive wilderness, the construction of access roads and tourist facilities, not to mention industrial facilities, power plants, pylons and transmission lines, reduces the value. Although the conflict between tourism and infrastructure is not insurmountable, as such construction may not spoil the wilderness experience for all visitors, the anticipated experience of wilderness may be significantly reduced, possibly affecting demand (Sæþórsdóttir, 2011). There is continuous pressure to introduce large-scale tourism development in pristine areas. Recent attempts include a project to convert more than 250 km<sup>2</sup> of wilderness area in the north into a resort comprising a luxury hotel and golf courses. The plan, involving a foreign investment of USD 160 million and reported creation of up to 600 jobs, was rejected in 2011, but the government is now reconsidering it (Eudes, 2013).

### **3.4. Tourism infrastructure**

The need to provide tourism infrastructure at popular tourist sites, to ensure traveller safety and environmental conservation while enhancing the visitor experience, is widely accepted. Examples of basic types of infrastructure include sign-posted and paved access roads, designated parking areas, sealed, wooden or raised footpaths (boardwalks), fences and signage/interpretation. The more heavily visited sites also provide visitor information services, concession stands, food and toilets.

The unprecedented growth in international and domestic tourism has had a twofold effect on tourism infrastructure. First, pressure on facilities as a result of increased visitor traffic at popular sites has led to infrastructure deterioration. For example, in 2012 a tarmac road leading to the site of the first Icelandic parliament in Þingvellir National Park buckled and almost collapsed because of the steadily growing stream of visitors. One study showed that 60% of Icelandic tourism industry stakeholders rated infrastructure at popular sites as “bad” and 65% considered infrastructure at tourist sites to be the key priority for improvement, above roads, airports and seaports (BCG, 2013). Land ownership issues are sometimes a barrier to the development of adequate infrastructure. This is true at Landmannalaugar, a popular tourist destination and hiking hub in the central highlands, where poorly designed and laid out visitor facilities detract from the quality of the natural environment (PKF, 2013).

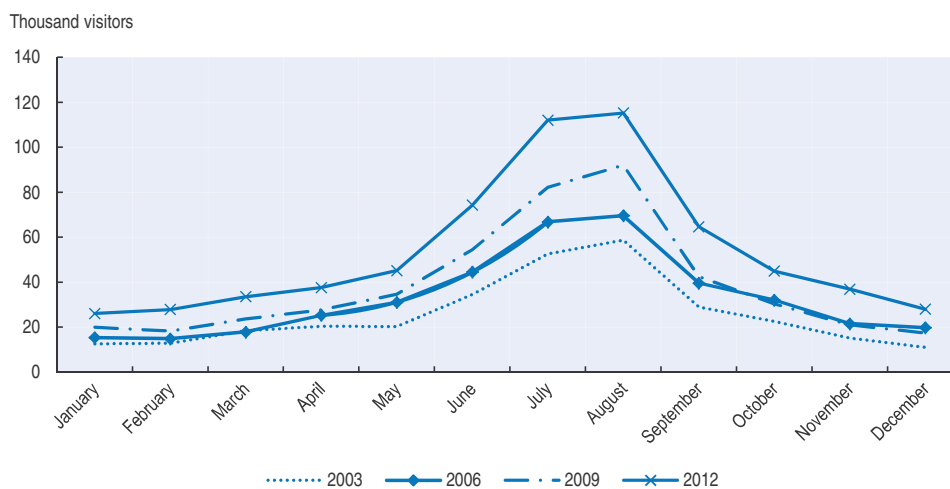
Second, limited funding has meant that opportunities to develop infrastructure at new sites, promoting the geographical distribution of visitors, have not been fully acted on. One study revealed that tourism operators considered the West Fjords particularly attractive, but did not feature the area in their offers due to poor access and lack of visitor infrastructure (PKF, 2013). At a more basic level, there is a need to invest in facilities such as parking, signage and toilets. The cost of these facilities is typically not very high. The greater challenge is ensuring that they are maintained.

### **3.5. Seasonality and distribution of visitors**


Tourism in Iceland is highly seasonal, with an increasing number of arrivals concentrated in the summer (Figure 5.5). In 2012, 58% of the 3.7 million visitor nights occurred from June to August, and 75.9% of nights spent outside the capital area were concentrated in these months. On any given day in July 2012, there were up to 35 000 international visitors in Iceland, which represented an increase in the population of around 6% (BCG, 2013). Icelandic tourism is also concentrated around Reykjavik and the south-west (Box 5.1).

Excessive concentration of visitors at peak periods results in congestion at tourist sites and damage to their quality, reducing their ability to attract future visitors. Most popular destinations on the Golden Circle, such as Gullfoss waterfall and the Geysir and Strokkur hot springs, suffer from such problems. Increased concentrations of visitors can also reduce the quality of experiences at sites renowned for tranquillity and isolation, such as the central highlands.

High seasonality also puts significant pressure on environment-related infrastructure, such as that for waste collection and treatment, water supply and wastewater treatment. In July 2012, hotel room occupancy in the capital region reached 91%, compared with occupancy rates around 60% in the shoulder seasons, from March to May and September to November. The difference is higher in other regions: for example peak month occupancy is

Figure 5.5. **Visitors to Iceland through Keflavík airport by month**

Source: ITB (2013), *Visitor Departure Statistics*.

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56% in the north-west while in March it is as low as 7%. Based on forecasts of visitor numbers, regional distribution and seasonality, around 5 700 new hotel rooms will need to be built, half as many again as exist today, of which around 60% will be needed in the capital region and south-west (BCG, 2013).

Because of the abundance of clean water and relatively large assimilative capacity of land and sea, there is still potential to increase water use and discharges during peak periods. But the accumulation of impacts, especially in areas with vulnerable ecosystems, can result in significant and irreversible damage. There is a need for strengthening monitoring systems in such areas to guard against contamination of fragile water supplies, as well as to provide regular maintenance of sewerage and waste collection services. Tourism strategies, at the national and regional levels, include plans for road development and hotel infrastructure, but say little or nothing about plans and financing concerning expansion and maintenance of environment-related infrastructure.

Despite efforts to address the issue of seasonality, the variation in international arrivals has remained largely consistent in recent years. Therefore, any steps to reduce seasonality and/or increase the geographical distribution of visitors through greater product diversification (e.g. a greater focus on history, culture and creative industries) could reduce environmental impact at existing sites and on supporting infrastructure, as well as increase opportunities for further development of tourism enterprises.

## 4. Environmental and tourism policies and institutions

### 4.1. Policies and objectives

Unspoiled wilderness was recognised as one of the most important resources of Icelandic tourism as early as 1990 in the Parliamentary Resolution on National Tourism Policy. Subsequent tourism strategies, including the most recent ones, for 2006-15 and 2011-20, reiterated the importance of natural assets for tourism development (Box 5.3). They also acknowledged the need to address the growing environmental impact of tourism and called for inclusion of broad environment-related objectives in each aspect of tourism development.

### Box 5.3. Environmental objectives of tourism strategies

The 2006-15 tourism strategy, then the responsibility of the minister of communications, included the following objectives:

- Nature and wilderness shall prevail in the development of tourism.
- The impact of tourism shall be distributed evenly and remain within tolerance limits defined by research.

The most recent strategy, for 2011-20, developed by the Ministry of Industry, Energy and Tourism in collaboration with the Icelandic Tourist Board, industry associations and other stakeholders, aims to:

- Maintain Iceland's unique nature with focused and strong emphasis on strengthening destinations.
- Improve the quality, professionalism and environmental consciousness of the tourism industry.
- Promote increased profitability and respect for the industry.
- Extend the tourist season, decrease seasonal fluctuations and promote better distribution of tourists around the country.

The strategy notes that meeting the objectives depends on actions in four key areas: i) infrastructure, ii) research and forecasting, iii) product development and innovation, and iv) marketing. Most notably, under the heading of infrastructure, it states that:

- Iceland's natural surroundings are a natural resource for the tourism sector. It is important to develop, protect, and maintain tourist sites nationwide. The authorities and other stakeholders must join forces in finding the means to finance such improvements.
- The development of tourism infrastructure shall aim at protecting nature, and the tourism strategy shall aim at incorporating the concepts of sustainability and responsibility for Iceland's culture and natural surroundings.

Source: PKF (2013), "Promote Iceland: Long-term strategy for the Icelandic tourism industry".

However, the national strategies (which the Icelandic Tourist Board is responsible for implementing) lack the detailed action plans, executive regulations and clearly defined responsibilities necessary for implementation, evaluation of progress and measurement of success against stated objectives. One survey of Icelandic tourism stakeholders highlighted tourism policy and regulation as an area for significant improvement: 54% of respondents rated national laws and regulation as "bad" or "very bad" in terms of their supportiveness to the tourism sector; 56% rated government policy negatively in the same terms (BCG, 2013). A key challenge in this regard is the lack of a clearly defined land-use planning policy. One has been under development since 2003, but has yet to be adopted. This lack has hampered more coherent and co-ordinated spatial and economic development, including in the area of tourism development. As a result it has created uncertainties in policy-making processes and has been a source of conflict between the national and local authorities (Chapter 2).

The tourism-related priorities of the Ministry for the Environment and Natural Resources (MENR), developed under the national strategy for sustainable development 2002-2020, Welfare for the Future, have been more concrete and operational (Chapter 2).

For example, a key priority for 2010-13 was to introduce a tourism-related environmental levy that would help fund land protection and infrastructure improvement at popular destinations. Another priority, for 2006-09, was to carry out a systematic assessment of natural sites that required special measures due to intensive traffic. Special attention was placed on designing measures to prevent off-road motoring, including completing the mapping of highland roads and trails in 2012.

The relationship between tourism and nature was also prominent in the nature conservation strategies for 2004-08 and 2009-13, which resulted in increasing the number and coverage of protected areas, all of which attract growing numbers of local and international visitors. Some regional tourism strategies, such as that for the north-east for 2009-14, provide clearer directions for development and insights into the desired results. They also help build consensus among residents (John S. Hull Associates, 2008).

The role of nature in economic development has featured high in the context of recent discussions on the green economy. The 2011 report of the Parliamentary Committee on the Strengthening of the Green Economy identified tourism as one of the country's fastest growing sectors (Chapter 3). It called for actions to stimulate a green or sustainable travel industry, which should have an obvious interest in maintaining the resources that the industry first and foremost builds its income on.

That report, and the oversight of its implementation by the Prime Minister's Office, could serve as an important driver in the transition to a green economy. Its implementation should be used to better co-ordinate tourism-related strategies and plans, including nature conservation planning and management, which so far has not been fully integrated in tourism policy making. This can be facilitated by development of a sustainable tourism action plan that would guide urgent action and provide a longer term perspective. Such a plan should include measurable numeric targets that would allow assessment to be published in regular progress reports.

#### **4.2. Institutional framework**

The 2005 Tourism Administration Act (No. 7324/2005) redefined the administrative framework for tourism management. The act gave overall responsibility for defining tourism policy to the Ministry of Industry, Energy and Tourism (which in 2012 was subsumed under the new Ministry of Industries and Innovation)<sup>2</sup> and made the Icelandic Tourist Board (ITB), an independent authority under the MII, responsible for policy implementation. Other important changes brought about by the act were the definition of criteria for tour operators and travel agencies, and the laying down of procedures for obtaining and revoking certification and licences and ensuring secure operations.

The ITB acquired a range of responsibilities, including issuing licences, registering and monitoring compliance by tourism operators, and implementing the tourism quality and environmental assurance system, VAKINN. It also has stewardship of the Tourist Site Protection Fund for infrastructure, safety and the preservation of natural sites; and collects data on tourist numbers, expectations and experiences.<sup>3</sup> The ITB has since played an active role in developing the regulatory framework for tourism, interacting with legislators and government agencies such as the EAI and the Innovation Centre Iceland.

The MENR has long overseen the use and management of key natural tourism sites linked to protected areas. The 1999 Nature Conservation Act established a strategic approach to nature conservation, based on scientific assessment (MENR, 2013). The MENR,

together with the EAI and specialised bodies, is responsible for expanding and managing protected areas, including national parks (Box 5.4).

Reforms introduced by the 2005 Tourism Administration Act strengthened operational aspects of tourism management, such as registration, licensing and tourism promotion. However, tourism-related policies are still not well co-ordinated across ministries. Related plans and programmes are developed in isolation, primarily under the MII, but also by the Prime Minister's Office, the MENR, the Ministry of Finance and Economic Affairs and the Ministry for Foreign Affairs. In addition, government agencies including the ITB, Promote Iceland and the EAI carry out actions in parallel, with suboptimal co-operation with local authorities and the private sector.

#### Box 5.4. **Combining nature conservation and tourism in Vatnajökull National Park**

In 2008, Iceland embarked on Europe's single largest nature conservation project to date, establishing Vatnajökull National Park. Initially covering 12 000 km<sup>2</sup>, the park offers a mixture of dynamic ice caps and outlet glaciers, geothermal energy sites and frequent subglacial volcanic activity, coupled with outburst floods.

The park incorporated areas already under protection, including Skaftafell and Jökulsárgljúfur national parks, the Lónsöræfi wilderness and Vatnajökull glacier, which is larger than all other glaciers in Europe combined. The park originally occupied about 12% of national territory, and has since been expanded to 14% (14 200 km<sup>2</sup>). It offers a unique opportunity to observe the wide-ranging impact of Vatnajökull glacier on its surroundings, in which ice and fire play leading and often complementary roles.

The creation of the park was one of the largest economic and rural development projects the government had ever undertaken. Tourists visiting this protected area can observe the culture and history of the communities dotted around the glacier, which have learned to live with and utilise their volatile surroundings. The proximity to nature's land-sculpting elements opens up a wide range of possibilities for research and study visits, and for experiencing the wilderness.

Visitor centres are the park's core service facilities. They contain exhibitions and displays, provide information and host cultural events, and house the park wardens. Wardens offer guided nature interpretation tours and children's activities, providing insight into such natural phenomena as volcanic eruptions and catastrophic floods, at the grander end of the scale, as well as the delicate world of Iceland's fragile flora and fauna.

Vatnajökull National Park is overseen by a board of seven members, including the four heads of the area committees involved, one member nominated by environmental NGOs and two appointed by the environment minister, who serve as the chairperson and vice chairperson. Outdoor activity associations are entitled to have an observer present at board meetings. The board formulates policies relating to the park, manages the preparation of proposals for a conservation plan and regulations, prepares the budget, allocates funds, approves individual operating plans, monitors implementation of park rules and the conservation plan, and ensures co-operation with other public bodies, local authorities and stakeholders.

The lack of co-ordination with environmental policies is particularly vivid in advising on tourism policies and related funding. The 2005 reforms included establishing the Icelandic Tourism Council, a consultative body under the MII, to make recommendations on tourism planning, marketing and promotion activities. However, none of its ten representatives (from central government, industry and local authorities)<sup>4</sup> represents the environmental authorities. Given the role of natural assets in tourism policy, the council's advice on tourism-related matters is partial and contributes to overlaps or gaps in policy responses. Similarly, the managing board of the Tourist Site Protection Fund (Section 5.2) includes no formal representatives of the environmental authorities, although it is stated that they are consulted in the fund's decision making.

Planning and governance of tourism and environment are also not aligned in managing environmentally sensitive areas. For example, while responsibility for tourism policy development lies with the MII, responsibility for managing Iceland's three national parks (Snæfellsjökull, Vatnajökull and Þingvellir) is allocated to three authorities under two separate bodies – the MENR and the Prime Minister's Office. This situation complicates efforts to develop policy responses in a timely, co-ordinated and strategic manner.

A 2013 study commissioned by a consortium of private companies (including Icelandair Group and Blue Lagoon) on strengthening tourism strategy implementation recommended establishing a tourism strategy task force, chaired by the minister for industries and innovation, which would include representatives from relevant ministries and agencies, and private sector organisations (BCG, 2013). Such a body, in which the environmental administration should be strongly represented, would greatly increase co-ordination and overall engagement in the tourism strategy. Overall, there seems to be a need to considerably reduce the number of entities involved in tourism governance. Some entities' functions could be assigned to the tourism strategy task force.

The task force would be responsible for overall strategy: defining the vision and targets, co-ordinating activities across governance bodies, tracking progress and resolving conflicts. However, the study also recommended establishing a tourism ministers committee made up of ministers with tourism responsibilities (and ideally chaired by the prime minister), whose function would be to agree required reforms and oversee implementation (for example, in relation to targeted development of tourism products and services in new areas). It would also co-ordinate new infrastructure required to support expected visitor growth. The concept of such a committee is based on similar bodies in Australia and New Zealand, which have been credited with successfully co-ordinating the countries' approach to tourism expansion (BCG, 2013).

## 5. Selected policy responses

### 5.1. Initiatives to address the environmental impact of tourism

Policy makers and the tourism industry generally acknowledge that the environmental impact of increased visitor numbers could affect future growth in the industry. This recognition has stimulated a number of actions. For example, as stipulated in *Welfare for the Future: Iceland's National Strategy for Sustainable Development-Priorities 2006-2009*, the EAI conducted research on tolerance limits of the most visited tourist destinations and in 2010 developed an action plan to protect those most affected. The plan identified, for the first time, the nine areas most heavily affected (classified as the Red List) and eight areas of concern (the Orange List). In these areas, tourism was deemed responsible for exceeding tolerance limits for off-trail walking and off-road motoring,



mostly due to lack of infrastructure (MENR, 2010a; EAI, 2010). The lists provided important guidance to the ITB, which funded improvements. Revision of the lists in 2013 showed seven areas on the Red List and 14 on the Orange List: four Red List areas were shifted to the Orange List, two Orange List areas to the Red list; and four new areas were added to the Orange List (EAI, 2010; 2013).

After the ban on off-road motoring in 1999, the EAI website began providing information about the potential impact of this activity on ecosystems and implications of non-compliance. As part of these educational efforts, a team from the environment and transport ministries issued a map of roads and tracks not subject to the ban (EAI, 2013). Despite enforcement efforts by national park rangers and the police, information collected by the EAI shows several cases of environmental damage from off-road motoring, especially in the central highlands. To address the issue, in 2010 the EAI issued a three year action plan envisaging stronger enforcement, wider dissemination of official maps of approved roads and tracks, and education efforts in co-operation with tourism and recreation groups (MENR, 2010b).

## **5.2. Financing of environment-related infrastructure**

Since 1995, the Icelandic tourism industry has spent about ISK 700 million on grants and projects in over 300 locations around the country (ITB, 2013a). However, it has been long acknowledged that funding is insufficient to address the infrastructure requirements to maintain and rehabilitate tourist sites of high environmental significance and ensure visitor safety. Various instruments to address the funding shortfall have been considered, including arrival/departure taxes, entrance and service fees at attractions, and a “nature pass” for access to national parks and other protected areas.

The instrument chosen was a tax on lodging, the so-called accommodation tax, introduced in 2011. With a rate of ISK 100 per night, the tax is levied per accommodation unit.<sup>5</sup> It is earmarked, with 40% of the revenue used to support environmental protection measures by the EAI and 60% going to the Tourist Site Protection Fund for the development, maintenance and protection of popular tourist attractions (Box 5.5).

Early experience indicates that, in its present form (on a per night and per unit basis), the accommodation tax does not appear to be fulfilling its intended purpose. In its first two years, the tax raised less revenue than expected and proved difficult to administer, especially in cases of households renting out rooms or second homes. A further issue is that the tax does not capture the growing cruise ship market. These combined factors suggest that tax base and rate urgently need to be reconsidered in order to make the tax more relevant to tourism operations. At the same time, a more holistic administrative structure is needed to manage the revenue. First, the management of various revenue streams should be consolidated. Second, the Tourist Site Protection Fund, or its equivalent, should include representatives from agencies responsible for environmental protection. Both steps would contribute to a more co-ordinated, strategic and efficient fund allocation.

One industry estimate suggests that to create a meaningful and sustainable tourism sector in Iceland, ISK 13 billion of public and private investment will be needed every year from 2013, rising to ISK 21 billion by 2023 (BCG, 2013). Around 80% would be for hotel development – new units and refurbishment – and investment in existing and new visitor sites. Around ISK 1.5 billion per year is needed to expand capacity at Keflavík International Airport. Capital investment is required in services, such as water supply, waste and

### Box 5.5. Tourist Site Protection Fund

The Tourist Site Protection Fund became operational in 2012. It aims to support the development and maintenance of infrastructure that protects nature at frequently visited tourist attractions, and to support the development of such infrastructure at new sites in order to increase the number of sites visited by tourists.

The Tourist Site Protection Fund is financed by 60% of the revenue from an accommodation tax and additional government funding. In the first year of operations the Icelandic Tourist Board supported the fund with up to ISK 5 million, and the government allocated ISK 1.5 billion for the period 2013-15.

Both public and private entities are eligible for funding. While the fund can finance development and maintenance of built structures at tourist attractions that are under public ownership or in protected areas, it does not provide funding for operating costs of built structures at tourist destinations managed by private entities. Provision of funding to private entities is subject to a condition that the tourist destinations involved are always open to the general public and are free of charge.

The Tourist Site Protection Fund board is made up of four representatives appointed by the minister of industries and innovation. Two are appointed upon nomination by the Icelandic Travel Industry Association, one upon nomination by the Association of Local Authorities and one without nomination, who acts as chairperson. The board makes proposals to the minister regarding fund allocations, taking into consideration the views of environmental authorities and other stakeholders concerning the relative merits for proposed developments. Funds are allocated twice a year, although exceptions may be made in cases of urgent need. Information on allocations from the fund must be made public. The Icelandic Tourist Board oversees the management of the fund.

Source: ITB (2013b), "The Tourist Site Protection Fund".

sewage collection, and telecommunications, to serve higher numbers of tourists. Much of this is expected to be provided by the private sector, either from reserves or from privately raised bank or equity finance, e.g. for hotel and airport investment. However, a significant proportion, which could amount to ISK 7 billion in 2023, would need to be funded either by taxation or through new revenue sources (BCG, 2013).

The form of such sources has been subject to much debate. Mechanisms under consideration include i) a flat charge on all visitors, typically levied on arrival or departure, ii) a multisite access charge, often referred to as a "nature pass" or an "environment card", and iii) single-site access charges, with individual sites charging at point of entry. Whatever option is selected, it should take into account the following key objectives: i) maximise revenue to fund investment in existing and new site development, ii) minimise impact on visitor demand, except to deliberately manage flows of visitors at peak times, iii) ensure efficient distribution of resources across existing and new sites, while providing an incentive for site operators or owners to invest in high-quality product development, and iv) ensure that the charging mechanism is feasible and can be implemented at low cost.

One of the options is the nature pass. Such a solution typically involves visitors buying a card that allows them to enter a range of sites (e.g. the top 30) at no additional payment. The key advantage is that it allows tourism authorities to bundle the most popular sites with less visited attractions. This model has been successfully followed in both urban and

nature contexts, for example in Oslo, Rome, Granada and London, and in South African and US national parks (BCG, 2013).

Introduction of the pass could be supplemented at individual sites by additional services, such as meeting facilities, exhibitions and children's shows, which sites could provide in exchange for additional fees. If visitor numbers rise as forecast to reach 1.5 million by 2023, the nature pass could raise ISK 0.7-4.6 billion in its first year and ISK 1.2-7.8 billion by 2023 (BCG, 2013). Funds generated by the pass could be redistributed through grants focused on conservation and tourism development in less frequented areas, loans to provide access to finance for sites with potential to generate a commercial or near-commercial return on investment, or revenue sharing with site owners and municipalities, providing a direct link between visitor numbers and card revenue. Part of the funds should also cover operating costs of the pass system.

### **5.3. Strengthening quality of tourism operators**

A key objective of creating the new ITB in 2005, prior to the reorganisation of the Tourist Council, was to establish an effective and efficient process of registration and licensing of tourism operators and to monitor their compliance with licence conditions. In this rapidly growing industry, professionalism and quality were considered key requirements, along with consumer protection and improved performance for the sector as a whole.

To achieve this objective, a harmonised quality and environmental system, based on the Qualmark system in New Zealand, was introduced in 2011 for the industry. It replaced the existing five star hotel classification system. Called VAKINN, the system aims to enhance and promote the quality of tourism in Iceland and to strengthen social and environmental responsibility of tourism operators. Created in co-operation with the tourism industry, VAKINN also addresses professional skills in response to the industry's rapid growth.

VAKINN is a voluntary, fee-based system offering a star rating system for accommodation quality and grading for all other tourism services, including environmental protection and sustainability. The environmental grading part of the system is free of charge to companies participating in the accommodation quality star rating system, but is not compulsory. It is not currently possible for companies to participate exclusively in the environmental part of VAKINN.

The environmental part of VAKINN reflects the principles of sustainable development and is based on eight main categories, which are used to assess a company's environmental responsibility as well as its relationship to the community (Box 5.6). Companies successful at the assessment stage are awarded gold, silver or bronze VAKINN certification. Companies that already hold ISO 14001, the Swan Nordic ecolabel or Earth Check certification receive the gold standard without assessment as long as they fulfil requirements relating to social responsibility.

The VAKINN system is a promising but relatively new initiative. As of August 2013, nine companies were participating, five of which had received environmental certification, and 47 applications were in process. All the Vatnajökull National Park visitor centres are certified by VAKINN. The VAKINN accommodation star rating is expected to be introduced in 2014.

### Box 5.6. VAKINN environmental award criteria

The VAKINN environmental system is based on eight categories:

- *Strategy and work procedures*: Have the company's strategy and mission been presented to the staff?
- *Procurement and resources*: Is lifetime cost taken into account with regard to procurement and other decisions?
- *Energy*: Are cooling and heating systems regularly monitored and maintained?
- *Waste*: Is glass, paper, plastic or metal returned for recycling?
- *Nature preservation*: Is the revegetation of land supported?
- *Community*: Is there a company representative on a committee or board of a local association?
- *Suppliers and market*: Is it known where and how raw materials are manufactured?
- *Information to customers*: Are customers informed of the company's main concerns with regard to nature preservation?

The environmental criteria are accompanied by a simple checklist to help analyse the company's position on the path towards sustainable tourism. The company management must fill in this list when applying for environmental grading. The checklist provides guidance as to what could be improved, as well as serving as a basis for an action plan. Supporting materials are also provided, such as monitoring forms, advice and suggestions for the declaration of responsible and sustainable tourism. All companies participating in VAKINN must also accept and comply with the VAKINN Code of Ethics.

To obtain the bronze award, the company must have taken action in at least six of the eight main category areas, with at least one action in each of the following categories: reducing waste, saving energy (e.g. fuel, electricity and hot water) and encouraging more environmentally viable procurement.

To earn the silver award, companies must have fulfilled the bronze criteria and carried out regular measurements for 6 to 12 months. They must also demonstrate success in at least one area referred to in their action plan, e.g. with regard to reducing waste or saving electricity, hot water or fuel.

To achieve the gold award, the company must have fulfilled the silver criteria and taken action in at least 25 areas, with at least 5 actions in each of the following: reducing waste, saving energy and promoting more environmentally viable procurement.

Source: VAKINN (2014), "The environmental system".

If the benefits to participants can be clearly articulated, there remains significant potential to use VAKINN as a catalyst to improve the social and environmental responsibility of Icelandic tourism businesses. As the number of operators and accommodation providers is relatively small, it is feasible to aim for 100% participation, which would bring significant improvement in the quality and sustainability of tourism in Iceland. Another option would be to make the VAKINN system compulsory, including its environmental component.

#### 5.4. Promoting green innovation in tourism

Innovation, in particular green innovation, has a fundamental role to play in improving sustainability and maximising the potential environmental, social and cultural benefits of tourism in the transition to a green economy. By adopting and encouraging the

development of innovative technologies and processes, businesses can make efficiency improvements in energy, water and waste infrastructure, while protecting ecosystems and creating the conditions for growth and sustainable development in local communities.

In an effort to enhance environmental awareness in the sector and promote product development and innovation, Iceland facilitated the participation of two tourism companies in a 2011 OECD/Nordic Innovation project on green business model innovation in tourism. The Icelandic companies joined 26 others in a project that aimed to guide them on how to work with green business model innovation and make the changes necessary for a transition to more strategic green innovation (Nilsson-Andersen and Andersen, 2012).

A survey of OECD member countries indicated that governments should play a more prominent role in better educating the public and tourism businesses concerning the environmental and financial benefits associated with adopting and supporting green innovation in tourism (OECD, 2012). Similarly, barriers identified by countries and participating companies – including information gaps, consumer reluctance, capacity constraints, investment cost, budget constraints and issues with access to finance – highlight potential areas of focus for government policy responses. The Icelandic government should continue to promote the benefits of green innovation for both tourism businesses and the environment.

### **5.5. Information and research**

For many years the government put insufficient priority on measuring tourism's scale, growth and contribution to the economy. The growth in visitor numbers, however, has led to a broadening of the scope of collected statistics, which over time has come to include tourist arrivals and accommodation trends, frequency and seasonality of visits, type of tourist activities and visitor surveys. An improved information base, created by the National Account Division of Statistics Iceland with support from the industry ministry, allowed the first comprehensive set of tourism accounts to be published in 2008 (Statistics Iceland, 2011). The goal of the set, which was later updated, was to provide credible and coherent estimates of key features of the tourism sector and its contribution to the economy.

Monitoring efforts have been sustained by the ITB, which has started to map tourism industry resources throughout the country, with the results published as a user-friendly, web-based interface. These analyses have been used to build national and regional strategies, product development and marketing.

However, environment-related information has not been included in tourism statistics and indicators (Arnarson, 2012). The gaps were filled by independent research, but these data were partial and scattered. Only recently have some research projects on tourism carrying capacity been launched by the University of Iceland, with support from the MII and ITB. Such initiatives could inform the tourism policy debate and help decision makers identify and measure key environmental aspects of tourism policies. The key remaining gaps include information on the contribution of environmental assets to tourism and economic development, non-compliance with environmental regulations related to tourism, and trends in funding the development and improvement of tourism-related environmental infrastructure. Strengthening monitoring and policy evaluation can help ensure that proposed solutions are cost-effective and address key environmental challenges linked with tourism development. Building alliances with the research community could help augment limited administrative resources.

## Notes

1. A new public-private partnership, Promote Iceland, created the campaign. The strategy was to advertise Iceland as “not for everyone”, targeting “enlightened” tourists. To attract this visitor segment, Icelanders were encouraged to open their homes and invite tourists in for a unique Icelandic experience. The campaign was widely covered in international media. In addition, Icelandic landscapes were featured in several television series and movies with international distribution.
2. The MII was created in September 2012 through amalgamation of the Ministry of Fisheries and Agriculture, the Ministry of Industry, Energy and Tourism, and part of the Ministry of Economic Affairs.
3. Originally, the ITB was also responsible for tourism marketing and promotion in Iceland and abroad. In 2010, responsibility for international promotion was transferred to a new organisation, Promote Iceland, a public-private partnership under the Ministry for Foreign Affairs.
4. The council’s chairperson and vice chairperson are appointed directly by the minister of industry and innovation. The remaining members are appointed by the minister upon nomination from the Icelandic Travel Industry Association (three representatives), the Association of Local Authorities (two representatives), the Iceland Tourism Association (two representatives) and Promote Iceland (one representative).
5. The tax is not levied per person but per “unit”. Units can include houses, apartments, hotels or hostels with overnight charges, as well as stations for camping and places to park vehicles.

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