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THE ROLE OF THE PRIVATE SECTOR IN GLOBAL FOOD SECURITY AND DEVELOPMENT October 16, 2008 – 2:30 to 3:45 p.m. Moderator: Jerry Steiner Participants: Carl Hausmann – CEO, Bunge North America Sarah Hull – Global Head, Public and Government Affairs Robert Lane – CEO, John Deere Sheri Schellhaass – President, Institute of Food Technologists; Vice President, General Mills Samuel Worthington – President and CEO, InterAction

Ambassador Kenneth Quinn President, World Food Prize Foundation

At this time if I can invite our next panel up. If you had been looking at our materials, you know that the chair and the moderator for this session was to be Alan Larson, former Under Secretary of State, now with Covington and Burlington, a leader in chairing U.S. panels and holding negotiations and discussions with the EU on biotechnology. And his father passed away several days ago, and Alan is unable to be with us.

And I called Jerry Steiner, and I said, "I know this is an unusual request on very short notice, but I wonder if you would be willing to step in and take Alan's role and be the moderator of the session." And Jerry, being the wonderful person that he is, agreed to do that. So thank you, and thanks to all, and let me turn it over to you.

Jerry Steiner

Senior Vice President, Monsanto

You all know, of course, that the truth is that no one can say no to Ken Quinn. I'll do a little bit of panel member and moderator here. This session here I know has to be lively and exciting, because if you're like me, that first session or couple of sessions right after lunch, that's the toughest time of the day, especially when you know you have an exciting evening coming up, like we all do right here. So we'll all do our best to be very lively and stimulating here. I also want to save plenty of time for questions, because I think oftentimes that's where the most interesting things come up right here.

We're going to focus on what the private sector's role is in solving this big challenge that we've got in front of us, which I think has been really very, very effectively painted. I'm going to kick this off really by bringing up two of the many nuggets that Sylvia Mathews Burrell brought up at lunch today, and there was just a couple of them that really caught my eye and I thought are very, very relevant to what we're talking about here today. And the two of them are: She talked about the difference between a success story and development. And I think it's really, really pertinent because many, many times – and I'm going to ask each of the panelists here to talk about what they are doing in business as a private sector participant in these very challenging places in the world to get a new start, to get something going – because we know getting things going is often one of the hardest things right there. But when they're successful, that's really the success story that we can all talk about.

But it doesn't turn into development until that pilot truly becomes scaled and no longer is a project, but is simply an ongoing business system that creates value for all of the people in it. And it's often this challenge – of making a pilot become a sustainable, ordinary, everyday business model that we start to take for granted – that is a place where we lose an awful lot of good ideas.

So that's the second half of what we'll talk about, is how we turn a success story into develop, and what that interface, what that partnership between the private sector and public policy, needs to look like in order for that to happen.

I want to start with the other saying that Sylvia talked about, and that was, *Go fast or go far*. And as Sylvia talked about, one of the partnerships that we are in with the drought-tolerant maize for Africa – or you'll hear it talked about as WEMA, Water Efficient Maize for Africa, right here – we have 10 partners in that program, or we are one of 10 partners in that program. So it is a big conference room whenever you get together.

And we're really buying very much into the Go far methodology right here, because we know it takes an awful lot of people on board from the very beginning – everyone's hand in creating the outcome – so that we don't make the mistakes and we end up with something that truly creates value for a broad set of people, in this case right here a maize that is more resilient in those kinds of situations.

But I also want the comments to really comment on this idea of partnership and how we can go far but also try to do it with some speed, because speed is important right here.

I'll kick off, and what I'm going to ask to do is that we're just going to go right down the value chain and it's pretty much the order that's in the program right here, kind of starting with things that the farmer is planting in the ground.

And I'll ask Sarah, you, to be next right here, and then we'll go down the value chain with Carl after that, and then Bob Lane, and then follow it up with where it ends up as food and, Sam, have you wrap it up at the other end. I'll ask each of you to maybe talk about five minutes, sort of maximum here, in terms of how you see the role of the private sector in meeting this challenge right here. And then we'll come back secondly and talk about how we turn success stories into development right here.

You know, for us as a seed company, obviously, we see our role as someone who needs to invest, and invest in solving problems. And the solution to that problem, obviously, has to earn a return for our investor. In the early days some of that return is social, as Sylvia talked about at lunch, as well as financial. The social piece is important, because when people win, it creates sustainability of the business model. It's only in the sustainability of the business model that this is ever going to be a durable return for any of us. I think society is counting on us to make these investments, to innovate. In the case of us as a seed company right here, that means doing breeding. That happens locally; as does the seed production happen locally, so it can build into an economy very, very quickly right here.

One of the big things that we can also bring is – even though the crops aren't always the same, sometimes they are, or they can leverage off of a very common platform that we could never afford to build if we were just building it for this specific market.

[There are] two examples of that, one of those being our molecular breeding. We built this platform because it's built on top of corn and soybeans and cotton and some vegetable crops for the developed world. But at a modest, incremental, marginal cost, it can also make a difference in those same crops which do happen to be grown in much of the developing world.

The same thing is true for technology like drought tolerance or insect resistance. Even though it's developed for maize in the U.S. or Latin America, that technology often has a direct application, but needs to be incorporated into germplasm that fits. And I think the private sector taking the creativity of "How do I use what I have?", that's been paid for and has an investment basis somewhere else but can make a difference in making a sustainable business model in the developing world, is an important element of creativity and commitment that we need to bring to addressing this problem.

Then lastly, I think the point that I see the private sector having to commit to and do is people. We need people to operate in each of these marketplaces, and as much as we can do to bring training and development to these places and hire people, it's also the start of the model.

So I'm just going to stop right there from the standpoint of what we as a seed company see our role in this being and kick off the discussion and hand it over to Sarah to talk about Syngenta. Sarah leads public and government affairs and development, like these kinds of issues, for Syngenta. Sarah.

Sarah Hull

Global Head, Public and Government Affairs, Syngenta

Thank you, and I think in your agenda you have Valdemar Fischer as the speaker, so I, too, was called in at the last minute to sit in for him. So he regrets he can't be here.

But I think for us the role of the private sector in global food security and development comes down to two words. And similar to what Jerry said, for us it's technology and it's partnerships. And no truer today has this been more important and, I think, a greater opportunity for us to take these things even further, especially the partnership piece.

We've heard a lot about on the technology side – the seeds and the genetics and the traits – and that's truly very important. But I also don't want to miss the role that crop protection, that seed treatment, can also play in helping to improve global food security.

We also heard yesterday the possibility around nanotechnology, which I think is also truly very interesting here. But we've got to get the partnerships right now and develop them in solid form so we can take those forward.

First, I'm going to take the two, technology first. For us it's about applying the full range of technologies. We say our purpose is "bringing plant potential to life," and that truly is going to be done through technology.

One particular project I wanted to talk about is something that we recently introduced, which is the tropical sugar beet, and we introduced this in India. We spent 11 years developing it, and when we were ready to go with it, we found partners that we felt we needed to help take it forward and develop a business model that would work in India.

We partnered with the Vasantdada Sugar Institute. We partnered with a bioethanol co-op with 12,000 farmers. We partnered with the Indian government. We partnered with local NGOs. And basically we together built the business model that allows this tropical sugar beet, which grows really fast and with a lot less water than traditional sugar beet, to have a two-crop season for these farmers, where they have their markets set for the sugar production in the first crop, and then the second crop they have the ethanol-production partnership lined up.

And this is just in its infancy, but we're already very excited about what it's developing and how we can take this into other countries, like Ethiopia, even possibly the U.S., but definitely in Peru and South Africa and other countries where we think that this model could be effectively replicated.

I also wanted to talk a minute about partnerships in terms of knowledge sharing. I think the whole agriculture-extension discussions that have been going on here are extremely valuable. And we have found some great success in a project – many projects, but one in particular – in Egypt, where we're working in some of the more arid areas with farmers who are using traditional methods but just not quite getting the productivity they want. So in training with them and partnering with the local NGO, we've been able to have some tremendous effect.

But I think the challenge with these things is, how do you make them scalable? How do you make them not pilot projects in different parts of the world, but how do you come together to actually make them much more effective? And I think that's what our challenge here is today, to figure out how to do that.

Obviously, it's working with many of you in this room. It's us having a little bit of a mindset shift ourselves, that we need to look at this differently than we have before. It's taking a look at the challenges in terms of the public policy, the trade implications of having a product in South Africa that could potentially be exported into Europe and it doesn't have the approvals that it needs because it's genetically modified. That's a real struggle for us, to get technology into some of these areas where they actually could benefit from it.

So I think we've got to figure out how we can partner on a much deeper level and much broader. I'm intrigued by the fact that I think some of the international organizations are much more willing to talk to the industry than they have been before. Typically we thought, "Oh, they're too politicized, it's too hard to break in; they don't want to hear from us, they don't trust us." But I think, you know – and it would be interesting to hear from the other panel members – we're finding that they're much more open to that. So I think there's a lot of encouragement here, but we need to keep going.

Jerry Steiner

Thank you. Carl?

Carl Hausmann CEO, Bunge North America

Good afternoon to everyone. I'd like to make a couple relatively general, maybe even simple observations, maybe contentious – you might agree, you might not – and really drive towards asking you all a question and see what you think about what might be the outcome.

First, what is the role of the private sector? Rather than talking about Bunge, I'd just like to say, in general, I really see it as connecting the farmer to the end consumer. We have a big role, and it is absolutely one that covers the entire value chain, whether it be ensuring markets for spot deliveries, spot purchases of farmers and consumers, or future markets – infrastructure, storage etc., transportation. Seems old-fashioned and simple, but transportation is a very big part of the private sector's role. Transformation, marketing, and distribution – and we do all of this both domestically, as well as globally.

Which drives me into another word I highlighted here to talk about for a second, is globalization. Ever since the Seattle ministerial – what was that, about eight years ago? – the concept is absolutely contentious. And yet notwithstanding that, ever since then, globalization of trade continues to grow, grow, and grow. So I would contend that the reality of globalization is inescapable, regardless of what you think of it.

Furthermore, though, more than inescapable, I'm convinced that food security is more enhanced by globalization. The world can't be depending on each country to produce its own product. So globalization, I think, is part of the answer, not a problem.

Next word maybe gets a little bit more special: interdependence. It sounds like – I was never in Congress; it sounds like that should be something coming out of legislators talking about. "What do you mean by interdependence?" But I think that is getting more and more important as we go forward. Certainly, interdependence between surplus countries and deficit countries. Again, I think that that is, this interdependence is not a problem but a solution. But it's also interdependence on everyone in the value chain.

You know, if we look back historically, I think we've been very comfortable with the interdependence between rural and urban. The urban people felt like, oh, the farmer, we trust the farmer – very comfortable buying farm produce in farm markets. But as you look at this on a global basis, the interdependence [is] between importing countries and exporting countries, between the fear of imported products from wherever they are – what is the food security of this interdependence?

So really the question I'd like to ask you is for us all to think about, Is this growing interdependence going to be carried out? Or, Are we going to be living in a very conflictive environment or an orderly environment?

For us to meet the challenges of food security around the world, of meeting the consumer requirements, we're going to have to be much more comfortable with the interdependence of importing countries and exporting countries; the interdependence of reducing export tariffs and reducing import tariffs in the various countries to succeed; the interdependence between rich countries and poor countries, North versus South; even the interdependence between NGOs and the private sector. In many cases NGOs, I think, they feel that, "We need to demonstrate against the private sector." Maybe that even might work, but I would contend that it probably would be more productive to work hand in hand.

This [is] interdependence: if we are all working in the same value chain, the smoother that we will work together, the better we will be.

Recently, as the world had been facing somewhat of an increasing demand and a shortfall in supplies, prices naturally go up. For me in the private sector, I think that is a natural consequence; maybe an unfortunate consequence in many areas, but a natural one. But we've seen many governments come out and say, "It's speculators. Let's have rules and figure against these speculators." Personally, I don't think that helps.

So whether we blame this all, beginning with the Seattle ministerial or not, I think we have a much more conflictive value chain today than we need to have a successful one going forward.

In that regard, let me just suggest a couple things that I think [are] the role of the private sector in meeting food security, not just what Bunge does in the private sector. I think it is absolutely critical that we all play a part in advocating for good ag policy.

Ag policy. I don't think we can leave it just up to the governments. Governments tend to be elected by their national citizens and often are being pushed towards more nationalistic ag policy than good ag policy. As a private sector, I think we need to continue, therefore, to push for not only WTO agreements but even regional agreements. People say, "Well, regional agreements might not be productive towards a more successful international agreement." Personally, I don't believe that. I think it is natural to have agreements with your neighboring countries, as well as with the rest of the world.

We need to find ways to work with NGOs to bring broader-based support for this new business model, or not only a business model, the new model for agriculture to meet these demands.

We certainly need to continue to encourage the continued use of science in meeting this growth. There is a lot of uncertainty out there about science, and this uncertainty absolutely doesn't help – not to say that current science is perfect and won't have any errors, but uncertainty and this conflictive environment won't help.

So I'm looking forward to learning from all of you here today to see how we can build a more orderly value chain and a less conflictive one. And as the private sector, we absolutely want to participate in the public-policy debate and the broad-based popular support for what we're doing, and look forward to hearing all of your thoughts on that. Thank you.

Jerry Steiner

Thank you, Carl. So, Bob, as CEO of John Deere, what's your perspective?

Robert Lane CEO, John Deere

Well, thank you very much. It's a privilege to be able to represent John Deere here today. Ambassador Quinn and Chairman Ruan, I thank you very much for the leadership. It's a privilege to be with people from all around the world who have a common interest in human beings flourishing.

In the private sector, John Deere is a company that's probably been fairly well known in the United States for a long time. It's 171 years old, but today the company sells – it's not as old as Bunge, I guess. Not too many that are older; I think you're from 1818, is that right? So we have to acknowledge that we're just a young company. But it's great to be on the panel with people from various parts of the value chain.

And as you've suggested, once there is seed and fertilizer, our company comes in, in terms of providing productive equipment. Today we sell in about 130 countries, and manufacture, of course, around the world as well.

But what is the role of the private sector? We are in business to invest other people's money to deliver a great business over the long run in returns. And when you think about the long run – 171 years, for example, and we're angling for our 200^{th} birthday – the only way we can deliver those returns to our customers, as I'm sure the rest of the panelists would agree, is by satisfying our customers in distinctive ways. There are no financial tricks you can do to deliver financial returns over many, many years.

And so the role of the private sector is to find these ways that meet customers' needs. And in this case, we're trying to think, as I think many of the companies represented here, about ultimately all of the people of the world who we would be thrilled if there wasn't anyone who was hungry.

I was just in Nigeria on Saturday night this last week and hearing a toast from the agricultural minister there, with a wonderful aspiration that there would be no hungry Nigerians, and talking about the fact that John Deere could play a role. I returned the toast with, "Maybe a small role," because obviously there are so many parts in this chain, to say nothing of the importance, critical importance, of seed and the research and fertilizer.

But Deere, for those of you who know the company, has been known for very productive, sophisticated equipment. So, for example, farmers here in Iowa – there aren't any more productive farmers in the world than right here – know this large, productive equipment. And Deere has been investing heavily to cause these farmers to be able to be so much more productive.

And just a word starting at the top of the chain – and then we'll get down to people who don't have the capability to have that kind of sophisticated equipment – is that this equipment today is helping make the farmers (through their own energies, of course, but using these tools) so much more productive than they were before. They're becoming mobile information machines. They allow so much less fertilizer to be applied, so much better care of the expensive seeds that are being developed and planted so very carefully, a much better use of fertilizer.

For example, GPS – as the tractor is coming along, the fertilizer can be stopped being applied at key points. The seeds can stop being applied. You go up and down the rows, as many of you realize; it's very hard to do that for 15 hours a day by an operator and not overlap or to leave a gap, even the best operators. With these mobile information machines, there can be no gap. This just improves productivity.

Well, what about all the people in some of the countries that were discussed so eloquently over lunch today? 10 years ago, together with other executives from John Deere, I was walking over a field in India, which was an empty field, and we wondered, "Is there a way that we could be building small tractors here that would allow us to do something that we just haven't been able to do before, and that is come up with a profitable tractor, one that can be sustained over many years that would meet the needs of more emerging farmers?"

And so today that tractor is coming out of India. It's one of the most modern, most integrated plants that Deere has. We build diesel engines there, transmissions, full tractors. About half the production goes into India. We export to about 66 countries, and a result of that tractor is why we were able to be in Nigeria, for example, because prior of that, we didn't have a product.

But we spent time on when we were there, though, was, How do we link in with those who have the seeds and the fertilizer, the distribution, the storage, the roads? There are so many parts of this chain that we are delighted to be here with all of you, because we play that key role.

And I think at that point I will end, and perhaps when we come back, I'll be able to have a chance to talk about a few other projects that Deere has been involved in, such as water, that might come up, which is certainly very relevant. So thank you so much for listening.

Jerry Steiner

Thank you very much, Bob. Sheri, Sheri Schellhaass with General Mills, and also the president of the Institute of Food Technologists. Want to talk about how you see it from a General Mills perspective? I know you're getting very involved in Africa.

Sheri Schellhaass

President, Institute of Food Technologists; Vice President, General Mills

It's a pleasure to be here today, and I guess I'm really – when you think of field to fork – I'm really on the fork end of the business. And some may even consider that a silver-spoon end of the business, because many of the products that General Mills make are really fairly high-end products from a value standpoint, when you think about developing nations.

Our mission is to nourish lives, to nourish communities, and nourish the future. And we do have examples where we have nourished lives, communities, and the future in developing nations – where we have taken and trained farmers in the most northern regions of China, up near the Siberian border, how to grow corn that we can convert into Bugles snacks that are sold in the markets that can afford them, such as Shanghai and Beijing.

I have been in these villages and witnessed the transformation that a mere seven years can make by doing something like this. I have seen farmers who lived in mud houses with thatched roofs now living in beautiful homes with electricity and TV sets. And their children go to the university. And this is in a mere seven years. It's extremely transformational.

And that is when we hit all three of those – nourishing lives, nourishing communities, and nourishing the future. But it won't be all three that we can hit in Africa, because in most parts of Africa they are not ready to be able to purchase the kinds of products that we make. And yet we feel the responsibility to enter into Africa and to try to make an impact at this point to invest in our future.

And so our efforts there are with partnerships, mainly philanthropic. They have to do with projects that we're doing with NGOs on the village level but also a new effort we have, offering our 1,200 food scientists and engineers located here in the United States to help NGOs and local governments be able to transfer technology so that we can help preserve the food that is coming out of the fields, even in the local regions.

Jerry Steiner

Thank you very much, Sheri. So, Sam, you want to – you, with InterAction, run the largest alliance in the U.S. of the relief and development NGOs. So you kind of see how really all of this has to come and fit together in a way that makes sense and actually makes a difference. I think your perspective is appropriate to be after all of these. And then we'll switch to the second questions.

Samuel Worthington

CEO, InterAction

Thanks for the opportunity to be on this panel, and I'm pleased that the U.S. nonprofit community is considered part of the private sector – because we do consider ourselves private, and oftentimes governments have troubles with this idea that we're not part of them.

And it's a community that is of significant scale. The InterAction members manage some \$9 billion of programs around the world. Over \$6 billion of those come from the generosity directly of the American people, so there's been a tremendous outpouring of generosity of American people into our community, and any of the brand-name nonprofits that you may give to are members of InterAction.

In many ways we're involved on the relief side. So if you go to a place like Darfur, there are 17 InterAction members operating in Darfur with 9,000 staff on the ground feeding two million people on a daily basis. We don't do this alone. It's a partnership with the UN, it's a partnership of other governments, it's a partnership of local groups on the ground. It's operating up a value chain, ensuring that the food that comes from this country, that comes from Europe, enables a village to survive or, as in Darfur earlier this year, a camp of 44,000 people to live the next day.

But ultimately that's not what we're about. We're about working with individuals in villages so that they could feed themselves there. We cannot feed the world here from America. We need to reach out and help others to be able to feed themselves.

And the challenge that has always been put forth, looking at the NGOs, is, you do small work. You do a few small projects – while you're talking to a community of 250,000 staff around the

world who are looking at issues of scale. Some of them are investing over \$100 million a year in Africa, in specific countries. And [there is a] shift that is happening in our community, and you may hear the parts of our community that are the most vocal, the advocacy parts, saying, "Change things."

But the parts that are involved in doing on the ground learned quite a long time ago that the only way to get to scale is to reach up into markets. Because we are engaged in those parts of the countries that are farthest away from the local government outpost, and that the only operational extension agents are from Catholic Relief Services, or Heifer International, or Save the Children, or other groups operating in these areas who are helping small landholders reach up.

And then the question is, To what? To a value chain. And what we're looking for are corporations who are interested in reaching down. We're interested in successfully linking those small-scale farmers up with other activities.

And there are plenty of successful examples of this. A more recent one was Winrock and two beverage companies – I guess we could call them beer companies – successfully getting very small-scale farmers to reach up to those companies to enable them to have a steady flow of grain from populations and farmers that they were not accessing in the long run.

So I'm really here to send a message that there is a need for a sort of triangular relationship between government, between business, and between the NGO community. Because it is the only way that we will get out there into these populations. And when we talk about extension, we talk about reaching way out there in the rural parts of the world, there is a community – it's the link between the international NGOs and the smaller NGOs that are local – that is now incredibly interested and recognizes the only we will be able to address food security is through new and innovative partnerships with the private sector, of which we are part.

Jerry Steiner

So what I heard here is that the role of the private sector is, I mean, we as companies, we take our investors' money, and we invest it. And we have to earn a return over a period of time that's satisfactory. And we do that by creating products and services that have to add value. And ideally, I think, in these marketplaces, for anything to start up and turn into something, it has to add value relatively quickly. That probably means within a season. In agriculture there's got to be some local wins here.

You can hear very clearly that no one believes you can do this alone. It takes some creative and probably, I'm going to offer, some uncomfortable partnerships to deliver this. And what I mean by uncomfortable is, we're going to have to be partnering with people that we don't agree on everything with. But what we agree on is far more important than what we don't. And I think, Sarah, that was a point that I heard you making that, you know, we've seen a new openness. I think that's fantastic. It doesn't mean that we're going to agree on everything, and I don't think it requires that we have to agree on everything.

I heard that sometimes it's going to start with philanthropy, but philanthropy will only take us so far. It has to become a market if it's going to become sustainable. And that takes, as Carl pointed out, intelligent policy for that market to be able to be formed here. So the question then I have for our panelists here is – we had the political debates last night, so I feel like I can ask this kind of a question – if you were president for a day, what kind of policy shifts do we need to see in order for more of these success stories, as Sylvia talked about over lunch, to turn into development? If we could change some things, what would make a difference? This is why it's a lot more fun to be moderator than it is to be one of these panelists right here. Does anybody want to start off? Carl, go ahead.

Carl Hausmann

I think there are several. But one other one that I find particularly egregious – and this has been mentioned a couple times – as people face increasing prices of food, we've seen recently in two countries where Bunge operates, in Argentina and in Ukraine, the first knee-jerk reaction of national government is to have export embargos or to increase export taxes to lower prices in the domestic market.

When Argentina increased export prices of wheat essentially going into Brazil, Brazil said, "Wait a second, we've been buying wheat from you for a long time. If it's going to be a problem, we'll look for other sources of supply."

I think in the long term, we need to be more comfortable with these interdependencies across borders, boundaries, than we have been. So one that I would like to highlight is, we need ag policy that has a little bit more of a global approach and a little bit less of a nationalistic, "defend your local consumer" approach.

That being said, our legislators weren't hired to defend the national or the international consumer, rather the domestic one. But ag policy, I think, is becoming much too important to be left to a solely domestic perspective on, What we should be doing? How much should we be subsidizing one farm sector versus another? What are the effects of these subsidies in the international export markets? I think we could have a little bit more, better international ag policy negotiated.

To some extent, I'd like to hope through the WTO, but I found that even the WTO – to some extent, we don't reach success in the WTO, and yet every one of the negotiators who went there knew that this was a win/win situation. But we don't know how to dress up our win/win situation to sell it in the home markets. And I think this is a big challenge that we face going forward.

Jerry Steiner

Very good. Those of you who don't have Carl's bio, you wouldn't know that I think he's worked on every continent, lived and worked on every continent except Antarctica, so you can tell that comment. Sounds like we have a lot of work to do in really making the case to people for how they're better off with that kind of policy that we have today. Other comments on policy? Go ahead, Bob.

Robert Lane

Just to, perhaps, support what you're suggesting. In the case of John Deere, to try to give examples, the board of directors of Deere – the entire board – traveled to India last fall. And one of

our sessions was with Kamal Nath, some of you know him, who, of course, was very instrumental in the recent discussions which were not successful.

But ultimately the understanding and the ability to realize what Dr. Hormats said from Goldman Sachs – that the demand for food is going to be very high over the longer period of time, just given the growth in the population and the standard of living, and that bringing the best that we all can offer here to the entire world is ultimately the way, I think, that's going to keep countries from making these knee-jerk reactions you just described, which were very unfortunate. I would agree with that, because it all of a sudden causes countries that could be importing to get nervous because exporters are putting up boundaries.

So we will do all we can to contribute to this global understanding, to the reduction of trade barriers. Ultimately, we're in the business of helping farmers, the best producers, compete. And we would see that everybody is better off in a situation where there is competition around the world under appropriate rules that have to be negotiated.

Jerry Steiner

Sam?

Sam Worthington

Over the next two years the U.S. is going to invest \$5 billion to alleviate hunger around the world. \$4.5 billion of that is in the form of food aid, and only \$500 million is in the form of helping individuals improve their agricultural capacity – and that needs to flip.

Ultimately, we do need to help people feed themselves, and that is providing resources of food from here. But our strategy over the last 15 years of the U.S. government going from 20 percent of assistance down to 3 or 4 percent of assistance focused on agriculture has been a policy of feeding the world.

We need to stop that policy. We need to feed some parts of the world but really have, at the heart of our policy, a replenishment of the capacity of local groups to feed themselves – local farmers, small-scale farmers to feed themselves. And that will only happen in an international environment where the overall trade environment encourages local farmers and enables local farmers to be competitive in the global markets, which means reducing trade barriers.

Sarah Hull

And just to add to that, I think another trade barrier is just general access to technology, where farmers could be producing a whole lot more than they are. We heard from many of you in the audience where you're saying you wish you had access to some of these tools, but the political nature of the discussions around the technology have totally overwhelmed the science-based introduction to technology. So I think for me it would be generally access to technology and also treating that as a trade barrier.

Jerry Steiner

And I think no one is saying here to lighten up on the science and ensure things that are safe. But when we've got a decade of difference between countries evaluating the same dossiers, we know that there's more than science involved here. And that's got to change. Any more comments on this before we'll open it up for questions from the audience here?

I would just offer on this last point on access that it goes beyond biotechnology. We even have places in the world – I was yesterday at the University of Wisconsin, and the dean there, Molly Jahn, is a vegetable breeder. And she talks about varieties that she developed and could never get these varieties through the regulatory systems. And it took six or seven years for a variety to go through a variety-regulatory system, likely because of some protectionist policies on domestic companies.

And I think if we're going to allow – we really want policies so that farmers can thrive. Because the farmer is the one who makes the decision to actually produce more. And that means that we need to look at all aspects of that farmer thriving, from finance, risk management, access to technology, access to markets.

So I think if you think about it from that epicenter right there, it's a very good lens. Just like Sylvia talked about the girl from Senegal was her boss, we need to think about the farmer and, How can we make the farmer succeed?

But sometimes that's going to look a little unconventional. For example, one of the reasons why finance isn't happening as broadly as it should is we don't have enough respect for contract law. I'm likely to finance you this year and next year and the year after that, if you pay me back. And so all of these things get integrated into a set of policies. But I firmly believe we need the farmer to succeed, and we need to think about policies that are going to make that happen all around the world.

Robert Lane

Jerry, if I could add just one more thought on public policy, which picks up the thoughts that Dr. Hormats from Goldman Sachs made, and that is policy relative to water. 70 percent of freshwater is used in agriculture. It's obviously one of the greatest, going to be one of the great scarce resources, perhaps, over this century that we're living in right now. One prediction might be that there will be more wars fought over water than over oil.

And today, as many of you in the audience know, water is often not priced in any way that causes it to be considered a scarce resource. It's a common resource, so there needs to be public policy to preserve it and to keep it clean. And this is an area of great opportunity for the global community.

As far as John Deere, as I implied earlier, we ourselves are investing in this area because there is so much new technology available, as was actually mentioned earlier in the day, that will allow people to use much less water, much "more crop per drop," as it's called. And this is another great opportunity for public policy and for the private sector to contribute to human flourishing.

Jerry Steiner

Very good. So we get policy aligned with really what nature is telling us to do, and that is to use our resources much more wisely.

QUESTION AND ANSWER SESSION

Steiner So at this time, why don't we go ahead and take some questions from the audience. Go ahead and identify yourself.

Question Paul Sugg; I spoke earlier. I work in sustainable agriculture in Uganda. To mention about value-chain development earlier, I don't want to repeat a whole lot of that or suck the whole gas out of the conference; it's not my conference or anything. But I want to talk to Mr. Hausmann, and I want to go at issue with you on something.

One statement that you made has me particularly concerned. I agree with you on the notion of exports. I agree with you on the notion of tariffs. I agree with you on the notion of free trade and that we can use globalization to help the small farmer.

Where I disagree with you is, you said that you think it's unrealistic that each of the developing countries, in particular, if I heard you correctly, are not going to realistically hit food security – we should use globalization to try to meet food security needs.

Would not it be better to try to meet the minimal standards of food security and give the Third World farmer better leveraging point and a better bargaining point, particularly given the transaction costs of export markets, before we start trying to utilize massive exports from the West? I mean, this is where we've gotten into trouble before.

And where do you start? You really have to scrutinize that strategy. You've got to do a lot of number crunching and beyond that, in terms of transaction cost. And are we going to develop a food-aid dependency relationship through the market, like we've done through an international welfare state of foreign aid? Wouldn't it be better to be able to establish the capacity to meet through food aid minimal security needs and drop malnutrition so they can at least stand on their own two feet to compete in the global market?

And given the fact that you run Bunge, which is producing one of the best of series of bins on the planet, and you're in post-harvest technology, might I point out – the point I didn't make earlier – if you're looking at any given season, we're looking at 30-60 percent losses [post-harvest]. Aren't you kind of going against your own commercial interest? I mean, we need your bins all over the African continent. If we can store up and we can protect the post-harvest situation, we can drop the overall losses. I mean, how...are you going to feed yourself anyplace if you're losing that much to pestilence and other problems in post-harvest? And one of the least areas where we see any concern has been in post-harvest, which is also part of market infrastructure.

Would not that be a better route to go, as opposed to looking at a problem of foodaid dependency? Then we can use the global markets to expand freedom of choice and possibly moving soybeans for biofuels from Iowa, since we've got a comparative advantage in producing soybeans, to where they would have to irrigate in other places, and that way we wouldn't have the tradeoff of biofuels or food.

Hausmann I think we agree completely. Maybe when I speak too quickly I didn't get my point. But we need interdependence on global trade, unquestionably – but we can't rely totally on it. We sure don't want to have all of – I never talked about food aid – but we also don't want to have all of the food requirements in certain countries be imported.

> We absolutely need to understand, however, that we will not meet the challenge of the future without global trade. And in fact, independent of the WTO, we have been seeing global trade increase remarkably every year.

> So my comment is not at all to say we don't need domestic production. We need it to be as efficient as possible and to produce value wherever we can. But we cannot expect to rely on that solely. I am convinced we will see in the future continuing increases in global trade, but I agree completely that we need a domestic market that is vibrant and functioning. It is a source of jobs and nutrition for people in all countries. And we must work on this front also.

Question My name is Julie Howard. I'm the director of the Partnership to Cut Hunger and Poverty in Africa, a research and advocacy group based in Washington. On the issue of scaling up, which you raised, last year we had \$350 million for all of African agricultural assistance. This year we have an increase in that because of the supplemental. I think given the financial crisis, we're by no means assured we can continue at the level that Sam noted.

I'm wondering – the Congress, U.S. Congress is really not convinced, I think, that there's a constituency in the U.S. that wants the sustained support for agriculture in Africa. I'm wondering if the agribusiness community will support the Lugar-Casey legislation that calls for \$750 million per year in fiscal '09 and building up. One point.

Second point is on the saying of "capacity building." I think we've seen in our own country the importance of higher education, of community colleges, of post-secondary. Would you be willing to support the development of those colleges in the countries where you work as you support them here in the United States?

Steiner Anyone want to tackle either one of those two?

I'll tackle the second one. I mean, I think, matter of fact, we had a discussion of this at the lunch table I was at, from an education perspective right here. And building up the universities in these places, we think, is really, really important. I think we need to figure out how to do this.

This also strikes me as an ideal partnership that, rather than solely relying on a relatively modest number of people that we can bring to the U.S. or Europe for

education, to think about how we can really build the colleges there and get to a whole bunch more people.

I know that we, as a company that relies on having a very technology-savvy workforce, when we're looking ahead, knowing that we have to build people's capabilities over a career right here, finding that pipeline of talent is really important.

So I don't know specifically about pieces of legislation, but ways to support colleges and institutes around the world is something really important, and it's something I think that we as an industry do need to take a look at.

Lane I would support that. One of the great needs when you're dealing with agricultural equipment, especially as it gets more sophisticated, is to train and educate people to take care of the equipment, to understand it. This is a need really all around the world, and so the idea of promoting education is vital.

The scope of taking care of agriculture is probably a very huge one and one in which we would just encourage and participate. But certainly being able to let local authorities know how vital that educated workforce is for improved productivity is something we'd be very happy to participate in.

Worthington On the point of reaching out to universities or to encourage universities here in terms of the outreach you have to African universities – I'm sure you're doing that already – but the ability to build local capacity and knowledge and take the best of the American lesson.

I have been in a roomful of members of the U.S. Senate who said, "Well, there's a constituency to feed people, but not necessarily a constituency to have people feed themselves." And I'm hoping that will change, because we all know that it's the capacity of individuals to pull themselves up out of their own poverty that will make things sustainable. We could do that, and there will be still plenty of, unfortunately, places where we'll need to feed people around the world.

- Hull On the education point, I think for us, as we're expanding into new markets where smallholders are really the focus, it takes a whole different way of working with them than what we're used to. So education for us and I know it's a small bit this is where I think the partnerships going deeper and broader absolutely needs to come to the forefront, definitely, in the whole education field. And I'm not familiar with the legislation either, but certainly the intent behind it is something that we support.
- **Schellhaass** I think the Lugar-Casey bill is something that we should all support. I think this is where we're going to finally get a strategic alignment with the money that we're spending as taxpayers and from our government.

And as the current president of the Institute of Food Technologists, which is a wonderful club of 22,000 food-science nerds here in the United States and abroad, we very much believe that it is our responsibility to help in the education of developing nations.

And in fact, we believe that there is a problem not only in developing nations but also in our current nation in keeping up the number of individuals that are going into agriculture and into food science. And it's something we are dedicated to making sure that we get fixed.

- Steiner Very good.
- Question I'm Al Clausi, a member of the Council of Advisors. My question is to Sheri Schellhaass. While I appreciate that the products that your company makes may not be applicable to underdeveloped Africa, or early-developing countries, you mentioned something about 1,200 scientists that would be available or something to that effect. How does that work? Or is it working?
- **Schellhaass** We just recently started this program; in fact, it's about a month old, although we've been doing some pilots in infancy. And let me give you an example of how this works.

There is an organization in Zambia that is actually making WFP along with they're bagging rice and growing rice and honey products. And we have come in contact with them, and they are having difficulty in adding value to their rice products. So they have broken rice kernels, and they'd like to extrude those and make a value-added product. And they're also having issues in making some of the in-country, contracted WFP corn/soy blend.

Well, there are 1,200 of us located in Minneapolis that spend a lot of time on extruders and extruding ready-to-eat cereal products and fortifying those with vitamins and minerals.

So what we did, because we were trying to have conversations with the individual through Skype phone every morning, is we bought them an extruder, a very simple extruder. And we put a very simple extruder, much simpler than we use, in our pilot plan. And volunteers came out of the wall, scientists and engineers that have expertise in this area, and we were able to help this particular NGO develop some products that they will be able to sell in Zambia.

This is really wonderful, because the farmers have now grown so much soy and so much rice, because they've had good agronomics, that they no longer have a food insecurity issue, but they'd like to make money by selling the product. And we felt very good about the fact that we are helping them.

We are also bringing in students who now would like to go to Africa and help in ways. And we will train them on extrusion, so when they get to Africa they can really help some of these NGOs.

And I will tell you that this has great business purpose for General Mills. It is not that we are just kind of heart, but we are. But we are currently in a war for talent – talent, food scientists and engineers for which we have a shortage here in the United States. And let me tell you, the millennials, the people that are in their 20s and 30s,

pick our company because we do these kinds of efforts. So it does have a business purpose, even though it doesn't have a market purpose just as yet.

- **Steiner** Sounds like a success story on the way to becoming development.
- Question [I am Enrique Duhau.]We heard you say what the private sector can supply for food security, and we heard about logistics from Bunge and better seeds from Monsanto and Syngenta, better tractors, etc. But we haven't heard about the most awesome product of private enterprise over the last three decades, which has been information technology.

I farm in Argentina. In our case we had at the beginning of this year it was sort of an attack by the government. They raised export prices to 47 percent, which would effectively put a big deal of the farmers out of business. And we organized through Internet, through telephone messages, and fought back. And I think that was very important.

We could give access to poor farmers in Africa, in Latin America, in Asia and India, through the Internet and information technology and they could connect, they could learn about new technologies, learn how to fix John Deere tractors or how to use better fertilizers. They could connect with other farmers and see for themselves that farmers everywhere are very similar – big or small, successful or those who are still fighting to be successful. But we are all human, and we are all doing agriculture, and our problems and dilemmas are very similar.

I think we could make Africa, make Latin America and Asia and make farmers advanced a lot.

Steiner It's an excellent point. And I would – Pedro Sanchez, you're here somewhere, raise your hand? He was here earlier. He's here, I know. The Millennium Villages in Africa actually have put [in] a whole bunch of mobile telephones and service. I know Ericsson put a number of towers in, and they're doing a number of this, in addition to all of that, training as you've described, as well as price and market discovery. So it's a fabulous point and really missing up here in the private sector right here. So thank you for raising that point.

Any other comments? Go ahead, Sam.

Worthington Just two comments on that point. One is, the actually very basic technology of the radio is making an enormous difference. Getting large numbers of radios out, and dissemination of information about agricultural extension over the airwaves, is working well.

And the other is just how fast cell phones have traveled throughout Africa. In Somalia today, where you have acute food shortages, families are moving around and moving to areas where there is food because of their cell phones. So you have migrations of population happening because of the cell phone, which is fundamentally different than situations where you'd have people starving because they didn't know there was a problem in the first place.

Steiner	Very good, thank you.
Question	I'm Dean Kleckner. I farm here in Iowa, and I also chair the group, Truth About Trade and Technology. And Enrique from Argentina was one of the international farmers that we brought in.
	Bob Lane, you mentioned that Bunge started in 1818. I didn't realize that. And, Carl, I take it you were not the CEO back then. And, Bob Lane, the first new tractor my Dad bought in Northern Iowa was a B John Deere, and we farmed 160 acres with that little B John Deere.
Lane	Time for a trade-in.
Question	It's long gone, Bob, and we stayed John Deere – pretty much. With tractors, yes, for sure.
	But question on water. And I think you, Bob Lane, I think you were the one that mentioned water, that 70 percent is used in agriculture, and that it is being said – and it is being said – that future wars may be fought more over water than oil. I guess my question is, Should it be in policy, though, government policy? Can't the market system determine this?
	For example, farmers in California have some cheap water because they started a hundred years ago. They paid the bills to get it going, the irrigation. So they still have cheap water. But if San Diego is willing to pay \$10,000 an acre foot, some of those farmers will say, "I can't afford to farm," or "I'll cut back on my use and sell some to San Diego and the people there or the new settlements, new cities that are developing, increasing in size."
	My observation is, personally, governments don't do anything very well, generally, in relation to policy. Question, again, your observations on that:Can't the market straighten this out without getting government policy involved?
Lane	Well, I'm not an expert on very complex public policy related to water, but I would make one observation: that externalities typically are a difficult thing for the markets to always deal with. And so issues like water and air often require a level playing field, and it's a legitimate role for government to play. Putting those general principles into practice is the art, but when there's no one individual owner of a resource, it often turns out – I think many economists would agree – that externalities like that are appropriate for rules of the game, if you will, to then allow the market to work out specifics.
	That would be my general observation. Maybe there'd be some different points of view on the panel.
Worthington	Again, many of the populations where our committee works are outside the market. The government policies pass, but they are living in areas – and this is millions of people in arid areas – where there is no relationship directly with markets, or in fact

with government policy. And I was running an NGO before my current role, and we put in 44,000 bore holes in one year, and we thought we were not at scale.

So the challenge is, there are enormous populations that are living in areas – you can say the population shouldn't be living there, but they've been there for millennia – that do not have access to water and oftentimes have a water table that's dropping. And that challenge needs to be met head-on. And it does take policy, it does take government, it will take the market; but unfortunately, sometimes, neither is president.

Hausmann Yeah, I'd like to add a little bit to that, and maybe this is appropriate or not. I almost feel, given the debates going on, I should stand up and make a speech. But I find it frustrating that we try to get the market to do some things that truly is the role of the government. Do we have such an incompetent government, or, as citizens, such little confidence in our government to do what they need to do?

If you go back to Jean-Jacques Rousseau, who wrote *The Social Contract* 150 years ago, whenever that was, we need governments to do certain things. If there is a fight between the farmers and the citizens of San Diego over the water, I don't think it is the market that can do this. We have elected, we have governments, to make sure we have an environment in which we can feed ourselves.

If you look where we have the greatest poverty, greatest lack of food security, we're talking about feeding people in Somalia, in North Korea. I don't think it is the quality of the soil in these countries. It is the quality of the government. So let's make sure that we have governments doing what they need to do and not trying to work around them, instead try to force them to do what we need them to do.

I think more and more people say, "Oh, the WTO doesn't work because they won't agree." Well, they have to agree. We are all inhabitants of this Earth; we are all depending on some of the major agricultural production areas of the world to feed us all. And, yes, even those soils less fertile than the Midwest, than the Pampas in Argentina, than Ukraine, need to be developed to feed their share of the population.

But we have worldwide resources that must be used wisely, and we need governments to help us allocate these resources.

Steiner Very good. Carl, you would have fit right in last night, too. And I think the other point on water is, you know, we could fill multiple conferences talking about alternatives to oil, because there are alternatives to oil and we're all developing technology to do that.

But there really isn't an alternative to water. So when we think about water, it is very, very special in that kind of way; and therefore we have to use it and steward it in that same kind of way. And I would agree, that's the same role, that government has an important and legitimate role to play in that.

What I might suggest in the end here is that why don't we go through all three of your comments and questions here, and then we'll have the panel react to that as

well as their final comments here. We've got 10 minutes in closing here, so we'll go through the three of you in line.

Question My name is Abhishek Vemuri. I'm just a local high-school student, and I don't claim to be well versed in agricultural economics or probably as well versed as I should be in the economic functioning of private-sector companies as yours. So just excuse my ignorance and seeming simplicity of my question, beforehand.

During the economic crisis the lines of credit are incredibly tight, as I understand it, and probably will be for a long time to come. And my understanding is that privatesector companies such as yours are probably reliant on those lines of credit, good access to those lines of credit, to maintain your commitment to fighting global food insecurity and developing those areas. So I guess is there anything, as you guys, as leaders in the private sector, do you have any specific ideas that you can offer us as to how you'll ensure that your commitments in these areas aren't severely reduced by this credit crisis?

- **Steiner** Great question for a high schooler, or for anyone, for that matter. Go ahead. We're going to take all three, and we'll have the panelists come.
- **Question** Pat Binns with Washington State University. Quick observation is that, while the technologies that are being discussed this afternoon are very innovative, they are at a complexity, scale, and cost that is beyond the reach of a very large segment of the farming community, which is the smallholder farmer and their associations.

So an observation would be that it would be great to, at a future date, have a representative of a manufacturer from China or India who make hand-tillers, post-harvesting equipment, etc., to discuss with us their challenges and their aspirations on how they can also contribute technology to the problems we're facing.

The question I would have, and particularly to Robert Lane – I understand that John Deere doesn't really need to look at smallholder farmer markets, but I'm interested: Do you see the potential of partner, private-private partnerships, where you could extend your financing capabilities so that when farmer associations are looking to buy some hand-tillers, some seed dryers, some cold-chain equipment, that they could be part of the large, financial instruments that you have for the larger equipment?

I observe that General Motors, most of their money is made in financing products, not making the products. And it seems to me that this could be a fantastic way for large companies who have aspirations to help, but enable other partners who address products at the right scale, affordability, and complexity so that smallholder farmers and their associations could take advantage of them.

Question I'm Daniel Hillel and I'm a hydrologist, soil scientist and irrigation specialist, and I know full well the importance of water, especially when the well is not full. But I take issue with the statement that water is more important than energy.

Water is very, very important; it's very fundamental. But given sufficient energy, lowcost energy, nonpolluting energy, if we had that kind of energy to use, we could make water or convey water and apply water.

So the fundamental resource is energy rather than water. And the challenge before us at this time is to find sources of energy that are sustainable and can be applied sufficiently to produce and apply water and improve agriculture as well as all other modes of human activity and economy.

Steiner So what we'll ask the panelists to do – we've got about a minute and a half or so each here – is any concluding thoughts and include in it, if possible, here – a minute apiece; I just did the math – address the comments and questions that were just brought up. So you want to go ahead, and we'll do them in reverse order here. So, Sam, you want to start?

Worthington A very simple message: Tap the NGO community. I've seen this many times where we have a corporation coming into an African country where you have NGOs quite at scale, often with 400-500 staff in country, been there 20-30 years, and we don't talk with each other. And you go into the Ministry of Agriculture and you're working with groups, and we've seen many groups stumble because you don't have the local knowledge.

So here's a community that is reaching out to you, asking you to tap it, to see it as part of your engagement with the continent and that we are open to the types of partnerships. There will be members of our community that will, say, push back on various parts. But our community itself is nicely split. If we took the European NGO community versus the Americans, I think the American community is much more comfortable with GMOs than the European side. So you end up with some culture divides within our own community.

But the basic message I want to get out there is – See that, if you're trying to get out to the small landholder, small-scale farmer, that you will find that there's a professional community interested in working with you with lots of expertise.

Schellhaass Thanks, Sam. And I would just say to the NGOs, it's often been thought that the corporations in the U.S., the multinational corporations make money and the NGOs and governmental agencies do good things. Rely on us to help you do good things. We have a lot to give into this situation even before we can receive back the full profits from it, and we're willing to do it.

It's time now for us to all join together, and it's time for us to be innovative, and it's time for us to think beyond where we have been thinking. And all day yesterday many of us that are in the consumer-products groups, many of us that are trained food scientists, for instance, have been trying to think of how we can join with the agriculture developers and actually have value added locally much sooner than we have currently imagined in the value chain, in order to drive profit back to the local farmer.

Steiner Bob... Lane To the high-school student, he's asking about the essential freeze in credit which has gone on. We've got an Ice Age in the credit market that's very serious. I would read Thomas Freidman's column yesterday in the New York Times called, "Why How Matters." If you apply the principles that Thomas Freidman talks about, that would have helped enormously in preventing, or will help enormously in preventing a future freeze. To the gentleman about credit for smaller farmers – along with those smaller products that John Deere is providing, Deere is bringing its expertise to how to finance to emerging markets in the world. 10 years ago we were just in the U.S. and Canada in our financing. Today we have operations in about 17 countries, and I was working in India just a couple weeks ago with our finance team on, how do we get credit to the small farmers there? So the answer is yes. Thanks so much for the questions. Hausmann Let me just conclude by saying I believe that the challenge in front of us is huge – doubling food production over the next 50 years. I feel very optimistic that we have the potential to meet this challenge, but not very optimistic that we will do it as smoothly as we need to. We all need to get more comfortable with these new interdependencies that very often we are not comfortable with. People are asking me – aren't I afraid of foodborne pathogens coming from Mexico? In fact, the science that I've read is that we still have greater levels of domestic concerns than, necessarily, of the imported foods, but the quick reaction is that you get nervous about imported foods. I feel very comfortable, with the comment by Sam, saying, Reach out to the NGOs. In fact, one of the things that I've been saving for the past year is that we corporations need to develop a more healthy relationship with the NGOs and not one that, we often feel, will be based on conflict – again, going back to the Seattle ministerial, the first reaction was, "NGOs - there's a risk to create this order." And yet we know that they are critical for having the broad-based public support, that we need to be comfortable with these new interdependencies if in fact we are to meet the challenge of the next fifty years: doubling of food production. Thank you. Hull I think, for me, the private sector is going to continue to invest in innovation. That's what we're here to do and what our shareholders are asking us to do. But I think we can get much more creative about how we partner locally and with the NGOs, with the international government organizations, which I think we've not been successful in doing in the past, but there's new opportunity today. And I also think the whole idea of knowledge sharing is something to the question around the smallholders, that we have to get much better at that with ag extension.

The solutions are there if we can just somehow come together with a broader, deeper partnership among the industry but also among the public sector to help bring some of that technology into the smallholders.

Steiner Thank you. I think speaking on behalf of my panel right here, I really appreciate your overall attention right here. I hear a lot of commitment and will, speaking on behalf of our company, to deliver our part of this equation.

I think, picking up on where Carl talked about right here, it's a lot easier to talk about the problem than it is to talk about the solution. And we have to spend more time in a collaboration mode rather than a confrontation mode, in talking and building the solution. It's going to be challenging, but I don't think there is a Plan B.

We need to fix this challenge, and I think on behalf of industry, we're here to do it. We need your help in guiding us also.

Thank you very much for your attention this afternoon.