

# BENCHMARKING ASSESSMENT REPORT

**DESTINATION BENCHMARKING** 

**SNAEFELLSNES PENINSULA** STYKKISHOLMI, ICELAND



REPORT DATE: 8 May 2017

Benchmarking Data Collection Period: 1 January 2015 - 31 December 2015

The planet deserves more than half measures

## **OVERVIEW**

This annual assessment of the **Snaefellsnes Peninsula** was undertaken against EarthCheck benchmarking indicators and checklists developed for EarthCheck and listed below<sub>1</sub>. They have been carefully selected to track performance in key areas of environmental and social performance impact. The lead agency responsible for collection, collation and authorisation of the information required by the indicators was the **Snaefellsnes Council of Executives**.

		Indicator Measure (Benchmark)
1	Policy	Policy is produced and in place <sup>2</sup>
2		Energy Consumption (GJ / Person Year) <sup>2</sup>
	F	Green Power (%) <sup>4</sup>
	Energy	Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO <sub>2</sub> -e / Person Year) <sup>3</sup>
		Indirect Emissions (Scope 3) (t CO <sub>2</sub> -e / Person Year) <sup>3</sup>
3	Water	Potable Water Consumption (kL / Person Year) <sup>3</sup>
	watei	Recycled / Captured Water (%) <sup>4</sup>
4	Macha	Waste Sent to Landfill (m³ / Person Year)³
	Waste	Recycled / Reused / Composted Waste (%) <sup>4</sup>
		Nitrous Oxides Produced (kg / Person Year / Hectare) <sup>3 5</sup>
		Sulphur Dioxide Produced (kg / Person Year / Hectare) <sup>3 5</sup>
		Particulate Matter Produced (kg / Person Year / Hectare) <sup>3 5</sup>
		Water Samples Passed (%) <sup>2</sup>
		Habitat Conservation Area (%) <sup>2</sup>
_	Sector Specific	Green Space (%) <sup>2</sup>
5		Significant Site Maintenance Fund (%)
		Destination Safety – Homicide Rate (%)
		Destination Safety – Theft Rate (%)
		Destination Safety – Assault (%)
		Socio-Economic Benefit – Unemployment Rate (%)
		Accredited Operations (%) <sup>2</sup>

#### **Lead Agency Performance**

6	Water Savings	Water Savings Rating (Points) <sup>6</sup>
	Waste Recycling	Waste Recycling Rating (Points) <sup>6</sup>
Paper Products Rating (Points) <sup>6</sup>		Paper Products Rating (Points) <sup>6</sup>
Cleaning Cleaning Products Rating (Points) <sup>6</sup>		Cleaning Products Rating (Points) <sup>6</sup>
	Pesticides	Pesticide Products Rating (Points) <sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Please refer to the relevant EarthCheck Sector Benchmarking Indicator (SBI) document for more details. For frequently asked questions (FAQs) about benchmarking or specific help, please log on to 'My EarthCheck'.

<sup>&</sup>lt;sup>2</sup> Produced by the lead agency after consultation with the community and consensus.

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<sup>&</sup>lt;sup>3</sup> Person Year is equivalent to 365 person days. EarthCheck Destinations must also allow for both resident and transient (tourist) populations in indicators assessed on a per person year basis. Tourist activity is classified into an "overnight stay" or "day tripper". An overnight stay is counted the same as a permanent resident, that is, 1 person day. A day tripper is counted as 0.333 person day.

<sup>&</sup>lt;sup>4</sup> These indicators are for guidance only and do not affect the overall benchmarking evaluation.

<sup>&</sup>lt;sup>5</sup> Primary assessed impacts on air quality are emissions due to electricity consumption, vehicular transport, industrial processes and mining. The levels are calculated on a per unit area basis using total emissions and total bounded area of the Destinatin, including waterways. The data is then normalized against the average number of person years per area of the country.

<sup>&</sup>lt;sup>5</sup> Assessed for the lead agency only.

## **DESTINATION PERFORMANCE BENCHMARKS**

Current performance: Below Baseline ★ At or above Baseline ✓ At or above Best Practice ★



## Energy

# Energy Consumption (GJ / Person Year) ✓





Energy Consumption (GJ / Person Year) for the year 2015 (1 January 2015 – 31 December 2015) was 174.3 GJ / Person Year, which was 1.3% better than the Baseline level.

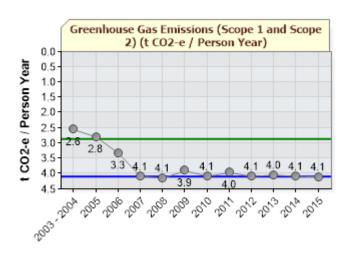
#### Green Power (%)

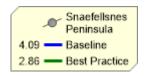
Not Applicable

200

# Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year) 🕊

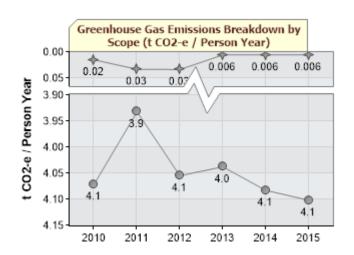


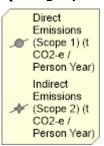




Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO<sub>2</sub>-e / Person Year) for the year 2015 (1 January 2015 - 31 December 2015) was 4.1 t CO<sub>2</sub>-e / Person Year, which was 0.5% below the Baseline level.

#### Greenhouse Gas Emissions Breakdown by Scope (t CO<sub>2</sub>-e / Person Year)

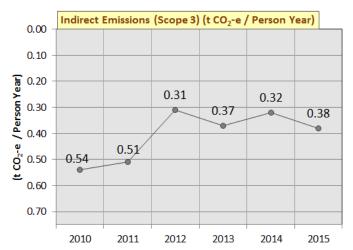


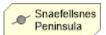


Direct Emissions (Scope 1) (t CO<sub>2</sub>-e / Person Year) for the year 2015 (1 January 2015 - 31 December 2015) was 4.1 t CO<sub>2</sub>-e / Person Year.

Indirect Emissions (Scope 2) (t CO<sub>2</sub>-e / Person Year) for the year 2015 (1 January 2015 - 31 December 2015) was 0.006 t CO<sub>2</sub>-e / Person Year.

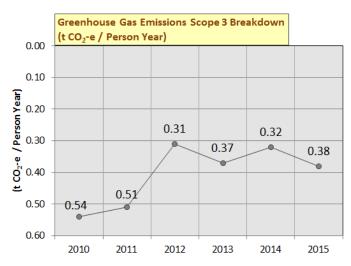
#### Indirect Emissions (Scope 3) (t CO<sub>2</sub>-e / Person Year)

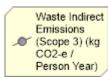




Indirect Emissions (Scope 3) (t  $CO_2$ -e / Person Year) for the year 2015 (1 January 2015 – 31 December 2015) was 0.38 t  $CO_2$ -e / Person Year.

### Greenhouse Gas Emissions Scope 3 Breakdown (t CO<sub>2</sub>-e / Person Year)





Waste Indirect Emissions (Scope 3) (t  $CO_2$ -e / Person Year) for the year 2015 (1 January 2015 – 31 December 2015) was 0.38 t  $CO_2$ -e / Person Year.

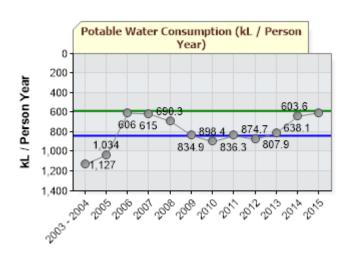
				Direct Emissi	ions (Scope 1)					
					el Combustion					
2015										
	Туре		Quantity	Unit	Energy Consumption (MJ)	CO <sub>2</sub> Emission Estimate (t CO <sub>2</sub> -e)	CH <sub>4</sub> Emission Estimate (t CO <sub>2</sub> -e)	N <sub>2</sub> O Emission Estimate (t CO <sub>2</sub> -e)	Total Emission Estimate (t CO <sub>2</sub> -e)	
	Heavy fuel oil		84443	litres (L)	3227088.7	237.3	0.6	0.6	238.5	
				subtotal	3227088.7	237.3	0.6	0.6	238.5	
	Mobile Fuel Combustion (road) 2015									
	T		Our white			CO. Fusianian	CII. Emilesian	N O Fraississ	T-t-I Fii	
	Туре		Quantity	Unit	Energy Consumption (MJ)	CO <sub>2</sub> Emission Estimate (t CO <sub>2</sub> -e)	CH <sub>4</sub> Emission Estimate (t CO <sub>2</sub> -e)	N <sub>2</sub> O Emission Estimate (t CO <sub>2</sub> -e)	Total Emission Estimate (t CO <sub>2</sub> -e)	
	Motor gasoline		2176049	litres (L)	74426271.3	4899.9	37.1	175.3	5112.3	
	Diesel		3969558	litres (L)	151624810.0	10673.6	11.8	174.1	10859.6	
				subtotal	226051081.3	15573.5	48.9	349.5	15971.9	
					nbustion (water)					
					D15 _					
	Туре		Quantity	Unit	Energy Consumption (MJ)	CO <sub>2</sub> Emission Estimate (t CO <sub>2</sub> -e)	CH <sub>4</sub> Emission Estimate (t CO <sub>2</sub> -e)	N <sub>2</sub> O Emission Estimate (t CO <sub>2</sub> -e)	Total Emission Estimate (t CO <sub>2</sub> -e)	
	Heavy fuel oil		912808	litres (L)	34884033.0	2565.0	4.9	20.5	2590.4	
				subtotal	34884033.0	2565.0	4.9	20.5	2590.4	
				TOTAL	264162203.0	18375.8	54.4	370.6	18800.8	
	Indirect Emissions (Scope 2)									
					d Electricity 015					
Quantity	Ui	nit	% Green Power	Provider	Energy Consumption (MJ)	CO <sub>2</sub> Emission Estimate (t CO <sub>2</sub> -e)	CH <sub>4</sub> Emission Estimate (t CO <sub>2</sub> -e)	N <sub>2</sub> O Emission Estimate (t CO <sub>2</sub> -e)	Total Emission Estimate (t CO <sub>2</sub> -e)	
148660974	Kilowatt h	our (kWh)	0	Iceland	535179506.4	27.2	0.09	0.5	27.8	
				subtotal	535179506.4	27.2	0.09	0.5	27.8	
				TOTAL	535179506.4	27.2	0.09	0.5	27.8	
			Gree	nhouse Gas Emissio	ns (Scope 1 and Sco	ope 2)				
				GRAND TOTAL	799341709.4	18403.0	54.5	371.1	18828.6	
					sions (Scope 3)					
					t to Landfill 015					
Quantity	Unit	Type of Landfill	Type of Waste	Type of Operation	Source	CO <sub>2</sub> Emission Estimate (t CO <sub>2</sub> -e)	CH <sub>4</sub> Emission Estimate (t CO <sub>2</sub> -e)	N <sub>2</sub> O Emission Estimate (t CO <sub>2</sub> -e)	Total Emission Estimate (t CO <sub>2</sub> -e)	
	Idla avana	Covered and/or	Unknown (mixed	Other Operation	International	0.0	1752.9	0.0	1752.9	
1460722	kilograms (uncompacted)	managed waste treatment facility	waste types)							
1460722			waste types)		subtotal	0.0	1752.9	0.0	1752.9	

<sup>\*</sup>A Green Power Agreement is unavailable for purchased as standard grid supply of electricity is from close to 100% renewable energy sources in Iceland.

#### Water

## Potable Water Consumption (kL / Person Year) ✓





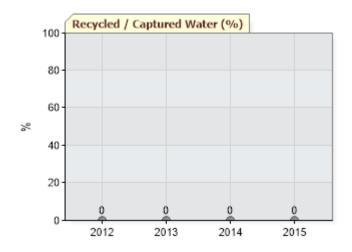


Potable Water Consumption (kL / Person Year) for the year 2015 (1 January 2015 - 31 December 2015) was 603.6 kL / Person Year, which was 27.8% better than the Baseline level.

#### 2015

Quantity	Unit	Potable Water Consumption (kL)	
2767504	kilolitres (kL)	2767504.0 kL	
	TOTAL	2767504.0 kL	

#### Recycled / Captured Water (%)





Recycled / Captured Water (%) for the year 2015 (1 January 2015 - 31 December 2015) was 0%.

#### Waste

## Waste Sent to Landfill (m³ / Person Year)





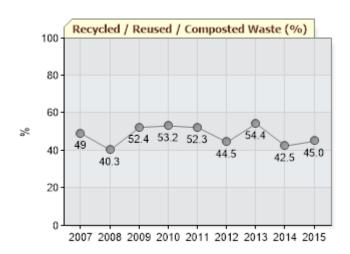


Waste Sent to Landfill (m³ / Person Year) for the year 2015 (1 January 2015 - 31 December 2015) was  $1.1~\text{m}^3$  / Person Year, which was 11.4% better than the Best Practice level.

2015

2013						
Quantity	Unit	Type of Landfill	Type of Waste	Type of Operation	Waste Sent to Landfill (m³)	
1460722	kilograms (uncompacted)	Covered and/or managed waste treatment facility	Unknown (mixed waste types)	Other Operation	4869.1 m <sup>3</sup>	
				TOTAL	4869.1 m³	

#### Recycled / Reused / Composted Waste (%)

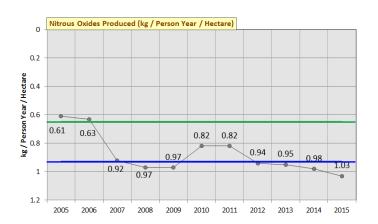




Recycled / Reused / Composted Waste (%) for the year 2015 (1 January 2015 -31 December 2015) was 45.0%.

## Sector Specific

# Nitrous Oxides Produced (kg / Person Year / Hectare)

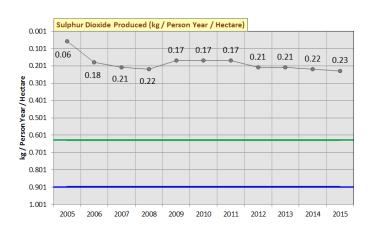




Nitrous Oxides Produced (kg / Person Year / Hectare) for the year 2015 (1 January 2015 -31 December 2015) was 1.03 kg / Person Year / Hectare, which was 10.8% below the Baseline level.

#### **Sulphur Dioxide Produced (kg / Person Year / Hectare)**







Sulphur Dioxide Produced (kg / Person Year / Hectare) for the year 2015 (1 January 2015 -31 December 2015) was 0.23 kg / Person Year / Hectare, which was 63.5% better than the Best Practice level.

## Particulate Matter Produced (kg / Person Year / Hectare)



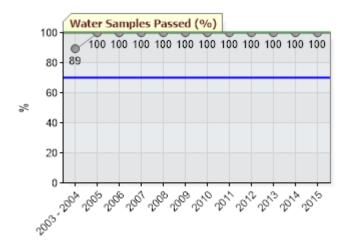




Particulate Matter Produced (kg / Person Year / Hectare) for the year 2015 (1 January 2015 - 31 December 2015) was 0.02 kg / Person Year / Hectare, which was 71.4% better than the Best Practice level.

## Water Samples Passed (%)

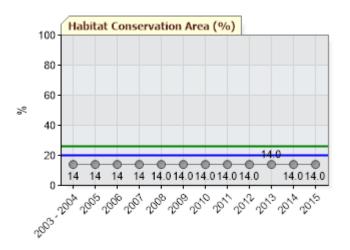






Water Samples Passed (%) for the year 2015 (1 January 2015 - 31 December 2015) was 100%, which was at the Best Practice level.

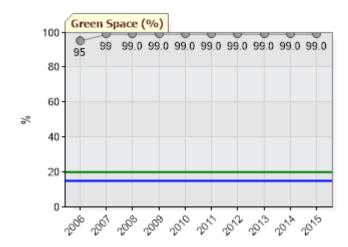
## Habitat Conservation Area (%)





Habitat Conservation Area (%) for the year 2015 (1 January 2015 - 31 December 2015) was 14.0%, which was 6.0% below the Baseline level.

# Green Space (%)★



# Snaefellsnes Peninsula 15 — Baseline 20 — Best Practice

Green Space (%) for the year 2015 (1 January 2015 – 31 December 2015) was 99.0%, which was 79.0% better than the Best Practice level.

#### Significant Site Maintenance Fund (%)



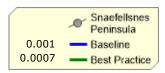


Significant Site Maintenance Fund (%) for the year 2015 (1 January 2015 – 31 December 2015) was Not Available.

## Destination Safety − Homicide Rate (%) ★







Homicide Rate for the year 2015 (1 January 2015 - 31 December 2015) was 0.0% which was 0.0007% better than the Best Practice Level.

## Destination Safety - Theft Rate (%)

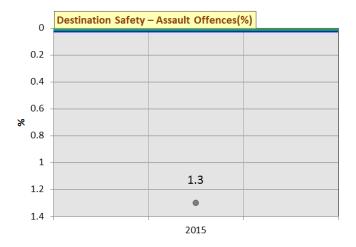






Theft Rate for the year 2015 (1 January 2015 - 31 December 2015) was 0.7% which was 0.19% better than the Best Practice Level.

# Destination Safety – Assault Rate (%) 🗴





Assault Rate for the year 2015 (1 January 2015 - 31 December 2015) was 1.3%, which was 1.277% below the Baseline level.

# Socio-Economic Benefit − Unemployment Rate (%)





Unemployment Rate (%) for the year 2015 (1 January 2015 – 31 December 2015) was 1.5 %, which was 3.1% better than the Best Practice Level.

## Accredited Operations (%)





Accredited Operations (%) for the year 2015 (1 January 2015 – 31 December 2015) was 0%, which was 5.0% below the Baseline level.

# Lead Agency Performance

#### Water

#### **Water Savings Rating (Points)**





Water Savings Rating (Points) for the year 2015 (1 January 2015 – 31 December 2015) not measured as no data entered.

Water Savings Measures	Frequency / Percentage Rating	Water Savings Rating (Points)
Check for leaks	Not Relevant / Available	-
Low/dual flush toilets	Not Relevant / Not Available	-
Low flow tap fittings	Not Relevant / Not Available	-
Low flow shower fittings	Not Relevant / Not Available	-
Water sprinklers used after dark	Not Relevant / Available	-
Minimal irrigation landscaping	Not Relevant / Not Available	-
Use of recycle/grey/rain water	Not Relevant / Available	-
	Overall Rating:	-

#### Waste

## Waste Recycling Rating (Points) ✓







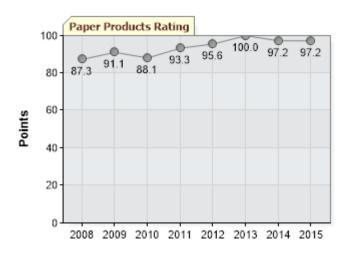
Waste Recycling Rating (Points) for the year 2015 (1 January 2015 – 31 December 2015) was 50.0 Points, which was at the Baseline level.

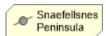
Waste Recycling Measures	Frequency / Percentage Rating	Waste Recycling Rating (Points)
Glass	Relevant / Not Available	50.0 Points
Paper/card	Relevant / Not Available	50.0 Points
Iron & steel (ferrous metals)	Relevant / Not Available	50.0 Points
Other metals (non-ferrous)	Relevant / Not Available	50.0 Points
Plastics	Relevant / Not Available	50.0 Points
Rubber	Relevant / Not Available	50.0 Points
Green waste	Relevant / Not Available	50.0 Points
	Overall Rating:	50.0 Points

## Paper

## Paper Products Rating (Points)







Paper Products Rating (Points) for the year 2015 (1 January 2015 - 31 December 2015) was 97.2 Points, which was 17.2 Points better than the Best Practice level.

Paper Products Measures	Frequency / Percentage Rating	Paper Products Rating (Points)
Office paper	100%	100.0 Points
Serviettes	Not Relevant / Not Available	-
Tissues	100%	100.0 Points
Toilet tissue	80-99%	88.9 Points
Paper towels	100%	100.0 Points
	Overall Rating:	97.2 Points

# Cleaning

## Cleaning Products Rating (Points) ✓







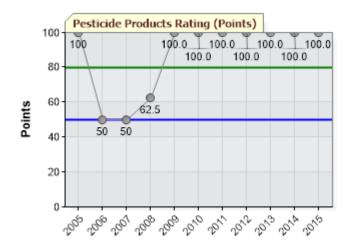
Cleaning Products Rating (Points) for the year 2015 (1 January 2015 – 31 December 2015) was 64.5 Points, which was 14.5 Points better than the Baseline level.

Cleaning Products Measures	Frequency / Percentage Rating	Cleaning Products Rating (Points)
Hard floor cleaners	40-59%	65.1 Points
Carpet cleaners	0%	0.0 Points
Interior surface cleaners	40-59%	65.1 Points
External surface cleaners	Not Relevant / Not Available	100.0 Points
Glass cleaners	80-99%	88.9 Points
Detergents	60-79%	73.9 Points
Personal hygiene	20-39%	58.8 Points
	Overall Rating:	64.5 Points

#### Pesticides

## Pesticide Products Rating (Points)







Pesticide Products Rating (Points) for the year 2015 (1 January 2015 – 31 December 2015) was 100.0 Points, which was 20.0 Points better than the Best Practice level.

If your operation does not use any pesticide products (which is a positive outcome), a rating of 100 will be reported for this indicator on the basis that no use represents a Best Practice achievement.

Pesticide Products Measures	Frequency / Percentage Rating	Pesticide Products Rating (Points)
Weed killers	Not Relevant / Not Available	100.0 Points
Fungal killers	Not Relevant / Not Available	100.0 Points
Rodent killers	Not Relevant / Not Available	100.0 Points
Insect killers	Not Relevant / Not Available	100.0 Points
	Overall Rating:	100.0 Points

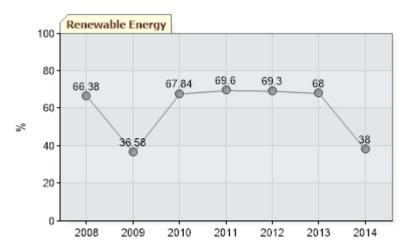
## **OPTIONAL BENCHMARKING INDICATORS**

**Snaefellsnes Peninsula** has also nominated optional Operation Selected and Specified Indicator/s that they consider relevant to their specific operation and locality. The Operation Selected and Specified Indicator/s do not form part of the formal annual benchmarking exercise.

### 1. Selected Indicators

Selected Indicators are from a supplied list of EarthCheck indicators.

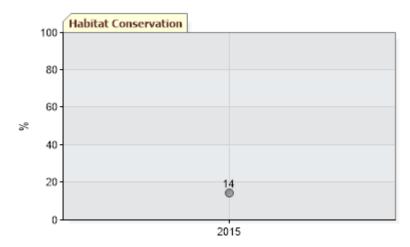
#### **Renewable Energy**



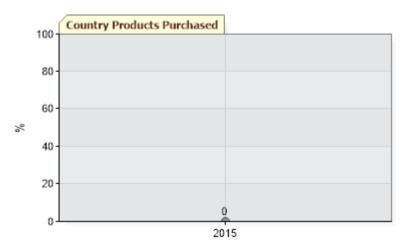
#### **Environmentally Accredited Operators**



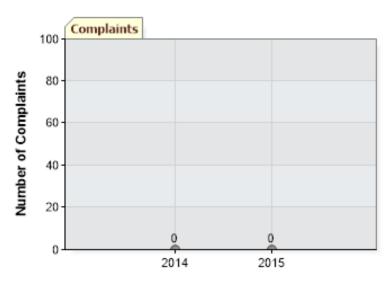
#### **Habitat Conservation**



#### **Country Products Purchased**



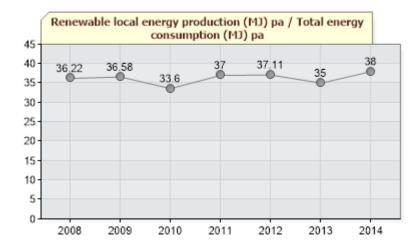
#### **Complaints**



# **Specified Indicators**

Specified Indicators are devised by the operator for local and/or internal performance assessment.

## Renewable local energy production (MJ) pa / Total energy consumption (MJ) pa

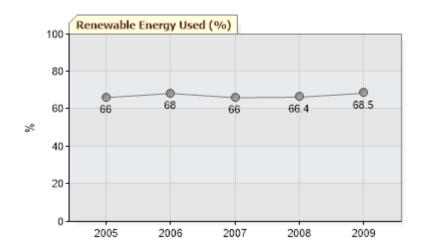


# HISTORIC BENCHMARKING INDICATORS

## 1. Renewable Energy

Renewable Energy % is no longer a supplementary indicator; it is included here for historical reference.

## Renewable Energy Used (%)



The supplied data has been compiled by **Snaefellsnes Peninsula** in the prescribed manner, authorised by a senior executive of the company and submitted for an annual assessment.

## CONCLUSION AND RECOMMENDATIONS

Congratulations, the **Snaefellsnes Peninsula** has met the requirements to be recognised as an EarthCheck Benchmarked Destination.

In addition to having a Sustainability Policy in place, fourteen of the assessed EarthCheck indicators are at or above the Baseline level. From the benchmarking data provided, ten indicators, Waste Sent to Landfill, Sulphur Dioxide Produced, Particulate Matter Produced, Water Samples Passed, Green Space, Homicide Rate, Theft Rate, Employment Rate, Paper Products Rating, and Pesticide Products Rating, are at or above the Best Practice level, which is an achievement to be very highly commended.

The one indicator, Water Savings Rating, could not be assessed as no data was entered.

The five indicators that fell below the Baseline level were *Greenhouse Gas Emissions (Scope 1 and Scope 2), Nitrous Oxides Produced, Habitat Conservation Area, Assault Rate, and Accredited Operations.* 

The value for *Greenhouse Gas Emissions* (Scope 1 and Scope 2) was 0.5% below the Baseline level. **Snaefellsnes Peninsula** is encouraged to review all its existing energy consumption and demand patterns for both facilities (e.g. use of low wattage, energy saving light fittings and timers to switch-off lights) and vehicles (e.g. reducing the number of journeys). **Snaefellsnes Peninsula** is encouraged to investigate other renewable energy options such as Hydro, Solar, or Wind.

The value for *Nitrous Oxides Produced* was 10.8% below the Baseline Level. The **Snaefellsnes Peninsula** is encouraged to make improvements to ensure that Air Quality (NO<sub>x</sub>) will meet the Baseline level for the next Benchmarking Period.

The value for *Habitat Conservation Area* was 6 % below the Baseline Level. The **Snaefellsnes** is encouraged to promote habitat conservation of land, wetlands and waterways to aid biodiversity conservation and support habitat protection within the region.

The percentage of *Assault Rate* is 1.277% below the Baseline level. The **Snaefellsnes** is encouraged to work with the local hotel and tourism association to identify common threats and how the **Snaefellsnes** could assist the community in providing more support to the police in reporting of crime.

The value for *Accredited Operations* was 5% below the Baseline Level. The **Snaefellsnes Peninsula** is encouraged to promote environmental accreditation to hotels, restaurants and other business within the community.

The **Snaefellsnes Peninsula** is encouraged to continue to make improvements in the above indicators and to ensure that any indicators below baseline is addressed in the organisation's risk assessment and long term sustainability approach.

Improvements in all the EarthCheck indicators will not only help the environment, but can also help reduce operational costs. Due to the positive commitment that the **Snaefellsnes Peninsula** has demonstrated to the environment, the assessors are confident that they can maintain or improve performance, where appropriate and practical, in all indicators. In

particular over the next 12 months, the **Snaefellsnes Peninsula** is encouraged to ensure that *Greenhouse Gas Emissions (Scope 1 and Scope 2), Nitrous Oxides Produced, Habitat Conservation Area, Assault Rate, and Accredited Operations* are at Baseline performance or better. In line with EarthCheck Policy this would enable the **Snaefellsnes Peninsula** to continue to meet the benchmarking requirements of the EarthCheck program.

## **APPENDIX**

#### **GREEN SPACE**

The following comments were provided by the **Snaefellsnes Peninsula** prior to the data submission:

"The area is sparsely populated with its 1,479 km2 and 3,868 inhabitants (1. Jan 2016), giving less than 3 people/km2. The majority of inhabitants live in the three towns of Stykkishólmur, Grundarfjördur, Ólafsvík and the two small villages of Hellissandur and Rif (Ólafsvík, Rif and Hellissandur belong to Snæfellsbær municipality). Thus the majority of the total area, roughly some 1,400 km2 is hosting only around 200 inhabitants. Within the destinations area is Snæfellsjökull National Park (170 km2, no inhabitants) and other areas protected under the Nature Conservation act nr.60/2013 or specific laws on protection of nature. In that sense almost the whole area is an open space and any efforts to develop "Green Spaces" would imply interference with nature, practically untouched for centuries."

Based on the information provided, the untouched areas would be deemed as part of Green Space. It is established that the majority of area for **Snaefellsnes** would be deemed as Green Space and therefore the Benchmarking Assessors have updated the 2015's data from 14% to 99% in line with the previous assessment. It is recommended that the data used to calculate the Green Space are verified at time of audit to ensure data reported in future benchmarking assessments are correct.

#### WATER SAVINGS RATING

The following comments were provided by the **Snaefellsnes Peninsula** prior to the data submission:

"Water savings -

- o How often does the organisation check for leaks
  - Not relevant/ Available ?
- o What % of all toilest installes are low/dual flush?
  - N/A
- o What % of all taps at your operation have low flow fixtures installed
  - N/A
- o What % of all showers at your operation have low flow fixtures installed
  - N/A
- o What % of all water sprinklers at your operation are only used at night and/or after dark?
  - I need to look at this better
- o What % of your landscape requires minimal irrigation
  - Is the question "how must of the area needs little watering?"
  - Football and golf-fields are possibly the only place that get "watered". Is that what you are refering to?
- o What % of your total water consumption is from recycles, grey, and/or rain water sources?
  - There is no recycling of water.
  - N/A"

The Benchmarking Assessors advised that the rating indicators are for the Destination Authority's offices only. It is due to the fact that obtaining such detailed information on these actions and activities across the entire Destination is likely to be extremely difficult. As a consequence, the checklist indicators focus on the Destination Authority by assessing its practices and purchasing policies. The rationale is that they are in an excellent position to "lead-by-example" by demonstrating practical and realistic methods and approaches that members of the Destination can adopt. With this information in mind, the **Snaefellsnes** 

**Peninsula** was requested to provide the updated data for the Water Savings Rating indicator. However the **Snaefellsnes Peninsula** was unable to provide further information regarding the Water Savings Indicators, the data initially submitted remained unchanged. The **Snaefellsnes Peninsula** is encouraged to establish a methodology to collect relevant data for the Water Savings indicator for future benchmarking assessments.

#### WASTE RECYCLING RATING

The Benchmarking Assessors requested clarification in relation to the Waste Recycling Rating as all Waste Recycling measures for 2016 have been submitted as Relevant / Not Available when percentages were reported in the past. However the **Snaefellsnes Peninsula** was unable to provide further information regarding the Waste Recycling Indicators, the data initially submitted remained unchanged. It is recommended that the data used to calculate the Waste Recycling Rating are verified at time of audit to ensure the information reported are correct.

#### SIGNIFICANT SITE MAINTENANCE FUND

The Benchmarking Assessors requested clarification in relation to the Significant Site Maintenance Fund as no data had been submitted for the percentage of Destination Authority budget allocated to maintenance of significant sites. However the **Snaefellsnes Peninsula** was unable to provide further information regarding the Significant Site Maintenance Fund, the indicator remained as Not Applicable for the 2015 benchmarking period. The **Snaefellsnes Peninsula** is encouraged to establish a methodology to collect relevant data for the Significant Site Maintenance Fund indicator for future benchmarking assessments.

#### **DESTINATION SAFETY**

The following comments were provided by the **Snaefellsnes Peninsula** prior to the data submission:

"Homicide, theft and assault numbers for destination safety that were entered are for all of West Iceland including municipalities Akraneskaupstaður (6908), Borgarbyggð(3637), Dalabyggð(678), Hvalfjarðarsveit(622) and Skorradalshreppur (53). Numbers in brackets are number of residents on 1. Jan 2016. I have been in contact with Guðrún Sesselja Baldursdóttir with the National Commissioner of the Icelandic Police office for more detailed numbers. She is very busy but has promished to send them to me as soon as she has them. I will then be in contact with my relationship manager."

#### The **Snaefellsnes Peninsula** later advised:

"I have just receive data from the police department that need to be updated as I put in numbers for all of west Iceland

Violations in Snæfellsnes (all 5 municipalities) in 2015

Destination safety:

Homicide offences - 0 (ratio 0%) Theft offences - 38 (ratio 0,7%) Assault offences - 3 (1,3%)"

The Benchmarking Assessors sought clarification with regards to the total resident population in Snæfellsnes for the 2015 benchmarking period so that the correct ratios can be updated. However the **Snaefellsnes Peninsula** was unable to provide further information regarding the total resident population. Therefore the supplied ratios have been used. It is recommended that the data used to calculate the Destination Safety indicators are verified at time of audit to ensure the values reported are correct.



## **Benchmarks Assessed by EarthCheck**

## SUMMARY OF SUPPLIED BENCHMARKING DATA

## **Activity Measures**

Person Years 4585 Total Destination Area 147900

## Supplied Benchmarking Data

#### **Energy**

# Energy Consumption (GJ / Person Year)

Supplied 799341.7094 GJ

Calculated 174.3384 GJ / Person Year
Baseline 176.6 GJ / Person Year
Best Practice 123.7 GJ / Person Year
Difference 1.3% better than the Baseline

level

#### Green Power (%)

Supplied Not Applicable Calculated Not Applicable

# Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO<sub>2</sub>-e / Person Year)

Supplied 18828.6 t CO<sub>2</sub>-e

Calculated  $4.1 \text{ t CO}_2\text{-e}$  / Person Year Baseline  $4.08771 \text{ t CO}_2\text{-e}$  / Person Year Best Practice  $2.86139 \text{ t CO}_2\text{-e}$  / Person Year Difference 0.5% below the Baseline level

# Direct Emissions (Scope 1) (t CO<sub>2</sub>-e / Person Year)

Supplied 18800.8 t CO<sub>2</sub>-e

Calculated 4.1 t CO<sub>2</sub>-e / Person Year

# Indirect Emissions (Scope 2) (kg CO<sub>2</sub>-e / Person Year)

Supplied 27759.5 kg CO<sub>2</sub>-e

Calculated 6.1 kg CO<sub>2</sub>-e / Person Year

# Indirect Emissions (Scope 3) (t CO<sub>2</sub>-e / Person Year)

Supplied 1752.866.t4 t CO<sub>2</sub>-e

Calculated 0.3823 t CO<sub>2</sub>-e / Person Year

# Waste Indirect Emissions (Scope 3) (t CO<sub>2</sub>-e / Person Year)

Supplied 1752.8664 t CO<sub>2</sub>-e

Calculated 0.3823 t CO<sub>2</sub>-e / Person Year

#### Water

# Potable Water Consumption (kL / Person Year)

Supplied 2767504.0 kL

Calculated 603.6 kL / Person Year
Baseline 835.5957 kL / Person Year
Best Practice 584.91699 kL / Person Year
Difference 27.8% better than the Baseline

ieve

#### Recycled / Captured Water (%)

Supplied 0% Calculated 0%

#### **Water Savings Rating (Points)**

Supplied No Data
Calculated No Data
Baseline 50 Points
Best Practice 80 Points

#### **Waste**

# Waste Sent to Landfill (m³ / Person Year)

Supplied 4869.1 m<sup>3</sup>

Calculated 1.1 m³ / Person Year
Baseline 1.71302 m³ / Person Year
Best Practice 1.19911 m³ / Person Year
Difference 11.4% better than the Best

Practice level

# Recycled / Reused / Composted Waste (%)

Supplied 45.0% Calculated 45.0%

#### Waste Recycling Rating (Points)

Supplied 50.0 Points
Calculated 50.0 Points
Baseline 50 Points
Best Practice 80 Points

Difference at the Baseline level

#### **Paper**

#### Paper Products Rating (Points)

Supplied 97.2 Points
Calculated 97.2 Points
Baseline 50 Points
Best Practice 80 Points

Difference 17.2 Points better than the Best

Practice level

#### Cleaning

#### **Cleaning Products Rating (Points)**

Supplied 64.5 Points
Calculated 64.5 Points
Baseline 50 Points
Best Practice 80 Points

Difference 14.5 Points better than the

Baseline level

#### **Pesticides**

#### **Pesticide Products Rating (Points)**

Supplied 100.0 Points
Calculated 100.0 Points
Baseline 50 Points
Best Practice 80 Points

Difference 20.0 Points better than the Best

Practice level

#### **Sector Specific**

# Nitrous Oxides Produced (kg / Person Year)

Supplied 142312 kg

Calculated 1.03 kg / Person Year / Hectare
Baseline 0.93 kg / Person Year / Hectare
Best Practice 0.65 kg / Person Year / Hectare
Difference 10.8 % below the Baseline level

# Sulphur Dioxide Produced (kg / Person Year)

Supplied 11505 kg

Calculated 0.23 kg / Person Year / Hectare
Baseline 0.90 kg / Person Year / Hectare
Best Practice 0.63 kg / Person Year / Hectare
Difference 63.5% better than the Best

Practice level

# Particulate Matter Produced (kg / Person Year)

Supplied 503535 kg

Calculated 0.02 kg / Person Year / Hectare
Baseline 0.1 kg / Person Year / Hectare
Best Practice 0.07 kg / Person Year / Hectare
Difference 71.4% better than the Best

Practice level

#### Water Samples Passed (%)

Supplied 100% Calculated 100% Baseline 70 % Best Practice 100 %

Difference at the Best Practice level

#### **Habitat Conservation Area (%)**

Supplied 14.0% Calculated 14.0% Baseline 20 % Best Practice 26 %

Difference 6.0% below the Baseline level

#### Green Space (%)

Supplied 99.0% Calculated 99.0% Baseline 15 % Best Practice 20 %

Difference 79.0% better than the Best

Practice level

#### Significant Site Maintenance Fund (%)

Supplied Not Available Calculated Not Available

# **Destination Safety – Homicide Rate** (%)

Supplied 0.0%
Calculated 0.0%
Baseline 0.001%
Best Practice 0.0007%

Difference 0.0007% better than the Best

Practice level

#### **Destination Safety - Theft Rate (%)**

Supplied 0.7%
Calculated 0.7%
Baseline 1.27%
Best Practice 0.89%

Difference 0.19% better than the Best

Practice level

#### **Destination Safety - Assault Rate (%)**

Supplied 1.3%
Calculated 1.3%
Baseline 0.023%
Best Practice 0.016%

Difference 1.277% below than the Baseline

level

#### Socio-Economic Benefit – Unemployment Rate (%)

Supplied 1.5% Calculated 1.5% Baseline 6.6% Best Practice 4.6%

Difference 3.1% better than the Best

Practice Level

## Accredited Operations (%)

Supplied 0%
Calculated 0%
Baseline 5 %
Best Practice 6.5 %

Difference 5.0% below the Baseline level

#### **Habitat Conservation (%)**

Supplied 14.0% Calculated 14.0%

## DETERMINATION OF BASELINE AND BEST PRACTICE LEVELS

#### General

The values for the Baseline and Best Practice levels for each indicator are derived from extensive worldwide research into available and appropriate case studies, industry surveys, engineering design handbooks, energy, water and waste audits, and climatic and geographic conditions.

National and regional data for per capita energy use, greenhouse gas and other emissions, wastes to landfill and water consumption, where available provide background data for normalisation of the expected performance values for per customer or employee, and/or overall performance of an enterprise being benchmarked. They are used to gauge the regional or national situation and environmental performances that an enterprise is based in, and hence what are reasonable levels to expect the enterprise to achieve.

A benchmarking result at, or above, the Baseline level demonstrates to all stakeholders that the enterprise is achieving above average performance. A result below the Baseline level indicates that an enterprise can and should carry out actions that will make beneficial improvements in performance.

#### **Consideration of Climate**

A major determinant of energy consumption in some sectors, primarily those centred on buildings such as accommodation, visitor centres and administration offices will be the dominant climatic conditions in which the enterprise is located. In general, to maintain the same level of indoor comfort, enterprises operating in hot or cold climates will consume more energy than those in temperate climates.

Similarly, it is recognised that in certain sectors a major determinant of potable water consumption will be the climate in which an enterprise is located, in particular those with large grounds and/or significant water-based facilities or activities. That is, enterprises located in hot climates are more likely to consume more potable water than equivalent ones located in cooler climates. Factors that are likely to lead to a higher level of potable water consumption, for example in the accommodation sector, include increased evaporation rates of swimming pools, personal bathing and irrigation demands of grounds. In consideration of this factor, Baseline and Best Practice levels can vary in relation to country location.

#### **Waste Sent to Landfill**

The benchmark indicator used for Waste Sent to Landfill is given in litres as waste bins are usually calibrated by volume, and it has been found that the majority of operations do not have access to the weight of material disposed of. However, if a weight is supplied, standard factors are used to convert from weight (e.g., kilograms (kg)) to volume (e.g., cubic metres  $(m^3)$  or litres (L)). These are: 1 kg (uncompacted waste) = 0.00333333 m<sup>3</sup> or 3.33333 L and 1 kg (compacted waste) = 0.00153846 m<sup>3</sup> or 1.53846 L.

Operations should make note of the level of compaction when submitting data for assessment by EarthCheck.

#### **Review of Performance Levels**

The Baseline and Best Practice performance levels for EarthCheck indicators are continuously reviewed and are likely to change over time. This review by a team of international experts, takes into account "business-as-usual" changes in practices, equipment and facilities, as well as regulations and general improvement trends in performance and procedures. This review is used to update the levels of Baseline and Best Practice, and provides useful feedback to the user of the indicators.

The list below summarises the basic generic rules used to determine Baseline and Best Practice levels for EarthCheck indicators.

- If relevant enterprise sector specific case studies are not available for a type of activity in a designated region, then national averages will be used to ascertain the Baseline level. In this case, the Best Practice level will be set at a minimum of 30% better performance than the Baseline.
- If case study or national data are not available for a specific indicator, then the first enterprise that benchmarks will have its results set as 15% better than Baseline (i.e., half way between Baseline and Best Practice).