



CO₂ Footprint from Shipping

The following article studies the differences in shipping a ton of goods from China to Winnipeg (our main distribution centre) vs shipping a ton of goods by truck from Quebec city to Winnipeg (many hardwoods are produced in the province of Quebec).



The above graphic shows miles/gallon/ton of various modes of transport (**Source:** Quick Quiz: Which Bottled Water has a bigger Carbon Footprint? Treehugger.com Published Dec 20 2006)

Please note: "we (Treehugger) could not find the exact number for a modern container ship but suspect that it is even better than a barge"

$$\text{Quebec to Winnipeg} = 1,560 \text{ miles} / 59 \text{ miles (truck)} = 26.4 \text{ gallons/ton}$$

This calculation shows that since Quebec and Winnipeg are roughly 1,560 miles apart and since trucks get 59 miles/gallon, we can conclude that it takes roughly 26.4 gallons of fuel to get one ton of hardwood flooring to Winnipeg from Quebec.

$$\text{Hangzhou to Shanghai} = 110 \text{ miles} / 59 \text{ miles (truck)} = 1.9 \text{ gallons/ton}$$

$$\text{Shanghai to Vancouver} = 8,125 \text{ miles} / 514 \text{ miles (barge)} = 15.8 \text{ gallons/ton}$$

$$\text{Vancouver to Winnipeg} = 1,375 \text{ miles} / 202 \text{ miles (rail)} = \underline{6.8 \text{ gallons/ton}}$$

$$\text{Total Hangzhou to Winnipeg} = \underline{24.5 \text{ gallons/ton}}$$

This calculation uses the same methods as used above to calculate the total gallons/ton all the way from Hangzhou to Winnipeg.

Some assumptions are bound to be broken by the results of these calculations, as it appears that shipping from China to Winnipeg is marginally LESS carbon intensive than shipping from Quebec city to Winnipeg. Obviously this savings in CO₂ becomes more apparent the further west you go.