FEDERAL TRADE COMMISSION

CARBON OFFSETS AND RENEWABLE ENERGY CERTIFICATES

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P R O C E E D I N G S

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WELCOMING REMARKS

MR. KOHM: Good morning and welcome to the Federal Trade Commission's Carbon Offsets and Renewable Energy Certificates Workshop. Before we begin today, I have a couple of announcements. The first is somebody lost a SmartTrip card this morning and it's at the guard's desk out front. So, if anybody can't get home today, that's where you need to go.

Before I begin, a few announcements for panelists and the audience. For those people who are going to be panelists today, please lean into these microphones. They don't pick up sound when you lean back and we have a pretty full house today, and we want to make sure that the people in the back are able to hear you.

We're going to endeavor to stay on time today. We have a lot of things to do and a very full agenda. So, if the panelists can please stick strictly to the time limits that have been provided. We want to make sure everybody hears what you say, but we want to also make sure we have time for questions and that we don't crunch the people at the end of the day.

There will be time for questions at the end of

each panel. In order to ask questions, please fill out the cards that have been provided, the question cards that were provided this morning. If you need additional question cards, they will be in the back of the room. Simply fill out the card and hold it up, somebody will come by and get the card and bring it to the moderator. We aren't always able to ask everybody's question, but we'd like to make all the questions part of the official record of this event. So if you can please write legibly. And while we'll take anonymous questions, we would appreciate it if you would write your name and affiliation on the card and we'll actually scan the card and make that part of the record.

If you would like to know what restrictions we place on the use of that information, namely being your name and affiliation, you could visit our website and look at our privacy policy.

The record of this event will remain open until January 25th, so if people want to answer those questions, if you want to supplement your comments, if you hear anything today that you would like to comment on, we'd encourage everybody to file those comments. In order to do so, you can send paper to the FTC's main address, but we'd prefer if you would comment on the website. Simply go to the FTC website, click on the

carbon offset button, and follow the instructions. It's very easy to do.

Today's event is also simultaneously webcast and transcribed, so you'll be able to go to the site and see copies of both the transcription and the webcast that could help you with any further comments.

In making comments, I just remind everybody that today's event is part of a rule-making record which is something a little different for the Federal Trade Commission. So, please keep in mind that what we're looking at is what claims are being made, how those claims are understood by consumers, whether the claims are truthful and substantiated, and what advice the FTC can give to help people avoid making deceptive claims.

Turning to a few housekeeping matters. First, regarding safety and security. Everybody received a name tag when they came in this morning. You need to wear that name tag at all times when you're in the building. If you see anything suspicious while you're here, if you see somebody walking around at the conference without a name tag, you can tell the guards at the front desk in the lobby.

When you leave the building today, you'll have to come back in through the same security procedures you came in this morning. So, particularly, when you go to

lunch today, make sure you leave enough time because we will be starting on time to come back through those procedures.

In case of a fire emergency, there are two exits, the main exit is out the main entrance onto New Jersey Avenue. If you go straight back through the pantry, there's also an exit to the left out to G Street. If we have such an emergency, please leave in an orderly fashion and cross diagonally across New Jersey Avenue. So you stay far away from the building.

For everyone's enjoyment today, please either turn off your cell phones, your Blackberries or put them on vibrate. We realize it's a long day and everybody can't necessarily be out of touch all day. If you do get a call or you want to make a call, however, please don't do that in this room. Aside from interfering with everybody else's enjoyment, it also interferes with our equipment. So if you want to make a call or you receive a call, please go all the way through the first set of glass doors out into the lobby.

We also have recycling bins, paper, plastic and aluminum right outside in the gallery. There's also a box for unused question cards. We'd encourage everybody to use those.

Finally, for those of you who are going to be

here all day and who haven't been listening to these announcements just waiting for the first speaker, the next ten seconds is what you want to really listen to. The bathrooms are across the lobby. If you go to the left of the guard desk and follow the corridor around to the left, you'll find both bathrooms. Okay, that concludes today's announcements.

Turning to our first speaker. Four years ago, one of Chairman Majoras' first duties when she joined the FTC was to open another workshop put on by the Enforcement Division. At that time, my predecessor introduced her as an anti-trust attorney with an inner consumer protection lawyer just waiting to get out.

Today, I'm proud to introduce the preeminent anti-trust and consumer protection attorney, the Chairman of the Federal Trade Commission, Deborah Platt Majoras.

(Applause.)

OPENING REMARKS

CHAIRMAN MAJORAS: Well, thank you so very much, Jim. It's terrific to be here. I welcome everyone to Washington and, particularly, our participants in this workshop. I also want to give a special welcome to those joining us by webcast. I must say this is one of our best attended workshops we have had in a while. And, so, together with our webcast participants, I think we're going to have just a tremendous dialogue. So, thank you for being here.

Why are we here? Well, from the sun belt to the rust belt to the beltway, consumers are showing increasing interest in environmental issues and, importantly, this interest may be influencing their purchasing decisions. In a recent USA Today Gallup poll, more than eight in ten Americans said that a company's environmental record should be an important factor in deciding whether to buy its products.

Businesses have taken notice, and in the past year there's been a virtual explosion of green marketing. NBC devoted an entire week to green programming. The current issue of Good Housekeeping includes a piece of how to buy green and not get fooled. Other magazines like Vanity Fair have released green issues and retailers like Wal-Mart and Home Depot have launched green product

lines.

In response to this rise in green marketing, we have accelerated our review of the FTC's Green Guides, which were first issued in 1992 and then updated in 1998. We do a regular review on a schedule of our guides and rules, but this one we have decided we need to do at an accelerated pace.

Now, for some of you here today, this may be your first exposure to the FTC, so let me just tell you a little bit about who we are and what we do. Our two fundamental missions are to promote and safeguard competition and to protect consumers. We're a relatively small agency with about just under 1100 employees, but we not only tackle a wide range of prominent competition but consumer protection issues which we'll focus on today. From spam to spyware to mortgage fraud, media violence to mobile marketing, data security to debt collection. And, of course, we run the national Do Not Call Registry.

In the advertising realm, our fundamental tool is the FTC Act which prohibits unfair or deceptive trade practices. So, for marketers, the basic rule to remember is that any material misrepresentation, omission or practice is deceptive if it's likely to mislead consumers who are acting reasonably. In short, marketers have to have a reasonable basis to support their advertising

claims.

Now, our job is not to substitute our judgment for that of consumers or to save them from making bad choices, which unfortunately we all do sometimes. Rather, it's to ensure that they obtain the truthful information that they need to make their own choices. And when markets function in this way, consumers win. They secure a broader selection of innovative products at lower prices.

In fulfilling our mission at the FTC, we employ a variety of tools, including law enforcement, market research, business education, consumer education, and the encouragement of sound, self-regulation in the industrial realm. Over the years, our work in the energy and environmental fields has underscored this multi-tiered approach. We've challenged deceptive practices in court, we've published information to help consumers make informed green purchasing decisions, and we've promulgated rules and guides to make the rules of road in this area clear for business. We've also encouraged well constructed industry self-regulatory programs as a way to compliment our own government efforts.

The FTC's Green Guides apply the FTC Act to environmental advertising and marketing practices and offer marketers general principles on how to avoid making

misleading claims. The guides also provide guidance to marketers on specific claims such as what is meant by environmentally friendly, recyclable, compostable. Since the guides were last revised in 1998, of course, the market has experienced the increased use of these terms to promote the green attributes of products, their packaging, their manufacturing processes. But we've also had the introduction, of course, of new terms like sustainable, bio-based, cradle to cradle, and carbon neutral.

Given the dynamic nature of this marketplace, it's important that the guides are responding to today's challenges and to consumer perceptions currently of these environmental claims. After all, consumers today have the option to purchase products and use them in ways that were unforeseen 15 years ago, when we first developed our guides, and consumer perceptions of old green claims may have evolved significantly over time. Our robust review of these guides will allow us to explore emerging consumer protection issues and provide better direction to green marketers.

Now, as is usual in reviewing a rule or guide, the FTC is seeking public comment on the continuing need for the guides, their economic impact, the affect of the guides on the accuracy of various environmental claims,

and the interaction of the guides with other environmental marketing regulations.

Given the explosion in the role of green marketing, though, we also decided to hold a series of public workshops on emerging green marketing issues. What we have found is that holding these types of workshops, and we do it on a whole variety of issues within our jurisdiction, provides us with an effective and very open way to take in and test the perspectives of various experts and stakeholders in these areas.

Today's event, the first in a series, focuses on carbon offsets and renewable energy certificates, or RECs, which are among the new products not addressed specifically today by the Green Guides. Carbon offsets and RECs are separate yet closely related products in this marketplace and, as many of you know, I'm quite certain, carbon offsets which are available now for purchase frequently serve as the basis for claims that greenhouse gas emissions are reduced. The offsets are memorialized in credits or certificates that purportedly represent measurable reductions in greenhouse emissions accomplished through such activities as methane capturing or tree planting.

RECs, on the other hand, serve as a new means to market renewable energy. RECs represent the renewable

attributes of electricity from wind, solar and other renewable energy sources and are sold separately from the electricity produced. As is the case with carbon offsets, companies and individuals can purchase RECs to offset emissions associated with their own activities. In an effort to become carbon neutral, many purchasers seek to obtain enough offsets to match their own emissions.

The term “carbon neutral” has received a lot of attention. Indeed, early last year, the new Oxford American Dictionary added the word “carbon neutral” having named it the 2006 word of the year. I didn't know such a thing existed. Last year, consumers watched a carbon neutral Superbowl, Academy Awards telecast, and NASCAR race.

Interest in carbon offsets and RECs, however, has not been limited to football fans, Oscar winners and racing enthusiasts. According to a recent Business Week article, the market for carbon offsets in the U.S. could be as high as $100 million, and the New York Times reported that the number of offsets sold by online realtors grew by more than 42 percent from 2005 to 2006 and continued to grow at a steep rate during 2007. The sale of carbon offsets and RECs, if marketed truthfully, can provide interested consumers the opportunity to

participate in this market for products and services that may reduce emissions.

To explore the consumer protection issues raised by this emerging market, throughout the day, experts from environmental organizations, industry, government and academia will address the technical and marketing issues posed by carbon offsets and RECs. These experts will discuss a wide range of issues related to these products, including efforts by a variety of organizations in the U.S. and internationally to develop methods for substantiating these claims, as well as discussing new and ongoing self-regulatory and certification efforts.

We hope that our discussions today can play an important role in furthering our collective understanding of the challenges that are presented here, and let me throw out a couple that we see.

For example, unlike tangible goods like cars or breakfast cereal, carbon offsets and RECs don't offer consumers an easy way to verify that they're receiving the product for which they paid. Many of the products funded by the sale of RECs or carbon offsets occur in places remote from consumers, whether the activity is planting trees in another country or subsidizing wind-powered energy across the U.S. Moreover, even if

consumers could see the project in action, most of us would have great difficulty in confirming that our offset purchase actually funds that particular project, or that the project would not have happened without our purchase, or for that matter that the project actually reduces atmospheric carbon in the amount that's claimed. Simply put, with this much uncertainty, there's a heightened potential for deception.

In addition, these new products raise questions of consumer interpretations. So, for example, when consumers buy offsets, do they know what they're purchasing? How do they interpret express claims about the general environmental benefits of the products and what implied claims are consumers taking away from this marketing? And, of course, substantiating claims may pose challenges for marketers.

Marketers first have to ensure that both the express and implied claims are based on competent and reliable evidence. If you say that your product offsets a certain amount of atmospheric carbon, then it should do just that. Additionally, even when the science is sound, other substantiation issues may arise. For example, sales of offsets and RECs may involve multiple transactions in a variety of different entities, and inadequate tracking and verification systems could lead

even those sellers acting in good faith to inadvertently sell the same product more than once. Unfortunately, these realities could also create opportunities for bad actors to deceive consumers.

So, today, we're going to explore these and other issues to determine the best way for the FTC to protect consumers in these burgeoning markets. A deeper understanding not only would help us combat fraud in the future, but will help us provide better guidance to marketers seeking to make truthful claims and also to provide guidance to consumers in making purchasing decisions.

Consistent with our past efforts on green matters, though, I want to make clear that we don't plan to develop environmental performance standards. We don't have the authority or the technical expertise to address issues of environmental or energy regulation, per se. Nor are we in the business of mandating environmentally preferable practices. Instead, our efforts will focus on our traditional consumer protection role addressing deceptive and unfair practices under the FTC Act. And as part of this effort, we are seeking to determine whether additional FTC guidance is warranted and, if so, what that guidance should be.

We have an impressive group assembled here

today, so I am confident that we are all going to leave better informed than when we arrived. So, again, I want to thank you for your interest and participation in these very important issues, and my special thanks to the panelists for taking time to lend us your expertise. Have a good day. Thank you.

(Applause.)

INTRODUCTION TO ADVERTISING LAW

MR. KOHM: We'd like to invite the first panel up.

For those of you in the back of the room, I think there's seats over here if you want to come grab those now. There's also some seats in the front row over to the left.

MS. FAIR: Good morning, I'm Lesley Fair, I'm an attorney in the Bureau of Consumer Protection working in our Division of Consumer and Business Education. I have the relatively simple job today of explaining the 93-year history of FTC law enforcement in now 14 minutes and 30 seconds, so hold on. For those of you who are FTC regulars, this will be a review, but I hope we can give, at least, some basic information.

Let me also mention, on a sticky note that I can assure you is made from 100 percent recycled materials, that the opinions I am going to be expressing today, as well as FTC staff at this event, are mine alone and don't necessarily reflect the official position of the Federal Trade Commission.

For those who are used to dealing with the regulatory frameworks of other agencies, the FTC offers, I think, a different and a streamlined approach. Certainly, we have, in our relatively thin volume in the

Code of Federal Regulations, a few regulations that will apply across the board regardless of the nature of the product or service you're selling. For example, the Mail Order Rule would require that if you're selling products via let's say a catalog, online, anywhere through the mail, that you deliver your products in the requisite length of time regardless of what the nature of the product is.

Anyone who uses email marketing as part of their campaign will need to follow the requirements of the Can-Spam Act to offer consumers an easy way to opt out of receiving future email. So, those kinds of rules apply across the board regardless of the nature of the product or service that you may be selling.

The FTC also has a limited number of specific rules and guides related to certain industries. Certainly, things like the Used Car Rule or the Appliance Labeling Rule, the Green Guides, as the Chairman mentioned, one of the ones that are probably of most interest to the folks that we're going to be talking about today.

However, the real basic of where the Federal Trade Commission's law enforcement approach begins is Section 5 of the FTC Act, which I think is 23 words long, last I counted it, has really not changed in the 93-year

history of the agency, and here is what it says. "Unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce are hereby declared unlawful."

The vast majority of what the FTC does in the law enforcement arena is based on enforcing this 23-word statute. So, if you are looking in our law for specific case law dealing with carbon offsets or specific case law dealing with RECs, you're not likely going to find them. What you'll find instead is the FTC's approach under Section 5 of the FTC Act.

Let me call your attention to two very important words, as the Chairman mentioned, deceptive acts or practices and unfair acts or practices. These words have very specific meanings under our law.

So, when is an act or a practice deceptive under the FTC Act? To find out more about this, you'll want to look at the FTC's Deception Policy Statement which applies across the board to all products and services and is readily available at FTC.gov, but here is the summary. An act or practice is deceptive under the FTC Act if it contains a representation or an omission of information that would be material to consumers, important to their decision to buy or use the product, and that would mislead consumers acting reasonably under

the circumstances. That's about 95 percent of the legal theory that the FTC uses when we challenge a false or deceptive advertising in the marketplace.

What is an unfair act or practice under the FTC Act? If it's likely to cause substantial consumer injury, that could be physical or economic, not reasonably avoidable by consumers themselves, and not outweighed by benefits to consumers or competition. You'll find more about this in the FTC's unfairness policy statement. Portions of this have actually been incorporated into the FTC Act itself. That makes up about 5 percent, but an important 5 percent, of what the FTC does in law enforcement actions to protect consumers.

These same standards apply across the board to all products and services. These same standards also apply across the board, regardless of the advertising medium that a company may use to disseminate its claims. Bearing in mind from the FTC's point of view, too, things that a company says on its website about its products or services are ads in the same way that a million dollar buy for 15 seconds of a carbon neutral Superbowl are ads. So, it’s important to bear in mind that your slogans, your trade names, as well as what you might say in a newspaper or radio ad or online are all ads subject to the Federal Trade Commission Act.

Here are just four basic principles that I think guide the FTC's view of how to enforce those 23 words to protect consumers the best. First, that the FTC looks at advertising claims from the point of view of reasonable consumers. Now, I'm not asking for a show of hands, but remember, reasonable consumers don't have your expertise in the technical areas that may be involved here. Some of them may have actually flunked organic chemistry at some point in their life. What you're looking for is a reasonable member of your target market and that may well be an average Joe or Josephine American on the street, how they interpret the claims. So, it's not how the advertiser or scientist or technical experts interpret the claims, it's how reasonable consumers do it.

The basic principle that companies need to remember is that before running an ad, the advertiser must have substantiation for all claims, that’s express and implied claims, that those reasonable consumers would take away from the ad. Now, again, the issue is not what claims did the advertiser intend to convey. That's not how the FTC looks at it. It's what claims reasonable consumers take from the ad. So, it's important to bear in mind not just what an advertiser may intend to communicate, but how real-life consumers are actually

interpreting these claims. Obviously, the level of substantiation is going to depend on the nature of the claim as I'll show in an example in just a minute.

Third, if a claim is truthful only under certain limited circumstances, advertisers must take care to qualify that claim and to do that carefully. General environmental claims that may actually need careful qualification is another topic I think that advertisers are going to want to pay particular attention to. I'll show a hypothetical example.

Finally, if a disclosure is necessary to prevent an ad from being deceptive, it must be clear and conspicuous. Simply put, what the headline giveth the footnote cannot taketh away. That applies across the board regardless of the nature of the product.

To show how these four principles work, the two questions that the advertisers must ask themselves before running an ad -- and, yes, the substantiation requirement requires that the company possess this reasonable basis before disseminating the claims.

First, what claims, express and implied, does my ad convey to reasonable consumers? And, second, do I have competent and reliable evidence which, depending on the claim, may require scientific evidence to support each of those claims?

Let me walk through this using just a hypothetical I came up with. I call this product LumaGreen energy frugal light bulbs. At least as of ten days ago, I spent quite an amount of time on the Patent and Trademark website trying every cognate of eco, earth, green and enviro. I think this is the only thing that hasn't been taken yet and, again, it's up for grabs if anybody wants to, but LumaGreen energy frugal light bulbs. And, as I said, this is strictly a hypothetical not based on an actual product.

Let's take a look at the kinds of claims you're likely to see in an ad like this. First, replace your current 100-watt bulbs with LumaGreen energy frugal lights and bathe your home in the natural glow of the sun. The concern here -- let's say I told you that the LumaGreen bulbs only provided 65 watts of light. From the FTC's point of view, we would be very concerned that consumers would be left with the impression that they would be getting 100 watts of light from the LumaGreen energy frugal lights. So, there would be a concern about what kind of express or implied claim consumers are taking from the ad.

Now, the fact that the company did not literally say, you'll get 100 watts of light, does not mean that that claim doesn't have to be substantiated.

So, here is an example of where we're going try to find out how consumers interpret that claim. Do consumers understand that claim that they're going to be getting the equivalent of 100-watt bulbs? So, that explains that we look at these claims from the point of view of reasonable consumers.

The second basic proposition, again, to substantiate all claims, express and implied, that reasonable consumers take from the ad. For each 100-watt bulb you replace with a LumaGreen energy frugal light, you'll save $28 a year on your electric bill. Not an unusual claim, the kind of thing we see a lot. Those kinds of claims -- generally speaking, claims must be substantiated with competent and reliable evidence. Claims about the benefits, efficacy, health, safety, or similar objective product representations, they're going to need competent and reliable scientific evidence.

How does the FTC define that? We look at competent and reliable scientific evidence as methodologically sound tests, studies, scientific research, based on the expertise of professionals in the field, objectively conducted by qualified people, using procedures accepted as accurate, yielding statistically significant results. So, we're talking solid science here.

Maybe it's helpful to talk about what competent and reliable scientific evidence is not. It's not anecdotal evidence from consumers. The fact that consumers like the product is lovely and we hope that happens, but that is not the same as competent and reliable evidence.

Popular press articles, you know, Vogue Magazine is not the New England Journal of Medicine, in a different kind of context. If you're making scientific claims, popular press articles or newspaper reports aren't going to stand up.

Sales materials from the person who sold you the active ingredients or the underlying products are not going to be substantiation simply because they, too, have a motivation to sell you something

The fact that there's a low return rate, again, a nice thing but does not prove, does not substitute for competent and reliable scientific evidence, neither does the fact that a company may offer a money back guarantee. Certainly, a money back guarantee gives rise to the need to honor that guarantee, but, again, it does not substitute for competent and reliable scientific evidence.

So, in looking at a claim like this, the FTC is going to try to figure out, you know, that $28 claim is

going to depend on a lot of different things. What's the cost of electricity in different parts of the country? How is the product used? Is this on a 24-hour a day lightbulb or on a lamp that’s flicked on for just a few minutes a day? So, all those variables companies need to bear in mind when trying to come up with the adequate level of substantiation for making these claims. But what companies definitely need for objective product claims is competent and reliable scientific evidence that they're truthful.

Here is another claim. At only $2.99, LumaGreen energy frugal lights are a bright idea. I always say if -- the deal I would like to make is if marketers and lawyers stop using asterisks, I will do what I can to get the government to stop using asterisks. But here, just hypothetically speaking, you'll notice the asterisk after the $2.99. At the bottom of the ad, in four-point type, is this phrase. Special introductory unit price with online purchase of 144-light case, for more information go to the website.

The FTC would likely say, you know, it certainly would be from a staff perspective that that would be an ineffective disclosure because it did not clearly and conspicuously disclose what the true price is. So, it’s those kinds of considerations that the FTC

is going to look at, again, what the headline giveth the footnote cannot taketh away.

I have gone back 58 years in FTC juris prudence and, to my knowledge, the Commission has never lost a case when the company's defense was, but we disclosed it in a footnote or on a television superscript. So just to let you know how that works.

Finally, the kind of claim that a lot of times we all see in these save the earth, earth-friendly, general claims -- bear in mind that it’s going to be important how consumers interpret those representations. It's probably, I would suggest, unwise to try to get around the substantiation requirement simply by using what I would call the green buzz word du jour. Remember that slogans like this may well convey information and convey claims to consumers.

Let's say, hypothetically speaking, that the filament of my magnificent LumaGreen energy frugal lightbulb, unlike other products, is made from the dreaded element Washingtonium, I'm calling it. Certainly, companies would have to be careful about making these general, unqualified save-the-earth kinds of claims when there are mitigating factors or factors outweighing it that raise other concerns about the safety or benefits of the product. So, again, I think these are

things advertisers need to watch out for in using these general slogan-type statements in their ads.

Now, where can companies go for more information about how the FTC looks at advertising claims? Certainly, in the back of the room today, you have the business guidance piece, Complying with the Environmental Marketing Guides, I think a very useful source of information. You'll also find little copies of our FTC Business Briefcase, which include 68 of the most popular plain language business guidance documents, including complying with the environmental marketing guides to give you a little bit more information about how the FTC looks at these kinds of advertising claims.

I'm 15 seconds over, but there you have it. Thank you very much.

(Applause.)

SESSION 1: MARKET OVERVIEW - CURRENT PRACTICES FOR CARBON OFFSETS AND RECs

MS. HANN: Lesley, thank you for an informative and, as always, dynamic presentation.

Good morning, everyone, and welcome to session one. Market Overview: Current Practices for Carbon Offsets and Renewable Energy Certificates. My name is Carolyn Hann. I am an attorney in the Enforcement Division of the Bureau of Consumer Protection, and I will serve as the moderator for this session.

I would like to introduce our distinguished panel. First, we have Kate Hamilton, who is the Carbon Project Manager at Ecosystem Marketplace. Next is Lori Bird, a Senior Energy Analyst with the National Renewable Energy Laboratory, or NREL. Our third panelist is Rebecca Tushnet, Professor of Law at the Georgetown University Law Center. And, finally, Alan Levy, a Senior Scientist at the Food and Drug Administration.

This session will provide an overview of four discrete areas, all of which will lay the groundwork for today's workshop. First, Kate Hamilton will present an introduction to the carbon offsets market. She will be followed by Lori Bird who will provide an overview of the renewable energy certificates market. Next, we will turn to Rebecca Tushnet who will cover First Amendment and

commercial speech issues. Finally, Alan Levy will discuss consumer perception in new markets such as these.

And, now, Kate will start us off.

MS. HAMILTON: Thank you for the introduction, Carolyn, and thank you all for being here. I know that carbon offsets and coffee are always a good first of the morning to get my day started right.

Before we delve into some of the deeper questions around these markets, I was asked to introduce the carbon markets in general, and particularly, the voluntary carbon markets.

I come from an organization called Ecosystem Marketplace. We're a non-profit, but we were created to be sort of a Bloomberg for these emerging payment for environmental service markets. So, we look not only at carbon markets, but also other environmental markets such as wetlands banking or water quality markets. And I focus on the carbon markets.

So, a few key principles enable these markets to happen, and one is the fact that greenhouse gases circulate evenly around the earth, so that the climate doesn't care whether I've emitted my greenhouses gases in New Jersey or in China. This enables us to find sort of the biggest emission reduction bang for our buck when we're looking around the earth and how are we going to

reduce these emissions. So, from an environmental position, this can enable us to reduce as many emissions as we can afford, or from an economic perspective, this could allow us to reduce the same amount of emissions at a cheaper cost.

So, then the idea with offsets is that an entity decides they want to balance out their emissions by paying someone else to reduce or sequester or discontinue their own emissions, and, in theory, the second entity would be doing this at a lesser cost than the first entity. Otherwise, the first entity wouldn't need to offset.

A second big principle about this market is then it puts a price on greenhouse gas emissions and releasing greenhouse gas emissions, and once companies realize there's an additional cost to releasing these emissions, they're more likely to try to reduce these emissions. So, even if you're voluntarily offsetting, then you're still paying for the emissions that you are offsetting and may want to think about ways to reduce them.

Another big issue is this idea that reducing emissions can have other social or environmental co-benefits. There's also a lot of discussions in that if you're only focused on reducing or sequestering

greenhouse gas emissions, you may be sacrificing other environmental or social concerns.

So, this is a not-to-scale model of some of the markets of the carbon markets. And a big point that I wanted to focus on is that, while today we're talking about the voluntary carbon markets, they aren't the only carbon markets. So, these blue bubbles and the green bubble, in fact, are regulated markets.

I'm particularly focused on the two yellow bubbles, and I have broken them into two parts. One is the Chicago Climate Exchange and the other is what I call the over-the-counter voluntary carbon market. The Chicago Climate Exchange is sort of an organized bubble amidst the chaos of the over-the-counter voluntary carbon market. And the Chicago Climate Exchange is a cap and trade system. Members commit voluntarily to reduce their emissions at 6 percent by 2010. And then they can trade emissions or they can also purchase offsets in order to reach their goals.

But those entities define offsets who are not members of the Chicago Climate Exchange, such as individuals and a range of institutions purchasing carbon offsets, are doing this through sort of the more chaotic over-the-counter voluntary carbon markets, and these markets don't have a formal exchange and they simply

consist of a scattered range of transactions. Because there's not a cap and trade system, they're all offset credits. A lot of people have called this market the wild west or have considered it a buyer beware market. So, a lot of negative plans we'll be talking about today are in this context.

On the flip side, there's some exciting aspects of this market as well. It represents the consumer demand for carbon offsets, sort of consumers looking so how can they maximize their emissions reduction. It also is an arena where sort of new projects can get financed that might not be able to jump through the hurdles of the regulatory markets, sort of the bureaucratic hurdles. Then it's also a place where maybe smaller projects that can't afford to jump through bureaucratic hurdles can be financed.

This market has been so chaotic that no one really knew exactly even how big this market was, the over-the-counter market or what were the range of project types. So, last year, Ecosystem Marketplace decided to start tracking this market and we did this by trying to survey as many suppliers as we could find and who would help us by sharing information in the marketplace. And what we found is, not surprisingly, the market grew rapidly between 2005 and 2006. So, the green and the

blue are, in fact, the OTC market and the bronze is the CC market.

Another interesting part about the market, that's why I broke out the green and blue, is that a huge percent of the OTC market historically was conservation organizations using carbon finance for land conservation, so NOGS. And you can see as the markets matured in the past several years, it's also become more diversified.

Also, if you look at the pre-2002 column, another interesting point is that this market has been robust for far longer than 2002 to 2006. We also just had a column where we asked how many credits have you sold before 2002. That's why this is so large because it represents 2002 and whatever before that. The earliest transaction we found was in 1989.

Another interesting point, not surprisingly, the suppliers in this market have continued to grow. So, more and more suppliers are coming into this marketplace each year. And I can guarantee you we don't have the numbers for 2007 yet, but in 2007 there's going to be continual growth of new suppliers. I find new suppliers every week that are selling credits in this marketplace. These suppliers include not only the retailers that you see selling credits on line, but also a host of other different organizations in the supply chain. So, there

are project developers who may sell to the retailer, there are brokers who may facilitate that transaction, and then there are organizations I call wholesalers that may work with project developers but only sell in bulk. So, they won't sell to individuals. They only sell to companies or to other retailers.

So, we also ask these suppliers how big do you think the market is going to be? So, of course, there's a selection bias here because these are the answers of the suppliers in the marketplace, but all the suppliers, most of them predicted continued growth. So, on average, in the next five years, they thought that it could continue to multiply to about four times its size. But with this continued growth and all this excitement around the marketplace, again, I want to point out just how tiny this carbon offset market is, this voluntary carbon offset is compared to the regulated market.

So, with the Chicago Climate Exchange and the OTC together we valued at around $91 million, which is pretty conservative. But all the regulated markets together were valued in 2006 at over $30 billion together. So, again, still a very small market in context of the other markets.

Another interesting point is that a carbon credit is a commodity that's been created from a wide

range of different projects and this can include a forestry project to something like destroying industrial gas to trapping and flaring methane to renewable energy credits to emissions reductions by energy efficiency, to trapping and flaring methane, et cetera. So, there's a range of different projects out there that are converting themselves to carbon credits.

And in this marketplace, in the OTC market, we found that forestry was 37 percent of the credits sold and that industrial gas, which is actually quite cheap, was another major part of the credits sold. And Lori will get more into renewable energy credits, but only in 17 percent of this market are actually renewable energy credits advertised and sold as carbon offset credits.

On the other side is the Chicago Climate Exchange, and these aren’t actually credits sold, they are credits registered. I couldn’t get the credits sold from them. But soil carbon is a huge part of the type of credits registered in them, which means it's been -- for something like Note, they said that the carbon has sequestered in the soil. And it will be interesting to see how well the market evolves, how the sort of balance of different project types change.

So, who is buying these credits? There's talk about the voluntary market, but in the end, you need a

final buyer to make the market happen. Not surprisingly, the suppliers said that 88 percent of their customers were businesses, and most of these businesses were located in the U.S. So, 68 percent of the consumers we were able to track were in the US. So, the U.S. is very important to this voluntary carbon market.

We also asked suppliers what they thought their customers cared about when purchasing credits, and a few interesting points came out. One was that the biggest thing was this concept of additionality and the idea that the project would have not happened without the carbon market.

Another big issue was that they thought their customers wanted additional environmental and social co-benefits. So, they didn't want a project that just reduced greenhouse gases. They also wanted it to have other co-benefits. So, we called this a demand for charismatic carbon. It’s not just a ton of carbon, it’s sort of a little more exciting, a little more sexy.

Then the fourth point is that they thought their customers really wanted certified credits. I think that this interest on additionality and this interest on certification has become especially large in the past two years as there's been quite a few exposés on this market and quite a few mainstream articles and different

organizations focus on some of the problems in this marketplace.

Some of the big problems are, one, are these credits additional? Two, could these credits be double counted? How do I know if I haven't sold my credit to one person I'm not selling again to another person? How do I know that I've actually sold one credit and then retired it? And, then, also, how do I know that if I've sold credits from a project, the project has actually produced those credits and there's been no project failure?

Another issue has been this idea of are there environmental or social sacrifices due to my emissions reduction project? So, some of these articles have focused on these various issues. Then as suppliers and buyers are seeking to prove the legitimacy of this market, certification has been a big issue in the past two years and a range of certifications have popped out in the marketplace. These are a few of them. It's interesting because the certifications are not only for carbon credits, but some of them are actually for retailers themselves or for products that are making carbon credit claims. So, gold standard in CCB's climate community and biodiversity are some that look at not only the fact that a carbon credit has been reduced, but also

that it has social and environmental co-benefits.

Other standards, such as a voluntary carbon standard, just want to say that this is a carbon credit and the emissions reduction has been reduced. And last year, in 2006, we found that most retailers actually use their own standards and then the next biggest one was that they use a voluntary carbon standard. I think this will change as standards mature and more people accept them into the market.

So, I think standards have blazed the way for sort of one area of legitimacy in the marketplace. I think the next area that's coming up now is this concept of registries. Again, this is really important for double counting. So, when you have a credit, can your credit be put in a bank with a serial number where it's organized and we can watch its transaction happening. And, now, several registries have popped up this year as well. And I won't go through these registries carefully for the sake of time, but another important aspect of the marketplace.

So, what is going to happen in the next steps? I think one of the big parts is that there's been continued growth in 2007. I haven't collected the numbers for the OTC market yet for 2007, but I can assure you that the numbers will be at least twice the size as

in 2006. And, also, the Chicago Climate Exchange reported that their volumes doubled between 2006 and 2007. And because the U.S. is such a big source of demand for this marketplace, a big question in the market is if U.S. regulation comes into place, how will this influence the voluntary carbon markets? Will it even be necessary to have a voluntary carbon market?

I think in response to that question there's still a huge number of entities making long-term commitments to purchasing offsets and emissions reductions that probably wouldn't be regulated if regulation came into play. So, the Yahoos, Googles, the Patagonias, et cetera, are all still utilizing offsets.

So, there's our introduction, and if have any questions, here is my information.

(Applause.)

MS. HANN: As Loris's setting up, I just want to make a quick announcement. The flashing light in the back of the room is not an alarm and there's no cause for concern, it's just a bad bulb. So, we are working on getting it fixed. Just want to let you know. Thank you.

UNIDENTIFIED MALE: We're trying to find a LumaGreen bulb for that.

MS. BIRD: So, I'm going to try to give a sort of complimentary overview of renewable energy certificate

markets, just as Kate gave us on carbon offset markets. I guess I would just say that REC markets are -- you can consider them a subset of carbon offset markets, but some RECs are also purchased for the environmental and other benefits of renewables so they may not be sold as offsets, and there are other emissions benefits of renewables and other social benefits as well.

So, what is a REC? We talked earlier -- one of the speakers mentioned that a REC represents the attributes of renewable energy generation that can have values separate from commodity electricity. So, basically, you can generate electricity from renewable energy sources and that can be sold separately, you can sell the commodity electricity in one place and sell renewable energy attributes somewhere else. There has been some debate about the definition of a REC because some folks would argue that a REC simply represents proof that renewable energy has been generated.

RECs are also known by a number of other names, including green tags, renewable energy credits, tradeable renewable energy certificates and so forth.

A brief history of how RECs evolved and where they started. Primarily, RECs emerged out of discussions about how to implement renewable energy policies. The first mention of this concept was in the mid-1990s when

California was talking about developing a renewable portfolio standard, which was a policy that requires electricity suppliers or utilities to obtain renewable energy for a certain percentage of the electricity that they are providing to their customers.

Then, after that, it was also marketed when competitive retail electric markets opened up in the late 1990s. There was a product called ReGen that was marketed in Massachusetts that was an upgrade service to electricity service. And then in the California market, as well, this concept emerged. And it also emerged in Europe at about the same time.

Why RECs? Why did this emerge? What are the advantages? Basically, this is a mechanism for monetizing the value of the attributes of renewable energy separate from the commodity electricity. It can help eliminate the problems of intermittency. Some renewable energy sources like wind or solar don't operate all the time, the wind has to be blowing for them to be creating electricity. And RECs sort of eliminate that issue that they can be sold separate from the electricity. You don't have to match the consumer's load exactly and so forth. So, it’s a lot easier on the renewable energy side to sell that attribute separately.

Same thing for transmission constraints.

Sometimes to actually get the electricity to the end use consumer you may have to cross several different transmission lines and so forth. Instead of paying the cost to wheel that there, RECs can avoid that issue as well.

I guess another benefit is that consumers can support renewable energy even if their supplier or their utility or their electricity supplier doesn't offer a renewable energy option. This is something that any consumer anywhere in the U.S. could purchase online.

So, I guess as I've already alluded to, REC markets have emerged, there's basically two types of REC markets, two categories that we've come up with. One is the compliance markets, renewable portfolio standards. These states that have policies that say a certain amount of renewables have to be in the resource portfolio of the utilities or the electricity load serving entities and then voluntary markets are consumers, either businesses or residential consumers, that are voluntarily purchasing renewable energy equivalent to their own electricity consumption. That's a lot of what we're talking about here and that's what I'm going to focus on, but I am going to just give you a real brief overview of the compliance market side as well.

This map just show the states. Twenty-five

states now and Washington D.C. have these renewable portfolio standard policies in place requiring the utilities to obtain 20 percent of their electricity from renewable sources by 2020 or so forth. All the amounts differ as you can see. But there's been a real increase in interested states in adopting these policies. A lot of states have increased the amount of renewables that have to be obtained in recent years and quite a few states have adopted policies. It's been growing very, very rapidly.

And on the voluntary market side, which is really what I'm going to focus on and talk about for the rest of the presentation, that market has also been growing rapidly. Today about 25 percent of U.S. utilities offer a green power program. So, that can either be in regulated markets, you know, your utility might be offering it. In the northeast and some other areas of the country, there's retail competition in electric markets and, so, in some of those states you can either switch providers to purchase green power or -- when I use the term “green power” I'm really referring to consumers that are purchasing renewable energy that may be in the form of RECs or it may be in the form of actual electricity bundled with a REC or renewable energy electricity.

So, in competitive retail electric markets, consumers, in many cases, have the option to switch to a provider that will offer a green power option or sometimes the default supplier, this is the case in New England, may be teaming with a third party marketer to offer a green power option so that the consumer can have default electricity service and not switch, but they can basically green it up and buy green power.

So, all told, more than 50 percent of consumers can purchase green power directly from a utility or electricity provider, and as I mentioned earlier, renewable energy certificate options can be purchased anywhere by all consumers in the U.S. because they can just go online and purchase them from some of the marketers.

Green power markets provide support for nearly 30 percent of new renewable energy capacity additions. That's new renewables that have been added since 1997. And this market has been growing rapidly at a rate of about 50 percent annually in recent years. And non-residential purchases are increasingly driving the market. In 2006, almost three quarters of all sales were to the non-residential sector, so businesses, universities, government agencies, so forth. And we estimate the size of the market to be 65 to 85 million in

2006 based on the green power sales.

This slide just gives you some perspective on how -- the voluntary market size is the red wedge and compliance markets and the blue wedge is how much renewable energy has been used or is going to be needed to meet current policies that are in place, these current RPS policies that I talked about.

This slide just shows you that in most states there are some utilities or power suppliers that are offering green power options to consumers. You can see in the upper Midwest there are some states with big, large numbers like Minnesota and Iowa. In some cases, states actually require the utilities to offer a green power option to the consumers.

We've collected data from marketers and utility for a number of years about the size of this market. This slide is in millions of kilowatt hours annually, so the sales in 2006 were about 12 billion-kilowatt hours. And as I said earlier, the market’s been growing at a rate of about 50 percent annually.

I guess I'll just mention, too, that this data, we do collect this. The utilities and marketers report this voluntarily to us. There's no requirement that they do that. And I actually do think that, particularly in '06, I think that this is really an underestimate because

not all of the suppliers provide was this information and we can only fill in with the information that we have. But I think we are actually missing some here.

The U.S. Environmental Protection Agency has a program, the Green Power Partnership. You're going to hear from some folks from there later today, but this just gives you kind of a flavor. They work with a lot of big companies that are purchasing green power and this is just the list of top 20. They do issue these lists. There's probably a new one that just came out -- did it come out yet? The next will come out in a few weeks. They have been issuing these about quarterly.

So, it just gives you some kind of flavor of the types of companies, and I think over the last couple of years we have really seen this go a bit more mainstream and some of the companies that are purchasing are not the traditional ones that are always doing all the environmentally friendly activities. So, it's been kind of interesting to watch that. Also, I think it’s spurred a lot of competition in that the companies are trying to outdo themselves to move up on the list.

Some of the companies that are purchasing green power or renewable energy actually advertise that either on their products, you can see the Silk soy milk, they actually have a picture of a wind turbine on here, some

show the Green-e logo. The Green-e Program is a certification program in the U.S. and, so, they're showing that their product was made or distributed with Green-e certified renewable energy.

Other companies or utilities are working with companies to help co-market their programs, so we have been seeing a lot of that. Sacramento Municipal Utility District worked with Starbucks to promote their green power option, so forth. Some of these other things. We have seen a lot more of that kind of activity in recent years.

Just real briefly, I provided some information on REC prices here. These are compliance market REC prices so RPS markets, which are pretty different from voluntary markets because each state has their own rules about what renewable energy types are eligible to meet their RPS, where they have to be generated, what geographic region they have to come from. And if states have very strict and restrictive policies in place, the price can be a lot higher if there are supply shortages or trouble meeting those requirements.

So, we have seen in New England, in particular, some really high prices. These are in dollars per megawatt hour. So, $50 a megawatt hour, 5 cents a kilowatt hour in Connecticut, for instance, or

Massachusetts. And then in other states, like Texas has had much lower prices over time. So, there's a lot of variability there, depending on the supply of the renewables in the region and the requirements of the RPS.

This is some information on wholesale voluntary market REC prices. So, this is not the price to the end use consumer per se, this will give you an indication maybe closer to what a very large business purchase would be or what the utility is purchasing it from. End use consumer, like a residential consumer, those prices are typically 1 to 2 and a half cents per kilowatt hour. You can see these prices are in dollars per megawatt hour, so they're much less. So, 0.1 to 1 cent a kilowatt hour here.

I guess I would just say that this data came from Evolution Markets, which is a broker. It's actually a pretty small subset of the actual transactions out there. But I think it gives us some indication of what the market prices are like.

I kind of talked about some of the factors that affect market prices, so I think I'm going to skip over this, but you can read it for folks that have copies of this or it's online.

I just want to say a couple of things about verification and certification of RECs. This market,

it's still a very young market, but it has grown over time and there's been some improvement in the verification and certification programs during that time.

Now, this map shows you where tracking systems are in place to track RECs. Most of these have been driven by state renewable portfolio standards because a lot of the state policies use RECs to track compliance with the policy. So, the REC tracking systems track the ownership of the REC over time, and once it's used for compliance with the policy, the RPS policy, it will be retired, or if it's sold into the voluntary market, it will be retired. So, it helps with double counting.

So, you can see most of the U.S. is now covered by the REC tracking systems. A couple of them just came online within the last six months. The New York tracking system in blue is supposed to come online maybe next year. And then in the southeast, all those white states down there, there is no tracking system available at this time for those states, although there may be in the near future.

I have just one minute left. So, I'm almost done here. I guess I'd also just say that there are certification programs out there that have been active for a number of years and they conduct audits and ensure that the RECs that are sold to consumers match those --

in terms of the quantity that the consumer is purchasing, they do audits to make sure that all that matches up.

Green-e has released some numbers about the volume that they have been certifying and it was about 10 billion-kilowatt hours in 2006. So, it was about 80 percent of our estimate of the entire market size.

Just a couple of issues and challenges to wrap up. This is my last slide. What are the issues? As I mentioned, REC tracking systems are not operational in all regions of the country yet. There's a lot of debate over additionality of RECs. I think we'll probably get into this in panels coming forward. Do REC purchases drive new renewable projects? There's been a lot of discussion of that in the last year or two.

The definition of a REC, are all attributes included? Can renewable projects sell both a REC and a greenhouse gas offset? Is there a potential for double counting there or how do we make sure that there's no double counting? And then will RECs or renewable energy be able to convey the greenhouse gas benefits of the renewable energy facility? The fact that it doesn’t have any greenhouse gas emissions under carbon regulation, and there's a lot of details about carbon policy design and it depends on the policy design whether they will be able to do that.

I guess just, lastly, difficulty in communicating the concept of a REC in simple advertising language to retail customers. I think the industry has evolved with that over time.

So, that's it. Thank you very much.

(Applause.)

MS. HANN: While Rebecca's setting up, I just wanted to make another announcement. If you have any questions for this panel, can you please complete the question cards and then someone will come around to collect them. We will try our best to ask these questions at the end of the panel. Thank you.

MS. TUSHNET: And, now, for something completely different. I was asked here to talk about the First Amendment and the relationship of commercial speech to carbon offsets and RECs. So, I'd like to address two questions, what is commercial speech and what about that speech may government permissibly regulate under the First Amendment?

For our purposes, speech about the use of these things, carbon offsets and RECs and related environmentally friendly -- I don't know whether I want to call them advertising gimmicks for my purposes or actual practices. We'll call them practices, that's fine. It's commercial speech. And that means that the

government can regulate it to avoid falsity or misleadingness. But as we've already heard, the key question is not necessarily misleadingness, although there are, of course, compliance issues, but confusingness. And that is a harder question, to what extent the government can regulate to prevent people from being confused. And maybe there's not even a difference between being confused and being misled. If we're just concentrating on consumer outcomes, consumers who are confused may end up making decisions just as if they were misled.

But start with what commercial speech isn't. Al Gore's "An Inconvenient Truth" isn't commercial speech and if Al Gore is speaking just for himself and with no commercial relationship to an organization's sake, for example, Terrapass says, Terrapass is great, you should use it, that's fully protected speech. And if he's wrong, it's very hard to get him to shut up. If Terrapass, however, says the same thing, that's commercial speech.

So, a product whose labeling says, your purchase fights global warming, that's subject to challenge for untruth by competitors, by consumers, and by government regulators. And I don't want to limit my remarks here to what the FTC has done or is in any way

likely to do because, as a business matter, if you're thinking about adopting these techniques or advertising your use of them, you do want to consider all the potential sources of challenge.

So, in fact, the most important case for these purposes is the case involving a consumer in California who sued Nike for making a bunch of statements about its labor practices under California's false advertising law. Basically, Nike came under sustained and coordinated challenge for its labor practices involving subcontractors in developing countries. It responded with a comprehensive PR campaign, including letters to the editor, ads in major papers, letters to college presidents and athletic departments. Its PR people gave interviews to newspaper reporters and so on. And none of this or very little of this was conventional advertising. I want to pause here to show you parts of Nike's campaign.

So, this is the text. This is the full text of the full page ad. So, there's a huge amount of white space. Please don't try and read it. The point is not what it said, the point is that this was a very emotional and sort of affect laden campaign designed to say that Nike cares, that Nike takes these issues seriously and is attempting to address them, and so on and so forth. And

then Nike also sent a letter to college presidents and athletic directors saying pretty much the same thing.

The consumer sued saying that these statements which basically had to do with labor conditions saying, you know, people mostly get paid at our factories and there aren't that many rapes and often they're fed, the consumers said this wasn't true, that Nike was distorting the conditions which were must worse than Nike admitted.

And Nike's defense was that this was fully protected speech under the First Amendment because among the things Nike was saying was that although it wasn't doing a perfect job, it was doing a lot better than the other employers or the other alternatives that the workers had. And its position was that in a time of globalization it was better to be involved in these things, to be trying than to not be there at all. And that that is actually a political and economic message of great importance that should be fully protected speech just as much as "An Inconvenient Truth" is fully protected speech. And, furthermore, you can't make that kind of argument without saying specific things about what your labor practices are.

And I think the analogy here to things like carbon offsets is quite strong. So, we just saw the kinds of things that are now on the sides of, say, Silk

soy milk. That is an argument about how one ought to produce goods and that actually has strong political and economic implications, even though it's on the side of a milk carton. The argument would go that that is fully protected speech under the First Amendment.

Now, the California Supreme Court disagreed and said this is commercial speech. We can evaluate whether it's true or false, at least the factual parts of it. The consumer can't challenge the statement that globalization is good or that it's important to be involved with labor practices rather than staying away. But if Nike says specific things about its labor practices like, on average, we pay people a certain amount per hour, that's a factual claim that can be regulated even though it fits into this larger context.

So, the California Supreme Court said what we look at is whether speech comes from a commercial speaker, whether it's directed to a commercial audience, and university presidents and athletic directors are an audience because they decide whether to have contracts with Nike; likewise, if you advertise in a paper, you're trying to reach a commercial audience, the people who might buy Nike's products. There are representations of fact about Nike's own business operations. And I want to also make the point here that what Nike was talking about

was the operations of its subcontractors.

So, traditionally, people say that commercial speech is easier to regulate than political speech because commercial speech is verifiable by the speaker. That's not always true in the sense that you may be buying inputs from someone else. Here, Nike was talking about the inputs it got. It was somewhat able to monitor its subcontractors, but they were subcontractors, they were independent entities and Nike didn't have control. But, nonetheless, the California Supreme Court said, you're responsible for what you say about what those subcontractors do, and that is important here, given the structure of the markets we're looking at where most of the people who are going to be making ultimate claims to the consumer are probably buying these as inputs from someone else.

It's still commercial speech even if you don't produce the input yourself as long as you have a commercial motive for talking about what you have purchased. Likewise, its commercial speech because Nike made the speech for the purpose of selling products. This is important insofar as not all of the speech we're talking about here will appear on the side of a milk carton where it's pretty obvious that that's an advertising message. If you put general image

advertising in the paper or wherever you think it's likely to reach consumers that's still likely to be commercial speech. In fact, it's almost certain to be commercial speech under the standard because you are trying to convince people ultimately to buy your products. And, in fact, why else would Nike say these things?

Under the California Supreme Court standard, almost everything a corporation says is going to be commercial speech. The U.S. Supreme Court took the case but, ultimately, didn't decide it and left the California decision intact. It's not clear that the Supreme Court would have agreed that all this stuff, including these letters, was commercial speech, but it's very hard to see where the California Supreme Court went wrong in my opinion. If these are factual representations, they pretty clearly are made by Nike to sell products, and if we want to have regulation of commercial speech at all I think we have to include speech like this.

Now, some people will say we shouldn't have extra regulation of commercial speech, but the FTC is set up in part on the assumption that the Supreme Court's doctrine allowing extra regulation of commercial speech is true, is correct, and is the right way to go.

So, quickly, assuming that most of the speech

we're talking about is commercial, what counts under the First Amendment as a representation of fact that could be false and misleading? This is important because commercial speech doctrine doesn't say commercial speech can be regulated across the board. In past years, the U.S. Supreme Court has been more aggressive about saying it's very hard to regulate truthful commercial speech. It's very easy to regulate false and misleading commercial speech, but it's much harder if you're trying to regulate it just because you don't like it, say cigarette ads. This, obviously, creates a huge premium on deciding the difference between true and misleading.

So, what about the phrase "good for the environment?" Can it be false? I mean, obviously, it can be false in some ways if the supplier is committing fraud, if the product is made of lead or toxic materials, then yes, it can be false. But that's actually not a particularly interesting question.

The troubling questions are, what if your calculations or assumptions about environmental friendliness are wrong even if you made them in good faith? What if the FTC sets a standard for something and you want to use another methodology to calculate your environmental impact because you think that that standard is better in complete good faith? If the FTC standard is

widely used, your standard could still be misleading under current law.

And a good example about this is miles per gallon where consumers really use the single number, the two numbers they get in order to make comparisons. What consumers really care about is they don't know what the methodology is. They believe that there is a methodology and that there is a single one that allows them to make decisions as between products in the marketplace, and that is the key challenge.

What's really underdeveloped in First Amendment doctrine is the extent to which the government can say these are the standards because it's important to consumers to be able to compare. Right now, the case law is, I would say, very confused about the difference between confusing consumers and misleading them. The Supreme Court has made most of its attempts to say, if you can clarify something, then the government can only require you to clarify it rather than suppress the message entirely.

But I think it's pretty much an open question, the extent to which the government is able to set standards. Nobody has actually challenged the miles per gallon standards on First Amendment rounds. There was a challenge to the tar standards in the past for cigarettes

where a cigarette manufacturer wanted to calculate tar differently. They actually had a plausible scientific argument that the governing standards for calculating tar were mistaken giving the way people actually smoke cigarettes. But the Court still accepted the idea that it was misleading to use a different standard because of consumer expectations.

And, again, I think this is going to be very important in this area because we don't expect consumers to become experts on how all these things are calculated. That's what we're here for. The challenge is to convert the specialized information into something that consumers can reasonably and rationally use when they're making decisions on limited information. That is going to get rid of a lot of nuance. There is no doubt that a comprehensible regulation is going to smooth off a lot of edges and make mistakes in small. I believe, however, that the First Amendment allows the government to set standards that overall improve consumer decision making, even if that means that some of the maximum possible information for the maximum informed consumer is lost.

But this is really actually a big open field in First Amendment law because, to date, the Supreme Court has not done very much in the field of consumer protection on this issue of understanding specific

messages.

Thank you. I'd be happy to talk further if you have questions.

(Applause.)

MS. HANN: Alan.

MR. LEVY: I must begin by confessing that I know very little about energy saving techniques or about how marketing carbon offsets is likely to work. What I do know a little about is product labeling and how information disclosures on product labels are understood and used by consumers. My task today is to introduce some basic axioms of product marketing effects on consumers, gleaned mostly from my experience with food labeling in the hope that you can see how these principles might apply to your circumstances and how they might help you design and implement better programs.

The most striking characteristic of these kinds of claims we're talking about today as mentioned initially by the Commissioner is that they are pretty strange product claims. Traditional product claims are about product use characteristics from the perspective of an individual user. Foods, for example, are marketed on attributes like taste, cost, convenience and health benefits. Such attributes follow from the experience of using the product and are more or less verifiable from

the user's own experience or from the collective experience of the population of users, the latter being a matter of scientific study.

Carbon footprint claims, on the other hand, are not really about product usage characteristics at all. They can't be verified by the consumer's experience with the product. They're really an extreme form of what we call credence claims where consumers have little or no ability to verify the claim based on their own experience and mainly have to rely on trust, a commodity in short supply among American consumers.

Carbon footprint claims are even stranger than the environmental claims covered by the FTC Green Guides like biodegradability or percent recycled content. These are typically about use characteristics of the product with public policy implications for a larger community. These kinds of claims at least seem to be objectively verifiable based on science and product testing.

Claims about offsetting one's carbon footprint or being carbon neutral by contrast are claims about the behavior of the product maker or service provider and, for the most part, can't be evaluated by product testing. At their most concrete they seem to be about the manufacturing processes used to produce the product. But, mostly, they are about someone's participation in

something called a carbon offset market. Participation in a carbon offset market is itself being sold as a strange hybrid kind of product or service.

Besides being an extreme form of credence claim that can't be verified by experience, claims about carbon footprints have another distinctive characteristic. Few people know very much about what they are and what they're for. The existence of this workshop testifies to there being some awareness of carbon emission markets among the general public. But I think it is quite likely that many people are like myself and they have only the vaguest notion of what a carbon footprint is. They might agree that driving a Hummer is probably bad for your carbon footprint, but they have little idea about what a carbon emission set aside market is and they have no clue about how to think about the many issues that arise and how to interpret and substantiate marketing claims made about carbon neutrality or offset.

Even more important than this widespread lack of knowledge is the fact consumers are very likely to agree that they know very little about the background for any marketing claims they might see about these topics. These two characteristics, not being verifiable and little prior knowledge or confidence about how to interpret applied specific marketing claims, present

difficult practical challenges for carbon footprint marketing.

It's actually hard to avoid the conclusion that buying a carbon neutral product is more like a symbolic act than it is an act of consumption. There's a definite public policy context, but a carbon neutral product is really nothing but the claim that it is carbon neutral and the credibility of the claim is essentially a matter of faith. We see examples of marketing of symbolic acts in everyday life. Voting comes to mind as a relevant and shining example of a symbolic act. There are probably important lessons to be learned from political campaigning and public policy advocacy about how to market carbon emission offsets. But I am not an expert about political campaigning and, today, I want to consider the marketing challenges of talking about carbon emission offsets in the context of selling products.

Let me turn now to Marketing 101. First of all, it is important to understand that from the consumer point of view the primary utility of label information in most product advertising is intended to be informative rather than entertaining is that it is a convenient shortcut to conducting arduous information search about product characteristics. People read labels in advertising because they are interested in buying some

kind of product and they want to make a good decision.

However, serious information search to inform these decisions is costly. Information search takes time and effort, appropriate information is not always available, and when it exists, it may be difficult to find. Even when consumers can find relevant information, it is often hard to understand and use. Product labeling and advertising are fundamentally devices to reduce all these burdensome information costs on consumers. Effective marketing has to serve and be seen by consumers as serving this purpose above all else.

There are several important implications of this basic truth. First, because the media application is to purchase decisions, advertising and labeling are usually seen by consumers to be about a specific product and not about a product category or about generic product characteristics. Labels are not billboards where useful information can be displayed outside of a practical purchase context. Advertising is more flexible and sometimes advertising can try to frame itself as being broadly informative, unattached from any purchase context.

We see this in certain kinds of advocacy advertising that tap the benefits of a certain kind of product like organic foods. But it is generally true

that consumers do not easily assume that what is said in product advertising or on a product label is intrinsically educational. Consumers are not students who want to understand general principles or experts who want to know the details of scoring algorithms for the strength of scientific evidence.

Labeling and advertising is not seen as a place to learn general truths that can be applied elsewhere. Consumers, for example, do not think of food labels as good places to learn about nutrition. They are quite sensitive about the space and time limitations inherent in reading food labels and find it insulting to imply that such a constrained information source should be considered a learning opportunity for them. They're even less sanguine about being well educated by advertisers.

Second, what consumers are looking for to reduce the burden of information search is new and relevant information. The best way to endear yourself to consumers trying to make purchase decisions in the most effective marketing is to tell them something relevant about a product they don't already know. Product specific information is an important category of new information because information about unfamiliar products is, by definition, new information. What is considered relevant information usually depends on your personal

values and your needs.

The point to be stressed here is that what is seen to be new and relevant information depends most of all on consumer prior knowledge and product experience.

Third, and perhaps the most important consequence of the information search saving nature of product labeling and informative advertising, is that consumers do not necessarily assume that information in labeling and advertising is reliable. But they have to think it is reliable in order for it to be useful to them. They are exquisitely aware of the commercial purpose of labeling and advertising which is to influence them to make a purchase over and above any information value labeling and advertising they have, and they are wary and often savvy about the myriad ways they can be misled.

As a consequence, effective labeling and information advertising has to pass a tacit legitimacy test. It has to be seen as plausible, consistent with what they already know, intended to be helpful and not manipulative before consumers will accept the help it promises in meeting their information search needs. It is not as if consumers make a careful calculated assessment of the truth value and good intent of every statement on a product label or an ad. The point, after

all, is to save time and effort. They do not think of themselves as scientists or regulators, but they are reflexively critical, sensitive discrepancies from what they already know and believe. They don't want to be fooled by their own desire to save themselves time and effort. This goes a long way to explain why product manufacturers go to such effort to cultivate a positive brand identity.

For consumers, a positive brand identity is a widely used shortcut that enables products to pass the reflexive legitimacy test consumers normally apply to marketing claims without triggering too much thinking about the details on their part.

A key point I want to emphasize here today is the essential role played by prior knowledge in determining how consumers respond to marketing claims. Effective marketing has to be based on a detailed understanding of consumer knowledge about the issues that are supposed to be informed by product information. All marketing claims are implied claims in the sense that they start from and rely on what consumers already know.

Since I do not presume to have a deep understanding of consumer problems in this area, I hesitate to make specific recommendations, but I feel quite comfortable in saying that identifying the state of

consumer knowledge, whether through surveys or qualitative research and testing, whether various possible marketing approaches are more or less congenial with the current state of consumer knowledge, is the key to developing an effective approach for marketing products in this area.

Because few consumers are likely to know about how carbon emission set aside markets work and, yet, consumers have to feel comfortable about the legitimacy of marketing claims, marketers of carbon neutral and carbon footprint claims are likely to have to initially target those population segments who are already well-informed and more interested in the issues. Consumers have to feel they know what you are talking about before they are likely to accept credence claims.

Marketers will primarily have to use informative advertising and labeling to reach consumers because low knowledge levels and high consumer skepticism of credence claims will tend to reduce the effectiveness of advertising seen as frivolous or entertaining. There is little hope in developing a mass market for carbon neutral or carbon footprint products until knowledge levels in the population are much higher than they are today.

Markets based on credence claims, the dietary

supplement market comes to mind, often specialize in providing detailed information to consumers, often in venues like Prevention Magazine that are not directly associated with product marketing. Both to raise population knowledge levels, facilitate acceptance of their marketing claims and widen the potential customer base.

Marketers of carbon neutral and carbon footprint claims will face the same challenge. Yet marketing is quite handicapped in trying to raise population knowledge levels. Most consumers prefer to learn about matters of science, technology and public policy from sources seen as objective and without commercial interest. News coverage and what consumers hear from Oprah are principal sources of information for the general public.

Fortunately, for marketers a large category of news is about what is happening in the marketplace. Marketers of carbon footprint products need to promote stories that will make favorable news probably more than they need to do any other kind of traditional marketing.

The last point I want to make about the nature of effective marketing that applies quite directly to your enterprise is that consumers make use of several rules of thumb to separate helpful marketing that solves

their information search problem from promotional fluff that serves commercial purposes.

The first is that they are keen observers of the marketplace. When claims are ubiquitous in the marketplace, consumers tend to be confident that they have been vetted efficiently to be trusted without engaging in further vending on their own. There is nothing more reassuring about the legitimacy of a claim than the fact that everyone else takes it seriously.

Another important cue is that when marketing uses the same terms in a similar system of presentation or format to convey information, it signals to consumers that there is a consensus or maybe even a supervising entity involved that can reign in the promotional excesses of individual consumers. The consistent style and format in the nutrition facts panels is one of its greatest strengths. The importance of there appearing to be an underlying consensus or a supervising entity behind marketing claims explains why the demand for the FTC Green Guides arose as much from industry as it did from consumer advocates.

Consumers are greatly reassured by the appearance of consensus in the marketplace. Though they are not likely to care that much about whether it's due to regulation, scientific consensus or voluntary

self-regulation by marketers.

The reverse is also true. Lack of consensus and inconsistent marketing claims in terms of substance format and presentation signals that there may be ulterior motives at work and heightens the scrutiny that all marketing is likely to get. It is not unlike the phenomena observed by economists where bad money drives out good money. Consumers are much more likely to discount all marketing if there are inconsistent and confusing claims being made in the market place. It is hard to avoid the critique of being self-serving when marketing for one product contradicts the marketing for another.

In a world where marketing claims are likely to be subjected to critics from experts, competitors and consumer advocates, it's hard to see how effective marketing can be done without giving the impression that it is based on common assumptions and common definitions. I'll end there because I'm over.

(Applause.)

MS. HANN: Now, we have some time for questions for the panelists. The first is for Lori Bird. One of the issues with RECs, renewable energy certificates, is they are not tested for additionality. A way to address this, as a buyer, would be to buy RECs out of a scarce

RPS or renewable portfolio standard market. So, this questioner has two questions for you.

First, is this currently possible? And if yes, to what extent are compliance RECs sold in the voluntary market?

MR. NEWSOME: Lori, in addition to that question, if you could just give a brief -- you mentioned additionality for RECs, if you could just give us a brief overview of what that means.

MS. BIRD: The concept is, well, if you're buying RECs, are you actually supporting the development of new renewable energy sources or is it just coming from facilities that would have come online anyway or are already operating that might be cost effective? So, there's been quite a bit of debate about this in the last couple of years.

Well, first of all, there is some standard, at least the Green-e standard, does require an additionality test in the sense that they don't certify any renewable energy that would be used for an RPS policy. So, if it's used for compliance with an RPS, it cannot be again sold to consumers to get Green-e certification. So, there is that additionality test. The EPA Green Power Partnership also has that requirement. So, the market generally -- and I think that’s really the case, that there’s very

little double counting in that sense that occurs currently.

The new Green-e climate, I think we're going to hear more about that later. That new standard that's just emerging does include some additional additionality tests, pardon my use of those words. But there are some performance-based additionality tests that are in there as well for RECs that would be used as offsets.

So, that actually is emerging, there's a lot of discussion about how to do that for RECs that are used for offset purposes. But as I said, there has been this additionality between RECs that are used for policy and those that are used to supply voluntary markets for quite some time and the market pretty much operates that way.

What was the other part of the question? Oh, whether you can purchase a REC from an RPS market and basically tie that up. Yes, that certainly can occur. I think the issue there is that they're probably going to be higher-priced. The issue is, well, can you buy a REC that's eligible for RPS compliance? There's a lot of RECs that come out of Texas, but they have basically a surplus of RECs available and those are pretty low-cost. There's a lot of renewable energy generation in Texas because there's good wind resource there, and a lot of that is used to supply the voluntary market.

I guess really the question is, well, can you buy RECs from a market that's more constrained because there had been, in the northeast in particular, some of the RPS policies in place there are very stringent. The states haven't necessarily been able to even meet their RPS, and if you buy a REC from that region, it would certainly be driving new renewables. It's just going to cost more. But that's certainly available, it's already happening, and consumers can do that, you just have to find a marketer that's actually selling that.

MS. HANN: Great, thank you. Our next question is for Kate. Here is the question. Can you please tell us a bit about the companies selling these products -- and I assume they mean carbon offset products -- in terms of profit versus non-profit? Are individuals making heaps of money off of these products? What's the best source of this type of information for a consumer?

MS. HAMILTON: So, there are both non-profits and for-profits selling credits into the marketplace. And I don't think that it necessarily means that a for-profit is making more money or buying a cheaper credit and a non-profit is giving you a better deal than a for-profit. I think that in general the non-profit sometimes focus on more specific project types, the sort of charismatic carbon, a lot of the non-profits are doing

forestry, but that's not even completely true. So, it's a really interesting angle in this market that both non-profits and for-profits are selling.

And another interesting aspect of those is that sometimes with a non-profit you can get a tax deduction if you buy it, whereas with a for-profit you can't. So, right now, for consumers, that's something interesting to look at. I think as the market develops that will be something interesting coming out since what that influences is final price.

The second one is, are they making heaps of money?

MS. HANN: Yes, that's right.

MS. HAMILTON: I don't know if they're making heaps of money. I think that we were able to track market prices up the value chain. So, the average price for a project developer was significantly lower than -- I think around $3, I don't have it off the top of my head -- was significantly lower than the average selling price from a broker versus the average selling price of a wholesaler versus the average selling price of a retailer, which was about $8. Then the average in total was around $4. So, if you go up the supply chain you are looking at higher prices. You're also looking at the credits have been screened in each of these steps. So,

there are potentially benefits for the final consumers.

But I have seen very few open books from retailers saying this is how much we spent to do the project, this is how much money we profited, and this is what we're selling it to you at.

MS. HANN: Great. Thank you, Kate. And I have a question for Rebecca. You noted that the courts are moving towards a quote, "clarify if you can," end quote, standard rather than suppressing commercial speech. Can you please give an example of this approach?

MS. TUSHNET: Actually, the Supreme Court has done this most with lawyer advertising, I think, because it feels fairly confident in assessing lawyer marketing messages since they're all lawyers. I actually think this is a mistake since they're lawyers, not consumers of lawyer services, but this is their belief anyway. So, the cases are about whether lawyers can advertise themselves as specialists or not. And the ruling is that saying that you're certified say in some particular specialty is not inherently misleading, so if you can clarify exactly what that means, you can say it, even if the bar would prefer not to allow you to advertise that specialty at all.

MS. HANN: Great. Thank you, Rebecca. I have a question for Alan. Alan, you mentioned that there's an

information disconnect or just lack of information for consumers. Could you give a sense of what kind of information in general consumers would need to obtain about a new product in order to pass the legitimacy screen and, therefore, feel that these products are actually credible?

MR. LEVY: This is why I think you have to do consumer research and you have to identify what the current state of understanding and knowledge is because I'm pretty positive that as consumers learn more about these markets, one of the important effects is that new issues are going to be raised in their minds about the legitimacy of the claims. And the more they know, the more they will know what kinds of questions need to be asked and answered. So, it's going to depend a lot on what the current state of understanding is in the population and how much they know about these things. And I assume that what constitutes legitimate claims is going to change as people become more knowledgeable.

MR. NEWSOME: Alan, just to follow up. I'm Hampton Newsome from the FTC. Could you give us just in a nutshell description of the type of consumer research that's generally done, just kind of the nuts and bolts of how these types of projects are accomplished, how are they set up and how you go about it?

MR. LEVY: Well, usually there's several phases. You typically talk to consumers in focus groups and qualitative settings and get some idea about what their general level of understanding is, what they think is important and relevant and what they consider to be new information. Then you would go to the general population and do some kind of surveying and get sort of quantitative estimates of how much people know about specific issues and what their attitudes are and what their practices are, what kinds of things they're doing.

Finally, and the most important thing, is that when you actually come up with an approach of how you want to talk about your product or market your product, you test it, and you test it in quasi experimental type settings where you give it to people and have them critique it and see how it works. So, you do that in sort of several phases to get an understanding of what the consumer knows and what's going to work.

MS. HANN: Great. Thank you, Alan. We have another question for Lori regarding RECs. In a voluntary market, what happens to the money paid by a household to buy these RECs? Who gets it and what do they do with it?

MS. BIRD: I guess there's variability. Similar to the question that Kate answered, we don't exactly get the information wholesale about what the

actual project is getting. But I think I did give some numbers about prices and so forth and I do hear some of the folks that own the renewable energy projects, what they're getting for their RECs. And they're pretty close, those wholesale prices that I provided, it's pretty much in that range, pretty close. So, I think that gives you some indication of the prices that we're talking about.

What they do with the money, there's variability there. There are a couple of non-profit organizations and some of the utilities promise that they'll take a certain amount of the money and invest it in new renewable energy facilities. Others make no promises to that effect. So, there's a lot of variability, I think, in the marketplace and some are just making profit off that.

MS. HANN: Terrific, thank you. We're running out of time, actually. I have one final question for all of the panelists, and here it is. Is there any ongoing research to look at the types of claims being made about these products and also consumer interpretation of them?

MR. LEVY: I'm not familiar with anything.

MS. TUSHNET: I don't know of anything about carbon offsets. I did want to actually give you an example of something where -- so, Lexmark advertises that

it recycles cartridges that are returned to it. Actually, it thermally recycles them. What that means is it turns them into ash. And they did a bunch of focus groups on what people thought it meant, and people generally did not think that it meant incinerating them. They thought that there was going to be something to do with trees. So, this is an example of a company doing market research that really didn't help it any because now it's subject to a false advertising claim by a competitor.

So, right now, the take-away is that this is very sporadic and likely to be embedded in other marketing initiatives as companies try and test what works for them most specifically, and a lot of it is going to be proprietary. So, if this research is going to happen, it is going to have to be led by public interest groups or by the government.

MS. BIRD: I'm not aware of any specific research in that. Our research is really focused on the growth in the market and so forth.

MS. HAMILTON: I think the main area that's connected with looking at claims versus carbon offset projects is really again coming up with standards and that each standard is again for different areas of the supply chain. One is for project developers and saying,

okay, are you doing what you're saying, and then to the very end of a carbon neutral product and is this product actually carbon neutral, has it actually measured its emissions, have they tried to reduce their emissions first and now are they getting appropriate offsets that maybe have faced the standard from the project development side? So, I think that's a big thing.

And, in particular, the UK is looking at that from a government viewpoint as well. Just an interesting note.

MS. HANN: Well, thank you very much. This ends our first session. It's 10:55. We're taking a break until 11:10. Thank you.

(Applause.)

SESSION 2: PROPERTY RIGHTS AND PRODUCT DEVELOPMENT - ECONOMIC ANALYSIS

MR. HILGER: We're starting Session 2 on Property Rights and Product Development: An Economic Analysis of Carbon Offsets and RECs. We have two speakers. Matthew Kotchen, who is an Assistant Professor at the University of California Santa Barbara and the Brent School of Science and Management and also a Fellow at the National Bureau of Economic Research. He will be talking about the market from an economic perspective.

That will be followed by a talk from Carolyn Fischer who is at Resources for the Future, and she will be talking about carbon offsets and additionality issues.

Matt.

MS. PAPPALARDO: Before we get started, we also want to mention that the slides will be available on our website. So, if you're concerned about not catching all the details right now, you'll be able to get them off the web.

MR. KOTCHEN: Well, I'd like to start by thanking you all for inviting me to come and give this presentation. As an academic, you travel around a lot and talk to other professors and it's a real treat to come here and talk to both academic researchers, but also people who are really actively involved in the markets

that I study. So, it's sort of a bit of a reality check. I think I'm going to find out if I really know what I'm talking about here a little bit.

When I was invited to come to give a presentation at the workshop, I have to say, this isn't exactly what I envisioned. There's a lot of folks here and it's also exciting in that respect as well. If I had known, I might have added a little more color to my slides.

But the title of my presentation is an Economic Perspective on the Market for Voluntary Carbon Offsets. And I took the aim of what I was going to try to accomplish in the brief amount of time that I have to speak to think about how would you perceive these markets or how would you think about these from the perspective of economic theory with a particular emphasis of what you can learn from applying an economic theoretic perspective to these markets.

So, that sets up this general outline that I have of the presentation which is the first thing that I want to convey is the idea that from an economic theory perspective, you can think of these markets for voluntary carbon offsets as an example of private provision of public goods. But then I found this is not completely satisfactory to explain the trends that we're seeing in

this market, so then it led me to thinking about it's really a market for an impure public good, so I hope to provide a brief introduction to an impure public good interpretation.

And then some of the work that I've been doing recently, I've kind of then realized that, well, it's not even just impure public goods, it's really a market for providing a public good for a bad. And this is the sense in which I think that the market for carbon offsets actually generates some new questions that both have applied, and practical importance, but also have some questions for us economists to think about as well because they're new questions and I don't think there's existing models out there for necessarily characterizing and making predictions for this market.

Another thing that's come up in the earlier session quite a bit that I felt I need to mention is just the idea of asymmetric information in third parties. As I was thinking about this before my presentation, I came across some data. So, then, Point 5 here is I'm actually going to provide a little bit of original empirical analysis that I hope will provide some insight and help influence some of the things that we're talking about here today, and then I'll close with some final thoughts.

So, when thinking about the market for

voluntary carbon offsets, the first thing that comes to mind for an economist is public goods. So, Econ 101 here, what are public goods? Well, there's two defining characteristics. The first is so called non-excludability. What this means is that no one can be prevented from enjoying the benefits of a good once the good is actually provided.

The other is so-called non-rivalry which is one individual's enjoyment of a good does not diminish any other's ability to enjoy the good.

So, the immediate thing that jumps out at you is that the market for -- or CO2 emission reductions in general are public goods. And why? Well, you could think about the reason for CO2 reductions is a more, let's say, stable climate and it turns out that you can't prevent anybody from enjoying a more stable climate once you have it and, also, one person's enjoyment of a more stable climate doesn't diminish any other's ability to enjoy a stable climate once it's provided.

So, where does this leave us with the market for voluntary carbon offsets? Well, offsets are an example of privately provided public goods, which is another way of saying it's a market for voluntary provision of public goods. Another way of thinking about that is generally it's some sort of a charitable activity

where people actually reach into their pockets and incur a private cost in order to provide a public benefit.

There's a whole host -- in fact, I would say one of the more celebrated results of at least public economics is the fact that when you leave the provision of public goods up to private provision or voluntary provision, you end up with underprovision or inefficiently low level of the public good.

Why does this arise? Well, there's two incentives that are at play. The typical one that's mentioned is that of free riding, which is why would you provide the public good when you can enjoy the benefits that are provided from somebody else? You have an incentive to free ride.

Another thing, which I think may be at play in a way in terms of the market for voluntary carbon offsets, is you're too small. Any one individual who purchases a carbon offset, I mean, let's get real here for a second, it isn't actually going to have a real meaningful impact on reducing global CO2 emissions and, therefore, providing a more stable climate.

So, what I think of here and the way that I think about this is that the market for voluntary offsets warrants attention, but it's not attention as a primary mechanism or policy intervention for addressing climate

change. This is a charitable sector that we're talking here, but it is true, as we saw earlier, that this market is growing. The estimate that we were given was it's $91 million in 2006. So, the financial commitment that people are making in these markets is substantial. I think it really warrants our attention for that purpose, and in addition to what we're actually getting for that money, but not as a viable policy mechanism in order for addressing climate change.

So, we've got a market for private provision of public goods. But how do we explain -- in some sense you could think of as anyone who purchases a voluntary offset from a real economics perspective, it's kind of a curious behavior because the effect that you have on the problem is so small. So, why do people actually do this?

So, what it leads me to think of is another strain of the literature called impure public goods or offsets as impure public goods. Here, the idea is that there's joint production of both a private and a public characteristic.

So, what I mean by that, let's take this example of voluntary carbon offsets. The public characteristic of an offset when somebody purchases it is the emission reductions that I just talked about, that is both non-rival and non-excludable.

But what can we think of as the private benefits of purchasing a voluntary offset? Well, some of the terms that are floating around in the literature are warm glow. You simply get a warm glow or you feel good from actually purchasing one of these offsets.

Another one is social approval. Maybe you hang in social networks where people say, well, there's this personal norm that you should be doing your part. So, you get social approval or recognition from your peer group for doing something good. Maybe there's also signaling. So, people signal about their income or signal that you are a good person. Somebody told me recently how you notice that when you see the Toyota Prius on the road, you never see bumper stickers on the Toyota Prius, and the reason is that the whole car is a bumper sticker. You're doing your part for the planet. Well, you also are increasingly seeing decals on cars for people buying carbon offsets and they're so-called driving neutral.

Oftentimes, when you think about people who donate to like National Public Radio, you get a free t-shirt or you get a mug or you get theater tickets. Companies certainly get corporate social responsibility benefits. Rarely do companies, when they're carbon neutral or rock-and-roll banks or the NFL or even NASCAR,

which I learned today, they advertise this claim and get some benefits that they're actually good citizens.

So, in a sense, you could think of these private or joint products, these private benefits, in some ways as subsidizing provision of the public good. People are buying this joint product.

But is it just that? Is that sufficient to sort of reconcile what we're seeing in the market for carbon offsets with economic theory? I think the answer is still no. So, when I purchased my ticket to come to Washington, I purchased it on Travelocity, and I would say within 15 minutes I got an email from them that said I can effectively offset the negative environmental impact of my entire trip, I can go without guilt, I can go zero, and they were willing to sell me a carbon offset for my air travel.

On another site, drivinggreen.com, they say everyone can effectively fight global warming by offsetting the greenhouse gas emissions, they are responsible for essentially erasing their carbon footprint and undoing the damage. So, in a sense, you could think back to this idea of warm glow. People are buying a joint product for the reasons I've just said. But, here, there's something else going on. People are doing something bad, so this market is also being driven

by let's offset that bad. That's probably intuitive to many of us in this room, but it turns out that that has implications for it's not just charitable activities, where when everybody buys or makes a contribution it's going to have a positive effect. That's not necessarily the case in terms of carbon offsets.

So, offsets or carbon offsets are a private provision of a public good for a bad. And in a sense, what this means is that there's a direct linkage to other activity, say driving, which is the example that I have been using. So, there's new questions for both theoretical study and empirical study that relate to the explicit link between the purchase of offset behavior and this private good behavior that arises as well.

So, there are many people who are skeptical of carbon offsets and they say, well, even if I bought that offset for my trip here on Travelocity, well, I wasn't going to take -- maybe I wouldn't have taken this trip if I didn't have that opportunity to buy that offset. So, is there actually a beneficial effect? It's possible that people substitute and buy more gas-guzzling cars when they can actually purchase an offset.

So, the relationship between availability of the offset market and these other markets become very important for whether or not we think about these,

whether or not there are going to be benefits associated with these markets, and it's very related to the question of additionality, which Carolyn is going to talk about after me.

So, what's going on out there in terms of research in this area? Well, I have a paper and Joshua Gans. His has a much more clever title, which is Carbon Offsets in an Economy with Guilt-Ridden Consumers, and he generates a bunch of predictions about under what circumstances will it have a beneficial effect on the environment and will it not have a beneficial effect on the environment, which, of course, is very important to people who purchase these and that question is important to many of us here in this room.

In terms of empirical evidence, well, Terrapass conducts a survey which the results and some of it is discussed on their webpage, where they did a survey of people that purchased their offsets. And they show that these people, compared to the general population, actually tend to live a more greener, less carbon intensive lifestyle. So, the pitch there is that maybe these people aren't purchasing these offsets in order to live a more carbon intensive lifestyle, maybe they're actually having a beneficial effect on environmental quality. So, these skeptics don't have to be so

skeptical about what's going on.

As an academic researcher, I think that this is suggestive, but it’s certainly not conclusive. What we don't want to do is compare the people who purchase the offsets to the people who don't purchase the offsets. We want to know what Terrapass purchasers would have done if they didn't purchase an offset. But, of course, this counterfactual doesn't exist and is difficult from a research perspective.

So, trying to get at this, some research that I’ve been working on with Michael Moore at the University of Michigan, we looked at households that are members of environmental organizations in terms of their electricity consumption. We found that households that have a head of husband hold that actually have purchased a carbon -- that are members of an environmental organization actually consume significantly less electricity and where the opportunity to purchase renewable energy their electricity consumption does not increase.

So, that was one minute left? I missed that second five-minute -- can I buy an offset and get a little more time?

The other thing I just want to mention here, I can get through this really quick, is the idea of information, asymmetric information which is very

important in third parties. I'm going to jump to my results, but I found a website that actually lists a lot of information on 66 different providers on 180 different projects.

So, what I did is I tried to do a little economic detective work here and figure out what I could learn about the data that's actually out there, even though there's not a lot. You can look through these descriptive statistics online, if you like, and I've got the slides, but basically what I did is I looked up prices. So, this is a distribution of the different prices for the offsets and you can see that it's amazingly uniform. Of the 66 different providers, the prices range from about $43 down to $3 and there's about one at each price. So, if you want to buy an offset, pick your price and there's someone out there online who you can buy your offset from.

But what explains these prices? Well, what I did is I estimated -- as an economist I'm interested in prices and I estimated a regression model and I tried to explain -- I tried to come up with variables that explain differences in these prices and I'll jump right to the results here. It turns out that the offsets in North America are about 53 percent less, these are statistically significant results, in Australasia than

they are in Europe. So, they're much cheaper. There's no statistically significant effects getting at what we were talking about before where the number of projects that are not-for-profit or for-profit status, there's no significant difference in prices.

But what's very interesting in the context of the charge here in this workshop is that those that had formal certification actually charged the 47 percent higher price for the offset for the equivalent amount of offsets.

So, what's going on here? I sort of pose the question out here because this is very preliminary. As an economist, it seems you could say, well, those that are getting certification are actually doing something that makes it more costly for them, or you could say that actually just having that certification enables them to get a higher-priced premium from consumers. So, maybe we could talk about that a little later.

But my general conclusions here are that it takes both existing and new theory from an economics perspective to understand what's going on in this offset market. Asymmetric information is an important thing that's going on and there seems to be some observable differences in these prices, which we can explain with things that may have real relevance for thinking about

the future of third party certification information provision and even the role of the FTC in getting involved in these markets. Thank you.

(Applause.)

MR. HILGER: Thank you very much, Matthew. And, again, all of these slides are available on the conference website. So, if you want to look at his analysis and there are citations to his research.

Also, if you have any questions, there are question cards floating around the audience or you could raise your hand and get one and it will be collected and then you'll have a chance to ask your questions.

Next will be Carolyn Fischer on RECs for carbon offsets and additionality. Carolyn, thank you.

MS. FISCHER: Thanks, and I'm very glad to be here and excited to see such a good turnout for discussing these issues. I'm with Resources for the Future. For those not familiar with RFF, we're an independent non-profit research institute focused on environmental and natural resource policy issues. We have been around for over 50 years trying to improve policymaking.

Now, I'm going to focus not just on carbon offsets, but specifically on using RECs for carbon offsets, and kind of question to what extent are these

things interchangeable? A fundamental point to make is that we have two different kinds of policies. We've got a set of policies to promote renewable energy and a set of potential policies to reduce greenhouse gas emissions. They're different policies with different rationales, but to some extent they do support kind of twin goals.

So, we have renewable generation policies that are there to support the innovation and diffusion and promote the scale economies that we need to make these technologies viable in the marketplace, but as a byproduct from that, by expanding renewable energy to some extent we do get greenhouse gas reductions.

On the other hand, we have greenhouse gas policies, like emissions trading programs like we have in Europe, and they're setting up in some states in the Regional Greenhouse Gas Initiative and in California. These programs are designed to reduce greenhouse gas emissions preferably by any means that are cost effective. That's why we're looking towards market-based mechanisms like emissions trading, so that it's cost effective.

Well, a byproduct of these policies is by making fossil fuel technologies more expensive, they're going to make renewable energy more competitive. So, we get a boost in renewable energy as a byproduct to these

policies.

So, you have both policies get you some of both, but they really have different emphasis and the credits associated with each policy are going to mean slightly different things.

It's also important to take account of the policy context for renewable generation. It's not just RECs. We've got a lot of other policies supporting renewable energy out there, federal tax credits, loans, a lot of states we've seen have renewable portfolio standards, other incentives, too. We've got voluntary programs and then RECs. These RECs, themselves, have multiple uses. One is compliance with different RPS programs, renewable portfolio standards for complying with retail green power offerings that utilities provide for consumers to offset their power purchases if they want to and, potentially, to offset things other than power like greenhouse gases.

So, this is kind of the key question and the role of voluntary offsets. So, in the absence of mandatory nationwide greenhouse gas policy, to what extent can these voluntary programs for renewable energy reduce our greenhouse gas emissions? That's kind of the key question I'm going to focus on.

For doing this, then you have to calculate what

are the offsets, what are the greenhouse gas reductions that we're getting from our RECs? And it's just like any offset program really, it requires comparison to a baseline counterfactual of what emissions you would be getting in the absence of these credits. And this requires, typically, a project-specific methodology like we have in the clean development mechanism as part of Kyoto protocol, which a lot of European countries are focused on.

So, there's been a lot of effort put in to improving the methodologies for this. But, basically, you have to forecast what your generation emissions would have been in the absence of this project and then, hopefully, after the project goes through, you observe the actual generation in emissions, you compare them to this baseline, you have monitoring verification and also verification of the methodology, and then you issue the credits.

But there are a lot of difficulties with any form of offset program because it's voluntary. So, when people aren't forced to comply with a greenhouse gas reductions regulation, they're joining the program because they want to. We don't necessarily know why they want to do that. We can't observe the counterfactual of what would happen in the absence of this project if it

doesn't go through. You observe one or the other.

One of the problems is, as Matt mentioned, asymmetric information. You have that problem here, too, in figuring out additionality because the investors who are intending to go through with the renewable energy policy, they have a lot better information about what they were going to do in the absence of getting these REC credits than you do or than a third party verifier does.

So, these offset programs tend to attract a lot of people that would have done it anyway because it's an extra bonus for them, and then they also track some people who wouldn't have done it anyway because there's sufficient extra return generated by the credits and it makes it worth their while. It's difficult to distinguish between these two. So, the general tendency in these kinds of project-based offset programs is to overallocate.

In the case of RECs, you kind of have to think through of how you would do this. You have two components that you need to worry about because these aren't projects that directly reduce emissions. You have, first of all, the question of is the renewable energy itself additional? So, would it not have been generated otherwise but for the credits? And then what emissions does this particular project display? What's

the conversion rate for this project? It's going to depend on what the generation mix is in the selling area. And, also, I'm going to argue whether the area has a greenhouse gas emissions cap or not, which is becoming relevant quickly.

Now, one of the problems in determining additionality of the renewable energy is that RECs really aren't designed to certify additionality. They're designed to certify renewable generation. And you can see this in some renewable portfolio standard systems, they include pre-existing renewables, especially hydro-electricity to allow for a larger percentage. Maybe you have noticed on the map, Maine has a huge RPS standard, it's 40 percent. Well, that includes hydro and that's where they get most of it and they actually have relatively low prices. Massachusetts has a 4 percent standard, but it actually turns out to be one of the strictest RPS standards because it's for new renewables in Massachusetts and it narrows that category.

So, those things mean very different things in terms of the stringency, but it actually -- the additionality part doesn't matter so much for the RPS because states can choose to incorporate whatever baseline renewable energy is in there into their targets when they're setting the stringency and, basically,

whether you include that or not, it serves as a transfer to those firms that are generating already. But it doesn't affect the efficiency of the program or the incentives. What does that is the effective stringency including that baseline, otherwise it's just a transfer within the system.

But additionality really does matter for offsets because if you're trying to get for carbon reductions as opposed to just you want to promote a certain share of renewable energy in your portfolio or promote renewable energy in general, it matters because you're granting these offsets to entities outside carbon regulation that are expecting some carbon reductions.

There's some additional issues like are the RECs themselves additional, can they not resell them? I think other people have addressed this. My sense is that that’s not really a problem. Most RPS systems have provisions to ensure that there isn't double counting.

There's also a question of accuracy. Are the RECs being allocated for installed capacity or for actual generation? This can matter because there's a lot of variability in renewable energy and it varies along the peak load profile, so you may be displacing different things across the peak load profile. Some of these are sort of ideas of are you displacing energy in fossil

fuels in the short run or the long run?

Regarding the conversion rate, there are complications because what you really want to know is, okay, so you've established that we have some additional renewable energy. What is it offsetting? So, what you want to know is not what the average emissions rate per kilowatt hour is in the country or even in that region, you actually want to know what is the marginal source of generation in that area where the renewable provider is serving. And you can see that we have very different emission rates depending on whether that's natural gas or coal or hydro or energy efficiency. So that would be if prices fall, then you get less energy efficiency.

So, what is the marginal source that is being replaced by additional renewable energy? And you can see it varies a lot by region, and this can also vary over the peak load profile. So, if you're assuming that it's displacing coal-fired electricity, that gets you a lot more offsets than if it's actually from natural gas, which is often the marginal source. But just to see the disparity, again, these are average and not marginal, I couldn't find those, I borrowed this from an EPA presentation from folks that run the EGRID model, which is often used to do these kinds of calculations. So, there's a really wide disparity of average emissions

rates around the country and then, presumably, also marginal.

There's an important role served by regional greenhouse gas policy, too. It starts to matter where your RECs come from. If they're coming from regions that have a greenhouse gas cap as is developing -- for now if you bought them from Europe especially. I'm going backwards.

So, if you're buying it from areas like the west that don't have a greenhouse gas emissions cap, then these can represent real offsets, subject to what I was talking about, the challenges of actually calculating what the offsets are. But if you're buying it from someplace that has the cap like some of the states that are in the northeast that are thinking about it, then the effect on total greenhouse gas emissions is going to be zero. So, you're buying a REC from Europe that enables more renewable energy, that enables electricity sector to meet its greenhouse gas emissions target more cost efficiently, so they can sell some emissions permits to someone else and the price and quantities will equilibrate, so you end up with the same amount of emissions, so you get no offsets in that case. Depending on how you account for leakage, that's really complicated.

There's also a certain role in interactions with regional RPS policies because you're kind of in competition for some of the same things, for same RECs. So, if you're using RECs from regions again without the RPS, this is going to provide additional subsidy to renewables. So, that's going to crowd out fossil fuel generation to some extent, but it's going to tend to lower generation costs and thereby typically prices and there's also less incentive to conserve. Some of that will end up as a demand impact. Whereas using RECs from regions with the RPS, that’s going to tend to drive up the prices, crowd out fossil generation and maybe crowd in a little bit of conservation.

There are additional regional issues in that because if these voluntary markets develop at such a scale to influence the markets, you can see kind of overlapping impacts on these other programs and also recognize that you're going to need the cooperation of all these jurisdictions not to change their targets in response to ensure that compliance and to coordinate with their greenhouse gas policies.

So, in conclusion, in areas without greenhouse gas caps, voluntary purchases of additional renewable energy can lead to greenhouse gas emissions reductions. But the calculations are really difficult and they're

source-specific, and the current RECs are not designed for this, they're designed to certify renewable generation, renewable generation of specific types as well because RPS policies differ on what type of renewables they allow. But it seems like we need something like RECs plus that would certify these additional attributes. They're not set up to certify carbon displacement attributes. They're much better at certifying renewable generation.

It's also important to recognize kind of in the long run that demand for offsets overlaps with REC demand created by all these other policies and programs and, ultimately, we should really be thinking of this as a transitional policy because once we get a greenhouse gas cap, then these kind of voluntary offsets are moved, or other than going abroad and looking for offsets in developing countries that don't have emissions caps or then you've also then got your ultimate offset. You can buy an emissions permit and yourself kind of shrink that cap.

In fact, that's what we're doing at a conference this summer a colleague of mine is organizing. He's decided he doesn't believe in offsets and, so, he's buying European ETS permits for it to offset. So, thank you.

(Applause.)

MR. HILGER: Thank you very much, Carolyn.

MS. PAPPALARDO: We have lots of interesting questions coming in. The first one I already shared with Matt. What was Matt going to say on the asymmetric information slide that he largely skipped?

MR. KOTCHEN: Well, let's make it not asymmetric information here in the sense that I know it and you don't. So, what I was going to say is asymmetric information provides an opportunity for third parties. So, asymmetric information which the idea was the basis for the 2001 Nobel prize in economics is that when one party in a transaction has more information than another, and this is a concern in the market for carbon offsets because it means that there could be some -- the sellers may not deliver on what they're saying, but also consumers may get discouraged because they don't believe the claims that are actually being made, which is relevant for here, what we're talking about here.

So, third parties can set standards and certify, these can come from governmental agencies or NOGS. But another area where it's sort of happening, which is where I got the data for some of the conclusions that I showed, were just third parties that are just out there to provide information, where they just list and

you can go to their website and find out different characteristics of these providers and make your choice that way. So, it sort of provides an opportunity for third parties and we already see evidence that they're starting to fill those niches.

MS. PAPPALARDO: Great. Another question for Matt. Why isn't the carbon market global? If it is, why doesn't the law of one price apply? Are offsets differentiated products?

MR. KOTCHEN: So, I think that was an isn't, just to be clear, right? Why isn't?

MS. PAPPALARDO: Why doesn’t?

MR. KOTCHEN: So, I think that that's -- I totally agree, which is why I think it's so curious that you see such variation in prices out there. A ton of CO2 emitted into the atmosphere, it doesn't matter where it comes from, so if you want to buy an offset, you could buy an offset that’s based in Australia, in Europe, Africa or the U.S. That is, of course, unless you're buying a joint product and you actually care about where that offset is. So, you may actually believe that if the emissions happens in the U.S. that the offset should occur in the U.S. And if that's the case maybe there would be differences in prices.

MR. HILGER: Next, an open question for both

of you. Are the limitations of public benefits -- more Matt. Are the limitations of public benefits, you discussed the example free riding, minimized or eliminated when companies purchase the offset for an advertising purpose and then sell their goods at competitive prices?

MR. KOTCHEN: That is related to a lot of the research that's being done in sort of the literature of corporate social responsibility. If it's more costly for companies to buy offsets and then they go out and their costs are then higher and they compete in a market where they're just competing on price does not eliminate the incentive. That would be true, again, unless there's differentiated products where people are actually willing to pay a price premium for this other information, then, in fact, it could be sustained. But at least the economic theory would say that if it's more costly for companies to do this and then nobody cares about it, then they would be competing in the market and that may be true. But it also raises the question of whether or not the carbon offset market really is competitive now or not.

MS. PAPPALARDO: We have a question for Carolyn. Can you comment on recent Green-e climate standards? Does it address concerns you highlighted

effectively, in your opinion?

MS. FISCHER: I guess I'm not quite familiar enough with the specifics of the Green-e standards. I was looking over some of their requirements and they do seem to make an effort to calculate these things. But it's a very difficult and complex procedure and I'm not sure how well anyone can really get at the additionality questions of the renewable energy, and then also the marginal, whether they do average emissions displaced or really marginal which is what you would want.

MS. PAPPALARDO: I think the next question probably follows on to your comment. Given the difficulty in ensuring RECs offset GHGs, would you recommend a moratorium on calling RECs offsets?

MS. FISCHER: I did notice in some places that some people hesitate to make a claim in terms of the carbon offsets for RECs and you can choose to buy RECs for renewable energy or you can choose to buy offsets. I'm very comfortable with those kinds of claims. And I think the methodology needs to be considered and standardized across products to feel confident in the claims of RECs as carbon offsets.

MR. HILGER: The next question, the discussion assumes that the offset or credit must drive additional value for the low or zero greenhouse gas emission

attribute. This may not be the most important value to the provider. It might be the long term power purchasing agreements that help finance a new project that would not be developed otherwise, additionality. What are your opinions?

MS. FISCHER: Again, that's similar to my last answer that there are a lot of reasons why people want to buy green power, and it's not just carbon, it's also to promote the technology, you get other air quality -- local air quality benefits from shifting towards renewable energy from other sources, at least wind and solar. So, again, I'm a lot more comfortable with considering RECs for what they are in terms of representing renewable energy and there are additional values to that that some people might place on it, compared to just carbon offsets.

MR. HILGER: Does the design of cap and trade programs determine whether RECs affect CO2 emission levels?

MS. FISCHER: The key feature is the cap, that emissions are fixed. If we had a carbon tax instead, then the answer would change because you have a fixed price. The purchasing of the REC isn't going to change the emissions price and thereby the incentives for everybody else in the market to reduce their emissions.

But by the fact that you have a cap and then you have an endogenous, a market-determined price for those emissions reductions, then you're always going to be meeting the cap. So, that's the key design feature that matters.

MS. PAPPALARDO: Thank you. One generic question that we have is, how do the challenges differ with offsets that come bundled with other products like snacks or vehicles versus offsets solo?

MS. FISCHER: Do you want to take this?

MR. KOTCHEN: I guess the question then about how it affects the other behavior becomes a little bit more constrained. So, if you think about individuals making choices about what car to drive versus buying an offset or not their vehicle choice, but then certain vehicles come along with automatic offsets. I guess it’s sort of interesting, some vehicles come with like a year free of gas. I wouldn't be surprised if we get vehicles coming now with a year of carbon offsets along with them, and then it sort of depends upon the price. How that affects the price and the outside option that individuals could actually make these decisions and decouple them on their own. So, it sort of makes another option in terms of how those behaviors would interact or the substitutability between them.

MR. HILGER: What economic insights should

regulators keep in mind when they evaluate substantiation for claims that an offset project actually reduces carbon emissions? And let me preface that by when one is buying a carbon offset, what exactly is one purchasing?

MR. KOTCHEN: That is a good question. I don't necessarily have the answer. There's lots of people here who are working and would probably give better insight into that I would guess later in the day. But one thing that comes about are these third parties that are providing information where a lot of the criteria that they have are a transparency of what's going on and whether or not companies are actually providing it when people purchase the offset.

So, I think that that's going to become increasingly important about whether or not it's based on energy production, whether or not it's based on avoided deforestation, whether or not it's based on any low till agriculture, lots of different types of things that could come about.

So, I think that you can find some of this out on some of these third party websites that are out there and we're actually working with this data set now, but I can't answer that really generally yet.

MS. PAPPALARDO: One general question that arises is that there's scientific uncertainty and

certainly about new product, a lot of uncertainty about how the market is developing in this area. Marketing claims for products involving uncertainty of facts raise difficult regulatory questions. One question to consider is the trade-off between Type 1 and Type 2 regulatory errors. That is a trade-off between allowing claims that eventually turn out to be harmful versus prohibiting claims that would have been beneficial.

Given your analysis of the market, what are the risks associated with both types of errors and how serious are they?

MS. FISCHER: Okay. Well, I can never remember which is the Type 1 or 2 and, apparently, it's backwards here. So, let's just break it down into the risk of allowing untrue claims. So, this is the risk first that consumers aren't going to be getting what they expect. They're going to be wasting money. Also, if those consumers are -- these are actually offsets allowed in a greenhouse gas emission system, then you're risking expanding the cap and not getting the full reductions that you expected, as opposed to reductions outside the cap, you're going to get some.

In the case if it's a regulated entity within a cap, you're actually going to increase emissions because if they're not getting the full offset, the full carbon

reductions from their offsets, that's allowing them to emit more under the cap, then you're effectively expanding the cap. So, that's an important risk there.

And I think that's also perhaps one of the explanations why credits seem to be more expensive in Europe. They might have tighter standards if these are mechanisms that allow them to offset their greenhouse gas liability under the ETS.

And then the risk is that if you have a lot of these in the market and they're cheaper to provide, less legitimate offsets than fully legitimate offsets, then you're going to tend to crowd out the legitimate products, you're going to drive down the price and make these other options uneconomic, and to the extent that you undermine confidence in the whole system, that's going to drive down the price and reinforce this effect more. So, I see risks on that side.

The risk of prohibiting claims that are actually true, then you're going to stifle that market, you're going to potentially limit legitimate opportunities and, so, there's a question there. I don't know that I have a good sense of how large one is relative to the other.

MS. PAPPALARDO: Well, thank you so much. We

had lots of questions, lots to think about. Thank you very much.

(Applause.)

SESSION 3: TECHNICAL SUBSTANTIATION ISSUES

MR. NEWSOME: Welcome back, everybody. I'm Hampton Newsome from the FTC. This is Session 3. During this session, we're going to talk about technical substantiation issues. I think we have got a great panel here.

As we discussed this morning, substantiation is a key concept under FTC's consumer protection law. And in the area of offsets and RECs, things can get complicated. There are lots of moving parts. There are questions you have to answer, how do you determine your greenhouse gas emissions from everyday activities? If you're using that as part of your claims to figure out what the average consumer -- how much their activities are creating.

Other questions, how do you calculate the emission reductions from your offset activities? Also, another important question is, how do you track offsets and credits and renewable energy certificates and how do you verify that they're not being double counted? That's another important question.

So, we have four people that are very involved in these types of activities, very knowledgeable, and they're going to walk through some of these issues with us.

To begin with, we've got Derick Broekhoff from World Resources Institute. He helps direct the greenhouse gas protocol team there. And then after that we'll have Jim Sullivan, who is Director of EPA's Climate Leaders Program. And then Maurice LeFranc from EPA, and he's in the Climate Change Division of the Office of Atmospheric Programs. And we'll wrap with Ed Holt, who's a consultant with extensive experience in the REC market. He's prepared many reports for DOE and worked on these issues.

So, let's start off with Derik, come on up, and we'll get going.

MR. BROEKHOFF: Thanks, Hampton. So, I'm going to start off the panel today by introducing some of the basic technical requirements of carbon offset accounting, by which I mean the quantification of emission reductions associated with carbon offsets. A key point I want to make is that there are some commonly accepted protocols and procedures for quantifying carbon offset reductions. At the same time, there's not necessarily one right way to do that quantification.

To do that you need standards or standardized methodologies, and we don't have those for large segments of the voluntary carbon offset market today. I think that's a key point to keep in mind when we're examining

questions about the veracity or credibility of different marketing claims.

Just to start off, if you're talking about carbon offset standards, I want to be clear that you really are talking about, in my opinion, three different related parts of the equation to a carbon offset standard. I'm just going to talk about the accounting part. But you'll generally see, I think, five or six different broad criteria that offsets need to meet in order to be credible. They need to be real, surplus, permanent, verifiable, and enforceable or some variation on those criteria.

You see those quite a lot. People tend to agree on them. Of course, the devil is in the details in terms of how you elaborate and specify what those criteria mean. In order to do that, you need these three sets of standards, the accounting standards that I'm going to talk about, but also monitoring and verification standards and tracking and contractual standards registries and whatnot to avoid double discounting and double selling, things like that.

So, some others here will address some of those other components, I'm just going to talk about the accounting side today. Much of what I'm going to present here is based on the work that my institute has done on

the Greenhouse Gas Protocol Initiative. Many of you may be familiar with it. This is a now ten-year-old initiative, a joint initiative between WRI and the World Business Council for Sustainable Development to develop greenhouse accounting standards for businesses to use, developed through a transparent and multi-stakeholder process involving businesses, NGOs and government representatives.

There's two components to the GHG protocol. One concerns corporate inventories, that is how you determine the emissions that your company or organization is responsible for. The second is a module devoted to GHG projects that is quantifying emission reductions associated with specific projects, offset projects in particular.

If you're familiar with the GHG protocol, you're probably familiar with the corporate side of things. I'll quickly talk about that. Basically, the corporate side is concerned with inventorying the emissions, determining the emissions that you need to reduce or offset if you're looking at offsets. Without going into a lot of detail, it specifies the different categories that you put those emissions into and separates them by the direct emissions from sources that you own or control and indirect emissions from different

sources including purchased electricity.

Now, we can come back to this slide, there's some discussion can carbon offsets count against you or direct emissions or your indirect emissions, what should you count them against? There's some further questions we can go into there.

But I'm going to jump right into the project accounting side of things. Basically, the project, the GHG protocol project module concerns how to quantify greenhouse gas emission reductions from individual projects. And rather than walk through all of the different steps in the GHG protocol, what I'm going to do is introduce what I think are three of the most fundamental basic concepts in carbon offset accounting and their importance and relevance.

So, starting off, I think the first key concepts and certainly the most important when you're looking at quantifying reductions from carbon offsets is this notion of a baseline scenario that is the reference point against which you're quantifying emission reductions. The key point here is that for carbon offsets you're looking at a forward-looking and hypothetical scenario. So, in the entity context, what you see on the left-hand side there, quantifying reductions is fairly straightforward. You inventory your

emissions in year one, you do it again in year two and you compare the results. If your year two emissions are lower, you can chock up those reductions between those two years. So, it's a basic historical comparison.

With offsets, you have a fundamentally different frame of reference. Again, you're looking at this hypothetical scenario, so the procedure is to look at your emissions in year one and in year two and compare those emissions to what the emissions would have been in this alternative scenario. So, it doesn't matter if your year two emissions are lower than your year one emissions. What matters is how those emissions compare to this hypothetical scenario.

What is the baseline scenario? There's different formulations for it. In the GHG protocol, the baseline scenario is what would have occurred, a description of what would have occurred in the absence of any considerations about climate change mitigation. Or, more specifically, in the context of a carbon offset market, what would have occurred in the absence of a carbon offset market?

So, imagine another state of the world where everything is completely the same, holding everything in constant except you don't have a carbon offset market, what would happened in that scenario? That's the basic

challenge associated with determining baseline emissions for carbon offsets.

There's a flip side to this question, which is this question of additionality, which is basically asking would the project itself have occurred in this alternative scenario in the absence of a carbon offset market? If your project would have happened in that scenario as well, it’s not additional, there’s no difference in emissions between the baseline and your project; you don't get any emission reductions.

Now, there's all kinds of different methods for trying to answer this question. I’m not going to go into what those methods are for additionality. The GHG protocol focuses on this question of estimating baseline emissions.

And there are basically two procedures, general procedures for making this estimation. The first step is always to identify what are the plausible alternatives to your project, alternative technologies and practices which we call baseline candidates. And then you take those alternatives and assess them using either of these two procedures. The first is a project-specific approach where you look at the various alternatives, compare the barriers facing the different alternatives, potentially the benefits or pay-offs associated with them, and you

try to identify one alternative that would have been most likely to occur in this alternate scenario without a carbon offset market.

The second procedure is what we call a performance standard procedure, and that's where you essentially look at all the alternatives and calculate a baseline emission rate, as an average of these different alternatives or a better than average emission rate. And you use that to represent what the baseline emissions would be for a typical project.

Now, these are both completely valid legitimate ways to try to answer this question about what baseline emissions would have been. But a key point here is that you can use either one of these procedures and come up with a different answer for the same kind of project and which one you choose really depends on the type of project involved and those considerations which are more, I think, policy related questions, which I'll get to at the end.

But different marketers may be using different methods to quantify their reductions and they may be valid. They may both be valid and that's something to consider in looking at their marketing claims. So, baseline emissions are a key concept.

The second key concept in carbon offset

accounting, I think, is what I would call completeness. That is, projects can have both intended and unintended effects on greenhouse gas emissions. Just as an example, you may have a project that involves biomass fuel which has a net zero contribution to fossil carbon emissions in the atmosphere, so it doesn't produce any net emissions but you may have an increased emissions associated with fossil fuels in the production of the biomass fuel and you would want to take account of those emissions in quantifying the overall emission reductions associated with your project.

So, all significant changes in greenhouse gas emissions should be accounted for when you're trying to quantify the reductions from carbon offsets.

Third key concept, monitoring and verification. Monitoring is required to determine the actual emissions from your projects in the project scenario. Also, in many cases, to validate important assumptions about the baseline scenario. So, you may make assumptions based on current fuel prices, for example. If those change, you may need to change your assumptions. So, you need ongoing monitoring to quantify total emission reductions and you don't want to count reductions before if they have not been monitored and verified.

So, all three of these basic concepts, I think,

are essential when you're looking at carbon offset accounting, the baseline emissions estimates, making sure you have done a complete accounting of all changes in emissions, and monitoring of the project to make sure that it performs as expected.

The key point, though, I think when you're looking at marketing claims and you're thinking about carbon offset standardization is that within these basic requirements there's still a lot of open-ended questions that need to be answered.

I posted some of them up here. Within the GHG protocol, we provide a set of general accounting principles that can help guide you in answering some of these questions. But absent some actual standardization and some actual development of methodologies that are tailored to specific types of projects that really specify these questions, you're going to have some ambiguity.

And a key point here is that these are, in my opinion, policy questions. That is, they're the kinds of questions you need to answer if you're designing a carbon offset program, you're setting standards, you're trying to balance issues like should we emphasize the environmental integrity of this market in the standards that we're developing at the expense of excluding some

good projects, for example, or should we try to be a little more lenient, promote the development of these markets, and reduce transaction costs and things of that nature. How you answer these larger policy questions is going to influence how you answer these accounting questions.

And that's a challenge I think for the voluntary market. It's not clear yet who is going to make these kinds of policy determinations for the market. They may get decided as this market evolves over time. But when you're looking at this question of are marketers out there representing offsets correctly, credibly, they have to at least have covered all the bases of these three basic ideas here, the baseline estimates and so forth. But there's still going to be some differences in the approaches that different standards and programs are taking. It's important to keep in mind.

That's it. Thank you very much. I'm happy to take any questions.

(Applause.)

MR. NEWSOME: Thanks, Derik. Let's go to Jim.

MR. SULLIVAN: Thanks, Hampton. I'm going to apologize in advance, I have been sick for the past few days, so if I'm coughing or wheezing up here, I'm going to apologize in advance. But since this is an FTC

meeting, I decided to do my own survey and make it audience participation. I've got here a common cold remedy which says it reduces coughing symptoms and common cold symptoms. So, every time I do, if you guys could keep notes and we'll give them something else to look for after this meeting.

I manage the Climate Leaders Program at EPA. We have been around six years working with companies to do comprehensive climate strategies. It's been road tested with greater than 150 partners from every major sector of the U.S. economy. There's three critical components that the partners work on: completing a corporate-wide inventory, developing an inventory management plan, and setting an aggressive corporate-wide reduction goal. I'll talk a little bit more about those in a second.

Partners report the progress annually to EPA and it's a pretty big group of companies. They represent about 10 percent of U.S. GDP from their U.S. revenues and emissions from these companies represent more than 8 percent of U.S. emissions in the U.S. inventory. Overall, a little more than half of them have publicly announced goals so far, preventing nearly 50 million metric tons of CO2, which is about close to nine million cars, and we have 11 partners that have achieved their

initial goals. So, a lot of experience dealing with greenhouse gas, inventories and offset issues.

The program requirements are developing a corporate-wide inventory which, as Derik had mentioned, is based on the WI/WBCSD protocol that includes all corporate emissions, not just CO2 but methane and the other major gases. It includes direct emissions plus indirect from electricity use.

The second component is creating an inventory management plan for credibility. So, this is a document like an environmental management system where companies really go through a rigorous process to describe how they're building their bottoms up corporate inventory. It ensures high quality data and then EPA does some desktop checks on that and actually does a site visit for every one of these companies to make sure that it's being well implemented at the site level.

And then the final component is setting a GHG reduction goal. It needs to be forward-looking, aggressive for the sector, and external reductions are allowed to help companies meet those goals, which is why we're here today. We also have on our website, if you look under that, a performance benchmarking methodology that's been peer reviewed, released under ACEEE this summer about how we set those performance benchmarks for

the goal setting process with companies.

So, just to give you a brief sampling of the companies we're working with, this started out about five years ago, this is a slide that showed what companies are taking action on climates. It's now become sort of a different message of who isn't taking action on climate. So, there's a lot of activity going on there and it’s a pretty good representation of leading companies in the U.S.

The key points we have had on offset approach with these companies is that the goal reporting -- I had mentioned the three components of the program. Companies are allowed to use offsets to help achieve their goals. It's different from an inventory. That's one of the key points if you take away from today as good. An inventory is an accounting of what your actual emissions are. An offset or a greenhouse gas reduction is something you do to reduce or something you do to offset those emissions.

So, we feel that the goal reporting should be transparent and public and you should track inventory data without netting the goal tracking data. So, we have four key criteria on the offset approach, real, additional, permanent, verifiable, they're words that people have heard I'm sure quite a bit before, and Maurice will go into a little more detail about those.

But I think the main points to take are that actual reductions have occurred, additional is beyond business as usual and, again, we're consistent with the WI protocol but with one time of approach under it, a performance standard approach, which we feel allows objective data to be used to evaluate performance in the marketplace. Permanent or can be backed by guarantees if there's an issue about potentially backsliding or losing the reductions, and verifiable, which encompasses three concepts. If it can be quantified, first of all. You can actually measure the project. It can be monitored. You can actually measure the changes in the project and it can be verified.

As we thought about developing and putting out these guidelines, we thought there's two ways that companies may really approach this. One is they may be developing or investing in their own projects, and two, they may choose to purchase offsets or registered reductions or whatever the 50 separate terms for them in the voluntary market are. So, we're developing guidelines, and I'll talk about them in the next slide for both of those types of approaches.

We've also developed over the past year project accounting methodologies for six different project types, which were out on the front table. They've all seemed to

have disappeared at this point, so they're available on our website as well, which is www.EPA.gov/climateleaders. It also allows partners to develop methods for the types we've not yet developed.

The final component is EPA does an internal review for the project summary and data. So, we're taking verification certification component and maintaining that as a government function, not an external third party function. So, the fact sheet was out on the table as well. It gives an overview of using external reductions to help achieve a Climate Leaders goal. There are draft guidelines for developing or investing in offset projects, which we're currently working on that will be released hopefully within a month or so, and there's also draft screening criteria for purchasing greenhouse gas reductions which we're also working on. So, this is the overview of the process we have put together.

Under the guidelines for developing or investing the offset projects are those project-specific methodologies I have discussed that Maurice will go into a bit more detail about. The other thing we're going to be developing under the more detailed guidelines is a generic project protocol where companies or people in the market are looking to use this type of methodology, can

use that to develop their own methodologies for project types which we haven't done.

And what Maurice will talk about in a bit I can mention here is that doing a performance standard methodology takes an awful lot of up-front work and time and effort. You need to find a good data set within the country you're doing things on to compare it to, and we don't have unlimited personnel or resources at EPA, so we're open to people developing those and bringing those in for review for this program.

The other thing that we've announced under the purchase guidelines, and I, again, put a bunch of copies of those out there, is green power purchases. So, companies that are looking to go out and buy green power or to buy RECs from the voluntary marketplace, the key points on that are that green power is an effective way to reduce the environmental impacts of electricity use. I don't think there's any controversy about that. I don't think anybody said anything this morning that would contradict that.

The second point is that EPA has a definition for green power sources. It's not a technology specific definition. It's what -- sources have a superior environmental profile and no manmade emissions. So, again, we're using work that some other experts at the

EPA have done for the definitional issues, and Matt Clouse will be on a panel later this afternoon if there's questions on that.

So, for Climate Leader's goal tracking purposes, what we've said is green power may be used to adjust the indirect emissions from electricity use. The guidance doesn't address on-site or non-grid connected renewable energy. The other thing that's new here, I think it was mentioned earlier, that there were average versus marginal rates. There is a new E-grid data set out there that has some marginal rates for various regions of the countries. So, this guidance uses the new marginal factors based on non-baseload emitting technologies.

Part of the important consideration on using green power to adjust electricity emissions are both an ownership consideration and an accounting consideration of how accurate the actual project accounting is.

The other thing I should mention we released in the past year is guidance on companies using carbon neutral goals, and that has a couple of components to it. One is expanding the inventory boundary to include optional sources. That would be things like business travel, employee commuting, product transport, things that aren't required under the program requirements but

that companies could do. So, the first thing you need to do is expand your boundaries if you're going to make a carbon neutral claim.

The second thing is achieving significant internal reductions. Companies need to have a reduction goal that we would be comfortable announcing as an external goal for achieving their reduction. So, efficiency, on-site renewables, processed fugitive must meet a performance benchmarking test similar to the other goals.

The final component of that is purchasing the external reductions either green power or REC for the part that companies are not able to reduce internally.

So, the key points to take away from this workshop is that EPA has significant expertise on a lot of these issues relating to greenhouse gas inventories, reduction goals, offsets, green power purchases. We have released guidance on this for offsets for green power under Climate Leaders, also under our Green Power Partnership. We've also released detailed accounting methodologies at this point for six project types plus green power purchases with, in the fact sheet, the option to expand on those project types. So, I would expect some more to be released in the next year.

Then the final thing to take away on this is I

think marketing claims based on the use of these types of methodologies should help add significant credibility in the marketplace. You now have a government agency responsible for the environment that has put some pretty detailed guidance in place for these things and as marketers begin to call companies and talk to people about this, you can now say, well, do these things meet the requirements that EPA has put out there.

So, the other thing is that that gets you part of the way, but there are still a couple of components missing. Because we're doing an internal EPA review of these projects for Climate Leaders, there's no provisions for external verification certification in the marketplace. So, companies can say we've met the accounting principles that EPA has put out there, but it's not going to be EPA reviewing that for the voluntary marketplace. So, there could be opportunities there.

The other thing is there's really no national registry on reduction and offset-type projects. To ensure double counting, you really want to make sure that there's some sort of serialization of the tons, some sort of upstream, you know how many tons a project is generating and that they're sold only once and retired. So, that's another thing, again, with the program and our own internal review is not necessarily covered under

this.

So, I just wanted to leave with those thoughts and then there's some contact information for folks on our staff and our team up here if you're interested. So, thank you.

(Applause.)

MR. NEWSOME: Thank you. I wanted to thank Jim for coming in. Maurice told me this morning he thought Jim was out sick and I was concerned because I thought I was going to have to give his presentation. I don't think I would do a good job. But thanks a lot for coming in.

All right, Maurice.

MR. LeFRANC: Thanks, Hampton. Jim's spilling water and has water all over the laptop here, so I hope I'm okay.

I'm just kind of going to jump in now. I thought the presentations this morning were excellent. I thought they really sort of teed up the issue and, particularly, the first two FTC presentations, which teed up what the problem is, is you have a market -- and I'm not sure it's actually a market as it's just a lot of individual buyers on a personal consumer level who are, for the right reasons, maybe doing things that don't have the consequence that they believe they may have.

So, essentially, what I wanted to do is walk through a bunch of different points. So, the elements that Jim talked about, they build on what Eric had put together for the WR/WBSCD protocol.

At EPA, we have been involved in offsets, I have been and some others on our teams since actually back in the '80s when the U.S. had a voluntary program, the U.S. Initiative on Joint Implementation, I think Linda was involved in that as well. We then worked on CDM when the U.S. was in the negotiations on Kyoto and wrote a lot of the text that was used eventually for Kyoto for the Marrakesh Accords operationalizing CDM. We've recently been working with Jim and his colleagues on the Climate Leaders Program. We worked for quite a while with Derik on the WRI protocol and the performance standards side and others. The performance standard, which I'll talk about a bit in a second, has been picked up by the RGGI approach and by the CCAR approach that they've done for some of their methodologies.

So, I'm going to walk through a number of different points. Again, what we're getting at, and I think Jim teed the point up, is that as a government agency we're not regulating greenhouse gases at this point. We're not setting a standard that's a regulatory standard, but we have set a standard by doing these

methodologies for the Climate Leaders Program and we're trying to maintain consistency, transparency, et cetera, through that.

So, I want to walk through our points that I think -- the topic of the workshop is to consider what the public or what the consumer should understand as they're considering voluntary offsets. So, I think the first thing, which I don't have on here, is really a clear project description. What is the project you're talking about? There are lots of different kinds of forestry projects, aforestation, reforestation. Are you talk about converting crop lands to forest, pasture to forest, what are the consequences of what that description is? So, that should be one thing that should be clearly communicated.

One thing that we've spent a lot of time on, and this is the first point that I have up here, is that data that's publicly available in order to set an additionality threshold, and I'll talk about that in a second, and to set the baseline, it's probably the thing that takes us the most time. We have used a number of contractors, technical experts, EPA people, to get at what is the most recent data set, what's the most thorough data set.

We look at the U.S., at this point, and say

what data set represents what's going on in this project type in this sector across the U.S. or regionally? And to me it's one of the most complicated but it's the essential thing to say, if you're talking about business as usual, beyond business as usual as a performance standard or as an additionality test, I'm not sure how you can do that unless you know what's going on around that project. Again, as Jim said, we've moved in the performance standard approach rather than sort of an intent argument for additionality.

What I'm going do when I finish with these bullets is walk through a few of the project types we have done which make it a little clearer.

The second thing is in our work and we think clearly in the offsets world the offset projects should be surplused to regulation. So, we have done thorough reviews for each project type what federal, state, local regulations are out there that would say one must do this project because you're regulated in a manner. Again, I'll fill in by talking about specific project types.

The question is, how does that play in advertising claims or claims for a voluntary market by providers. How is that communicated? Particularly when you get to the state and local level where it's not clear other than walking through every possible regulation in

the state, it's not clear how you do that. But it also is key because our position is you can't do a project and claim a reduction if it's just being done for regulatory purposes. Additionality -- again, what we do is we defined additionality in a performance standard, and a definition we use and then operationalizes that additionality represents a level of performance that with respect to emissions reductions or removals or technologies or practices is significantly better than average compared with similar recently undertaken practices or activities in a relevant geographic area.

So, what we're clearly doing is looking at what's happening around the place where that project is being proposed. If everyone is doing without a carbon benefit, if everyone is doing a certain project type, one would wonder if it would be considered additional. And, again, what we look at is we separate out the additionality test and baseline test. An additionality test is a threshold. It's either a technology threshold, again looking at the data, what's going on in that project type. So, here's the technology that's cutting edge technology that everyone is using. Therefore, if you're using something that's emitting higher, less efficient, then it wouldn't be additional.

Practice base, and, again, I'll walk through it

quickly and some of the project types, practice base is saying with's going on around you, how many people are putting digesters on on farms? What's the percent doing it? And then emissions rate, we look at particularly in like industrial projects, what's the rate per unit of output of emissions and then we set a performance threshold that's significantly better than average. Top 20 percentile, top 15 percentile. Again it varies by project type.

We also set a clear baseline and communicate this. We say, for example, for a retrofit the baseline would most likely be what's your annual performance over a period of time? For a new project, again, it relates to the data set and the additionality test that you still would be expected to be compared to a baseline that's performing either at average or better than average.

We also look at if you're in a capped region and the sector that you're wanting to work in is a capped sector, I think this could come up in RGGI right now, for example, that you couldn't be doing an offset project in that cap sector. I think there may be some questions later about this. There may be other sectors within the region which aren't capped where you could do an offset project.

Again, I think Jim hit a little bit on the

issue of double counting. How do you track what's going on, how do you know that the credit that you bought here someone else didn't buy somewhere else? Again, is there a registry system? Climate Leaders would have that, but communicating to the consumer how do you ensure to the consumer that they're not buying something someone else has already bought.

The NEXA bill (phonetic), it's well-documented, reductions linked to a specific project. There are some of the websites where you can look and you can say I'm buying or at least you're under the impression you're buying reductions from X project. There are others that sort of mix a variety of offset projects or even mix RECs in there. Our thrust would be that you would have to be able to track back the reduction you're buying or you're claiming to a specific project. Again, it goes to this data sets, the information that you're providing to assure that that project actually is leading to a reduction.

I won't say much about validation verification. What we require in all of our methodologies, we outline what the acceptable monitoring approaches would be. We're working with Jim and others in Climate Leaders now on what are the program design issues around validation, verification. Is the third party or EPA people? My

sense is to some degree EPA people would be involved in the verification.

And, again, without going into a lot of detail because I'm going to run out of time is there would be provisions to address leakage, and leakage for us is activity shifting. So, I did something here that caused an emissions over there. We require that to be addressed. Permanence as well. I have done a project but for some reason that project is going to disappear. Generally, it's linked to forest projects, but it could be in a variety of cases, it doesn't just have to be forestry. There are lots of provision, insurance provisions, temporary credit provisions, et cetera. But one must be clear that if I bought this reduction from this project that it just doesn't disappear a week later.

Again, the one thing that we clearly require is that there are ex post reductions. A reduction is not a reduction until it occurred. So, there's no forward crediting, no forward reductions.

So, I'm going to kind of walk through a couple of project types just to say what we do. What we do is look at recent historic data for the country and then we look to see whether there are regional differences in that data set. And that's again to look at our definition of additionality that we're comparing with

similar activities, similar geographic areas.

It goes to the last point I think that Derik was making, that there are standards and then there's policy setting. So, to a degree, what we're doing for a voluntary program at EPA is setting the policy and saying we have methodologies, if you do a project, we will use similar methodologies for purchase reductions or similar expectations.

So, I'll just walk through a manure project we do and just quickly say what we would look at. For manure management projects, we look at data sets. So, we look at the U.S. EPA inventory of emissions which characterizes manure management efforts around the country, a census of agriculture, and then EPA's Agstar program which tracks digester and manure management projects. So, we define the project type as an installation of anaerobic digester either at a dairy or a swine operation. Jim said if someone wants to come in and have some poultry operation, they could come in with a methodology consistent with what we're doing with data sets. We just haven't done that with what we have done.

We then define for the project, we say what are all the components of the boundaries? So, we have a physical component. So, it’s confinement areas, collection systems, et cetera. We say what the boundary

would be as far as the greenhouse gases, so we actually say what are the gases you have to consider? For manure management, we really don't get into leakage at all. There's not really an expectation of leakage. There are no federal regulations, so that's really not an issue in that project type.

Additionality is practice-based. Only .07 percent of dairy farms and 0.2 percent of swine operations have digesters on them. So, we feel the practice of someone putting a digester to us is clearly additional. There's no sort of incentive to do that right now, or a small incentives. And, again, it's only additional if you don't have a digester already in place.

The baselines that we look at are the current management practice. What are you doing to manage manure right now? We provide detailed equations in our methodologies which you could walk through and just simply calculate -- first estimate and then calculate your reductions and then outline monitoring.

I will go very quickly to aforestation and reforestation. We use data sets from USDA, the National Resources Inventory. We define aforestation and reforestation because we're not getting into temporal, what was the land, we're looking at crop land and pasture land that would be converted to forest.

Our physical boundaries, the land area you're dealing with, the gases are primarily the CO2 removed from the atmosphere with some consideration of nitrous oxide and then emissions from the equipment or activities that are involved in the reforestation.

Leakage is one which we have included in our approach. Again, it's activity shifting and we're working more -- we have some default values in there for different regions. What we have done here is picked the regional breakdown in the NRI to say essentially what we look at with additionality, again, the percentage of conversion of crop land to forest is very low. We look at the background rate of crop land/pasture land being converted either to forest to either crop to pasture, pasture to crop, or to development. We consider that a background rate and that comes into play when we set the baseline.

We say this is how much would be converted, this is how much carbon would be stored over a 20-year period. There are generally no federal regulations. So, we're not really looking at a regulatory screen, even though there are some voluntary compensation programs that we would consider. Again, we provide detail equations, we outline what monitoring approaches should be used. And, again, what we're looking for is sort of

to transfer back to the topic at hand is that what our expectation would be and Climate Leaders and what we're doing is not to say we would pick certain providers, we would pick certain reductions that are valid, we would set a set of screening criteria that would track with what we're talking about here and saying anyone could come in and any Climate Leader partner could come in with purchase reductions as long as they're following the screening criteria. That was one of the to-do things that Jim outlined. Thanks.

(Applause.)

MR. NEWSOME: Thanks, Maurice. Ed.

MR. HOLT: Good afternoon. First, I want to thank the FTC for inviting me to speak to you this afternoon. I was asked to focus particularly on the use of RECs, renewable energy certificates, as offsets and to raise and identify particular issues out in the marketplace.

As you heard a little bit this morning, there are a number of REC marketers or green power marketers that do make carbon CO2 benefits, and certainly, there are many voluntary purchasers who expect to receive or expect to claim at least having produced carbon benefits from their REC purchases. But what are they getting and how do you prove that?

One of the issues that actually I think Lori Bird mentioned this morning was she talked a little bit about differences in definitions of what a REC is. Certainly, there are -- first of all, some states with an RPS generally have addressed this question. States that do not have an RPS have not addressed it. But those who have addressed it, there are variations in what's eligible, what kind of technology is eligible, and what comes with it. Most of those states say the RECs include the environmental attributes, but they don't go on to specify just what those attributes are.

Is it specifically just the direct on-site emissions, for example, or is it what I would call the derived or potentially off-site emission reductions? They don't really address that, and that leads to one of the key issues in using RECs as offsets is uncertainty whether the REC includes an emission reduction.

In an uncapped market, these emission reductions could potentially be claimed by two parties. The reason is that the renewal energy generator that made the investment, generated energy into the grid, caused a fossil fuel generator to back off. But then there's also the fossil fuel generator that reduced output on-site who might also wish to claim that same reduction. Generally, the renewable energy generators are the ones that are

making the claim.

Fossil fuel generators, to my knowledge, are not making the claim in any marketing terms, they're not making sales of emission reductions. So, in that sense, there may not be much of a conflict, but those same fossil generators might be registering their emissions outputs in some of these registry databases.

Well, what happens is that under the greenhouse gas protocol that both Derik and Jim talked about, the practice is that the emission reductions assigned to the fossil fuel generator as a direct or Scope 1 emission reduction, while at the same time the purchaser of the renewal energy may make a claim to the reduction as an indirect or Scope 2 emission reduction. In a sense, it's kind of a sanctioned -- I almost don't want to say this, but it might convey it better. It's a sanction double counting where because they're in two different columns, they're in two different categories, it's okay. It's kind of like double entry bookkeeping. You have a credit over here and you have a debit over here.

But that leads to some uncertainty about what claims can be made. Or you have to be precise about the types of claims that are made. In fact, I have seen a number of renewable energy marketers or REC marketers that are beginning to market their product or make their

claim in that kind of a term, that it's indirect to offset your electricity purchases.

The last point on this slide that I wanted to make is that the distinction may work for RECs as offsets to electricity emissions, but it doesn't really clearly address, at least to my limited knowledge about the greenhouse gas accounting procedures, it doesn't really address how RECs sold as offsets to say transportation or other activities might work. Maybe it doesn't work for them, so that could be a problem.

In terms of substantiation of claims, I would say, first of all, that for RECs -- I'm speaking for a minute just about RECs only, not about offsets -- verifying REC claims is much easier and simpler because of the fact that there are a number of state or regional certificate tracking systems that have been established around the country. In fact, Lori again showed a slide this morning, a map of the states that showed big regions that are covered by these REC tracking systems that ensure that there's no double counting and that the RECs sold for voluntary purchases are not also used for mandatory compliance.

Most of the country, as I say, is now covered. In fact, the area that Lori showed in the map from Kansas down to Florida, through the southeast, there is a

proposal to establish a tracking system there as well. So, the point I take away from this is that for REC purposes double counting is very unlikely. These tracking systems make independent verification much easier, and essentially REC tracking goes a very long way to satisfy the substantiation needs for marketing RECs. But as I say, again, not specifically for offset claims because the megawatt hours, they're very clearly measured by meters. They're tracked and they're pretty much secure from tampering.

Now, for voluntary emission reductions, they may still be double counted because the emission reductions are not tracked. They could be tracked, there's no technical reason why the tracking systems couldn't do that, but there's no policy direction that clarifies the point about who gets to make that claim on the emission reduction.

Another point that was raised or has been talked about is this issue of additionality. This morning we heard a little bit of talk about whether or not the -- well, essentially, additionality as this project, would it have occurred beyond business as usual? And there are a number of different tests that are applied, some of them jointly, it's not just pick one, but several of them together.

Is it new? Is it additional to what is mandated or what's required? The third one is this financial test, would the project have been undertaken without the carbon offset revenue? And the last one is the one that Maurice was talking about, really a performance and technology test, is it really new technology or is it high performing technology that is not common?

This was getting a lot of debate and discussion in sort of email traffic that I was seeing over the past year, but I think in the last several months it seems to have quieted down quite a lot. I'm also encouraged by the fact that both the Center for Resource Solutions and the Green-e Program and EPA have identified that renewable projects are additional, A, if they're new and if they meet the performance tests. It’s very difficult to do this on the financial side of things because a renewable project gets multiple sources of revenue and it's very hard to determine which stream of revenue is the one that really put it over the top, which one comes first, which one comes at the last, which is the last increment. It's not, in my mind, a very practical way of applying the additionality question.

There are other issues going more to consumer interests. There's a lot of confusing terminology out

there, at least it's confusing to me, and if it is to me I assume it is to people who don't spend a lot of time on this. We talk about offsets, we talk about emission reduction credits, and there's verified emission reductions and sometimes I read that as voluntary emission reduction credits. I'm not sure if there's a difference. Certified emission reductions and the Chicago Climate Exchanges uses these carbon financial instruments. So, this terminology can be somewhat of an issue that education through the FTC or through marketers could help.

There are multiple seals of approval. We heard some of that this morning. I think we'll hear a little bit more about that later this afternoon. And the question of measurement, there are different ways to measure the reduction, whether it's based on average emissions avoided or whether it's on marginal emissions avoided. I don't know that that's really a problem for consumer protection because in either case whatever you use as long as it can be backed up, as long as you can prove it, but it would be helpful, I think, if there were some more generally accepted consensus on what's the best way to measure it.

Finally, I just wanted to throw up an example, an effort really to try to put into practice what I have

understood over the years, some of the guidelines for green marketing that we have seen from the FTC. I first used this slide, actually I think it was nine years ago, it wasn't used quite the same way but I still called the product Windex. This is not the same that you heard about on My Big Fat Greek Wedding. Remember the guy who is using Windex as all kinds of cures for Jim's cold or anything else? But it's Windex to indicate that this wind product doesn't include everything that you might imagine.

So, this one is specific, first of all, it says reduce your greenhouse gas footprint. Then have this little asterisk that hopefully isn't too small type that says something that consumers won't understand anyway, but at least it's specific, it says, provide Scope 2 emission reductions per the greenhouse gas protocol. And it further clarifies that this product Windex supports wind energy projects fortified with carbon reductions.

So, it's carbon reductions, it's not NOX, it's not SOX, the other kinds of emissions that might come along with generation for various reasons that are not included. So, because you don't want to give a general impression that all this stuff is being avoided, you have to have the footnote that says carbon is a principal greenhouse gas, it just explains what that is, but it

does not include sulfur dioxide and nitrogen dioxide reduction benefits.

Then there are a couple of other things you could throw in there such as certified by Safety REC, which is just something that we made up, thank you, Hampton. And independently verified and maybe that -- you know, for people who don't really know enough about that, they say, oh, Safety REC, I know about them, that's good enough for me, I don't have to do all that investigation.

Finally, another point that was made this morning, I think in one of the first presentations, to point out the location of this. The wind generators, in this case I'm saying it's located in Oregon, but the environmental benefits for carbon emissions are global. So, it doesn't really matter where it's located and you still get those benefits.

So, with that, I would like to close and I think we'll be ready for questions. Thank you.

(Applause.)

MR. NEWSOME: Thanks, Ed.

Let's start off with a short discussion about cap and trade because we had some questions this morning on that that we didn't get a chance to get to. I was wondering if you all could discuss the intersection

between the mandatory markets and the voluntary markets, and in the REC market, we're generally talking about RPS standards, but in the offset market there is a lot of discussion about potential cap and trade in the future.

What I would like to do is impose on Maurice, if he could just give a very short discussion or explanation of what cap and trade is because a lot of you know a lot about that, but some of you may not know as much. So, Maurice, if you could kick it off and then after that if anyone else has something they want to add on that, that would be great.

MR. LeFRANC: Thanks, Hampton. There are probably a lot of people in the audience, I know several of them, who know a lot more about cap and trade and work a lot more than I do, but I'll give sort of a quick overview.

Hampton asked me to just sort of give a quick what is cap and trade. I guess the best place to look right now is in some of the legislation that's come off the Hill in the last year or so. I guess traditionally a cap system with trading, offsets was at best the orphan, kind of the pure cap and trade people, I don't think really had a lot of sort of need or desire to have offsets introduced into the system. But in the recent legislation, I think almost all, if not all, has offset

provisions or some provisions like that.

So, in cap and trade, the system sets a cap, it picks an amount, picks a year, X percent of 1990 base year by 2020. You would then look at, well, what sectors within that system are you going to cap? And there are certain sectors that are easy to measure and monitor. You could cap those. There are other sectors which aren't so easy to measure and monitor. They may be sort of -- which is the way I think the legislation is playing out is that they may be good candidates for offsets, and then there are things sort of in the middle called set-asides, where you're taking part out of the cap, the allowances, or however you do it, and maybe addressing certain sectors, for example energy efficiency or some of the agriculture projects which are sort of difficult on the cap side or on the offset side.

Then one decides whether one does an auction for whatever the allowances would be for the cap or you look at an allocation based on historic emissions and then once the system is set up, participants buy, sell, trade. So, what happens to the voluntary market I think, again, it goes sort of to what some people talked about this morning. Are you talking about the 20 percent which is sort of this consumer market with the warm glow as the speaker said this morning? Or are you talking about the

-- I think Kate teed up 80 percent which is corporate which is maybe buying and participating, anticipating a future system. So, where do offsets and RECs fall out? So, I'll defer and let somebody else finish.

MR. NEWSOME: Anyone else want to jump in on that?

MR. HOLT: I would. One of the comments made this morning was that if a cap and trade system is adopted, the use of offsets would then be moot. Most cap and trade programs include a provision for a specific type of offset under the cap and trade program where they narrowly define what an offset is, what's eligible. So, there would still be some form of offsets in there.

But, in addition, there are still people who will want to do things that are additional to what's mandated by the cap. So, for example, if there are individuals or corporations who are not under an obligation to reduce, they may still want to do more to make a difference. And if I understand the greenhouse gas accounting principles, in fact, one that Maurice put up there said something like there can still be offsets as long as they're not under the cap.

Well, the renewable energy sector or the power sector would be under a cap, but consumers could still buy renewable energy certificates and make claims if

their actions are recognized by the cap and trade program and allowances are retired as a result. A specific example of that that is currently in the regional greenhouse gas initiative program, or RGGI program, that allows states that are part of that to retire allowances on behalf of voluntary demand for renewable energy. And, so, in that sense, while they might not technically be offsets, they do enable consumers to make those purchases of RECs and still make carbon claims.

MR. NEWSOME: Derik.

MR. BROEKHOFF: Just to quickly follow up on that. I think the key concept here is that if you have a cap on a set of sources and there's any scarcity in that system, in other words without the cap emissions would be higher than the total number of allowances, the emissions in that system are going to tend to rise to the level of the cap. So, if you undertake activities such as renewable energy generation that would reduce emissions from certain sources at a certain point in time under that cap, it's going to free up allowances, someone somewhere is going to buy that allowance, the overall emissions for the year are still going to rise to the total of the cap.

So, it's hard in that circumstance to be claiming that you're reducing emissions. The emissions

are going to rise to the level of the cap and that's why, as Ed was pointing out, for an emission reduction claim to be credible you have to have this retirement of an allowance under that system.

MR. NEWSOME: Jim?

MR. SULLIVAN: Just to quickly echo that, there are a lot of people like under the SO2 program, schools buying SO2 allowances to retire on behalf of cleaner air. That's an actual retirement. It's a nationwide cap, it's coming from a source, and you can be sure that one ton of allowance you're retiring is equal to one ton of reduction in that cap level that's actually emitted.

MR. NEWSOME: Let's talk for a few minutes about additionality. We've touched on that several times today. It is an issue. There are different opinions about how to define additionality, and Ed mentioned that he thinks some of the discussion is changing a little bit. I'm interested in whether other panelists here feel the same way.

So, I would like you to just comment on the different approaches out there. Maurice and Jim have talked about the approach that EPA has been developing recently on it. And Jim moved the microphone over to Maurice. But one thing that you may not have an answer for, but something that we're very interested in, and

that's whether there is any notion of what a consumer would expect in terms of additionality. If there's no express claim about additionality given, what would the average consumer expect? Are they expecting this product makes a difference in some way and has anyone looked into that at all? Any thoughts on additionality? Maurice?

MR. LeFRANC: I don't mind starting. For us under Climate Leaders, it's easier to deal with additionality because what we can say is we've defined it for the Climate Leaders Program. Now, for a general claim for consumers that something is additional, I'm not sure it's quite that easy. So, I'm not sure the consumer actually should be concerned about being additional other than the fact if they're buying what they expect is a real reduction, that there's an emission somewhere, either their own emission or someone else's and they bought something from a project that, at the least, it's zeroing out net.

So, to me, that's additional for a consumer. So, I'm not sure whether you have to make an explicit claim that my projects and my portfolio are additional as much as it's an implicit claim that if it's a reduction, it should be something that -- you know, pick whatever definition would not otherwise occur beyond business as usual, et cetera, et cetera. I think getting hung up --

I think Ed's comment that it's calmed down, I think that people have just gotten tired of sort of talking about additionality theoretically or in the abstract because there's no answer. It's something different. Financial intent, barrier tests, et cetera. It's not really until you put it operationally in a policy or a regulatory program that it really then has a meaning.

So, I think across all sorts of providers, I'm not sure there's really a meaning for additional, but other than the reductions, I mean, I think the principles Derik put up, real measurable, the same set of principles everyone is using. That's what's key.

MR. NEWSOME: That's very helpful. Anyone else? Let's go with Ed.

MR. HOLT: I'd just like to -- well, I guess I'll express an opinion and then I'll state what I think is a fact. My opinion is that many consumers do expect their purchase to make a difference. Otherwise, they wouldn't spend more money for it. So, making a difference means that it's additional to what would have happened otherwise. The debate is about how you determine what's additional, not whether or not consumers expect it to be additional. That's my opinion.

The fact is I don't think there is any consumer research specific to this issue that is generalizable,

widespread, based on any large sample or anything like that. So, I think that's yet to be undertaken. So, I wouldn't want you to reach any conclusion based on opinions that many of us do have.

MR. NEWSOME: Okay. Let's go with Derik and then Jim.

MR. BROEKHOFF: I second Ed's opinion, basically. I'm not aware of any market research out there, but I think there is a general expectation among consumers, retail purchasers in particular, that their payment is making a difference that is implicitly there is some connection between purchasing an offset and a reduction occurring.

I think, in concept, that's what additionality is. You're really trying to figure out, again, sort of on a theoretical level, did the payment make a difference? And to generalize that, would this project that's reducing emissions have happened in a situation where you have no carbon offset market? The issue, of course, is that's easy enough to describe in concept or theory, the question is how do you test for additionality. That's where I think probably most consumers don't have a clear expectation. It's something that's been debated among the cognizante (phonetic) for years.

There are different approaches to how you answer this question about what would have happened or would the project have happened anyway. And many legitimate approaches -- I think the approach that the EPA has taken is a perfectly valid approach.

The one thing that I would admonish I guess is that in proposing different additionality tests or rejecting certain tests, you still have to keep your eye on the prize, that is this underlying idea of what consumers are expecting, is the payment making a difference. And the test has to have some bearing or relevance back to that question in helping to answer that question.

MR. NEWSOME: Thanks. Jim.

MR. SULLIVAN: I think those are all good and valid points. The one thing to remember in all this is in inventory and doing what emissions are is an accounting call. And when WRI did the GHG protocol, it was pretty easy to come to consensus on how you measure what an emission is. But coming across as a reduction is a policy call. It's a lot more difficult to value what not having that emission from the smokestack could be, and if you do a poll of 100 consumers, I think you could probably range from one person saying until you knock the smokestack down it's not good enough to another person

saying every time I flip a light switch or decide to walk to the store instead of drive, I've done something different than I otherwise would have, so it's good enough for me.

So, what we've tried to do with this is at least turn our policy calls based on objective publicly available data, so that everybody out there can see the data set, you can see what's going on in the market, you can see where we have made our cut off, you know, needs to be 50 percent or 75 percent better. There's a lot of history in this at the EPA. We started with Energy Star back in '91 or '92, identifying the top 25 percent of performing products in a certain product category.

I think when you get to a sophisticated corporate purchaser, who Maurice and some others have mentioned, about 80 percent of this market is probably corporate purchasers at this time, it can be a little more complicated message. When you get to a consumer, it needs to be a pretty simple here is a label, here is something that shows you that.

One thing I will point out I didn't mention in my presentation is that there were a couple of slides earlier about the concept of additionality as relating to renewable energy markets. In our sheet out there, we have a data set in the country showing renewable energy,

it's listed under the EIA data as the other renewables category, it's 2 percent of existing capacity. A lot of that is put into place due to RPSs and other regulatory policies, and we're up here fighting over whether one wind turbine or another one is additional. If you pull back a second and look at the big picture, come on, people, it's good projects, it's helping the environment, and people are not choosing whether to invest in one wind project or a turbine next door. They can choose to invest in coal, they can choose to invest in natural gas, they can be putting those resources into looking at future nuclear. It's power generation that's the key there.

So, when you look at it that way with kind of a data set to back it up and see that, I think these individual arguments about the specific projects become a little more put in perspective.

MR. NEWSOME: Okay, well, thanks. That's very helpful. We just have a minute here, so to segue to our next session Janice is going to do certification, we have two questions that were from the audience that were very good segues and whoever asked them can pick up a LumaGreen light bulb afterwards.

But the question was, they both basically related to the nexus between the EPA Climate Leaders

Program, the protocols you have, and existing third party certification programs that are out there and whether the participants in your program have to follow both or whether they can get credit for following other certification programs.

MR. BROEKHOFF: I think we're pretty clear on the fact sheet on that. We have done some road testing and benchmarking that we're not ready to make public yet, but I think the gist of what we're starting to find is that even if you use two similar methodologies that on their surface appear very similar, very quickly the 1 and 2 percent differences on a lot of the assumptions like combustion rates and the things that you wouldn't think about add up to a very different number for overall project reduction tons.

So, what we have said at this time in the fact sheet and in the methodologies that if companies under Climate Leaders want to use external reductions, the project that they're purchasing from needs to be evaluated using our accounting methodology and it needs to have the total number of tons certified using that particular methodology. So, as I have said, we only have six to seven methodologies out there at the moment. We're planning on working on some more. And there is a provision for companies or for marketers or people who

want to use those to come in with their own methodologies, their own data sets that are consistent with that and do that.

But I think one of the dangers of the market is having certification or review that allows five different methodologies for a landfill gas project and what you are going to end up with in the market is people shopping for the most lenient methodology. They might all be fairly similar, it might be something as simple as the global warming potential. Somebody is going to use the SAR value of 21, somebody is going to use the TAR value of 23 which is more recent but not based on the framework convention negotiation.

So, at the moment, we're certainly thinking that companies in Climate Leaders should use our methodologies, it's not to say anything about companies outside of that or what consumers are buying because there's very valid reasons for some of those choices, but we wanted to eliminate as much as possible that shopping for the most lenient methodology.

MR. NEWSOME: Okay, all right.

MR. LeFRANC: I just want to add really briefly, it's hard to tee up if you think about how many pieces of legislation have come out in the last year on cap and trade, how many companies are participating in

programs like Climate Leaders, there's something longer term out there and I think from our perspective we have to be careful what's teed up for the longer term. And I think that companies would be clear that they're participating Climate Leaders, registries, et cetera, anticipating what comes next. So, I think for our program we're trying to make sure that internal to our program, we're being consistent. But I don't think that affects sort of the consumer side, the 20 percent that I think is the consumer purchases.

MR. NEWSOME: Okay. Well, I want to thank the panelists. I think this was very useful, and we'll meet back at 2:30.

(Applause.)

SESSION 4: CERTIFICATION PROGRAMS AND SELF-REGULATORY EFFORTS

MS. FRANKLE: Good afternoon. and welcome to Session 4: Certification Programs and Self-Regulatory Efforts. I'm Janice Frankle, I'm an attorney in the Division of Enforcement and this session's moderator.

We have three very insightful speakers for this session: Mario Teisl, Jennifer Martin and Ian Carter.

Mario will be our first presenter. Mario is a Professor in the School of Economics at the University of Maine. Mario will be discussing the costs and benefits of certification programs.

Jennifer will be our next presenter. As Director of Certification and Analysis at the Center for Resource Solutions, or CRS, Jennifer oversees the Green-e Energy and Climate Certification Program. Jennifer will be discussing CRS's Green-e Certification Program and certification programs in general.

Ian is our final presenter. Ian is the North American Policy Coordinator for the International Emissions Trading Association, or IETA. IETA, along with two other non-profits, developed the voluntary carbon standard which Ian will discuss. Thank you.

Mario.

MR. TEISL: Thanks, Janice. I'm going to get

right into it because I'm condensing an hour into ten minutes apparently. So, even though it's sort of labeled like Matt's earlier presentation, this is where we're going to take a different road here. He was talking about the economics and the social cost standpoint. I'm going to look more at the business side of things.

I have a slide up here with a lot of labels here, but it's more to differentiate what I'm going to talk about and what Al Levy talked about and some others had talked about this morning. I'm not focusing so much on the information provision part of eco certification programs, I'm going to focus more on the certification part of these certification programs. However, I want to note that how these programs are designed and disseminated wherever affects both the costs and benefits to the firm and to society.

Some of the relative metrics that affect these are whether it's a private or a public program, whether it's a single attribute like energy efficiency versus a multi-attribute program, whether it's government or not, whether it's mandatory or not, and whether what I would say is it's partial or full, meaning does it only look at one part of the production process, the certification only, or is it a life cycle cradle to grave analysis?

So, what are the benefits of certification?

The first bullet is primarily something that Matt talked about and Alan talked about and some others have talked about is how it affects consumers and consumer utility. I'm going to focus more on the second point and some other points later. And that is how does it affect firms? What is it about certification programs that provides an incentive for firms to do these programs and what are the disincentives to performing these programs?

Some of the incentives for a firm is that they can increase the revenues, which includes changes in prices and/or sales. It can improve the corporate image, I think Matt had mentioned that earlier. And I'm going to use the word "halo effect" because I'm going to use that later. And, also, it can improve management in terms of cost or risk reductions.

Now, in terms of the importance, there's actually not a lot of really good cost and benefit studies out there on certification. Most of them are cost savings analysis, things like that. But from some survey research firms that have done certification, most of them, about two-thirds of them said the reason they did it is to improve their corporate image. It was not necessarily to increase revenues. In fact, only about 50 percent of firms that were interviewed indicated that they had any increased -- no, I'm sorry, only 17 percent

of firms indicated an increase of revenues.

Now, I had mentioned earlier that revenues has to do with changes in prices and/or changes in sales. Now, I want to differentiate something and provide a little more evidence about revenues. In some areas, we have found increases in prices. If you look at organic and fair trade certifications, there have been some documented price increases or price premiums. However, in the forest products market, there's almost no evidence of a price premium there.

Related to sales, I want to point out there's two different phenomenon in terms of increase of sales. One I would say would be consumer-driven and I would call that an increase in market share. The other one is more retailer-driven and I would call that increase of market access. There's been a recent phenomenon in the last decade or so of very large retailers being able to impose quality constraints on suppliers that they could not do before and that's partially linked to the size of the retailer like Target or Wal-Mart or McDonald's, Home Depot. It also has to do with the increased technology and traceability in doing identity preservation in the supply chain management. So, anyway, there's these technology changes and size of firm changes that have affected this.

In terms of improved management, in terms of cost and risk reductions, we're talking about actual costs of operation or reduced risk, liability risks due to emissions, reduced future regulatory risks and reduced healthcare risks and, again, a survey of firms showed that only about half of the firms that have done certification saw actual cost reductions. About a quarter of them saw cost increases in production, and the remaining about 20 percent or so saw no change in cost.

Cost of certifications are hard to get a handle on empirically because there's a lot of costs that traditionally are not counted in some of these studies. First of all, standard setting and enforcement strategies, that has to do more with the design of these things. Those are things that have been taken on by government agencies or non-profits for the most part and not by the firm. So, really some of those costs aren't being covered.

The actual compliance and certification efforts are covered in terms of firm costs. Search and transaction costs due to the certification offered or not, this has to take into account that maybe a producer now has to search for new suppliers or that kind of thing. Labeling, marketing and outreach costs, if the firm that certifies actually chooses to participate in

those.

And then there's this opportunity cost and in some sectors of the market these opportunity costs do not show up in the analyses, but for those that have done them, they are quite large often. Opportunity cost means that when you start maybe having to impose segregation of your product lines, you have now lost the ability to shuffle production across factories or different parts of the factory because some parts are certified only, some places are not. So, there's a reduced flexibility. Some storage units will be emptied because they can't be used because the certified stuff is not in there. They can't shuffle production that way. There's also some financing and things like that that also go in there.

Some of the agricultural markets have shown opportunity costs to actually be higher than all the other costs combined. Examples of some of these costs that are included or may be included as part of the actual certification is you have the typical hard costs or conventional costs, new equipment you have to purchase, new storage units, new structures. You have to hire new people. You have to pay for the actual certifying inspection to come in. But there's a lot of soft costs that are not included often in some of these

studies. These are all the costs that the firm has to take into account before they get certified.

So, some of these certifications that companies have to start a year to a year and a half in advance because they have to start changing their documentation, their reporting, their monitoring of things, they have to maybe do some environmental studies and some modeling, they have to plan how they're going to do things differently. They have to do all this stuff before they get through the certification process, and often those costs are not included.

Some of these cost determinants have already been highlighted in the previous panel. They didn't talk about the costs per se, but they talked about differences in stringency levels and things like that.

One thing that wasn't picked up on and I'll mention that has a significant effect on costs is the size of the firm or the project. In some of my work that looked at forest certification, you find there's real economies of size with these certification programs because a lot of these costs, the planning, all of those up-front costs are basically fixed. You have to do them whether you're a small firm or a big firm.

To give you some examples, if you are certifying a 50,000-acre forest, your per-acre

certification cost runs about 50 cents. If you're doing that for a 5,000-acre forest, you're talking about 950 per acre. So, you can see there's some real impacts there.

This last slide just points out there are other market costs that may not be directly affecting the firm. You have got some trade impacts. You have got some real market power and structural impacts. For example, the example with the economies of scales argument, you have a lot of smaller producers not being able to participate in environmental certification because it's so costly on a per-unit basis and they can't compete.

Trade impacts are also similar because you have smaller producers in lesser developed countries plus you don't have the capital and human capital infrastructure for a lot of the monitoring and enforcement efforts. So, even if you are a bigger producer in the lesser developed countries, you don't have the governmental support systems and enforcement systems to allow you to participate. And we're done.

(Applause.)

MS. FRANKLE: Thank you, Mario. Jennifer will be our next speaker.

Let me just remind you if you have questions, please fill out question cards and there are folks out

there to collect them. Thanks.

MS. MARTIN: Thank you, Janice, for the introduction. Can everyone hear me? My voice is going a little bit, so just raise your hands if I start to fade.

I'm Jennifer Martin from the Center for Resource Solutions. The Center for Resource Solutions is a non-profit organization. We're located in San Francisco, and we run a variety of programs. The reason I'm here today is that one of the programs that we administer is the Green-e Program. And Green-e is a certification program. We have been running Green-e Energy for ten years, which certifies renewable energy products sold in the voluntary market, and early this year, we're going to be starting Green-e Climate which will be a consumer protection program that applies to the offset industry.

Just a little overview on how the Green-e Program is run. The Center for Resource Solutions is the program administer of the Green-e Program. We have an independent governance board that's comprised of a variety of environmental consumer protection organizations and other experts in the field who make the final determination on our policy. And whenever we make changes to a standard or significant policy changes to how we run our program, we open up those changes to a

broad stakeholder review process and stakeholder comments are brought to the board before the board makes a final decision on whether or not to adopt that policy change.

We also allow our program participants, so those are utilities and marketers whose are participating in our program, to have a non-voting member on the board so they can voice concerns that are industry-specific and how well the program is working with what they're doing in the marketplace.

I'd also like to add that we recently joined ISEAL, which is the International Social and Environmental Accreditation and Labeling Alliance. This is an international non-profit that's aimed at promoting best practice in the development of certification programs in social and environmental labeling, and they promote a variety of activities among their members that include the involvement of stakeholders and just adhering to best practices when you're developing environmental certification programs.

I'll give you a quick overview of the Green-e Program. This is a consumer protection program for renewable energy products sold in the voluntary market. We have been around for over ten years now. We certify three product types, renewable energy certificates, renewable electricity sold in markets where there's

competitive retail or wholesale markets, and also utility green pricing programs.

The Green-e Program provides three main functions. First, our standard defines what is eligible to be called a renewable energy product in our program so that includes which resources qualify, what vintages they need to be, what year the facilities were built, so really old facilities can't participate in the program. We have specifications about no double counting. If a renewable energy is used for compliance with an RPS, for example, you can't also sell it in the voluntary market, and a variety of other specifications in our standard.

We conduct annual verification of all the products that we certify, so we require independent third party audits of all the companies who are participating in our program to ensure that supply equals sales, they did no double selling and that they gave customers what was promised.

We also do marketing and compliance review of these companies. We have a code of conduct which requires that certain disclosures be made to all their customers, including provision of a product content label to the customer and disclosure of standard terms and conditions and price to customers when they're making a purchase and we review those materials twice a year to

ensure that companies are being accurate and full in their disclosures.

Also, we review all of their marketing materials, so we require that they submit all their brochures, print, radio and television advertising to use and we review them, one, for compliance with our code of conduct and, also, if we think that they may be running afoul of FTC guidelines or the National Association of Attorney General guidelines on environmental marketing, we tell them and make suggestions about how they can improve their communication about their product.

Just quickly, this is similar information to what was presented this morning by Lori Bird. This is just a history of the quantity of renewable energy products that we have certified over the years. The scale is in megawatt hours. You can see when the program first started we were certifying entirely competitive electricity products, and as the market has evolved, we've moved to a program now where the majority of what we're certifying are renewable energy certificates which are being sold separate from the electricity.

Moving on to Green-e Climate, which I think is of more interest to the crowd based on questions so far. This is a program that we're going to be launching early this year. It's a consumer protection program just like

Green-e Energy, but this one is aimed at greenhouse gas emission reductions or what is normally called offsets. We will certify offset products sold at the retail level, so companies such as Terrapass or carbonfund.org or other sellers who sell offsets at the retail level could choose to join our program if they wish to.

We have been developing the standard and the program documents for the past almost two years. We began working with an advisory group in mid 2008 to sort of scope out what market needs there were, where there were consumer protection issues that weren't already being filled by other organizations. In December of 2006, we released our first draft of our standard. Since then, we're now in our fifth stakeholder process and the development of the program, which will be ending this month, and then shortly thereafter our board will meet and assuming all goes well, we'll be able to start certifying products within the next month or two.

So, what functions is Green-e Climate going to provide? First, we're going to require that all greenhouse gas reductions sold by companies who certify their products with us are independently certified to be real, verified, permanent, enforceable, and additional. We're going to do this by partnering with organizations who perform this. There are a variety of organizations,

some of which we've heard about already today, that certify at the project level to ensure that offsets are being created and that they meet additionality criteria and aren't double counted.

We're also going to verify that consumers get what they pay for, so we'll be requiring marketers who participate in our program to undergo a third party audit each year where we'll go through their books, look at all of their sales records, look at contract documents and records from registries to ensure that they have purchased offsets in the type and quantity that they promised their customers.

And, finally, we're going to require a series of disclosures be made by the marketers who participate and our customers that include telling consumers where the offsets are sourced from, giving links to the programs that certified each offset project so if consumers wish to know more about how that project was evaluated, including what additionality tests were used, they can find out and, also, general information about what offsets are, and then a standard product content label which will include basic information about what the offset is.

This diagram is a simplification of how the offset market works. I think we've talked about portions

of this today. I just wanted to reiterate there's sort of three stages in how this market is functioning. First is the offset activity or the project. So, this could be anything ranging from renewable energy or energy efficiency to methane capture or a forestry project. There is a certification or validation step that needs to take place here to ensure that the project is additional and to quantify the amount of emission reductions that are produced by it.

These emission offsets are then sold to vendors or marketers, and the marketers will often source offsets from a variety of projects and often projects certified by a variety of different organizations. The marketer then bundles these together to create a product and that product is sold to the end consumer.

So, Green-e Climate will come in first by identifying which of the project certifiers meet the standards in our criteria, and secondly, by auditing the vendors to ensure that they bought and supplied their customers what was promised.

The third area is the consumer claim, once a consumer buys an offset, what can they say about what that means for their corporate environmental performance or their individual performance as a member of the global community? And, right now, there are a variety of

organizations who have put forward carbon neutral-like standards or are certifying people to be carbon neutral, but there hasn't been any broad international consensus about how to define what is a meaningful claim from a corporate or a consumer perspective.

We have been in conversations with some other NGOs here and internationally about trying to develop international standards on that, but it's still in its infancy and we'd be very interested in helping to move that conversation forward.

Just to give a context for some of the other certification programs that have been mentioned, in Box 1 this includes programs like the offset certified by the Chicago Climate Exchange, EPA's offset protocols, the CDM gold standard, the voluntary carbon standard. The California Climate Action Registry has some offset protocols. I already mentioned the voluntary carbon standard. There are others, so there are a whole variety of organizations that work in this area, number one, which is certifying at the project level.

To our knowledge, there's no other organization in the United States right now who is looking at certifying the product that the vendor is selling to consumer. So, that's where we've tried to focus our effort is to fill that gap in the marketplace right now.

I think my time is up, so here is my contact information. All the materials that have been developed, including all the stakeholder comments we have received in the development of these programs, are posted on our website. So, if you would like to get more information, the website is listed here or you could contact me by email or phone. Thank you.

(Applause.)

MS. FRANKLE: Thank you, Jennifer. Ian is our final presenter.

MR. CARTER: Good afternoon, everyone, and thank you for the opportunity to speak today. Despite the time constraint, I want to take a quick detour on what I was going to say to be absolutely clear on what the VCS is not, and that runs to a comment about carbon neutral.

The VCS really has nothing to say directly to the claim of carbon neutrality. What the VCS is is a standard entirely focused on the common currency of the market, the ton. The fundamental intention of the standard in developing was to address the problem of a real plethora of conflicting information and fundamentally confusing information in the market.

Ecosystem Marketplace and New Carbon Finance did an excellent report last summer about the state of

the voluntary carbon market. But I think it was quite striking that you couldn't get all the standards that were in the market onto a graph on a single page with anything but the names of them. The intention of the VCS was, therefore, to go to the absolute minimum.

There are many, many good credits, crediting standards out there that talk about important things like environmental benefits other than carbon, social sustainability, that sort of thing. Those are all very, very praiseworthy efforts. That was not our focus. We wanted to make sure that every credit in the market was real measurable and additionality. Ideally, all of those other standards should also be VCS compatible and they can be unit, they can be sold under both labels for example.

So, in the end, it's meant to form the benchmark for the market, and recognizing that this is going to be an international market, some of the standards say just buy United Nations credits, well, that means you can’t do a project in Oregon. Given that over half of the voluntary market is in North America, that just didn't make a lot of sense to us.

Some basic assumptions that are made, the focus is on projects that are done, are additional to the legal compliance obligations that the entity doing the project

or controlling the source faces. So, that means, yes, it will be difficult to do. You cannot do a renewal energy project for VCS offsets in much of Europe. You can do that in India. At present, you could do that in the United States. At the point that there's a significant regulatory barrier to that, it will become problematic.

The focus was on driving innovation and new activity. So, the project start date must be after January 2002 and the earliest crediting period is March 28, 2006. I have to confess to you, I have no idea why it's March 28th, but that is the earliest crediting period. The intention is very simple there, it’s to promote projects currently under development so that buyers have a fundamental assurance that the capital that is flowing into the market is making some kind of difference.

In terms of the design of the standard, first and foremost it looks to ISO 14064, the Part II standard requirements. The VCS only provides additional requirements where the ISO standard is either silent or was seen through market experience that it did not provide enough guidance to the project developers to allow it to proceed. But it is meant to be an overlay at best to the ISO 14064, and that is, in part, very clearly because of the intention to have something that is

fundamentally compatible with regulatory programs in the future.

Every project can only use approved methodologies either from existing GHG reduction programs such as the United Nations Clean Development Mechanism. But I should point out that the very first non-regulatory methodologies that will be accepted are almost certainly going to be the California Climate Action Registry's, which that approval is currently under process. So, that will be the first truly voluntary standards.

Projects will have to use approved additionality tools, such as IETA zone additionality tool for the CDM or recognized methods of calculating and demonstrating additionality, which I think we heard about earlier today about technical substantiation. But the basic intent there is to ensure the projects use clear and transparent methods of calculating the baseline and the achieved emissions reductions.

Lastly, and this is, I think, critically important to us, projects are required to use accredited independent verifiers. At first glance, the critical role of verifiers in this standard may pass unnoticed. The verifiers are accountable for their work, and most importantly, they're required to make good on and replace any emissions reductions that are wrongly issued. So,

there is an actor in the process with a direct interest in the fundamental accuracy of the crediting process. And our intention here was to assure that projects are not over-issuing emission reductions and are not allowed to double issue or double credit.

Projects are registered in a central project database. The host for that is still being identified. There's a current host, and I'm not sure but at present that is out for competitive tender, in fact. All projects under VCS will be registered within that database, making available to the public the project development document, the monitoring plan, the verification reports, and all other documentation related to the project, which we feel is essential to give the public the transparency necessary to have confidence in this standard.

All of the VCUs, the voluntary carbon units, are issued through an accredited registry which is responsible for checking that any of the VCUs that are presented to them or projects that are presented for VCU issuance are legally owned and valid. So, there is a point of responsibility there. And any trading of the resulting VCUs is required to go through our accredited custodial services in order to ensure at all times the VCU can be traced to the rightful owner and, again,

seeking to address the issue of fraud.

With that, I'm happy to take any questions. There's an enormous amount of detail in this standard. It's available both at V-C-S.org and IETA's website, along with the website of our partners in the Climate Group and the World Business Council for Sustainable Development. Thank you for your time.

(Applause.)

MS. FRANKLE: Thank you, Ian. Now we're in the question-and-answer session. This is a question for all our panelists. As part of our green guides review, we're considering whether the guide should be amended to include guidance about carbon offsets and certification of carbon offsets. I just wanted your thoughts on what kind of guidance would be most useful for the green guides to provide.

Mario, do you want to start out? Oh, okay, go ahead. Jennifer?

MS. MARTIN: Sure. We're still working on our written comments, but one of the things we think would be useful is if a company wants to say we buy renewable energy, that the FTC gives some guidance about how much that is if they don't state a percentage. And in our program, we think if a company says we buy renewable energy, the inference is that they're matching 100

percent of their electricity use. We don't have a mechanism to enforce that because we don't control all the companies who are making those claims. So, that would be something that would be useful from our perspective.

MS. FRANKLE: Thank you. Any other thoughts?

MR. CARTER: At least on the carbon side, I think one thing that might be a reach for what the FTC can do at this point, but would be enormously important would be to provide some kind of endorsement, not necessarily in brand name but in principal, of what would constitute a real standard. We'd like to think that the VCS would qualify and that it would be something like real, measurable, and verifiable. But something that would serve the role of a positive list. In essence, duplicating for an area where you have more direct jurisdiction than we could possibly have, some of the same intent.

Our fundamental initiative was meant to be international, but the FTC has, in its scope, some ability to put some weight behind that.

MS. FRANKLE: Okay. Mario?

MR. TEISL: The only thing I would add, it's a while since I have looked at the guidelines, but my impression was that they tend to -- FTC likes to be more

suggestive as opposed to regulatory, I think, in terms of stipulating what exactly a firm should or should not be doing. From a lot of firms' perspectives, that may be easier, you know, it provides them a little more flexibility.

But I think there's probably a lot of firms out there, particularly smaller ones, that find that uncertainty a little troubling because it leaves them open to going down a road and maybe investing money into new processes and all that and then finding out after the fact that they're getting a letter from somebody saying, no, well, you really shouldn't do it that way. A lot of investment decisions already have a lot of uncertainty in them anyway. If the guidelines were just a little more defined, I guess, I think that might be helpful. There's a trade-off.

MS. FRANKLE: This is an interesting question. Must offsets be either valid or invalid or could a scale of validity be created such as AAA, ABB, things like that, similar to credit markets. Any thoughts about that?

MS. MARTIN: I'll just jump in from the perspective of our program. We think consumers believe that when they spend money on a product that they're getting 100 percent of what they have been told they're

getting and that from a consumer protection perspective that there needs to be as close as you can get to a guarantee that they're getting what they're paying for.

This question sort of leads into the issue of whether or not consumers are buying a commodity or if they're making a donation, and there are at least one or maybe more companies who are not selling an offset or a REC as a commodity, which is what we've all been talking about something that's actually been created and then documented and traded, but saying, you know, give your money towards some project and we'll use your money to help build a new project and then you'll get some future share of what's created, and that's a very useful model but it's a very different thing that the consumer is getting.

I think that just needs to be clear in everybody's head that there's a difference between what is sort of like a donation program and what we've all been talking about today which is really the purchase of a property right.

MR. TEISL: At first when I answered the question, I was looking in terms of consumer research, and certainly there are certification programs that are not 01. I mean, you win the award or you don't. You have a range. Like electricity labeling, right? I mean,

energy efficiency ratings where it's a scale. But that's not really what your question was asking.

It was almost like it sounded like is it okay for it to be somewhat credible as opposed to really credible. And my guess is that consumers would not differentiate that. If they think it's somewhat credible to them, it's not credible, that would be my guess.

MS. FRANKLE: Okay, Ian.

MR. CARTER: Yeah, I think you can have a scale, but I don't think it can be a scale that ranks validity. We heard the phrase "charismatic carbon" earlier today, and I think there can be really, really good projects and you can find interesting ways of quantifying that, but at the end of the day you need to know that a ton is a ton or you're not really doing anything fundamentally meaningful.

That has to be tempered by a somewhat pragmatic realization that there's no way to get perfect empirical certainty around the counterfactual. You just can't do it. It's logically impossible. But I think as a bedrock principle, you can't give up the idea that a ton really is a ton.

MS. FRANKLE: Okay. Before I ask the next question, I've just been asked to make sure you all speak directly into the mics because it's hard to hear.

This is for you, Jennifer. How does Green-e evaluate consumer interpretation of the marketing materials that you review and the disclosures that you propose?

MS. MARTIN: Well, our initial disclosures were developed early in the program and we looked at what some states were requiring for consumer labeling of electricity products to guide the initial start of our program, and then over time we've added to the disclosures and changed them. Often, we get feedback from customers directly saying what does this mean or marketers, participants in our program will give us feedback. So, we've changed it over time.

We haven't been able to do a detailed sort of focus group effort with consumers to see how they respond to those things. We would love to do it, we just haven't had the resources to do it until now. But it's just been changed over time based on feedback we have gotten from participants, both consumers and sellers.

MS. FRANKLE: Another question, what do you see as the consumer benefit to have this double certification of project-based and retailer-based projects? For example, if a person buys a gold standard offset, why would that person need the additional CRS certification?

MS. MARTIN: Well, if they bought a gold

standard offset and they were able to participate in a registry directly, they would not need our certification because they would act as sort of a largescale buyer making their purchase on the wholesale market. The focus of our program is really for those buyers who either aren't informed well enough to be able to go out on the wholesale market and make choices themselves or they're not large enough to participate in that market and it means they have to buy from one of the middlemen, these marketers. And in that case, you do need the additional step that we're providing, which is to make sure that the marketers are actually delivering what's promised to their customers.

MS. FRANKLE: Okay. Question for Mario. Mario, what do you say about consumers' reactions to eco labeling and certification?

MR. TEISL: Do I get another ten minutes to talk about that? I've worked on a lot of eco, consumer reactions to eco labels and eco marketing on lots of different products, and the reactions are not standard across products, partially because the reactions are going to be contingent on their priors of the environmental problem that you're trying to fix and how that's linked to the product and, also, the priors of how environmental certification is linked to changes in other

attributes of the product.

For example, in some recent work we did with marketing of greener cars, people did not see the link between or they do not see any differentiation across vehicles in terms of their pollution characteristics. Seventy-five percent of people thought all cars and trucks, SUVs, they all polluted the same amount. That's clearly not true. So, that would affect the reactions to any eco information you're trying to push in terms of marketing.

The other thing that we found is that although some people responded favorably to eco information about cars, they also indicated that they thought those cars were probably more expensive, less safe to drive and had lower performance characteristics. So, there's this quandary of some of the producers and dealers not wanting to push that information because all of a sudden they bring in all these other intermeshed priors into the buying process.

Given that, that there's all this variation in products and stuff, I think you can say that there's consumers tend to like information disclosures that are standardized across products. I mean, not the standards are the same, but that the way you present the information is standardized. The amount of detail you

provide for products is important, both in the short run and the long run. Development of the industry and degree in the industry. Who is giving you the information? If there's any ancillary education or marketing activities. Those are mainly sort of the program characteristics. There's other characteristics of the person themselves that get intermeshed with this stuff. But there's a lot of variation within those variables.

MS. FRANKLE: Well, I wish we had more time for questions, but I do thank our panelists very much.

(Applause.)

MS. FRANKLE: We're going to take a 15-minute break and we'll resume at 3:30. Thanks.

SESSION 5: ROUNDTABLE DISCUSSION ON CONSUMER PROTECTION CHALLENGES AND NEED FOR FTC GUIDANCE

MR. NEWSOME: Welcome back, everybody. This is our last session. I want to thank everybody for coming today. It's been very helpful for us to hear from the various panels and I think this panel will be a good one, too. We got some questions about logistics in terms of public comments for the Green Guides review and for this meeting. As most of you know, this meeting is part of the overall review of the Green Guides that we're conducting. We are accepting public comments specifically on these topics, on carbon offsets and RECs. And the public comment period for that will be open after this meeting for about two weeks. I think it closes on January 25th.

And concurrent with that, we've also announced review of the Green Guides which address the broad range of green claims and we're also accepting comments on that. That's on a different docket. And the comments for those close, I believe, February 11th, but it's a little bit beyond the comments for this.

So, what we're going to do here, we're going have a roundtable discussion. We're going to try to hit some of the issues that have been addressed earlier and maybe some new issues. And what I would like to do is

before we start off with the discussion, I would like to go down the table and if everyone could introduce themselves and give a very brief introduction, that would be great. We'll start with Wiley.

MR. BARBOUR: Hi, I'm Wiley Barbour, I'm the Director of Environmental Resources Trust. Recently, ERT has joined with Windrock International, so I'll say I'm with ERT Windrock, and I have been working in these issues for the last 15 years. I'm very glad for FTC to invite all of us here. And where have you been lately?

MR. BROOKS: My name is Cameron Brooks. I work as the Vice President of Resource Development for Renewable Choice Energy. Renewable Choice Energy is a full-service service provider of RECs and carbon offsets to corporate and consumer clients. And I'm excited to be here as well, mostly because I really see this as a -- the fact that this hearing is going on is a real mark of the maturity of the industry that it warrants this kind of scrutiny and attention, and I think it will only lead to stronger products in the future.

MS. RANGAN: Hi, my name is Urvashi Rangan. I'm a Senior Scientist and Policy Analyst at Consumers Union. We publish Consumer Reports Magazine. I have been rating environmental labels on food, personal care products, cleaners, other things, and getting into these

labels as well on consumer products. I've been doing that the last eight years. So, I'm particularly interested in it from that point of view and hope to bring some perspective on what we expect out of good labeling and what ought to be on consumer products to meet consumer expectations.

MS. KOLLMUS: I'm Anja Kollmus. I work for the Stockholm Environment Institute, the U.S. Center of the Stockholm Institute. I'm a scientist there and I focus mostly on carbon markets. I did a study last year evaluating 13 offset retailers and I'm right now working on a study that compares the standards that have come out for the voluntary markets. So, if you are interested -- and this is a shameless plug. If you're interested in my study, if you can just give me your card, it should come out in two or three weeks.

MR. CARLSON: My name is Eric Carlson. I'm the Executive Director of carbonfund.org. We're a non-profit organization that's probably one of the largest carbon offset retailers and, to some extent, wholesalers in the country. We work with 450 companies and actually over 100,000 individuals have participated in our programs to date, in the process of offsetting over two billion pounds of CO2 emissions. We're glad that the industry is growing and that the certifications and the credibility

of the industry is growing, and we're welcome to questions. Thank you.

MR. CLOUSE: Good afternoon. My name is Matt Clouse. I work at EPA. I'm here because EPA champions a clean energy agenda in our interactions with state, federal agencies and consumers to reduce and remove barriers to improving the market for clean energy and we utilize our brand name and our credibility to introduce ideas such as green power and other clean energy options and try to raise awareness of those.

Through the Green Power Partnership, which I am the Director of, we have been working with organizations to increase usage of green power in the U.S. and we launched in July of 2001. At this point, we have over 800 partners and those partners, on an annual basis, purchase over 11 billion-kilowatt hours.

MR. SCHASEL: Hi, I'm Rob Schasel with PepsiCo. I head the energy and environmental sustainability efforts at PepsiCo. PepsiCo, for those that don't know, includes Frito Lay, Quaker, Tropicana, Gatorade, as well as the Pepsi family of carbonated beverages. We're here because in 2007 as a complement to our other environmental sustainability strategies, which include efficiency improvement in our operations, driving down the amount of energy and water we consume, putting in our

own solar facilities and biomass facilities to minimize the amount of energy that we're consuming in our plants, we also made a commitment to purchase renewable energy certificates in an amount equal to 100 percent of the electricity that we purchase and use in the United States at all of our operations.

Our Sun Chips brand is the first out of the box in promoting that by putting the Green-e logo on the Sun Chips bag and putting a statement on the back that says we buy green energy credits to match 100 percent of the electricity needed to produce Sun Chips, and we put the Green-e website there as well as our own Sun Chips website where consumers can learn more about what it is we're doing to help the environment.

MR. STERN: I'm Adam Stern, Senior Advisor for Business Development and Environmental Policy at Terrapass. We're a San Francisco based company, one of the largest retailers of carbon offsets. We help individuals, primarily consumers, offset the impacts of their driving, flying and home energy use. We support three types of projects: wind power, methane digesters that work at dairies and landfill gas flaring projects. We welcome the involvement of the FTC in this important issue and are delighted to participate.

MR. ZONANA: Thank you. My name is David

Zonana. I'm from the California Department of Justice, also known as the California Attorney General's Office. Along with my colleagues, we are working on climate change issues in a number of areas. I come from the consumer and energy area of our office. So, our interests are very much aligned with the FTC and consumer protection issues. We also bring with us the expertise and knowledge learned from going through the energy deregulation process in California.

MR. NEWSOME: Thank you very much. What I would like to do first, I would like to kind of go straight to the heart of why we're holding this workshop today, or one of the main reasons. This is part of the overall Green Guides review. So, what we're trying to do is trying to figure out whether we need additional guidance for these products and the Green Guides, and if so, what that guidance should be. So, what I would like to do is I would like the panel to discuss what they see FTC could address in this area and, included in that, what are some of the biggest challenges to sellers of these products in terms of making their claims, what are the issues that they're dealing with, are their claims out there that there are questions about, et cetera.

But before we get into that, I want to just give an example. I want to encourage everyone to look at

the current Green Guides as you're considering these issues and preparing comments. They cover a variety of different green claims and they're set up in kind of an example format. They give examples of claims that are made and there's a commentary on whether those claims are deceptive or not.

Just some examples, there's a section on general environmental benefit claims, and we talked about that this morning a little bit. Example 3 in the guide says a pump spray product is labeled environmentally safe. Most of the product's active ingredients consist of volatile organic compounds that may cause smog by contributing to ground level ozone formation. The claim is deceptive because, absent further qualification, it is likely to convey to consumers that the use of the product will not result in air pollution or harm to the environment. There are similar examples here for recyclable claims and things like that.

What I would like to ask is whether anyone can offer some examples of claims that would be useful to go into the guide for these markets, and as part of that, some of the issues that the marketers are addressing and that other people are seeing in the market that we should cover.

Now, we've also talked about how FTC does not

set comprehensive environmental regulations, we don't identify preferred practices. Our focus is on making sure that marketers are not using misleading claims and protecting consumers. So, with that very broad question and also an invitation for some broad discussion of that and also an invitation for some very specific examples if people think that these are the kinds of things that we should address.

Does anyone wants to take a crack at that. Urvashi?

MS. RANGAN: Okay, thanks a lot, Hampton. I think clarification of terminology out there is really important. Things like carbon-free, carbon neutral, carbon offset, carbon negative, which we have seen on FIJI water, are really confusing to consumers and what exactly that means. It seems to me, and I'm not an expert in this area, but as someone who’s evaluating the meaning of these labels and these general claims, that direct offsets are potentially more meaningful than indirect offsets. That's not to say indirect offsets are not valuable. But there needs to be some kind of clarity I think in these terms, so that if you're going to say that you're carbon negative but you're using electricity to generate production for your product and then you're buying offsets upstream, downstream, that offset your

use, is that really carbon negative?

I don't have survey data for you, but I would think that a lot of consumers would not necessarily see that as carbon negative, but rather a support of alternative energy practices that offset what they have used in fact.

So, I think it would be wonderful if FTC could add some clarity and some parameters to those terms so that we couldn't bleed outside some of those lines and that it would become clearer to consumers, okay, that's direct offsetting so that company has done something to offset their own energy uses. Oh, that's indirect. I'll leave it at that.

MR. NEWSOME: Okay, thank you. Rob.

MR. SCHASEL: I think consistent with the message that's gone on most of the day, the statements need to be capable of being certified and verifiable and incremental, which is one of the reasons why we chose renewable energy certificates that were certified by Green-e because we could verify they were, in fact, additional projects that were generating renewable energy on our behalf.

In addition, I think there's got to be some standard -- I'm not sure exactly how you implement this, but there's got to be some standard that the credits or

the offsets that are being purchased are, in fact, incremental to indigenous activities that are taking place within the company's own operations. Again, you shouldn't just be able to buy your way to a carbon neutral or carbon negative footprint, you should need to be reducing your own consumption to the minimum point possible, and then offsets are a viable strategy to take that last step to get you to the point where you can actually claim a neutrality.

MR. NEWSOME: Okay, thank you. Matt.

MR. CLOUSE: Following on Urvashi's comments, I think the term "clarification" is important, but I also think that clarifying scope is also important as well. And as we've seen with the inventory world, you can choose, in some cases, to inventory your owned facilities or your operational facilities which could include leased space.

But I think another boundary that's worth considering, too, might be a brand boundary. There are some corporations that have franchises, for instance, that they may not own, but it might be confusing to the public if a statement was made without proper disclosure. Some might perceive the purchase to cover all of the brand's facilities when the corporate entity may not own or operate all those facilities.

MR. NEWSOME: Okay, let's go to Adam.

MR. STERN: I think as the discussion has shown over the last six or seven hours, carbon offsetting is a new and complex subject. It is difficult to explain to people, and I have tried to do this maybe a thousand times over the last year and a half, the basic notion that you're driving your car or you're getting on an airplane and then you're going to pay some money to a provider who is going to support a project in another place that's going to offset the impact of your activity. That's a communication challenge.

I think the response here is that providers and consumers ought to be looking for disclosures on the websites, in the material that's provided to purchasers of carbon offsets, and ways to document that the projects themselves and the offsets have been verified.

And just by way of example, and there's certainly others in the industry who are following similar guidelines, at Terrapass, every product that we sell, whether it's for your car or your flight or home energy use, we send the customer a product content label consistent with what was described by Jennifer Martin of the Green-e protocol. This is one step. There's supplementary information on our website. We publish an audit that reviews every single project, where they are,

the number of tons that have been offset by that project. I think practices like these, some of my colleague here are probably adopting them, too, if they can become more widespread, go a long way towards strengthening the confidence in this important market.

MR. NEWSOME: Great, thanks. Cameron.

MR. BROOKS: Well, to answer the question and to echo, I think, some of the comments that have been offered already, I would see one area that the FTC can really build on an opportunity, as far as offering guidance, is in the area of making more precise claims. So, at Renewable Choice, we certainly see that every transaction we enter into is an opportunity to help educate the customer and to help educate them not just simply to transact, but so they understand how and why and they can communicate effectively that their commitment is making some kind of difference and precisely what that difference is.

So, I think the comment about scope is very well-taken and that can build on trends that we have seen in the standards that are coming out over the last 18 months and in the work that folks have done at WRI or EPA or voluntary carbon standard or ERT or what have you in terms of defining what are the different scopes, how do you draw boundaries, what are the applicable vehicles or

instruments that can be used to apply against those different scopes, and then working certainly with our corporate customers to help guide their claims that they're making and with the individual consumer.

Like at Terrapass, we're constantly updating the materials that go out and I really like what I heard about on the Sun Chips bag there because it says specifically what is being purchased and what's being offset. It doesn't simply say powered by wind or something along those lines. So, more precision would be very welcome and I think the FTC can help lead the way there.

MR. NEWSOME: Thank you. Wiley.

MR. BARBOUR: Thanks. I just want to say I think we're at a historic point in time. The U.S. is on the brink, after 15 years of trying to address climate change as a voluntary issue, we're really on the brink of addressing this in a mandatory way. That has to be a key consideration for everyone in this room because it changes the way you think about these tradeable environmental commodities. We're joining a global market for environmental commodities. Those markets succeed when they’re based on the ability to measure, report and verify these environmental goods such as renewable energy generation or emission reductions, to be able to track

those over time, to have a set of rules that governs how they're created and allocated and traded and ultimately used and retired.

The good news is we have a lot of this infrastructure in the United States, so we're not completely unable to respond to this change that's coming very rapidly. But we're still dealing with the legacy of almost two decades of thinking of this as a voluntary issue, as something that can be solved through voluntary actions. I think there's a great deal of good that can be harnessed by the voluntary market and the drive by companies and others to go out and buy these whether or not there's regulatory initiative.

But at the same time what we see from all the participants in the last couple of panels is although everyone's being very polite, there are real differences about what counts and maybe we should be a little bit more straight up and point those differences out. The real differences amongst professionals in this field about whether or not a REC really does transfer to the buyer in emission reduction. There are real differences of opinion about whether or not a forestry project, which is going to take 50 years to grow if the carbon should be counted as a reduction today.

So, these are things we ought to heighten and

sharpen and these are policy calls. So, we have an underlying basis for measurement and verification, and probably most of the people in this room could come to an agreement over what is an emission because we understand the fundamental processes that create emissions. But, as I think Jim Sullivan pointed out in an earlier panel, where you hit the rub is where you decide what is a reduction, and that requires a policy call about a baseline and that's where you're not going to get, we haven't so far, agreement in the community. This is where I think FTC could be really valuable especially in this transition period in the next couple of years where we don't have a mandatory system and, yet, there's an enormous activity.

I'll just say in looking at your environmental marketing guides under qualifications and disclosures, there's a statement that says that in order to be effective, a qualification or disclosure such as those described in these guides should be sufficiently clear, prominent and understandable to prevent deception.

In my experience, if you're thinking of a qualifier that can explain to a general member of the public what exactly we mean when we say there's an indirect reduction being transferred, I'm not convinced that we really are able to do that in a sufficiently

clear, prominent and understandable way. I think this is an issue that -- there's no real consensus amongst the folks that you have assembled here in these panels. The public needs something simple. And really this is about price. I think that any environmental commodity that is being put forward as something that conveys a reduction, we could find an emission reduction that would be unimpeachable such as a Kyoto protocol allowance or credit, but they cost too much. So, we're looking for a cheap alternative. That's really what this is about, so we need to really sharpen the discussion I think.

MR. NEWSOME: Great, thanks. A couple of issues you raised, hopefully, we can get back to. Let’s go to David at the end.

MR. ZONANA: Thank you. Something the last speaker said triggered a thought in my head. The general comment is this: The FTC guidelines are non-binding, they’re not regulations. They're there to help provide industry with some guidance and help educate consumers. The law is already on the books. The FTC Act is there, the various state laws are there, and those laws require that those marketing the product don't deceive the consumer, that they make clear statements of what they're selling, and that, in general, along with the principles that the guides set out that they be able

to substantiate their claims.

So, the farther you go in making a claim, the more you have to think about how you're going to substantiate that claim. The more careful you are with your marketing claim, the easier it may be to substantiate it.

So, even without guidance, there are laws out there, there are standards. And I think it would still be very beneficial to have the FTC weigh in on these issues, where it can, where it finds that there is sufficient consensus or clarity or a need to, by example, define out some bad practices.

MR. NEWSOME: Thank you. Just to clarify, David's right in that the guides are not technically regulations, they're not rules. But they are interpretations of -- they basically show how FTC would interpret the FTC Act. So, if a company is doing something that’s inconsistent with the guides and the FTC were taking enforcement action, we would cite to the FTC Act instead of the Green Guides. But, nevertheless, the Green Guides represent interpretations of the FTC Act.

So, let's go to Rob.

MR. SCHASEL: Thanks. I just wanted to pick up on one of the things that Wiley said and reinforce and maybe amplify it a little bit because I think he pointed

out a stumbling block that we're probably going to continue to stumble over for the next couple of years, which is there are some things that voluntary markets can do well and voluntary markets can prove incremental positives very well because there's something there to go and put your fingers on and touch and feel.

Voluntary markets cannot prove negatives very well. So, in the absence of some type of mandatory cap and trade legislation, I think carbon offsets are going to be something that we continue to struggle with because it's very difficult to prove a negative. In the absence of a mandatory cap and trade type legislation, carbon offsets are the equivalent not just of the old analogy of squeezing a balloon where you squeeze it over here and it reappears over here, but really it’s squeezing a balloon while you continue to blow it up because we continue to add additional carbon emissions year over year over year in the United States. So, you claim a carbon offset, but meanwhile the total emissions continue to grow

So, in the absence of having a verifiable cap that we're not going to exceed, carbon offsets are going to continue to be a very difficult thing that I think consumers will struggle with because, in a sense, it is a vapor product until we have got a cap that doesn't get exceeded and an offset really does mean a ton of carbon

that doesn't get emitted. So, before that happens, we look at voluntary markets as being much better in terms of proving a positive, like a renewable energy kilowatt hour generated which you can actually go and verify did happen.

MR. NEWSOME: Okay, thank you. Matt.

MR. CLOUSE: Going from the general to the specific, I'm providing some examples. One of the issues we have seen is with more companies interested in putting on-site renewable systems at their facility, there is some confusion when the RECs are sold about what claims can be made. And I would suggest that FTC could play an important role on clarifying those claims, once the RECs have been sold and what claims you have when RECs are held.

MR. NEWSOME: Okay, thanks. Eric.

MR. CARLSON: I'd just like to chime in that, from the discussions earlier, I think we need to put out a little bit about some of the consensus that has emerged and actually been around, I think, almost since the inception of the market. That is that certification is really the hallmark of quality in the REC and the offset industries. It answers the fundamental question, is this real and who says so?

And what you saw, I think, from the previous

presentations was all the different criteria that go into these certifications are a little bit different, but very much the same, baseline, measurable, real, verifiable, you name it, it goes on and on. I think reasonable people, as Wiley pointed out, can disagree a little bit here and there on some of the technical details. I suspect the FTC wouldn't engage in that. But that's a good line for the industry to continue to become involved in or to debate.

Certification really answers that for the consumer. If it's Green-e, this is what it means. It's very transparent. They've got hundreds of stakeholders. If it's Environmental Resources Trust, the same thing. Voluntary carbon standard, and so on and so forth. We don't have a lack of standards in the industry. We have a huge number of standards, and I think the background of these more or less are the same, although let's say Green-e only does renewable energy in the U.S. So, if you want renewable energy in India, you've got to go somewhere else, and so on and so forth.

So, I actually see a lot of positive things in the industry, a lot of things we can agree on. But I think we do need to say is it certified, because that really gets you to a whole other level of quality, or is it not? We need the dialogue, we need people to say, to

really reject or dismiss offsets that aren't or at least require a certain amount of justification behind those.

MR. NEWSOME: Okay, thanks. If we could just do a short diversion. Andy, I'll get to you in a second. I would like to go into what people's thoughts are on tip for consumers, the kinds of things that FTC could provide, information to consumers about what to look for when they're purchasing these products.

Before we do that, Wiley mentioned the issue of RECs as offsets. It's been discussed today. I know that there are different opinions on the panel and there has been a lot of discussion. I was wondering if I could ask a few of you just to give a very brief overview of your position on that, and I'll pick on Wiley first since we talked about it on the phone and I know that you have some opinions on it. And if Adam or Eric, if you want to briefly discuss where you all stand on that issue. Then I would like to move on with Anja's comment and then go to consumer tips.

So, I don't want to spend an extra hour on RECs as offsets, but I would like to get this on the table at least. So, Wiley, we'll go with you.

MR. BARBOUR: For complete comments, ERT provided joint comments on this issue to CRS when they asked for comments on their GHG renewable energy

protocol. So, there are comments from ERT and the Greenhouse Gas Expert Network and Pew Center on Climate and the California Climate Action Registry that are jointly our views on this. I think the short answer is no, a REC is not an offset.

When I think about this, think about it from the perspective of consumer protection, I think about the story about the country bumpkin who takes a bus to New York City and he gets off onto the sidewalk, and pretty soon, he meets a gentleman who makes him a great deal, he sells him the Brooklyn Bridge. Everything is great until someone points out that, actually, you didn't really buy the Brooklyn Bridge because the seller didn't own it.

So, it's a fundamental issue for me when you think about these environmental markets and when you're buying something is, you know, is ownership clear? Is it contested? Are there more than one claimant to that product or that benefit? If so, that's a problem. ERT operates a Greenhouse Gas Registry, and as a registry operator, the first question we have to ascertain is does this person who is seeking to register a project or offset with us really own it?

And, really, this is a fundamental issue with RECs. And the whole idea that you own an indirect reduction, I think, is a little bit deceptive because it

sounds like you really own something, but what you're saying is you own a reduction on someone else's property. Maybe you can get it, maybe you can't. But to say that you can sell that, I think, is fundamentally quite questionable. And this has been ERT's position for over a decade and we are a certifier of RECs and we certainly support renewable energy, but you have to be careful about what it is that you're conveying.

I think that we've adopted the language from the GHG protocol to say you're transferring this indirect production, but it is tricky and I think the EPA position that the Climate Leaders distributed, I think is getting us in the right direction. But it's clearly saying it's not the same as a verified emission reduction where you've got a whole set of activities that go into the creation of that environmental product and real third party attestation and clear delineation, and there's usually a big report on that. You just don't go through that process with a REC.

MR. NEWSOME: Well, there are certainly different opinions on that as we've seen today. Why don't we go to Anja.

MS. KOLLMUS: Thank you. A couple of things, I wanted to comment on Eric's comment on certification. Certification can only be as good as the standard is that

it certifies by, and that's actually something where I feel there can also be some consumer confusion and possibly deception. Because if you certify a weak standard that doesn't have a very stringent definition of additionality, you can put a very big label saying this was certified, but it's really kind of a meaningless certification.

I have talked to certifiers and they're very really aware of that. They say we only go in there to see if the emissions reductions have actually occurred. We don't question the additionality assumptions. So, there's a little bit of a qualifier, yes, certification is very important, but the underlying standard is even more important.

And to tie that in with your question about RECs, I think RECs are a very different commodity from offsets. They have been designed for a very different market and there are two issues why, in my opinion, they cannot be easily used as carbon offsets. One is ownership issues and the other one is additionality. And we've heard some people say today that the additionality, people are getting tired of the additionality discussion. I actually disagree with that. It's a very complex issue and it needs to be discussed, and we need to have a continuous conversation about it.

There is no silver bullet, there might be a silver bucket though. So, in terms of RECs, for me -- Jim from EPA said, if market penetration is so small, you know, if it's less than 2 percent, why bother with this whole additionality question? But if it turns out even the market penetration is so small, if the renewable facilities I'm building, I'm able to build it because I'm getting a huge tax credit, so for renewable energy, just to give an example, you probably earn around $90 per megawatt and about 50 or so or 40 or so of that comes from a tax credit. If only an additional $2 for a megawatt comes from a REC, how could I possibly claim that those $2 are the ones that enable me to build that facility?

MR. NEWSOME: Okay. Adam.

MR. STERN: This is a debate that's been going on four or five years. And I don't want to necessarily represent the renewable energy industry, but I'm sure there are people in this room who would be happy to present in written comments the support there is in the world for applying RECs as an offset. They're a very reputable organizations including some who appeared on the panel earlier, like the World Resources Institute, The Union of Concerned Scientists, Natural Resources Defense Council, that have all indicated a support for

using RECs as an offset value.

I can tell you from Terrapass's experience that we buy Green-e RECs. Those are ones that are not in states that have renewable portfolio standards, so they're not just meeting a regulatory cap at some level. We don't buy in RGGI states either where there is an emerging cap taking shape there. We register our transactions so there's a record of them, and we retire the credits so that they can't be traded again. I think these kinds of procedures that our business follows, and some of my colleagues here on the panel do as well, are the kinds of things that can reassure customers that they know what they're getting and this it's a legitimate way to offset a portion of your activities whether they be driving, flying or using electricity.

MR. NEWSOME: Thank you. Eric.

MR. CARLSON: I'm happy to weigh in here. First, let me say that I think that we need to keep in mind here exactly what it is we're trying to do, and I hate to sound a bit pithy, but the goal here is to actually reduce carbon dioxide emissions. If there is anybody here whose goal that is not, you're probably at the wrong forum.

To that end, the planet doesn't care how you reduce your emissions, whether it's through Central

Europe imploding in the 1990s through renewable energy, energy efficiency or some other form. It doesn't care where, whether in Boston, Brazil or Bombay, and it really doesn't care why. The fight here is against climate change in reducing carbon dioxide emissions as quickly as possible.

I think that the certification bodies that are out there have taken into account additionality in as objective a way as you can without trying to tie up the industry in knots and trying to figure out what is exactly is, say, financial additionality. It is a 1 percent return on investment, 5 percent, 10 percent, 3 percent above coal, 15, 20, or something like that?

But I would go back to saying that I think we can all agree that at least with a certification, and I'm going to disagree with Anja here, you know what those criteria are and you know that there's a body of support behind that. Rather than saying taking the words from, say, a marketer that self-verifies, self-certifies and whatever and maybe just puts a lot of language up on their website, that's not the same as saying that Green-e says this and all of these bodies back Green-e. I think we need to take that into account.

My own feeling is that RECs are offsets. Again, going back to the planetary guidance here. If a

wind REC does not reduce emissions or offset emissions, my question then is what does it do? If I use 10,000-kilowatt hours of electricity, and I can either go to my utility or I can go to the market and get say wind energy or something like that, I'm buying a very real, certifiable commodity and the environmental claims to say such. According to who? Well, according to the EPA and according to the EGRID.

The basic formula for how a REC becomes an offset is simple. One REC equals one megawatt hour of environmental attributes and one megawatt hour is determined using EGRID. Now, there are absolutely technical details of where these things take place, the regulatory issues coming into effect and all that. But at its core, if buying a wind REC or some other REC that's certified and is not double counted and all that doesn't reduce pollution, then it's not really clean. We're saying buy clean power, but if it's not clean than what is it? It's absolutely offsetting what is being used in the grid.

MR. NEWSOME: Okay, thanks. Cameron next, I see a lot of cards up and I don't want to do an hour on RECs. So, if we have comments on RECs, let's try to keep them as brief as possible, but I want to make sure everybody gets a chance to speak. So, Cameron.

MR. BROOKS: Just a couple of quick thoughts. I couldn't agree more with you that the standard is critical. And conversations about quality, I think, take place at the level of the standard and that's key.

On the question of RECs as offsets, I do think that that comes down or comes back to a question of scope and whether you're talking about Scope 1, 2 or 3 emissions and there are differences there. As Wiley pointed out, there are real questions about property rights which, right now, I think the property rights are captured either through a contract path that retailers have to sellers or through some kind of regulation, but that is clearly an area that the FTC could help the industry quite a bit as far as offering guidance. Ultimately, I suppose a lot of that stuff will be tested in case law that I'm not going to comment on.

I also won't comment on the question of whether or not consumers are growing tired of talking about additionality. I think what is very clear is that customers are not growing tired about talking about change. So, these are the same customers that are, in many states, voting to enact new policies that, as Wiley wants to see and I think all of us here want to see, tough, aggressive mandatory policies that require change as far as auto emissions, energy use, a whole panoply of

things that relate to carbon emissions.

One anecdote that I would offer that would point out perhaps some of the complexity of how you judge a $2 or $5 or a $10 REC within a financing picture that looks at a 90-megawatt hour project development -- recently, one of the leaders in the industry spoke at the Green Power Marketing Conference, so he's helped to develop one of the major project development companies and a leader in the green energy space. He made the observation that not one project moving forward today is doing so without incorporating the value of RECs into the core financing of their project. That is a sea change from a couple of years ago.

Lori Bird and others at NREL have published a report that shows that going forward there is expected to be a significant shortage between supply and demand, which clearly demonstrates that the aggregated demand that consumers and corporate buyers have and are -- you know, we like to think that we and others that are forming industry associations around renewable marketing are playing a role in aggregating that demand and driving it and shaping it in ways that it can be integrated into that financing. But it’s clearly playing a role that is adding a new financing stream to project development, and I think that that's core change and I think it’s

important to recognize, and I think that that's an area that is to be applauded and to be promoted at all opportunities.

MR. NEWSOME: Let’s go to Urvashi. Thanks, Cameron.

MS. RANGAN: As someone who has looked at over 150 labels on products, I can tell you that we look at how meaningful those standards are as the first criteria. So, I just want to echo what Anja had to say about that.

We have seen plenty of certification programs, whether it's the whole standard or part of the standard, that has very weak criteria in terms of what they're doing to enforce the standard. One example we have is a certifier who says they have chemical management going on and forest management. The way they actually put that into practical use is leave that up to the forester to decide how they’re going to manage their chemical use. That’s not a standard, that’s not meeting chemical management.

So, sometimes you have to look beyond the rhetoric of what's actually being said and you have to look at how the standard is indeed being verified to really get underneath whether a standard is particularly meaningful.

That said, the next criteria we look at is

verification, and that is an important step. But I don't think we're here today to mandate certification programs, at least that wasn't my understanding. And there may very well be certification programs that exist and those will be rated and judged by consumers as to how meaningful they are, and then there will be voluntary claims and what can we do in the marketplace to prevent deception with regard to those voluntary claims. And I think that's sort of where we are in the discussion.

I also want to echo a few other things and I'm going to incorporate tips for consumers. Additionality, it's a really wonky term we're using here, but for consumers it means what is the value over the baseline, what is the value over a conventional? That's how consumers make judgments about whether they're willing to spend extra money for something. So, if you're doing something that's 10 percent over baseline versus 80 percent over baseline, that's a meaningful difference to a consumer. It may mean a difference in one consumer supporting that product, buying that product, buying that service, and one not.

And I don't think this is a one size fits all kind of issue or value. I think consumers are going to make their value judgments based on their own interpretations of whether you're meeting their

expectations or not among that realm. But what we clearly need is full disclosure and transparency in order for consumers to be able to adequately make those judgment calls.

So, for example, if you're doing offsetting, quantifying that offsetting in some way for consumers, I think would be an incredibly important element to add to your labeling schemes so that consumers could make a judgment among products as to whether or not there is a difference in the value that you're adding.

MR. NEWSOME: Great, thank you, Urvashi. That's a good segue. So, let's talk about consumers and, Anja, you're next. So, let me just frame the question and then we'll go into it. I want you to answer it, too, because you have done that report that you did last year focusing on the consumer end.

The question is a basic one. Your neighbor comes up to you over the fence and says, I want to buy these offsets online or I want to buy RECs, and they really want to dig into it and they want to learn about it. What are the four or five things you tell them to look out for and to ask and the kinds of information that they should seek when they're looking at these products?

So, Anja, let's start with you.

MS. KOLLMUS: Well, the first thing I would

tell them is that first they should reduce their own emissions. It's important to keep in mind that we have to reduce emissions by 80 percent if we want to minimize the possibility of having a larger than two-degree centigrade warming. That doesn't mean we're not going to see some major changes already.

So, the stakes are very high and the reductions we are required to make are very, very large, and offsets have to be put in perspective with that ultimate goal we have. That's true for national and international policy, as well as personal action. So, that's the first thing I would say, you have to reduce your own carbon footprint first.

And then I would say additionality is certainly an important thing to question, are the offsets you are purchasing really additional. And, of course, no one argues with Eric that windmills are producing fewer emissions than a coal plant. The key question is, are you the one who is causing the change? So, if your contribution is not causing any change, you cannot really claim that you're helping to reduce those emissions.

The little example I often use is if say Urvashi comes to me and says, I would like to buy a Prius, but I really can't afford it. And I'll say to her, you know, I'll give you $3,000 so you can buy it,

but I want to claim the carbon benefits you get from having a more efficient car. That I would consider an additional project because she wouldn't be able to buy her Prius if I didn't help her. If she came to me and said, I bought just a Prius, and I said to her, can I give you $3,000 so that I can claim credit for the carbon offsets, it's exactly the same. But in a second example, it's not additional because she already bought the Prius.

So, I think the FTC could -- it would be helpful for consumers to have a little bit of a guideline, a little bit of an explanation, why is this such a complex issue and what really is it about? So, additionallity would be one.

The second one would be what kind of project do you want? Do you want to have a project that has additional benefits, that has additional social or environmental benefits? Do you want a project that is implemented in the U.S. or do you want a project that is implemented in the developing countries? And then what type of project. And I think there is, in each category, renewable energy, energy efficiency, forestry, there's valid and good projects and it's kind of up to the consumer to choose what he feels most comfortable in supporting.

MR. NEWSOME: Thank you. We'll go to Wiley

next, but added to that, I'm just curious whether we're seeing or we expect to see competition or advertising based on different types of offset activities and whether there's an indication that consumers prefer offsets from one type of activity because maybe it's less complicated or they're more comfortable with it. Just an extra question there. I would like us to continue to talk about the over the backyard fence discussion with your neighbor. Wiley.

MR. BARBOUR: I'll take your question on because I think it's tied in. In any conference, you'll hear a variety of people say, additionality is the most important characteristic of a project. I don't particularly believe that myself, but you'll hear that over and over again. So, your question is when people come -- and I often get calls from people saying I'm looking for an offset project, you know, how many times is it I'm looking for the most additional project. And the answer is not very often. Additionality is a great idea in theory, it's really hard to implement in practice. It's an idea that says we can pick the winners in this marketplace, we can figure out objectively what's the best place to direct capital to where it will achieve the greatest environmental good. And it's a great idea, but it just is really hard to put into place.

When I get calls for offsets, it's often I need offsets in the Southwest, I need offsets from the transportation sector, I need a land-based offset in China, I need offsets from a Muslim country. So, when you ask what does the public want, the answer is a whole huge variety of different types of characteristics. And when I think about what we can reasonably expect members of the public to understand in terms of these disclosures, I'm not at all convinced, after having heard all these comments, that we can really expect the public to dissect and understand all these arguments and, therefore, it's okay to have multiple different types of standards that would quantify things very differently.

I think there is a real problem with standards and with these concepts and, ultimately, we will need some clear policy guidance, and I think it's a real challenge to try to think about where those signals could come from the quickest and with the most authority.

And, again, we should keep our eye on the prize. We are going through an enormous change in this country, so what we ought to be thinking about is what voluntary market do we want to see when we have a mandatory cap on greenhouse gases in place. And in thinking about that, we ought to think about how should we be designing this market right now so that that

transition is smooth? And if we build up a set of expectations from the public on what might be contained in a product and then once the cap comes in, it's no longer contained in that product, what have we just done? I don't think we've done the right type of service.

So, I think we ought to be really -- and this is part of the transition that needs to happen -- we need to really rethink all these issues in terms of where we are right now and we are on the brink of a completely different approach to our emissions. And as Anja pointed out, we need to reduce not just 5 or 10 percent, but ultimately 80 percent.

So, the whole idea of additionality, again, it's challenged once you're in a compliance regime, once you're dealing with a defined environmental product with clear ownership of that right to pollute and someone wants to buy that, like buying an SO2 allowance and retiring that, to me, that is a very efficient and reasonable way to reduce pollution that's available to all members of the public.

My organization owns 16,000 SO2 allowances and we'll sell them to any one of you who wants to retire that allowance, but the point is it costs real money, more than most of these products are priced at, and it's really not something that passes an additionality test.

It is simply the ability by the development of an environmental market to transfer title to the right to pollute and you, as an individual, has the right to then throw it in the garbage so it will never happen. I think that's a highly credible environmental product, but I don't know if it fits the definition of additional or not.

MR. NEWSOME: Thanks. Matt, let's go to you.

MR. CLOUSE: I have a number of follow-up comments and Wiley prompted one. I would like us to not think that the potential future carbon market will eclipse voluntary markets as we see them now. I don't think we need to have these voluntary markets be entirely paving the path to the future. I think that in the future, if we do have regulation, there will be sectors that aren't capped, there will be sectors that aren't fully covered. I think there will be businesses that want to go beyond what they have to do. We have to think of them as separate markets and that do separate activities. They both, especially the voluntary market, need to be credible, otherwise it doesn't move forward.

If I could go back to the hybrid purchase example on additionality. I'm growing frustrated with the financial additionality test. I think it's very simple to understand by many people, and that's part of

the problem. Because when you start looking at the details of how you prove additionality through financial means, it's quite complex. If you look at a wind farm, how is that wind farm financed, is it financed through debt, is it financed through equity? There's a number of ways that gets quite complicated to get at financial additionality. The idea of RECs are that you're paying a small portion, but it's a small portion that make as significant difference. How much of a difference? How do you prove that made a difference?

I think moving towards a performance-based standard makes a lot more sense and that you're looking at what happens overall in that sector and setting a standard for what is really above and beyond what's happening in that marketplace at a business level.

And then the last thing on ownership, I think EPA has tried to take a prudent position at this time in the absence of a policy call over who can make ownership claims, and that current prudent path is to have separate accounting as you see in Climate Leaders, as you see in the WRI guidance for indirect and direct. It gives credit to those who can control their purchases, like Pepsi when they can go out and choose not to buy conventional power but buy RECs, and they can account for that and encourage them to take action now.

There's also incentives for those who are generators to register their own direct emissions there, too.

So, some folks in the room are taking kind of an advocate position towards ownership that seems somewhat reasonable, given that we haven't seen claims from fossil generators saying you stole my claim. We haven't seen those. This market has been in existence ten years, there hasn't been that battle to date. But as EPA, as we are advising the companies we work with, like Pepsi sitting next to us, like many other very large companies, we advocate a very prudent approach until that policy call is made. And those are my comments.

MR. NEWSOME: Thanks, Matt. All right, Rob.

MR. SCHASEL: Yeah, I want to get back to the question of what would I say to the neighbor when asked about buying products with environmental claims. I'll walk out on a limb here and say that I think the average residential consumer is far more likely to be struggling with the question of which consumer product do I buy based upon the environmental claim associated with it than they are ever to be faced with the which REC or which carbon offset do I buy. So, I'm going to direct my kind of answers towards which consumer products based upon environmental claims.

And if my neighbor asked me that question over the fence, after I got through the obligatory obvious answer, which is obviously PepsiCo products, I think I would try to give the answer that Anja gave which is make sure that the company from which you're buying is, first, off doing everything they can to minimize their own emissions and their own consumption in their indigenous operations, because I think she brought up a very salient point which is if we're really serious about this and we're going to make a difference, we really do need to get to 80 percent emission reductions from what we're emitting today in order to stave off some severe consequences.

So, I think each consumer -- and what the FTC can recommend is if it's important to you as a consumer, you really need to take the effort to educate yourself and you need to demand that your consumer products companies take a part in educating you as well so that they can tell you what it is that they're doing within their own operations to minimize their energy consumption and then what it is that they're doing outside of their own operations to make an external impact, and only as a final resort what role do offsets or RECs play in their performance.

MR. NEWSOME: Thank you. Okay, next we have

Eric, Cameron, then Adam. And when you all answer, if you could provide a brief explanation or just description of the kinds of things, the kinds of information you provide to consumers when you go to your website, the things that you all have identified as important information for them to have when they're looking to choose these products.

So, let's start with Eric.

MR. CARLSON: I want to agree with what Matt said and what Maurice from the EPA said before. If I can take 30 or 40 seconds first, with additionality we need to keep in mind that, I think Maurice pointed out eight, if I'm not incorrect, additionality criteria, beyond business as usual, baseline, not capped, no double counting and several others. So, all of these certifications have those built into it.

What we're really struggling here with, and I think Matt pointed out, is what about the criteria that are strictly subjective that anybody could simply come out and say, I do this and that's the right thing to do. I think everybody agrees in moving forward to promote more carbon climate friendly projects that there has to be a marketplace that we all understand and accept. That means using objective criteria and not leaving it up to the whims of certain folks to say, well, I think this is

wonderful and I say so.

In terms of the information we provide to consumers, when folks come and support us, we have a number of projects listed on our website. We have information about those. We have the project selection criteria that we use. We have the verification report like Terrapass does. Our financial audit is available. One of the things that makes carbonfund.org a little on the unique side is we let consumers choose which types of projects they support, whether it's renewable energy, energy efficiency or reforestation. So, once you're in there we're telling the consumer, based on that choice, we're going to do this. So that means our reforestation projects meet the Climate Community and Biodiversity Alliance standards, our renewable energy is ERT certified under Wiley's protocols, so on, so forth.

So, I think providing that information is very important. Certainly, for very large customers who really want to select specific projects, we send them the project design document and that sort of information.

MR. NEWSOME: Okay, great, thanks. Cameron.

MR. BROOKS: I'll try to answer a couple of questions. As far as what I would say over the fence to my neighbor, I really do think it comes down to credibility and it comes down to a matter of standards

and to follow, perhaps, from the Google model of searching, a lot of that credibility I think comes from who is linking in to those standards, who is supporting those standards, what does Environmental Defense say, what does WRI say, what does the EPA say? How is the general community responding to that? And I think that in our current market that's the best measure of credibility that's out there. And I think, also, I would say to them it comes down to a matter of community.

To answer your second question about what do we see? With this disclaimer, I work on the supply side of the business so I tend to get to opt out of a lot of those conversations about exactly what we're saying. But I know, for example, on our website whether this has launched or will soon be launched, you heard my disclaimer before so I can't quite say, but a lot of our website presence is based around community and many of our customers come to us from our commercial clients, whether it's Whole Foods or Vail or Gander Mountain or something like that, and they can choose to be affiliated with that community and they can choose to be affiliated with other communities much in the sort of peer-to-peer networking way on the Internet.

I think that that's important because when you get down to the question of where the impact happens,

especially at the consumer level, I think it's fair to say that the impact does not happen at the margin. It pains me to be in front of, what is it, three projector screens because I have a very cute picture of my kids buying a wind power card, which is a product that we have at Whole Foods Market and I always like to throw up pictures of my kids in front of captive audiences. So, it's painful. But that $5 card, in and of itself, is not going to lead to a new $2 million wind turbine being put in the ground any more than when I go to Whole Foods and I buy one tomato which maybe costs more than my wind power card, I don't expect that there's a farmer at the other end who plants another tomato because of that purchase.

But there is a power in community and there is a power in being able to aggregate that demand and shape that demand. So, I think a key question is will this move it forward.

And just to touch back, and I will wrap up, I promise, on the question of additionality, I think this is a very key concept because it's very easy to paint the picture of this wind farm was going to happen or here we came along and it happened because of us or in the Prius example. But I think in the project development world, most project development and most financial investment,

in a larger context, happens with either a small or, in most cases, a large degree of risk.

Of the 2400-megawatts of wind that were put into the ground last year, Lawrence Berkeley Labs did a study and they showed only 20 percent employed at the project level. So, most of that wind is going in with an element of risk.

I know that one of the partners we work with in the wind space, they're in the corn belt, they're a very heavy fossil fuel industry player. They looked at a project where they did not lock up the value of the RECs, they did not enter into a forward agreement to sell the RECs, but because of their experience with another wind farm selling RECs, they felt comfortable about the value of what they would be able to get if they moved forward. So, they could feel comfortable that they're financing projections had an element of risk but were within a comfortable range that they could approve that project and it got put in the ground.

Now, what happens with those RECs if they're sold into the market? We have stipulated that they cannot be considered to be additional because that project was already built. I think we've lost an opportunity, in that sense, to achieve the scale that this industry is capable of achieving. So, for every

megawatt of wind that's going in the ground there are scores of fossil projects that are on the books or moving forward. I think it's just very important that we encourage the opportunity and we protect for the consumer back to this idea before, the consumer wants to see change. They want to see things moving forward, and that is one of the things that the FTC and others can help protect, the ability of the consumer to have an impact on the market today.

MR. NEWSOME: Okay, thank you. All right, Adam, let's go to you.

MR. STERN: Thank you. I wanted to build on some comments Cameron made and some earlier statements made this morning where a number of people described carbon offsetting as a symbolic act. I think a number of other people used the phrase, the warm glow that one feels when one buys these or pushes the purchase button on a website.

But, in fact, as the Professor from Santa Barbara said, we've studied our customer base and the reality is that a lot of people out there who have seen Al Gore's movie, they've watched what happened with Katrina, they've seen the shifts in the weird weather, it's 70 degrees on January 8th in Washington D.C., and they want to get involved and start doing something now.

Congress is having a useful debate on legislation about how many tons should be reduced by 2040 or 2050, and that's great and that needs to happen. But there are people and there are companies who want to take responsibility for their share of the problem. They all understood increasingly that we all, even if we try to conserve, still have some dimension of a carbon footprint. If you've conserved and you've taken those steps, carbon offsets are a reasonable way to take care of the rest for the time being until new technologies and other things develop that will allow us to have an even smaller footprint.

Today, not everyone can afford to buy a Prius. I think our view is that there's nothing wrong with doing what you can, offsetting the balance, educating yourselves so that you learn more about what you can do to be as environmental as possible. As long as the offsets are independently verified, matched against a standard, have clear dates as to when these projects occurred, what kinds of projects there are, and an annual audit that's published on the website or easily accessible so that you know you really got what you paid for.

MR. NEWSOME: Thank you. So, we have about 15 minutes. We've got David next. I would like to get to

at least two things before we end. We may have time for more. I would like David, in addition to the comment that you're probably going to talk about, consumer tips, but I would also like if you could give us some information about the state perspective on these issues. David is from an office that, a lot of the kinds of things that FTC does on the federal level, they do on the state level. The State AGs Offices and the Consumer Protection Agencies are very important partners for the FTC and they have the same kinds of experience in addressing these issues and they're also a very similar perspective from us.

So, I'll ask David if you could address that. Then what I would like to do is because nobody seems to want to talk about additionality, I would like for us to talk a little bit about that, at least have a question from me, a very specific question. There are so many different views on additionality, and it’s an ongoing debate and we’ve talked about all this. One thing that there seems to be a general consensus about is the idea that of regulatory additionality. If the activity is required by regulation, then it shouldn't be used for offset activity because it's something that would have happened anyway.

First question, is that the case? Is there a

consensus on that? And, second, would it be useful for FTC to provide an example in its guidance of regulatory additionality or is it such a no-brainer that it wouldn't be helpful to anyone?

So, let's start with David. And then if the panelists could address that very specific question on additionality that would be great. So, David.

MR. ZONANA: Sure. Let me start with your very specific question. It strikes me that some of the articles in the press that have been critical of the voluntary offset market have cited examples where the seemingly simple test of regulatory additionality hasn't been met or the test of whether or not the project already existed and whether it was business as usual had not been met. So, I think it would be helpful to, in some sense, state what is obvious to those in the room, but not obvious necessarily to everybody thinking about getting into the marketing of voluntary offsets, much less the average consumer out there.

You wanted me to talk about a state perspective. Let me do that very briefly. I think we are or will shortly be wrestling with the question of how voluntary offsets fit in or exist in a compliance market. California may very well have a cap and trade system, that's not determined by any means yet. But if it does,

does that mean that we would consider any projects in California not fit for a voluntary market? And we just haven't reached a conclusion on that question at this point.

We are, I think, taking a close look at, as are other states, this voluntary offset market because it is growing so fast, and picking up on something Adam said, because it has broad implications for climate change policy and the public support for climate change policy in the long term. If there is a crisis of confidence in the voluntary market, there's a concern that that would bleed over into support for mandatory programs, for mandatory regulation reducing greenhouse gases, and I think that would be regrettable if we saw that.

So, getting government involved, getting enforcers involved, I think, is beneficial to this market. The market is already doing a lot of things to police itself as it matures, and we're certainly interested in everything that's gone on in that front, and we'll be talking to those who are both marketing the products and those who are coming up with certification and self-regulation regimes.

MR. NEWSOME: Thank you. Wiley, let's go to you.

MR. BARBOUR: On the topic of regulatory

additionality, my first thought was, well, no, of course you don't need to do that. Everybody agrees that a project that's required by regulation is not eligible for participation in a market because it's already been required. But then I thought, well, you know, it's not quite that simple.

We are developing an infrastructure and an accounting system to enable us to have meaningful environmental markets. Although we often talk about renewable energy and greenhouse gas reductions as though those were the only commodities, there are at least 71 programs in the U.S. and Canada for nutrient trading, nitrogen or phosphorus trading within a watershed or a tributary, and there are also trading markets for SOX, NOX, and other local pollutants. So, really, the answer of regulatory additionality becomes a little bit complicated when you think about an project that may impacted by regulations on dairies or on water quality or on noise or odor abatement.

So, it is a little bit nuanced and perhaps it is something that would be useful to address. If a project has multiple environmental impacts, and many biomass projects do, and then they're also subject to a variety of different types of environmental regulatory processes, landfills is another case where you might have

a variety of things that impinge on a project developer and that would influence their decision to enter into various permit conditions. The issue of was it required is a little bit more tricky once you delve into those details than might appear at first. So, I think perhaps some looking into that would be important.

Let me just say one thing, also, that I'm glad that I heard I think Matt and others pick up on. I didn't want my comments to suggest that we will not have a viable and dynamic voluntary market on top of and side by side with a mandatory market. I truly believe that. So, I didn't mean it to sound like I'm thinking of the the voluntary market as just a ramp up to that mandatory market. I do think it will be dwarfed in size by the mandatory market, but if we can harness additional activity, additional environmental benefit through voluntary purchases and investments, that's a great thing. So, that’s what we want to preserve, the integrity of the voluntary market as we transition into a mandatory market.

MR. NEWSOME: Thank you. I think one thing to keep in mind here is with this example that I have asked about regulatory additionality and there are, as you said, some nuances to it. But some of the examples we have in the Green Guides are examples that if you put 50

experts in the room they would all say, well, obviously you don't make that kind of claim. But at the same time, having that example in there would be helpful to new market entrants and others involved that don't have as much knowledge or maybe more of a casual acquaintance with what's going on.

So, let's go with Matt next.

MR. CLOUSE: Just to add further to that, we get a lot of calls at the Green Power Partnership at EPA about what counts and this issue still comes up of whether or not they can count. The renewables that they already get in the products they buy from, the product they would get otherwise when they buy electricity, and the answer is no and we have to explain why. But let me further say that don't just limit it, the regulatory additionality discussion to a renewable portfolio standard. There are other issues that come up as well. Consent decrees and others, we're happy to provide you a longer list, but those things should also be filtered out in that regulatory additionality test.

MR. NEWSOME: Well, one example I hear from a lot of people are the regulated and non-regulated landfills in terms of methane capture. So, there are probably several different examples there.

Let's go to Anja.

MS. KOLLMUS: I get to talk about additionality again, my favorite topic. A couple of things, what Cameron and Matthew said about things being more complex than my example indicated, my Prius example, that's absolutely true and that's definitely true for the REC market, how projects are financed very much have an impact on the viability of the project itself.

In a way, also, the flip side of having very stringent additionality requirements is that you potentially punish someone who is a very good project developer. If you have a project developer say somewhere in India that really wants to bring this biomass project online, and they're just a really creative entrepreneur and they're going to say I'm going to do this because I know it's good thing no matter if I can sell offsets or not. So, it is a complex topic and there's always several sides to it.

In terms of the regulatory test, I think it's, in theory, very accepted and, in some instances, very simple, say with methane projects from landfill. If it's required by law, then you cannot sell offsets from it. It is though, as all things related to additionality, more complex than that.

One is the potential perverse incentives you create by the offset market. So, if you have certain

regions who don't have legislation and then can sell their offsets, those landfill owners are very likely going to be opposed to regulation that are going to force them to do that because they would lose the revenue stream.

A second example which shows that the regulatory test is not always that simple, this is a hypothetical example too. If you have a city that has a commitment to reduce their emissions, and within that city, you have a company that is a member of the Chicago Climate Exchange and they are doing a very good job at reducing their emissions and they want to sell their excess, they have exceeded their goal and they want to sell their excess allowances through the CCX market. Well, the city is going to look at the inventory, they're going to do a citywide inventory to see if they met their commitment and they are, of course, going to look at the reduced emissions from that company. So, should that company then be able to sell their excess reductions through CCX? If yes, then they would be double counted. There's no simple answer to this and there are many examples like that.

MR. NEWSOME: Okay, well, thank you. Let's go with Eric and then Cameron, and I guess that means, Cameron, you will have the last word. One thing to think

about with this additionality example that I've thrown out is, from the FTC's perspective, what I'm essentially asking is if you sold an offset and you just made a generic claim about the offset and it was based on say a landfill that was regulated and EPA or the state or whatever required methane capture, would the sale of that offset and the claims, would those be deceptive to the consumers?

The missing step there is, well, that kind of assumes that the consumer has a general idea about an expectation about additionality. So, there is a lot wrapped up in this example.

So, let's go with Eric and then Cameron.

MR. CARLSON: I think you've raised a really important point about what we can define and what we can't. And I don't know of a certification body that would allow the sort of project that you're referencing. I guess it could happen.

And the other thing I think, as Anja and Wiley and others have pointed out, is you can see how this stuff can suddenly get very complex on one of the objective additionality criteria. All the more reason why I think we need to have technical experts dealing with this, dealing with this in papers and in symposiums and things like that and really talking about this.

But let me paint a different scenario and that is, can you imagine if all of the marketers here on the stage or out in the audience or around the country all had their own standards, did their own verification, did their own certification, had their own definitions of additionality and so on and so forth. One of the things that you rarely hear in the discussion about additionality that I would like to ask people is just define it. The EPA did a great job today defining what they mean by additionality. Green-e defines what they mean by additionality. Wiley does the same thing. To simply say wouldn't have happened anyways isn't a definition that any project developer can take to a bank and say we meet this threshold.

So, that's another reason I think we need to get away from these subjective areas, away from allowing non-disinterested parties to define their own way around this. That's why I guess I have said it a number of times today and I'll just repeat it and be quiet, that I think third party certification answers the question is it real and who says so and what's behind it.

MR. NEWSOME: Okay, thank you. Cameron, you have an opportunity, if you can keep it under a minute you'll give your friend Adam a chance to speak. He has his card up to add another comment. Then we'll wrap it

up.

MR. BROOKS: I think you asked a question after the question about regulatory additionality, but, quite frankly, I didn't hear it because I was so flustered by the idea that I was going to have the last word. So, I'm glad you'll be taking the last word.

But on that question, to me, it comes back standards and I don't know of a credible standard that would suggest that regulatory additionality is not a concern. So, I'm inclined to suggest that it's not an important thing to include as a specific guidance in the FTC as long as you have included guidance to go to those standards. Again, none of those would include that.

But as I was thinking about the last word, I will offer up this last word and then I'll hand it over to Adam, which is, again, I would come back to the FTC has a great opportunity and I hope it's seized upon to protect the consumer. I mean, there's a track record that in my personal life I come back to, not having to suffer the indignity of getting up in the middle of dinner to answer a telemarketing call.

I suffer other indignities at dinner like having my son throw food on me or, as I was coming out here, giving a civics lesson to a four-year-old girl who wanted to know what a capital was and she asked me

earnestly, daddy, is that where the king lives? I tried to explain, no, despite what any individual politician might think, we don't have kings here, we have presidents, and then that led to a question, which, honestly, if anyone here can help me answer, I couldn't answer, which is what's the difference between an emperor and a king.

So, usually when I get to these more philosophical, but clearly unanswerable questions on my part, my daughter has a great fondness for Yoda, and I would said that's the kind of a question that a Jedi master can answer. It seems to me with the discussion of counterfactuals and additionality and all that, we really do have a great need for a Jedi master that can answer some of these questions for us.

In the absence of that, we do have at least one man in a green tie which is close to Yoda. So, maybe in the interim, you can fill some of that void, and it's all you.

MR. STERN: All right. I do a Yoda imitation, but...I want to thank the FTC and the staff for preparing the session. I think it's been enormously informative and I think it’s worth stepping back for one minute, perhaps as a closing thought, and recognizing that this is an emerging industry, it's still at a relatively early

stage. But even in the last year, there's enormous progress made on a lot of levels.

You have some top rate providers that have served customers probably now in the hundreds of thousands, customers who have been given a chance to get more engaged in solutions to global warming. You have two very respected accrediting bodies in Green-e and VCS that, working through hundreds of public stakeholder comments, have developed strong standards that now are available for the market to use. You have people getting more educated to the point that the word "carbon offset" makes it into the Oxford Dictionary as the word of the year. You have a constituency that's building in this country in part because people are buying offsets, that is pressuring Congressmen and Senators to take action on this larger problem.

And, so, for those reasons, I hope the FTC will do as much as it can to nurture this industry to help strengthen it. There's a lot of good that can come out of it with all the provisions of consumer protection that can ensure people get a good deal, they know what they're paying for, it's verified, it's publicly disclosed.

This is one of the more encouraging developments in my estimation in terms of where we're really going to move, if we're going to get our arms

around this whole problem of climate change. I hope the FTC will help support that movement.

MR. NEWSOME: Okay, well, thank you. I want to thank everyone for participating today. This has been very useful. Thank you for coming and have a good evening.

(Applause.)

(The workshop was concluded.)

C E R T I F I C A T I O N O F R E P O R T E R

MATTER NUMBER: P954501

CASE TITLE: ENVIRONMENTAL MARKETING GUIDES REVIEW

DATE: JANUARY 8, 2008

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause before the FEDERAL TRADE COMMISSION to the best of my knowledge and belief.

DATED: JANUARY 22, 2008

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ROBIN E. BOGGESS

C E R T I F I C A T I O N O F P R O O F R E A D E R

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation and format.

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ELIZABETH M. FARRELL