



EARTHCHECK

BENCHMARKING ASSESSMENT REPORT

DESTINATION BENCHMARKING

SNAEFELLSNES PENINSULA
STYKKISHOLMI, ICELAND



REPORT DATE: 4 September 2018

Benchmarking Data Collection Period: 1 January 2017 – 31 December 2017

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 below¹. 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 ²
2	Energy	Energy Consumption (GJ / Person Year) ² Green Power (%) ⁴ Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO ₂ -e / Person Year) ³ Indirect Emissions (Scope 3) (t CO ₂ -e / Person Year) ³
3	Water	Potable Water Consumption (kL / Person Year) ³ Recycled / Captured Water (%) ⁴
4	Waste	Waste Sent to Landfill (m ³ / Person Year) ³ Recycled / Reused / Composted Waste (%) ⁴
5	Sector Specific	Nitrous Oxides Produced (kg / Person Year / Hectare) ^{3 5} Sulphur Dioxide Produced (kg / Person Year / Hectare) ^{3 5} Particulate Matter Produced (kg / Person Year / Hectare) ^{3 5} Water Samples Passed (%) ² Habitat Conservation Area (%) ² Green Space (%) ² Significant Site Maintenance Fund (%) Destination Safety – Homicide Rate (%) Destination Safety – Theft Rate (%) Destination Safety – Assault (%) Socio-Economic Benefit – Unemployment Rate (%) Accredited Operations (%) ²
Lead Agency Performance		
6	Water Savings	Water Savings Rating (Points) ⁶
	Waste Recycling	Waste Recycling Rating (Points) ⁶
	Paper	Paper Products Rating (Points) ⁶
	Cleaning	Cleaning Products Rating (Points) ⁶
	Pesticides	Pesticide Products Rating (Points) ⁶

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- ¹ 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'.
- ² Produced by the lead agency after consultation with the community and consensus.
- ³ 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.
- ⁴ These indicators are for guidance only and do not affect the overall benchmarking evaluation.
- ⁵ 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 Destination, including waterways. The data is then normalized against the average number of person years per area of the country.
- ⁶ Assessed for the lead agency only.

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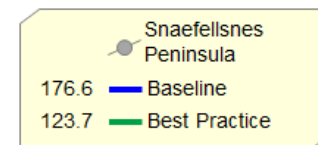
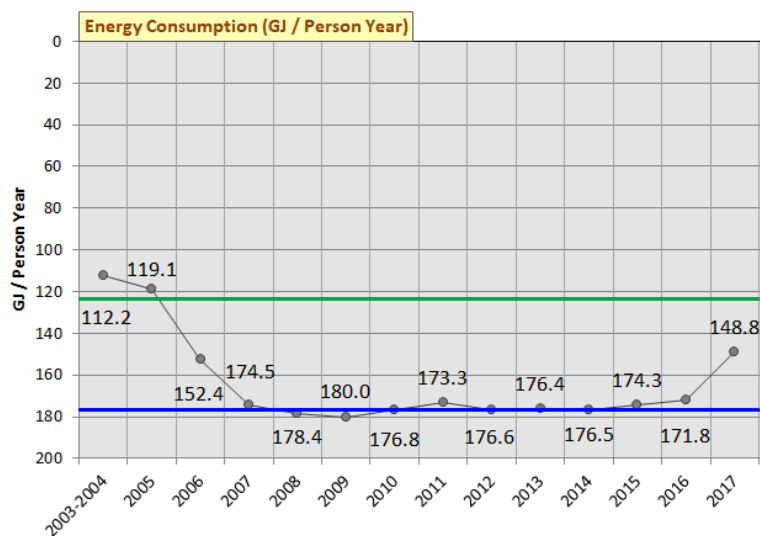
DESTINATION PERFORMANCE BENCHMARKS

Current performance: Below Baseline ✖ At or above Baseline ✔ At or above Best Practice ★

1. Policy ★

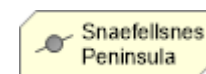
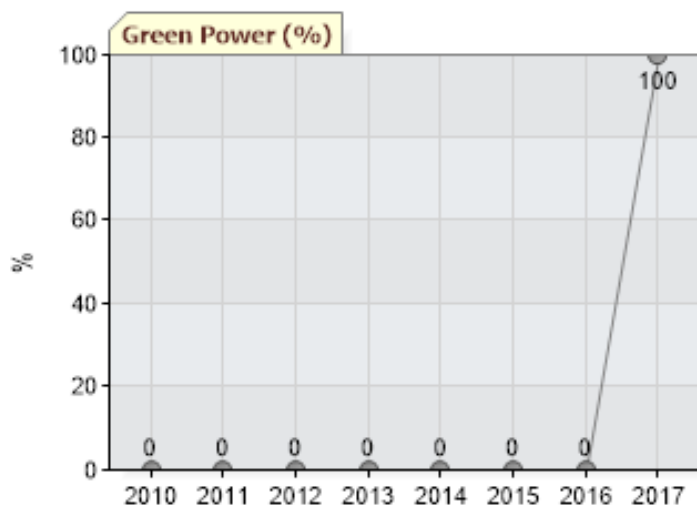
2. Energy

Energy Consumption (GJ / Person Year) ✔



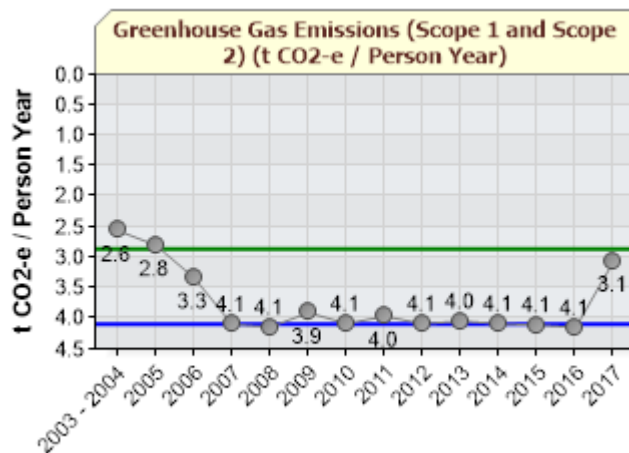
Energy Consumption (GJ / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 148.8 GJ / Person Year, which was 15.75% better than the Baseline level.

Green Power (%)



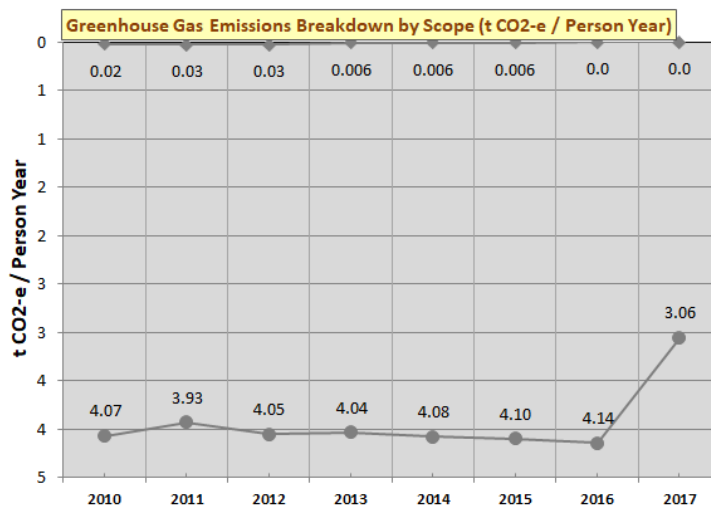
Green Power (%) for the year 2017 (1 January 2017 – 31 December 2017) was 100%.

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



Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 3.1 t CO₂-e / Person Year, which was 25.3% better than the Baseline level.

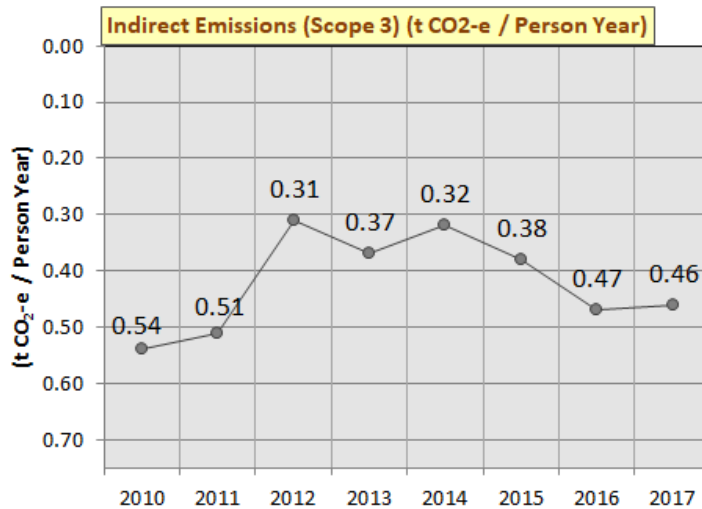
Greenhouse Gas Emissions Breakdown by Scope (kg CO₂-e / Person Year)



Direct Emissions (Scope 1) (kg CO₂-e / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 3.06 t CO₂-e / Person Year.

Indirect Emissions (Scope 2) (kg CO₂-e / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.0 t CO₂-e / Person Year.

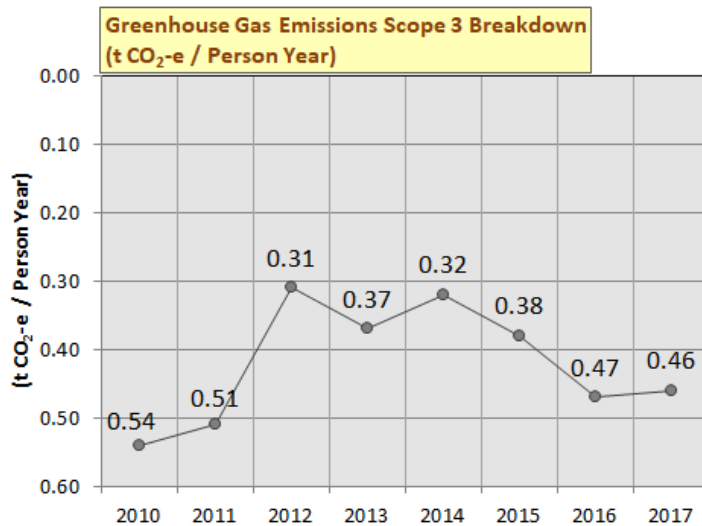
Indirect Emissions (Scope 3) (t CO₂-e / Person Year)



Snæfellsnes Peninsula

Indirect Emissions (Scope 3) (t CO₂-e / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.46 t CO₂-e / Person Year.

Greenhouse Gas Emissions Scope 3 Breakdown (t CO₂-e / Person Year)



Waste Indirect Emissions (Scope 3) (t CO₂-e / Person Year)

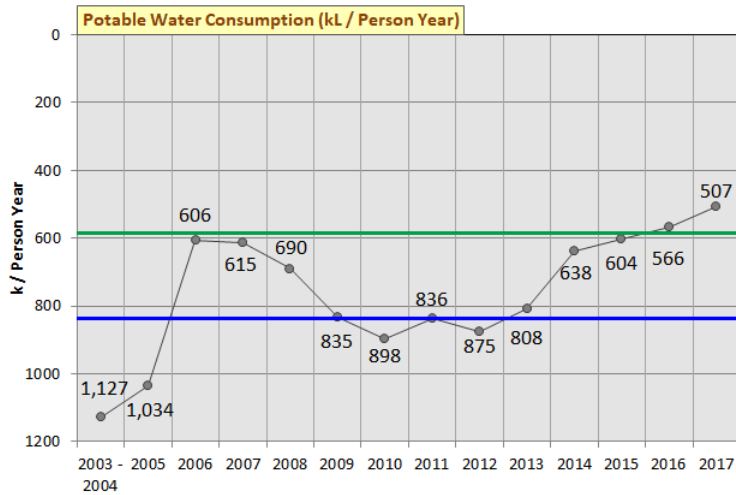
Waste Indirect Emissions (Scope 3) (t CO₂-e / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.46 t CO₂-e / Person Year.

Direct Emissions (Scope 1)								
Stationary Fuel Combustion								
2017								
Type	Quantity	Unit	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)	
Heavy fuel oil	108777	litres (L)	4157041.2	305.7	0.8	0.7	307.2	
subtotal			4157041.2	305.7	0.8	0.7	307.2	
Mobile Fuel Combustion (road)								
2017								
Type	Quantity	Unit	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)	
Diesel	3008805	litres (L)	114927023.7	8090.3	8.9	132.0	8231.2	
Motor gasoline	1424737	litres (L)	48729538.0	3208.1	24.3	114.8	3347.2	
subtotal			163656561.7	11298.4	33.2	246.8	11578.4	
Mobile Fuel Combustion (water)								
2017								
Type	Quantity	Unit	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)	
Heavy fuel oil	977548	litres (L)	37358148.4	2746.9	5.2	22.0	2774.2	
subtotal			37358148.4	2746.9	5.2	22.0	2774.2	
TOTAL				205171751.3	14351.0	39.3	269.5	14659.8
Indirect Emissions (Scope 2)								
Purchased Electricity								
2017								
Quantity	Unit	% Green Power	Provider	Energy Consumption (MJ)	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)
88076263	Kilowatt hour (kWh)	100	Iceland	317074546.8	0.0	0.0	0.0	0.0
205900	Kilowatt hour (kWh)	100	Iceland	741240.0	0.0	0.0	0.0	0.0
53070140	Kilowatt hour (kWh)	100	Iceland	191052504.0	0.0	0.0	0.0	0.0
subtotal				508868290.8	0.0	0.0	0.0	0.0
TOTAL				508868290.8	0.0	0.0	0.0	0.0
Greenhouse Gas Emissions (Scope 1 and Scope 2)								
GRAND TOTAL				714040042.1	14351.0	39.3	269.5	14659.8
Indirect Emissions (Scope 3)								
Waste Sent to Landfill								
2017								
Quantity	Unit	Type of Landfill	Type of Waste	Type of Operation	Source	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)
1851336	kilograms (uncompacted)	Covered and/or managed waste treatment facility	Unknown (mixed waste types)	Other Operation	International	0,0	2221,60	2221,60
subtotal						0,0	2221,60	2221,60

Waste Sent for Incineration								
2017								
Quantity	Unit	Type of Incineration Technology	Type of Waste	Source	CO ₂ Emission Estimate (t CO ₂ -e)	CH ₄ Emission Estimate (t CO ₂ -e)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)
16135	kilograms (uncompacted)	Continuous Incineration - Stoker	Textiles	International	3,87	0,0	0,0	3,87
subtotal					3,87	0,0	0,0	3,87
TOTAL					3,87	221,60	0.0	225,47

3. Water

Potable Water Consumption (kL / Person Year) ★

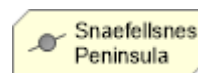
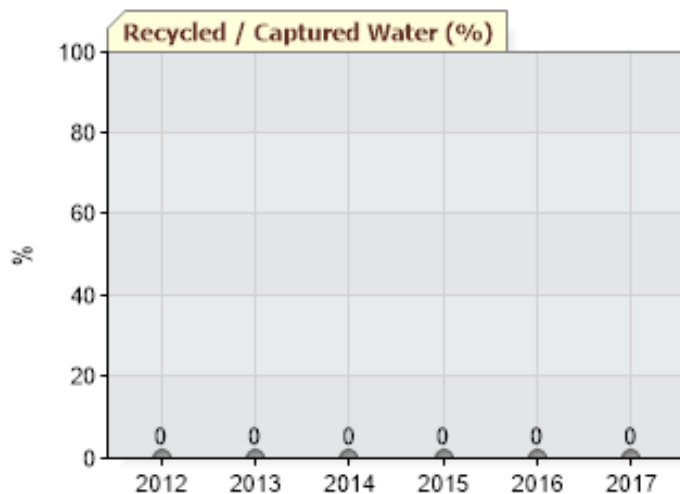


Potable Water Consumption (kL / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 506.7 kL / Person Year, which was 13.4% better than the Best Practice level.

2017

Quantity	Unit	Potable Water Consumption (kL)
2430982	kilolitres (kL)	2430982.0 kL
	TOTAL	2430982.0 kL

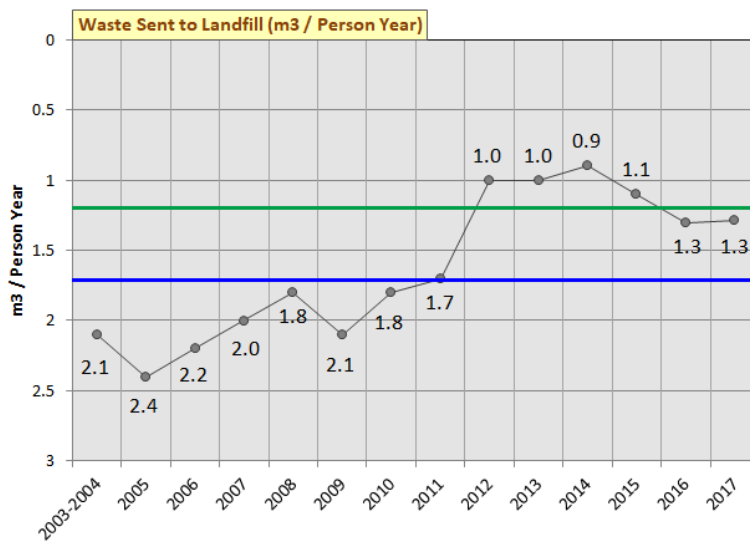
Recycled / Captured Water (%)



Recycled / Captured Water (%) for the year 2017 (1 January 2017 – 31 December 2017) was 0%.

4. Waste

Waste Sent to Landfill (m³ / Person Year) ✓

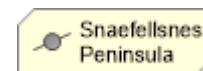
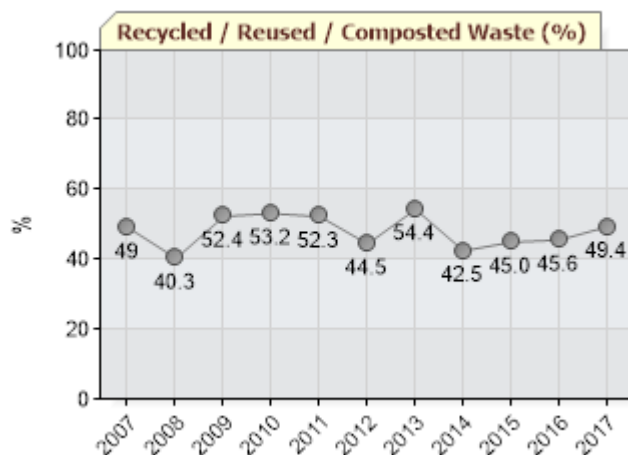


Waste Sent to Landfill (m³ / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 1.29m³ / Person Year, which was 24.56% better than the Baseline level.

2017

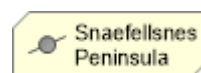
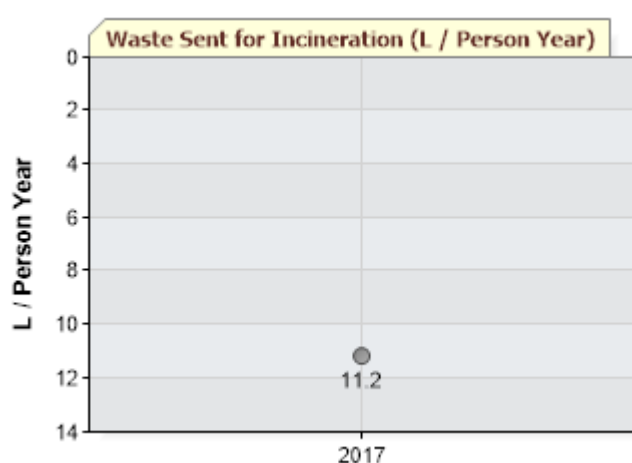
Quantity	Unit	Type of Landfill	Type of Waste	Type of Operation	Waste Sent to Landfill (m ³)
1851336	kilograms (uncompacted)	Covered and/or managed waste treatment facility	Unknown (mixed waste types)	Other Operation	6171,11
				TOTAL	6171,11 m3

Recycled / Reused / Composted Waste (%)



Recycled / Reused / Composted Waste (%) for the year 2017 (1 January 2017 – 31 December 2017) was 49.4%.

Waste Sent for Incineration (L / Person Year)



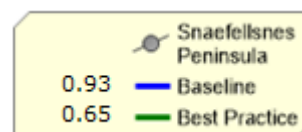
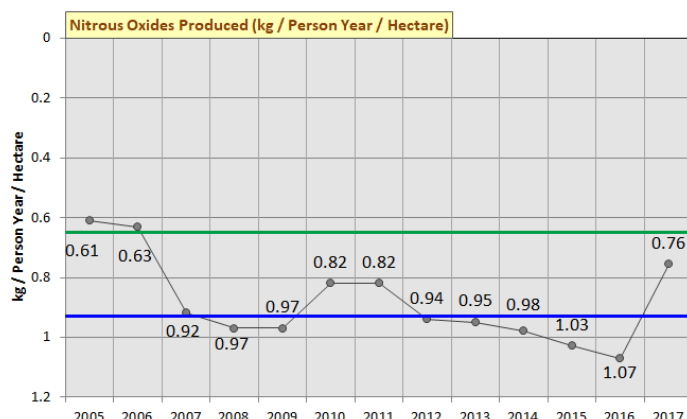
Waste Sent for Incineration (L / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 11.2 L / Person Year.

2017

Quantity	Unit	Type of Incineration Technology	Type of Waste	Waste Sent for Incineration (m ³)
16135	kilograms (uncompacted)	Continuous Incineration - Stoker	Textiles	53.8 m ³
			TOTAL	53783.3 L

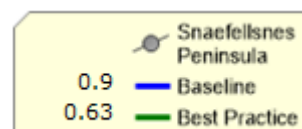
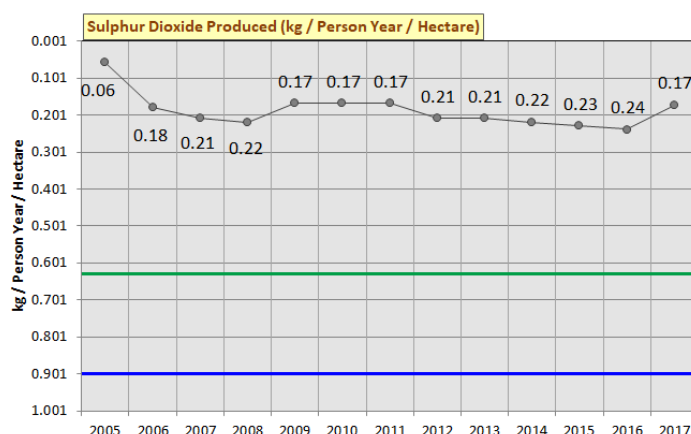
5. Sector Specific

Nitrous Oxides Produced (kg / Person Year) ✓



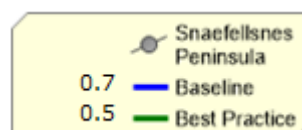
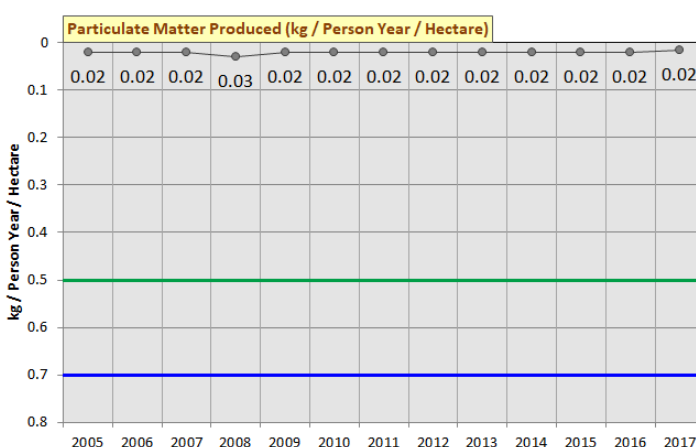
Nitrous Oxides Produced (kg / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.76 kg / Person Year / Hectare, which was 18.3% better than the Baseline level.

Sulphur Dioxide Produced (kg / Person Year) ★



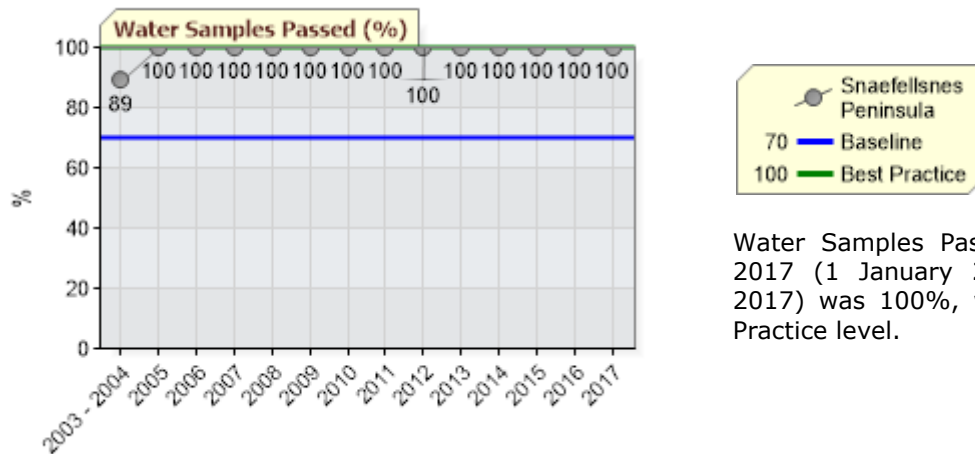
Sulphur Dioxide Produced (kg / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.17 kg / Person Year / Hectare, which was 73% better than the Best Practice level.

Particulate Matter Produced (kg / Person Year) ★



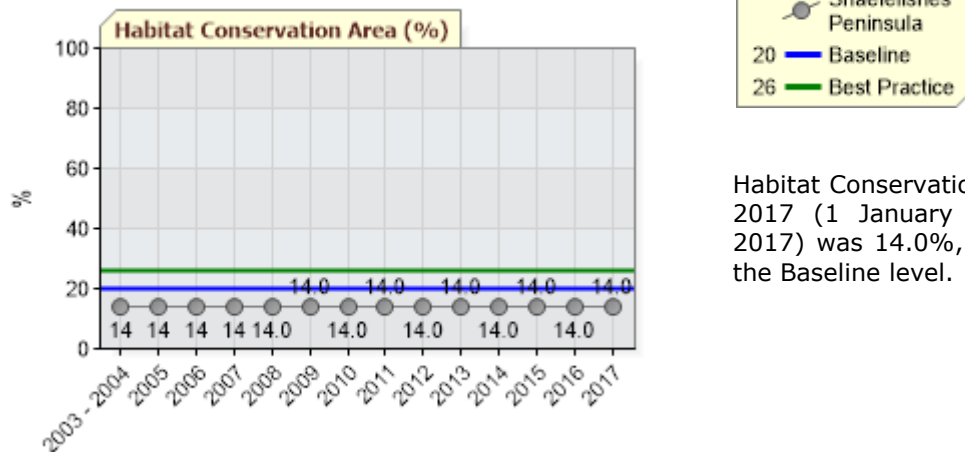
Particulate Matter Produced (kg / Person Year) for the year 2017 (1 January 2017 – 31 December 2017) was 0.016 kg / Person Year / Hectare, which was 96.8% better than the Best Practice level.

Water Samples Passed (%) ★



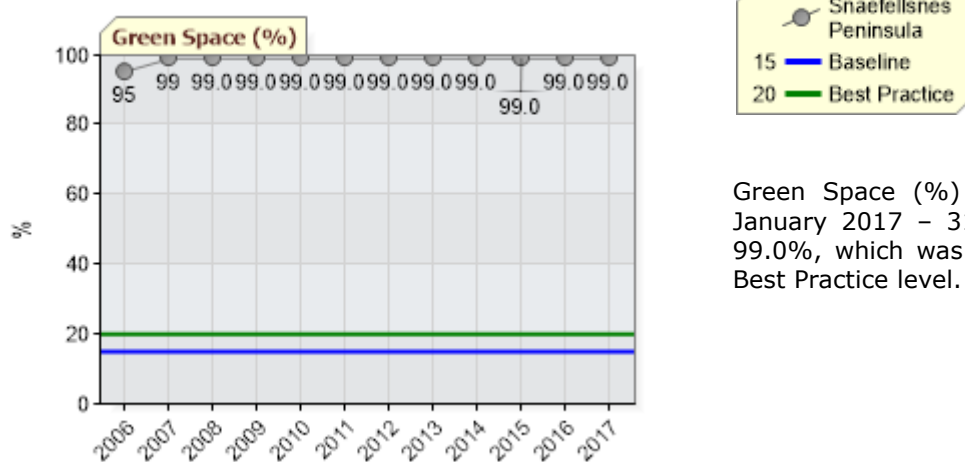
Water Samples Passed (%) for the year 2017 (1 January 2017 – 31 December 2017) was 100%, which was at the Best Practice level.

Habitat Conservation Area (%) ✕



Habitat Conservation Area (%) for the year 2017 (1 January 2017 – 31 December 2017) was 14.0%, which was 6.0% below the Baseline level.

Green Space (%) ★

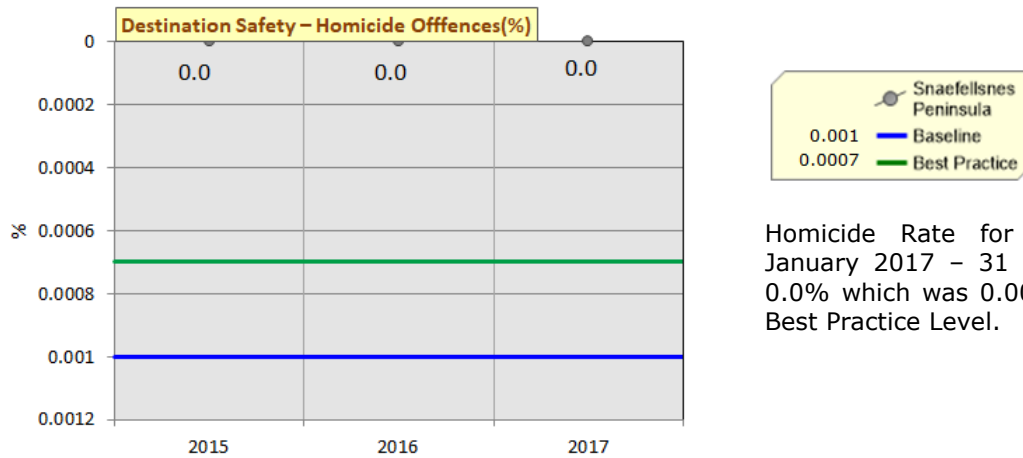


Green Space (%) for the year 2017 (1 January 2017 – 31 December 2017) was 99.0%, which was 79.0% better than the Best Practice level.

Significant Site Maintenance Fund (%)

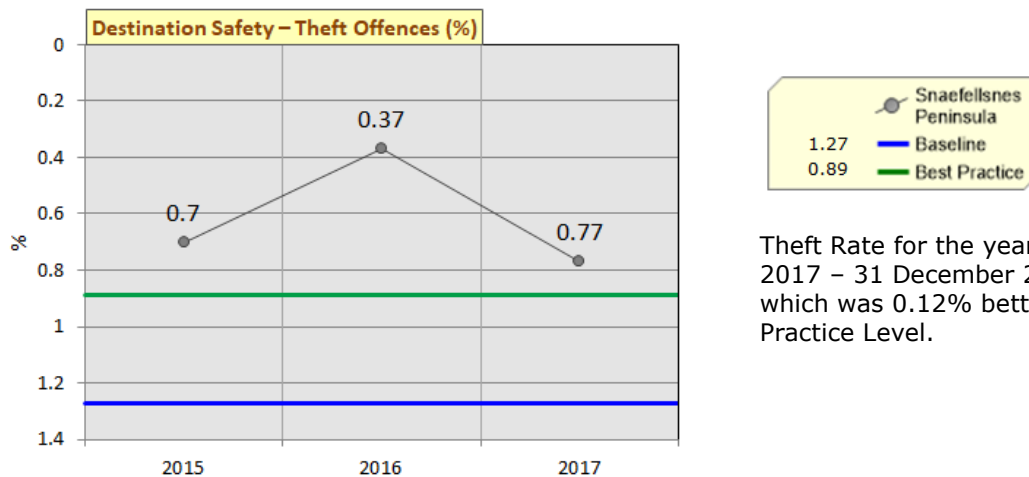
Not Available

Destination Safety – Homicide Rate (%) ★



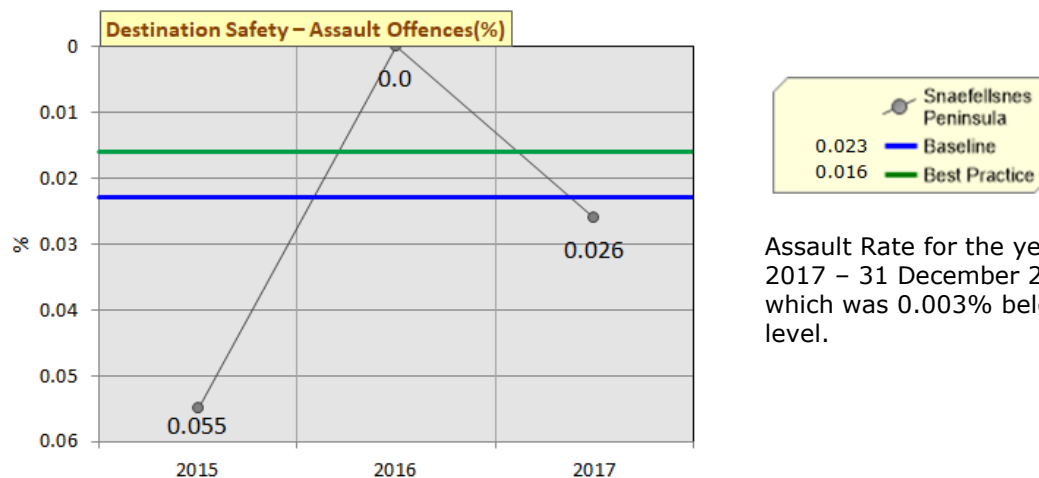
Homicide Rate for the year 2017 (1 January 2017 – 31 December 2017) was 0.0% which was 0.0007% better than the Best Practice Level.

Destination Safety – Theft Rate (%) ★



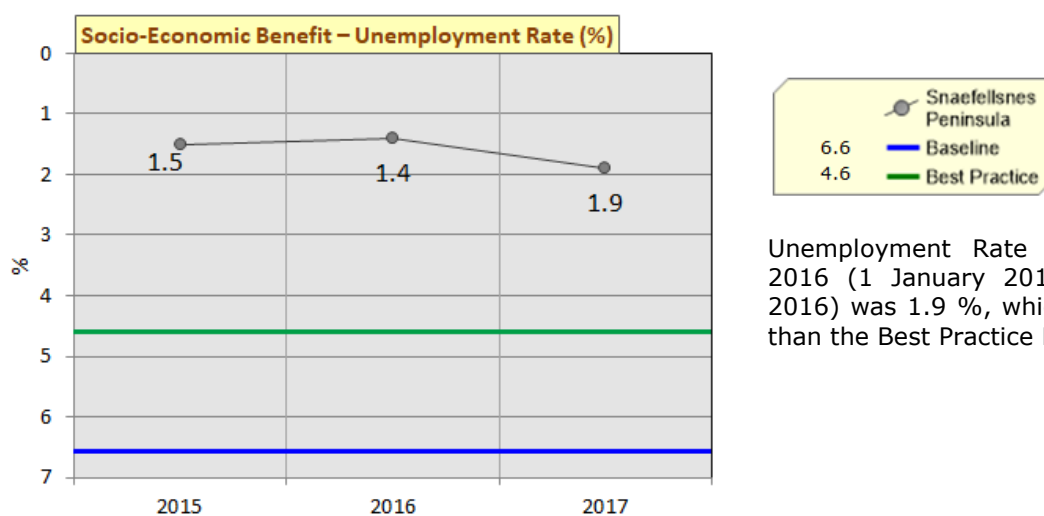
Theft Rate for the year 2017 (1 January 2017 – 31 December 2017) was 0.77% which was 0.12% better than the Best Practice Level.

Destination Safety – Assault Rate (%) ✕



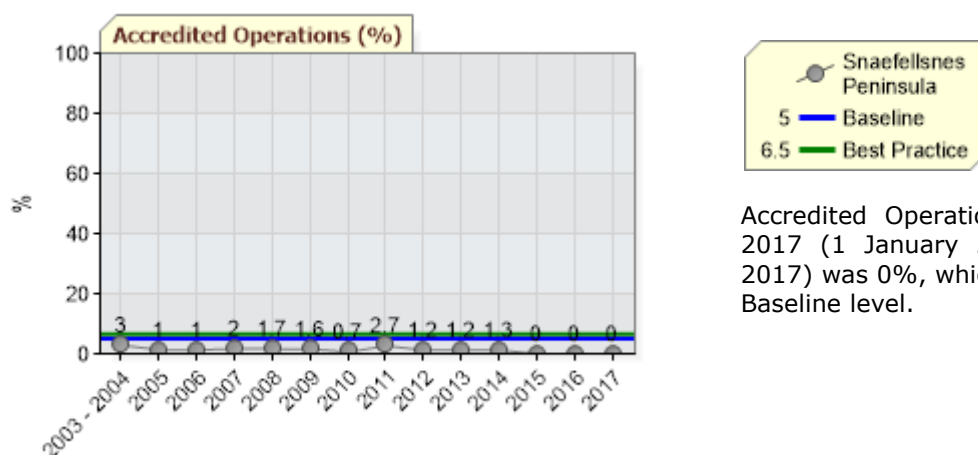
Assault Rate for the year 2017 (1 January 2017 – 31 December 2017) was 0.026%, which was 0.003% below the Baseline level.

Socio-Economic Benefit – Unemployment Rate (%) ★



Unemployment Rate (%) for the year 2016 (1 January 2016 – 31 December 2016) was 1.9 %, which was 2.7% better than the Best Practice Level.

Accredited Operations (%) ✕

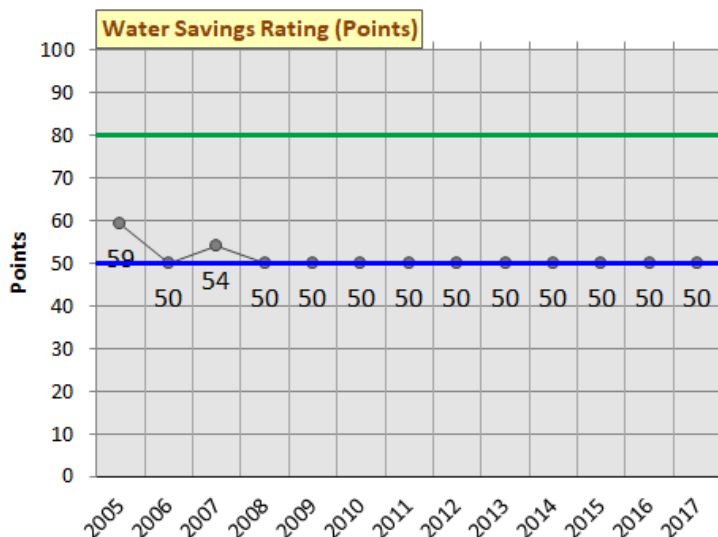


Accredited Operations (%) for the year 2017 (1 January 2017 – 31 December 2017) was 0%, which was 5.0% below the Baseline level.

Lead Agency Performance

Water

Water Savings Rating (Points) ✓

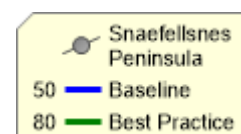
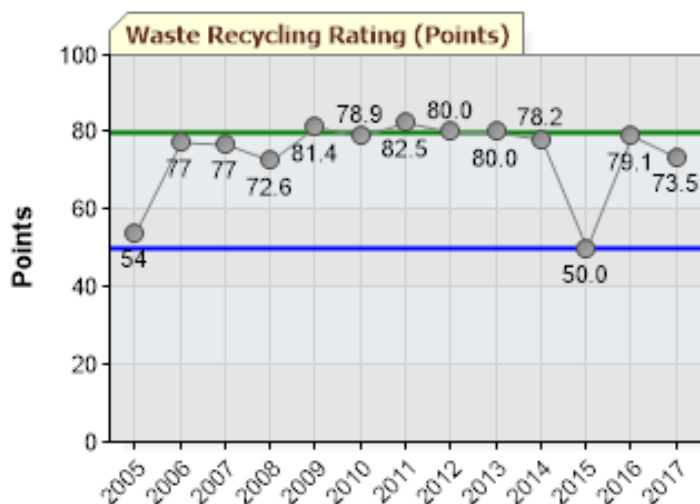


Water Savings Rating (Points) for the year 2017 (1 January 2017 – 31 December 2017) was 50.0 Points, which was at the Baseline level.

Water Savings Measures	Frequency / Percentage Rating	Water Savings Rating (Points)
Check for leaks	Relevant / Not Available	50.0 Points
Low/dual flush toilets	Relevant / Not Available	50.0 Points
Low flow tap fittings	Relevant / Not Available	50.0 Points
Low flow shower fittings	Relevant / Not Available	50.0 Points
Water sprinklers used after dark	Relevant / Not Available	50.0 Points
Minimal irrigation landscaping	Relevant / Not Available	50.0 Points
Use of recycle/grey/rain water	Relevant / Not Available	50.0 Points
	Overall Rating:	50.0 Points

Waste

Waste Recycling Rating (Points) ✓



Waste Recycling Rating (Points) for the year 2017 (1 January 2017 – 31 December 2017) was 73.5 Points, which was 23.5 Points better than the Baseline level.

Waste Recycling Measures	Frequency / Percentage Rating	Waste Recycling Rating (Points)
Glass	80-99%	88.9 Points
Paper/card	60-79%	73.9 Points
Iron & steel (ferrous metals)	80-99%	88.9 Points
Other metals (non-ferrous)	40-59%	65.1 Points
Plastics	60-79%	73.9 Points
Rubber	40-59%	65.1 Points
Green waste	20-39%	58.8 Points
	Overall Rating:	73.5 Points

Paper

Paper Products Rating (Points) ✓

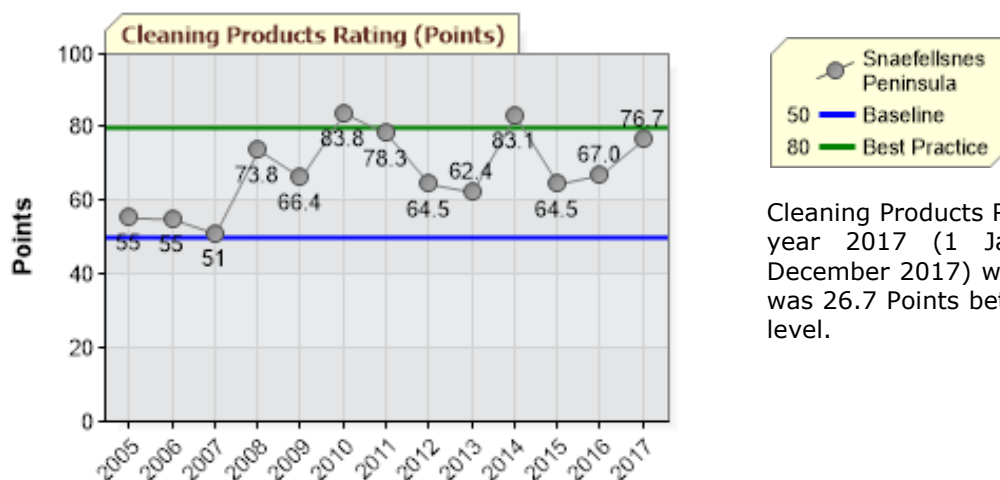


Paper Products Rating (Points) for the year 2017 (1 January 2017 – 31 December 2017) was 75.6 Points, which was 25.6 Points better than the Baseline level.

Paper Products Measures	Frequency / Percentage Rating	Paper Products Rating (Points)
Office paper	100%	100.0 Points
Serviettes	0%	0.0 Points
Tissues	100%	100.0 Points
Toilet tissue	80-99%	88.9 Points
Paper towels	80-99%	88.9 Points
Overall Rating:		75.6 Points

Cleaning

Cleaning Products Rating (Points) ✓

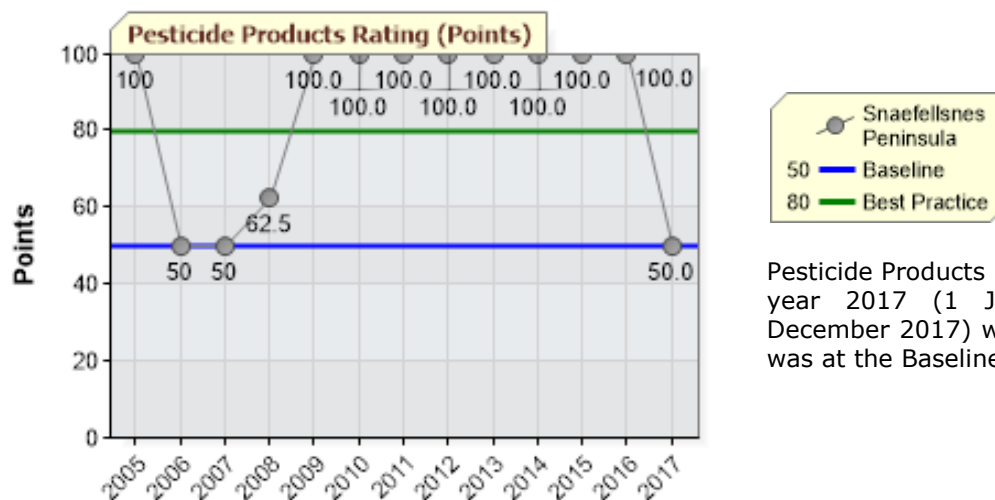


Cleaning Products Rating (Points) for the year 2017 (1 January 2017 – 31 December 2017) was 76.7 Points, which was 26.7 Points better than the Baseline level.

Cleaning Products Measures	Frequency / Percentage Rating	Cleaning Products Rating (Points)
Hard floor cleaners	40-59%	65.1 Points
Carpet cleaners	100%	100.0 Points
Interior surface cleaners	20-39%	58.8 Points
External surface cleaners	Not Relevant / Available	100.0 Points
Glass cleaners	40-59%	65.1 Points
Detergents	80-99%	88.9 Points
Personal hygiene	20-39%	58.8 Points
	Overall Rating:	76.7 Points

Pesticides

Pesticide Products Rating (Points) ✓



Pesticide Products Rating (Points) for the year 2017 (1 January 2017 – 31 December 2017) was 50.0 Points, which was at the Baseline level.

Pesticide Products Measures	Frequency / Percentage Rating	Pesticide Products Rating (Points)
Weed killers	Not Relevant / Available	100.0 Points
Fungal killers	Not Relevant / Available	100.0 Points
Rodent killers	0%	0.0 Points
Insect killers	0%	0.0 Points
	Overall Rating:	50.0 Points

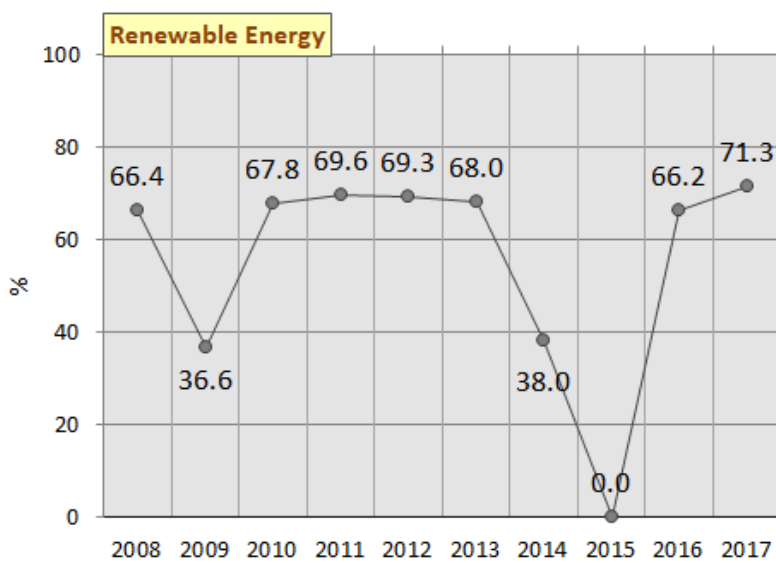
OPTIONAL BENCHMARKING INDICATORS

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.

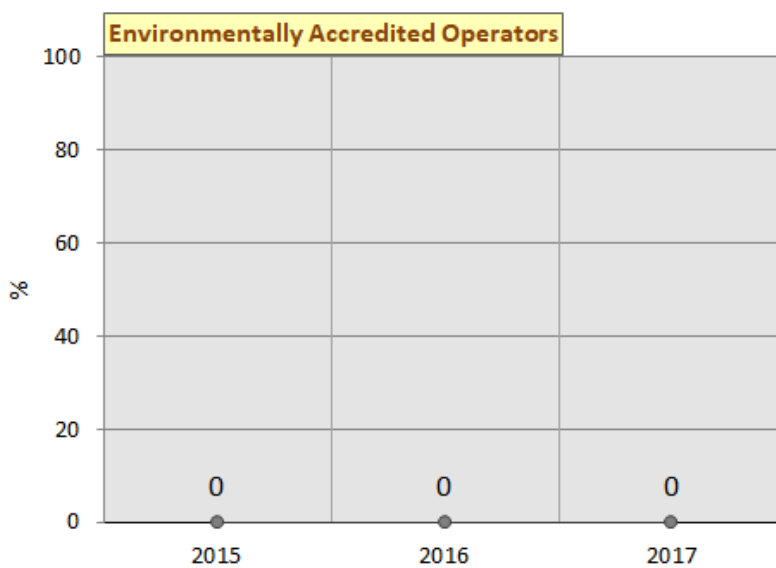
Selected Indicators

Selected Indicators are from a supplied list of EarthCheck indicators.

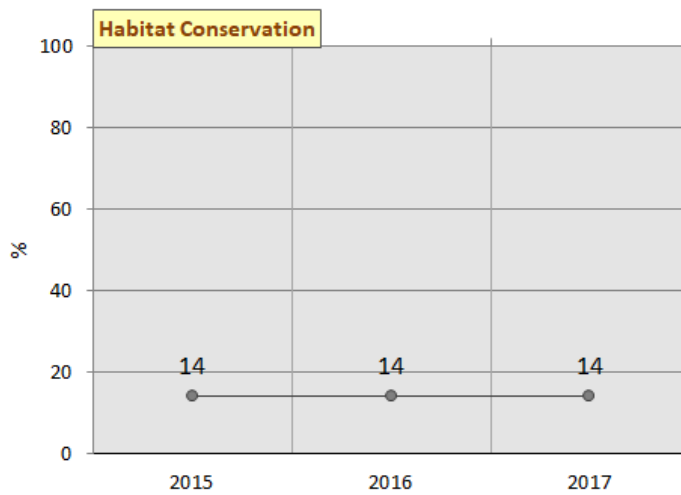
Renewable Energy



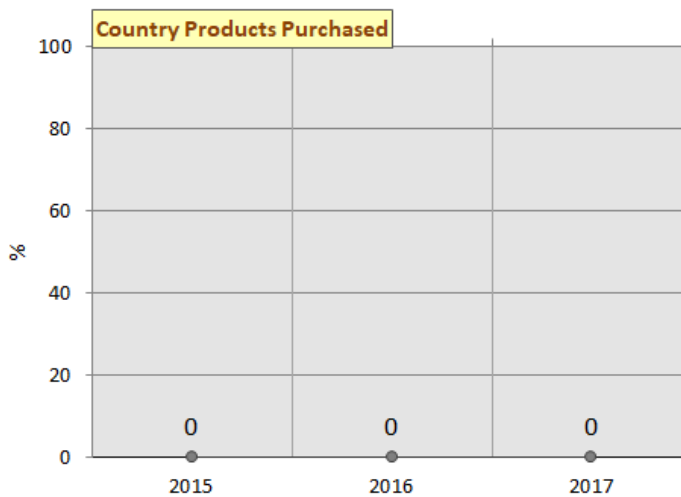
Environmentally Accredited Operators



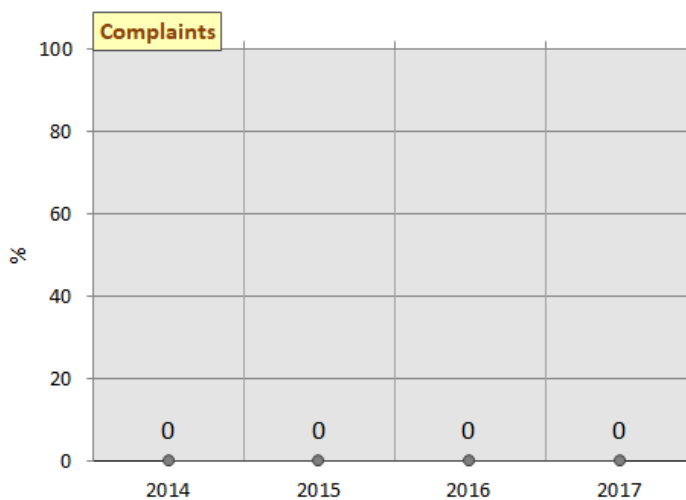
Habitat Conservation



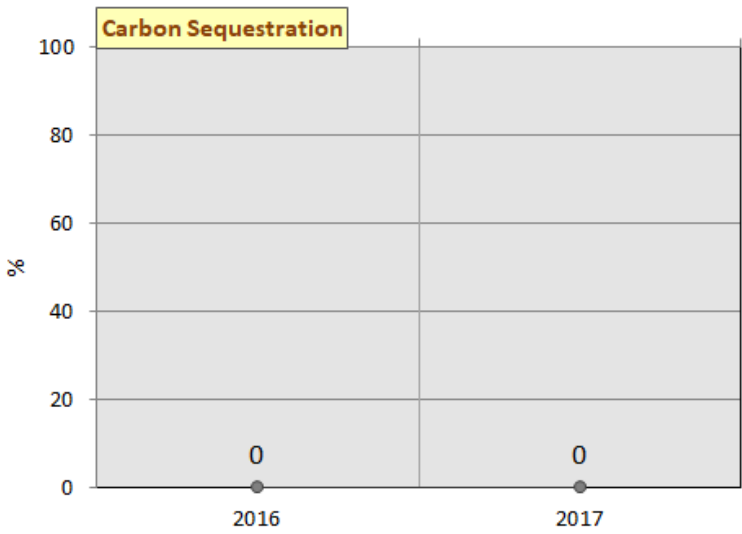
Country Products Purchased



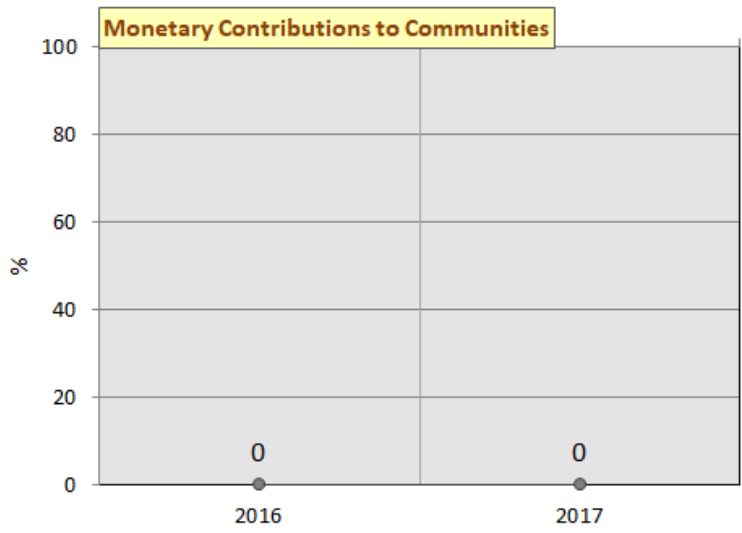
Complaints



Carbon Sequestration



Monetary Contributions to Communities

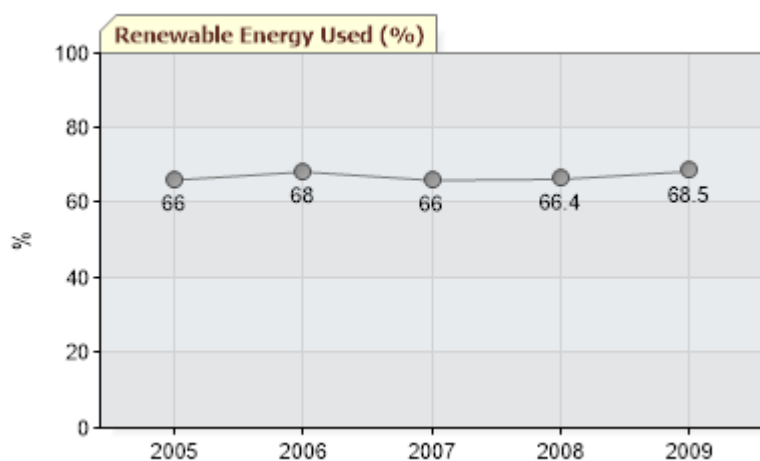


HISTORIC BENCHMARKING INDICATORS

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

In addition to having a Sustainability Policy in place, seventeen of the assessed EarthCheck indicators are at or above the Baseline level.

From the benchmarking data provided, eight indicators, *Potable Water Consumption, Sulphur Dioxide Produced, Particulate Matter Produced, Water Samples Passed, Green Space, Homicide Rate, Theft Rate, and Unemployment Rate*, are at or above the Best Practice level, which is an achievement to be commended.

The three indicators that fell below the Baseline level were *Habitat Conservation Area, Assault Rate, and Accredited Operations*.

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

The Assault Rate is 0.003% below the Baseline. **Snaefellsnes Peninsula** is encouraged to work with the local hotel and tourism association to identify common threats and how they 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. **Snaefellsnes Peninsula** is encouraged to promote environmental accreditation to hotels, restaurants and other business within the destination

The **Snaefellsnes Peninsula** is encouraged to continue to make improvements in the above indicator/s and to ensure that any indicator/s 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 **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 Habitat Conservation Area, 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

MOBILE FUEL COMBUSTION (ROAD)

The Benchmarking Assessors sought clarification in regards to why Motor Gasoline and Diesel consumed for Mobile Fuel Combustion (road) decreased during the 2017 reporting period.

The **Snaefellsnes Peninsula Destination Authority** provided the following response for clarification:

This change is due to calculations on mobile fuel combustion and understandably raises questions. We have used the same calculations since 2008 and thought it was time to review average fuel combustion in 2017. We hired the consultant that created our calculation systems, (specialist in environmental management) and his conclusion was that we have been using obsolete numbers for some years, hence the drastic change in data. In attachment you'll find the calculations for 2016 and 2017.

Therefore the Benchmarking Assessors maintained the figures submitted for Mobile Fuel Combustion (road) based on the clarification provided above.

PURCHASED ELECTRICITY

The Benchmarking Assessors sought clarification in regards to why the percentage of Purchased Electricity sourced from renewables increased to 100% during the 2017 reporting period.

The **Snaefellsnes Peninsula Destination Authority** provided the following response for clarification:

The data provided is correct according to our calculations. We have a green power agreement with all electricity service providers on Snaefellsnes confirming 100% green energy. I uploaded these agreements in the self-assessment checklist 3.1.1. Energy efficiency, conservation and management.

Therefore the Benchmarking Assessors maintained the figures submitted for Purchased Electricity based on the clarification provided above.

WASTE SENT FOR INCINERATION

The Benchmarking Assessors sought clarification to confirm that Waste Sent for Incineration was correctly reported for the first time during the 2017 reporting period.

The **Snaefellsnes Peninsula Destination Authority** provided the following response for clarification:

Yes, this number is correct. I believe no coordinator has separated waste sent to incineration and waste sent to landfill, therefore this is the first time we make the distinction. The years before the waste actually sent to incineration was included in the numbers of waste sent to landfill. I can confirm that the number of weight of waste sent to incineration has not been high.

Therefore the Benchmarking Assessors maintained the figures submitted for Waste Sent for Incineration based on the clarification provided above.

WATER SAVINGS

The Benchmarking Assessors sought clarification with regards to why the responses for the Water Savings indicator changed to Not Relevant / Not Available during the 2017 reporting period.

The **Snaefellsnes Peninsula Destination Authority** provided the following response for clarification:

The answers for 2017 are incorrect, they should say relevant/not available, except the last one should say 0%. We do not have the means to calculate the ratio of most of these water saving methods, but we do however put effort in some of them, i.e. I think most toilets have low/dual flush, we rarely if ever use water sprinklers and leaks are monitored.

Therefore the Benchmarking Assessors updated the figures submitted for Water Savings based on the clarification provided above.



EARTHCHECK

Benchmarks Assessed by EarthCheck

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measures

Person Years	4798
Total Destination Area	147900

Supplied Benchmarking Data

Energy

Energy Consumption (GJ / Person Year)

Supplied	714040 GJ
Calculated	148.8 GJ / Person Year
Baseline	176.6 GJ / Person Year
Best Practice	123.7 MJ / Person Year
Difference	15.8% better than the Baseline level

Green Power (%)

Supplied	100%
Calculated	100%

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

Supplied	14659.8 t CO ₂ -e
Calculated	3.1 t CO ₂ -e / Person Year
Baseline	4.09 t CO ₂ -e / Person Year
Best Practice	2.86 t CO ₂ -e / Person Year
Difference	25.3% better than the Baseline level

Direct Emissions (Scope 1) (t CO₂-e / Person Year)

Supplied	14659.8 t CO ₂ -e
Calculated	3.1 t CO ₂ -e / Person Year

Indirect Emissions (Scope 2) (kg CO₂-e / Person Year)

Supplied	0.0 kg CO ₂ -e
Calculated	0.0 kg CO ₂ -e / Person Year

Indirect Emissions (Scope 3) (t CO₂-e / Person Year)

Supplied	2221.6 t CO ₂ -e
Calculated	0.463 t CO ₂ -e / Person Year

Waste Indirect Emissions (Scope 3) (t CO₂-e / Person Year)

Supplied	2221.6 t CO ₂ -e
Calculated	0.463 t CO ₂ -e / Person Year

Water

Potable Water Consumption (kL / Person Year)

Supplied	2430982.0 kL
Calculated	506.7 kL / Person Year
Baseline	835.6 kL / Person Year
Best Practice	584.9 kL / Person Year
Difference	13.4% better than the Best Practice level

Recycled / Captured Water (%)

Supplied	0%
Calculated	0%

Water Savings Rating (Points)

Supplied	50.0 Points
Calculated	50.0 Points
Baseline	50 Points
Best Practice	80 Points
Difference	at the Baseline level

Waste

Waste Sent to Landfill (m³ / Person Year)

Supplied	6171.11 m ³
Calculated	1.286 m ³ / Person Year
Baseline	1.71302 m ³ / Person Year
Best Practice	1.19911 m ³ / Person Year
Difference	

Recycled / Reused / Composted Waste (%)

Supplied	49.4%
Calculated	49.4%

Waste Recycling Rating (Points)

Supplied	73.5 Points
Calculated	73.5 Points
Baseline	50 Points
Best Practice	80 Points
Difference	23.5 Points better than the Baseline level

Waste Sent for Incineration (L / Person Year)

Supplied	53783.3 L
Calculated	11.2 L / Person Year

Paper

Paper Products Rating (Points)

Supplied	75.6 Points
Calculated	75.6 Points
Baseline	50 Points
Best Practice	80 Points
Difference	25.6 Points better than the Baseline level

Cleaning

Cleaning Products Rating (Points)

Supplied	76.7 Points
Calculated	76.7 Points
Baseline	50 Points
Best Practice	80 Points
Difference	26.7 Points better than the Baseline level

Pesticides

Pesticide Products Rating (Points)

Supplied	50.0 Points
Calculated	50.0 Points
Baseline	50 Points
Best Practice	80 Points
Difference	at the Baseline level

Sector Specific

Nitrous Oxides Produced (kg / Person Year / Hectare)	
Supplied	104761.1 kg
Calculated	0.76 kg / Person Year / Hectare
Baseline	0.93 kg / Person Year / Hectare
Best Practice	0.65 kg / Person Year / Hectare
Difference	18.3% better than the Baseline level
Sulphur Dioxide Produced (kg / Person Year / Hectare)	
Supplied	8667.9 kg
Calculated	0.17 kg / Person Year / Hectare
Baseline	0.9 kg / Person Year / Hectare
Best Practice	0.63 kg / Person Year / Hectare
Difference	73% better than the Best Practice level

Particulate Matter Produced (kg / Person Year / Hectare)

Supplied	354523.7 kg
Calculated	0.02 kg / Person Year / Hectare
Baseline	0.1 kg / Person Year / Hectare
Best Practice	0.07 kg / Person Year / Hectare
Difference	96.8% 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	0.77%
Calculated	0.77%
Baseline	1.27%
Best Practice	0.89%
Difference	0.12% better than the Best Practice level

Destination Safety – Assault Rate (%)

Supplied	0.03%
Calculated	0.0%
Baseline	0.023%
Best Practice	0.016%
Difference	0.003% below the Baseline level

Socio-Economic Benefit – Unemployment Rate (%)	
Supplied	1.4%
Calculated	1.4%
Baseline	6.6%
Best Practice	4.6%
Difference	3.2% 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 (m³) or litres (L)). These are: 1 kg (uncompacted waste) = 0.00333333 m³ or 3.33333 L and 1 kg (compacted waste) = 0.00153846 m³ 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).