

# 6.

## Engineering- and Construction-related Products

PCR Name	PCR ID
● Roadbed material made from inorganic sludge	PA-AY
● Rubber Chip Products	PA-BZ
● Wood-plastic Composite	PA-CB
● Wood, Wood Materials	PA-CC
● Wood Products	PA-CD
● Insulation material for construction	PA-CK

N.B. The PCR codes shown do not include the edition numbers.

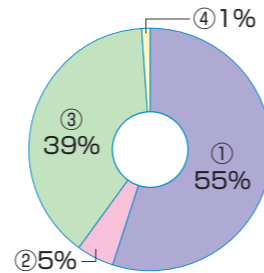
**Note**

- Out of the products which were given verification of their carbon footprints of products (CFP), those representative from each category (use) have been selected and introduced, focusing on products that were displayed in the 2011 Eco-Products exhibition. Regarding all the products, please refer to the list of products authorized to use the CFP label, at the back.
- The calculation coverage for carbon footprints has partly changed in FY2010 from that of FY2009. The Sales Process in the Transport/Sale Stage in FY2009 was eliminated in FY2010 as a tentative measure during the pilot project period.
- With regard to the lower section "Percentage of CO<sub>2</sub> emissions" for each product, an entry of "0%" in that section for a final product indicates that no CO<sub>2</sub> is emitted during the said process of that product. An entry of "-" for intermediate goods indicates that the said process is not included in the calculation coverage.

# 6. Engineering- and Construction-related Products



Company name	Soil Management Japan, Co., Ltd.	
Product name	<b>Ecokite</b>	<b>Final Product</b>
PCR Name & ID	Roadbed material made from inorganic sludge	<b>PA-AY-01</b>
Product Outline (Verified in FY2009)	Calculation covers products only, and is based on a sales unit of volume = 1m <sup>3</sup> . Does not include roadbed material made from raw materials other than inorganic sludge (e.g. debris, slag, glass or ceramic chips).	



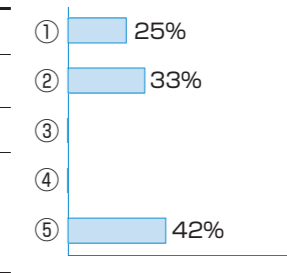
カーボンフットプリント試行事業  
<http://www.cfp-japan.jp>  
 検証番号：CV-AY-001

▶ This is a recycled product using industrial waste (inorganic sludge) as raw material.  
 ▶ We seek to make effective use of resources by conducting the recycling of materials that are difficult to process.

Process	① Acquisition of raw materials	② Production	③ Transport/sales	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	55%	5%	39%	1%	0%	177kg



Company name	ECOWOOD Co.Ltd	
Product name	<b>ECO-M Wood E05</b>	<b>Intermediate Goods</b>
PCR Name & ID	Wood-plastic Composite	<b>PA-CB-01</b>
Product Outline (Verified in FY2011)	Specifications: Interior slits, ribbed on one side Size: 3mm×14.5mm Materials: Wood, recycled plastic composites	



CO<sub>2</sub> per kg: 3.86kg  
 (At the raw material acquisition, production, disposal and recycling stages)

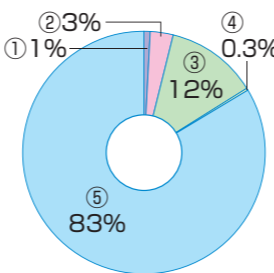
CO<sub>2</sub>の「見える化」  
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 検証番号：CV-CB01-001

▶ Recycled materials (waste wood and waste plastic chips) are used as raw materials.  
 NB: Recycled materials content is 90% or more.

Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /1kg of product)
Percentage of CO <sub>2</sub> emissions	25%	33%	—	—	42%	3.86kg



Company name	KUROGANE INDUSTRY Co., Ltd.	
Product name	<b>Rubber Chip Products KSR (with kraft paper sack) (20kg)</b>	<b>Final Product</b>
PCR Name & ID	Rubber Chip Products	<b>PA-BZ-01</b>
Product Outline (Verified in FY2011)	Size: φ1mm to 2mm Total weight: 20.2kg (net weight is 20kg, weight of container is 0.21kg) Packaging type: In paper bags	



CO<sub>2</sub>の「見える化」  
 カーボンフットプリント  
 内容量 1kg あたり  
<http://www.cfp-japan.jp>  
 検証番号：CV-BZ01-002

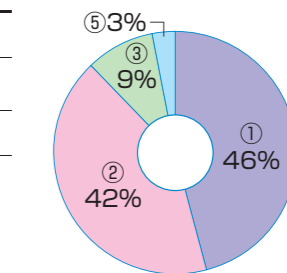
Net weight of this product is 20kg.

▶ Recycled materials are used in its raw materials.  
 ▶ This product emits very little CO<sub>2</sub> during the use and maintenance stages.

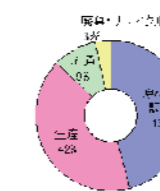
Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	1%	3%	12%	0.3%	83%	89.3kg



Company name	Hokushin Co.,Ltd	
Product name	<b>Starwood TFB</b>	<b>Final Product</b>
PCR Name & ID	Wood, Wood Materials	<b>PA-CC-01</b>
Product Outline (Verified in FY2011)	A medium density fiberboard (MDF) that meets JIS A 5905 (fiberboard) density standards of 0.35g/cm <sup>3</sup> or more with a thickness of 2.5 - 15mm, piled and wrapped in units of around 2m <sup>3</sup> .	



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 1m<sup>3</sup> あたり  
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▶ The raw materials for MDF are the leftover materials generated by chipboard and lumber factories, wood from demolished buildings, used packaging materials, unused low quality paper chips, small-diameter trees from forest thinning etc.  
 ▶ MDF is produced by turning these materials into chips, processing them into a fine fibrous state and then molding and applying thermocompression.  
 ▶ The material makes effective use of wood materials and is designated as a specific procurement item under the Green Purchasing Law.

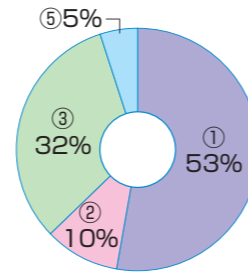
Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /m <sup>3</sup> of product)
Percentage of CO <sub>2</sub> emissions	46%	42%	9%	0%	3%	1110kg

- 1. Food-related Products
- 2. Lifestyle Products
- 3. Clothing-related Products
- 4. Printing-related Products
- 5. Office-related Products
- 6. Engineering- and Construction-related Products
- 7. Other Industrial Products

# 6. Engineering- and Construction-related Products



Company name	Marutama Industries, CO., LTD	
Product name	<b>marutama needle-leaved tree structural plywood (thickness 12mm 4PLY)</b>	<b>Final Product</b>
PCR Name & ID	Wood, Wood Materials	<b>PA-CC-02</b>
Product Outline (Verified in FY2011)	Chipboard for manufacturing using mainly Japanese Larch and Sakhalin Fir trees grown in Hokkaido Size: Thickness 12mm, 4-layer width approx. 90cm - 120cm, length approx. 180cm - 300cm	



**209kg**  
**CO<sub>2</sub>**

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<http://www.cfp-japan.jp>  
検証番号: CV-CC02-003

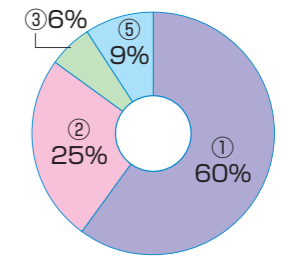
Amount of CO<sub>2</sub> stored in the wood materials used in this product:

Japanese Larch 847kg-CO<sub>2</sub>/m<sup>3</sup>  
Sakhalin Fir 671kg-CO<sub>2</sub>/m<sup>3</sup>

▶ The factory runs on natural energy provided by wood biomass.

Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	53%	10%	32%	0%	5%	209kg

Company name	HAYASHI PLYWOOD INDUSTRIAL CO., LTD.	
Product name	<b>Plywood made of Kyoto Cedar 12x910x1820mm</b>	<b>Final Product</b>
PCR Name & ID	Wood, Wood Materials	<b>PA-CC-01</b>
Product Outline (Verified in FY2011)	100% grown in Kyoto cedars are used 12x910x1820mm (0.0199m <sup>3</sup> )	



**5.78kg**  
**CO<sub>2</sub>**

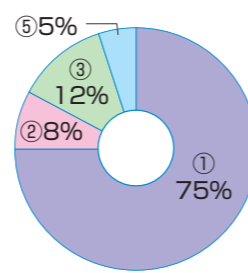
CO<sub>2</sub>の「見える化」  
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検証番号: CV-CC01-005

▶ The product appeals to consumers with a sophisticated interest in environmental issues.

▶ We reduce CO<sub>2</sub> emissions from transport by using locally sourced materials.

Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	60%	25%	6%	0%	9%	5.78kg

Company name	Tsuji Lumber co.,LTD.	
Product name	<b>Laminated lumber (HINATA) 105x105 3M</b>	<b>Final Product</b>
PCR Name & ID	Wood, Wood Materials	<b>PA-CC-01</b>
Product Outline (Verified in FY2011)	Laminated lumber (stand columns) made from 100% Kyoto cedar trees Size: L105mmxW105mmxH3m JAS certified product	



**12.1kg**  
**CO<sub>2</sub>**

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<http://www.cfp-japan.jp>  
検証番号: CV-CC01-001

The wood stores atmospheric CO<sub>2</sub> as carbon.

Amount of carbon stored per product: 5.46kg  
This converts to 20.0kg-CO<sub>2</sub>.

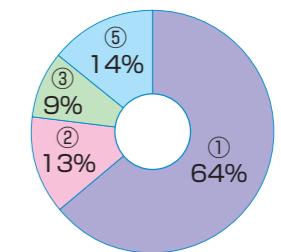
▶ Cedars grown in Kyoto Prefecture are used as the raw materials.

▶ Since wood products store atmospheric CO<sub>2</sub> until they are disposed of, using them for a long time contributes to preventing global warming.

Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	75%	8%	12%	0%	5%	12.1kg



Company name	Yamato Craft Co.,Ltd	
Product name	<b>W CUBE dust box YK06-012</b>	<b>Final Product</b>
PCR Name & ID	Wood Products	<b>PA-CD-01</b>
Product Outline (Verified in FY2011)	<ul style="list-style-type: none"> <li>Product name: Garbage Box</li> <li>Size: W200mmxD200mmxH33cm</li> <li>Coating: Urethane resin paint</li> <li>Product weight: 1.29kg</li> <li>Materials: MDF (box), plywood (lid)</li> </ul>	



**4.14kg**  
**CO<sub>2</sub>**

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検証番号: CV-CD01-001

▶ As the product is wooden, the wood chips at the manufacturing stage and the incineration of the product during disposal stage are carbon neutral.

▶ The product is handmade by craftsmen, reducing the environmental burden at the production stage.

▶ The materials all use four-star standard formaldehyde.  
The coating does not contain toluene or xylene.

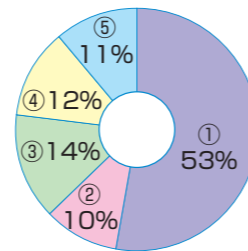
Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	64%	13%	9%	0%	14%	4.14kg

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## 6. Engineering- and Construction-related Products



Company name	Decos Co., Ltd.	
Product name	<b>Decos Fiber (Insulation material for construction)</b>	<b>Final Product</b>
PCR Name & ID	Insulation material for construction	<b>PA-CK-01</b>
Product Outline (Verified in FY2011)	15 kg of product weight, tare weight 0.114 kg	



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検証番号：CV-CK01-001

- ▶ The recycled newspaper is used for the main materials.
- ▶ We collaborate to a local NPO organization by recovery of a newspaper as part of a local contribution, and are utilizing resources.
- ▶ Only electricity is used in a stage of production. Heat and water are not used at all.
- ▶ All the wastes that come out from a factory are recycled.
- ▶ Transportation uses a modal shift.
- ▶ In order to perform construction by blowing, there is no heat insulation deficit.

Process	① Acquisition of raw materials	② Production	③ Transport	④ Use/maintenance	⑤ Disposal/recycle	Total amount (kg-CO <sub>2</sub> /product)
Percentage of CO <sub>2</sub> emissions	53%	10%	14%	12%	11%	11.9kg

# Other Industrial Products

- | PCR Name                                       | PCR ID       |
|--|--------------|
| ●Reuse battery (industrial lead battery) ..... | <b>PA-BK</b> |
| ●Pallet for Cargo and Transportation .....     | <b>PA-BG</b> |

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