

**GREEN GLOBE 21
COMMUNITY BENCHMARKING**

BENCHMARKED
ASSESSMENT REPORT

**Kaikoura
New Zealand**

30 November 2004

Period Benchmarked: 1 July 2003 - 30 June 2004
Assessment Conducted by Earthcheck

Kaikoura

OVERVIEW

This annual assessment of **Kaikoura** was undertaken against **earthcheck™** benchmarking indicators developed for GREEN GLOBE 21. These indicators, listed below, have been carefully selected to track performance in key areas of environmental and social performance impact. The lead agency responsible for collection, collation and authorization of the information required by the indicators was the **Kaikoura Council**.

| | earthcheck™ Indicator | Annual Benchmark |
|----|------------------------------------|--|
| 1 | Sustainability policy ^A | Policy is produced and in place |
| 2 | Energy consumption | Energy consumed (MJ) / Person year ^B |
| 3 | Greenhouse gas production | Carbon dioxide (tonne) / Person year ^B |
| 4 | Air quality | Nitrogen oxides generated / Person year per Area ^C |
| 5 | Air quality | Sulphur dioxides generated / Person year per Area ^C |
| 6 | Air quality | Particulates generated / Person year per Area ^C |
| 7 | Potable water consumption | Water consumed (kL) / Person year ^B |
| 8 | Solid waste production | Volume of waste (m ³) / Person year ^B |
| 9 | Resource conservation ^D | Total paper products purchased (kg) / Employee per year ^E |
| 10 | Resource conservation ^D | Biodegradable pesticides used (kg) / Total pesticides used (kg) |
| 11 | Resource conservation ^D | Biodegradable cleaning chemicals used (kg) / Total pesticides used (kg) |
| 12 | Biodiversity | Habitat conservation area / Total community area |
| 13 | Waterways quality | Water quality tests passed / Water samples taken |
| 14 | Travel & tourism | Environmental performance accredited travel & tourism operations / Total travel & tourism operations |

^A produced by the lead agency after community consultation and consensus.

^B person year is equivalent of 365 person days. GREEN GLOBE 21 communities are often also significant destinations for visitors as a consequence of travel and tourism. Consequently indicators assessed on a per person year basis need to take into account both the resident and the transient (tourist) populations. 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.

^C 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 person year per unit area basis using total emissions, total person years and total bounded area of the community, including waterways. The data is then normalized against the average number of person years per area of the country (for further details, please refer to the Community Benchmarking Document).

^D carried out by the lead agency only.

^E per employee of the lead agency.

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In addition to the list on the previous page, a range of optional indicators are also provided. These present the opportunity for the community to benchmark areas that reflect specific commitments to the local environment by the community.

Optional benchmarks are encouraged and recognized by GREEN GLOBE 21, but are not used in the Benchmarking evaluation that assesses whether the community has reached the standards necessary to use the GREEN GLOBE 21 logo.¹



The data for the listed **earthcheck**[™] indicators and their benchmarks have been compiled by **Kaikoura** in the prescribed manor, authorized by a senior officer of the community's lead agency, the **Kaikoura District Council**, and submitted to GREEN GLOBE 21 for an annual independent assessment conducted by the Earthcheck Organization.

¹ To meet the annual benchmarking requirements of GREEN GLOBE 21 and have the right to use the GREEN GLOBE 21 logo, the benchmarks for all the **earthcheck**[™] indicators should be at or above the Baseline level. Baseline performance and Best Practice are set by the Earthcheck Organization for GREEN GLOBE 21 with reference to the appropriate national and international conditions which take into where practical account social, economic, geographical and climatic impacts.

If a community fails to meet the minimum requirements for one **earthcheck**[™] indicator (Baseline or above performance), but achieves Baseline or better performance in all the other **earthcheck**[™] Indicators, then the community is allowed to use the GREEN GLOBE 21 logo. It is, however, given a maximum of 12 months to improve performance in that indicator. After 12 months, if the community still does not achieve Baseline or better performance without substantiated evidence that the situation was beyond the control of the community (e.g. occurrence of a natural disaster), then the right to use the GREEN GLOBE 21 logo will be withdrawn.

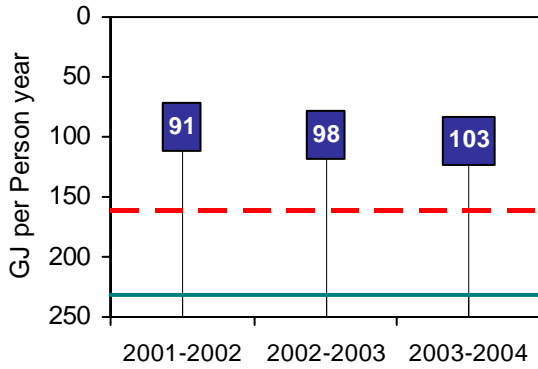
As a standard policy, all **earthcheck**[™] indicators are continuously reviewed for GREEN GLOBE 21, along with the performance levels which communities have to achieve in order to use of the GREEN GLOBE 21 logo. This review by a team of international experts takes into account "business-as-usual" changes in practices and equipment, as well as general improvement trends in performance. This information is used to update the Baseline and Best Practice levels, and as useful feedback to the industry will be made available in published reports. However, a minimum of 12 months advanced warning will be supplied, along with a clear justification, of changes in any required benchmarking performance related data.

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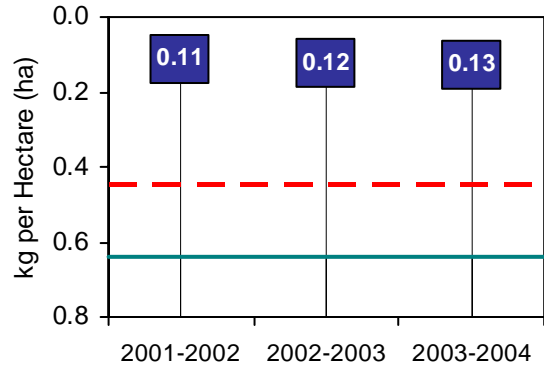


1 Kaikoura has a Sustainability Policy in place ✓

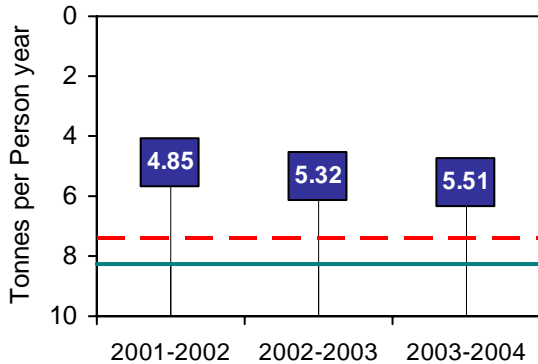
2 Energy consumption ★
Energy consumed / Person year



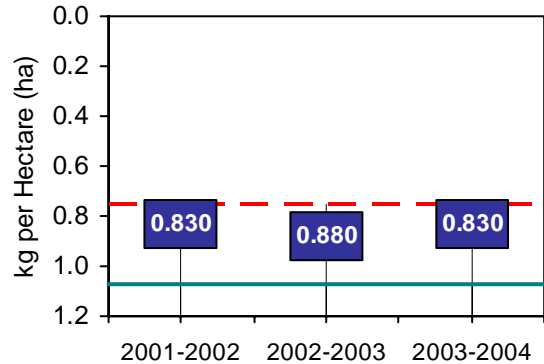
5 Air quality ★
Sulphur dioxide (SO₂) generated / Area



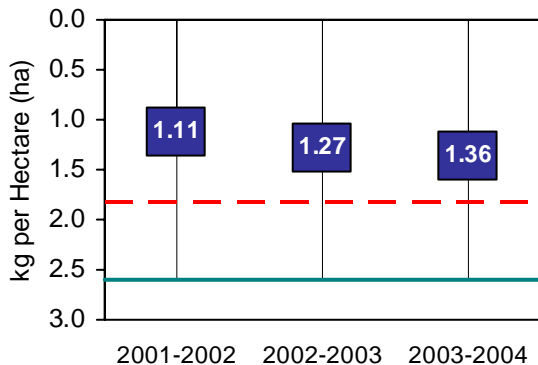
3 Greenhouse gas production ★
Carbon dioxide (CO₂) produced / Person year



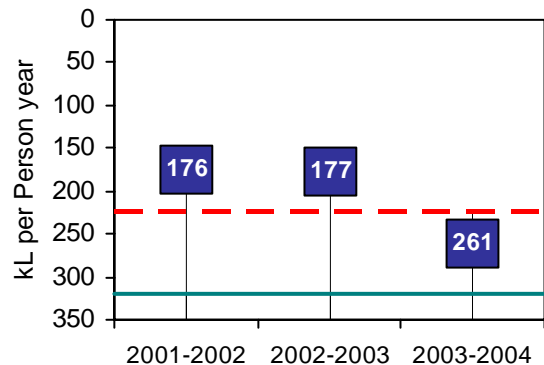
6 Air quality ✓
Particulates (PM 10) generated / Area



4 Air quality ★
Nitrogen oxides (NO_x) generated / Area



7 Water consumption ^B ✓
Potable water consumed / Person year



Performance Level: Baseline — Best Practice - - -

Benchmarking Result: * Below Baseline ✓ At or above Baseline ★ At or above Best Practice

^A Each benchmark is assessed on a per annum (12 month) basis

^B Best Practice, Baseline and Community consumption figures are for that supplied by water companies for non-agricultural use. In many countries, industry and primarily agriculture (including forestry and fisheries) can account for 60-80% of the overall consumption of fresh water, but a majority of this is generally obtained by direct extraction from bore holes and waterways.

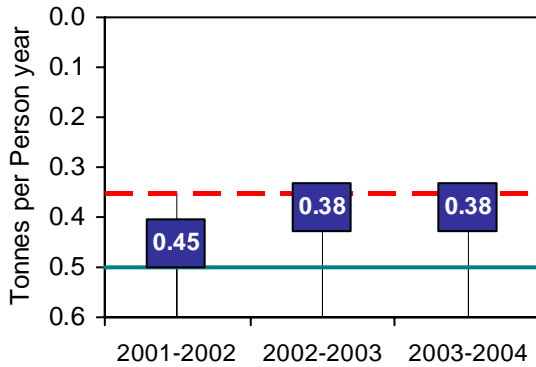
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COMMUNITY PERFORMANCE BENCHMARKS *continued*

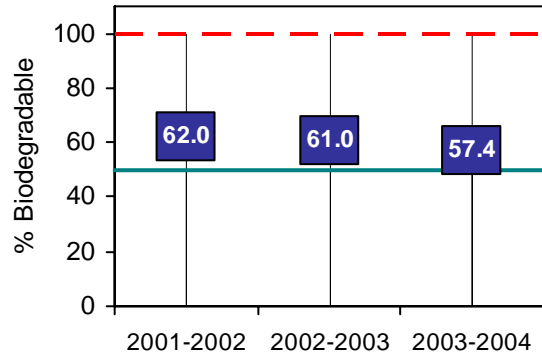
8 Solid waste production ✓

Waste landfilled / Person year



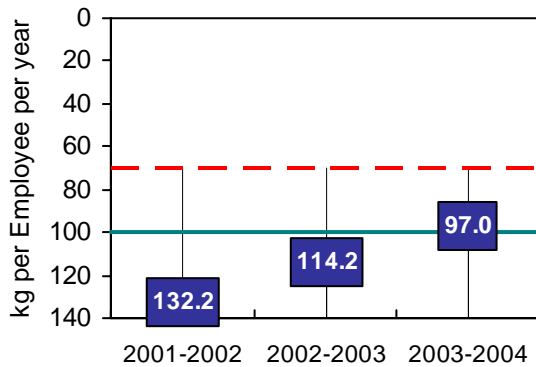
11 Resource conservation ^A ✓

Biodegradable cleaning chemicals / Total cleaning chemicals



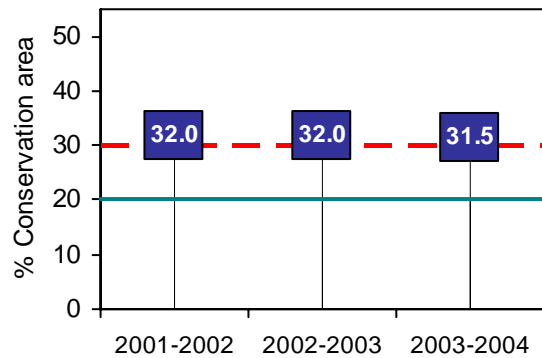
9 Resource conservation ^A ✓

Paper purchased / Employee



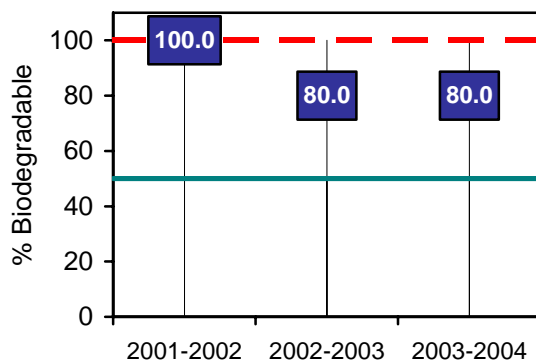
12 Biodiversity ★

Habitat conservation area / Total community area



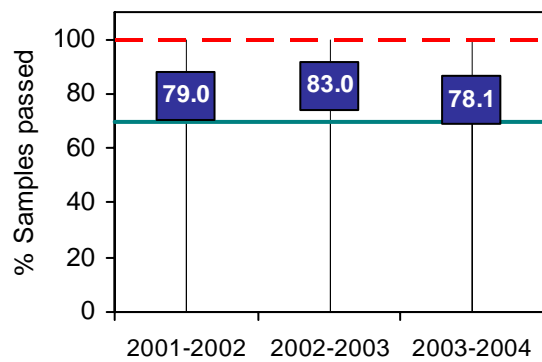
10 Resource conservation ^A ✓

Biodegradable pesticides used / Total pesticides used



13 Waterways quality ✓

Water test passes / Water samples taken



Performance Level:

Baseline

Best Practice

Benchmarking Result: ✘ Below Baseline ✓ At or above Baseline ★ At or above Best Practice

^A assessed for the Community's lead agency – Kaikoura District Council

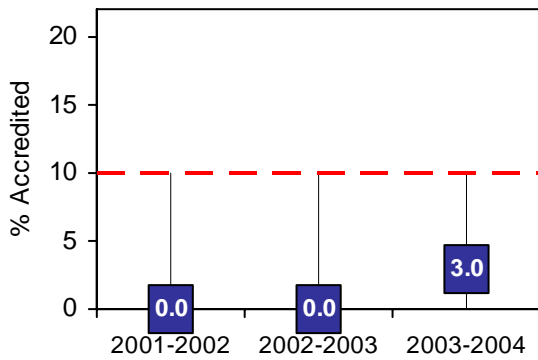
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COMMUNITY PERFORMANCE BENCHMARKS *continued*

14 Travel & Tourism

Environmental performance accredited operations / Total travel & tourism operations



It is recognized that in most regions around the world, travel and tourism has not, until very recently, had access to environmental accreditation programs, such as GREEN GLOBE 21, that are suitable for their business.

As a consequence there is no Baseline as this indicator's role is not to pass/fail a community, but rather to encourage local operators, who are generally the main point of contact for visitors to the community, to start taking part in environmentally aware programs. This will not only help support the community's goals for a better environment, but also promote their own businesses.

Performance Level:

Baseline ———

Best Practice - - - -

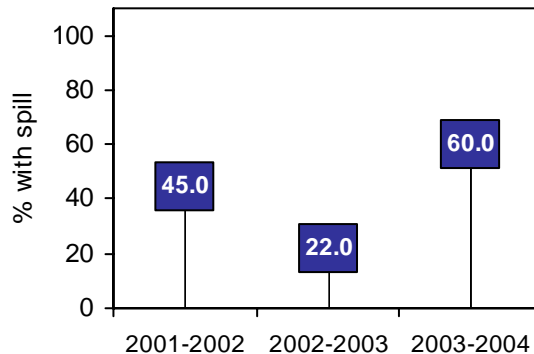
Benchmarking Result: ✖ Below Baseline ✓ At or above Baseline ★ At or above Best Practice

OPTIONAL BENCHMARKING INDICATORS

Kaikoura has also nominated and specified an optional indicator that they consider relevant to their specific operation and locality. This indicator reflects a very positive and strong commitment that the lead agency has to monitoring a key factor that can impact on the community's environment (e.g. through run-off of hazardous chemicals into waterways).

COMMUNITY SPECIFIED INDICATOR ²

*Number of truck accidents within **Kaikoura** involving a chemical spill pa / Total number of truck accidents within **Kaikoura** pa*



² Specified by the lead agency as a key issue impacting the local environment of the community

Kaikoura

CONCLUSION AND RECOMMENDATIONS

Congratulations, Kaikoura has again successfully passed the requirements to remain recognized as a GREEN GLOBE 21 Benchmarked Community for the next 12 months, and retain the right to display the GREEN GLOBE 21 logo during this period.



Five indicators are at, or above, the GREEN GLOBE 21 Best Practice level, *Energy Consumption*, *Greenhouse Gas Production*, *Air Quality (NOx)*, *Air Quality (SO₂)* and *Biodiversity*, which is an excellent outcome to be very highly commended.

In addition, the use by the lead agency (***Kaikoura District Council***), of the Optional Selected Indicator demonstrates their clear commitment to environmental protection across the community.

Improvements in all the **earthcheck™** indicators will not only help the environment, but can also help reduce costs. Considering the very positive commitment and leadership role that the **Kaikoura** community has demonstrated to the environment through entering this program, GREEN GLOBE 21 is confident that they can over the next 12 months maintain, and even improve performance in those indicators that have been successfully benchmarked. In line with GREEN GLOBE 21 Policy this would enable Benchmarked status to be retained.

Annual benchmarks assessed by Earthcheck:

Handwritten signature of Melinda Watt in blue ink.

Melinda Watt
General Manager
Earthcheck Organization

Handwritten signature of Dr Ashley Scott in blue ink.

Dr Ashley Scott
Director, Research & Development
Earthcheck Organization

Report endorsed by GREEN GLOBE 21:

Handwritten signature of Cathy Parsons in blue ink.

30 November 2004

Cathy Parsons
Chief Executive Officer
GGAP International