



EARTHCHECK

BENCHMARKING ASSESSMENT REPORT

COMMUNITY BENCHMARKING

KOMMUNEQARFIK SERMERSOOQ / SERMERSOOQ BUSINESS
NUUK, GREENLAND



REPORT DATE: 17 May 2021

Benchmarking Data Collection Period: 1 January 2020 – 31 December 2020

The planet deserves more than half measures

OVERVIEW

This annual assessment of **Nuuk, The Capital of Greenland** was undertaken against EarthCheck benchmarking indicators and checklists developed for EarthCheck and listed below. ¹ They have been carefully selected to track performance in key areas of environmental and social performance impact. EarthCheck benchmarking provides an organisation a vehicle for sustainability reporting and is based on the premise of continual improvement. By undertaking a Benchmarking Assessment an organisation meets the requirements of annual benchmarking which includes the collection and submission of benchmarking data to EarthCheck for review and completion of the Benchmarking Assessment Report.²

Indicator Measure (Benchmark)	
1 Policy	Policy is produced and in place
2 Energy	Energy Consumption (GJ / Person Year)
	Green Power (Purchased Electricity) (%) ³
	Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO ₂ -e / Person Year)
	Indirect Emissions (Scope 3) (t CO ₂ -e / Person Year)
3 Water	Potable Water Consumption (kL / Person Year)
	Recycled / Captured Water (%) ³
4 Waste	Waste Sent to Landfill (m ³ / Person Year)
	Recycled / Reused / Composted Waste (%) ³
	Waste Sent for Incineration (m ³ / Person Year) ³
5 Sector Specific	Nitrous Oxides Produced (kg / Person Year / Hectare)
	Sulphur Dioxide Produced (kg / Person Year / Hectare)
	Particulate Matter Produced (kg / Person Year / Hectare)
	Water Samples Passed (%)
	Habitat Conservation (%) ³
	Habitat Conservation Area (%)
	Green Space (%)
	Destination Safety – Homicide Rate (%)
	Destination Safety – Theft Rate (%)
	Destination Safety – Assault Rate (%)
Accredited Operations (%)	
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

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 destination 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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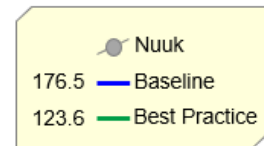
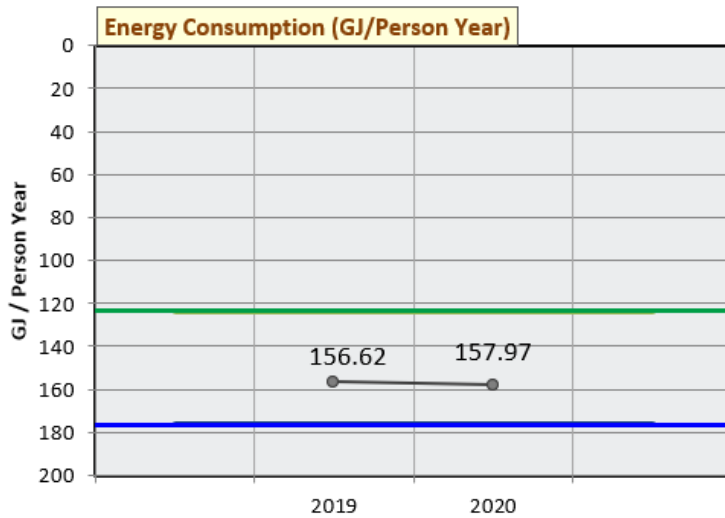
COMMUNITY PERFORMANCE BENCHMARKS

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

1. Policy ★

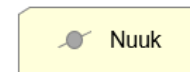
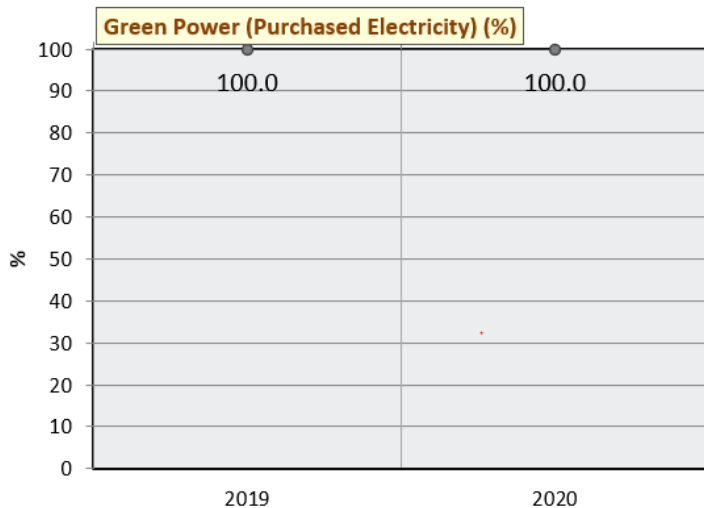
2. Energy

Energy Consumption (GJ / Person Year) ✔



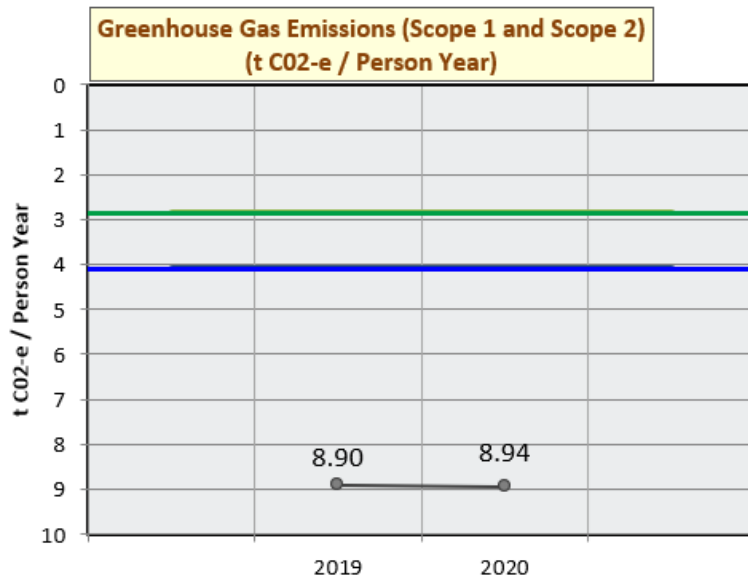
Energy Consumption (GJ / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 157.97 GJ / Person Year, which was 10.5% better than the Baseline level.

Green Power (Purchased Electricity) (%)



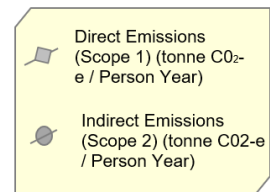
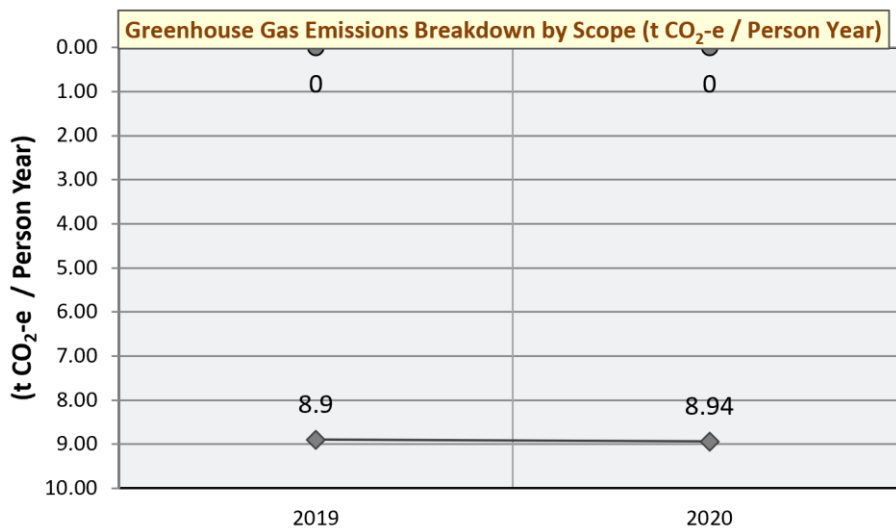
Green Power (Purchased Electricity) (%) for the year 2020 (1 January 2020 – 31 December 2020) was 100%.

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 2020 (1 January 2020 – 31 December 2020) was 8.94 t CO₂-e / Person Year, which was 118.6% below the Baseline level.

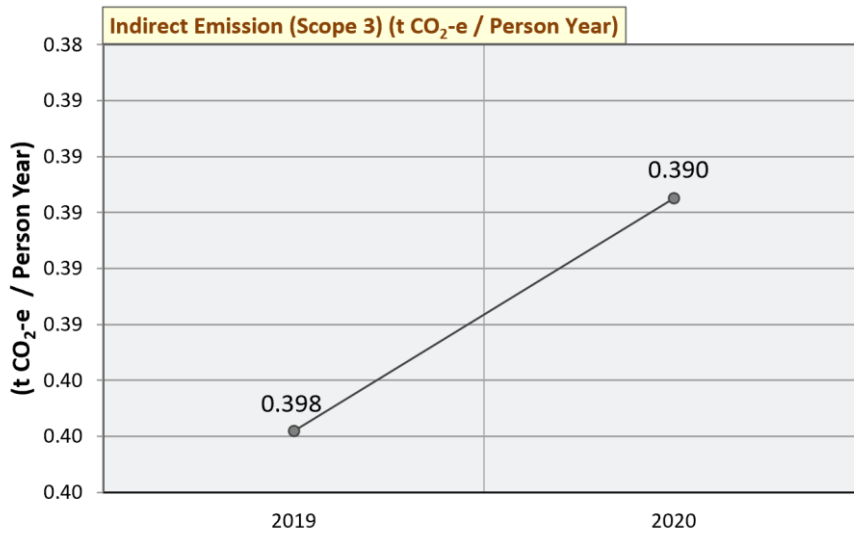
Greenhouse Gas Emissions Breakdown by Scope (t CO₂-e / Person Year)



Direct Emissions (Scope 1) (t CO₂-e / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 8.94 t CO₂-e / Person Year.

Indirect Emissions (Scope 2) (t CO₂-e / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 0.0 t CO₂-e / Person Year.

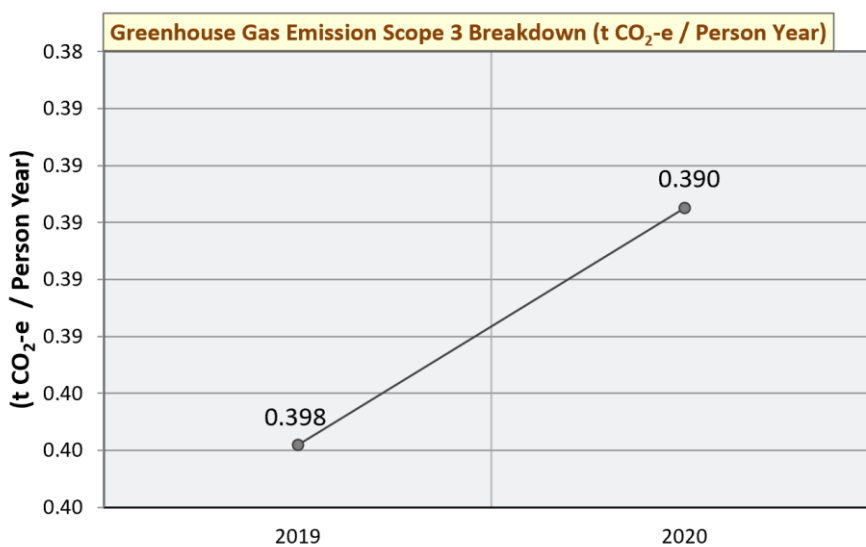
Indirect Emissions (Scope 3) (t CO₂-e / Person Year)



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Indirect Emissions (Scope 3) (kg CO₂-e / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 0.390 t CO₂-e / Person Year.

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



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

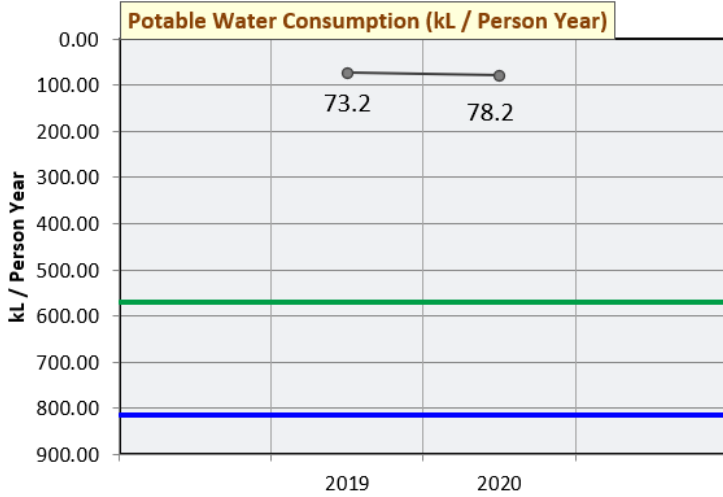
Waste Indirect Emissions (Scope 3) (kg CO₂-e / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 0.390 t CO₂-e / Person Year.

Direct Emissions (Scope 1)										
Mobile Fuel Combustion (road)										
2020										
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)			
Motor gasoline	1050000	litres (L)	35912603.5	2364.3	17.9	84.6	2466.8			
Diesel	9350000	litres (L)	357141015.0	25140.9	27.8	410.2	25578.9			
subtotal			393053618.5	27505.2	45.7	494.8	28045.8			
Mobile Fuel Combustion (air)										
2020										
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)			
Jet Kerosene	2200000	litres (L)	80783703.0	5487.2	0.8	47.6	5535.6			
subtotal			80783703.0	5487.2	0.8	47.6	5535.6			
Mobile Fuel Combustion (water)										
2020										
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)			
Motor gasoline	5150000	litres (L)	176142769.4	11596.4	24.6	103.7	11724.7			
Diesel	45650000	litres (L)	1743688485.0	122747.0	243.5	1027.0	124017.5			
subtotal			1919831254.4	134343.3	268.1	1130.8	135742.2			
TOTAL			2393668575.9	167335.8	314.6	1673.2	169323.6			
Indirect Emissions (Scope 2)										
Purchased Electricity										
2020										
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)		
166506475	Kilowatt hour (kWh)	100	Non-OECD Americas	599423310.0	0.0	0.0	0.0	0.0	0.0	
subtotal				599423310.0	0.0	0.0	0.0	0.0	0.0	
TOTAL				599423310.0	0.0	0.0	0.0	0.0	0.0	
Greenhouse Gas Emissions (Scope 1 and Scope 2)										
GRAND TOTAL				2993091885.9	167335.8	314.6	1673.2	169323.6		
Indirect Emissions (Scope 3)										
Waste Sent to Landfill										
2020										
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)	N ₂ O Emission Estimate (t CO ₂ -e)	Total Emission Estimate (t CO ₂ -e)	
610	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Food		International	0	0	576.45	576.45	

2000	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Inert		International	0	0	0	0
760	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Concrete / metal / plastics / glass		International	0	0	0	0
2900	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Unknown (mixed waste types)	Other Operation	International	0	0	3480	3480
subtotal						0	0	4056.45	4056.45
Waste Sent for Incineration									
2020									
Quantity	Unit	Type of Incineration Technology	Type of Waste	Source	CO₂ Emission Estimate (t CO₂-e)	CH₄ Emission Estimate (t CO₂-e)	N₂O Emission Estimate (t CO₂-e)	Total Emission Estimate (t CO₂-e)	
13845	tonnes (uncompacted)	Continuous Incineration - Stoker	Textiles	International	4061.2	0.03	0.7	4061.9	
subtotal						4061.2	0.03	0.7	4061.9
TOTAL						4061.2	0.03	4057.15	8118.35

3. Water

Potable Water Consumption (kL / Person Year) ★



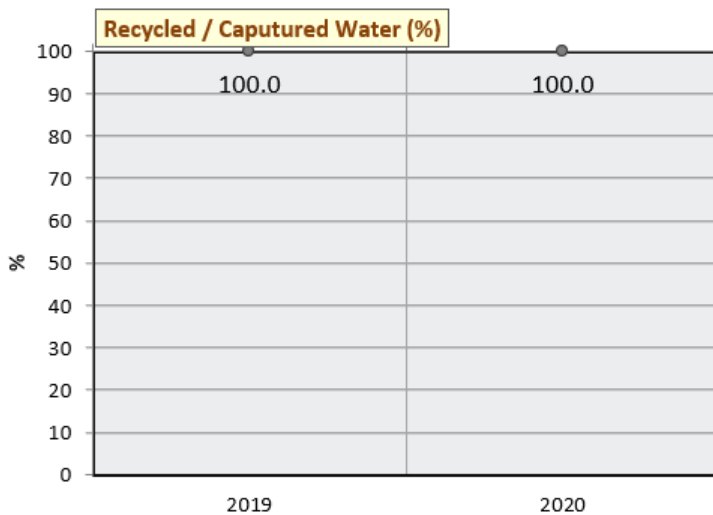
● Nuuk
— 814. Baseline
— 570. Best Practice

Potable Water Consumption (kL / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 78.2 kL / Per son Year, which was 86.3% better than the Best Practice level.

2020

Quantity	Unit	Potable Water Consumption (kL)
1480792	cubic metres	1480792.0 kL
	TOTAL	1480792.0 kL

Recycled / Captured Water (%)

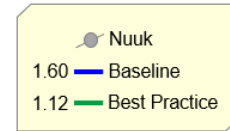
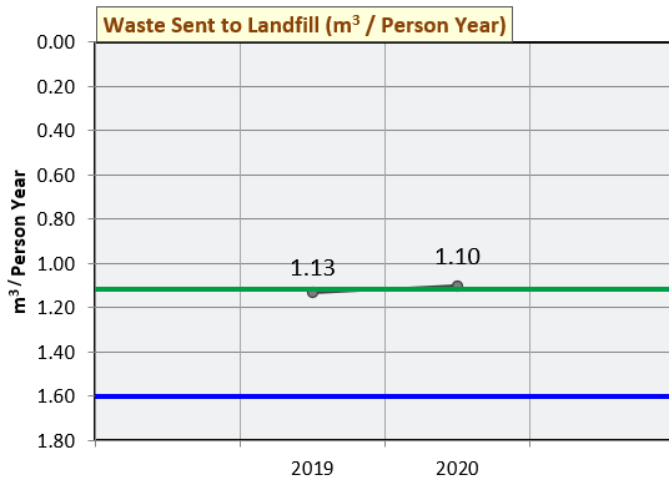


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Recycled / Captured Water (%) for the year 2020 (1 January 2020 – 31 December 2020) was 100%.

4. Waste

Waste Sent to Landfill (m³ / Person Year) ★

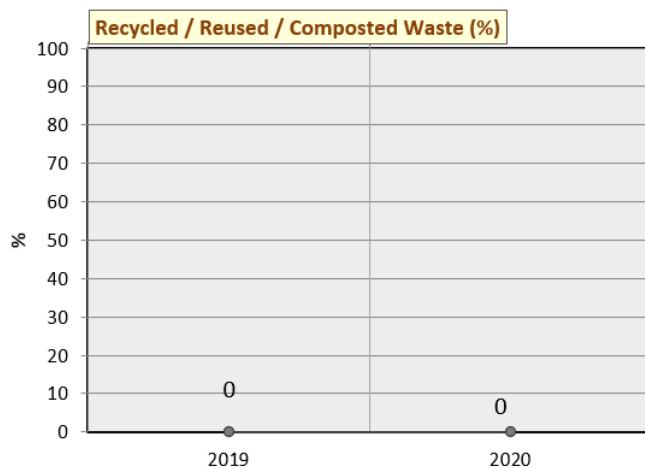


Waste Sent to Landfill (m³ / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 1.10 m³ / Person Year, which was 1.8% better than the Best Practice level.

2020

Quantity	Unit	Type of Landfill	Type of Waste	Type of Operation	Waste Sent to Landfill (m ³)
610	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Food	-	2033.33
2000	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Inert	-	6666.67
760	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Concrete / metal / plastics / glass	-	2533.33
2900	tonnes (uncompacted)	Covered and/or managed waste treatment facility	Unknown (mixed waste types)	Other Operation	9666.67
				TOTAL	20900 m³

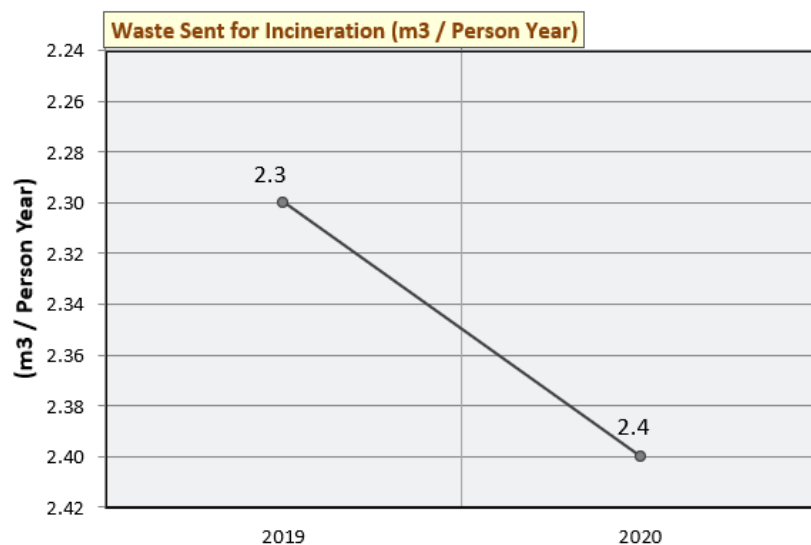
Recycled / Reused / Composted Waste (%)



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Recycled / Reused / Composted Waste (%) for the year 2020 (1 January 2020 – 31 December 2020) was 0%.

Waste Sent for Incineration (m³ / Person Year)



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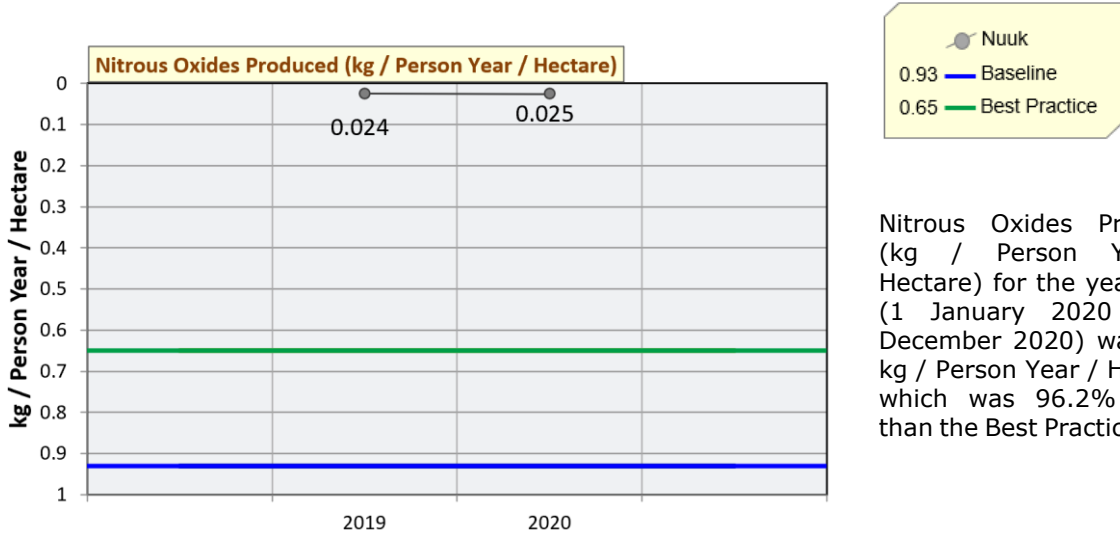
Waste Sent for Incineration (m³ / Person Year) for the year 2020 (1 January 2020 – 31 December 2020) was 2.4 m³ / Person Year.

2020

Quantity	Unit	Type of Incineration Technology	Type of Waste	Waste Sent for Incineration (m ³)
13845	tonnes (uncompacted)	Continuous Incineration - Stoker	Textiles	46150.0 m ³
			TOTAL	46150.0 m³

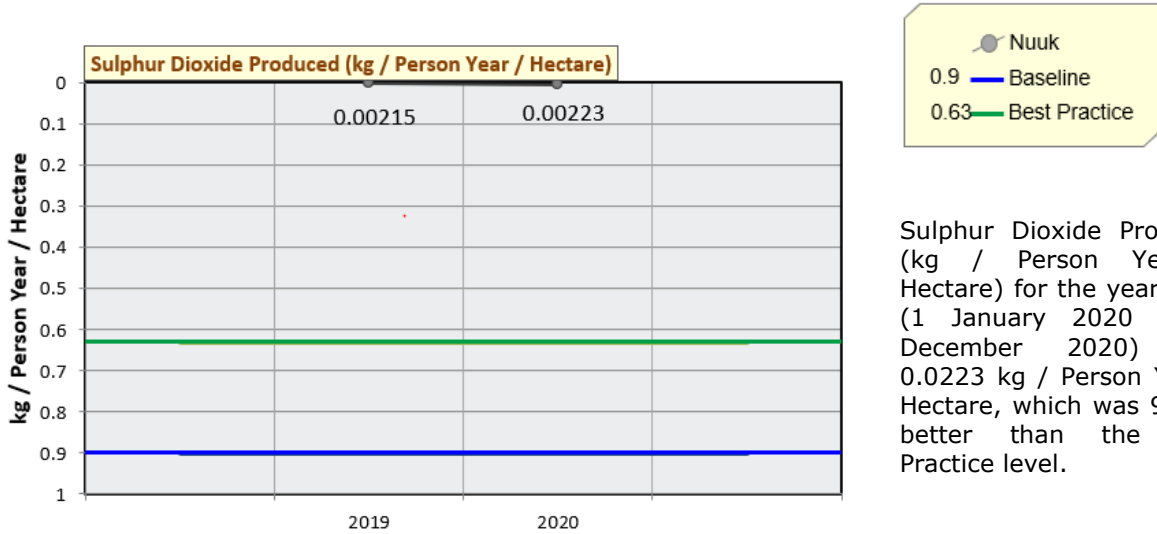
5. Sector Specific

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



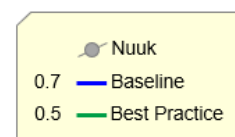
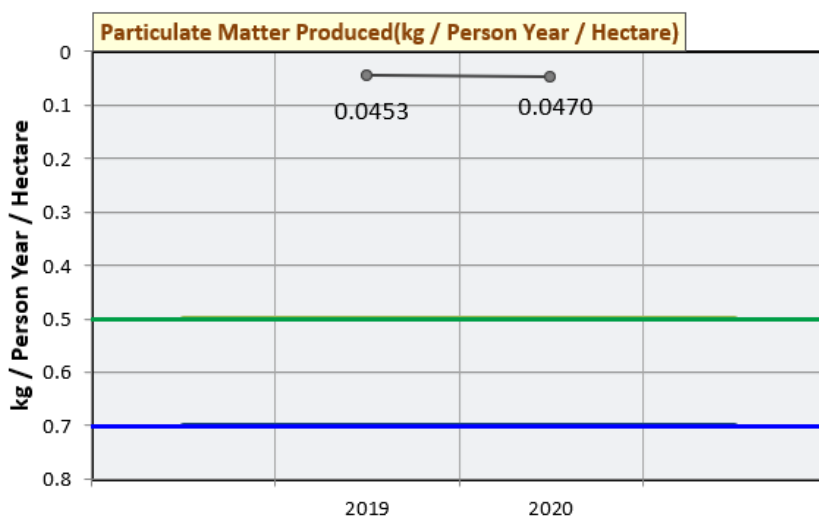
Nitrous Oxides Produced (kg / Person Year / Hectare) for the year 2020 (1 January 2020 - 31 December 2020) was 0.25 kg / Person Year / Hectare, which was 96.2% better than the Best Practice level.

Sulphur Dioxide Produced (kg / Person Year / Hectare) ★



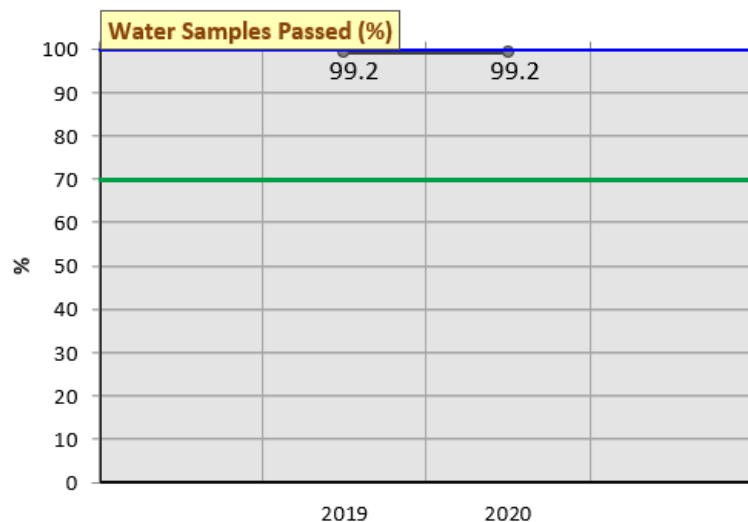
Sulphur Dioxide Produced (kg / Person Year / Hectare) for the year 2020 (1 January 2020 - 31 December 2020) was 0.00223 kg / Person Year / Hectare, which was 99.6% better than the Best Practice level.

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



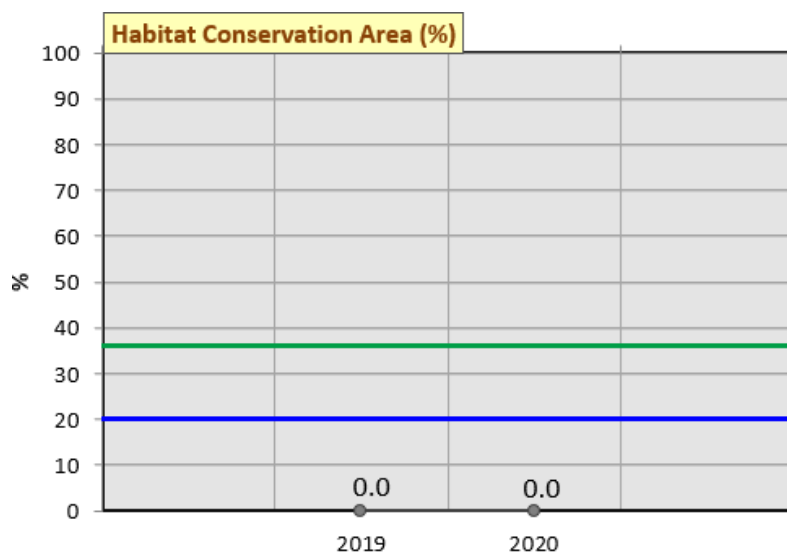
Particulate Matter Produced (kg / Person Year / Hectare) for the year 2020 (1 January 2020 - 31 December 2020) was 0.0470 kg / Person Year / Hectare, which was 90.6% better than the Best Practice level.

Water Samples Passed (%) ✓



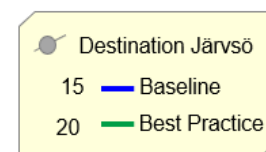
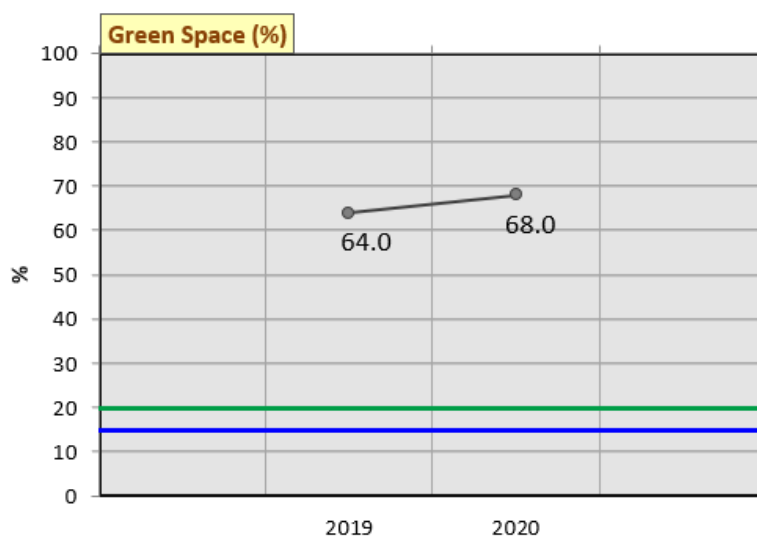
Water Samples Passed (%) for the year 2020 (1 January 2020 - 31 December 2020) was 99.2%, which was 29.2% better than the Baseline level.

Habitat Conservation Area (%) ✘



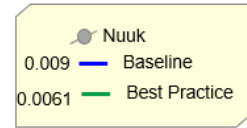
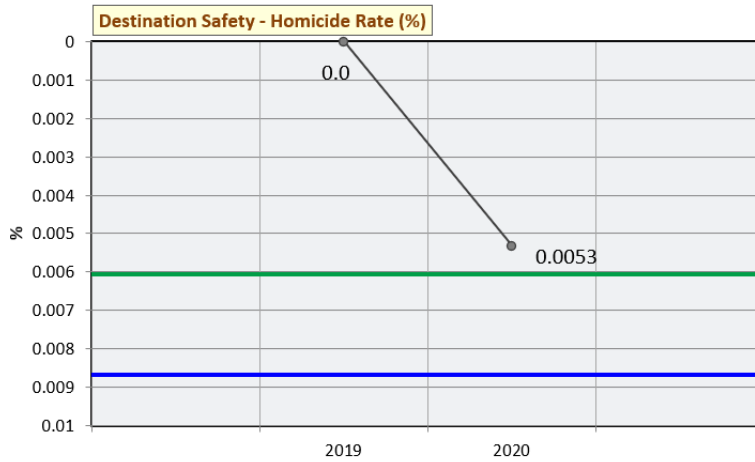
Habitat Conservation Area (%) for the year 2020 (1 January 2020 – 31 December 2020) was 0%, which was 20.0% below the Baseline level.

Green Space (%) ★



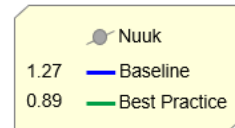
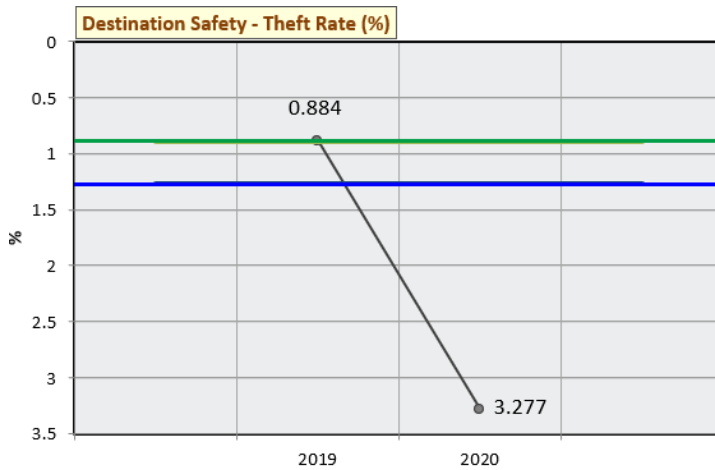
Green Space (%) for the year 2020 (1 January 2020 – 31 December 2020) was 68.0%, which was 48.0% better than the Best Practice level.

Destination Safety – Homicide Rate (%) ★



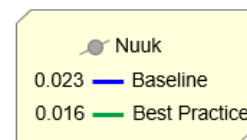
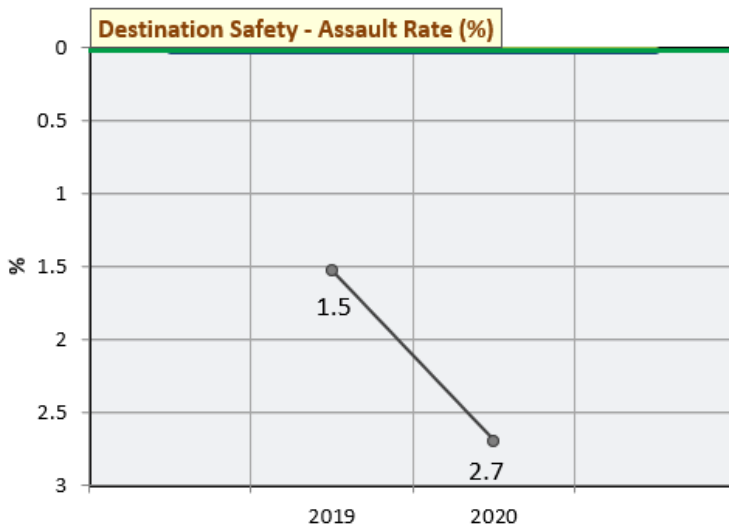
Homicide Rate for the year 2020 (1 January 2020 – 31 December 2020) was 0.0053%, which was 0.0008% better than the Best Practice level.

Destination Safety – Theft Rate (%) ✘



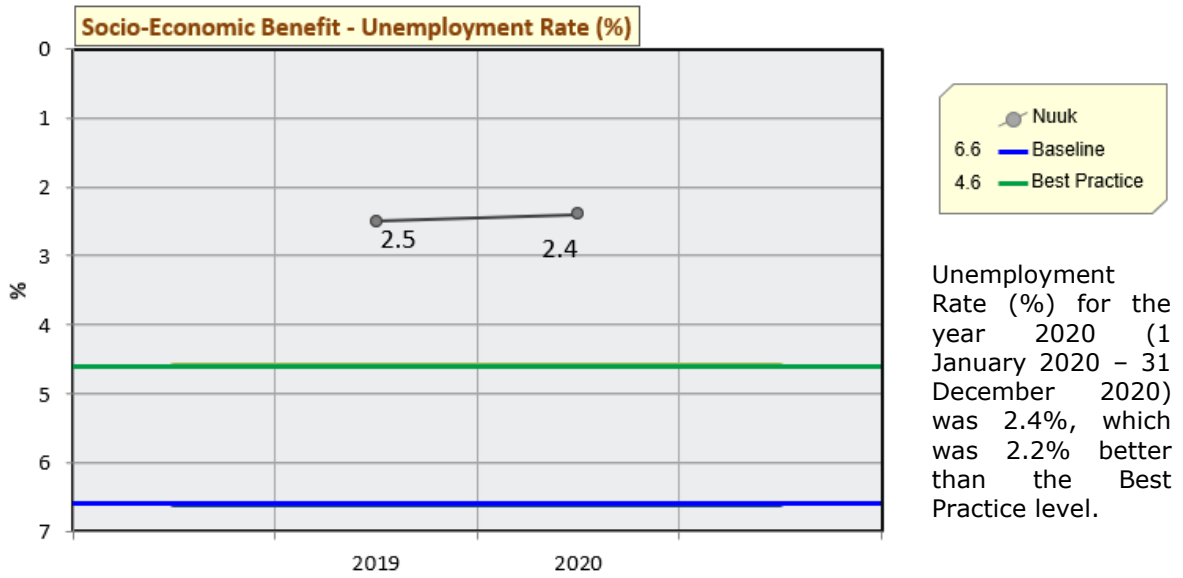
Theft Rate for the year 2020 (1 January 2020 – 31 December 2020) was 3.277%, which was 2.007% below than the Baseline level.

Destination Safety – Assault Rate (%) ✘

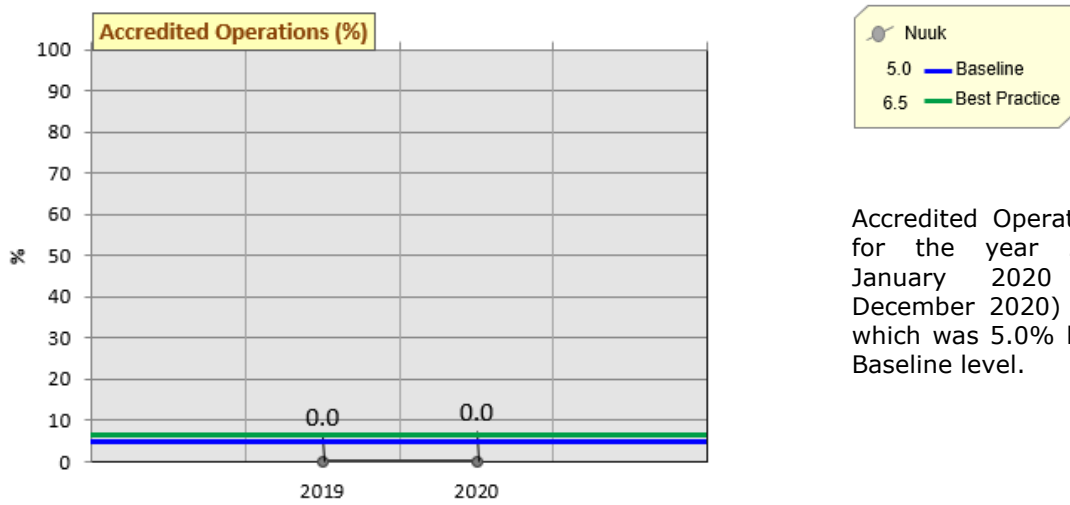


Assault Rate for the year 2020 (1 January 2020 – 31 December 2020) was 2.7%, which was 2.677% below the Baseline level.

Socio-Economic Benefit – Unemployment Rate (%) ★

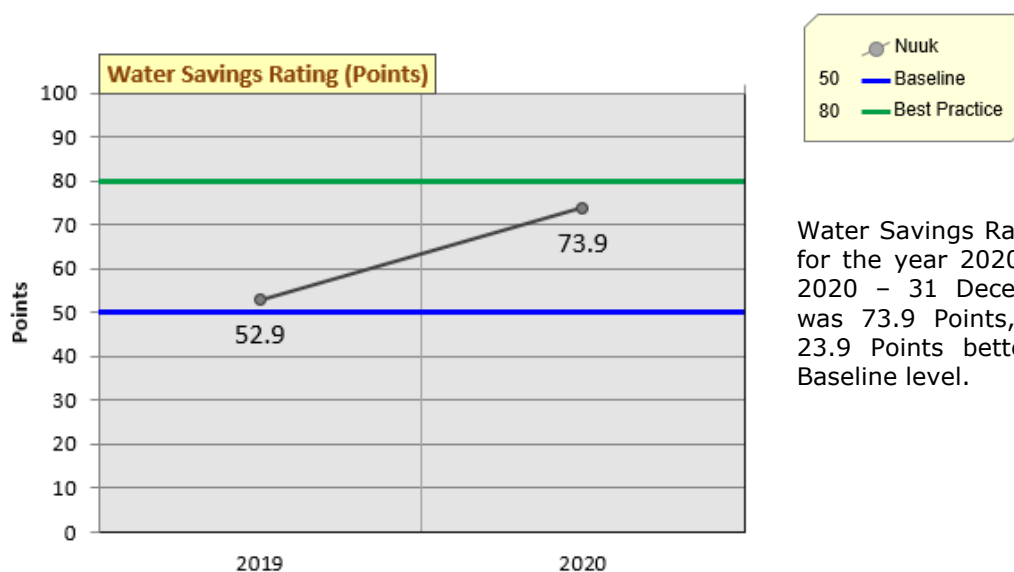


Accredited Operations (%) ✕



6.0 LEAD AGENCY PERFORMANCE

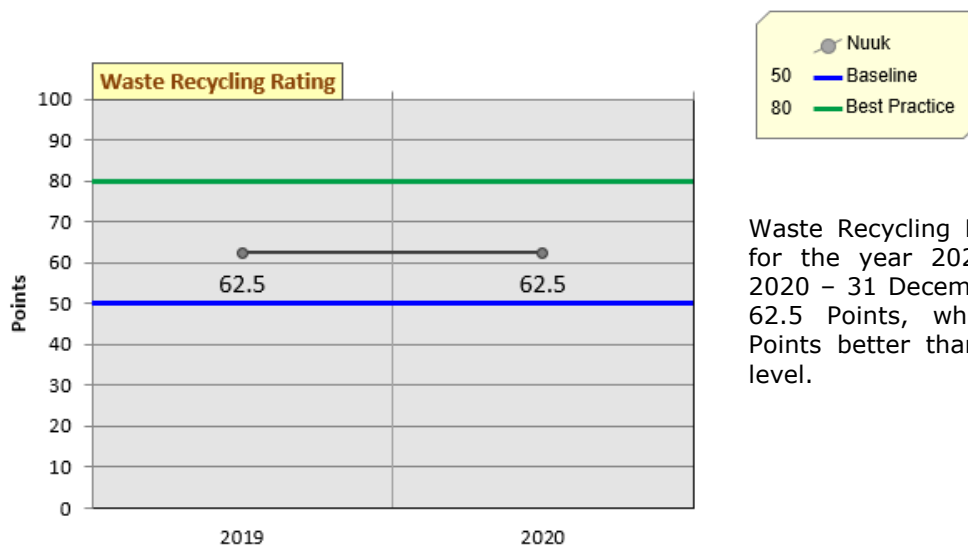
Water Savings Rating (Points) ✓



Water Savings Rating (Points) for the year 2020 (1 January 2020 – 31 December 2020) was 73.9 Points, which was 23.9 Points better than the Baseline level.

Water Savings Measures	Frequency / Percentage Rating	Water Savings Rating (Points)
Check for leaks	Every 6 months	58.8 Points
Low/dual flush toilets	80-99%	88.9 Points
Low flow tap fittings	60-79%	73.9 Points
Low flow shower fittings	Not Relevant / Not Available	
Water sprinklers used after dark	Not Relevant / Not Available	
Minimal irrigation landscaping	Not Relevant / Not Available	
Use of recycle/grey/rain water	Not Relevant / Not Available	
	Overall Rating:	73.9 Points

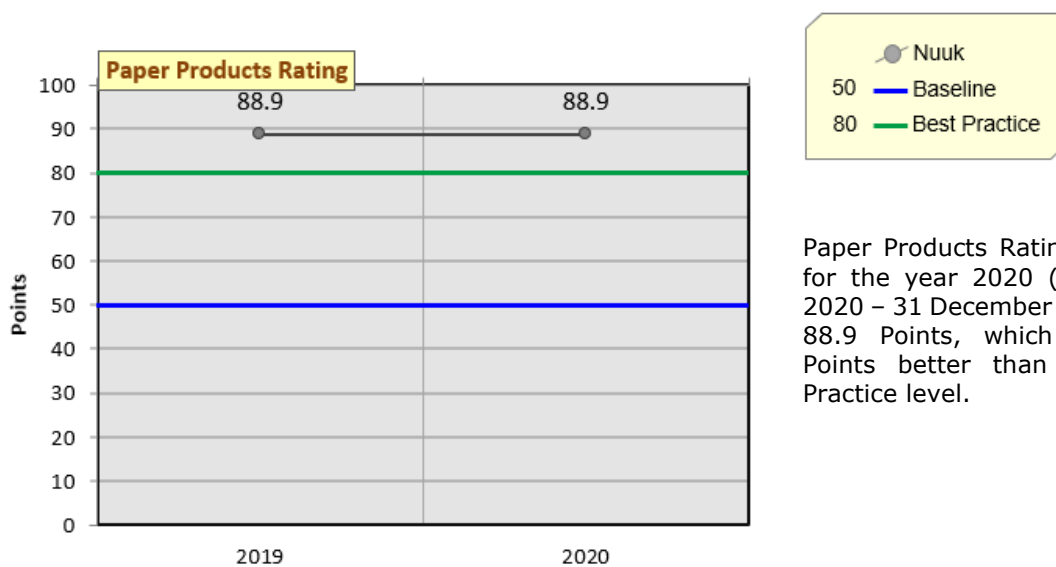
Waste Recycling Rating (Points) ✓



Waste Recycling Rating (Points) for the year 2020 (1 January 2020 – 31 December 2020) was 62.5 Points, which was 12.5 Points better than the Baseline level.

Waste Recycling Measures	Frequency / Percentage Rating	Waste Recycling Rating (Points)
Glass	80-99%	88.9 Points
Paper/card	Not Relevant / Not Available	
Iron & steel (ferrous metals)	80-99%	88.9 Points
Other metals (non-ferrous)	80-99%	88.9 Points
Plastics	1-19%	54.0 Points
Rubber	1-19%	54.0 Points
Green waste	0%	0.0 Points
	Overall Rating:	62.5 Points

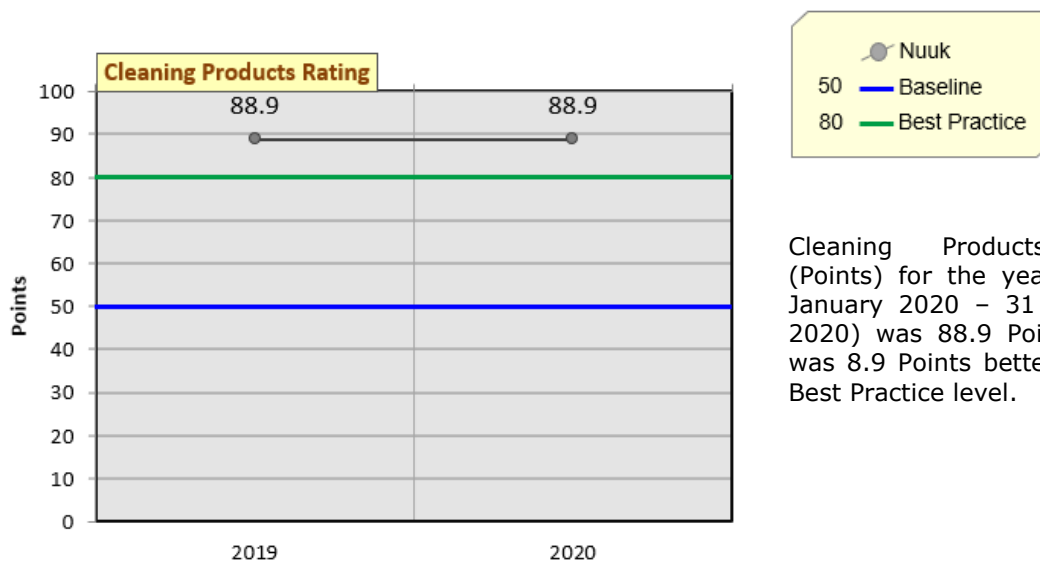
Paper Products Rating (Points) ★



Paper Products Rating (Points) for the year 2020 (1 January 2020 – 31 December 2020) was 88.9 Points, which was 8.9 Points better than the Best Practice level.

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

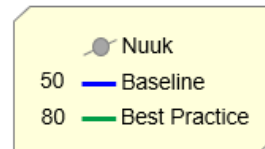
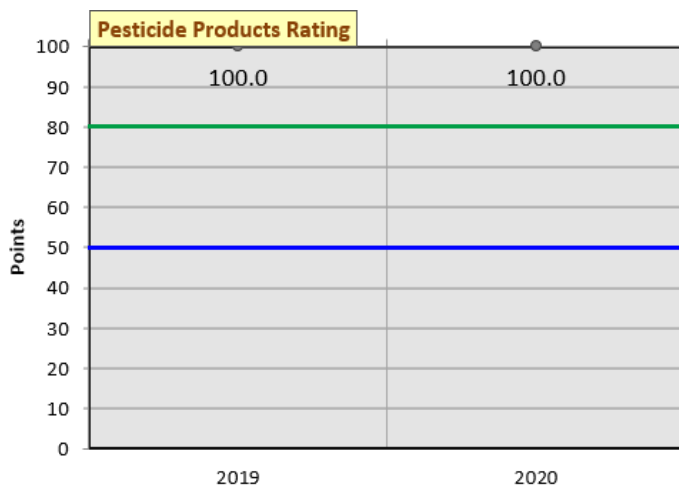
Cleaning Products Rating (Points) ★



Cleaning Products Rating (Points) for the year 2020 (1 January 2020 - 31 December 2020) was 88.9 Points, which was 8.9 Points better than the Best Practice level.

Cleaning Products Measures	Frequency / Percentage Rating	Cleaning Products Rating (Points)
Hard floor cleaners	80-99%	88.9 Points
Carpet cleaners	80-99%	88.9 Points
Interior surface cleaners	80-99%	88.9 Points
External surface cleaners	80-99%	88.9 Points
Glass cleaners	80-99%	88.9 Points
Detergents	80-99%	88.9 Points
Personal hygiene	80-99%	88.9 Points
	Overall Rating:	88.9 Points

Pesticide Products Rating (Points) ★



Pesticide Products Rating (Points) for the year 2020 (1 January 2020 – 31 December 2020) 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 / Available	100.0 Points
Fungal killers	Not Relevant / Not Available	100.0 Points
Rodent killers	Not Relevant / Available	100.0 Points
Insect killers	Not Relevant / Available	100.0 Points
	Overall Rating:	100.0 Points

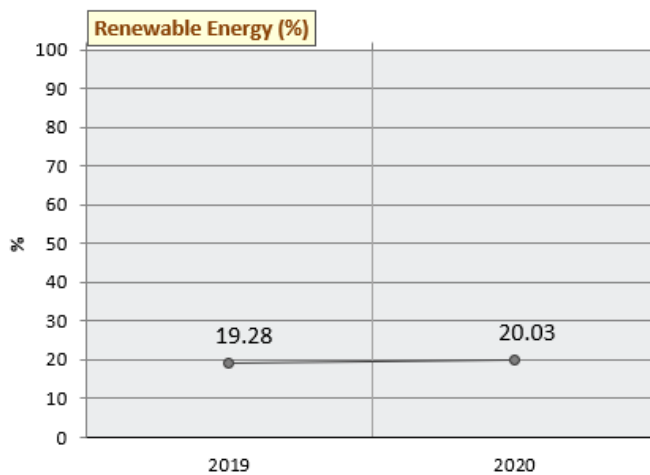
OPTIONAL BENCHMARKING INDICATORS

Kommuneqarfik Sermersooq / Sermersooq Business 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



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

CONCLUSION AND RECOMMENDATIONS

Congratulations, **Nuuk** has met the requirements to be recognised as an EarthCheck Benchmarked Community.

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

From the benchmarking data provided, eleven indicators, *Potable Water Consumption, Waste Sent to Landfill, Nitrous Oxides Produced, Sulphur Dioxide Produced, Particulate Matter Produced, Homicide Rate, Unemployment Rate, Paper Products Rating, Cleaning Products Rating, Pesticide Products Rating, and Green Space*, are at or above the Best Practice level.

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

The value for Greenhouse Gas Emissions was 118.6% below the Baseline level. **Nuuk** 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). **Nuuk** is encouraged to investigate other renewable energy options such as Hydro, Solar, or Wind.

The percentage of Theft Rate is 3.277%, and Assault Rate was 2.7%, both falling below the Baseline. **Nuuk** 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 Habitat Conservation Area was 9%, whereas the Baseline level is 20%. **Nuuk** is encouraged to promote habitat conservation of land, wetlands and waterways to aid biodiversity conservation and support habitat protection within the region.

The value for Accredited Operations was 0%, whereas the Baseline level is 5%. **Nuuk** is encouraged to promote environmental accreditation to hotels, restaurants and other business within the destination.

The **Nuuk** is encouraged to continue to make improvements in the above indicators 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 **Nuuk** 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, **Nuuk** is encouraged to ensure that Greenhouse Gas Emissions (Scope 1 and Scope 2), Habitat Conservation Area, and Accredited Operations are at Baseline performance or better. In line with EarthCheck Policy this would enable **Nuuk** to continue to meet the benchmarking requirements of the EarthCheck program.

APPENDIX

TOTAL DESTINATION AREA

The Benchmarking Assessors sought clarification with regards to a decrease in the destination area.

Nuuk provided the following response for clarification:

“I will leave that to EarthCheck to decide. See the next bullet. The change is due to new mapping. You can see details in the first attached document. The red line is the new mapping and the yellow line is the 2019 mapping. The red line includes only land areas, whereas the yellow line also includes city plans that includes parts of the surrounding waters. Using the red line going forward from today, should provide a stable figure for total destination area. Using the yellow line going forward will cause fluctuations due to inaccuracies when we redrawing city planning. The map material in Nuuk is not of the best quality. If EarthCheck prefers that we keep using the same procedure as last year the figure will be 3587 hectares in 2020. With the new procedure the figure is correct at 3359 hectares. Let me know what you prefer.”

Therefore the Benchmarking Assessors maintained the data, and updated the previous period’s *Total Destination Area* to reflect use this new methodology.

WASTE SENT TO LANDFILL

The Benchmarking Assessors sought clarification with regards to a big increase in landfilled waste.

Nuuk provided the following response for clarification:

“See corrections below. I have checked the data we received from our waste management facility (see the two attached files on waste) and the my.earthcheck portal. The 2019 data in the portal are missing the input of 3,000 tonnes uncompacted unknown (mixed waste types). The 2020 data are correct for unknown (mixed waste types). I have corrected inert and food in the table below too. The numbers were interchanged. Please, advise us how to rectify this issue.”

	2019		2020	
Inert	2,000	tonnes (uncompacted)	2,000	tonnes (uncompacted)
Food	730	tonnes (uncompacted)	610	tonnes (uncompacted)
Concrete / metal / plastics / glass	560	tonnes (uncompacted)	760	tonnes (uncompacted)
Unknown (mixed waste types)	3,000	(tonnes uncompacted)	2,900	tonnes (uncompacted)

Therefore the Benchmarking Assessors updated the figures.



EARTHCHECK

Benchmarks Assessed by EarthCheck

SUMMARY OF SUPPLIED BENCHMARKING DATA

Activity Measures

Person Years	18947
Total Destination Area	3359

Supplied Benchmarking Data

Energy

Energy Consumption (GJ / Person Year)

Supplied	2993091.89 GJ
Calculated	157.97 GJ / Person Year
Baseline	176.51 GJ / Person Year
Best Practice	123.56 GJ / Person Year
Difference	10.5% better than the Baseline level

Green Power (Purchased Electricity) (%)

Supplied	100%
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Greenhouse Gas Emissions (Scope 1 and Scope 2) (t CO₂-e / Person Year)

Supplied	169323.6 t CO ₂ -e
Calculated	8.9 t CO ₂ -e / Person Year
Baseline	4.09 t CO ₂ -e / Person Year
Best Practice	2.9 t CO ₂ -e / Person Year
Difference	118.6% below the Baseline level

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

Supplied	169323.6 t CO ₂ -e
Calculated	8.9 t CO ₂ -e / Person Year

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

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

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

Supplied	7380 t CO ₂ -e
Calculated	214.4 t CO ₂ -e / Person Year

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

Supplied	7380 t CO ₂ -e
Calculated	0.390 t CO ₂ -e / Person Year

Water

Potable Water Consumption (kL / Person Year)

Supplied	1480792.0 kL
Calculated	78.2 kL / Person Year
Baseline	814.64142 kL / Person Year
Best Practice	570.24902 kL / Person Year
Difference	86.3% better than the Best Practice level

Recycled / Captured Water (%)

Supplied	100%
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Water Savings Rating (Points)

Calculated	73.9 Points
Baseline	50 Points
Best Practice	80 Points
Difference	23.9 Points better than the Baseline level

Waste

Waste Sent to Landfill (m³ / Person Year)

Supplied	20900 m ³
Calculated	1.10 m ³ / Person Year
Baseline	1.6 m ³ / Person Year
Best Practice	1.10 m ³ / Person Year

Recycled / Reused / Composted Waste (%)

Supplied	0%
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Waste Recycling Rating (Points)

Calculated	62.5 Points
Baseline	50 Points
Best Practice	80 Points
Difference	12.5 Points better than the Baseline level

Waste Sent for Incineration (m³ / Person Year)

Supplied	46150.0 m ³
Calculated	2.4 m ³ / Person Year

Paper

Paper Products Rating (Points)

Calculated	88.9 Points
Baseline	50 Points
Best Practice	80 Points
Difference	8.9 Points better than the Best Practice level

Cleaning

Cleaning Products Rating (Points)

Calculated	88.9 Points
Baseline	50 Points
Best Practice	80 Points
Difference	8.9 Points better than the Best Practice level

Pesticides

Pesticide Products Rating (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 / Hectare)

Calculated	0.025 kg / Person Year / Hectare
Baseline	0.93 kg / Person Year / Hectare
Best Practice	0.65 kg / Person Year / Hectare
Difference	96.2% better than Best Practice

Sulphur Dioxide Produced (kg / Person Year / Hectare)

Calculated	0.00223 kg / Person Year / Hectare
Baseline	0.9 kg / Person Year / Hectare
Best Practice	0.63 kg / Person Year / Hectare
Difference	99.6% better than Best Practice

Particulate Matter Produced (kg / Person Year / Hectare)

Calculated	0.0470 kg / Person Year / Hectare
Baseline	0.7 kg / Person Year / Hectare
Best Practice	0.5 kg / Person Year / Hectare
Difference	90.6% better than Best Practice

Water Samples Passed (%)

Supplied	99.2%
Baseline	70 %
Best Practice	100 %
Difference	29.2% better than the Baseline level

Habitat Conservation Area (%)

Supplied	0%
Baseline	20 %
Best Practice	26 %
Difference	20.0% below the Baseline level

Green Space (%)

Supplied	68.0%
Baseline	15 %
Best Practice	20 %
Difference	48.0% better than the Best Practice level

Accredited Operations (%)

Supplied	0%
Baseline	5 %
Best Practice	6.5 %
Difference	5.0% below the Baseline level

Socio-Economic

Destination Safety Homicide Rate (%)

Calculated	0.0053%
Baseline	0.009%
Best Practice	0.0061%
Difference	0.0008% better than Best Practice

Destination Safety Theft Rate (%)

Calculated	3.277%
Baseline	1.27%
Best Practice	0.89%
Difference	2.007% below Baseline

Destination Safety Assault Rate (%)

Calculated	2.7%
Baseline	0.023%
Best Practice	0.016%
Difference	2.677% below Baseline

Unemployment Rate (%)

Calculated	2.4%
Baseline	6.6%
Best Practice	4.6%
Difference	2.2% better than the Best Practice level

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).