



# BENCHMARKED ASSESSMENT REPORT

**COMMUNITY BENCHMARKING**

**Kaikoura  
New Zealand**

**Report Date: 21 April 2006  
Benchmarked Certificate Expiry: 20 September 2006**

PERIOD BENCHMARKED: 1 July 2004 – 30 June 2005  
Assessment Conducted by Earthcheck



# Green Globe 21 Community Benchmarking Results

## 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 <sup>1, 2</sup>. The lead agency responsible for collection, collation and authorization of the information required by the indicators was the **Kaikoura District Council**.

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

<sup>A</sup> produced by the lead agency after community consultation and consensus.

<sup>B</sup> person year is equivalent to 365 person days. Green Globe 21 Communities 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>C</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 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).

<sup>D</sup> carried out by the lead agency only.

<sup>E</sup> per employee of the lead agency.

<sup>1</sup> A more detailed description of how these indicators are assessed can be found in the Community Benchmarking guide which can be downloaded from [www.earthcheck.org/publications.htm](http://www.earthcheck.org/publications.htm)

<sup>2</sup> For frequently asked questions (FAQs) about benchmarking or to ask specific help, please refer to [www.earthcheck.org](http://www.earthcheck.org)

# Green Globe 21 Community Benchmarking Results

## Kaikoura

In addition to the list on the previous page, a range of optional indicators are also provided. These present the opportunity 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.<sup>3</sup>



The data for the listed **earthcheck**<sup>™</sup> indicators and their benchmarks have been stated as compiled by **Kaikoura** in the prescribed manner, authorized by a senior officer of the Community's lead agency, **Kaikoura District Council**, and submitted to Green Globe 21 for an annual independent assessment conducted by the Earthcheck Organization.

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<sup>3</sup> To meet the requirements that allow the right to use the Green Globe 21 logo, the benchmarks for all the **earthcheck**<sup>™</sup> indicators should be at, or better than, the Baseline level. Baseline performance and Best Practice are set for Green Globe 21 by the Earthcheck Organization with reference to appropriate national, regional and international data which take into account social, geographical and climatic impacts.

If a Community fails to meet the minimum requirements for up to two **earthcheck**<sup>™</sup> indicators (Baseline or better performance), but achieves Baseline or better performance in all the other **earthcheck**<sup>™</sup> 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. 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**<sup>™</sup> indicators are continuously reviewed, along with the performance levels which Communities have to achieve in order to use the Green Globe 21 logo. This review takes into account "business-as-usual" changes in practices and equipment and is used to update where appropriate the Baseline and Best Practice levels, which provide useful feedback to the Community. Advanced warning will be given of changes in any required benchmarking related requirements and data.

# Green Globe 21 Community Benchmarking Results

## Kaikoura

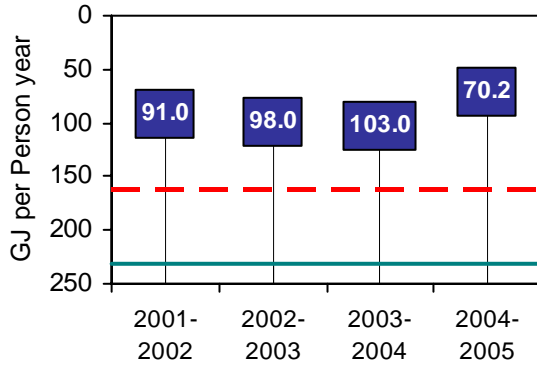


### ANNUAL COMMUNITY PERFORMANCE BENCHMARKS

#### 1 Sustainability Policy in place ✓

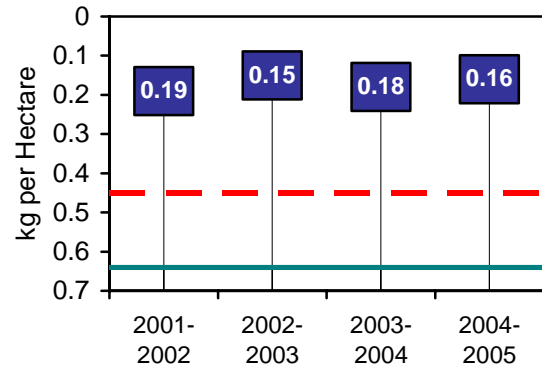
#### 2 Energy consumption ★

Energy consumed / Person year



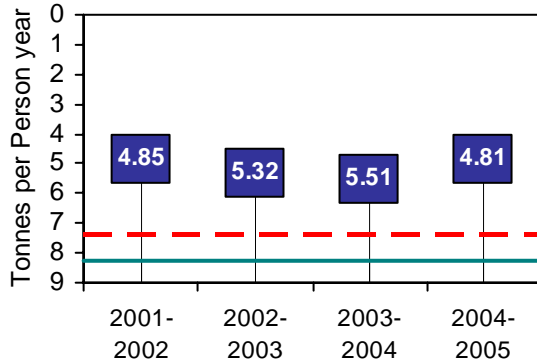
#### 5 Air quality ★

Sulphur dioxide (SO<sub>2</sub>) generated / Area



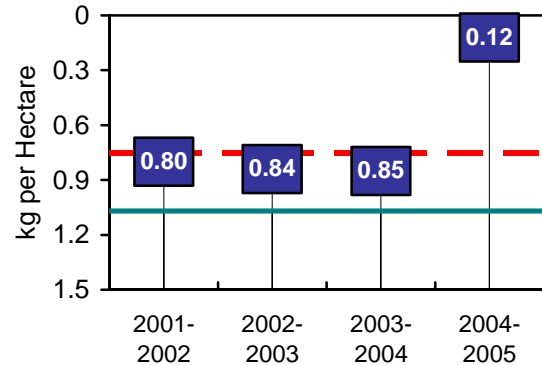
#### 3 Greenhouse gas production ★

Carbon dioxide (CO<sub>2</sub>) produced / Person year



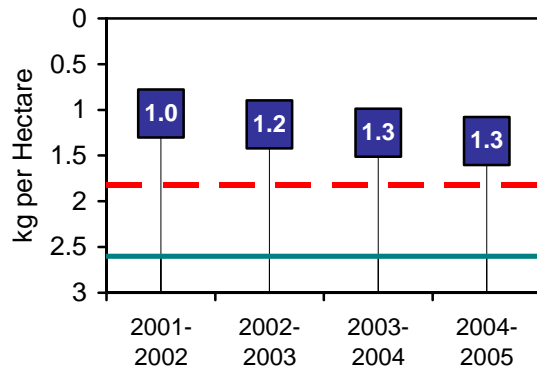
#### 6 Air quality ★

Particulates (PM<sub>10</sub>) generated / Area



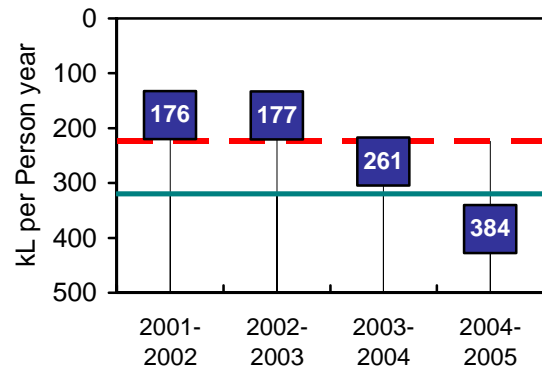
#### 4 Air quality ★

Nitrogen oxides (NO<sub>x</sub>) generated / Area



#### 7 Potable water consumption ✘<sup>4</sup>

Potable water consumed / Person year



Performance Level:

Baseline ———

Best Practice - - - -

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

<sup>4</sup> Best Practice, Baseline and Community consumption figures are based on that supplied by water utilities for primarily domestic and commercial/industrial use. Agricultural consumption (including forestry and fisheries) accounts in many countries for around 50-80% of a country's overall consumption of fresh water, but most of this is usually obtained by direct extraction from bore holes and waterways.

# Green Globe 21 Community Benchmarking Results

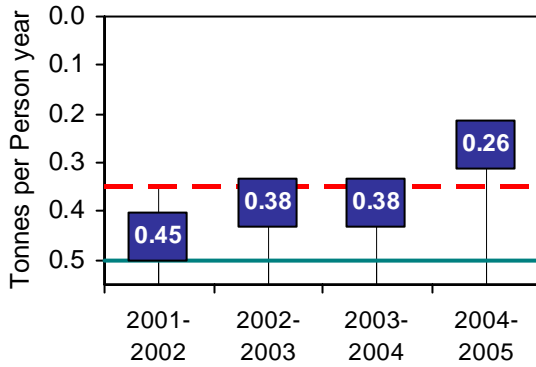
## Kaikoura



### ANNUAL COMMUNITY PERFORMANCE BENCHMARKS continued

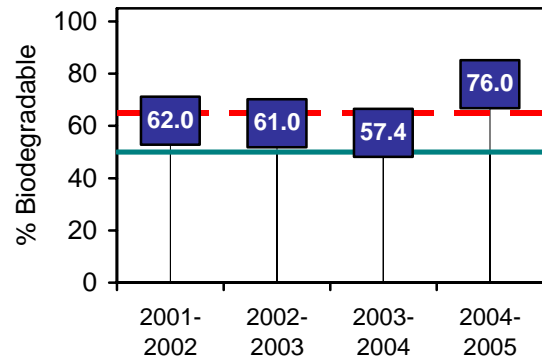
#### 8 Solid waste production ★

Waste landfilled / Person year



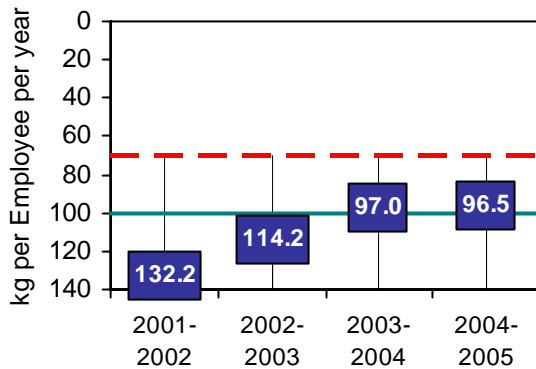
#### 11 Resource conservation <sup>A</sup> ★

Biodegradable chemicals used / Total chemicals used



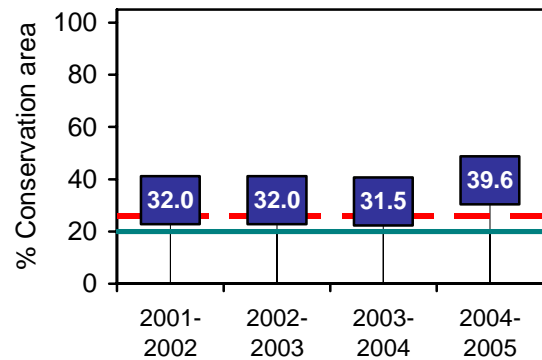
#### 9 Resource conservation <sup>A</sup> ✓

Paper purchased / Employee



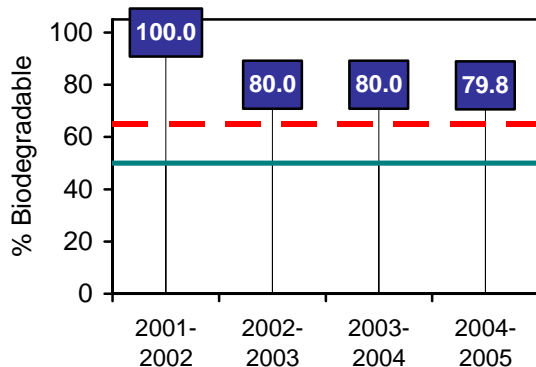
#### 12 Biodiversity ★

Habitat conservation area / Total community area



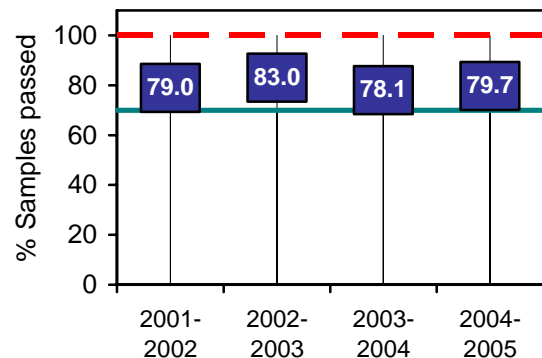
#### 10 Resource conservation <sup>A</sup> ★

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

<sup>A</sup> assessed for the Community's lead agency – **Kaikoura District Council**

# Green Globe 21 Community Benchmarking Results

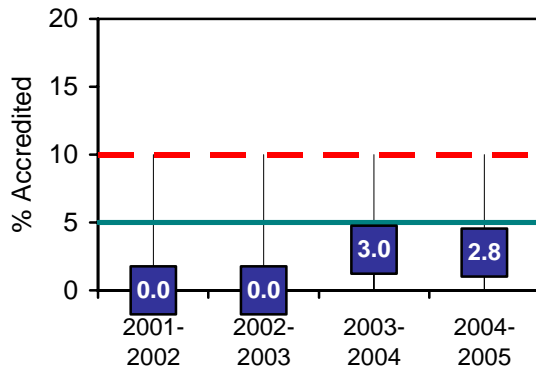
## Kaikoura



### ANNUAL 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 this indicator's role is not to pass/fail a Community, but to encourage local travel and tourism operators, who are generally the main point of contact for visitors to the Community, to start taking part in, and promoting, 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

### OPTIONAL BENCHMARKING INDICATORS

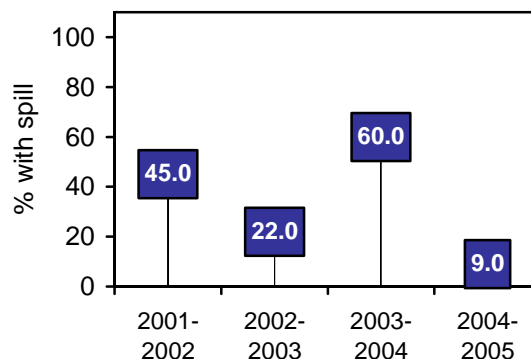
**Kaikoura** has also nominated and specified an optional indicator that they consider relevant to their specific operation and locality. This indicator reflects a very positive and strong commitment that the lead agency has to monitoring a key factor that can impact on the community's environment (e.g.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



### COMMUNITY SPECIFIED INDICATOR <sup>5</sup>

#### Environmental hazard monitoring <sup>6</sup>

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



<sup>5</sup> Specified by the Community

<sup>6</sup> Specified by the lead agency as a key issue impacting the local environment of the Community

# Green Globe 21 Community Benchmarking Results

## Kaikoura

### CONCLUSION AND RECOMMENDATIONS

Congratulations, **Kaikoura** has passed the requirements to continue to become recognized as a Green Globe 21 Benchmarked Community for the next 12 months, and retains the right to display the Green Globe 21 logo during this period.



Twelve assessed **earthcheck**<sup>TM</sup> indicators are above the Baseline level. From the benchmarking data provided, eight indicators, *Energy Consumption*, *Greenhouse Gas Production*, *Air Quality (NO<sub>x</sub>)*, *Air Quality (SO<sub>x</sub>)*, *Air Quality (PM10)*,<sup>7</sup> *Solid Waste Production*, *Resource Conservation (Biodegradable Pesticides Used)*, *Resource Conservation (Biodegradable Chemicals Used)*, and *Biodiversity*, are above the Best Practice level, which is an outstanding achievement to be very highly commended.

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

The one indicator that falls below the Baseline level is water consumption, which at 18.5% above the Baseline level, has risen significantly from previous years.<sup>8</sup>

Improvements in all the **earthcheck**<sup>TM</sup> indicators will not only help the environment, but can also help reduce costs. In particular, **Kaikoura** is encouraged to investigate the marked increase in the level of water used by the community.

Due to the very positive commitment that the Community has demonstrated to the environment, through entering this program, Green Globe 21 is confident that they can retain their status as a leader in environmental performance, and maintain or improve performance, where appropriate and practical, in all indicators. In line with Green Globe 21 Policy this would enable Benchmarked status to be retained.

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<sup>7</sup> The significant improvement in Air Quality (PM10), the measure of particulate matter with a diameter of 10 µm or less discharged, is due primarily to a more than 10 fold reduction from previous years in the supplied value on the quantity of wood burnt.

<sup>8</sup> Water consumption has been assessed using the supplied data on community (domestic and business) usage only (urban at 1,157,854 kL pa and rural at 609,550 kL pa), and does not take into account that used for agriculture.

# Green Globe 21 Community Benchmarking Results

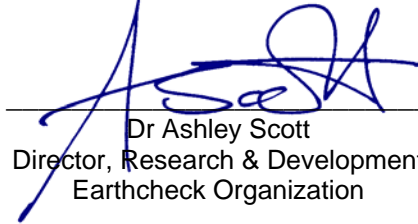
## Kaikoura

### Annual benchmarks assessed by Earthcheck:



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Melinda Watt  
General Manager  
Earthcheck Organization



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Dr Ashley Scott  
Director, Research & Development  
Earthcheck Organization

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### Report endorsed by Green Globe 21:



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21 April 2006

Cathy Parsons  
Chief Executive Officer  
GGAP International

[www.greenglobe21.com](http://www.greenglobe21.com)