Purchase Decision: Sustainability of Mountain Pine Beetle Wood Concrete Products

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Abstract

In British Columbia, many communities are dependent on the forest industry and are consequently concerned about uses for the millions of hectares of pine forests killed by the mountain pine beetle. The wood fiber from those dead trees is normally useless for traditional manufacturing of dimensional lumber due to its fragility and poor quality, but wood concrete provides an alternative use. This was a market research study on mountain pine beetle wood concrete product (MPBWCP), an innovative wood product that is a blend of pine beetle–killed wood and concrete. Three building product applications were investigated, including countertops, floor tiles, and garden blocks. We assessed the relative importance that consumers place on the product attributes of wood chip size, color, price, location of production, and green certification. Qualified consumer participants from cities on the West Coast of Canada and the United States were invited to evaluate physical samples of MPBWCP on site. The results of the conjoint analysis revealed that the consumers placed high importance on attributes pertaining to two forms of sustainability, economic and environmental. Indeed, economic sustainability of local communities was the most important attribute. Moreover, sustainability and aesthetic attributes were more important compared with the relative price attribute. Cluster analyses revealed that consumers could be divided into five different segments for all product types. Moreover, one consumer segment highly valued both attributes of sustainability (economic and environmental) more than any other segment. As for demographic insights, the most price-sensitive consumer segment had significantly higher education levels. Overall, consumers showed a desire for sustainable building products in their acceptance of MPBWCP. This is consistent with the importance they placed on both sustainability attributes versus the traditional product attributes of aesthetics and price. By examining a broader concept of sustainability that incorporates economic and environmental dimensions, this study extends the literature on wood products and environmental friendliness.

Innovative wood materials and products strongly depend on market research to show consumer acceptance and thereby further their development and commercialization. Market studies have examined such important innovations as oriented strand board (Tabarsi et al. 2003), environmentally certified wood products (Bigsby and Ozanne 2002), and certified value-added wood products (Kozak et al. 2004). One of the most recent and perhaps impactful product innovations in wood materials in Canada is mountain pine beetle wood concrete product (MPBWCP). MPBWCP's impact rests on its proposed use in value-added products from pine beetle–killed trees, its environmental friendliness, and its highly advantageous properties as a building material. The potential use of dead lodge pole pine for alternative wood products offers a solution to the problem of the mountain pine beetle (MPB) epidemic, the largest devastation event of lodge pole pine forests in Canada, especially in British Columbia. With 80 percent of the province's merchantable pine predicted to be lost to the pine beetle, the need for value-added forestry is greater now than ever before to sustain the Can$13 billion contribution of the forestry sector to the British Columbia economy.[1]

[1] Based on 2009 figures on ''Revenue from Goods Manufactured,'' Natural Resources Canada, federal government, http://canadaforests.nrcan.gc.ca/statsprofile/economicimpact/bc.

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Lodge pole pine accounts for 20 percent of the tree species in British Columbia forests.[2] Hence, the market potential of MPBWCP needs to be examined; therefore, we focused on consumer acceptance and preference of pine beetle wood concrete products in this study.

Intriguingly, although wood concrete was developed more than a century ago in Europe, wood scientists at the University of Northern British Columbia have only recently discovered that wood chips from dead lodge pole pine trees bind successfully with concrete. This is an unusual phenomenon because many wood species do not bind well with concrete to form a unified hybrid material blending concrete, waste wood fiber, and water. What is remarkable about wood concrete as an innovative wood product is that it offers the best characteristics of both wood and traditional concrete, making it a versatile and desirable building material that is fire and water resistant, lightweight, durable, and workable with wood tools. Aesthetically, the material borrows from both wood and concrete and presents highly visible wood chips. The artistry of a product's appearance comes from modifying the wood chip size. The material can also be dyed to change its color (see Fig. 1 for samples).

The current state of commercialization for MPBWCP is early-stage introduction of a new product into the market. At the time of this study, a number of products were being developed, including floor tiles, countertops, and garden blocks as well as prototype applications. In collaboration with a small local business shop, several commercially ready countertops have been installed, including one in the main reception desk of a hotel. One of the goals of the research team was to develop collaborations with a large industry partner in order to accelerate commercialization.

In British Columbia, many communities are dependent on the forest industry and are consequently concerned about uses for the millions of hectares of pine forests killed by the MPB. The wood fiber from those dead trees is normally useless for traditional manufacturing of dimensional lumber due to its fragility and poor quality, but wood concrete provides an alternative use. Therefore, initial efforts to market MPBWCPs position them as sustainable community products. Meanwhile, since they use materials that would otherwise go to waste, MPBWCPs are also considered to be environmentally sustainable products (Sholty 2010). Survey results from a preliminary study showed that consumers viewed MPB wood concrete very favorably (Sholty 2010) and perceived it as a viable product. Consumers are willing to pay a 5 percent premium for MPB wood concrete versus comparable materials, despite feeling that recycled wood waste material should not command a higher premium. Although they view MPBWCP as a recycled waste product, consumers consider it to be aesthetically attractive and durable, neither cheap nor of low quality. While Sholty (2010) explored consumer and industry reactions to MPB wood concrete as a general material, our study evaluated consumers' attitudes toward five MPBWCP attributes (i.e., price level, color, wood chip size, green certification, and location of production) for three major home applications (countertops, floor tiles, and garden blocks).

[2] BC Forest Innovation Investment. British Columbia Forest Overview. http://www.bcfii.ca/wp-content/uploads/bc-forest-sector/Wood-Fibre-Opps-WEB_Part2.pdf.

Figure 1.—Samples of mountain pine beetle wood concrete products (MPBWCPs).

Results of previous research on sustainability and wood products can be found in Bigsby and Ozanne (2002), who examined consumers' responses to environmentally friendly wood products in New Zealand by evaluating their preferences for five product attributes. The environmental attribute was found to be important; in fact, it was revealed by consumers that the most important factor is the wood's source; primarily, that it is local instead of imported and that it is from a plantation, not a natural forest. Moreover, after the wood's source, environmental certification was also important. Price was the least important factor, which was also found to be the case by Kozak et al. (2004), who reported that consumers were willing to pay a small premium for ''value added'' certification, and Roos and Nyrud (2008), whose study found that green consumers are less price sensitive than non–green buyers.

Methods

Conjoint and cluster analysis

In examining consumer preferences for environmentally certified wood products, Bigsby and Ozanne (2002) used conjoint analysis. Conjoint analysis is a technique that attempts to measure buyers' tradeoffs among products and services with multiple attributes (Green and Srinivasan 1990). It determines the relative importance people attach to various attributes of a product and the importance they attach to the levels of attributes. For example, conjoint analysis could reveal the importance of environmental friendliness that consumers attach to wood concrete products relative to its other attributes. Thus, the results of conjoint analysis would yield information regarding optimal product types, price levels, and promotion attributes leading to successful product development and commercialization of MPBWCP.

It is also desirable to reveal more about consumer preferences through deeper analysis, which can yield information helpful for identifying, reaching, and advertising to consumer segments interested in the home building products market. Although conjoint analysis has been shown to be able to predict actual choice behavior (Green and Srinivasan 1990), it does not provide all the potential information about MPBWCP purchasing decisions. There-

fore, cluster analysis was used to categorize respondents based on the relative importance values for each of the clusters on each attribute (Bigsby and Ozanne 2002). Thus, the cluster analysis results complement the conjoint analysis findings by providing detailed information about the relative importance of each attribute by each segment, along with the profile and size of each segment. For example, Bigsby and Ozanne (2002) identified four consumer market segments in which two such segments had a high preference for environmental attributes, eco-certification, and source of wood relative to other attributes such as price.

Sample and research design

Participants were invited to evaluate and score physical samples of three applications of MPBWCP on site. These three applications (countertops, flooring, and garden blocks) were chosen for the following reasons. First, in-depth feedback from focus groups named these as the most viable product applications. Second, the amount of time and resources to develop these products is affordable because they do not require extensive testing to meet building code standards. Thus, given product viability and resource feasibility for product development, these applications show the greatest promise toward commercialization with an industry partner.

Data on preferences for MPBWCPs and their attributes were collected from in-person conjoint sessions in three western coast cities in Canada and the United States. Two conjoint session locations were in British Columbia (Prince George and Vancouver) and one was in Los Angeles. These three locations on the West Coast were chosen for the following reasons. Prince George, Canada, is where the researchers reside, and they are interested in local and rural views on MPBWCPs. Vancouver was chosen because it is the nearest and largest Canadian urban center. Los Angeles was chosen to represent a US market, which is Canada's largest export market. Los Angeles was chosen in particular because of its large size (vs. other US West Coast cities) and because the research implementation partner could source consumer participants there.

In each city, participants were qualified consumers; that is, they were do-it-yourself (DIY) consumers who (1) had completed a DIY home project in the past 2 years or planned to complete one in the next 2 years; (2) were involved in installation of materials such as gypsum, drywall, countertops, flooring, or any type of tiles or landscaping products such as stones or concrete pavers or blocks for terracing; (3) were either solely responsible for or made recommendations and influenced choices concerning DIY projects; and (4) were not color blind.

A marketing research firm recruited participants in Prince George and Vancouver using random probability telephone lists, and then directed respondents to online panels where they were screened for suitability. Sampling in Los Angeles was problematic due to the atypically young population and the size of the metropolitan population. Instead of telephone lists, the e-Rewards online panel was used for random recruitment. The marketing research firm made up to five call attempts to reduce nonresponse bias. The overall attendance rate was 70 percent among those randomly recruited, ranging from 50 percent in Los Angeles (100 recruited and 50 attended) to 83 percent in Prince George (60 recruited and 50 attended) and 91 percent in Vancouver (56 recruited and 51 attended). Thus, 151 respondents (76 male, 74 female, 1 elected not to record gender) took part from May 28 to June 19, 2009. Of those respondents, 30 were younger than 35 years old, 61 were between 35 and 54 years old, 58 were 55 years or older, and 2 respondents elected not to record their age. Furthermore, 117 respondents lived in a house, 19 lived in an apartment, 14 lived in a town house or other dwelling, and 1 respondent elected not to list a dwelling type.

After signing in to the session, participants were given a product rating form and a technical specifications sheet for MPBWCPs. Then, they were shown a 4-minute video describing MPBWCPs and were asked to read the specifications sheet. The video and specification sheet provided different information on the attributes tested in the conjoint sessions. This is because these materials were designed to inform consumers about MPBWCPs without sensitizing the respondents. Specifically, content in the video covered background about the MPB epidemic in British Columbia, MPBWCP as a possible economic solution, what MPBWCP is, how it is made, and possible applications. Words such as ''green'' or ''environmentally friendly'' were not used in the narrative in the video, again to avoid biasing perception. The technical specification sheet showed scientifically measured properties of MPBWCP such as bending strength, durability, water resistance, and density. Thus, the content in these materials was independent from the attributes (color, chip size, price, green, locally made) and, therefore, the content would not influence participants on the attributes.

Participants were then directed to three display stations corresponding to the three product types: countertops, flooring, and garden blocks. Each station had a control product (a comparable benchmark product available at Home Depot) and 20 samples (including four holdout samples) of MPBWCPs with thorough combinations of the tested attributes (relative price, color, wood chip size, green certification, and location of production), which was created by a standardized orthogonal design (Green and Rao 1971). Each product sample was labeled with price, wood chip size, green certification, and location of production. Samples also varied in color. Each product label depicted a different bundle of five attributes, with two or three levels for each attribute: relative price (low, moderate, high), color (natural, bright, dark), wood chip size (small, large, mixed), green certification (yes, no), and location of production (local, North America, imported). Appendix 1 provides explanations of these attributes and levels. Consumer participants were able to handle MPBWCPs to evaluate all the physical attributes such as color and wood chip size. The research coordinator had minimal interaction with participants at these conjoint sessions. As experienced market researchers working with academics, the coordinators strictly limited their interactions to only providing instructions to participants in these sessions. They did not report any unusual interactions occurring in these sessions.

The starting order for viewing products was rotated, so each of the three product types was viewed first equally, and respondents evaluated each sample on a scale of 1 to 100. A 1 to 100 scale has become increasingly common in conjoint analysis because it is easier for respondents to allocate their preference regardless of the number of bundles and thus provides better predictive results than other scales such as pairwise comparison scaling and rank order scaling (e.g., Green and Krieger 1993). Upon completion of the

evaluations, respondents returned to the research coordinator, who checked the forms for completion. They were then asked to sign a receipt for their $50 honorarium.

Results and Discussion

Conjoint analysis

We first tested for differences in the relative importance values of the attributes by location and found no significant differences among locations. In addition, the relative importance values of the attributes in each city showed the same pattern. Thus, we aggregated the data collected from the three cities. The relative importance values of the various attributes measured by the conjoint analysis instrument are shown in Figure 2. Overall, location of production was rated as the most important attribute (importance scores were 35.8 for countertops, 35.9 for floor tiles, and 38.1 for garden blocks). Color was rated as the second most important attribute (importance scores were 21.9 for countertops, 21.1 for floor tiles, and 23.6 for garden blocks). The next important attribute was green certification (importance scores were 17.9 for countertops, 20.6 for floor tiles, and 21.0 for garden blocks). Wood chip size was rated as the least important attribute, particularly for floor tiles and garden blocks (importance scores were 15.3 for countertops, 10.6 for floor tiles, and 3.8 for garden blocks).

Statistics suggested a strong positive correlation or association between the observed and the estimated utility values, which indicates a good fit to the data. Pearson's R and Kendall's tau were used to test if the model fit the data. Pearson's R was found to be 0.997 ($P = 0.0000$) for countertops, 0.994 ($P = 0.0000$) for floor tiles, and 0.999 ($P = 0.0000$) for garden blocks. Kendall's tau was found to be 0.967 ($P = 0.0000$) for countertops, 0.983 ($P = 0.0000$) for floor tiles, and 0.983 ($P = 0.0000$) for garden blocks.

Table 1 shows the overall ranking of attributes for the three applications, which allows comparison of relative importance across categories of attributes as well as comparison of relative importance across levels within an attribute. For countertops, the attribute ''locally produced'' (i.e., economic sustainability) was found to be the most important level followed by ''small wood chip size,'' ''green certification,'' and ''natural color.'' For floor tiles and garden blocks, the attribute locally produced (i.e., economic sustainability) was found to be the most important level, as it was for countertops. However, green certification was ranked the second most important attribute followed by natural color and small wood chip size. The three least important attributes were ''imported abroad,'' ''bright color,'' and ''not certified as green'' across the three applications. These scores are consistent with the conclusion that sustainability attributes matter relatively more in wood concrete products.

Cluster analysis

We found further insight about consumer preferences for wood concrete products by identifying distinguishable consumer segments using cluster analysis. In this study, relative importance values were clustered or classified using the K-means clustering analysis technique. Three-, four-, five-, and six-cluster solutions were all considered. Finally, a five-cluster solution (a number identical to the number of attributes) was chosen because the five-cluster solution was the best to compare the derived clusters across the three product types. Analysis of variance (ANOVA) techniques were used to test the hypothesis of no difference between the relative importance values across the five clusters. All of the attributes for each product type proved to be statistically different ($\alpha = 0.01$) across the five clusters.

Table 2 provides the results for the five-cluster solution from the cluster analysis. We ran χ^2 analyses to test for independence of the five clusters and to find differences in the relative importance values across them, which confirmed

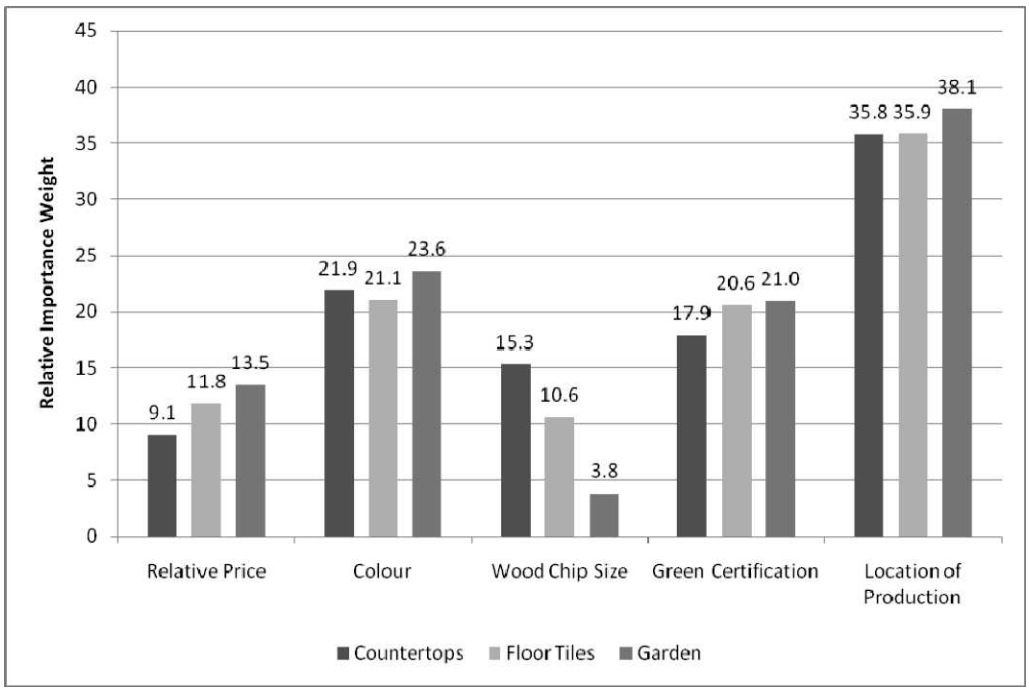

Figure 2.—Relative importance of attributes for countertops, floor tiles, and garden blocks.

Table 1.—Overall ranking of attributes for countertops, floor tiles, and garden blocks.

Attribute	Level	Part worth	Relative importance weight	Rank
Countertops				
Location of production	Locally	5.408	35.8	1
	North America	0.511		7
	Abroad	−5.920		14
Relative price	Low	1.934	9.1	5
	High	−0.934		8
	Moderate	−0.940		9
Color	Natural	2.594	21.9	4
	Dark	1.744		6
	Bright	−4.338		13
Wood chip size	Small	2.950	15.3	2
	Large	−1.056		10
	Mixed	−1.894		11
Green certification	Certified	2.823	17.9	3
	Not certified	−2.823		12
Floor tiles				
Location of production	Locally	5.291	35.9	1
	North America	0.290		7
	Abroad	−5.581		14
Relative price	Low	1.975	11.8	5
	Moderate	−0.365		8
	High	−1.610		11
Color	Natural	2.207	21.1	3
	Dark	1.968		6
	Bright	−4.175		13
Wood chip size	Small	2.010	10.6	4
	Mixed	−0.793		9
	Large	−1.217		10
Green certification	Certified	3.123	20.6	2
	Not certified	−3.123		12
Garden blocks				
Location of production	Locally	5.180	38.1	1
	North America	1.304		6
	Abroad	−6.484		14
Relative price	Low	2.290	13.5	5
	Moderate	−0.456		10
	High	−1.834		11
Color	Natural	2.412	23.6	3
	Dark	2.410		4
	Bright	−4.822		13
Wood chip size	Small	0.770	3.8	7
	Large	−0.374		8
	Mixed	−0.396		9
Green certification	Certified	3.211	21.0	2
	Not certified	−3.211		12

Table 2.—Relative importance values for the five clusters for countertops, floor tiles, and garden blocks.[a]

Attribute	Cluster 1	2	3	4	5
Counter tops					
Relative price	14.4	**37.6**	16.8	18.5	12.8
Color	14.9	16.3	**42.7**	14.5	10.4
Wood chip size	**52.6**	17.9	17.1	16.0	10.1
Green certification	5.4	9.5	8.4	20.8	9.3
Location of production	12.6	18.7	15.0	**30.1**	**57.3**
n	16	36	36	42	18
% of sample	10.8	24.3	24.3	28.4	12.2
Floor tiles					
Relative price	17.5	**42.4**	17.6	19.1	13.8
Color	19.1	17.0	**47.1**	14.6	11.5
Wood chip size	**44.0**	13.2	15.5	15.3	10.4
Green certification	8.3	9.9	6.1	23.6	13.4
Location of production	11.1	17.4	13.7	**27.4**	**50.8**
n	26	30	28	35	28
% of sample	17.6	20.4	19.1	23.8	19.1
Garden blocks					
Relative price	16.6	**43.6**	16.7	20.7	12.3
Color	19.0	13.7	**41.0**	15.9	9.6
Wood chip size	**45.1**	15.6	17.2	12.0	8.2
Green certification	5.7	8.6	8.5	22.7	10.9
Location of production	13.6	18.4	16.7	**28.7**	**59.0**
n	17	28	38	38	22
% of sample	11.9	19.6	26.6	26.6	15.3

[a] Bold values indicate the attribute with the highest importance value for each cluster.

the validity of the cluster analysis even though the sample size was a potential limitation. The relative importance values for each of the five clusters on each attribute and the sample size (and percentage of samples) for each cluster were included. As the most important product attribute, Cluster 1 rated wood chip size, Cluster 2 rated relative price, Cluster 3 rated color, and Cluster 5 rated location of production. In contrast, Cluster 4 considered green certification more critical than the other clusters. The preferences were not different across the three product applications, even though the percentages of sample were different from each other.

A demographic profile of an average individual in each cluster was developed by comparing on the basis of a range of demographic variables using ANOVA and χ^2 tests. Table 3 presents the mean value or the percentage of each cluster for each demographic variable along with the F statistic of ANOVA and χ^2 statistic. No variable was found to be statistically significant for countertops; however, education level was found to be statistically significant ($P = 0.029$) for garden blocks and gender was found to be marginally significant for floor tiles ($P = 0.079$).

Much like Bigsby and Ozanne (2002) found, demographic profiling is elusive, aside from two notable differences. The cluster favoring wood chip size had a greater male representation than other clusters, particularly for flooring products. Meanwhile, for the garden block products, the segment most sensitive to relative price also had significantly higher education levels. The lack of demographic momentum in other areas may be symptomatic of a lack of familiarity with the product and its attributes. Therefore, demographics is a suitable area of work for consequent studies concerning environmental and economic sustainability and new building materials. Indeed, market researchers have been interested for some time in defining who is the ''eco-friendly'' consumer (Schwepke and Cornwell 1991, Shrum et al. 1995, Laroche et al. 2001). For example, D'Souza et al. (2007) investigated consumers' green purchase intentions with respect to environmental beliefs. Hence, given this interest in the market research literature, identifying the ''sustainable'' consumer would be of great interest for future study.

Table 3.—Clusters compared on demographic characteristics for countertops, floor tiles, and garden blocks.

Characteristic[a]	Cluster 1	2	3	4	5	Statistics	*P*
Countertops							
Age	44.27	49.06	48.58	51.36	46.35	0.96[b]	0.436
Income	6.73	7.20	6.15	5.58	6.44	1.12[b]	0.349
Education	3.57	4.19	4.09	4.05	3.81	1.31[b]	0.268
Gender (% male)	68.80	55.60	52.80	40.50	47.10	4.33[c]	0.363
Marital status (% married)	69.20	61.30	77.10	58.30	87.50	6.38[c]	0.172
Floor tiles							
Age	49.36	48.97	47.61	46.66	53.04	0.95[b]	0.437
Income	7.00	6.45	6.26	6.31	6.12	0.40[b]	0.811
Education	3.75	4.21	3.93	4.07	4.04	0.85[b]	0.495
Gender (% male)[d]	**73.10**	**53.30**	**37.10**	**44.40**	**51.40**	**8.36[c]**	**0.079**
Marital status (% married)	72.70	65.40	74.10	56.70	80.00	4.19[c]	0.381
Garden blocks							
Age	47.63	45.57	48.00	47.95	54.57	1.45[b]	0.221
Income	8.00	6.15	6.62	5.89	6.10	1.96[b]	0.104
Education[d]	**3.56**	**4.40**	**4.11**	**3.97**	**3.70**	**2.80[b]**	**0.029**
Gender (% male)	70.60	57.10	52.60	36.80	47.60	6.21[c]	0.184
Marital status (% married)	93.30	58.30	67.60	60.60	78.90	7.40[c]	0.116

[a] The characteristics income level and education level were asked as categorical variables; an increase in the number indicates an increase in income level or education level of respondent.
[b] *F* statistic.
[c] χ^2 statistic.
[d] Bold values indicate the demographic characteristic that was statistically significant for each cluster.

Conclusions

The purpose of this study was to examine the relative importance of product attributes for MBPWCP. For three markets in North America, conjoint analysis indicated that location of production was the most important attribute: respondents favored locally sourced materials and production, which represented economic sustainability in the local community. Green certification and color were somewhat more important than the product's relative price and the aesthetic quality of wood chip size, though some segments did weigh price heavily. The results concerning price are similar to those of Bigsby and Ozanne (2002).

Cluster analysis pointed to five different segments for each of the three product types. For each product, a segment existed that placed high importance on one of the following attributes: wood chip size, color, relative price, and location of production. For each product, an additional segment existed that favored green certification more than the other segments but still placed it after location of production. More broadly speaking, we saw a segment of the consumer market that valued MPBWCP based on traditional home building product attributes; namely, aesthetics matter more than price. Indeed, there is a distinct consumer market that values sustainability above other attributes, including aesthetics and price. To these segments, sustainability is important in terms of both environmental and economical attributes.

For manufacturers interested in commercialization of MPBWCP, the findings of this study include the marketing aspects that matter most and that can be used in promotional material. An actionable list for MPBWCP includes the following: (1) it needs to be promoted as a local material with a local story; (2) green certification from a credible third party is desirable; (3) all three products (floor tiles, garden blocks, and countertops) are all well received by consumers; and (4) this is a sustainable product for both the environment and local economy and jobs. Lastly, MPBWCP has other physical attributes such as water resistance, lightness, and workability with wood tools that can give it substantially more value or advantage to comparable products. For example, one industry participant remarked that it is highly appealing that as a garden block, MPBWCP can easily be cut and drilled with hand tools. This gives flexibility to a user building a terrace, which traditionally requires having the exact set of blocks to fit correctly.

Our results demonstrate a desire for economically sustainable building products and the corresponding appeal of MPBWCPs. Previous work on consumer evaluation of environment and wood products (Bigsby and Ozanne 2002) supports the importance of the environmental attribute particularly where the wood is sourced, as well as green certification. Previous work also shows that price is a relatively less important attribute to consumers (Kozak et al. 2004, Roos and Nyrud 2008). This study extends our knowledge by showing that consumers value the broader notion of sustainability (including economic) rather than the narrower concern for the environment as discussed in past works. Moreover, they are willing to pay more for sustainability as demonstrated by their higher ranking for source of production and green certification over relative price attributes of MPBWCPs. With follow-up work in market segmenting and product positioning, the products can be optimized toward commercial feasibility and become a value-added contribution to local economies in regions negatively impacted by the MPB epidemic.

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Appendix 1.—Summary of mountain pine beetle wood concrete product (MPBWCP) attributes and levels.

Attribute	Levels	Explanation
Relative price	Low, moderate, high	Levels are based on a 10% mark-up or discount relative to a mainstream familiar benchmark product; e.g., low relative price is benchmark −10% vs. a Corian countertop at Home Depot.
Color	Natural, bright, dark	MPBWCPs can be stained different colors; consumers can see the different stain treatments. Natural is no stain, showing the natural concrete color. The bright stain color is red; the dark stain color is black.
Wood chip size	Small, large, mixed	MPBWCPs can have different sized wood chips; consumers can see the different wood chip sizes. Mixed chip size shows chips of all sizes.
Green certification	Yes, no	Green certification is described as being from a respected, credible, and independent third party generic agency.
Location of production	Local, North America, imported	Local describes MPBWCPs being made in the province of British Columbia. Imported describes MPBWCPs made outside of North America.