

Learning from the Activities of the Woodmiles Forum

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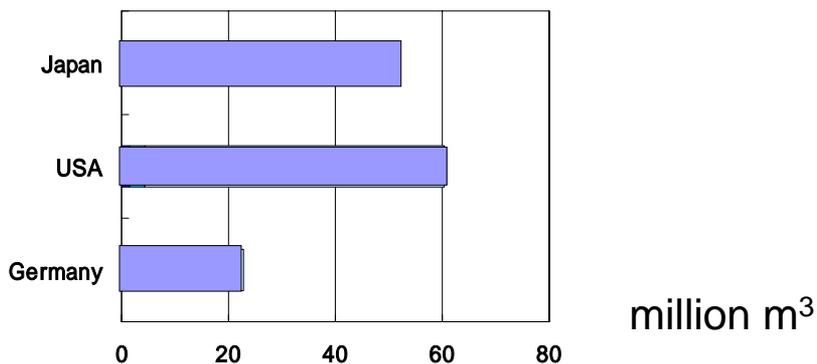
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- Establishment of the Woodmiles Forum and its background
- Activities of the Woodmiles Forum
- Houses built with timber harvested from nearby forests and the woodmiles report
- Conclusion

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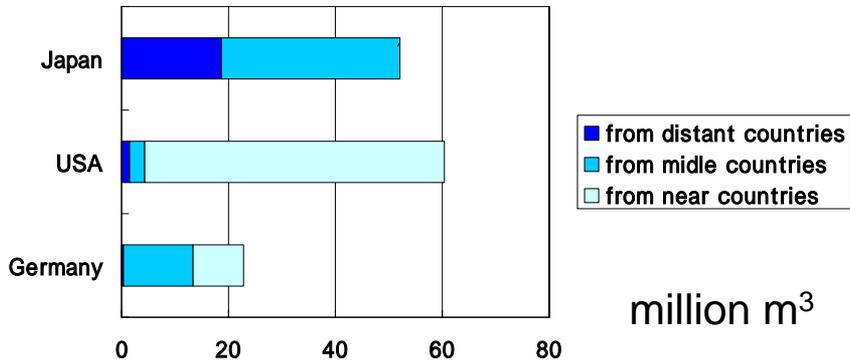
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Timber importation of major importation countries



Japan consumes wood from distant forest.

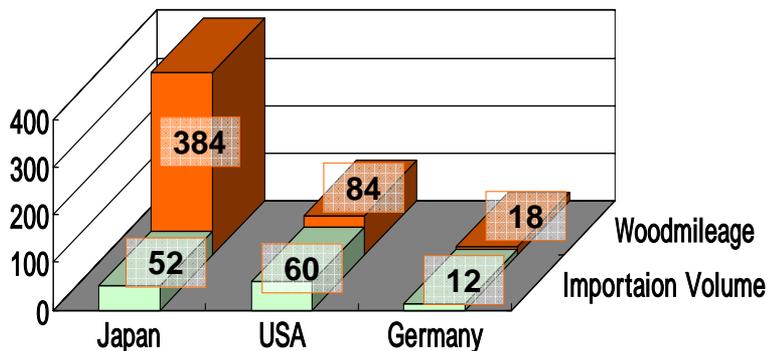
Timber importation of major importation countries by distance from origin



Japan consumes wood from distant forest.

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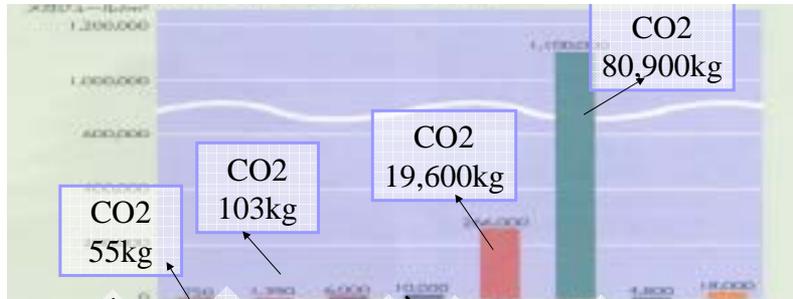
Comparison of woodmileage of imported timber



Woodmileage of Japan is four times larger than that of USA

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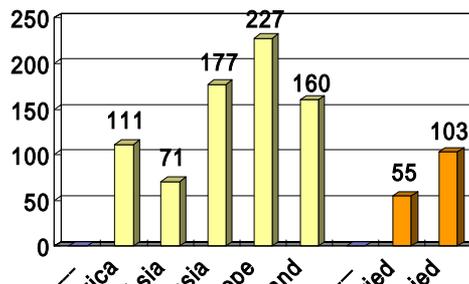
Energy consumption and CO₂ discharge in production process of construction materials



The quantity of carbon emitted from the production process of timber is fur smaller than that of other construction materials.

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CO₂ discharged on transportation and production process



Source:
The Woodmiles
Forum(2004)

Transportation of timber through long distances has more environmental load than the production process of the timber has.

Establishment of the Woodmiles Forum

- Establishment
 - June, 2003
- The purpose
 - to develop and disseminate indexes concerning the distances between the places at which timber is harvested and the places at which it is consumed (i.e., woodmiles). (Article 2 of the Bylaws)

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Establishment of the Woodmiles Forum

- The activities of the Forum (Article 3 of the Bylaws)
 - Developing indexes and tools related to woodmiles
 - Disseminating woodmiles and networking for woodmiles
 - Collecting related information and conducting research

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Establishment of the Woodmiles Forum

- The activities of the Forum (Article 3 of the Bylaws)
 - Developing indexes and tools related to woodmiles
 - Woodmileage(WM)
 - Woodmileage CO2 (WMCO2)
 - Woodmileage L (L = linear) (BWML)
 - Logistics Stops Knowledge Level (LSNL)

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Establishment of the Woodmiles Forum

- The activities of the Forum (Article 3 of the Bylaws)
 - Developing indexes and tools related to woodmiles
 - **Disseminating woodmiles and networking for woodmiles**
 - Collecting related information and conducting research

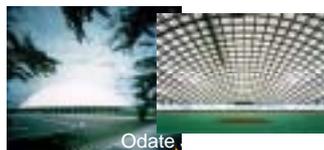
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Large Scale Wooden Frame Domes in Japan



Izumo Dome

Izumo Dome
Shimane Pref.
1992



Odate

Odate Jukai Dome, Akita Pref.
1997



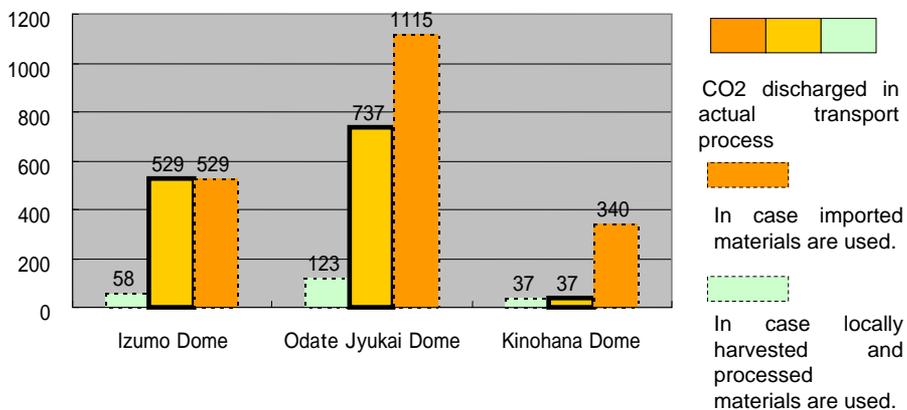
Konohana Dome

Konohana Dome
Miyazaki Pref.
2004



Production and Transportation Process of Timber Used for the Domes

	Izumo Dome	Odate Jyuaki D.		Konohana D.
Harvest site	Bend, OR.	Y. Riv. B. AP		M.Riv. B.MP.
Lam.mill	OR.	NP..	AP.	ditto
Building site	Izumo	Odate		Miyazaki
Total distance	9272km	1531km	138km	133km
CO ₂ dis. per u.	246kg/ m ³	162 kg/m ³		27km/ m ³
Timber Vol.	2,150 m ³	4,273 m ³		1,381 m ³
Woodmileage	19,934 '000 km m ³	3,685 '000 km m ³		453 '000 km m ³
WMCO ₂	529ton	718ton		37ton

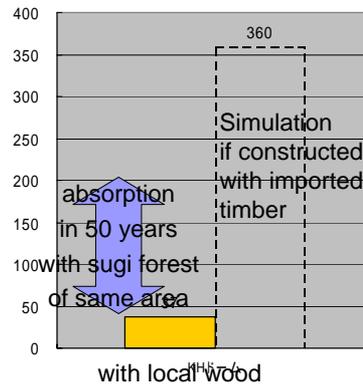


Result of an estimate of the building Woodmileage CO₂ from the three biggest wooden frame domes in Japan

Result of the evaluation of WMCO2 of the Domes



Evaluation of WMCO2 of timber transportation process of Konohana Dome



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The woodmiles indexes of the house built by S Housing KK.

Timber Volume

Subject of the report

Average house using average timber

Woodmiles
Average transportation distance of used timber

Woodmileage
MAC of volume and distance

	神水岩泊体験館	一般的な住宅 (全国平均)
①材積 (木材使用量)	46.7744 m ³ <small>※この住宅の木材使用量は、一般的な住宅より約1.75倍多く、地域に多い積蓄となっています。</small>	26.6825 m ³
②トラックマイルズ (平均輸送距離)	183 km <small>一般的な住宅に比べ、約1/3.9</small>	6,983 km
③トラックマイルレージ (材積×輸送距離)	8,554 m ³ ・km <small>一般的な住宅に比べ、約1/3.2</small>	18776,324 m ³ ・km

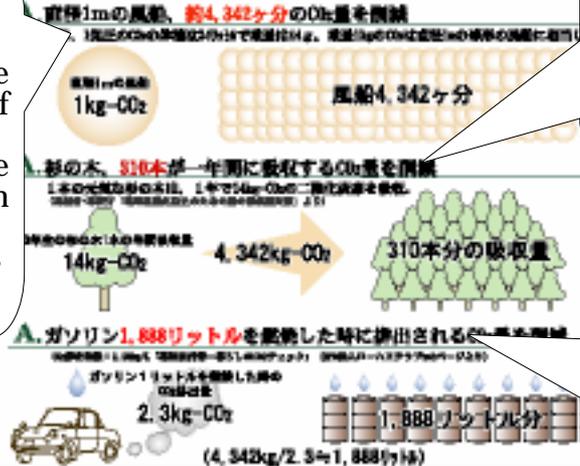
Comparison of CO2 emission in the timber transportation process between the house built by S Housing KK and an average house

	S Housing KK	Average house using average timber	Difference
Timber Volume m3	46.7744	46.7744	0.0000
Average transportation distance km	183	6983	6800
CO2 Emission Kg	1131	5473	4342

How large is the reduction of 4342 kg of carbon dioxide?

A reduction equivalent to the amount of about 4,342 one meter in diameter balloonfuls of CO₂

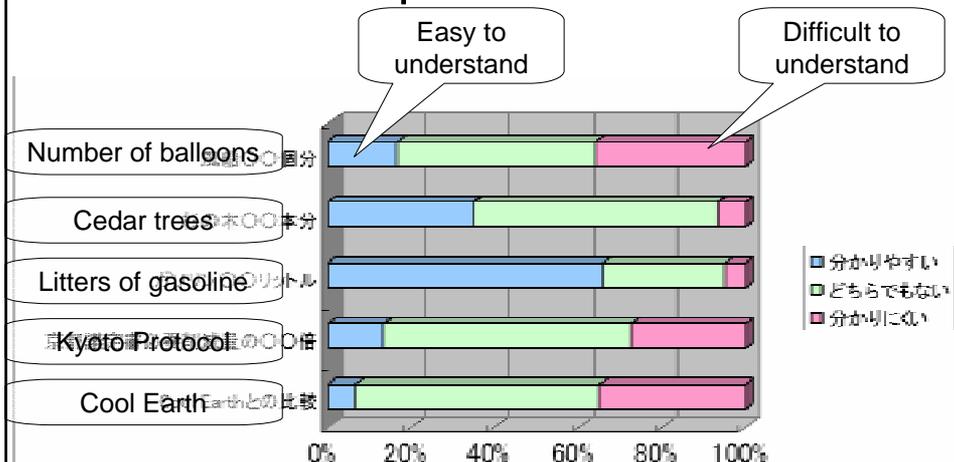
Q. 4,342 kg-CO₂ の削減量ってどのくらい?



A reduction equivalent to the amount of CO₂ absorbed by 310 cedar trees in a year

..... the amount of CO₂ emitted by burning 1,888 liters of gasoline

Easy or difficult to understand Result of the questionnaire

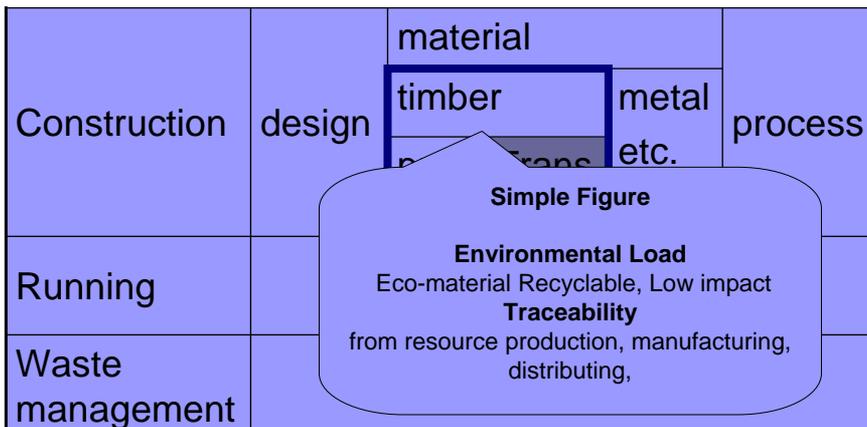


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Possibility of the woodmiles

Total LCA Process



Possibility of the woodmiles

Total LCA Process

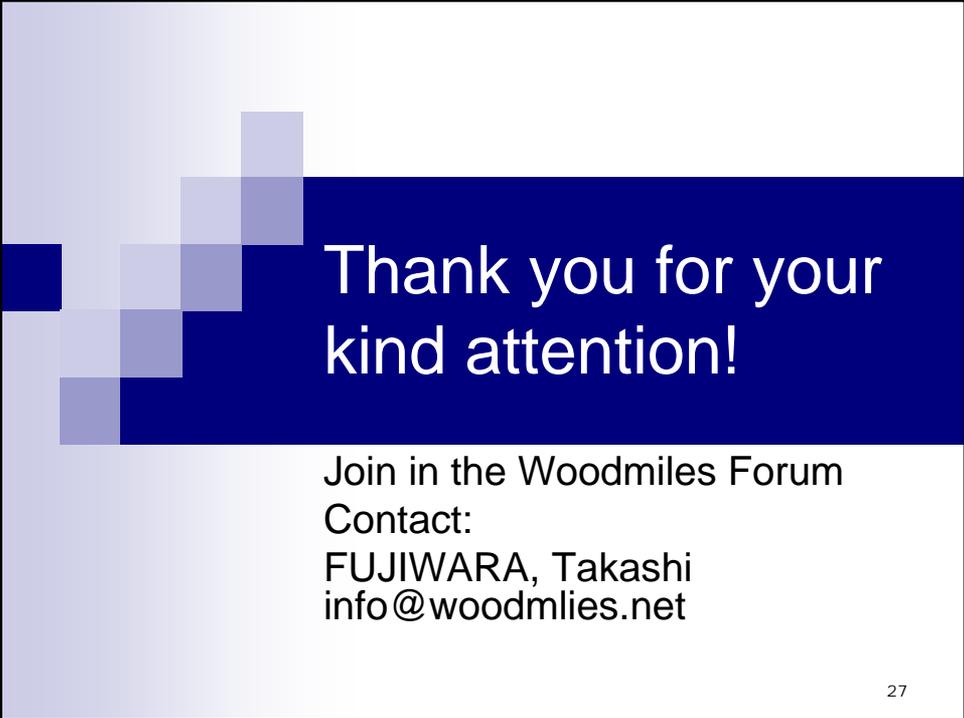
Construction	design	material	metal etc.	process
		Fair wood Campaign		
Running				
Waste management				

Possibility of the woodmiles

Total LCA Process

Construction	<p>CASBEE (Comprehensive Assessment Building Environment) green building rating system</p> <p>Definition of "locally produced" in the CASBEE method was established based on the proposal by the Woodmiles Forum</p>
Running	
Waste management	

It is important to use the indexes collaboratively with other indexes in the method of comprehensive evaluation



Thank you for your
kind attention!

Join in the Woodmiles Forum
Contact:
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