The Future (March 23, 2015)

Moderator: Michael Dworkin, Professor of Law and Director of the Institute for Energy and the Environment, Vermont Law School

Mary Powell, President and CEO of Green Mountain Power
David Cash, former Commissioner, Massachusetts Department of Environmental Protection and
Department of Public Utilities
Pierre Arcand, Minister of Energy and Natural Resources, Québec

Michael Dworkin: I m Mike Dworkin, I m the professor of law at Vermont Law School where I direct the Institute for Energy and the Environment, and there are a few disclaimers I have to make. You have sat through

So really the short was to summarize where we see the vision of where we are

But John I have to disagree with you. I think it goes well, well beyond looking at the transformation of fish to birds, or something like that. What we need is fundamental, fundamental transformation of our energy system. It is an energy system that has been around for 100 years, that was designed with how to regulate natural

I mean it has been crazy working across states and regions, in such a way that collectively, we all know what the answer is, and yet it has been really difficult to get there. So I am confident that these kinds of conferences, these kind of discussions,

fundamental part of this fundamental shift. And I really appreciated Pierre's acknowledgement that we haven teven started yet, or **effci**tovery good. I would even say, coming from Massachusetts, where we are so **peall**uld that **rleast** sachusetts has been number one in energy efficiency for the last three years, beating out California. Anybody from California here? It was part of my contract that I had to say that whenever I was in California. But even in Massachusetts, it is not enough. Not even close to enough. I forget it is in the tens of thousands of homes that we audit every year, all of the utilities audit out of a residential base of like 2.5 million homes. That is not even close. So for two - utilities to really be thinking about how they can play in the game of energy efficiency is really important.

And that brings me to my second point, which I didn t hear as much, and that is I think that the utility is that - you are definitely getting there, you know, especially when you had your Ben and Jerry s up there, and etc. That we need to be thinking about energy - as utilities providing a service, and the service is, cold ice utilities and the service is, cold ice utilities and the service is and the service is and the service is and the service is an at the service is at th

Michael Dworkin: And that

they re on the customer side, not the distribution side. I think that the chance to getting off

About what you were talking - about the relationship, and especially when we talked about generation, the problem that we face right now it is an interesting idea, an idea that is of course of worth thinking, but my first comment right is that again if you compare it to other general types of energy it is still very high cost. And the problem we face is that I have a dozen if not more groups, people who come with new ideas or new technology, and the challenge is always to

Mary Powell: Yeah and I actually just want to say relevant to your point, I actually feel like maybe in my zeal to sort of get going and get to the power point I didn t mention it strongly enough. But, you know a big part of what put us in a really good position to move in the direction we are moving was the stabilizing we did around our

us. But clearly, I don t know what will be the exact outcome of this, but clearly we need to have stronger programs.

Michael Dworkin: In the back in the middle.

Nicolas Muszynski: Hello, my name is Nicolas Muszynski, I work for Renewable Energy Systems Canada. I do renewable transmission and storage project development. I have a question, kind of a fundamental shift in the way that we see our system, kind of like what Mr. Cash is talking about and in the context of kind of cash-strapped capital investments. When we look at the type of investments that are done in the energy sector and oil and gas industry, so for instance the Energy East Project is I think a \$13 billion project proposed. Obviously, a lot of people would think that that is a little bit of a large project, but nobody thinks that people are completely nuts to think of investing in that. When the same type of investment, which will probable actually get you an HVCD between Newfoundland and England, to be able to balance Europe and North America with renewable energy - so I was just wondering why is there such a -I guess when we look at the transmission projects and the invests that are done in renewable energy, people often think it s completely bonkers. But when we re looking at the traditional power, not traditional power but fossil fuel investments, it is kind of like a run-of-the-mill, normal, business as usual proposal.

David Cash: That s an awesome question. And you are not even talking about siting, right? So like I can think of several fossil fuel projects that were sited in New England without much kind of community engagement, and I can think of a particular one off the coast of Massachusetts, you know? You know I think that, I think part of the answer to that is cultural, you know, that we are a fossil fuel based economy and have been for many, many years. And so the culture of developing fossil fuel projects is one that is relatively natural. Maybe even more important, is that, I would think, our regulatory structure is set up to deal with development of fossil fuel infrastructure and that hasn t been the case with renewables. It s more difficult because we don t have the tools yet, and the tools are scattered, right? So if you redeveloping some project in New England and you want to get RPS credit that well then, which state of RPS, we all have slightly different programs. You know it is a very different regulatory structure. As I mentioned

Michael Dworkin: I d add one very technical but vital point. Almost every form of governmental assistance for renewables has come in with a very short sunset, in the 24 to 36 month period. Whereas the multi billion-dollar oil faculties that I worked on when I was at the University of Houston,

relationship that has worked very well, and has - you know, another part of it was they have been in Vermont for 20 some odd years and we d never heard of them. So that made us really believe that they meant what they said when they believed in local control, and that has been absolutely our experience. So for better or for worse, I guess you can blame stuff on us, if you don't like the things Green Mountain Power is doing.

Michael Dworkin: Probably have time for one more, and then after the question, I am going to ask that everybody wait and we will move into the closing ceremony and some very worthwhile thanks. So let me just do a quick.

Vincent: Bonsoir Monsieur Minister. Thank you for being here. I am a student at Carleton, my name is Vincent. I am also an energy efficiency professional, from Québec, so on behalf of the energy efficiency industry in Québec, well frankly, we re not that bad. Broww,e do agree that there is still a lot more to do, and this hinges a lot on electricity prices, as you were being told this morning by an economist from the Université Laval. There has been proposal and a number of recommendations made in the past to use the additional dividends that might be, you know, passed to the Government of Québec from Hydro-Québec and use fiscal levers to give back to the low income consumers and therefore

Michael Dworkin: I think it is time that we need move on I am afraid, sadly. All the questions I want to ask are going to stay with myself as well, so I am in comradeship with you on that. I do want you to stay where you are for a moment so we don't get chaos as we do a turn over to the people

I just have two quick points that I want to make to wrap things up, final thoughts.