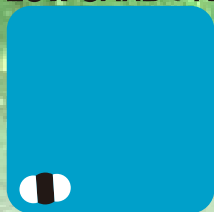


LOW CARBON



Low CO<sub>2</sub> Kawasaki Brand '14

# Low CO<sub>2</sub> Kawasaki Brand'14



Developed in Kawasaki City



Manufactured, supplied in Kawasaki City

Decrease No change Increase

## Low CO<sub>2</sub> Kawasaki Brand '14 Grand prize



Product & Technology Category

### MITSUBISHI KAKOKI KAISHA, LTD.

HyGeia Series: Small-Scale On-Site Hydrogen Generator



#### Overview and features of product, technology

- New model high-performance, compact, on-site hydrogen production unit that produces high-purity hydrogen (more than 99.999 vol%)
- Offers world's foremost reforming efficiency
- Supports various feedstock such as city gas, LPG, biogas, etc.
- Exempted from High Pressure Gas Safety Act because of a operating condition at less than 1MPa

#### Life cycle CO<sub>2</sub> reduction effect

- Reduces approx. 30% CO<sub>2</sub> emission in comparison to previous model.

Reduction of amount of raw materials procured by more compact size

More than 20% reduction in amount of feedstock used



### JFE Steel Corporation East Japan Works (Keihin) Product & Technology Category

“LP Steel Plate” environment-friendly steel plate for ships and bridges

※LP : Longitudinally Profiled Steel Plate

#### Overview and features of product, technology

- The steel plates with continuously and linearly varied thickness in plate length direction according to change in design strength.
- Resource saving (reducing amount of steel plates in use) and Energy reduction for butt welding are made possible by use of LP steel plates. LP steel plates meet demands of energy reduction and CO<sub>2</sub> emissions reduction in each industry in addition to shipbuilding.

#### Life cycle CO<sub>2</sub> reduction effect

- Compared with plain steel plate, amount of CO<sub>2</sub> emissions reduction at every phase of life cycle achieved approx. 0.1% reduction of total CO<sub>2</sub> emissions.

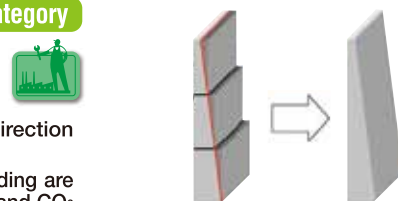
Resource saving by reducing amount of steel plates in use

Energy reduction for butt welding

Improve the ship's fuel cost by reduction of ship's weight



\*Amount accounted for in distribution and sales phases is extremely small and was therefore omitted from calculation.



### Toshiba Corporation Komukai Complex Product & Technology Category

Phased Array Weather Radar

#### Overview and features of product, technology

- Toshiba has developed the first Phased Array Weather Radar in Japan, which performs high speed and high accuracy observation. The information is used for timely evacuation from disaster like local torrential downpours “guerrilla rainstorm”, and rivers and dams management.
- Observation performance of Phased Array Weather Radar is equivalent to 20 conventional weather radars with parabolic antenna.

#### Life cycle CO<sub>2</sub> reduction effect

- Reduced CO<sub>2</sub> emission by approximately 90% compared to 20 conventional weather radars with parabolic antenna

Reduced power consumption because Phased Array Weather Radar is worth 20 conventional weather radars with parabolic antenna.



## Toshiba Corporation Komukai Complex

### EG-7000 Automatic Ticket Gate for Shinkansen

#### Product & Technology Category



#### Overview and features of product, technology

- Automatic ticket gate for Shinkansen can handle both smart cards and magnetic tickets such as fare ticket, limited express ticket, seat reservation ticket at one time. Passenger who has smart card for Shinkansen can pass the gate without using magnetic ticket.
- Decreased machine weight and reduced power consumption when idle

#### Life cycle CO<sub>2</sub> reduction effect

- Reduced CO<sub>2</sub> emission by approximately 30% compared to the former model



## NIHON GENRYO Co., Ltd.

### Mobile SIPHON TANK

#### Product & Technology Category



#### Overview and features of product, technology

- This is the mobile sand filtration device which can be used for disaster recovery operations, wastewater treatment and supplying safe drinking water.
- Filter media can be used semi-permanently without replacement, because of the SIPHON Washing Technology.
- Supplying safe and clean drinking water without maintenance works.

#### Life cycle CO<sub>2</sub> reduction effect

- Mobile SIPHON TANK can reduce around 15% of CO<sub>2</sub> emission compared with the conventional sand filtration devices.

Increasing the cost of raw materials because the SIPHON Washing Technology is equipped. Decreasing the electricity consumption and amount of backwashing waste water dramatically by reason of decreasing the time of backwashing. No need to dispose the used filter media as industrial waste, because SIPHON Washing Technology can keep media always in a clean condition.



## Pioneer Corporation

### OLED Lighting "OLE-B01" for Makeup

#### Product & Technology Category



\* Model is for exclusive use by Shiseido Co., Ltd. (hereinafter "Shiseido").

#### Overview and features of product, technology

- Illumination for applying makeup takes advantage of organic EL illumination features; is gentle on the eyes, offers excellent coloring, visibility, and has little reflection to help reduce mistakes.
- Commenced dispersion to Shiseido stores nationwide.
- Produces little heat, and no UV/infrared rays, so it is the ideal light for directly shining the facial surface in applying makeup for the eyes and face.

#### Life cycle CO<sub>2</sub> reduction effect

- Compared with incandescent light (comparatively close to natural light), offers approx. 10% reduction of CO<sub>2</sub> emission.



## Fujitsu General Limited

### Room Air-conditioner using New R32 Refrigerant "nocria" X Series

#### Product & Technology Category



#### Overview and features of product, technology

- "nocria" Series premium model equipped with "Dual Blaster" right/left side fans.
- Equipped with world's first air stream control of both side and center air streams; residential air-conditioner uses new R32 refrigerant that supports both energy conservation and optimal comfort.

#### Life cycle CO<sub>2</sub> reduction effect

- Approx. 5% CO<sub>2</sub> reduction in comparison with "nocria" X Series (2013 model).



## Fujitsu General Limited

### Room Air-conditioner using New R32 Refrigerant "nocria" Z Series

#### Product & Technology Category



#### Overview and features of product, technology

- "nocria" Series flagship model realizes total high function.
- Offers high level of both energy conservation and comfort; residential air-conditioner uses new R32 refrigerant that offers the high energy conservation and the best cooling/heating performance available.

#### Life cycle CO<sub>2</sub> reduction effect

- Approx. 5% CO<sub>2</sub> reduction in comparison with "nocria" Z Series (2013 model).

