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L1	Tuesday, July 15, 2008
L2	9:00 a.m.
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L6	Federal Trade Commission
L7	FTC Conference Center
L8	601 New Jersey Avenue, N.W.
L9	Washington, D.C.
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even at the end of the panel, and that every panel, we guarantee, will have time for questions at the end.

If you have questions, please fill out the cards. So everybody can see, these are the cards that were in the packets that you picked up this morning. If you need an extra card, simply hold up your hand and somebody will walk around and provide one. When you are done with your question, just hold up the card. Somebody will collect it. And we will ask questions at the end of the panel.

Now, we will not necessarily have time for every question. We will ask as many as we can. However, this is a little different than many of our workshops. This is part of a rule-making, in this case a guide-making proceeding, and the questions will be made part of the guide-making record. So, what we would ask is we would ask you to identify yourself on the card. You are welcome to send up anonymous questions if you would like, but we would really like it if you would identify yourself on the card.

If you have additional comments, and we hope that today's activities spur lots of more in-depth comments, the record will be open until August 15th. So, you simply need to go to our website and post a comment on the website and, hopefully, many of you will do that

between now and August 15th. When you are doing that, think about a couple of things. We would really like you to tell us what are the trends in the areas that you are commenting on, whether they be building or textiles; what are the problems that you see currently in the industry; and what are the problems you foresee coming in terms of misleading claims and provide some examples. Because that will help us best formulate guidance for the future.

Today's event is being webcast. It is simultaneously webcast so lots of people around the country and around the world can watch this. It will also be archived with the transcript. So, if you want to refer to those materials when you are making your more in-depth comments, they will be available on our website usually starting tomorrow.

A few comments about security. When you came in this morning, you were screened. Every time you leave the building, you will need to be rescreened to come back in. So if you leave between panels or particularly at lunch when everybody's trying to get back in at the same time, we will start on time, so please leave enough time to go through the screening process.

Everybody was provided with name tags. Please wear the name tags at all times when you are inside. And if you see any suspicious behavior, you can report that

1 to the guard desk up front.

In case of a fire emergency, there are two ways out of the conference center. Back through the pantry, right behind us, and out on to G street, and out through the main doors and the front of the building. Then we will congregate diagonally across from the building by Georgetown Law School. In case of a SIP emergency, a shelter-in-place where you do not want to go outside, what you want to do is leave the conference center, take the hallway to the left of the guard stand and then follow everybody down into the garage, down -- we do not want to take the elevators, but down the stairs into the garage.

A couple comments about cell phones and Blackberries, now is the time for amnesty.

(Laughter.)

MR. KOHM: It is not socially awkward for the next 30 seconds to take out your cell phones and turn them off. If you need to be reached, please put them on vibrate. If you need to take calls, please leave the conference center. Aside from being able to hear you out in the hallway right beyond our room, I am told that that can interfere with the video webcast. So please go out into the main hallway if you need to take calls.

Finally, the most important reason that I am up

1	here, particularly for those of you who are going to be
2	here all day, the bathrooms.
3	(Laughter.)
4	MR. KOHM: If you leave the conference center
5	and go to the left of the guard station and follow around
6	to the left, both the men's and the women's room are in
7	that direction.
8	Turning to today's opening remarks. In keeping
9	with our pledge to start everything on time, without
10	further ado, I am proud to introduce the Chairman of the
11	Federal Trade Commission, William Kovacic, to open what
12	I am sure will be a productive and interesting day.
13	Chairman?
14	(Applause.)
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OPENING REMARKS

CHAIRMAN KOVACIC: I want to welcome all of you to our program today by putting in context the undertakings that we have launched. This is the third in a series of workshops dealing with green claims and to put in context what we will be doing today into the framework of the agency's larger work in this area.

I have spent most of my professional life over the last 20 years in the academic tower of ivory. And when you look at the typical assessment of public policy, commentators, many of my colleagues over at GW and others tend to identify three weaknesses in the way in which public agencies operate. The first is that they lag behind developments in commerce and in consumer behavior that is relevant to the formation of policy. That our tendency naturally is to look in the rearview mirror and not to have particularly farsighted vision looking ahead through the wind screen at what is coming up, so that we are perpetually in the process of trying to catch up and like Sisyphus never quite able to put the boulder up over the hill.

The second complaint is that many of our policy-making gestures lack nuances. That too often we tend to fall into a habit of using a single tool rather than using a variety of policy responses that would

is to learn about those developments. And in many respects, this is part of a rejuvenation, re-invention of the agency that transpired well over a decade ago throughout the '90s and into this decade. Part of what we realized is that if we are going to remain current, if we are going to stay state-of-the-art concerning these developments, we have to engage in a regular process of public consultation with the whole collection of interested parties -- consumers, business associations, academics, and other commentators who have views who can teach us about what is taking place.

That is why Jim's invitation to you to share your views is so important. That is why we commit on a regular basis substantial resources to this type of public consultation. And I think the results of the program today unmistakably will put us in a better position to make judgments about the application of the full range of policy tools we have at our disposal. That is one reason to convene this event.

The second is that we have learned, looking at our entire portfolio of tools, that the appropriate policy response in many instances is to use a varied, multiple collection of strategies in dealing with individual phenomena. That was the purpose for creating this agency. My agency is part think-tank, it is part

law enforcement body. We like to think of it in many ways as the thinking person's approach to consumer protection and competition policy.

why? In part, we are a law enforcement agency and we are quite willing to use our enforcement powers to ensure the claims relating to green products, green services are indeed truthful. And I think all of you understand the intuition behind that. That is, confidence on the part of consumers about the legitimacy of claims is indispensable to permitting these changes in consumer tastes to really drive adjustments in commercial behavior. And it is equally important for individual entrepreneurs who want to respond to these claims in an honest way to be able to make representations with consumers being confident that those claims are truthful.

So, we regard the enforcement process as being an indispensable ingredient in ensuring honesty in the making of these claims. But it is not the only tool that we use. The workshop, the public consultation is part of that process. The guidelines that we will be discussing are a key element to educate both business actors who want clarity and predictability about what they do and for consumers to educate them about what to expect when they hear representations regarding green claims, and to engage in a process of research so that we better

understand what consumers are taking away from individual ads.

I am sure that in the world that Jim just talked about before where this demonic device.

(Laughter.)

CHAIRMAN KOVACIC: Summons your attention by the minute, I look forward to a day past when this wonderful thing, but this curse, this Blackberry, never summoned you. That there were not messages cascading over you regularly from a computer screen. That phones were attached to walls.

(Laughter.)

CHAIRMAN KOVACIC: That there were miracle devices called fax machines that could come and creep up after you. And, at best, an express courier who is at least two days away from wherever you were. In many ways, that was a happier state of life. But the benefits that come with the information do impose costs. And a key question about which we conduct research, and we are very interested in conducting these proceedings, is how do people actually absorb information that are presented through advertisements?

In the downpour of information where consumers, in effect, are standing under a giant waterfall with a teacup every day trying to catch little drips of

information and absorb them, how do people understand claims that are being made, how do they perceive them, and how should that guide our approach to formulating policy?

So, in many respects, the approach that you see today, and this program is part of it, is a recognition on our part that if we are going to make good policy in this area, we are going to have to use the full portfolio of policy instruments dedicated to us, to be a wise enforcer, to engage in public consultations, to do research, to issue guidelines. This program today is going to inform the use of each of these policy tools.

And the third challenge that we are addressing is one of cooperation, how to provide better ferry service and communication in the archipelago. You will notice today that participation in this program engages the energies of our public institutions that are deeply involved in making good policy in this area: our colleagues from the Environmental Protection Agency, from Customs and Border Protection. This is part of a conscious effort on the part of the policy-making community to try to achieve coherent approaches to teach each other, to build relationships that will facilitate a conversation over time that ensures that different public institutions, state institutions, local institutions are

1	equivalent of capital investments that will be valuable
2	for the policy community, for consumers and for our
3	agency over the long term. And in a city that tends to
4	be very short-sighted in its treatment of fundamentally
5	difficult longer term concerns, I am heartened to have
6	you all here as an act of faith in your own commitment in
7	taking the long run as though it matters and making the
8	contribution to this process. That is public policy on a
9	good day.
10	And I want to welcome you and thank you for
11	being part of this endeavor today and to thank my
12	colleagues for making it possible. Thank you.
13	(Applause.)
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1	SESSION 1: WEAVING GREEN TEXTILE CLAIMS - COTTON,
2	ORGANIC COTTON & BAMBOO
3	MS. FRANKLE: Good morning, everyone. I am
4	Janice Frankle and this is Session 1: Weaving Green
5	Textile Claims - Cotton, Organic Cotton and Bamboo.
6	Although today's green textile discussion focuses on the
7	FTC Green Guides, the FTC also administers several laws
8	pertaining to textile labeling, including the Textile Act
9	and the rules promulgated thereunder.
10	What is important for today's textile
11	discussion is that the law requires you to use the
12	generic fiber name recognized by the FTC to identify
13	fiber content on a label or in advertising. For example,
14	offie of the FTC's recognized 00 1.000u5oaed thereunder.

come in last night. So, I was doing the definite mad dash to come here. And first and foremost, I am an organic cotton farmer. So, I am trying to keep a crop growing in West Texas and that is one of the hats I wear. The other thing is I am the Executive Director of the Organic Exchange. We are a nonprofit, and our mission is to catalyze market forces to expand organic fiber agriculture.

So, I am just going to talk a little bit today about preserving integrity in a rapidly growing market. I think we have already had a little bit of a taste of sometimes our industries are growing faster than the infrastructure to do that and, so, our role at the Exchange is to connect, convene, to educate, and that is the main thing that we do is education.

Just to put organic into context, organic fibers are regulated by the National Organic Program here in the United States by USDA and, so, when you say the word "organic" here in the United States, it is a legal term and it has a definition around that. And, so, there are strict laws that are enforced about what can and cannot be called organic, and it is about a method of production when we talk about organic fibers. So, most people think it is cotton grown or fibers grown without this. It is not organic by default, it is organic by

design. It is about a system of agriculture where you 1 are using crop rotation, where you are putting in an ecosystem or a habitat.

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So, some of the fibers that are now being certified are cotton, hemp and linen. In addition to that, there's organic wool. The livestock are being certified on pastures that meet the organic requirements and the livestock are treated in such a way. So, many of the times right now the fiber components are done within a food system and the focus is on the food and the regulations and, again, the agricultural products that are derived from that and we also are starting to see some organic leather.

So, in the United States organic fiber products sales grew by 44 percent, and here are the categories where this growth has been taking place, and these are results from a survey that was done by the Organic Trade Association. So, women's apparel is 43 percent; infant and children clothing are 40 percent; men's is 43 percent with sheets and towels at 38 and child and teen at 52. These are the growth percentages in those different categories. And we are going to have some new results of this at the end of the year and there is significant growth that is still happening in this marketplace.

When we look at this globally, organic fiber

- 1 markets have increased 35 percent from 2001 to 2007 and
- we are going to increase it significantly again by 2008.

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So, let's get into the labeling certification of organic fiber products. This is where, if you can see on one side of the screen, there are all kinds of regulations around what you can and cannot say and sometimes they can be misleading and confusing about what you should say or cannot say on an organic fiber product because the National Organic Program, in its preamble, says here is what you can say about an organic agricultural product and their processing standards cover foods.

Where we are in a textile product where it may be more confusing about what you may need to put on that product because unlike a food situation, you know, you are talking about a function. If you did not have something other than organic fiber in this pair of socks they would not stay up. So, there are reasons for different labeling and education and what you put on that claim other than the strict requirements of what you put on a food product.

So, what we have done here is that while there have not been legal requirements about what you can and cannot say in an organic fiber product, what we have tried to do is keep with the intent of the National Organic Program and its regulations that are there on how you label food products, as well as be compliant with the

displayed on the final product only if all operations producing and handling and processing the final -- you know, every step along that way, if you are going to put 100 percent organic out there on a product.

Now, if you are just going to make an organic claim, then, by weight, a minimum of 95 percent of that fiber or the product must be the organic fiber. And the 5 percent of non-organic substances have to be listed in the NOP program as allowable. And they have kind of given me a sign. The other thing -- they are going to hurry me along here, ten minutes and five minutes, we are going to click away on the time.

So, the other and the most predominant market claim that is made on organic products at this time is made with organic, which means that the product must, by weight, contain 70 percent of organic fibers and you must identify the specific fibers that are in the product.

Grace is going to be talking later on about textile claims and product claims and, again, I just want us to be clear that organic in the product may be about the fiber itself.

Then there are voluntary processing claims,

GOTS is one of them, but there are a number of different

processing claims that are in the global market. And in

Europe, there are a number of them. Here in the United

States, there are a few of them. But as an industry, we are working to endorse and support one single voluntary organic textile standard and, so, that is called the GOTS. Again, Grace will be going into that in the next panel.

For companies that do not want to make a product claim, then the Organic Exchange is supporting two different standards. One is called the OE blended and one is called the OE 100. The OE 100 allows the brands and companies to have verifications on fiber content by a third party to verify that the cotton in this product, for example, is 100 percent organic. That there are no other fibers utilized in this product other than the organic and they are only making a fiber claim.

Now, when you talk about a blended claim like, for example, this sweater is going to be a certain percentage tencel and a certain percentage organic cotton. There are a number of reasons to blend.

Patagonia is going to be talking about some of their blends with cotton and recycled polyester. So, a lot of times companies are going to blend cotton with other fibers in order to have the functionality of the garment to meet the needs of the consumer.

There is another reason to blend and that is to encourage organic cotton production. A lot of companies

like Nike are using 3 to 5 percent blends of organic

fiber in all their products and they are not making any

product claim on that. That claim is coming through in a

CSR report or on their website talking about their

willingness to support organic fiber agriculture.

The other thing that I think is important to recognize is that there is transitional fiber being grown and we are starting to talk about that in the transition to organic.

And then who is buying these products? More than that, and I think this is something everybody needs to be aware of, people are asking what is in your product, who made it, where it comes from. So, when we look at labels around what is going on with products, people are caring and want to know how, where, what, and what is going on in their products. Thank you for your time.

(Applause.)

19 MS. FRANKLE: Thank you very much, LaRhea.

20 Pat?

DR. O'LEARY: Good morning, and thank you for the opportunity to talk today. Today, first of all, I would like to start out and give just a small introduction and follow that with what is Cotton's green message, what is the message that we are trying to get

across to consumers. And then after that, what do
consumers think about the environmental issues, about the
environmental claims that are being made? And, finally,

I would leikeirtonmentawlithlajimus that are being made? And, finally,

material is that it does not require much water, it grows quickly, it is naturally regenerative, it will grow over and over again, you can harvest from the top and it continues to grow, and it is claimed to be inherently pest-resistant.

However, to convert the bamboo stalk into fiber, you have to separate the fibers out from the rest of the material. And there are two ways to do that. One is a mechanical process, and this is where you actually separate the individual fibers from the bamboo stalk and then make a textile yarn out of it.

The second process is a chemical process, and this is really a preparation using regenerated cellulose. So, in this process you actually dissolve the cellulose and you extrude it, coagulate it, wash it and then turn it into a yarn. Very similar to the processes that are used for rayon and lyocell.

The thing I like to make mention here is that once the cellulose has been regenerated, it loses some of the properties of what the natural bamboo fiber might have.

The mechanical processing of bamboo, it is similar to flax processing which is used to make linen yarns and fabrics. So, I am going to call that natural bamboo fiber in this presentation. The first process is

something called retting and that loosens up the internal structure and allows the fibers to be separated later on. There are two ways to do that. One is an enzymatic process. In days past, you would lay out the stalks in the field and let the natural dew and the natural enzymes that are there degrade the material and sometimes it takes as long as several weeks or you put in artificial ponds and then you collect the weakened stalks.

A method now which is used, because it is much more time-saving, is the chemical process. You boil the stalks in either a mild acid or alkaline solution to loosen up the fibers from the stalk material.

Then we go to something called breaking, and it is just like what it sounds. You actually separate the bundles from the stalk through a mechanical process of crushing the stalks. The material is loosened from the actual fiber. Then you go to something called scutching and that is like your grandmother beating a rug on a clothesline. You actually use mechanical action to knock everything loose except for the fiber that you are trying to keep.

Finally, something called hackling, which is where you take these fibers that have about scutched away from all the other extraneous material, you pull it together, align it and then it goes from there into a

yarn. Just from what I described, you can tell this is a
very labor and time-intensive process and it produces
linen-like fabrics which is like, you know, thick and
thin slubby yarns. This is, according to the references
I found, is probably not used very much now because of
the time and labor and the cost in making yarn from this
process.

A much more common way of making fibers from bamboo raw material is a process very similar to making viscose rayon, and I am going to call this rayon from bamboo. You start out with a sodium hydroxide treatment of the leaves and the stems, the stalks, and you form a material called alkalized cellulose. You then take the chemical, carbon disulfide, which will react with the alkalized cellulose to form sodium xanthate. Additional sodium hydroxide will then dissolve this xanthate. Now, you have this very viscous material, dissolved cellulose. You then extrude this into a sulfuric acid, sodium sulphate, zinc sulphate solution. And, at that point, the dissolved fiber, polymers are coagulated and converted into a fiber.

Then you must go through multiple washes to

1	be removed. And from there, you dry it and you can make
2	your fiber. You can see there is significant air and
3	water pollution in the manufacture of rayon from bamboo.
4	It does produce a very nice fiber. It produces soft
5	apparel fabrics. The cellulose that comings from bamboo
6	is a pretty good molecular weight, so you get good
7	mechanical properties. But it should be considered to be
8	a rayon fiber, as the definition that Janice mentioned
9	earlier.

that breathability unless -- depending on the process
that you have. So, I think claims that claim this need
to be substantiated by scientific studies. As Pat said,
you need to have some good science, peer-reviewed studies
in order to document these claims.

I have included some references here for those who want to go further into this. Scientific papers, textbooks, as well as some information that was found on the web.

(Applause.)

MS. FRANKLE: Thank you very much, Peter. This is a reminder that the PowerPoint slides will be up on our website, so you can look at the references. They should be up tomorrow.

process and whether or not the cellulose involved in this process can be instrumentally or scientifically differentiated depending on what the source of that cellulose is, whether it comes from cotton linters or wood pulp, which is traditional, or, as we have heard already today, whether that cellulose is being derived from bamboo or any other cellulose-bearing plant, which is most plants, actually.

I do not want to go into too much chemistry, but just to give you a little bit of a background on this, the individual unit is a glucose forming polysaccharides and they then form what we call polymers or long change molecule calls, the mer is a repeat and many mers or polymers, that is where we get that word. It is a hydrocarbon containing oxygen, hydrogen and carbon atoms only. Enough chemistry.

(Laughter.)

DR. GERDE: Cellulose is a major component of, as far as I can tell, every plant that there is. There may be some exceptions, but I could not tell you what they are. We know them intimately with perhaps not really even knowing them. Cotton, of course; flax, which gives us linen; jute; kapok and hundreds of other things that may be potentially available for textile or fibrous applications.

The cellulose component of plants accounts for probably half, if not slightly more than half, total consumption of textile fibers can be obtained from seed hairs, cotton, plant stems like bamboo, leaves or bark. Some of the things that are being used these days sort of prototyping, things like hibiscus kenaf fiber and bagasse fiber which comes from sugar cane. The cellulose is the raw material for many things besides textiles including paper, cellophane and, of course, other woody applications such as furniture and decorative objects, which we are not going to talk about today. And, of course, rayon.

A little bit about bamboo botanically. This will build a bit on what Dr. Hauser told us. It is a grass. The largest grass in the world, in fact, is the giant bamboo. It is a huge family. It is the fastest growing woody plant in the world, so it is very sustainable. It spreads easily. If you have ever tried to eradicate it from your garden, you know what I mean. I remember my dad doing that once years ago. Its growth, though, is dependent, to some extent, on local climate and soil conditions. However, it grows virtually every place in the world except perhaps the North and South Pole. Is really is a ubiquitous plant in some form.

Historically, it is of high cultural and

economic significance in East and Southeast Asia. I am sure we have all been to lovely oriental Japanese gardens or Chinese gardens, for instance. It is used for building and as a food source. But, increasingly, we are seeing its importance for commercial application. It is easy to grow. Once it is growing, it is fast in its growth. It renews itself quickly. Needs very little attention and has broad market application.

But having said that, and again, as Dr. Hauser pointed out, we need to stop and consider what is the difference between the botanical entity which may convey beneficial properties, such as the antimicrobial properties, and what can convey with the cellulose from the bamboo once it has gone through commercial processing, and that is part of the question.

Research into cellulose from bamboo with comparison to other kinds of cellulose is not new. So far, I have found research reports dating to the early 1930s, using various instrumental approaches. And the upshot for the studies that we have seen so far is that once the cellulose is simply cellulose, the source cannot be differentiated.

Both the FTC and our document, the Harmonized

Tariff Schedule of the United States define rayon. The

FTC is defined in rules and regulations under the Textile

Fiber Products Identification Act, which is 16 CFR Part
303, and that is a document that we do use in conjunction
with our work in the CBP laboratories. I think the first
line essentially is worth repeating. It is a
manufactured fiber composed of regenerated cellulose and
then it goes on to be more specific about certain
chemical aspects.

The tariff defines man-made fibers, in general, as an overarching term in several chapters that pertain to textile goods brought into this country. Man-made provides for both staple fibers, short fibers and filaments, the longer sort, that are organic and gained by manufacturing. It particularly speaks to regenerated cellulose and it talks about both cuprammonium rayon, which we are not talking about today, and the viscose process, which is the focus of this presentation.

The tariff and the FTC documents, by the way, are available online as PDF files and they can be searched by keyword. I will say that I have done a keyword search with respect to the word "bamboo." It does not appear in either document in the context of textiles. It does appear in the tariff, but in a different context.

The tariff further defines synthetic and artificial under man-made. Synthetic would pertain to

1	store for knitters and bought this off the shelf
2	commercially. On the back, the label says "100 percent
3	bamboo." We regularly use an instrument called a Fourier
4	transform infrared spectrometer to identify man-made
5	fibers. This is typical in all of our laboratories.
6	When I subjected a sample of this particular yarn to the
7	FTIR, this is what I got.
8	If you look to the left of the spectrum, you
9	will see at that lower broad peak, you will see a red and
10	a blue line. The red is the sample from that skein of
11	yarn I just showed you. The blue is a laboratory match
12	with high confidence for viscose rayon domestically
13	

L	approaches	do	we	use	to	do	that?

I would like to thank, in particular, Korin 2 3 Ewing, Janice Frankle and Elsie Kappler, who have been 4 guiding me through this process with FTC since spring, and my own colleagues in LSS, our Executive Director, Mr. 5 Ira Reese, my Laboratory Director at Springfield 6 7 Laboratory, Renee Stevens, who I think is hiding somewhere in the back of the room, all of my staff, 8 colleagues at Springfield Lab and my field lab colleagues 9 around the U.S. And a special thank you to Gail Hamill 10 who is -- is Gail here from our -- hi, Gail -- from our 11 12 office of rulings and regulations. Gail is the -- I am going to have to look at this now to say it right -- is 13 the Chief for Tariff Classification and Marketing Branch 14 15 in our Office of International Trade. Thank you all very 16 much.

(Applause.)

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DR. GERDE: Oh, we are on the web, too.

MS. FRANKLE: Thank you very much, Janice, and thank you to all the panelists. And now we are going to have some time for questions. So, if you have questions, hold up your question cards and they will be collected. If you need a question card, hold up your hand and we will give you a question card.

I want to start this off with a follow-up to

1	DR. O'LEARY: I do not know that I have much to
2	add than what I gave in my presentation but yes, a
3	resounding yes. The green claims do need to be addressed
4	in the Green Guides because as you can see by the data
5	that I presented, there is a lot of misunderstanding,
6	misleading information that needs to be clarified.
7	MS. FRANKLE: Peter.
8	DR. HAUSER: I would agree with my fellow
9	panelists that the guides need to include more
LO	information on the specific textile products.
L1	MS. FRANKLE: Janice?
12	DR. GERDE: Obviously. I agree with 3n4ig8s0 0.000o 1.00

1	1	MS. PEPPER: Well, the conversations around
2	2 ba	amboo are something we are having in our industry as
3	3 we	ell. So, since it is an agricultural product you could
4	4 ce	ertainly make a fiber-only claim to say that the fiber
5	5 ir	n this product was grown organically and, certainly, if
6	6 it	t were grown organically, it would address a lot of the
7	7 is	ssues around crop rotations, sustainable harvesting and
8	8 di	ifferent things like that. So, it is an agricultural
9	9 pı	roduct, but conceptually yes, the fiber could be
10	0 ce	ertified to be grown organically.

I do not see that it could ever make -- there is just no way it would ever be able to make a product claim because of the type of processing that is required. Unless you go to that totally mechanical part that Peter was talking about where it is just that natural process. So, again, if you made a product claim, it would have to be not only the production but the processing.

MS. FRANKLE: Thank you. Pat, in your presentation, you talked about Cotton, Inc's green marketing messages. How does Cotton, Inc. respond to claims that it takes a lot of pesticides and insecticides to grow cotton and thus non-organic cotton is a green product?

DR. O'LEARY: Well, if we were talking about 25, 30 years ago I would agree, we did use a lot of

T	pesticides in growing cotton. But we have come a long
2	way since then. The latest USDA data shows that it is
3	less than a tenth of an ounce per pound of cotton
4	produced and that is an average over the whole
5	country.
6	I might add that the majority of that is
7	used they are herbicides. And these are herbicides
8	that are being used to allow the grower to use
9	conservation tillage, and conservation tillage is an

The pesticides that we are using today are much 12 more target-specific than they were 25 years ago. So, 13

quality, to prevent erosion.

important tool to preserve the soil, to improve the

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generally believe natural fibers are better for the

1	MS. FRANKLE: Thank you. And this is another
2	question from the audience for the whole panel. It says
3	no one in this panel mentioned coatings applied to
4	textiles. Those coatings, say, to make them
5	wrinkle-free. How should these affect environmental
6	claims or what effect do they have on the environmental
7	claims that are being made? LaRhea?

MS. PEPPER: Well, depending upon what it is, if it is a natural beeswax to make it rain-proof, it depends on what the coating is as to where it will fit into whether you can only make a fiber claim back to this product is made with this, or if it can fit into the processing, if the finish fits into a process that is organically approved. Then you could possibly make a product claim as well. So, it would depend upon what that coating is.

DR. O'LEARY: Again, as LaRhea said, it depends upon what the claim is. First of all, if it is a claim specifically for the fiber, there should not be any problem. But, again, it needs to be differentiated on the packaging. You cannot make claims that are not for the whole product that is not true.

DR. HAUSER: If you refer to that GOTS standard that LaRhea mentioned earlier, if the coating is composed of those types of materials I would think you would be

safe in using those claims. Otherwise, as Pat said, you 1 would need to differentiate. 2

MS. FRANKLE:

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Janice, do you have a comment? DR. GERDE: I would tend to agree with what has already been said and the question of coated, laminated, impregnated textiles is very specific. In one of my slides, in fact, I mentioned there is a particular chapter in the tariff that covers those along with textiles intended for industrial use.

When we do our analysis, for any given sample that comes to the door of any of our labs, it very much comes to a case-by-case basis. There are instances where a laminate could actually be peeled off of the textile substrate and perhaps the textile is not affected at all. But in other cases where you have an impregnation where something is actually working its way into the small voids between fibers and yarns, then you might have an entirely different situation. But you would have to look at it through instrumental and analytical processes.

MS. FRANKLE: Thank you. And this is a question for Pat or anyone else dealing with cotton This is from the audience. Cotton garments require a higher wash temperature and longer drying times as compared to most synthetics. So, how can one substantiate the green claim for cotton during consumer

1 use?

L	DR. O'LEARY: Well, adding to what LaRhea said,
2	I think, too, it needs to be made obvious, more obvious,
3	that the guides do apply to business-to-business as well
1	as business-to-consumer, because I think the general
5	perception out there is that it only applies to the
5	latter.

And there is something I might add, too. I cannot speak to everyone, but when Cotton talks business-to-business, we talk on a completely different level as when we talk to the consumer. It is a level that is a lot more technical and we use a lot more data to back up the claims that we are making, and also some of the responsibility falls upon that business to be responsible for knowing the source, all along the sourcing chain, where the products are coming from.

MS. FRANKLE: Thank you very much. We are running out of time. Peter, Janice, any quick comments?

DR. HAUSER: I think that if you focused on the retailers and explained to them that they needed to be sure of their sources, as Pat said. And who is the one who is ultimately going to be held responsible, I think is going to be the retailer because they are the ones who

L	full-time job just doing this kind of textile work. So,
2	it is definitely on the rise. And the complexity of the
3	textile labeling issues are multiplied by the complexity
1	of the organic labeling issues, so I wanted to make that
5	point. LaRhea made some great points about labeling
5	claims and I am going to go a little farther with that
7	today.

Exhibit A is this t-shirt that I bought in the Burlington, Vermont, airport snack bar on my way here. It is a good company. It is a company that does a good job and is a member of OTA, so I cannot say anything bad about them. And it says 100 percent certified organic cotton t-shirt. Green T. It says "This garment is made" -- on the hang tag, "This garment is made with 100 percent certified organic grown cotton without the use of pesticides, herbicides or artificial dyes." Who uses artificial dyes to grow cotton, I don't know.

(Laughter.)

MS. GERSHUNY: So, even the people who are getting it right do not always get it right.

The global organic textile standard was developed -- and you can go to the website to get all of the background information on them -- to define requirements that ensure the organic status of textiles from harvesting of the raw materials to environmentally

So, the processing standards reflect all of these different aspects, including how the raw fiber was produced, which must comply with the country of marketing regulations. So, if a product is being marketed here, it must be produced in accordance with the National Organic Program. As LaRhea mentioned, FTC does allow the word "organic" to modify the fiber content on a label. And there are a number of other reasons why the GOTS label is different but similar to the National Organic Program.

GOTS is a voluntary standard. Again, it is not subject to government regulations. It does require NOP certification for U.S. market products. It has similar label grades as LaRhea pointed out. I do not know if it would be possible to be any 100 percent organic products since it would have to be made only with organic agricultural products as processing aids which would be difficult. Very few textile processing substances are permitted under the National Organic Program, and that is one of the key reasons why the National Organic Program does not address process textile products. It only addresses raw fibers.

GOTS also addresses environmental and social criteria such as labor conditions, which are not addressed under the National Organic Program. GOTS labeling rules mirror the National Organic Program as

LaRhea mentioned. The problem is that the food products talk about what can be put on the principal display panel of a food product. What is a principal display panel of a fiber product? I do not know. The care and content label may be likened to the ingredient panel, which is fine, but when you put a made with organic label on a food product, on the principal display panel, consumers assume that it is processed according to the rules that are required under the National Organic Program.

If you make a made with organic cotton claim on a textile product, it does not necessarily mean that, and there's a lot of confusion, and many people who are familiar with food products will assume that that means that it is processed according to the National Organic Program rules. So, that is something that needs to be clarified.

I am going to go right to the question of -these are examples from the Oregon Till Certified Organic
Company Certifier, which does do GOTS certification now.
This is relatively recent. This is an example of a
correct label. We now have just released last month in
Italy a global organic textile standard logo which will
be allowed to be used under a licensing agreement. And
one of the things that we have requested is that the
National Organic Program consult with the FTC. So, when

Footprint Chronicles, which is a mini website where we show the entire manufacturing process of some of our products, delve into the specifics of those and try to measure the environmental impact of our product.

So, our e-fibers. This is a not a comprehensive list, but the most appropriate list I could put up here, so including organic cotton, hemp, chlorine-free wool, recycled polyester, recycled nylon and tencel, which is not officially on our list yet but being added right now. We have been using it for a long time, but I think it is about time it got added to our list here.

So, if we have a product that, by weight, is more than 33 percent of one of these fibers, we label it in the store and in the catalog with a green E. That shows that it is made from environmentally friendly fibers and we usually have some more kind of explanation in the store and on the website and in the catalog to explain what it is.

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have everything and we are trying to focus on the environmental impact as opposed to just saying natural is good and synthetic is bad or vice versa.

So, for cotton I think the big issue was we wanted to eliminate the synthetic pesticides, synthetic fertilizers and the defoliants that were being used in industrial cotton. So, we started to embrace organic cotton. By the same token, we could use hemp for certain applications. I do not think it is appropriate for all, but hemp has a natural fiber not being processed through a chemical process similar to the natural bamboo that was talked about earlier. It could be used in the same application.

In wool, I think the main issue was chlorine in the processing of shrink-proof. So, we used different technologies such as ozone and plasma treatment to try to avoid the chlorine load and the wastewater from wool shrink-proofing called chlorine-free wool. In synthetics, we really wanted to get away from using petroleum as a raw material for synthetics, so we started using recycled polyester like the PET water bottles and soda bottles and, c0 r6fInently, recycled nylon to offset that petroleum input.

When we talk about solvent spun, we talk about regenerated fibers, we really have gone towards the

tencel process which was explained a little earlier, too.

2 It is a lyocell fiber. Tencel is the brand name from

3 Lenzing, where instead of using carbon disulfide, which

4 is a toxic solvent used for rayon processing, that it

5 uses a non-toxic solvent and in that process is almost

6 100 percent recycled and reused.

So, for some questions like why isn't bamboo on there, why isn't PLA on there, and if I have time I will hit it. Otherwise, I need somebody to ask me a question later.

(Laughter.)

MR. COPELAND: So, I wanted to make sure I overview textile processing because I think it is really important to remember that we start with a raw material from petroleum or from a plant or from an animal and then we make a fiber and then we spin a yarn and then we have to knit or weave a fabric and you have to color it and we have to cut and sew it and assemble the garment. So, I think there is a lot of opportunity for environmental improvement in this entire process, and we need to think about, when we make environmental claims, what is significant. I just thought I would put this up here to give it a little bit of context.

So, I have talked mainly about how we address the fibers, but we also are addressing the processing

more recently and we are using this global industry
textile standard called bluesign. They are mainly
focusing on dyeing and finishing, including the chemicals
that are used, trying to use less chemicals, safer
chemicals, measuring and reducing air pollution and water
pollution, focusing on the worker safety as well as
consumer safety and reducing the water and energy
consumption used to be more efficient.

At the end of life, like I mentioned earlier, we are focusing on the Common Threads Program trying to increase the amount of garments that we can take back and recycle into new garments.

Finally, I want to mention the Footprint
Chronicles. This is where we are kind of learning out
loud online, chasing our own supply chain back. We have
10 products on the website right now and plan to add five
products each season. We are tracking the energy, the
CO2, and the waste for each of these supply chains and we
show little videos or slide shows of each step. So, what
we are doing is traceability and transparency, and I
think without having knowledge of where your product
comes from and how it is made, it is impossible to make
accurate environmental claims about a textile product.
So, this is where we are at right now.

That is the end of my slide show, so I get to

go back and answer my own questions, right? Awesome.

What about bamboo? Well, it has been well answered today.

(Laughter.)

MR. COPELAND: We do not use bamboo because when we went to the processing factories, we found out that a regular rayon processing factory is using a lot of waste products from the pulp and paper industry to make rayon anyway. So, substituting that raw material for bamboo, it does not really give you an environmental story. The problem or the environmental issue with rayon processing is the solvent. So, if we can change that solvent, like I said, with a tencel process that we see where we can change the solvent and make it non-toxic, recycle the solvent, then I think then we have a good environmental story.

Why not PLA? Polylactic acid. This is a made from corn type of product that we really, really seriously looked into the benefits of and were pretty much ready to launch it until we kind of got to thinking that it was not so much of a good idea because we were doing a good job of reducing petroleum as a raw material for synthetics, but what we kind of substituted that with was an agricultural system that we did not think was very sustainable.

So, this is back to the kind of questioning whether something natural or something agricultural is inherently environmentally friendly. And I think what we decided was, is that since it was coming from our monocropped corn culture, a lot of it was using synthetic fertilizers, synthetic pesticides. We just did not think that this was a sustainable way to make a fiber.

And there was also a GMO component which we did not want to support the genetically modified organisms, which is a personal choice from our company. But I think there is a lot more that could be done to make a sustainable agricultural type of system that could feed into a really sustainable type of PLA project. But for right now, we are kind of staying away from it.

I will try to make some kind of closing comments and I think it is that since 1996 all of our cotton is organic. We would like to be able to label it that way as organic even if 0 0.000mhce to label it

is important. We will continue to try to find the best materials and market them in the best way and make the best product. Thank you.

(Applause.)

5 MS. KAPPLER: Thanks, Todd. Next, we have 6 Kathleen Huddy.

MS. HUDDY: I am afraid I am still in the mid-20th century. I do not have a PowerPoint. So you have to stare at my name.

The Good Housekeeping Research Institute has been around for over 100 years. What we do is we clarify consumer confusion on product claims. We also look at new products and try to identify and clarify those for the consumer. We do this via a magazine that is read by 24 million readers. Of course, mostly women. Plus, we are also very strong in our website and on television with mass media. Good Morning, America and the Today Show are two of the shows that we are on regularly. So, we have a broad reach to the consumer explaining about products and their claims.

How do we do this? Well, we do it through lab and consumer testing using industry and government standards, AATCC, ASTM and CFR standards. Plus, we also create new test methodologies for a product where a standard may not currently exist and we like to point out

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1	With the advent of the green movement, the GHRI
2	has definitely noticed the proliferation of green wash
3	claims and products and are concerned by the consumers'
4	perceptions of what they really mean. For example, most
5	of us in the industry know what labeling an organic
6	garment really means and we have all talked about that
7	before. But what does the consumer think? Well,
8	unfortunately, they think that that means that the
9	product has been made environmentally, in an
10	environmentally sound manner from start to finish. They
11	do not know or they do not understand that it is just
12	that the cotton was grown organically.

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Our readers have told us that they are receptive to green products as long as they perform and do not cost much more, especially in this time and era. They also find green claims confusing and suspicious. They are very suspicious of the claims.

Most consumers do not know that Section 5 of the FTC Act protects them. It has broad governance, but it is very, very broad and it is very hard for the beneficial to those with allergies and sensitive skin.

If you have that claim, you better have this much data

behind it to tell me that you have really researched it

4 and you can prove it.

Besides us and Pat from Consumer Reports, there are other groups that are out there trying to make sure that the consumer knows what they are getting and that it is truthful besides the government standards. There are ways to prove your claims through ASTM and A Squared standards, plus there are independent certifications such as bluesign, GOTS and Okatech (phonetic), that is a European standard, one actually that the consumer is starting to understand.

So, just remember that when you are about to make a claim, there are people like us, Pat and I, that are out there looking and making sure that it is truthful for the consumer. Thanks.

(Applause.)

MS. KAPPLER: Thanks, Kathleen. Pat?

MS. SLAVEN: Good morning, I am Pat Slaven from Consumer Reports magazine and I would like to thank Janice and the FTC for bringing us here to talk about textiles, especially textile labeling.

My talk is bamboo by rayon. Recently, we had the opportunity to test bamboo toweling in 2006. This is

L	part of a project where we tested 27 different models of
2	bath towels. Five models among that 27 had big claims
3	that they were made from bamboo. They were bamboo
1	towels. Only one of those five models had sewn-on
5	labeling that actually correctly stated the fiber
3	contenactly statedng thed, on

large font and the tag, here is a copy of the tag, in large font, it states bamboo. In very small font, it states 50 percent bamboo, 50 percent cotton. And the claims are especially interesting, some of these claims, especially the antimicrobial, as some of our previous panelists have stated, is not, in any way, substantiated by rayon made from bamboo. This claim is substantiated from true bamboo fibers but not from the bamboo. And this was a few years ago.

We wanted to verify the claims because we are Consumer Reports. We stuck the fibers under a microscope and sure enough there were the striations typical of rayon. We contacted the manufacturers and they all did fess up and said, yeah, it is bamboo. Well, actually, no, it is rayon from bamboo. So, at least they were honest enough.

But what it comes down to for Consumer Reports is what does the consumer get? You are seeing bamboo rayon and cotton blend towels from major manufacturers, Land's End, Lenox Platinum Collection, CB2 Bamboo, the Bombay Company Estate. All of these towels cost well in excess of \$20. The Target bamboo towel was the one bargain of the bunch. It cost \$8. It quickly disappeared from the shelves. In fact, it disappeared so quickly that it was not available for Consumers prior to

publication, we had to pull it from our report. Regular cotton bath towels on average cost substantially less.

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Well, you are hearing us talk quite a bit about some of the fallacies of rayon made from bamboo. But what is the good stuff? We did have our sensory plant panelists evaluate these bath towels and they are indeed softer than most regular cotton bath towels. Not all regular cotton bath towels, but most. But the bad stuff, we did not see any superior products. Nothing was clearly superior. In the case of the bath towels, the rayon-cotton blends did indeed have a softer hand, but similar to other bath towels, and including much less expensive bath towels, they shrank, they pilled. Many of them termed into bon-bons, that is when the border shrinks up and you get that characteristic wrapped candy shape.

The other thing that may have been corrected in the industry, but at the time of publication, there were no deeper intense colors. Everything was essentially a pastel, as shown on my first slide with the stack of bamboo0 0.000yowels. Not all

1	quite cagey about the actual process, as several of my
2	colleagues have discussed, and it makes it very difficult
3	for the consumer to look at a claim or look at a hang tag
4	or look at a sewn-in label and assess its eco-friendly
5	claims.

disulfide, lots of water, lots of power. I could go on at length. It is really the topic of a Textile 101 lecture, it may be a full course. But we will spare you this.

So, the question is, is this green washing? A number of the previous panelists have pulled up the FTC definition of rayon. Nowhere in it do we define what types of cellulose go into the manufacture of rayon. It is not like lyocell that is a clearly defined different process that does have some advantages. Rayon can be made from pretty much any sort of cellulose. We have had a number of discussions on cotton linters, wood pulp. I went to UC-Davis. One of my colleagues was working on extracting cellulose from rice and turning it, too, into rayon. There was a problem with silica in the processing, which, again, is beyond the scope of this discussion.

So, in conclusion, the consumer is being led to believe that she is purchasing a green superior product. What the consumer is indeed purchasing is a cotton-rayon blend bath towel. She is paying a premium price for the honor and the privilege. And what does she get? She is getting an ordinary bath towel that, at best, is a bit softer than 100 percent cotton. We would like to see better labeling.

1	Well, while stating that something is made from
2	bamboo rather than rayon is misleading, this is not
3	necessarily a hazard to life and limb as say an
4	automotive rollover standard is, but it affects the
5	consumer's pocketbook. As long as consumers are spending
6	more money for something with these claims, we should be
7	seeing better labeling and we should be seeing better
8	superior products.

Thank you very much for allowing us to present, and at Consumer Reports we are really honored to see that the Federal Government is taking an interest in labeling.

(Applause.)

MS. KAPPLER: Thanks to all our panelists.

Let's move on to questions. We have some from the audience and I have some for you as well.

This is for all the panelists. What is your understanding of consumers' interpretation of a textile label that says "made with organic cotton"? Does this interpretation go beyond the way the cotton is grown, for example, to the production of a finished product? If yes, what kind of guidance would be helpful for the Green Guides to provide?

MS. GERSHUNY: Well, I probably address some of that by saying that if a consumer is familiar with the food labeling requirements for organic, they might assume

that something that says "made with organic cotton" is also complying with the processing standards under the National Organic Program, which would not be the case. So, in order to address that, I think that there needs to be a very clear statement both from the National Organic Program and from FTC that any content claims on fiber in a product about -- organic content claims about a product are only about the fiber content and not about how the product is processed unless it is certified under a scheme such as GOTS.

MS. KAPPLER: Thanks. Todd?

MR. COPELAND: Sure. I agree that some customers will be confused by that. I think not all of them and I think it is a learning curve and we need to be clear. And I think I agree with the fact that looking at the difference between a pure agricultural product and a processed product, in the case of a textile a very processed product, that we need to be specific about this is regarding just the fiber or we are talking about the entire processed product. And I think for me it would be two separate things, organic for the fiber and a GOTS certification or a bluesign certification or some kind of certification for the processing part.

MS. HUDDY: I have already stated in my speech that we think that the consumer thinks that the

perception is the finished from the beginning to the
end of the product, that the whole thing is sustainable
and environmentally friendly. So, I think that besides
fiber identification, that there also needs to be other
clear identifications as to where the product stops being
environmentally friendly or continues to be
environmentally friendly such as the independent
certifications.

MS. SLAVEN: Consumer Reports, like Good
Housekeeping, has been trying to do some education, and
the consumer, the perception, again, is that the entire
product is organic where, at best, it is how the fiber
was grown. It has nothing to do with the processing. We
published an article about sheets a few years back and a
little bit in the towel story where we tried to educate
the consumer, but there is not a lot you can do with one
or two lines in an article and it really comes back to
labeling.

MS. KAPPLER: This a question for Todd. Todd, you alluded to the challenges of non-deceptively communicating green textile claims that go merely beyond making fiber claims. Along those lines, what should the Green Guides say to provide marketers with guidance when they make green textile claims?

MR. COPELAND: Beyond the fiber, I think it

1	needs to be related or limited to some kind of
2	third-party certification. It is pretty difficult to
3	make a reference to natural dye or uses less energy or
4	something like that and really have some objective
5	support for that as a brand. I think you need some kind
б	of third-party support independent verification behind
7	that.

MS. KAPPLER: You mentioned the issue of bamboo and the perception at Patagonia that it was not a trade-off that was worth it, as I understand it, because the rayon was also being manufactured using refuse from wood plants and cotton fibers. Is there some way that the Green Guides could communicate that issue of a trade-off?

MR. COPELAND: I think in that case it was the case of one factory. I think that is the standard process. But I just think that the big issue of using bamboo for rayon processing, we were not even addressing the right problem. I think that was the point of me making that comment. So, it is important to say that it is rayon. If you want to go beyond that and say, okay, it is rayon from something, then that is fine, whatever that is, and then maybe the FTC decides whether you say that or not. But I think definitely you have to say at least what the fiber type is.

1	MS. KAPPLER: This is a question for Kathleen
2	and Pat. You talked about the observations of your
3	companies regarding green textile claims. What are the
4	most egregious claims that you all have noticed, and
5	along those same lines, what textile claims seem to be
6	causing consumers the most confusion.
7	MS. HUDDY: Well, the latest bit of bamboo that
8	we saw had, I would say, probably six or seven claims.
9	One being the a bunch being the ones that I stated
10	before. Antifungal, antimicrobial, beneficial to those

- seen FR cotton with a green claim yet.
- 2 MS. SLAVEN: No, I have not seen that either.
- 3 Although we did get -- actually, a trade association that
- I worked with a number of years ago, we got asked how to
- 5 do an organic treatment with flame retardancy, and the
- 6 closest thing we could come up with was dipping something
- 7 in Borax which is really a push. But we have not seen
- 8 that as a claim. But everything is chemicals including
- 9 what we are breathing.
- MS. GERSHUNY: The GOTS standards do permit treatment with flame retardant chemicals where that is
- required by law. So, that would be an exception. And if
- people are familiar with the standards, they will know
- that if it is a certain kind of product, then they can
- 15 still put a GOTS label on it even though it is treated
- 16 with fire retardant chemicals. I think that there may be
- some GOTS approved chemicals that are used for fire
- 18 retardant, but that is beyond my scope of expertise.
- 19 Maybe Sam Moore knows. No? Okay.
- MS. KAPPLER: Here is a question for Todd. Is
- 21 Patagonia differentiating between post-industrial and
- 22 post-consumer recycled content? What about routinely
- 23 collected waste, is this called recycled?
- 24 MR. COPELAND: That is a really good question.
- 25 Currently, we are not explaining differences between

1	post-industrial and post-consumer recycled content. I
2	think they are both pretty important and I think that you
3	can make a claim for both of them being environmentally
4	friendly, and I think as long as we are checking our
5	sources of recycled material, we are pretty confident
6	that we are doing the right thing in most cases.

MS. KAPPLER: A question for the panel. Some organic advocates claim that products produced organically are more environmentally friendly than conventional fibers. How can one reconcile the fact that there are often lower yields, more soil losses, more water pollution and, ultimately more loss of wildlife habitat in organic methods?

MS. GERSHUNY: How much time do I have for that?

(Laughter.)

MS. GERSHUNY: I think that the environmental benefits of organic production are well documented and the claims that those methods are not environmentally beneficial are promulgated by people who are trying to promote not more industrial, chemical and genetically modified organisms, and I think that the reams of data that are out there will certainly refute that argument. I do not think I can go into all of the documentation at this point, but certainly there is lots of it.

MS. KAPPLER: Any examples?
MS. GERSHUNY: Any examples? I do not think I
can give any citations at this point. I was not prepared
for that question here. But you could go to the OTA
website, www.ota.org, and with links to research and
documentation about those claims. I am sure you will
find the information there.
MS. KAPPLER: Anyone else?
MS. HUDDY: Well, we cannot really answer that
question because we deal with the end product that the
consumer is purchasing at the store.
MS. SLAVEN: And Consumer Reports really cannot
add anything to that either.
MR. COPELAND: I am a retailer, not a farmer,
but I can say that I support organic agriculture. And I
think any claims that say that it is more environmentally
harmful than industrial agriculture than somebody has
done a lot of work to try and get those numbers together
to prove a point and I do not have the numbers to refute
it, sorry.
MS. KAPPLER: Here is a question for Kathleen
and Pat. Is it possible to adequately qualify a
"renewable sustainable source claim" for textiles made
from bamboo? If so, how would a marketer qualify a

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claims so that the claim does not imply that it is

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1	manufactured in some sort of environmentally friendly
2	way?
3	MS. SLAVEN: I think it would require a very
4	large label. And other than one of the certifying
5	bodies, that would be an awful lot of words to put on a
6	label.
7	MS. HUDDY: I do not think there is any way to
8	do that that I know of.
9	MS. KAPPLER: Well, along those lines, so many
LO	of these justifications and qualifications make for a
L1	label that is the size of a gas station bathroom key.
L2	MS. HUDDY: I have seen them that long,
L3	especially if they are going to different countries. It
L4	is ridiculous.
L5	MS. KAPPLER: Is some sort of reference to
L6	third-party certification the answer to that? Or is
L7	there some way to try to summarize in a few short words
L8	what is true?
L9	MS. HUDDY: Well, you can use an independent
20	lab, using ASTM and A Squared standards, which is
21	perfectly justifiable. And then you can also use the
22	independent certifications, which the consumers are
23	starting to understand. They are starting to see
24	Okatech, they are starting to see it in catalogs, they
) 5	understand it. It is easy for them to understand. And

they are already starting to see bluesign and that also is very easy for them to understand.

MS. SLAVEN: Even some of the simple stuff, some of the simpler tags that we saw where it said rayon from bamboo, a little bit of education provides a lot. As Dr. Gerde said earlier, we do not say rayon from cotton linters, rayon from wood pulp. However, that is one modification that may make it clearer for the consumer.

MS. GERSHUNY: I would just say that the word "organic" is now legally defined and that it is not something that fits on a bumper sticker either. But any consumer can find the standards and know just what that means. As a matter of fact, the standards do call for practices that eliminate the danger, the threat of soil or water pollution, for example. In any practices, every practice has to be shown to minimize any threat to soil or water.

MS. KAPPLER: Let me just return to the issue of product labeling because you all talked about the fact that consumers are starting to understand these third-party certifications and there is information on websites and catalogs that provide them with more information about this. But what about the point of sale and the label? Is it really adequate for a consumer to

1	have a reference to a third-party certification on a
2	label without some further explanation of what that
3	certification connotes or conveys?
4	MR. COPELAND: Can I shoot? I think, in some
5	cases, you could have a book attached to your garment and
6	some people want that. Some people want to sit in the
7	store and they want all that data. But a lot of people
8	don't. Trying not to give all that information and

1	made from these fibers are green? If not, why not?
2	MS. HUDDY: Well, again, it is the processing
3	from the product, you know, from the beginning of the
4	product to the end of the product. We have looked at milk
5	t-shirts and soy t-shirts. Some of the claims have been
6	fairly impossible to substantiate. You know, it makes
7	your skin softer if you wear a milk t-shirt. You know,

prove that to me.

And, again, it is the processing. I think it is fascinating that they were able to make it out of a milk protein and that is a great thing, but again, listing all those product claims and not being able to substantiate them is a problem.

That would be hard to prove.

MS. SLAVEN: I have not seen any of these items in my lab yet.

MR. COPELAND: I think these fibers are like the protein version of bamboo rayon kind of. Where they are talking about that it is made from soy or milk, but not talking about the fact that it is a regenerated process that uses chemical solvents and other chemicals to actually congeal it back out. And I think that is the environmental issue, not whether you are using soy or milk or something.

But I think it is being promoted as a natural product, renewable product source or whatever, and I

1	like your Threading Your Way Guide. And then that is the
2	carrot. And then the stick is enforcement. And I
3	realize that that is a real tough one.
4	MS. GERSHUNY: I would suggest, I mean, there
5	are lots and lots of conferences and trade shows for
6	green products and the Organic Trade Association's annual
7	conference, All Things Organic, which it would be very
8	helpful to have that information for people who
9	manufacture those kinds of products.
10	MS. KAPPLER: Thank you. That is all we have.
11	Now, we are going to move on to a lunch break and we will
12	be out until 1:00. Just to remind everyone that you will
13	need to allow some additional time to get back into the
14	building, so do work that into your schedule. Thanks to
15	all our panelists.
16	(Applause.)
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SHADES OF GREEN - OVERVIEW OF GREEN CLAIMS 1 SESSION 3: 2 FOR BUILDING PRODUCTS 3 MR. FRISBY: Good afternoon, everyone. My name 4 is Robert Frisby. I will be monitoring our third session. 5 Before we get to that, I want to make a few 6 7 brief announcements for people who did not attend this morning's session. The restrooms in this building are 8 9 located across the lobby behind the elevators near the quard desk. Also, we ask you to please turn off your 10 cell phones or put them on vibrate, and if you want to 11 12 make calls, we would prefer that you do so out in the lobby or outside the building. 13 14 Also, we are going to be posting the 15 PowerPoints that you are seeing today on our webpage very soon and we will also be posting a transcript of the 16 17 proceedings and the archived webcast very soon as well. 18 We are going to be following our presentations 19 with a question-and-answer session. If you have a 20 question, please write it down on one of the index cards that you may have seen back there. If you need a card, 21 there are folks walking around with them and we will try 22

And with that, let me introduce our third panel

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to pose whatever questions we can at the end of the

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session.

1	of the day. The third panel is on Shades of Green -
2	Overview of Green Claims for Building Products. We have
3	Kirsten Ritchie, who is Director of Sustainable Design at
4	Gensler. We have Corey Brinkema, President of FSCUS, the
5	National Initiative of the Forest Stewardship Council.
6	We have Rick Cantrell, Vice President and Chief Operating
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1	it mean? What does it mean to you? Well, a lot of
2	people think, oh, it means it is a safe product, I can
3	use it maybe around my pools and my sinks. The reality
4	is it only means that the carrier is water, it is no
5	longer oil. It can still contain arsenic, cyanide and
6	all kinds of other things. And if you notice, it has a
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and speak multi-attribute. Plenty Magazine, I love that magazine, he could be the one, he drives a hybrid but does he compost.

(Laughter.)

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We have the capability to MS. RITCHIE: understand more than one thing at one point in time. And, actually, the Europeans I think are a bit ahead of This is from Marks and Spencer, they have what they call their Plan A because there is no Plan B. now requiring their tire supply chain, all their products to evaluate along what they call the five pillars of environmental and social issues. Climate change, waste, dealing with is this product recyclable, is it compostable, sustainable raw materials, what is the recycled content, is it organic, is it FSC certified, is it a fair partner that is dealing with the social responsibility aspect, and then health because we are concerned about public health and we want to make sure these products do not cause any problems for us.

So, they are looking -- Marks and Spencer is a very, very large retailer in the European Union and they actually are coming here to the States and actually going internationally. And they are saying, you know what, our customers, the average, you know, grocery store buyer can understand these things and they want to know.

So, what are the targets that we have to
what we are trying to achieve because we often have
people come to us and manufacturers come to us and say,
well, just tell us what you want. And it is like, that
is your job, you are supposed to know your product, you
are supposed to know the market, you are supposed to be
doing the right thing, but we will go ahead and help you

We have issues of product -- the reality is you are looking at both the product and the process. On the product side, you are looking at things of the attributes, it is the material content, it is the mission profile, it is performance characteristics, it is toxicity. But you also have to deal with the process, how that product was produced. Energy consumption, its carbon footprints, clearly we are very concerned about that from a climate change perspective. Water consumption, behind energy and carbon, we are running out of water. What waste is being generated and how is this being managed, what are the air emissions that are associated with the production of that product.

In terms of the product characteristics, there are a whole bunch of green rating systems that are out in the marketplace. Many of you are familiar with some of these, like, for example, LEED, you've got Energy Star, you've got Green Globes. If we look just at LEED, LEED

actually lays out for us kind of the product

characteristics that we typically are looking for when we

are talking about products for the built environment.

In terms of water, I mean, you have water efficiency fixtures, energy efficient lighting and appliances. You want to reduce toxic materials, particularly as it relates to lighting the steels with mercury. Are you using salvage materials? Are you using recycled content pre and post? Post is preferred. Is it a locally and regionally harvested material? Is it rapidly renewable? Is it a certified wood source? And then, also, from more of the health perspective, is it low emitting, whether it is adhesives, your paints, your carpets.

LEED actually has some guidelines here for you. So, from that perspective, if you are a manufacturer or if you are a specifier, if you are a buyer and you are concerned about product characteristics, this is a good short list to start to say I have to be able to articulate how my product performs or meets these criteria.

But what we really are concerned about is the life cycle of this product and all the impacts that are associated during the extraction of raw materials, its manufacturing, its use and then what happens to it end of

life. That is the life cycle assessment. Part of the reason we want to look at things from a life cycle perspective is to make sure that we are not trading off.

Just because we are getting something that is very energy efficient, we do not want to know that it is toxic from a public health perspective. Or just because we are really, really good at extracting materials does not mean we have a very inefficient product in the marketplace.

So, we have to make sure that we are not incurring undo trade-offs to try and get some of the benefits that we think we are receiving.

Now, the reality from a life cycle perspective, it is pretty complex science and it is evolving science. This is the scope, a life cycle assessment, for ketchup. Now, you think ketchup and then you think potentially this podium. There is a bit of difference in the complexity of that. And from here, you see all the different things you have to look at and you multiply that by what is -- when you have a multi-material sort of product, how you really can assess it. But we can. We are getting better and better and better at that.

What is it we are really trying to determine from a life cycle perspective? We look at all these flows, we look at all these emissions, we look at all the consumption and we aggregate them together to identify

1 the impacts in certain key impact areas.

Internationally, there are five agreed-to impact
categories. There are global warming, also known as
carbon footprint, greenhouse gas emissions, stratospheric
ozone depletion, acidification, utrification and photochemical smog. We agree to both universally. There is
no doubt about that.

But the reality is there is a whole lot more that we are also interested in. This is the list of impact categories. It was developed by EPA as part of TRACEI, the Tool for the Reduction and Assessment of Chemical and other Environmental Impacts. How is that for nomenclature? You can see that it has the five main categories there, climate change, utrification, smog, acidification, ozone depletion, but it also has things like resource depletion, human health, a big thing. On the life cycle area, public health is a real challenge, we do not know how to do it yet. Water intake, human health cancers, eco toxicity, habitat alteration, non-cancerous human health impacts and indoor air quality.

Now, from a life cycle perspective, the life cycle practitioners say all of these are equal. They are all equally important and we have to address them all equally. But the reality is trying to do that from a manufacturing perspective or from a marketplace

1 perspective is not really practical. It is like there is

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1 use to define performance internationally. There is a

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1	has a bunch of great language in there. But one of the
2	things is an environmental claim that is vague or non-
3	specific or which broadly implies that a product is
4	environmentally beneficial or environmentally benign
5	shall not be used. What does that mean? All those terms
6	that we see, environmentally friendly, environmentally
7	safe, earth friendly, non-polluting, green, ozone
8	friendly, you just don't go there. Pretty simple. Just
9	don't do it.
10	ISO 14025, which is a life cycle, basically
11	nutritional label. A newcomer for those of us in the
12	building products trade is 21930, which is environmental
13	

1 are concerned about climate change.

2 (Laughter.)

MS. RITCHIE: 14024, environmental seal of approval. This is giving you the good, better, best. And, fortunately, we have a lot of standards that are now developing here in the United States using that kind of protocol to help us figure out what are really good products, and they look at a whole host of attributes. This is not just recycled content, this is not just energy efficiency. This is the new standard, IEEE 1680, which is the basis for the electronic products environment assessment tool.

And you notice they talk about elimination of environmentally sensitive materials, materials selection, end of life management, energy conservation, corporate performance. If we had to list all the attributes for every single one of the thousands and thousands and thousands of products that go into our buildings, we would have spec books that would run from that wall to that wall. You cannot operate that way.

But, now, what we can do is we can say, all electronic products have to meet IEEE 1680 level of bronze or level of silver. It is greatly simplifying what we will have to do as specifiers to get good quality products that are also environmentally friendly in the

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NSF Carpet standard, NSF 140. We also have a new draft standard out for sustainable assessment for resilient floor coverings. BIFMA is also working on a standard for sustainability of furniture. The list is growing, which is very important.

environmentally preferenced products. So, a number of organizations are working in that way. But how do we then move from standards and get products in the marketplace? And the important thing is we have to gain our trust. In God we trust, all others bring data, great quote from Gerry Anderson who was the founder of Interface. You have what are called environmental product declarations.

This is that nutritional label we are talking about, very detailed, tells you what the carbon footprint is, tells you what the acidification footprint is, tells you what materials went into the product. A very nice one because we are dealing again with the design community, try and have a little nice graphic on their face. This is an environmental product declaration that Steel K (phonetic) has put together on a chair. They have it for a number of their products, particularly those that they sell in Europe.

We then quickly have the issue of
certification. Because these are very complex standards,
they look at a lot of information. Who can we really
trust in saying, yes, I meet the standard? You have the
first party certification, which basically is
self-declaring; you have second party which there is some
relationship between the certification organization and
that being certified, such as, for example, a membership
in a trade association or a vendor; and then you have
third-party certification and that is really where we
want to encourage that you go.

The final element is branding. Branding is very important. The reality is we are a brand-driven society as you know, it really helps -- takes a lot of complex processes, brings them down and makes them nice and graphical. And there are things like the value, even from an environmental perspective, when you talk about the value, for example of Energy Star. People who became aware of Energy Star appliances said next time that they are going to buy and look for them. So, it does have real value.

And you see we have a whole lot of those brands in the environmental arena, and I would leave you with a question, though, are we being overwhelmed. So, I am hoping somebody will ask us that of the panel so I can

l answer that because I am out of time. Thank :	you.
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2 (Applause.)

MR. FRISBY: Thank you very much. Corey, you are next.

MR. BRINKEMA: Thank you. I am Corey Brinkema with the Forest Stewardship Council United States and I am the president of what is known as the National Initiative within our International System. I think we are approaching 50 national initiatives now. We are based in Bonn, Germany and our offices are based in Minneapolis.

We are going to make that shift now into discussing certification systems and standards, and I would also like to comment on a few points that Kirsten touched on as well. First of all, our organization, our mission, as stated here, we are about promoting the environmentally appropriate, socially beneficial and economically viable management of the world's forests. We do this through setting standards, developing a certification system and creating a logo and a label that will be recognized in the marketplace and reward good behavior.

So, I mentioned we are a global organization, and if there is one take-away today that you get out of my talk, it is comprehension that FSC is what is known as

a consensus-based organization. And that means we bring all stakeholders together through membership, through standard-setting and policy development. And that is really what sets FSC apart.

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We have three chambers in our membership.

Membership is open. You categorize yourself as either environmental, economic or social. Organizations like the timber industry and lumber producers and retailers would be in our economic category. Environmental is primarily environmental NGOs; and social is an interesting and sometimes eclectic mix. Internationally, it is indigenous organizations, labor, and community and community development organizations.

We have certified now -- these are figures from April of 2008. I've just recently received the second quarter of this year and we are a little over 260 million acres certified and we are getting very close to 10,000 chain of custody certificates, and I will explain what that means in a minute. We are now in 81 countries.

So, what is FSC? We are a market-based non-regulatory tool for forest conservation. We have developed the world's most rigorous and prescriptive standards for forest management. Essentially what we are trying to do is allow the cons,c.000-rconrportes purhaisr

this through setting standards, as I mentioned, and
providing a third party verification system for
accrediting independent certifiers, more forest
management and then through the chain of custody. This
set of arrows down here, in just very summary form,
describes the chain of custody process from the forest
floor through primary and secondary mills and through to
the distribution channel and retailers and, finally, a
label on a product like a pad of paper or a piece of
furniture or lumber or other green building products.

Our guiding principles, there are 10 of them. And with each one of these principles there are a set of criteria. We have, I believe, 54 criteria and then at the standards, national and regional standards level we have also what are known as indicators that allow and provide guidance for our certifying bodies to determine compliance to these principles and criterias.

So, the first one is primarily around legality. The second one about land tenure. The third is indigenous people's rights. Four is community relations, labor rights. Number five, benefits of the forest, largely an economic principle. Number six, environmental impact. These are quite a lengthy section of our standards. Number seven, requiring a detailed management plan. Eight, monitoring and assessment. Number nine,

1	the maintenance of what are known as high conservation
2	value forests. That is a term that was coined by the FSC
3	and specifies protections for areas of special
4	conservation value, it can also be social criteria there.
5	Number 10, plantations and plantations need to be managed
6	under the FSC principles and criteria. They do not have
7	a separate set of rules, and it is an understanding that
8ndersta	nding that

1 this	consensus	approach	is	very	powerful,	but	what
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2 matters most are the standards. And FSC has set, by far,

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percent last year. We are on a similar pace this year.

Internationally, we grew by 40 percent last year. We are

at 47 percent annualized rate internationally right now.

In green building, specifically the driver certainly has been FSC's exclusive recognition within the LEED program, the USB Building Council's LEED Program.

Many other green home-building programs, many of which are regional in nature, also recognize only FSC or give preference to FSC. I mentioned a few states there. Home Depot and Lowe's have given preference to FSC-certified wood products as well. And the environmental organizations are also playing a significant role in demand creation in this arena.

I am going to end very quickly here with a description of our logos. The mixed sources logo is the one that is used frequently in the paper sector and engineered wood products, and I can describe this later if anyone wants me to go into what is known as controlled sources. That is where that mixed sources label comes into play. 100 percent FSC is fairly self-explanatory. All the fiber or product comes from an FSC certified forest and then there is also a label for recycled.

And then, finally, this is my last slide, FSC trademarks provide a guarantee that the products are coming from a responsible source and authorization is

1	required to ensure that these trademarks are used
2	correctly. The certifying bodies provide that guidance
3	to the companies that are in the chain of custody and
4	then for others, like retailers who do not require chain
5	of custody, there are nominated agents and my national
6	initiative serves as one of those. We also have a very
7	robust misuse functioning system.

So, I will end with that. This is one of many now promotional examples of FSC recently in the marketplace, this is from a couple months ago. Wal-Mart is an example of how corporations are using FSC in promoting their products. I will end with that. Thank you.

(Applause.)

MR. FRISBY: Thank you. Rick?

MR. CANTRELL: Thank you. Good afternoon, everyone. I do have a lot packed into this presentation, so I am going to go through some things fairly quickly. We have been talking about green buildings and the green building standards a little bit. Basically, when you look at those standards, they are all addressing some of the basic core values.

The one I am going to focus on today is resources and particularly the wood resources in those buildings. It is interesting to note in most of these

1	non-profit organization, we are an independent 501(c)(3),
2	the Sustainable Forest Initiative Program. We, too, have
3	a balanced Board of Directors with the three chambers
4	represented, the environmental, the social and the
5	economic interests. We are also a consensus-based
6	process as well. If fact, our bylaws and governance
7	dictate that no individual chamber can be overruled in
8	terms of voting and we have never had that to happen
9	anyway. The board and all the folks, all the
10	stakeholders involved in setting our standards operate on
11	a consensus basis.

We are also in a five-year review cycle and we have started that review this year. It will be the third such review we have had since 1995. Open comment period, public input is welcome.

The existing standards based on nine principles, 13 objectives, 34 performance measures and 103 indicators where program participants are required to implement policies, plans, procedures to make sure all of those things are being met in their operations in the forest and in the way they procure their wood on the open market as well. This was developed by professional foresters, conservationists, scientists and others through a very rigorous public review process.

And we are a single standard that is applied in

1	the U.S. and Canada and recognized internationally. We
2	have been endorsed by the Program for the Endorsement of
3	Forest Certification Schemes out of Europe, which is
4	similar to FSC in that they are an umbrella organization
5	that endorses national or regional standards. And, so,
6	we are now endorsed by PFC, which means we have access to
7	international markets with our products as well.
8	We do have verification and validation as part
9	of the certification process. We do not accredit the

third party certifiers that certify companies to our

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are found that that happens within the organization.

Credible in the marketplace. We are recognized by a number of green building standards as well, like the National Association of Home Builders and Green Globes.

We strongly believe that we should be recognized in LEED and continue to work toward that end. We have been recognized internationally. The United Kingdom

Government's Timber Expertise Panel recognizes SFI and gives us full credit as does the U.S. Government Central Services Administration. It is interesting to know we are also recognized in the U.K. Government's Green Building Program.

Chain of custody. Corey walked you through how FSC worked. It is very similar with FSI. If you are going to make a percent content claim and carry a product into the marketplace with a label, if you are going from a certified forest, certified logs, certified sawmill in this case, the lumber eventually makes it to a retailer. Chain of custody is required throughout the process so you can keep track of that fiber. If you are able to do that with SFI and meet our requirements, you can use on product labels, here are a couple of examples. 100 percent, as Corey said, is self-explanatory. That means you are tracking all of that lumber from a certified forest.

If you are going to make a percent content claim, in our situation, you have to put the percentage on the label. You could put 10 percent came from independently certified forests or 50 percent, whatever percentage you are able to track through your chain of custody. That makes the claim very clear.

We also have what is called a fiber sourcing label for those who are not able to make a percent content claim or do not wish to. This does not have any claim at all regarding what percentage of the wood came from a certified forest. This is important because it recognized a very important fact. Only 10 percent of the world's forests right now are certified. There's 90 percent that are not. And, so, having a way to track your wood and to make some type of a claim in terms of your fiber sourcing, this is one of the ways you can do it without having misleading claims about percent content.

Consumer research, we have done some and are currently doing some more. Some that we did recently, in terms of our messaging on our labels, was with the Artemus Strategy Group and we found out some things that were top of mind for customers making sure that sustainable forestry practices are in place particularly related to sensitive land. And the Smead example there,

1	MS	FRISBY:	Thank '	VOII	Steve?
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MR. SIDES: Thank you to the FTC for organizing and inviting a number of us here to speak with you today. I am from the paint manufacturing industry. Those are a lot of companies you probably know because you have used their products and appreciate them and a lot of companies you probably do not know, but maybe still appreciate them because of the finishes on your car or something that you purchased.

The trade association itself that I worked for is about 115 years old, and our primary mission is to assist our industry with compliance with governmental regulations and also advocacy before federal, state and local agencies. The paint industry in the U.S. is about an \$18 billion industry. Not very big. But our products ultimately end up being applied to about 75 percent of the gross national product. So, we are regulated everywhere our customers are regulated.

And, consequently, coatings and paints are a very diverse industry. The stuff we make has to stick to the surfaces and perform to our customers' specifications, and it is important for protection and for beautification of those products. And while, Kirsten, I do not think we use cyanide and arsenic in any great quantities, I know that was a jest on your part, we

certainly do use a number of hazardous substances and we are highly regulated. So, I wanted to give you a little sense of what happens in the course of putting out a paint formulation and why green product claims are difficult and truly require the formulation of a very responsive green product at this point.

The paint industry is regulated. We, as an association, also put forward guidance for our members on how to label products and produce material safety data sheets. Many of you are familiar with these regulations. The OSHA has a communications standard that requires appropriate hazard warnings on products containing chemical components. So does the Federal Hazardous Substances Act. Our industry labeling guidance compels action and awareness of our members on the specific requirements that are necessary for both hazard and precautionary warning, target organ health effects and even chronic hazard warnings like cancer on consumer products.

Take a trip down to one of your local paint stores and take a look at a paint label sometime and you will see that those product claims are present on those products as a result of regulatory requirements.

Consequently, to get a truly green product like you have heard described here and to make environmentally friendly

and non-toxic claims requires an intentional effort on the part of a product manufacturer.

A lot of what you see in the environment claims and in some of the green building standards associated with paint, as with other building products, have emerged from other regulatory requirements. In our case for paint, the volatile component of that product is a critical consideration. Essentially the solvents that are in the paint.

A lot of you are not old enough to remember oil-based paint and the particularly odorous requirements of applying that type of product, it is almost gone in the marketplace right now. A lot of technology forcing regulations have come along which have pushed that product out. A lot of them are emerging in California. By, I guess, by our best estimate, low VOC requirements are going to be required by law, by regulation in nearly 68 percent of the country within the next six to eight months, I believe, because of requirement in the ozone transport states out east here and the mid-Atlantic, as well as the areas around Lake Michigan.

There is a national rule. EPA has promulgated it some years ago. But it is, of course, the least stringent of these rules that are currently operating, and the paint industry needs to react to that.

VOC product fees is a new area that is driving changes in product formulations. Because of air quality impacts of stationary and mobile sources, a lot of state governments are interested in controlling area sources and the emissions from you painting your house is an area source. So, consequently, if we make products that you use and they have VOCs, we may pay a fee in several states now, and more states are pursuing that, to address the air pollution requirements of that. It drives up the cost of manufacturing a product and, so, consequently, the industry responds by driving down the use of these materials, really changing product manufacturing as well.

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We, too, are engaged in research. We have a cooperative research venture now with UC-Riverside in California. It is called Paces. It is essentially seeking to integrate life cycle assessment, to look at the next generation, if you will, of product restrictions on paints and integrate many of the features that you have seen here. Historically, we have been interested and receptive in moving forward with tools to evaluate potential risks. There is a wall paint exposure model that EPA has up on its website that many of our formulators use to assess formulations. Then there is the whole myriad of green building standards which have incorporated requirements for paint and coatings.

1 I just want to quickly run through four.

Anybody here from other standard setting organizations, I apologize, but there is a time terminator right here in front of me that is going to keep me moving.

(Laughter.)

MR. SIDES: LEED, Green Seal, ANSI and Scientific Certification Systems. LEED really, as most of these are focused on, how does the use of the paint product impact indoor air quality for principally the persons applying the product because you would hope that after it dries, it is not continuing to off-gas. Many of you would not paint if that were, in fact, the case, if the paint was stinking and causing problems for a long time. But the LEED standards basically seek to do that.

How do they do it? These standards tend to piggyback on each other. Green Seal, GS-11 on paint references EPA test methods, has some specific content restrictions, but also looks at VOC numbers, solvent content numbers that have been established by governments.

ANSI, I think you are going to have a speaker from ANSI later today, and the National Association of Home Builders Research Foundation is working with ANSI, is establishing new standards, building standards, and they have two tiers, interestingly, of restrictions. One

has to do with sort of the traditional gross VOC content 1 restrictions, but they are moving into a new area which involves small chamber testing and evaluating the emissions of products from small chambers and some of those are identified here.

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The Scientific Certification Systems on the West Coast is one of the standard setting organizations that has embraced small scale testing. Ironically, a lot of these testing, Scientific Certification and others, are commercial standards, Green Seal, commercial standards. They set themselves up. They say if you want to be certified and be able to stick a logo up on your paint product label, pay us money and we will certify So, they become a business in and of themselves, quite frankly, and they certainly are not going to have more restrictive standards that drive their marketplace away. I will offer that to you at this point. You want to make sure they are intellectually honest.

Consequently, we tend to favor strong FTC guidelines, EPA stepping into the fray and putting forth solid standards. Let's face it, some of these things, like Energy Star, we all respect and EPA has a good green flag to fly, I would say.

We have a whole number of other standards, I will toss them up here, ASTM, National Sanitation

1 Foundation.	We	are	regulated	everywhere
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A couple conclusions I seek to offer. We are technically challenged all the time in terms of formulating a product. It has to meet our customer standards, but it also needs to meet environmental performance considerations that the marketplace is increasingly valuing. Our members do want to market a green product. It is challenging in light of this myriad of technical standards and the trade association is viewed as being a critical supportive entity.

Again, we are very supportive of strong FTC guidelines. I cannot tell you how many times I have cited it. The marketplace is a savage place. An extraneous claim of non-toxic, I get a letter or call from a company saying there is a paint company saying non-toxic, how would they be making that claim, and I follow up on those things. Not that I am looking at a job at the FTC or anything, but we do find a way of supporting this through peer-to-peer interactions, and that is what we do. So, thank you very much for your time.

(Applause.)

MR. FRISBY: Thank you. Frank?

MR. HURD: It has been alluded to, there is a lovely young lady who keeps our time. But what they did

1	not tell you is Robert promised to tazer us if we did not
2	finish on time. So, I was really worried about Steve
3	when he went over. And that is why Kirsten sped up so
4	much towards the last half of her presentation.

Definition of sustainability. Sustainability is really talking about meeting the needs of today without sacrificing the needs of tomorrow. And that means there are trade-offs when you do this. There is always trade-offs when you are talking about sustainability.

I am not going to spend time about standards. Kirsten really talked about that, what standards are. But standards are just recognized -- widely recognized standards. Like what a ton is.

When we talk about environmental standards, they involve recognized protocols, developing consensus process and, generally, usually some third-party certification is involved in that.

This has been alluded to all morning and now that these are the kinds of sins that you talk about when you talk about green washing, this is what we do not want to do. This is what I think the FTC is trying to preclude.

Credibility that prevents green washing is at third-party verification. An organization like ANSI that

does accreditation that is third party that does not
allow the industry to be the predominant part of the
consensus-based organization that sets it up and is
balanced, whether it is academics, environmentalists,
industry folks, architectural designers. And I think
probably the most important aspect when we talk about
that is the fact of transparency. You have got to be
transparent with everything you do. Without
transparency, everything else is a waste.

Carpet and Rug Institute. I think I will surprise you when I talk about what we do. We are an ANSI-accredited, product-certifying body, which means -- ANSI does two things. They accredit bodies to develop standards, they accredit bodies to certify products. The most famous ANSI-accredited, product-certifying body that you are familiar with is UL. That is the kind of things we do.

Right here, we certify green label plus carpet

fuzzy feeling that their products were doing what they 1 said they would do. So, we were forced by them to go in 3 and certify vacuum cleaners.

> Now, the seal of approval that is on the far, I guess, left-hand side on there, that represents the products that we are certifying in the cleaning area. Spot removers, deep clean machines, systems, cleaning systems, in-tank solutions. Why would we, as a carpet industry, be doing that? We are doing that because we want to make sure that our customers have the proper cleaning equipment to clean our products because that is the number one problem that people think about and it was actually welcome.

> Let me give you a little reason of why we went in that. We went out and purchased 24 spot removers off the market, just right off the shelf. Nationally known. You would recognize those products. Tested those against an extremely difficult benchmark, water. Six did better than water. And when we took them to -- we went to the cleaning manufacturers and said, this is what we found,

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1 manufacturers know what it is and the consumer knows what 2 it is.

The second thing that we have done, and this was alluded to a little bit by Kirsten, is we went out and we went to NSF and asked them to help us develop a sustainable carpet assessment standard, and this is under the ANSI process. They are an ANSI-accredited, standard-setting body. NSF, like I said, it is ANSI driven, it is consensus driven. It took us probably more than four years to develop, it was long. It is inconclusive. It is not a LEED, it was developed by a multi-stakeholder group. It is LCA-based, supply-chain focused, includes social equity, and, probably most important to us, it requires third-party certification.

The last thing I was going to say is there are a lot of things going on with ASTM also just dealing with the kinds of things that FTC is looking for for the FTC guides. And these are the kinds of things, environmental principles, economic principles, social principles, all under the rubric of what sustainability is and what we are talking about. With that, I will give it next to our moderator.

MR. FRISBY: Thank you very much.

MR. HURD: I am not going to get tazed.

MR. FRISBY: No tazers.

Third, third-party certification, it has been
talked about a number of the times by other panelists, is
really important, particularly for these complex things.
So, that talks about the issue separating the standards
development process from the certification bodies and
what we need to really potentially do there to truly make
a claim.

The appropriate graphic mark. Graphics do help a lot. We are a visually-based society. But I think we have to be very careful that the mark is not implying more than is really is being delivered. That is a nuance, but if you think like that water-based, what does it really mean to people, and we have to be careful about that.

And the fifth and really important thing, and I did not really talk about it in my presentation, is the reality is that this has to be a cost-competitive environment. We have to have things that are out there that are not driving and not single sourced or sole sourced. There has to be some competition, multiple certifiers, manufacturers, and you just have to know the analysis and the process they are going to be going through really are competitive from a cost perspective and not prohibitive.

MR. FRISBY: Thank you. The next question is

for Corey. In your presentation, you described the logos and mentioned the references to controlled sources. I wonder if you could explain that.

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MR. BRINKEMA: Controlled sources play a very important role in the FSC system, particularly for those products that do not necessarily or through the course of inventory controls and the manufacturing process where FSC certified sources may be commingled with other What FSC allows is innovation in the system --I forget exactly how old it is, at least three or four years. We call it a volume credit system and it is very important, I think, for folks to understand and it is confusing to many. But under the volume credit system, a manufacturer, let's say Andersen Windows, near my hometown, manufactures wood-based windows. So, during the course of a calendar year, 10 percent, let's say -actually, I think it is a little bit higher for them. want to say it is 15 or 16 percent. FSC certified wood comes into their manufacturing process, and we are not forcing them to segregate that FSC wood to create an FSC line, we allow them to commingle with other sources.

But what we do, though, is the other 85 percent of their wood cannot just be any wood, it has to be what is called controlled. And controlled in the FSC world means getting rid of what we consider the five most

L	egregious practices of conventional forestry. So,
2	getting conversion out, conversion wood, wood from high
3	conservation value forests, wood from areas where there
1	is social or civil strife, wood with genetically modified
5	organisms and then also, obviously, legal. We get the
5	illegal wood out of the system.

So we ask -- we force Andersen Windows to do a risk assessment and they have to identify the areas.

They have to know where their wood is coming from and they have to do that risk assessment and determine if it is high or low risk. If it is high risk in any category, then they actually have to drive down to the forest management unit and find out if that particular unit is safe. Otherwise, they can do it on a country or regional basis.

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L	percent	FSC (certif	Eied	sour	ces.	. So,	if	there	is	more
2	demand,	then	they	have	to	buy	more	FSC	certi	fied	i
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No, we do not have a lot of information about -- in fact, I would probably argue there is not all that much distinction between the mixed sources label and the 100 percent label.

MR. FRISBY: This is a question for all the panelists, although I think that Kirsten already touched on this. To what extent do you all believe that marketers are currently making problematic environmental claims for building products and could you give examples of claims that you think are either prevalent or relatively egregious? Kirsten, do you want to start by elaborating on your presentation?

MS. RITCHIE: Sure. I hope I gave you some examples and we could go on and on and on. If you ever want examples, actually, a really great place to start is the garden aisle of your local do-it-yourself place because they tend to have a lot of egregious claims.

I think the biggest part of the claims is when you have -- for the area that we are really concerned about is those fluffy words. It is the environmentally friendly or the eco safe or the great green or clean air, I like that one. Those kinds of claims that clearly, you

know, there is no basis behind them. I think the trends, though, that we have seen, particularly in the building industry and I think part of it is because the awareness from the green building programs that are going out there, we are seeing less and less of those claims.

There are fewer of them. I think now it is little bit harder, although you still can find them, it is a little bit harder to find some of those claims than before.

There does seem to be a bit more of a trend probably from some international manufacturers coming in and trying to make some sort of market niche, making claims, and then you just raise a flag and say, hey you do not want to go there, what is the basis of your claim?

It would be really great if we could have a mechanism by which we see the claims and we could send it to the FTC and have you guys follow up on it. That I would really like. You just write the letter to them and that would get a lot of action. From my perspective, they are using the fluffy language, the stuff that you guys say do not use and, in many cases, it simply needs somebody sending them an e-mail, raising a flag and saying what is the basis of this, where is the data.

MR. FRISBY: Just to follow up, are you saying that those fluffy terms, for lack of a better word, are impossible to qualify adequately and that is why the

1	green	guides	should	identify	them	as	being	likely
2	decept	tive or						

MS. RITCHIE: On a basic level, yes. I do think through the standards process you potentially could find ways to quantify what do I mean when I am saying, in this particular product sector, do we mean when we say environmentally friendly. But that to me would say that when you are making that term, you are qualifying it by saying environmentally friendly as defined by ASTM 1153 or as defined by ISO 5367. So, we have a reference point such that the next client or the next manufacturer who comes along and wants to make the same claim can go to that standard and follow that process and be allowed then to compete and make the same claim in the marketplace.

MR. FRISBY: Thank you. Corey, do you want to address this point?

MR. BRINKEMA: I would just maybe comment a little bit on our analysis of claims that can be made on a label, specifically related to wood. We have generally used the term well managed. That is what FSC, from its early days, you know, there is certainly the word "sustainable" and sustainability has been used frequently in the forest industry, and there was a high degree of discomfort over using that term and also that it is a squishy term in the marketplace. There are some in the

1	seen them. We have seen some recently with materials
2	that compete with wood in green buildings where brick or
3	concrete or one of those type of materials we will talk
4	about, we have seen an ad that called them one of the
5	most sustainable building materials and there was no
6	qualification behind that.
7	We think the use of the word "sustainable" is
8	appropriate in certain instances. If you are talking
90000	1.00000 0.0000 0.0000 cm0 050.0000 cm1.00000 0.00000Yaterials and the

1	MR. SIDES: I think probably one of the most
2	frequently overused terms for chemical products, if you
3	will, is non-toxic. Kirsten mentioned it as well. That
4	is a tough one. You know, those of us that have a
5	background in public health, or at least follow this,
6	maybe can maybe tie that to some particular standards.
7	But I think it is rather loosely used.
8	In the case of art products, there is an
9	industry standard setting organization that operates that
10	is fairly reliable. But I think that is one area, in
11	looking at the current guidelines, that could be beefed
12	up or improved somewhat.
13	In our industry, as well, we are somewhat
14	compelled to use petrochemical or soil derived feed
15	stocks. There are very little renewables, and there is a
16	history of using renewables in the industry, but
17	petrochemicals replaced it, and not much success in using
18	post-consumer reprocessed consumables as well. So, if
19	you move into that area and want to establish some
20	guidelines along that line, I think we would probably be
21	finding some opportunities to provide you some insight on
22	our experience on the chemical product side as well.
23	Those are just some thoughts.
24	MR. FRISBY: Thank you. Frank?

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MR. HURD: Yeah, I can give you a very good

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example of one. We had a manufacturer who said that this product contained up to 70 percent recycled content and his attorney said that met the FTC guidelines. When we challenged that particular company, they actually took it back. Because that is not what -- you know, that could be zero or 70 or 35, anything that says up to 70 percent. But it met the FTC guidelines according to their attorneys. So, that is the kind of things when you talk about misleading claims, that you can make those kind of misleading claims.

The other thing that is interesting, I think we have talked about it is we throw terms out about renewable, we throw terms out about nontoxic. We throw a lot of these terms out, but we do not put them in the context of what the overall impact on the environment is. A good example is ethanol. Look what happened, ethanol is a renewable product. Look what is going on right now because of the use of ethanol. There are other impacts. And when you look at the ethanol, the energy used to produce ethanol is greater than the energy used to produce oil, gasoline going through a refinery.

So, I mean, yeah, there are trade-offs that you have to do and you have to look at life cycle assessment and the entire gamut of attributes that you are dealing with.

L	MS. RITCHIE: If I could also just add, one of
2	the things, too, that is an issue is the term "free."
3	Free of or like formaldehyde free. The FTC, on the food
1	side, you can make a sugar-free or fat-free claim if it
5	is less than .5 percent free. But from a chemical
5	perspective, .5 percent is still very big, particularly
7	when the testing is down to the part per billion.

So, I think that is an area that we are going to have to look at and really encourage you to look into saying how does the use of the term "free" really -- should it be used in reference to environmental green claims?

MR. BRINKEMA: I was just going to make one really quick point because Frank reminded me something that I wanted to mention and Kirsten had brought it up and Rick as well. But this holy grail of an analytical tool, this life cycle assessment or life cycle analysis, I think actually Rick had a nice slide there that showed some of the life cycle attributes of wood related to some other structural building products.

I think we do all have to remember, though, particularly those products that are derived in the case of wood from -- essentially from organic systems and ecosystems and have significant impacts on ecosystems.

We have not yet figured out really good ways of measuring

those things. So, we can measure carbon emissions, we
can measure direct air pollution. But how do we measure
an endangered species loss or how do we measure whether
these forestry practices are impacting our water aquifer
resources and so on.

So, I think when we do these sort of analyses, we really need to understand many things, which, right now, are frankly really qualitative and not quantitative. But they are absolutely essential. We have to figure out some way to value them.

MR. FRISBY: Here is a question from the audience about life cycle analysis. And this question I will address to all five of you if you care to weigh in. Should the green guides encourage green building certifiers to engage in a life cycle assessment which includes the use phase, that is the use and maintenance of a building following construction?

MS. RITCHIE: I think absolutely you have to, particularly when you are looking at the trade-offs or the benefits that are derived from those products, for example, energy efficiency lightbulbs, energy efficiency fixtures, water efficient fixtures, insulation, which, yes, it does take energy to manufacture insulation. But what it saves over the product is very, very important.

So, there have been some moves in that

1	direction. BEES is one of the few kind of life cycle
2	tools that actually does that. It is a tool developed by
3	NIST, the Building Economic and Environmental
4	Sustainability tool set that actually help you quantify
5	and compare different products and life cycle
6	perspectives. So, yes, absolutely.

It is a challenge, though. How do you assess the life cycle impact of the two-by-four stud that you are not doing anything with in the use phase other than, hopefully, it's continuing to hold up the building or the brick or there are other things. But because there are those products that really do have significant benefit in use, even if they do require a little bit more energy or water consumption up front, we do have to have a mechanism to recognize that.

MR. FRISBY: Anyone else want to comment on that question?

MR. SIDES: I just think from the standpoint of the paint and coatings industry, life cycle assessments will provide us with some opportunities to serve the marketplace better. California's a bit of a laboratory for a lot of these things. Discussions now on what are known as cool paints which help reflect heat and save energy, the automotive industry is looking at embracing that, a whole host of opportunities to integrate those

kinds of additional ecosystem services, if you will, that can come about as a result of formulating in that area.

The big question, though, is how will benefits in that arena weigh against use of certain raw materials and the like that may pose a problem. So, we are still trying to figure that out working with UC at Riverside and exploring some options for that.

MR. HURD: I am not sure about the use phase, but I would like to comment on the concept of using life cycle assessment as comparative tool. It is very difficult to compare a product to another product category whether that is floor covering, whether that is wall covering, whether that is roofing shingles. A life cycle assessment is best used internally for you to figure out how you can improve your product and make sure that it becomes a better product that you are developing. I do not think we have developed the analytical tools well enough to be comparing different products, even like products.

MR. FRISBY: Here is another question from the audience. Because of the current difficulty in defining sustainability, would it make sense for the guides to encourage marketers to list product contents and describe business practices to allow the consumer to decide whether a product is sustainable?

1	MS. RITCHIE: So, there is the issue of
2	sustainability. First of all, when I am thinking about
3	sustainability, I am thinking of that thing beyond the
4	environment. It is an assessment by which you have
5	looked at economic, you have looked at environmental and
6	you have looked at the social repercussions as it relates
7	to products for its manufacture and its use.

The challenge that you get in saying, let the consumer decide -- as an example, there was a little product I came across, it was a little carpenter's level. It was about this big, right? The label was this big, of all the different things it had. No old growth forest, sustainably produced, blah, blah, blah, blah. But I really loved the no old growth forest because the reality, it was steel and plastic.

(Laughter.)

MS. RITCHIE: That was one of those, it is kind of a little misleading here. So, the challenge that you have also is if you just list all those things and you do not have standards behind them, somebody is coming along who has a competing product and says, I want to be able to make the same claims or I believe my product makes the same claims. But you do not have that methodology, how can they do that?

So, you have a company that is legitimately

saying, I believe we have a better product from an environmental or a sustainable perspective, but I cannot fight, I cannot counter what this other manufacturer is saying because there is no basis for that. So, I think that is something we really want to try to avoid.

The really is we have really won when we do not have to make all these sustainable or green claims on the products because it just is. We can really focus on those things that are important to us, the performance, the aesthetics, the price. That is where we want to get with our products. Right now, we have -- you know, we do have products that do have huge varying environmental profiles and sustainability profiles and that justifies the differential. But, with time, eventually that is going to go away.

MR. CANTRELL: We think the use of the term "sustainable," as I said a little earlier, has to be done carefully, and we support the way that the Canadian Competition Bureau has recently released guidelines, which talk about not making generic claims of sustainability, but it is okay to make a claim, as I used earlier, that fiber in this product line came from a forest managed to the Sustainable Forestry Initiative standard, and then you define that standard and you have your website information, et cetera, to back it up.

1	Those types of claims are fine. It is the
2	generic, the most sustainable product in the world,
3	without any qualification, that are problematic.
4	MR. FRISBY: I would like to turn now to
5	suggestions for revising the guides. You have already
6	touched on this to some extent. This question I am
7	

that is one of our primary roles is to enforce that.

But, generally, what we are able to do through the trademark service provider platform is we actually review every on-product and off-product claim in the system. So, for instance, an advertisement by Wal-Mart was reviewed by us to make sure that there were no overstatements or misstatements. So, I think requiring that is certainly something that the guides -- I think, to some extent, you already do that. But I agree with Rick that we all have to have where to turn to for information and your website is generally one of the better places for that.

What you also see is often when you have -- you do turn to websites, we will also turn you out, for instance, the third parties that have reviewed us and other standards, for example, and have made robust comparisons. Yale University, for example, did a very nice analysis for the U.S. Green Building Council and the Sustainable Furniture Industry Council to review the forest management certification standards.

MR. FRISBY: We are almost out of time, but Rick and Frank, do you want to try and move quickly on this?

MR. HURD: Yeah, a couple things I would just like to add. I think that the FTC guides could do a lot

1	of help in making sure that the logos that go up are
2	define really what they are talking about. Many of them
3	just say it is green or sustainable or whatever and they
4	do not let you know what it is certifying against or what
5	it is certifying for.
6	And the other thing that I would say is, we are
7	really surprised at the number of phone calls we get from
8	competitors about a competitor who has misused the logo
9	or mis-spoken in the advertising, and that really has
LO	proven very successful in keeping it down because all we
L1	have to do is send them a letter or make a phone call and
L2	cease and desist.
L3	MR. FRISBY: I am afraid we do have to stop.
L4	Thank you all very much for your presentations and for
L5	your insights.
L6	(Applause.)
L7	UNIDENTIFIED FEMALE: The next panel will begin
L8	at 2:30.
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SESSION 4: FRAMING IT UP - CONSUMER PROTECTION ISSUES 1 REGARDING GREEN BUILDING CERTIFICATIONS

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MS. ROSEN SPECTOR: Welcome back. Now that we have talked about some of the green building products that are out there, we are going to frame it up and we are actually going to talk about green buildings and the consumer protection issues regarding green building certification.

We have a wonderful panel here today. We have Michelle Moore from the U.S. Green Building Council; Erin Shaffer from Green Building Initiative; Carlos Martin, National Association of Home Builders; and Sam Rashkin from EPA, Energy Star.

So, I am going to turn it over to Michelle to give the first presentation.

MS. MOORE: Good afternoon, everybody. I have my trusty water here because my throat decided to do its best impersonation of Marlena Dietrich today.

First of all, thank you so much for convening this tremendously interesting conversation. really thrilled to be a part of it as USGBC and we think the timing could not be better for what is happening in the marketplace. It has not been that long ago when this is how people thought about green building and green homes specifically, which is what I am going to be

talking about today.

2 (Laughter.)

MS. MOORE: So, false claims were not happening so much because there just were not that many people who were listening or who were into it. It was a really narrow part of the marketplace, but a really important one. I am sure many of you here are very familiar with these numbers. But the built environment overall, and this represents commercial building and residential building, has an enormous environmental footprint, and from an economic perspective, from an environmental perspective and from a personal perspective, there are a lot of really wonderful benefits that could be driven by paying more attention and really measuring what our results are.

And the public attitudes around these things have really transformed and we actually have NAHB to thank for helping to advance this research with McGraw-Hill. But as you can see, we are looking at a potentially \$40 billion marketplace projected by 2010 in combined sales of green building products and services in both the commercial and residential marketplace. And from the perspective of market transformation, this is great news. From USGBC's perspective, we would like to see every single building that gets built be green and,

1	to some extent, labels like LEED becoming irrelevant in
2	that future.

It also means that with so much money to be made, potentially with such a great market opportunity here, that there really has been a rush of people -- we do not like to assume bad intent but maybe just misinformed intent into making claims that are not necessarily accurate. Because when it comes to a green home, there are lots of different definitions. This is not really surprising, the residential marketplace is very localized and very fractured and the market needs multiple entry points.

But screwing in a CFL lightbulb and having a bamboo floor doth not a green home make, and we think that there is a wonderful opportunity here to expand some0000 0.0000

in our development there is a fourth P and that is proof.

You know, it is just a regular old business adage, right,

that if you cannot measure it, you cannot manage it, and

if what we are looking for is lower energy bills, a lower

CO2 emissions footprint and a healthier indoor

environment for our families, those kinds of claims need

to be substantiated. How are you getting there and where

are people getting on the ladder?

You have seen this before, although I think before it was a hamburger. It is very similar to the way that we think about the food that we put into our bodies. Consider the built environment, the room that we are in here, the home you are going home to, the places that your kids are going to school. As Americans, we spend about 90 percent of our time indoors. So, it just makes sense that the environments that we live and work in would have a tremendous impact on our health and well-being. But whereas you can get pretty reasonable nutritional information about a box of animal crackers, it is devilishly difficult to figure out what a building is going to do for you.

If you are in the market looking for a new home right now, which, of course, there are not a lot of people doing right now, good luck trying to find out what the energy performance of that home is expected to be,

what have the historical energy bills been, how can you improve on that as a consumer. Or if you are looking for a place for your child to go to school, how is that built environment going to have an impact on the way that your child learns. So, good ideas to consider.

I am going to talk just a little bit about how LEED looks at a green home. It is fairly comprehensive. I am not going to get down into the nitty-gritty technical details of the rating system. That can be found in the trusty LEED for Homes reference guide, all 400 and something pages of it, which I do have here if anybody wants to take a look. But we look at it from, as I said, many different lenses and not just the materials that go into a home, which is actually how most consumers think about green homes. They do not think about air conditioning and windows and flooring products and that sort of thing, but energy performance. What is the site like, where are you building, how are you treating the land development?

And LEED, too, just a little bit of context for you guys, you know, USGBC's mission is market transformation. We are a 501(c)(3) and LEED is the chief tool -- I was going to say in our quiver, but that is a mixed metaphor. But to be able to advocate green building and green homes, you have to really be able to

1	define it. So, we seek to set the bar for leadership.
2	So, the best builders, the innovators, the risk takers,
3	the market leaders are the people who would be naturally
4	embracing the LEED rating system. There are a lot of
5	other entry points and a lot of other needs in mainstream
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1	Institute,	which	is a	a 501	(C)(6)	nonprofit	that	USGBC
2	helped to d	develop	ed,	next	year.			

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So, this is what it looks like for residential. Again, this is where we are headed currently. process looked a little bit different during our pilot program during which USGBC was doing all the certifications itself through staff. But USGBC works with Green Building Certification Institute, which administers third-party certifications and also the LEED accredited professional program. So, LEED AP, professional accreditation, people get accredited and buildings get certified and that is done through an ISO type process that USGBC is implementing in the marketplace. So, we are able to really manage quality assurance and to have an auditable program in the community that works not only at teeny, tiny numbers of buildings, that would work at scale as well as more builders and homeowners more really embrace these ideas.

From a local perspective, from a builder perspective, they are primarily working with their local provider, and LEED for Homes provider is a local home organization that has expertise and energy efficiency in green building. There are about 33 of them around the country available today. And they are effectively the front door for home builders who are interested in using

L	the LEED for Homes rating system. There are coaches,
2	there are teachers. They help them with the
3	certification package. But, ultimately, it is USGBC via
1	GBCI and the certification bodies that will be engaging
5	who would actually be administering the certification
5	process. So, we are really differentiating between arm's
7	length third-party certification and the coaching and
3	sometimes consulting process that happens as the market
)	is adapting and learning how to apply these new tools.

1	Sustainable sites and locations and linkages.
2	So, where is your home? Is it transit-oriented
3	development? How are you developing the site and using
4	plantings? And if you use irrigation, are you using
5	irrigation smartly? So, it is not just the building, but
6	it is also the place that the building is located.
7	Water efficiency, incredibly important, in my
8	home state of Georgia and if you are in California, it
9	has a big impact on your CO2 footprint for your home as
10	well.
11	Energy and atmosphere. We looked to the
12	incredible work that has been forged by EPA with Energy
13	Star for homes and how LEED addresses that issue. It is
14	a tremendously important area of credits and where the
15	greatest weights in the rating system are headed, not
16	only in our residential program but in commercial.
17	Materials and resources. Indoor environmental
18	quality. Awareness and education, as I shared, requiring
19	homeowner manuals so people really know what they are
20	getting. And it lines up with what we see coming from

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green globes for new construction, that is in the ANSI process right now. We anticipate that it will be completed by the end of the year, at which point it will be the first green building standard that is an ANSI standard.

Let me rephrase that because one of the things that people confuse is rating system and standards. This is a rating system as is LEED. It is not a standard. It will be an ANSI standard, but it will still be a rating system. We also have an existing tool and we have filed opins which are anticipated to take that through the ANSI process as well.

We have a personnel certification system for green globes assessors that follows the ANSI and ISO standards. It will be the first real independent third-party verification system. We help homeowners associations start green building programs supporting the National Association of Home Builders green building guides, and we own the U.S. license to green globes for new construction and existing buildings.

So, what is Green Globes? Green Globes is

North America's first design assessment and rating system

for commercial buildings. And saying commercial

buildings, Green Globes can be used for multi-family

housing, health care, schools, through your high-end

1	building	tool.
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2 GBI became the first green building 3 organization that is ANSI approved as a standards 4 developer, and then immediately we put our new construction tool into the ANSI process. What that means is at the end of that process, it is a true consensus-based standard.

> So, Green Globes for New Construction is a design assessment and rating tool and our Green Globes for Continual Improvement of Existing Building can be used to establish a baseline and then give performance It helps you improve the performance of a reports. building.

There was a study done about a year and a half ago by University of Minnesota and it looked at the two major systems that are out there in America right now and that's LEED and Green Globes. And it said 80 to 85 percent of the substance of the two tools is the same. We come at things a little bit differently, but the substance overlap is significant.

A couple of highlights, though, Green Globes being web-based interactive is a little bit easier to use, there is immediate feedback and it is less costly, and Green Globes places a little bit more emphasis on energy use, energy performance and it integrates life

1 was in the United States while we were in Canad

For a third-party verification, if you want a plaque on your wall so you can call your building a Green Globes verified building, you need a two-step process.

One is a paperwork review by one of our third-party verifiers and the other is the site visit. We are the only ones who do a site visit at this point.

CSA America is developing an ISO certified and ANSI approved third-party personnel certification program for us. In order to enter that and hope to pass the exam and become a third-party verifier for GBI, you would have to have 10 to 15 years of experience, typically as an engineer, architect, et cetera. And that is it and I will be available for questions. Thank you.

(Applause.)

MS. ROSEN SPECTOR: Thanks, Erin. Now, we will hear from Carlos.

MR. MARTIN: Usually when I talk in these forums about green building, I get really energized, but am exhausted after this day. I do not envy you FTC people at all who have to go through all of this.

No, in all honesty, I would like to thank you all for inviting us because this actually weds to core activities that NAHB is involved in. One is promoting green building as an technological alternative for our

educational events that are provided there in which claims are made that may affect consumers, et cetera. So, through all of these, we are very conscious of the messages that are being given out.

So, let me focus a little bit on our green building guidelines and standards. Now, this is really the meat of the NAHB Green Program, as it is for practically all of our programs. The guidelines is the older of the two rating systems. It was started by an open committee process in 2004 and it contains green building provisions similar to many of the other ones that you have already heard. The guidelines, however, only addresses single-family housing and there are three sort of ratcheted-up thresholds, the bronze, silver and gold.

Since it was created, a variety of local homebuilder associations that are members of the NAHB Federation have certified homes to it and have developed their own certification programs around it. Three years later, after the publication of the guidelines, NAHB saw the need to add rigor to the development of green building rating systems in order to establish a technically sound platform from which additional claims and any other services could be developed. So, NAHB agreed to work collaboratively with the International

1 Code Council and t	o undergo the rigorous	standards in
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- developing protocols that would produce the first
- 3 standard on residential construction submitted to the

1	that point is basically that she has gotten Y points
2	achieved that meet X thresholds. It is not a
3	certification, it is not a warranty, it is not a
4	guarantee or anything. It is just self-certification
5	based on the rating system. Self-scoring based on the
6	rating system. See how difficult it is when you are
7	talking about accreditation, designation, certification,
8	et cetera. We will try to be very careful as we provide
9	these.

client, et cetera. The certificate states what you see right, this house as originally built is in substantial conformance with the NAHB model green home building guidelines. This certification is not a representation, warranty or guarantee of home performance. Basically, that is all the stuff that you see in the fine line.

Basically, at that point what a builder can say is that they have a certified emerald through the national green building standard, et cetera. They can make a claim that the house has been certified according to a definition that has been set forth in the guidelines of the standard.

Now, a little bit more about certification agent. We talked about the ANSI process for the actual standard. The research center actually is an ISO 17025 accredited product testing laboratory. They are accredited to a variety of ASTM and ANSI tests, particularly those on material properties and structural systems and building envelope. So, they have a variety of accreditation programs associated with them.

Now, what are the program claims that we provide? NAHB is very careful, again, when it comes to the claims not only about the program itself but about the homes that are certified to it and the rating systems that are provided under it. These claims I think can be

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that was discussed earlier today, we have included in the guidelines their standard, but we do not repeat any manufacturer's claim to those rating systems.

Now, just as an example. What happens on our -- the benefits page for homeowners that we have listed on NAHB Green lists out areas of benefits, operating costs, maintenance, health and comfort. Obviously, you cannot read all that. The environment. I invite you to go to NAHB.org to further look at that. But we are very cautious about using generic language about comparisons with standard homes or traditional homes like a better home or a more sustainable home. We do not make those claims essentially and we do not provide blanket quantitative assertions to any of those benefits.

Now, one of the reasons that we are very cautious about the program and certified homes claims and benefits is that we have an in-house staff that has been working for a decade on providing accurate guidance to our home builders and our remodelers. Now, much of that guidance comes to us, again, from this group that had provided regular training and educational sessions at all of our green building conferences, at all of our green educational sessions, and the builders show. We have in-house legal staff that provides regular technical assistance and they provide guidance on everything from

the actual warranties, from the consumer expectations that are expected, and they have adopted green building as an area in which they provide this guidance as well.

So, as much as we would like to promote green building internally at NAHB, we are very cautious of the reminders and the disclaimers that are provided from our legal staff to temper our marketing materials and make claims to ensure that consumers are receiving accurate and appropriate information. There is much guidance, we believe, that needs to evolve on green building claims. That is especially true with the research and development side of a lot of the discussions. This was true in the last panel as well, that we would like to see a lot more of this research come forward and substantiate a lot of the performance and benefits claims that we would like to see.

So, in the meantime, consistency of terms, reliance on credible standards and homeowner education are all mechanisms that we believe can contribute to appropriate green home claims. Thanks again for this

an incredible amount of information to kind of come at you all at once, so I agree with Carlos. I am going to talk about Energy Star qualified homes as it serves as another instrument for defining green. And a big part of this is to start with the branding that we use, the claims that we imply from the branding, how we justify those claims and bring that to the market.

So, clearly, Energy Star is a well-known brand out in the marketplace. We like to say it is a national U.S. Government backed symbol for energy efficiency, but the core principles that drive where this brand came from are two things. One, before a product has a chance to earn the Energy Star label, it has to prove itself to be cost-effective and, secondly, it has to meet or exceed performance expectations consumers have for that product.

We all know the experience of introducing CFL lightbulbs in the mid-1980s, when they flicker, they hummed, they did not produce as much light as they claimed. There was a multi-billion dollar effort to prove to the consumer public that this was a technology that does not work. So, giving them away for free was not the best market transformation you can make. So, these are key principles for what we do, and following those has led to success.

The last nationwide survey for Energy Star

1	reveals about a 70 percent consumer awareness across the
2	country for this logo and for the name. Now, in markets
3	where you get actual concentrated support by utilities or
Д	

1	And maybe one of the key things that we do is
2	we define truly energy efficient in the marketplace. We
3	set a very regular rigorous set of specifications
4	together by aggressive vetting with building science
5	experts, stakeholders across the housing industry, and
6	come up with a very, very strong set of specifications
7	for that point in time that we put it in the market, and
8	then we require third-party verification. Most of our
9	homes are verified by using the existing home energy
10	rating system or HERS (phonetic) industry that is in the
11	market and overseen by RESNEC, the industry association
12	for that group. In addition, we have special
13	verification options for modular and manufactured
14	housing. So, that is how we define truly efficient, with
15	specification and strong certification by third-party
16	inspectors.

1 homes.

You can see that we are tracking a little bit of a decline as the industry has gone a little bit soft in the last 18 months, but our number of builder partners is staggering in the increased interest. Prior to the soft market conditions, we were getting 30, 35 builders per month join the program. The last 18 months since the market has gone very soft, we have increased to over 300 builders per month joining the program. There is truly an interest in building green and finding a way to make a more value-based offering to consumers looking for new homes because you have to have that.

How do we bring this value to consumers? What I am going to do in the next slide is compress three, four hours of building science training into this one slide.

(Laughter).

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MR. RASHKIN: So, bear with me. I am going to work with you on this. But you will at least get a flavor for just the sound underpinnings that drive this program's specifications. The goal, the objective, if you will, or the why is we want to build homes that are affordable, comfortable, healthy and durable. And the value proposition that we want that is compelling for the builder is to reduce their risk. It is an incredibly high risky proposition to be in that industry. increasing consumer satisfaction and having a way to differentiate themself from their biggest competition. About 75 percent of the competition's used homes, three out of four homes sold in the marketplace are used, and what a compelling difference it is for a consumer to buy a new Energy Star home. And from our perspective the benefits are incredible in terms of environmental protection and improved national security.

So, how do we get there? It is very simple.

You do three things. You control air flow, thermal flow and moisture flow and you wind up with a great building.

You learn these three filters and go through a set of

plans or a house under construction and see if you effectively addressed thermal flow, air flow and moisture flow that you have a great building. And there are various components of each of those that we know from old physics classes and science courses we took in high school how you do that. That is what we try to do. That is the big how and that is where we spend two to three hours with builders and with HERS raters and with all the classes, we do training, what you do to get to Energy Star, and it winds up being these set measures.

What you will notice is there is a very repetitive set of improvements that get you control of air flow, thermal flow and moisture flow, air ceiling, air barriers, better insulation, low E windows, and so forth, and better equipment and right sizing and the keep repeating as solutions for each of the various columns that we are trying to solve, and the ones acquired by Energy Star shown in blue here now. The ones that are not in blue will be required soon by the next iteration of Energy Star.

The key take-away point here is the requirements for Energy Star are science-based and they lead to a complete systems approach to how to build a high-performance home that can, if not guarantee, almost effectively promise, that the house has to be more

comfortable, it has to be more durable, it has to be more healthy and have lower bills for increased affordability.

Unless you break the laws of physics, you have to get those outcomes and that is the underpinning for how we can make our brand promise. That is why when you see these requirements for Energy Star, which are effectively what you have to do without much choice. You have to have your duct systems tight, you have to do an incredibly well air-sealed home, you have to have advanced windows, appropriate to the climate, efficient equipment, the insulation has to be installed properly because what we know about insulation is R value is much less important than how it is installed. You can lose about 85 to 90 percent of the rated R value of insulation if you are not attentive to how you put it in place, including complete air barrier assemblies.

I have this one three, four hour course with builders on how to do air barriers right. Because I

very specific what you have to do. In contrast, the green programs often have four tiers and then many, many ways of getting to those four tiers by combining points.

Energy Star also works at the systems approach that I laid out versus a parts approach where you get points for various categories.

Third, we specify a minimum performance level as -- without a lot of choice, knowing we are trying to define that attribute, and the green programs are striving to include all the choices that are in the marketplace to achieve green and you can kind of choose how you get to that performance by mixing and matching. And, also, we allow, because of the various labels that are individual, to use component approaches versus going all in and doing all green. For instance, if you want to focus on water conservation and not materials, you can make that choice.

So, in the end, this is a simple definition of green, energy, indoor environment and sustainable resources, and EPA feels, in effect, we have three very strong ingredient labels but do not provide the whole label for green. So, it is kind of like this TV set I saw in a fitness room where I was speaking at one conference and I saw all these individual components for the TV that were individual attributes, surround sound,

1	HD, and also Dolby sound. In effect, we do not make the
2	TV, we do not make the green program. We make
3	ingredients that are very powerful attributes within the
4	green program.

I am a Fast Talker of America, a proud member, thank you very much.

(Applause.)

MS. ROSEN SPECTOR: Thank you all very much. I just have to say that after hearing all this, I always want to buy a new house.

A number of you very helpfully gave some suggestions about what we can do with our Green Guides and I want to pick up on that. Carlos, you mentioned that the guides should have consistency of terms and stressed a reliance on credible standards. So, first, I would like to ask the panel, what specific terms do you think that we might need to add to the Green Guides and maybe provide definitions for that would help with green building claims?

MS. MOORE: Well, I will start since I am immediately to your left. I think there is an opportunity to help people understand sustainability as an aspirational goal versus green as being generally descriptive of a whole basket of goodies that are benefits-oriented from a consumer perspective. Because

what we see happening in the marketplace, as it relates
to erroneous claims of green and people misapplying our
trademarks as well, which we do police very actively, is
that folks will apply terminology to single attributes.
So, it has some recycled content, so it is green, it has
some bamboo in it, so it is green. And those kinds of
misunderstandings could be helpfully addressed by
creating more of a a broader based lexicon for people
to understand how single attributes fit into a multi-
attribute solution like a greener home.

MS. ROSEN SPECTOR: Does anybody else have a thought?

MR. MARTIN: I would agree with that. I would also like to add that I think that a lot of the -perhaps the performance categories and the benefits
categories are ones that we could all come to some
standardization on. I think primarily because that is
what the consumer hears. And, so, if there are certain
things we say about energy efficiency that we are all
talking about the same, about what do we mean by energy
efficiency, what do we mean by improved environmental
quality, that sort of thing. So, just those overarching
terms. Obviously, there are a variety of different ways
to get there that exist. But having those overarching
terms would be helpful.

1	MS. ROSEN SPECTOR: Right. I guess I noticed
2	that with all these different rating systems, you have
3	different strategies and approaches to get to a green
<u>4</u>	building, but they all emphasize kind of energy
5	efficiency but they may get there in a different way.
6	So, is there something the FTC could do, through its
7	Green Guides or through education, to make it easier for

1	So, I do think that the definition of what a
2	green building is or the attributes of what might
3	encompass a green building is an area you might want to
4	look at, but it is an area that there is a lot of work
5	going on.
6	MS. MOORE: I think there are some examples as
7	well that are happening in Europe that might be
8	interesting to looking to as a long-term horizon.
9	Certainly, and I believe this is true, that any of the
10	residential rating systems, at this point, look to Energy
11	Star as sort of the engine under the hood and I believe
12	that Sam has probably sat on an awful lot of our
13	committee calls to that point. But there are a number of
14	us who use the nutrition label from products, and if
15	there were a common vernacular, particularly since many
16	of the rating syls/tems haveheycammonlookingoatissiesothare talking at
17	they are looking at, if you are talking about a green

home or if you are talking about a green building, you

look for performance or look for different

18

foundation, some capacity in the marketplace to be able to have that discussion.

MR. RASHKIN: Just to weigh in on this, the challenge I think for FTC gets back to the metrics. With energy efficiency, you have a metric whether it is percent relative to code or even a percent energy savings, there are numbers that consumers can relate to. Once you get past energy and you start looking at indoor air quality, what is the metric? How do you provide guidance to consumers and how do you gauge whether a standard or a label meets that?

When you get to water conservation, maybe there is some percent water savings, but relative to what again, there is no code reference. And for materials and for a lot of these factors that relate to green, I do not know how to get a hold around the metrics. And symptomatic of that is the fact that if you look at the rating systems, they vary from about 100 to 150 points to few thousand points, and even the point systems mean something very different. So, a consumer can look at one green rating and then another and see 10 points means a lot in one and 100 points means a lot on the other. It is going to be a very big challenge.

MS. ROSEN SPECTOR: Well, that relates to a question that came from the audience which I am going to

1	slightly rephrase, but the idea that consumers are seeing
2	LEED Certified Silver or Green Globes verified or NAHB
3	Gold, how are they perceiving that claim? What
4	environmental benefits are they even taking from that
5	simple certification language and how are those specific
6	environmental attributes that are being certified being
7	communicated to consumers through just that simple
8	certification language?
9	MR. RASHKIN: I would not mind weighing in on
10	that one only because I spend too much time traveling and
11	I do not know what to do with myself a lot. I mystery
12	shop thousands of homes and ask sales agents questions
13	

education right now to help develop the capacity on the market side, not only to engage the people who are involved in sales and marketing of these homes but also the builders themselves and understanding how to apply the label, USGBC has also undertaken a very deliberate consumer education initiative and that is expressed at a website that we have created called thegreenhomeguide.org and a website that we continue to advance, build more curriculum in to connect with Green Bill 365, which is an online education portal that address both the builder and the consumer, and also marrying that with educational programming that we provide for even product manufacturers and constituency at Green Build every year.

We have seen a huge transformation in the commercial marketplace. That is demonstrated by the many people here who have been involved in this dialogue today. There is extraordinary expertise among architects, engineers, builders, increasingly trades people on the commercial side of this sector to have a fairly sophisticated conversation about what green building means and what it means in terms of performance.

It is ready for an investment in R&D, like the NBI study that Erin referenced that showed that 35 percent energy savings was typical of LEED certified buildings or many of the two million that USGBC is

putting into research to help understand things like the reality of claims of increased productivity in green buildings, for instance.

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So, we are looking at the residential marketplace not just as a snapshot today and making decisions on that basis, but really understanding how we can invest into developing a lexicon and building a dialogue and leveraging the work that NAHB is doing to really educate their builders and the extraordinary foundation that EPA has created with Energy Star. is a way for us to create and transform in the future where that Tower of Babel that we are all concerned about around green home claims and what does it really mean to the consumer and how can manufacturers appropriately differentiate themselves is something that we can really work through as a community. I think that what has happened on the commercial building side of the marketplace is a wonderful demonstration of what is possible.

MR. MARTIN: There is certainly a lot of precedent regarding what claims builders can make that existed for several decades right now, to go beyond green buildings. So, that might be helpful for FTC to review, looking at what kind of warranties are acceptable, what sort of legal precedents have occurred regarding those

warranties and any potential other physical claims of the physical construction of the home. So, that might be a good starting point for you all to perceive how green building fits into that.

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MS. ROSEN SPECTOR: A lot of green building, obviously, the green building claims and a lot of the products center around these certification programs and Carlos mentioned reliance on credible standards. So, I am wondering whether you all think that the FTC Green Guides should perhaps set more specific guidance for reliance on certification and seals to substantiate environmental benefit claims and even there has also been a lot of talk today about ANSI developed standards versus consensus-based standards, open standards and whether you think the Guides should provide some information about that. Kirsten mentioned there is the first party certification and then there is second party and third party. Would it be helpful to the building industry to weigh in on which of those types of standards and provide more guidance on the use of those standards that could provide substantiation for some of these claims?

MS. MOORE: Going back to Kirsten's slide, there is a wonderful opportunity to differentiate between marketing labels versus industry standards versus third-party created programs because there is different

- levels of scrutiny as a consumer that you might want to
- 2 apply in those different circumstances.

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- But, you know, that is contrary to our guidance.
- Obviously, it is something that we're pursuing.

But having that present in the Guides, the FTC has a much broader voice to engage the community that any single 501(c)(3) nonprofit or governmental agency would have that is focused on specific program implementation.

MR. SHAFFER: And I think one of the things that is really helpful, we already talked about looking at the attributes that would encompass a green building. I think that it is important to distinguish between a brand new built building and a building that has been in operation for 5 years or 10 years or 15 years and that the operation or the performance of that building is more important than what it was 10 or 15 years ago when it was

standards are that needs to happen for consumers to understand. But when you talk about these, it is bordering on building regulation and the building regulations vary. It is probably one of the most complex -- I should not say that if there is anybody from any other industry here.

(Laughter.)

MR. MARTIN: I think it is one of the most complex regulatory systems that exists in the country for an industry. So, I think home buyer, homeowner, consumer education about what standards mean is probably a more useful vehicle for FTC.

MS. ROSEN SPECTOR: I just want to clarify, are you saying that we should not be saying what the standard should say or even weigh in on a standard that is — saying something to the effect of in the Guides, a standard that is developed by a third party through an open consensus—based process can likely provide substantiation for X type of claim. Are you saying the agency should not even do something like that or just that they should not get involved in developing building standards?

MR. MARTIN: The latter definitely is the case. For the former, I think it is a fine line that you are going to be playing because you obviously want to

1	describe what standards are for the consumer to
2	understand what they are reviewing. And, so, in some
3	ways, you do not want to just say caveat emptor and leave
4	it at that, you want to provide some guidance about how
5	they can make logical decisions about what their green
6	building options are.
7	So, keeping the market open, obviously, as we
8	were saying there are a lot of different rating systems,
9	a lot of standards out there. Explaining how to
10	distinguish between all of them is probably a more
11	beneficial vehicle for FTC if that makes sense.
12	MR. RASHKIN: Maybe the best education that the

what you look for. But beyond like we are not a
consensus-based approach and to have something that says
a standard has to be a consensus-based standard would
trouble us because we just find we like a different
approach that is more nimble and allows us to move more
quickly where we gather information from all the
stakeholders very aggressively, but we kind of adjudicate
the final standards that we put out without a consensus
process. That allows us to move quickly and make
decisions. It is just another way to go that we find
preferable.

So, I think there are certain criteria and you have to explore what they are. But I am not sure how much more specific you can get than that.

MS. ROSEN SPECTOR: Is there even kind of an accepted metric for what is a green home?

MS. MOORE: I think there is a good opportunity with regard to FTC's work in this area to look at bridging the gap between how green homes or green products for the home get sold and how consumers think about having a green home. The consumer research that NAHB commissioned, the stuff that we are about to come with says consumers think about energy efficiency, they think about environmental footprint. First and foremost, they think about having a healthier place for their

families to live.

But if you are going into the Home Depot, you are seeing lightbulbs and air conditioning systems and windows and all these individual product oriented approaches and it is really difficult to figure out how to bring that together into a system. So, to harmonize a vernacular that allows consumers to marry what they see if they go to the store or what they see if they are talking to that sales agent trying to up-sell them on a granite countertop versus the kind of benefits they want to achieve for themselves and their family, that could be a helpful dialogue for the marketplace overall to just begin to create the bridge because you all do not want to have to reprint this whole thing in your Green Guides in terms of detailed technical guidance.

MR. RASHKIN: What Carlos said was pretty important because we agree with NAHB quite a bit about how difficult it is to make claims. We caveat and cast every benefit about these homes very carefully and choose our words. So, I think one of the things you can do at FTC is say no green program can make claims about percent more healthy, percent more water savings. You can just realize that there are so much behavioral factors associated with these homes that you can forbid certain claims as part of any green program. That can start

1	going a long ways to avoiding some of the abuses that are
2	happening.
3	MS. ROSEN SPECTOR: All right. Well, I guess,
4	Sam, you get the last word. That is the end of this
5	panel and we will start Panel 5 at 3:45. I want to thank
6	the panelist for a very informative and interesting
7	discussion.

	200
1	from the Business and Institutional Furniture
2	Manufacturer's Association; and John Spears from
3	Sustainable Design Group. So, thank you very much for
4	joining us.
5	Let's start off with kind of a review of what
6	is going on in the marketplace. If we can kind of just
7	go down the line for the first question and tell us what
8	kind of green claims you see that are going on in the
9	marketplace right now, what are the hot green claims. I
10	am not sure if we are in the same order here, but, Allen,
11	why don't you start us off?
12	MR. BLAKEY: Well, vinyl is the most widely
13	used plastic in building and construction. It is a
14	synthetic material. Now, it is fair to ask are synthetic
15	materials green, but when we are talking about a
16	complicated thing like a building, it is unavoidable that
17	you will have synthetic materials in buildings and vinyl
18	can contribute. It does have benefits and advantages.
19	So, I think there is a tension between what sorts of
20	products and materials do the job in green buildings.
21	That is one of the issues that we are seeing.
22	MR. KOHM: Okay. And, Christine, what kind of
23	claims do you see going on out there?
24	MS. CHASE: Some of the things we are looking

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at, at Green Seal, we sort of do have the product

L	standards. So, a lot of the confusion I think has to do
2	with how individual standards fit within a greater
3	context, be it a more broader building standard and how
1	that interaction is. I know that there is a lot of
5	confusion from contractors that we receive.

In addition to that, some of the things that we are working on are more service-based standards. So, this is basically after a building is built or, you know, is developed and that sort of thing, how you maintain and how you clean it, what kind of products you bring into the built environment at that point will really affect indoor air quality and other health effects. So, those are some of the things that we are looking at as well.

MR. KOHM: Okay. And, John?

MR. GIRMAN: Several things. I think one of the things that was touched on very well in the last panel by Michelle Moore, and that was the definition of green, what is green. She mentioned a lot of attributes that could be used to define green, recycled content,

1	times, for example, the issue of natural versus synthetic
2	does come up as a claim and there is a notion that
3	somehow if something is natural it is automatically green
4	and that is not always true. There are other things like
5	that as well.

MR. KOHM: Okay. Sophia?

MS. GREENBAUM: We are an educational organization, so do not necessarily have a prescriptive definition of green. We do support some of our members that have green building standards including NAHB and U.S. Green Building Council. But what we really look at is some of the interactions between sustainable design features and costs, life cycle analysis, security, accessibility, safety and durability. So, we have more design practitioners and building owners coming to us looking for the crossovers between sustainability and other design attributes. For example, in schools, you might even have acoustics being considered in terms of sustainability because it is an important aspect of indoor environmental quality.

MR. KOHM: Tom?

MR. REARDON: Well, the furniture producers have been fielding a lot of different requests from their customers. The U.S. Green Building Council and LEED have done a tremendous job in elevating the awareness and the

1	importance of evaluating environmental impacts of
2	buildings and construction projects. Our manufacturers
3	produce products that go in these buildings. And,
4	increasingly, the customers are focusing on recycled
5	content, emissions of VOCs from product, certified woods,
б	and sustainability is much larger than that.

So, as an industry, we saw a need for some harmonization and some commonality among the different attributes that define sustainability or green and I think the entire marketplace can benefit from some standardization in that area.

MR. KOHM: And, John?

MR. SPEARS: Thanks. Well, I am coming from a perspective, I design homes, green, solar, self-sufficient, sustainable, whatever you want to call it. And in the early '70s when I started the terms were all different but everything else was the same, and the customers have not changed in their interest in demand for quality housing.

The first thing they care about is indoor air quality. They want to know is this house healthy or isn't it and all of the details about the various volatile organic compounds and percentages of this and that are very irrelevant to that market audience, the consumer of the house.

1	The second thing they want to know is, and even
2	more so today, is can I afford to pay the energy bill.
3	So, there needs to be a metric and a measurement that
4	says this is efficient or it isn't or some way of
5	

was going to get to later, but let's get to it right now.

When you are buying a building as opposed to the

components of a building, or our last workshop was on

packaging, when you are dealing with something fairly

tangible and fairly simple, you are buying a complex

system. How does that change what kind of claims people

can make for that good, for the building, whether you are

selling the building or renting it? Does anybody have

9 comments about that? John?

MR. GIRMAN: Just a few comments. I think the issue is inherently easier if you are dealing with just a product because you can say, for example, that it is going to emit so many milligrams or micrograms of a particular pollutant per volume of the thing or per weight. That is relatively easy and you can test and meet it. It is much harder when somebody tries -- but perhaps less understandable to the consumer, I should say.

But when you are talking about a building, as John said, you are talking about a system, it is a complex thing. And it is very difficult to guarantee, for example, even though we can measure energy use, we can know what we put in in terms of appliances what they would use, it is very difficult in the end to project what that particular home is going to use in terms of

2	MR. SPEARS: I think consumers are very
3	gullible and they get most of their information about
4	their purchases from salespeople that represent the
5	companies that are trying to sell them something. So,
6	education, third-party education about how to be an
7	intelligent consumer of houses, products, things that you
8	do is really, really important. And standards and
9	ratings have a real role to play in those things.

1	But it strikes me that it is a real problem when you make
2	general green claims and maybe a particular problem when
3	you have complex systems.
4	Could you all talk a little bit about what the
5	hidden trade-offs are you see and the kinds of claims
6	people make for buildings that may be confusing to
7	consumers?
8	Allen, if you wanted to comment on something
9	else, go ahead.
10	MR. BLAKEY: I will bridge from the last
11	question to the current one or try to anyway, thank you.
12	

1 being	done	on m	narket	differentiation	in	green	buildings.
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2 MR. KOHM: That is fascinating. Can you give 3 us an example of where that might occur?

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MR. BLAKEY: Yeah. PVC-free, for example, is a term that we run across sometimes. And there are problems with going free, you know, anything free, as we see it. One is that often the advertisement, where this typically appears, says nothing about what the product actually is made of. So, the consumer does not know. There is an implication, of course, that if it is free of this material, then it is healthier or more environmentally friendly. I guess we even question sometimes whether the advertiser, the product manufacturer knows for a certainty that it is PVC-free because sometimes these are products that are made of multiple materials.

MR. KOHM: John, you will be next, but it strikes me that, at least potentially, that there are claims that could be made that are true where the implications are false, in other words, that you say something about the chemical versus organic input of a particular product at the time. But over the life cycle, in fact, it is greener, in some sense, to use the chemical product rather than the organic product because over the lifetime it degrades less or you have to renew

L	get a high exposure or is it something that is high
2	emitting at the very beginning but then is low emitting
3	later on?

When a product is tested is also very important and that could be very misleading because if something is tested within 24 hours of being manufactured that means one thing. If it is tested 14 days later, that may be more meaningful to the people who are moving into the house. So, that is a case where they have to -- giving information is not enough. You have to tell people what the information means, what does low emitting mean.

MR. KOHM: And it seems that VOCs would be an example of that.

MR. GIRMAN: Exactly.

MR. KOHM: Is there any standardization on what people mean when they talk about VOCs and emissions?

MR. GIRMAN: No, some testing programs do tell you when it is being tested so you have some ability to check on that. But that is not generally something that people even know enough to ask about.

I think another thing where something is misleading is very often something will be touted as being natural, and the implication is that natural is green and good. We get calls like this all the time from the public and I remind them that bee stings are natural,

snake venom is natural, poison ivy is natural, but they
are not benign and natural does not mean benign. There
are some cases where you would much prefer to use a
synthetic product that is much more durable and would
last a long time, has easier maintenance and perhaps
emits less.

So, going back to what some of the panel has said on earlier panels, you have to look at the whole thing, you have to look at things holistically. Life cycle analysis can help on that, but you really have to look at things as a system.

MR. KOHM: Is there any specific example you have of a product that might be not natural but over a lifetime analysis be more green in a broad sense than its organic counterpart?

MR. GIRMAN: I do not think there have been sufficient good analyses that show this, but let me throw one thing out that might be interesting to at least one panelist. That is that linoleum is often touted as being an environmentally friendly product and the reason is because it is a natural product, although I have never seen a linoleum tree, perhaps you have.

(Laughter.)

MR. GIRMAN: So, it is really composed of many things. But the thing is Tunga Sawhammer (phonetic) in

1	Germany has tested a lot of products, both natural and
2	synthetic, and he found that many natural products are
3	much higher emitters of VOCs, linoleum, in general, being
4	a much higher emitter of VOCs than vinyl, for example.
5	Now, that is half the story, getting back to
6	what you said earlier, because the thing is you have to
7	also look at what things are being emitted and for how
8	long and what their health effects are. So, it is a very
9	complex thing that you have asked.
10	MR. KOHM: Tom?
11	MR. REARDON: Yeah, I just support that. I
12	think it is very easy to make well-intentioned single
13	attribute claims or even multi-attribute claims that do
14	not necessarily look at the whole story and potentially
15	give a misleading impression to what could be a somewhat
16	uninformed consumer.
17	MR. KOHM: Can you give us a hypothetical
18	example they do not have to be specific companies or
19	ads of where that might occur?
20	MR. REARDON: Well, I mean if you are
21	MR. KOHM: Now, everybody is on notice that I
22	ask for examples all the time. You can think in advance.
23	(Laughter.)
24	MR. REARDON: I did not bring anything to share

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with the class.

1	MR. KOHM: If you brought some, it would have
2	to be enough for everybody.
3	MR. REARDON: And I was not sure how many to
4	expect.
5	(Laughter.)
6	MR. REARDON: Any claim about energy
7	consumption of the product, I mean, that is looking at a

think is the actual attribute you are looking at. So, they are using the terms incorrectly.

Giving it credibility by giving it, you know, NASA tested, there are no -- and even the like ASTM standards that they will claim for the testing do not really give you technically an R value. So, if you took this paint, painted it on your wall and assume that it is going to cut the heat loss of your building the same as a fully insulated wall would, you are not going to get that performance because, I mean, technically what they are doing is they are claiming the performance in radiant heat transfer and not in conducive heat transfer and R is not the right value for doing that.

The other one has to do with insulation in general, the difference between types of insulation and their various attributes. For instance, the difference between a loose fill insulation in a wall and a foam insulation which might fill a cavity and make that cavity actually airtight as well as making it insulating. A poorly insulated wall with a loose fill insulation is a very leaky wall and probably will not even come close to achieving the values that are specified by the material in a standard product test of that material under ideal conditions. You foam that same wall and you get significantly better performance because you have reduced

air infiltration, the performance is more like the standard test method conditions when you get it.

So, there is lots of variety in claims when you take a single component performance factor that may be tested with an ASTM test and very valid, but when it is applied in the field it has very different performance characteristics.

MR. KOHM: Okay. We are going to go to Sophia first, but before we do that, I want to tell the panel what my next question is going to be and give you some time to think. It springboards off John's last comment. What are the one or two worst kinds of claims that you are seeing in your area in the marketplace now?

Sophia, first to you?

MS. GREENBAUM: I guess this can kind of tie into that, but I just wanted to take a step back. You were talking about consumer knowledge and I think consumers, at this point, are up against two things, it is the lack of technical knowledge of building and the building industry and building products, but also the building systems, and also the amount of eco fluff that Kirsten mentioned before. And I think until we can really gauge where consumers are and where their understanding is, it is going to be a challenge to provide a good context for some of these environmental

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MR. KOHM: Can we just go down the line and if you can tell me kind of what the worst things you are seeing, the one or two worst things you are seeing in the marketplace now?

MR. BLAKEY: I think, in addition to being free of something, it is comparative claims that are based on very little data or no data. Sometimes they are single attribute comparative claims, sometimes they are tied to a website that some group has put up that is perhaps a pressure campaign organization and it is clear to us, it seems clear to us that the marketing organization has not really investigated, it has not done its own research or investigated the quality of the research that leads to the claims on the website that they are linking to.

Six degrees of separation, I guess we would say, as we mentioned in some previous comments.

MR. KOHM: Christine?

MR. CHASE: I guess I would say, I do not know if they are necessarily the worst, but some of the ones that I have seen that have been my pet peeve are sort of the earth-friendly and safe for people, planet and yourself or something like that. I saw one ad campaign with a baby with a cleaning product and it sort of implied that it would be safe for a baby, which all

products have impacts as far as environmental goes, but particularly products that, you know, have chemicals in them. Maybe they have sort of bettered them. That is one certain thing, but I do not think any cleaning product would be safe for your baby to drink, and that implication, I think, is definitely a dangerous one to make.

That is something that we definitely try to keep at bay and provide a certification and provide a standard to show that it is a comparative product and not necessarily an absolute.

MR. KOHM: Thank you. John?

MR. GIRMAN: Yeah, I do not monitor ads like that, so I am having trouble coming up with examples. But one thing that strikes me is occasionally you will see a claim that green buildings have X percent better indoor air quality and there is no way of knowing how they measured that, if there was really a study that did that or what that means.

Another one that might be a little off target, but it is nonetheless a problem because it comes up many times, and that is the use of plants, and they are green, as air cleaners indoors and the claims that are made are pretty outrageous.

MR. KOHM: Sophia?

MS. GREENBAUM: Right now in the current Green Guides there is a principle that addresses packaging and addresses where the Mobius strip of recycling is put on the packaging. So, it is describing either the packaging or the product, but should not be ambiguous. And I think one of the things that we could do better in our industry is distinguish more between professional accreditation, membership in an organization and product or building certification. Because sometimes you can go to a design professional's website and if they have the logo of a certain organization, it might make you think that all of their products or their entire portfolio will be Energy Star when it is really taken out of context.

MR. KOHM: Thank you. Tom?

MR. REARDON: I was having a hard time coming up with a specific example, but one just came to me. I did see an advertisement recently where the product manufacturer was saying that this certification that they were claiming compliance with was required for LEED certification. And, you know, LEED is a credit-based system. They are all optional, so there really is no credits that are required for LEED certification. So, that was very misleading.

But I think most of the time it is really a matter of vagueness, you know, eco friendly,

1	believe there is a group that is run by Consumer Reports,
2	they have a website greenerchoices.org and they do not
3	deal with all of the building certifications that are out
4	there, but they provide a good template for starting to
5	look at just check boxes, is the certification program
6	vetted by a third party, is it consensus-based, is it
7	transparent.
8	So, tools like that are helpful and I think the
9	certificates are worthwhile because they add
10	efficiencies. It is those claims that do not have a
11	context that make it more challenging for consumers to
12	sort out.
13	MR. KOHM: Okay.
14	MR. REARDON: If I could add.
15	MR. KOHM: Okay, Tom?
16	MR. REARDON: I definitely support that. I
17	think the most important thing to the consumer is the
18	

there is another kind of bias. There is ideological bias. And we believe that there are certification bodies that are suffering from ideological bias and that this is an anti-competitive result. And I believe that it would be in FTC's interest, it would be in consumers' interests — and it is my understanding that you do have an extensive history of looking at antitrust aspects of standards and certifying organizations.

MR. KOHM: The FTC does, that is correct.

MR. BLAKEY: The FTC does. This is an issue that perhaps the FTC would be interested in looking into.

And how does an organization ensure that it has balance among its representatives? In a building, if a standards body has an industry representative on a building standard, how can you have one industry representative for all of the industries that are involved in putting together a building? Is it the building materials, is it the energy systems, the water systems and so forth? So, I think there are questions that need to be asked about the true openness and transparency.

A third aspect I just wanted to mention is that sometimes openness and transparency has to do with the general vote once the standard provision has been issued, but the development of the standard provision or the

policy is done in a very non-open, selective, exclusive group that does not have adequate representation in our view.

MR. KOHM: Christine?

MS. CHASE: I think, Allen, your points are well made and you definitely want, when you have a standard setting body, particularly a credible one, you want it to be based on scientific rigor and make sure that you have a balanced representation of people at the table when you develop that standard, so that when you are moving forward, you have something that is meaningful and also addresses all the different issues.

I think one of the things that I was just going to address about sort of the multitude of different standards out there is that, you know, some of the things that we are facing is that there are a lot of different standards and what we are trying to do is sort of a more of educational and awareness and sort of a lot of it is knowing your certifier, who is behind it and who is sort of creating it. How a standard is created, that is a very important factor as well. And then looking at some of the different issues as far as openness, transparency and whether it is a profit driven or non-profit, and those sort of ideas.

I do not necessarily know if it is something

1	that I think some of the underlying principles may be
2	something that FTC can touch upon, but definitely I would
3	say from a greater consumer awareness point of view,
4	definitely understanding the certifying body is an
5	important factor to consider.

MR. KOHM: Is there a way that the FTC can promote that understanding?

MR. CHASE: I think that maybe some of the -looking at the Green Guide, they do have a specific area
that talks about eco labels and seals and perhaps
definitely embellishing that and being more descriptive,
perhaps giving examples and that sort of thing within the
context of the Green Guides would be very helpful I
believe.

MR. KOHM: I will not put you on the spot right now, although if you want to be you are welcome to. But if you or other people want to comment on what some examples are that we might give in that space, that would be very useful.

John Spears?

MR. SPEARS: Referencing your question about is there a proliferation of standards out there or guides or labels, looking at the consumer in a residential home market, there is really only one label out there that has market penetration that people are aware of. There are

others that are moving into that, but Energy Star is clearly the lead in the market for labeling of energy efficient buildings.

There are standards out there for indoor air quality. The American Lung Association's Health House, for instance, is one that works very hard to address that. And, again, it is a set of attributes that you either meet or you don't to get that label. But it is not well-known or widely out there.

And then at the consumer level the appliances, again, it is Energy Star which, in my mind, has really been the moving force to get the consumer to look at energy, look at indoor air quality, look at water conservation, and to provide a reference to go by. The other standards are probably much more focused towards, or guidelines, using the correct term, are probably more focused towards the professional that are building the buildings or designing the buildings. Like LEED is much more oriented to the architects and the builders than it is to a consumer. The same thing with many of the other systems.

So, you got to really look at the market for the rating. Who is it communicating to?

MR. KOHM: Question from the audience. What are the most pressing issues in indoor air quality and

1	green building at this time? What claims are being made
2	in this area that concern you? And why don't we start
3	with John Girman.
4	MR. GIRMAN: I think one of the biggest
5	problems in terms of indoor air first of all, let me
6	set the stage. We believe there's really a hierarchy in
7	terms of controlling indoor air quality sources,
8	ventilation and then air cleaning in some cases. So,
9	addressing sources first as the thing that most of
LO	what we are discussing right now, I think that one of the
L1	biggest problems is the fact that we build buildings and
L2	test products one by one. And, so, we do not build on
L3	previous knowledge.

And if I can just dream for a moment, I wish
that every product that we tested would be identified as
far as what it was, who made it and everything else and
go into a database. So, then the person down the road
who builds a building and wants to use similar products
could just access that database and find out what it is

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testing into future buildings that would make me very happy.

MR. KOHM: Anybody else want to comment?

MS. CHASE: Yeah, I just want to reiterate what John said. I think a lot of times the indoor air quality is being impacted by a variety of different sources. So, it is a combination of the paints that you use, of the cleaners that you bring in, of the furniture, of the carpet, of the wall covering and, so, that sort of combination of different factors definitely contributes into, and then you sort of look at the building and how it is ventilated and that sort of thing and there are factors to consider, different. So, that, I think, would be definitely a very difficult way to check or to average the impact of the overall indoor air quality of the environment.

MR. REARDON: Just add to that and maybe expand on it a little bit. There are relatively static sources of indoor emitants, air pollutants, whether it is a piece of furniture, the carpet or a wall covering, and then there are continual sources, like copy machines and things like that that -- and even human beings. I mean, we emit VOCs in our deodorants, in our mouthwashes and things that we bring into the workplace, too. So, it really is a multifaceted perspective we need to take.

1	MR	KOHM:	John?
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MR. SPEARS: I think one of the things that the FTC could do is eliminate this whole notion that John just brought up about the fact that there are sources, so when you buy a product to put in the building or when you bring materials into the building, you can look at the ratings of those materials and at what their emissions are. The building is actually a system, so you need to look at ventilation and how that then controls those sources, the ones that you build the building with as well as the ones that you bring in on a daily basis.

And then the third one is the cleaning. A lot of times you see claims from air cleaning companies that that is the silver bullet that is going to make your building pristine. But, in fact, it does not necessarily do that. It is just part of the system's approach. So, you have really very different categories, very different audiences, again, for the standards. And when you get to the consumer, you really have to have a standard that is the system's look at the whole system, how it is put together, and then the manufacturers and the professionals that design the buildings need to look at the individual components and how they go together.

MR. KOHM: Let me ask you all kind of the \$64,000 question. And I will let anybody start who

1	wants, and if nobody wants to be the first one, then I
2	will pick somebody. What are one or two revisions that
3	you think would be most useful that the FTC could make to
4	the Green Guides?

Allen's going to be on the block if he does not -- if somebody does not help him out here.

MR. BLAKEY: Opinions do not count, you need data. The reiteration of the inappropriateness of these broad eco friendly sustainability -- I know that sustainability is a process, not an endpoint. It is a management tool. Perhaps there are appropriate ways to use these terms, but I think that is something FTC needs to look at. Opinions do not count. Some of the broad, sweeping terms. The more you can measure it, the more you can show it with data, the better off life cycle data is. Is it perfect? No. Is it easy? No. It is complicated. There are gaps in life cycle comparisons.

But if you do not have life cycle data comparing two products -- and it is a very narrow science, you cannot really do a life cycle of a material versus a material because so much depends on the particular application. But absent full data to support your claim, you are really not able to justify it.

MR. KOHM: Thank you. Christine?

MS. CHASE: I guess I will just sort of build

1	upon what Allen said and a lot of it I think has to do
2	with substantiation. So, if you are making claims, be it
3	overly broad or that sort of thing, show what you are
4	creating, the proof of why you are making that claim. I
5	think if there is a basis, if there is a third-party
6	certification involved or not, what is making you make
7	the claim, and then do so in a context that has sort of a
8	life cycle consideration so you can avoid some of these
9	hidden trade-offs.

MR. KOHM: John?

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MR. GIRMAN: I think that the two previous responders really listed it very nicely. I think bring the data, have the data available, the transparency of the certification, what it means. It is also useful to have in the guide what it does not mean and there are some things in there you might want to go into in certification in a little more detail.

One thing that I think consumers need to know is that this is an area that is evolving and changing fairly rapidly. So, what is true last year may not be true this year. So, they need to keep on top of things and use current information.

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content of a product. Those are two different things and they are looking at two different outcomes. For example, emissions might be more related to health and indoor air quality whereas the content might be more related to sustainability and the ability to recycle and reuse the product. So, I think that people need to know that all certifications are not created equal.

I mentioned earlier about when a product is tested and what it means in terms of trying to interpret what the emissions might mean. I think another thing that is very important, if you are testing for chemicals, what were the chemicals you tested for? And that list is very important because nobody is going to be able to test for everything and, so, you need to know what things might be overlooked that might be important and I think consumers need to know that.

Another thing, I do not know the extent to which it comes up now, but I predict that it will in the future, is that total volatile organic compound content is a very poor indicator of health. It is used that way as a surrogate, but it just does not work. There have not been studies, at least very, very few studies, that suggest even that you can use TVOC or total volatile organic content as an indicator of health and, yet, it is a very cheap and inexpensive way of doing it so a lot of

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3 MR. KOHM: Do you think that is what is being 4 conveyed when people talk about VOCs?

MR. GIRMAN: I think sometimes that is what people have in mind. If it has not occurred yet it will because it is such a cheap and easy way to do emissions testing and it is what some people will gravitate towards unless we educate consumers.

I should also say we are talking about consumers, we are not just talking about the public. If an architect is asked to build a green building or intends to do that, some of the architects are not very well educated, also. Some education has to go to them. And product specifiers are not very well educated, too, about the large list of attributes that we talked about in various panels.

MR. KOHM: Can I just get you to lean into the microphone a little bit. I'm sorry.

MR. GIRMAN: Sure, no problem. We need to educate product specifiers about the large list of attributes that we need to look at to really have a green product. It is not just one or two things. They need to consider all these things. So, there is education, not just of the man or woman on the street, but the product

specifiers, some of the people in the building trades themselves.

3 MR. KOHM: Sophia?

MS. GREENBAUM: A couple things change. To reference what Carlos from NAHB mentioned earlier, I would definitely distinguish between design and performance of buildings. In the commercial building industry, we are taking a look at performance metrics and standards, but I do not think we are quite there yet to be able to guarantee those based on design that is on paper. I think that is an important distinction that should end up in these marketing claims.

The second change, which Christine also touched on, was embellishing the use of the labels, the appropriate use of the labels. And, again, I mentioned earlier whether it is a professional accreditation, an organization membership label or a product label, they need to be used appropriately.

And then the last change that I might suggest would be expanding the environmental terms so that they really address some of the marketing claims that are being made for buildings and green buildings. Two of the most common that might be pressing right now would be the health claims and the energy efficiency claims.

MR. KOHM: Before we move on, let me just

explore a little further this idea of time because in a building, the product is used over a much longer period of time than packaging, for instance, or other consumer goods. Do you think that it is deceptive not to or misleading not to talk about time when you are talking about the attributes of a building, for example, if you have a certain energy efficiency that may degrade over time or depending on use, and if it is, should the FTC be saying in its Guides that it, in fact, is misleading if you do not give a time period or you do not indicate that your claim is time qualified? I would just open that up to the group.

MR. SPEARS: Well, some of the standards already take that into account, for instance, on foam insulation, for instance, particularly, the rating that they give that through an ASTM standard process is a time-rated average over the life expectancy of the product. The biggest issue is really maintenance. Is the building going to be maintained because if the exhaust fan craps out and nobody replaces it, then the indoor air quality goes away.

MR. KOHM: Although you do not have to make these claims through certifying bodies, you can make them directly to the public. If one were to do that, then there would be -- do they need to be time-qualified in

1	the	same	way	the	certifi	cati	lon i	s?	Any	r thou	ıght	s,	Sophia	э?
2			MS.	GRI	EENBAUM:	I	woul	.d	just	cast	it	in	terms	

MS. GREENBAUM: I would just cast it in terms of performance maybe instead of the time because the performance element captures that operations and maintenance, and when you are designing the building, you can make assumptions about how it will be occupied or how it will be maintained, but those might not come to pass if you do not have the training for the building owner. But at the same time, it is a good start to start making those assumptions, to design for a higher standard. But, again, the performance is the issue.

MR. KOHM: John?

MR. GIRMAN: I think I am saying much the same thing. It is not just time-qualified, but you have to qualify that the appropriate maintenance and operation has to occur for the building and building systems, and I think that is something that needs to be stressed.

People very often have more control than they think they do. Getting the product or a new building is one thing. Taking care of it is another thing and we sometimes fall down because we made the purchase and it should last for how long, we can forget about it for a while, and you cannot.

MR. KOHM: Let's move on with this general one and then I have one more question. Tom?

1	simple, though. Simple and understandable for the
2	audience.
3	MR. KOHM: Well, just so you do not get the
4	wrong idea, our materials may be written in the first
5	instance by lawyers, but they have to go through non-
6	lawyers before they go out to the public.

7 (Laughter.)

8 MR. KOHM: They translate them into EotW1.00000 0.00000 0

- 1 problems? Tom?
- 2 MR. REARDON: I think it is definitely a
- 3 worthwhile aspiration and the direction that we want to
- 4 head. I am just not certain that the data and the
- 5 science has developed to the point that it is truly
- 6 viable yet.
- 7 MR. KOHM: Anybody else? Okay. I am sorry, go
- 8 ahead, Sophia.
- 9 MS. GREENBAUM: I would just echo Tom's
- sentiments just to say that there is not necessarily a
- 11 single methodology out there for establishing those life
- 12 cycle analyses.
- MR. REARDON: But, ultimately I think that is
- 14 nirvana.
- 15 MR. BLAKEY: I guess I agree with those
- 16 comments. But if you are making a general green claim,
- that does imply so many things in buildings. Energy,
- 18 water, materials, indoor air and so forth. And I think
- 19 one could make the case that you do need almost life
- 20 cycle type data. You certainly need more than if you are
- 21 making a single attribute claim.
- 22 MR. KOHM: Christine? Oh, I'm sorry. Go
- ahead.
- MR. BLAKEY: Just the last thing is I am not an
- expert on the life cycle databases and methodologies, but

my understanding is that they are growing. I mean, there are many gaps in the life cycle data of every product and when you are doing life cycle comparisons, you end up doing apples and oranges. But the more data that is contributed and the more it is peer-reviewed, I think the sounder, the larger, and the more effective the ability to do this becomes.

MR. KOHM: Christine?

MS. CHASE: Yeah, I think the really important thing here is one of the things, the idea is certainly to have a life cycle approach. But I agree with what has been expressed before is that there is a lack of data and sort of a lot of different methodologies and you do not really want to be bogged down -- sometimes I think it is definitely very important and something that we are striving towards, but you do not want to stop everything in order to do a full life cycle analysis before you can sort of proceed forward, but definitely something you strive towards.

MR. KOHM: John?

MR. SPEARS: Well, there is is life cycle analysis and then there is life cycle analysis and then there is cradle-to-cradle analysis. The terms are general; the methodologies are varied. I think we are probably more interested in what has been termed cradle-

1	to-cradle analysis rather than life cycle analysis
2	because where do you end the life cycle of a product?
3	And, so, if you are going to say we should say life cycle
4	analysis, there needs to be a whole discussion what that
5	is.

MR. KOHM; Okay. We have had a long day and you all have been up here for a long time, but I just want to give everybody one last chance. If there is something you've heard today or something you want to communicate to the FTC or the audience, this will be the last question.

I'm sorry. Allen?

MR. BLAKEY: Once again, I feel like I am late on the draw here. Thank you for the opportunity. I would encourage -- I know you asked a question at an earlier panel today what can the FTC do. I would reiterate what I think someone said earlier, workshops, work through trade associations. I think there is a need for FTC to raise the consciousness and awareness of the marketplace. Thank you.

MR. KOHM: Okay. John?

MR. GIRMAN: I think one of the difficult things that is facing all of us in this and it is not just FTC's job, but to be able to define what it really means to be green, what the attributes are. Unless we

can agree on some common understanding of what that means, it is going to be very difficult to define the rest of the things on what we should or should not be doing and how we should discuss that. So, I think that is one of the first tasks. And as I said, I would love it if FTC did it, but it probably involves a much larger community to do that.

MR. KOHM: Thank you very much. At the beginning we promised that we would start and stop on time. The hidden promise is that we would stop a little early.

To all our distinguished panelists, to everybody who has stuck it out with us today, all day, and to everybody across the country and across the globe who watched on the webcast today, thank you very much. I want to remind everybody, as I did this morning, that this is part of the process of developing the Green Guides. The record is open until August 15th and we hope that all of you will take the time to comment. You can do that on the website.

And, again, when you are commenting, we are very interested in what kind of claims that are out there that are problematic and what kind of guidance the FTC can give to help marketers and sellers not step over the deception line. That is really the line we are looking

1	for. We are not an environmental standard setting
2	organization. And, in fact, we are not an environmental
3	organization at all. So, we are not looking to what is
4	the optimal environmental solution. We are looking for
5	the solution that allows for competition of these claims
6	on a non-deceptive basis.
7	Thank you all for joining us and we hope to see
8	you at our next workshop.
9	(Applause.)
10	(Whereupon, at 4:47 p.m. the workshop was
11	concluded.)
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4	TEXTILES
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