THE BROOKINGS INSTITUTION

GREEN GROWTH AND INTERNATIONAL COOPERATION

Washington, D.C.
Tuesday, March 27, 2012

PARTICIPANTS:

Moderator:

KATHERINE SIERRA
Senior Fellow
The Brookings Institution

Panelists:

RACHEL KYTE
Vice President, Sustainable Development
The World Bank

ROBERT ORR
Assistant Secretary-General, Planning and Policy Coordination
United Nations

ANDRÉS FLORES MONTALVO
General Director of Environmental Policy and
Economics, Ecology National institute
Ministry of the Environment and Natural Resources
Government of Mexico

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P R O C E E D I N G S

MS. SIERRA: My name is Kathy Sierra, and I'm a Senior Fellow in the Global Economy and Development Program here at Brookings. And it's my great pleasure to welcome you to one in the series of discussions that we are having on the issue of green growth and development.

For those of you that have been following green growth, I think you might recognize it as a means or a strategy that will help countries expand their economies while sustainably using their natural resources. It builds on the concepts of sustainable development, but with a very different vibe, a very different framing. It's not about limits but, instead, about new pathways for sustainable development that unleash innovation, create new opportunities, new jobs, build competencies that together will lead to growth and poverty alleviation.

Now, it's both a new and an old concept. It builds on the discussions and goals of sustainable development that were introduced 20 years ago at the U.N. Conference on the Environment and Development, and can be traced, as well, to the quest for low-carbon development, which is needed to tackle climate change.

But green growth's emergence as a new and particular theme over the last few years can be traced to the stimulus packages which were introduced after the financial crisis in 2008, as countries moved to use stimulus packages and new strategies to help countries and economies move out of recession, to create jobs, and to develop new competitive strengths for this century.

So this series is going to be discussing green growth in the run-up to the next major event, which is Rio+20 conference, which is going to be happening in Rio in June of this year. Green growth is a major theme of that conference, and so we thought that we would try to pick apart the green growth theme from different angles and perspectives in anticipation of those discussions.

The series started with a discussion on green growth and trade, which had a panel last week moderated by my colleague Josh Meltzer. On April 26th we'll be hosting the Danish trade minister, who is going to be providing the EU's perspectives on the links between green growth and trade. On May 17th we will be examining the role of innovation and technology in achieving green growth, with particular -- looking at the efforts at international cooperation about helping least developing countries build green growth technologies, research and development capabilities into their strategies. And my colleague, Nate Hultman will be previewing results of ongoing Brookings research on May 17th.

A related event will look at efforts to develop new sustainable development goals. And this is another theme and discussion that will be happening at Rio+20. My colleague Homi Kharas will be leading that discussion on May 2nd.

And, finally, we will be doing a preview of Rio+20 in the early part of June. So stay tuned for that.

Now, we believe that the theme of green growth and green economies has a significant potential for international cooperation. And that's the topic of today's event. We're going to be thinking about green growth and the ways that it's shaping and being shaped by major international processes that are underway -- and timely.

We're very lucky to have senior representatives from the World Bank, from the United Nations, and from the Government of Mexico who are going to take different angles and share their perspectives on this theme.

Rachel Kyte, who's the Vice President for Sustainable Development at the World Bank will begin the discussion by framing the issue, discussing with us what is green growth, and what does it mean for development, and what does it mean for growth and poverty alleviation, especially in the developing world.

Robert Orr, Assistant Secretary-General for Planning and Policy Coordination at the United Nations, who works directly with the Secretary-General, will outline the ways in which the green growth agenda is being positioned in the run-up to Rio+20.

Mr. Andrés Flores Montalvo, General Director of Environmental Policy and Economics of Mexico's National Institute of Ecology, will discuss the ways that Mexico is implementing the green growth agenda. But he's also going to discuss how G-20 is looking at this issue. Mexico has the leadership of the G-20 during this cycle.

We'll hear first from the panelists at the podium, and then we'll sit down as a panel and I'll lead a discussion, and we will have time for audience questions.

Now, let me get to the panelists and introduce them. I think they don't need much introduction, but it's good to remind ourselves of how distinguished our group is.

Rachel Kyte, Vice President of Sustainable Development, took up her post in September 2011. She has overall responsibility for the Bank's infrastructure, agricultural, environment, urban and social development issues, as well as the global public goods that surround those issues. I had her job before she had it, so I know her stuff reasonably well. Welcome, Rachel.

Before her appointment, she was with the International Finance Corporation, which is the private sector arm of the World Bank Group. She was the Vice President for Business Advisory Services from 2008 to 2011, and a member of the IFC's management team. She focused on delivering measurable impact on the world's poorest, in the most challenging environments, including countries affected by conflict. She led IFC's work to support more inclusive business models, including women's businesses. She spearheaded the adoption of IFC development goals, the first set of development goals specific to the private sector.

Before that role, she was the IFC's Director for the Environment and Social Development, where she led efforts for a new sustainability performance standard. Prior to joining the IFC, Rachel was a member of the management team of the IEC and the World Conservation Union.

She holds a master's of arts in international relations from the Fletcher School of Law and Diplomacy, and a B.A. in politics and history from the University of London. I think it sounds like you're a think-tanker, Rachel. So, at some point we'll get you here.

Dr. Robert Orr is Assistant Secretary-General for Planning and Policy Coordination at the United Nations, working directly with the Secretary-General. As such, he's been responsible for advising the Secretary-General on the full range of policy and strategic issues, helping develop signature policy initiatives, and running the Secretary-General's cabinet-style policy committee.

The Secretary General has just recently announced his appointment as head of a new U.N. partnership facility, and that appointment is expected to be confirmed very soon. So you'll be seeing Bob move into a different role.

He previously worked at Harvard University, where he was executive director at the Belfer Center for Science and International Affairs at the Kennedy School of Government. Prior to this, he was Director of the Council on Foreign Relations in Washington, D.C. From 1996 to 2001, he served in senior posts in the U.S. Government, including deputy to the U.S. Ambassador to the United Nations, and Director of the U.S.-U.N. Washington Office.

He served as Director of Global and Multilateral Affairs at the National Security Council, where he was responsible for peacekeeping and humanitarian efforts. He has done a stint at the International Peace Academy, USAID in Nairobi, Kenya. And he told me before we started that he actually did a little bit of time here at Brookings. So I welcome home Bob.

He received his Ph.D. and M.P.A. in international relations from the Woodrow Wilson School at Princeton University, and a B.A. from UCLA. And I'm also from L.A., so we can talk about that later.

Dr. Andrés Flores Montalvo is Director General for Environmental Policy and Economics at the National Institute of Ecology, which is within the Mexican Government's Ministry of the Environment and Natural Resources. He has over nine years of work experience at INE in different positions. He currently holds the position of Director of Climate Change Research. He's been a delegate to Mexico's UNFCCC negotiations, as well as the intergovernmental panel on climate change.

During his studies he was part of MIT's integrated program on urban, regional, and global air pollution, where he was in charge of air emissions modeling, and policy analysis for the commercial sector.

He's an economist from the National Autonomous University of Mexico, has master's degrees in economics from Monterrey Tech, a master's degree in environmental technology from the Imperial College of Science, Technology and Medicine at the University of London, and a doctorate in energy and environmental studies from MIT.

I hope you'll agree with me that we have a great panel today. And so, with that, let me pass on the microphone to Rachel to give us an introduction of the concepts of green growth.

Thank you.

MS. KYTE: Good morning, everybody. Thank you, Kathy. I have some very big shoes to fill. Kathy was an inspiration to me when I was at IFC, and now I'm trying to live up to her reputation in my new job at the Bank. So I'm very delighted to be here at Brookings at your invitation. Also, it's great to be here with Bob and Andrés. So I hope we'll put on a good show for you this morning.

My job is really to open up the theme and look at this from an organization whose mission is to eradicate poverty or to help our clients move towards that -- and, you know, why would green growth be important for us?

So what I want to do is talk to you about the way we think about green growth. And really, for us, it's a growth that is efficient -- more efficient than the growth that we have now -- that is inclusive, and that values natural assets. Really importantly, in terms of time, which is the one thing that none of us have, it's growth that will not lock us into an irreversibility that we can ill afford. We call it "Green Growth for All," that's our title for it, working title. But that's our label.

The labels really aren't important -- and you'll hear from Bob all the different ways in which this agenda is being discussed in the run-up to Rio+20. What's really important is that we act.

Over the last 20 years, economic growth has lifted more than 660 million people out of poverty, and has raised income levels for millions more. So -- however, that's not quite enough, because growth has too often come at the expense of the environment. We are reaching now the limits of resource depletion, and moving towards rapid -- dramatic, in some cases -- and unpredictable impacts, with the risk of irreversibility, that there won't be anything that we can do to come back from it.

And, at the same time, you know, 1.3 billion people still don't have access to electricity. 2.6 billion people don't have access to sanitation. 900 million people have no access to safe, clean drinking water. And I could go on. You know many of these statistics.

So growth has worked for many, but it's not inclusive enough, and it's not working quickly enough, and at risk of degrading the environment. So, for those of us committed to reducing global poverty, the current system is not working, and unacceptable.

At the World Bank we recognize, therefore, that growth is a necessary condition for poverty reduction. But it's not a sufficient condition. We need efficient growth. We need what we think of as good, smart growth that creates opportunities, recognizes the value of the environment, and works for all of us -- and that inclusivity cannot be delayed.

Globally, inclusivity is increasing. The world is flattening. But in certain countries the inclusivity is becoming less so, we're bifurcating between the rich and the poor. And this leads to instability, and not the platform for cooperation and regional integration that we need to see.

We cannot balance our economies, or the health of the planet, on the backs of the poor. And that's another important reason why we need to shift our growth path. It cannot be balanced on the backs of those who are hungry -- a billion each day. And it can't be balanced on the backs of those who don't have any water. And it can't be balanced on the backs of those who don't have any energy.

And so we have to solve for the inclusivity at the same time as we solve for the greenness of our growth pattern.

So what do we mean precisely? Well, let me go a little bit into depth here.

Green growth is economic growth that is environmentally sustainable. Okay, easy to say. What does that mean?

For us, green growth is not the end; it is a pathway, as Kathy was saying, to a more sustainable development. The aim is to operationalize sustainable development by reconciling urgent needs for sustained growth in order to move the needle on poverty alleviation, while avoiding lock-in to unsustainable growth patterns and irreversible environmental damage.

We're not calling for no growth. We're not calling for slow growth, or a reversal of growth. But what we do need is a step change in the way in which we manage economies. We need to help policy-makers answer the Monday-morning question, especially the Monday-morning question after Rio, "What do I do differently? What do I consider in a different light?"

We also recognize that there's no single green growth model. Strategies will vary across countries, but all countries have an opportunity for greener growth. And in every country, it's going to take a broad partnership across the public and private sectors, and with the support of civil society, to make it work for all.

I think what's really important is providing the data sets and the evidence that countries will need in order to make different choices. And we're committed to being able to support countries in that.

So, in order to create the enabling environment that would allow different choices to be made, and for those choices to have impact, there's a lot of data and a lot of evidence needed to be marshaled.

So, green growth, like all good growth policies, requires getting the prices right, it requires fixing markets. It requires addressing the policy and coordination failures. It requires the creation of tradeable property rights, and the reduction of inappropriate subsidies. But that's kind of, in some respects, it's almost generic.

But it's more than that. It really does mean increasing efficiency and recognizing the inefficiency in the current growth patterns that we are experiencing. So, both economic theory and empirical evidence show that addressing market and governance failures make it possible to grow greener -- growing cleaner without growing slower.

So, for example, let's look at urban sprawl and congestion. They're not just bad for the environment, they make cities less efficient. They have immediate public health impacts. But they also don't work for the poor. They make the life of the poor even more difficult.

So, for example, we know that there is a massive need for innovative transport systems. And we know that in the case of, for example, bus rapid transit, which is cost-effective, and can be introduced quite quickly, that the productivity of the poor can increase sometimes by 20 percent immediately with the access to easy transport through a bus rapid-transport system. So, a win-win: Increase the productivity of the poor, increase the effectiveness of the city as an economic engine, and clean the environment by putting in clean bus rapid transit.

Fast growing Asian economies with low energy intensity in transport have been the most successful at not only expanding the way the supply rapid transport systems, but also sparing the demand for them. And this is an important aspect of municipal leadership.

And then let's go to the sort of, the building that is going to be required, the greed building required for the cities of the future in a world where 75 percent of us will live in cities within 20 years.

Improving insulation is cost-effective due to energy savings achieved, yet firms and households often fail to insulate for the lack of relevant information, and for other drivers which drive us away from the self-preserving things that we really should do that are cost effective. In California and the U.K., studies have show that when comparative data on energy use is available, people tend to emulate the best performers, or even seek to outperform their peers. And this isn't just something for the rich or for the middle class. I have seen the innovation of Envinity, which is a builder and a housing developer in Mexico for the poor, where each of the low-income households has the meters in each of the housing units. You are able to put distributed energy over the head of the housing development, and you see changes in behavior immediately.

And so these kinds of things work for the poor, they work for the middle class, they work for the rich.

Policies are required so that utilities provide comparative indicators that encourage people to be more conscious of their energy use, and will catalyze change behavior. This is one tiny example of the behavioral economic issues behind why we don't do what is in our best interest, why energy efficiency has not been embraced by people and by firms, by households, when it is cost-negative, when the immediate payback is possible.

Green growth is also about valuing natural capital. Natural capital, the environment, so that's water, land, clean air, ecosystem services, they're all absolutely critical in a country's wealth, and understanding what a country's wealth is.

Like other forms of capital, it requires investment, maintenance, good management if it is to be productive and fully contributing to prosperity. There are plenty of ethical and cultural reasons to protect our environment, but it's actually smart economics, too.

I mean, one example, which Kathy knows well, is the transformation of the Loess Plateau in China, an area about the size of France, which epitomizes what can happen when the value of natural capital is recognized. Centuries of overgrazing and overuse and insufficient investment had resulted in a badly degraded landscape. But restoration, through smart policy, effective incentives and investments resulted in increased productivity and income per household, reduced the frequency of floods and landslides, and created a better environmental condition for about 20 million people.

The question now is can we do the Loess Plateau, or something like it, in other countries of the world? And I've seen the start of something truly transformative in Rwanda when I was there just a few weeks ago, using this same integrated approach.

But when it comes to natural capital accounts, we have been talking about this for 30, perhaps even more, years. Certainly this was something that was heralded in Stockholm 40 years ago. This is something that it is time to stop talking about, and it's time to start implementing.

Many countries have come out with natural capital reports. Many countries have thought through this issue in a quite sophisticated way. What we will be calling for in the run-up to Rio, in New York this week, and in the other inter-sessional meetings, and in New York, is for countries to commit to actually implementing wealth accounting and evaluation of ecosystems alongside their GDP from now, and we'll learn while we're doing. And we can build a coalition of countries who want to see the different data set and the different evidence necessary for them to make different choices.

Finally, green growth is about avoiding decisions that lock in irreversible environmental damage -- in both developed and developing countries. Policies need to focus on what is required in the next 5 to 10 years to sustain growth without locking into unsustainable patterns. Because growing dirty and cleaning up later, which is the way in which many policy-makers think about the needs that they have is, we believe, not an option. Or we think it's actually not the efficient and effective option.

For example, many countries have suffered through failure protect coastal ecosystems from degradation, allowing incompatible aquacultural techniques, like shrimp farming, or bad shrimp farming, can damage fragile ecosystems. Typically, the cost of increased coastal erosion and severe flooding, together with restoration, are very high, whereas a better understanding of the value of the ecosystem could both preserve the wetland, enable an appropriate aquaculture system to be developed, and produce a win-win.

So all too often, the potential short-term gains outweigh the long-term costs. And in a world of climate change and the need to adapt, the cost of those tradeoffs, the cost of those short-term gains over the long-term degradation is getting higher and higher, and we need to be able to find ways to support countries to be able to bridge the difference.

The argument that poor countries should focus on satisfying their basic needs rather than on the environment is misleading. Clean air, water, solid waste management are basic needs, and many environmental policies enhance income generation and poverty alleviation. And we have got a responsibility to bring that data into the cabinet table in a more effective way than we have been able to in the past. And second, environmental performance does not automatically improve with income, and we need to understand more about the curves that will be produced with different growth options.

Finally -- finally, finally -- green growth is affordable. This is perhaps one element of the debate which is the most contested. According to analysis of some 40 countries where the data exists, environmental degradation is, on average, costing countries around 8 percent of GDP. The combination of reducing costs of degradation and increasing smart green investments would make green growth affordable. Research indicates that for every dollar invested, between two and three dollars could be generated, and potentially more.

So how do we get there?

Well, work with governments to establish enabling policies and address the market failures which hobble them from the get-go.

Second, forge the partnerships, especially the public-private partnerships, but also with civil society, to get the conversation going around the introduction of natural capital accounting, and nudging the behavior changes that are necessary.

Acknowledge that green investments typically require higher up-front costs, and ensure access to up-front capital, and continue to innovate financing products.

Create an enabling environment for private sector investment. You cannot move to a large green investment plan if it is impossible for small and medium-size enterprises to operate freely within the economy.

As the engine of innovative solutions, the private sector's role in driving the green inclusive growth agenda will be central. Identifying opportunities for leveraging private-sector investment that supports green growth is essential, and there's plenty of good examples to learn from. The question is of scale and speed.

IFC, our sister institution, leverages $11 in private-sector lending for every dollar of concessional lending in sustainable-energy financing. That's resulting in about 16.7 million tons of GHG emissions per year, just in one program element.

So we recognize that the obstacles to green growth are substantial, that it will take the best efforts of all of us to make it happen. But in the last decade, we have experienced a confluence of a severe food, energy, and water crises, with no sense that this crisis is going to abate.

Green growth now offers us the opportunity of an integrated approach to building food, water, energy security and resilience, and to prevent irreversible damage to our societies, to the environment, that will in particular penalize the poor.

Rio+20 for us is a platform to deepen and broaden the conversation on green growth, and we hope to see you all there.

Thank you. (Applause.)

MR. ORR: Thank you very much, Kathy, for the invitation to be here. It is truly an honor to be back at Brookings, and to share the stage with Rachel and Andrés and you, Kathy. So, very much appreciated.

The topic today, green growth and development, is something that is talked about by many people in many different ways. And oftentimes we get hung up on terminology. So I'm glad to follow Rachel, who dove down a bit into what some of the substance of what green growth is. I think we'll make more progress by talking about concrete things than about ideologies about green growth, or any other term.

In fact, I think we've gotten quite hung up on the color palette. We not only have debates about green growth and green economies, we're talking about "brown economies," about "blue economies." They all bring something to the party. There is a reality of blue economies and brown economies and green economies. But I think the importance here is to get into the specifics, and not get hung up on the nomenclature.

And I think here you've just gotten a preview of what I think is going to be a significant World Bank report -- or at least I assume it's a good preview of a future World Bank report -- on green growth. And I think it is important to develop and address this concept as concretely as possible.

In the United Nations, the concept which has universal acceptance and applicability is sustainable development. Green growth is still a contested term. It's a contested idea -- so much so that in the negotiations leading up to Rio+20, the terminology that has been used is "green growth in the context of sustainable development and equity." I think this is an indication of where some of the fault-lines lie that we need to be very sensitive to.

But the one thing that we have gotten universal agreement on, 20 years ago in Rio is that sustainable development is an objective shared by all. And this means that we need to improve the economy, and the environment, and social equity all simultaneously.

Sustainable development has been identified by the Secretary-General, who has just begun his second term, as the top priority for the United Nations in the coming five years. And one reason is that it cuts to the heart of the economic, social, and environmental equations. It's a big agenda. It's a big umbrella to be under, but it's a very important point of departure, because we do have global agreement on that as we head towards Rio.

As we look ahead, just 18 years from now, in the year 2030, if you might think about it, a child born today will come of age -- at least what in the United States is defined as coming of age, 18 years old -- will come of age in 2030. This is really, literally, tomorrow, just one generation away.

The world today has 7 billion people. By 2030 we'll have 8 billion, another billion. And in 2030, the world will need at least 50 percent more food, 45 percent more energy, and 30 percent more water than today. And those are probably all very conservative numbers -- but at least 50 percent more food, 45 percent more energy, and 30 percent more water. And science is telling us that already we're approaching many planetary boundaries.

So I think the press of this agenda couldn't be more urgent. Economies are teetering; ecosystems are almost literally under siege. And inequality within and between countries is soaring. And in many countries -- actually, I should probably say in all countries, both speculative and often narrow interests have superseded the common interests, common responsibility, and common sense.

As we approach Rio+20, moving sustainable development into the mainstream of both economics and politics, and making clear the costs of action and inaction, today and tomorrow, will be the essence of what our politics and economics should look like in the years to come.

A word about Rio, as we approach the Rio+20 moment. Already we have confirmations from more heads of state and government to attend the meetings in Rio than we had for the 1992 Rio Summit. This sets a very high premium on using the Rio moment to really change the course of events. You don't spend that kind of high-level political capital -- and I think they will be accompanied by an awful lot of economic capital in Rio -- you don't take this moment lightly.

The member states of the U.N., as I mentioned, have determined that the two subjects to be discussed, and agreements to be struck in Rio, the first one is a green economy in the context of sustainable development and poverty eradication -- not the pithiest of descriptions, as one would expect coming out of a negotiation, but I think it shows the scope of what people are attempting to achieve in Rio.

The second subject, by the way, is the institutional framework of sustainable development, the institutional side of implementing everything that falls under the "green economy in the context of sustainable development and poverty eradication."

I think the biggest issue that is at debate right now in the Rio negotiations, which are ongoing, is the question of equity. Equity, social equity, and economic equity is highly contested all over the world right now, and the economic crisis is only making it a more acute debate in everyone's politics. So there's no way around it. While we may want to and need to address the green side of growth, we have to -- and I think it's very important that you heard Rachel this morning -- emphasize the equity issues and the poverty eradication issues as much. On this there is absolutely no daylight between the World Bank and the United Nations. And this is an important and significant development, I think.

There are concerns by a number of developing country negotiators, if the early rounds of negotiation are a good indication, that the green economy is still a contested term in part because of worries about green protectionism, about green conditionalities for aid. These are old debates, but they are wrapped up in the new debate. And I think it's important that in Rio we overcome some of the old baggage. These are legitimate issues, they have to be addressed, and they should be addressed in the context of this negotiation so we can move on with a concrete agenda that everyone can agree to.

So, what would a green economy or a green growth look like?

I think the essence -- and I think Rachel's description I could accept as easily -- but the essence of it is that we're looking for sets of policies that promote greater efficiency in the use of energy and other scare resources. We're looking to decouple economic growth from environmental degradation. And we need to de-carbonize the economy through the development and diffusion and adoption of low-carbon technologies.

But greening the economy may be a relatively term, but it is describing a development reality that we've known for a long time. We have to price externalities. We have to eliminate perverse subsidies. We have to enforce regulatory standards. We need to redirect investment flows in more productive and sustainable directions. We need to promote equity and social protection, and we do need to fulfill the oft-repeated pledges about international assistance to help make this all possible in all parts of the world.

We, finally, do need to do something that has been agreed in the original Rio in 1992, and that is to recognize common but differentiated responsibilities. And instead of haggling over what that phrase actually means, I think governments need to agree to policies and to directions that would actually do it.

So, what is new here, I think, at this moment, as we look at the negotiations, is a growing recognition that the pace of change needs to change dramatically. The global recession and the economic worries that have translated into political worries around the world do need to be taken as an opportunity.

It may seem counterintuitive. At this point in time, governments around the world are acting quite conservatively on a number of matters because of their economic worries. But it is exactly at these times that bold new directions can, and in some cases, are being taken. And I think we need to seize the Rio moment as the moment when, as a collective, the governments of the world, and private actors of the world, take some bold decisions to move in this direction.

So why are we facing difficulties of marketing sustainable development, if it's a concept that's been broadly agreed for 20 or 40 years, depending on when you want to date the concept? Why aren't we getting there?

I think some of the issues that Rachel mentioned, and that I think the World Bank has highlighted in some of its work, that the higher up-front costs are sometimes prohibitive, or appear prohibitive to decision-makers. But against some higher up-front costs, we do need to look at the returns -- economic and otherwise -- in the medium and long term, and we need to look at the co-benefits.

This is not a narrow economic equation. Greening the economy brings with it health benefits, energy security, cleaner air, and whole host of other impacts that can be quantified economically as well as socially -- and, hopefully, if done right, converted into political success for those leaders bold enough to take these decisions.

But financing constraints aren't the entire reason why we're not moving in this direction. I do think, though, that we have to look at the financing constraints right up front as a major issue. We do need to look at innovative financing arrangements. We do need to look at de-risking policies. We need sound policy frameworks, as Rachel emphasized, that can direct capital flows to where they are most needed for these sustainable economies.

And I think this is the key. Right now there is scare capital, certainly in government hands. Everyone is feeling constrained. So where those resources are directed right now really makes a big difference, especially given that private capital is not nearly constrained as public capital right now. So, where the public points, a lot more private capital can follow. So it's in these tough times of priority-setting that it makes the biggest difference.

Rachel mentioned -- or, I think, Kathy mentioned, actually, the issue of the new paradigm that started to be created out of the stimulus moment in a number of countries, countries like Korea, and China, and the United States took some decisions to use stimulus money. But it's when you're not at a stimulus moment and everyone is pulling back that those decisions on allocation of public capital become even more important, and the signals are watched even more carefully by private actors.

So, we are at a moment where we need to make tough decisions, and Rio gives us an excellent platform to be able to do this.

Some of the tough decisions have already been agreed in fora like the G-20. And I think it would be important to hear from Andrés on how things are developing under the Mexican presidency.

The G-20 is a forum that is, at the head-of-state level, quite new. And it has not had kind of its breakthrough moment, if you will, yet. But one of the big decisions that was reached in Pittsburgh, under President Obama's presidency of the G-20, was agreement of the G-20 to phase out fossil fuel subsidies by 2020. It was a rather remarkable agreement, but now honored in the breach, of course. This is something that, I think, the issue of fuel subsidies, if we don't crack some of these tough nuts, we won't get there. You can only do so much incentivizing of renewable energy if you're massively subsidizing the oldest of energy. You just won't get there.

The second thing that we need to do is to take the long view. Easier said than done, but taking the long view does mean that we need to look at our incentive structures and what we're going to do.

If you talk to any of the U.N.'s global compact companies -- this is over 7,000 top-tier performers who have signed on to a series of agreements on how they will govern their companies. These are some of the world's best performing, as well as best managed companies -- our global compact companies have been very clear with us about what they need as they head towards something like Rio. They need new incentive structures for their proven innovations and solutions. And areas like energy-efficiency and emissions reductions are right up there at the top of many of the lists, not just for energy-related companies, but a whole range of industrial, including service providers.

This is why the Secretary-General is working on consensus among governments, in Rio, to start to develop a new set of sustainable development goals. The U.N. has had a very successful experiment with the Millennium Development Goals. For the many doubters that there were that development could be done or improved by setting goals, I think the Millennium Development Goals have proved the skeptics wrong. I take no pride in this, but I can say I was one of the skeptics. So I'm proud to say I was wrong in this case.

The fact is, though, that 10 years into the Millennium Development Goals, what has made it so successful, and the focus on poverty reduction, and the focus on the poorest, and the focus on the social and economic side, has not been replicated on some of the sustainability dimensions on the environmental side, and internalizing some of the externalities.

We do need -- we're just starting a process now to develop the new set of goals that would succeed the Millennium Development Goals in 2015. This will be a long and potentially difficult negotiation, when something as successful and valuable as the MDGs needs to be updated. I think that all the governments of the world will take this very seriously.

We hope that Rio will point the way -- won't agree on a set of sustainable development goals necessarily, but will point a way for what will be, over the course of the next year or two, a very intense negotiation on our next set of goals.

The third thing we need to do is that we need to value equity as opportunity. Many, many studies have shown that inequality and exclusion of women, youth, and the poor detracts from global growth, and threatens to unravel the compact between society and its institutions. We see this in country after country. If we don't go after the equity issues now, as a part of our green strategies, it will unravel not only our green strategies, but we'll continue to see the unraveling of our politics and our societies.

I'd like to conclude today by focusing on one of the most powerful vehicles to achieve this vision of sustainable development, or green growth in the context of sustainable development, and that is the question of public and private partnerships.

And by this, I don't mean what has traditionally been essentially a project-level series of public and private partnerships -- a company or a private institution, with a government. We have to get much more strategic, and operate at the strategic level, when we talk about partnerships, especially in this sustainable development space.

The Secretary-General announced as part of his second-term vision, he had literally a handful of priorities, five, and he talked about two enablers to achieve his goals for the U.N. over the next five years. The first of these enablers was the question of partnerships. And to achieve this, we will be creating, combining a number of pieces of the U.N., and scaling up these pieces to be able to have a new coherent and strategic-level partnership facility that can take forward public-private partnerships at a scale that we have not seen to date.

Harnessing the power of partnership is much more about what this new green economy could look like. Who are actors that you need in the room? You don't need just governments and international institutions. You don't just need private sector and industrialists. You need finance, you need philanthropy, you need civil society. It really is going to take a truly multi-stakeholder approach to be able to create a green economy. This can't be done by government agreement -- in Rio or anywhere else -- alone, it has to be done with all those stakeholders in the room. And that's where we're going at the U.N., and where the Secretary-General hopes to lead the institution in the next five years.

To conclude in a very concrete way on this, what could this look like? It could look like what we're already doing with the Sustainable Energy for All Initiative of the Secretary-General. This is a multi-stakeholder initiative, where the Secretary-General has used his convening power to bring together governments, private institutions -- finance, as well as business -- philanthropy, and civil society around three very specific goals: to make energy access universal by 2030 -- these short 18 years, and the 18-year-old's life as I spoke of earlier. That would mean we have to reach 1.4 billion people that don't have energy access today, and accounting for population growth, even more than growth.

Secondly, we need to double the rate of improvement in energy efficiency, currently, about 1.2 percent improvement per year. We have to at least double this to 2.4 or more.

And, lastly, to double the share of renewables in the global energy mix.

Today, these three goals are increasingly accepted by a range of actors around the world as targets that we can and, indeed, must meet. They won't be met by governments alone.

We have seen tremendous inputs and participation by private entities in this initiative. And I think, in Rio, watch this space, we are going to see a truly multi-stakeholder alliance be born in this space on energy. I would hope that we can also see such a multi-stakeholder alliance around oceans, around water, around a number of our other key subjects at Rio. But on energy, it is happening; it's happening right now. And we really are inviting everyone to join what is quickly becoming a movement for sustainable energy for all.

I'd like to conclude here just with the thought that -- I'm looking around this room, and it's a pretty young audience, which is great. It is a truly generational opportunity that we have in Rio. International conferences come and go. If we think back to Rio 1992, everyone who was there remembers it, talks about it like it was yesterday. And 20 years ago, in the scope of things, is really yesterday.

Rio+20 is an opportunity not to be squandered by governments or by private actors. And I think we're on a path where we can get there. A lot of hard work needs to be done by negotiators, but also by the range of actors that are going to rally around the conclusions of Rio and make them happen.

The biggest difference that I hope to see between Rio 1992 and Rio 2012 is that we have the coalition of actors ready, willing, and able to implement the outcomes that come out of the conference in Rio. And I think we are moving in the right direction on that.

Thank you very much for the opportunity to join you today. (Applause.)

MR. MONTALVO: Good morning. I'd like to begin by thanking Brookings, on behalf of Minister Elvira, and especially Kathy Sierra for her kind invitation to participate in this panel discussion. I am very honored to share the podium and the panel with Rachel and with Bob this morning.

In my presentation I'm going to address two issues. First, I'm going to talk about what green growth means to Mexico, and what we are doing to address the issue and to move along this path. And second, speaking on behalf of Mexico as current President of the G-20, I'm going to talk about what this means for the group, for the G-20, and what progress has been achieved on the agenda this year.

On the first issue, as a matter of context, I will briefly mention that Mexico is very concerned about climate change. For us, it represents one of the greatest challenges currently, not only for the preservation of the environment, but also to social and economic development.

Recent examples show that climate-related impacts are intensifying and becoming more frequent in the country. During the first half of 2011, to mention one that's just a year ago, 40 percent of the Mexican territory was suffering the worst drought period in the last seven decades, and that produced a loss of over 6 million tons of crops that very many people depend on, especially the poorest.

Just before that year, in contrast, Mexico had experienced the highest levels of precipitation in vast regions of the country, with record average rain, but also with very intense periods of rainstorms that caused floods that affected more than 20 states. We have 32 states, so one-third of the country was affected very much by these floods.

Also in that year, in 2010, we had the worst hurricane season every registered in Mexico, with a cost of roughly 0.6 percent of our national GDP in that whole year. In all, more than 702 municipalities, from 17 states, suffered from damages related to climate change, or to climate in general in that year, and they required relief from the federal government.

While these impacts are increasing in magnitude and frequency, as I was mentioning, it is also the environmental and socio-economic conditions that we live in that make us highly vulnerable, particularly for some specific sectors that are the more vulnerable now, less resilient, for some specific regions and sectors.

We have several analyses made so far. One of them, the "Study of Economics of Climate Change for Mexico," stresses two relevant lessons that have been already mentioned by Bob and by Rachel this morning. The first one is that it is economically wise to act now, and not to risk suffering the implications of great losses given great uncertainties. And second, that even if climate change was not a concern, if it didn't exist, in a world with limited resources, as the one we are in, increasing population, and also the need to improve living standards, acting in response to signals of natural resources scarcity is good economics.

Mexico sees the combination of these factors -- on the one hand, climate change and the degradation of the natural capital, and on the other, the need to grow and correct social inequalities in the context of the global financial crisis -- as a great opportunity to catalyze a transition to low-carbon, resource-efficient, and climate-resilient green economy. This is the main reason why Mexico voluntarily submitted a greenhouse gas mitigation target of 30 percent below business-as-usual by 2020, and an aspirational goal of 50 percent reduction in annual emissions by 2050 with regard to what we had in the year 2000. This is taking into account the long-term view that Bob was mentioning in his presentation just now.

What sustains this proposition by Mexico is the believe that by implementing a low-emissions development strategy which promotes specific technologies, but also the establishment of enabling public policies and institutional arrangements, including proper incentives and conditions to support expansion of a private sector that supplies greener goods and services, Mexico can achieve a steady and sustainable economic growth.

The Mexican green growth strategy proposes implementation of an ample range of mitigation and adaptation efforts, conceptualized within a wide ranging green growth plan that entails multiple benefits such as poverty alleviation, green jobs creation, energy security, clean air, and more efficient production and consumption processes, and improved air quality -- at the same time that the preservation of natural resources and biodiversity is also promoted.

In Mexico's vision, the low-emissions development strategy is a central element to green growth which focuses on the low-carbon development part of it.

The other main component, as I was referring to, is the national adaptation strategy.

We are currently advancing the preparation of proposals for both these components in multi-stakeholder, participative process, supported by a wide range of studies. We hope that these studies will provide enough evidence, and a database that will be useful in the future for decision-makers at the time that they have to do more concrete planning.

According to our analysis, and assuming actions from the international community, and the availability of new resources which are sufficient both domestic and international, including private and public resources, we are proposing over 130 specific activities where it is worth putting an effort in terms of mitigation actions with high social benefits.

They pursue the following objectives: first, to increase penetration of greener technologies for power generation. Second, to improve efficiency in energy transformation, then to promote efficiency in energy consumption, as well -- not only on the supply side, but also on the demand side. To encourage, fourth, low-carbon development and transport solutions which are important in Mexico, as over 20 percent of the emissions of greenhouse gases come from transport. So we have to tackle that sector specifically in improved efficiency and technology.

Fifth, to manage waste responsibly. Sixth, to manage forests sustainably. Mexico has still a high rate of deforestation, so we have to work further to abate it. And, finally, to decrease emissions from agriculture and livestock.

In terms of adaptation measures, on the other side, it is essential for Mexico to implement actions in sectors highly dependent on natural resources, such as agriculture, livestock, fisheries, forestry, mining, oil and gas, and tourism, as well is the protection of ecosystems and biodiversity, and to promote, in general, capacity development at the sub-national level. We have done a lot of work so far, working with the State governments, and they have improved a lot in their capacity to respond to climate change, and to adapt specifically. But still, we're lacking access and capacity at the municipal level, especially in the smallest municipalities, and that's very much needed at this point.

According to some preliminary studies, by implementing all measures included in the national low-emissions development strategy that I'm talking about, GDP would increase by about 5.8 percent per year by 2020, reducing, at the same time, the rate of unemployment by almost half, against business-as-usual, with the creation of nearly 3 million new jobs that we can call green jobs, and progressive changes, as well, in income distribution.

Many of these measures that we are analyzing are already in our planning phase, or even at the initial stages of their implementation. Rachel was talking, for instance, about what we are doing on housing. There's a high penetration of what we call "green housing" -- green mortgages for houses -- so we are supporting the transition of that sector, buildings and housing, to greener modes of living.

Still, the vast majority of the measures required would need the commitment and support of the next government. As you all know, you may be aware of this, we are nearing the end of the current administration in Mexico, with elections in July, and a new president coming to office in early December. We cannot, at this stage, expect to put any new program in place and, in fact, we are constrained to do so by law.

So what we can do, and we are actually doing, is putting together all the analysis, putting at the disposal of the incoming government, the committed support of several national and international organizations that goes beyond the end of this administration, so that they can have all the necessary elements and support to decide on whether to develop a comprehensive green growth strategy, program, or insert green growth elements across all relevant sectors and regions.

We also expect to have some sort of pressure coming from different sectors to move towards green growth, and that things progress along these directions regardless of the political process at the national level. We see business with a lot of interest, for instance, in these new concepts, because they see opportunities for new ways for improving production and productivity. So they are probably the ones who are going to move these ideas forward.

As I have made clear, the Mexican government believes that green growth is the way forward. And by President Calderón's initiative, it was proposed as one of the top five priority areas for the G-20 agenda for this cycle.

Moving now into the second part of my presentation, I will very briefly comment what is the vision behind this proposal, and what progress has been made so far.

Regarding the vision, the Mexican presidency of the G-20 sees green growth as a strategy to foster the drivers of economic growth that are consistent with the efficient use of natural resources, and minimal environmental pressures, particularly in the context of the recent global crisis. This we do, Mexico does, convinced that international cooperation is essential to support the advancement of green growth into domestic policies, particularly in developing countries, and most especially in least-developed countries.

The proposal by Mexico was amply debated within the G-20, and the topic of inclusive green growth -- the G-20 added the word "inclusive" to add the social considerations -- was accepted as a cross-cutting priority of the G-20 development agenda. In consequence, an informal sub-group was created within the Development Working Group of the G-20, with the endorsement of the "Sherpas," who are the guides of the process, and it was mandated, this group, to discuss the issue and come up with concrete proposals for products, deliverables, and political messages for this year.

This group that I'm referring to organized a workshop not long ago, less than a month ago, a workshop on inclusive green growth and international development cooperation. And this was followed by a meeting from which several proposals came to the Sherpas and to the formal meeting of the Development Working Group of the G-20, which met last week, Monday and Tuesday, in Seoul.

The importance [in the art?] of addressing resource efficiency, vulnerability, financial and social issues in the context of inclusive green growth has been emphasized by all the groups that have been discussing this issue within the G-20.

Regarding agreed principles, deliverables on green growth should be oriented to find new resources of growth, innovation, business opportunities, and employment. The G-20's vision on green growth is inclusive, and takes into account the social and distributional effects of growth, and the impacts to the environment.

Finally, green growth initiatives will be opportunity-oriented, and will seek building capacity of low-income countries. These initiatives will not seek to impose obligations, prescribe a path, or constrain growth in any way.

Political messages being currently discussed include emphasizing that resource efficiency is a key to green growth, expressing G-20's support for countries, in particular low-income countries that wish to design and implement inclusive green growth strategies and policies -- and, finally, reiterate that G-20's contribution must be non-prescriptive.

On deliverables, one of the main ones is a non-prescriptive toolkit, or national policy frameworks to support countries, especially low-income countries, that wish to design and implement affordable and inclusive green growth strategies. As a basis for it, there is the common understanding about the importance of looking at flexible models, best practices, and knowledge sharing for inclusive green growth, with no one-size-fits-all approach. This guide, this toolkit, is to be developed by the U.N., the World Bank, and the OECD, looking to add value to these organizations' individual work, with each one contributing according to their strengths.

Other deliverables for this year include a partnership for affordable and inclusive green growth, involving various sources of funding, the identification and support of initiatives to increase countries' capacity to implement green accounting that has been referred to already, the identification of linkages from the report of a high-level panel on sustainability, of the U.N., to take forward support, transitions towards affordable and inclusive green growth, and a road map for inclusive green growth in the context of international development cooperation.

Some of these deliverables are short-term. We should have some results even in June, at the meeting in June, while others deserve a longer time to mature.

To finish, I would like only to add that the work of the G-20 on green growth is specifically aimed at complementing, adding value to, and avoiding duplication with ongoing work within Rio+20 and other processes. It is hoped that it is useful for all countries who wish to design and implement affordable and inclusive green growth policies within and outside the G-20.

There was a lot of discussion when we were talking about these toolkits on whether the G-20 was in a position to show the rest of the world what is green growth, or what path should be followed, so, at the end of the day, there is no implication on these deliverables of any preconception of them not really needing, themselves, to have some of these tools for their own development. There should be North-South collaboration, South-South collaboration, and even South-North collaboration as part of the processes to be put forward by the G-20 this year.

We expect, just to finish, the concrete proposals and political messages delivered in the Los Cabos Summit in June, to be clear and helpful in support of green growth policies through the world.

Thank you very much. (Applause.)

[Pause.]

MS. SIERRA: So I was prepared to give some very difficult and incisive and penetrating questions to my panelists, but they've done such an excellent job of presenting the issues, and given the time, I think I'm going to open it up to audience questions and answers, before concluding at 11:00.

So I'm going to ask you to raise your hands. Please identify yourself. And if you're directing a question to a specific member of the panel let us know, otherwise we'll open it up. And we'll take two or three questions at a time.

So let us start with -- right there. Thank you.

MS. ENGLESKA: Thank you so much for this really insightful panel. My name is Pauline Engelska.

And so my question was prompted by Mr. Orr's presentation, but I would really open it up to the entire panel to comment on it.

So this refers to definitions, "green growth" versus "sustainable development" versus "green economy." And I'm sure there's a zillion others that are being used.

And so my question is, when it comes to the high-level meetings between, you know, country leaders, and institutions such as the World Bank and the U.N., I just wonder how much of it is real lack of understanding that long-term thinking is necessary? How much of it is just being scared of it? Because, I mean, I can imagine, looking at the figures and, you know, what is it going to take, it could be truly scary. How much of that is present in that? And how much of it is just kind of lack of caring?

And, you know, going back to the definitions issue, I mean, are we just using that as an opportunity to kind of continue doing nothing? Or, you know, continue doing as little as we can?

MS. SIERRA: Thank you very much.

Let's take a couple more questions here.

MS. YOON: Thank you for presentation and giving me the opportunity to raise a question.

My name is Sun Jin Yoon. I came from South Korea. I am professor at Seoul National University.

Actually, Korea was addressed in presentation, and actually Korea is the only country which announced green growth as national development paradigm. But I have seen many failures in Korea.

So the question I have is, why green growth instead of sustainable development? So we need to clarify the relationship, or some comparison between sustainable development and green growth.

I saw some different decision-making process in green growth paradigm, and the green growth paradigm [sic]. We have many participation from civil society under the paradigm of sustainable development. And deep emphasis was given to social equity and environmental protection.

MS. SIERRA: Could I ask -- a question, please?

MS. YOON: Yeah. So, please clarify, and why do we need to pursue green growth instead of sustainable development? I think green economy is more than green growth, because "growth" is still emphasized.

So, please clarify the relationship. And I think --

MS. SIERRA: Okay, thank you.

MS. YOON: -- there is no order in three elements in sustainable development. But the emphasis is always given to growth. I think that is problem.

MS. SIERRA: Okay, let's take one more question.

This gentleman. Thank you.

MR. BLAUSTEIN: Yes, thank you all for this excellent presentation. My name is Rich Blaustein, and I'm an environmental freelance journalist.

I have a question -- whether I talk to scientists working on carbon-capture, or a Latin American negotiator in the UNFCCC process, a common rumination is what would be the biggest boost for green growth would be price on carbon, the carbon market.

And I would like your opinion on how that figures in. And is it perhaps the biggest boon, the biggest open question about how to make that shift?

MS. SIERRA: Okay, let me take one more question.

Lisa.

MS. FRIEDMAN: Thanks. Lisa Friedman from ClimateWire.

Actually, a question for Mr. Montalvo and for Ms. Kyte, if you don't mind.

A quick one for Mr. Montalvo -- and forgive me if I didn't understand -- but I understand that Mexico's climate law is coming up for a vote on Thursday. And can you talk a little bit about how the issues that you raised, you know, what this law will do, in terms of some of the programs that you raised, and what the prospects are?

And for the World Bank -- forgive me for being the skunk at the garden party --

MS. KYTE: That's okay, Lisa (laughs.)

MS. FRIEDMAN: -- but there is a big fight, another fight, over coal at the World Bank, a pending loan guarantee for Kosovo to build a lignite coal plant.

Can you talk about how projects like that, or this specific project, how your goals of not doing things that will lock us into irreversibility --

MS. KYTE: Absolutely. Sure.

MS. FRIEDMAN: -- works with projects like this? And maybe, more broadly, when it comes to Rio+20, what is the role of coal, and what will it have to be, maybe, continuing in some countries?

MS. SIERRA: Sure. Great.

So maybe I can ask Bob to take -- there are two questions about definitions, what do we mean by "sustainable development" versus "green growth?"

Rachel, if you can talk a bit about the enabling environment, price on carbon, as well as the position with respect to irreversible pathways.

And then, Andrés, if you can talk a little bit about what's happening next in Mexico.

Bob?

MR. ORR: When it comes to terminology, I'm a firm believer that you fly whatever flag you need to mobilize the constituencies you need to get the job done. So I really don't care who flies under the "green growth" flag, who flies under the "green economy" flag, who flies under the "sustainable development" flag -- as long as everyone is eliminating perverse incentives and creating positive incentives for behavior that will improve our greening of the economy, our making things more equitable, and producing growth outcomes.

I think the terminology does matter, though, in that it is a mobilizational tool. You know, "sustainable development" is a concept that probably most people in this room are familiar with. Most people in the world are not. It's not a flag that mobilizes constituencies. It's a very big flag.

So I think one of our challenges at the U.N. is to take what is wide acceptance and agreement on sustainable development, but to be able to turn it into policies that make a difference in people's lives. So not to just pat ourselves on the back that we have a concept everyone agrees to. Quite frankly, that doesn't interest me. I want to see changes in behavior that match that concept.

I think, on the issue of the emphasis on growth always being a problem, I think growth is a prerequisite for what we need to achieve, but it does not do the whole job. And I think, here, we've seen this in spades in the last decade or two, since Rio.

We actually have produced growth. The world has grown well. We have not done so well on the equity equation, and we've certainly not done so well on the environmental equation. So, I don't want to drag growth down. I want to lift equity and environmental sustainability up.

And I think it's where the green growth paradigm is interesting. It's trying to appeal to the growth constituency -- to businesses, to decision-makers in the political realm -- to make decisions that will pay off in growth terms, but will also pay off in green terms and in equity terms.

So I do like the fact that the Mexican presidency championed and got the "inclusive green growth" into the G-20 door. Because if you look at the G-20 crowd, that is mostly the growth crowd, if you kind of split the world up into constituencies. It's very important that the growth crowd own this agenda as their own, and build into the equity and the environment.

In the end, we need everyone to own all three pieces of the sustainable development trinity.

MS. KYTE: So, just -- I'm going to completely agree with Bob, and just to segue, you know, we have a green growth knowledge platform which is a collaborate space, which is UNET, OECD, ourselves. Koreans are very engaged in that, and Mexicans, as well. And it's growing. And, you know, it's a space where people are sort of talking about, well, what does this practically mean, and what's worked, what hasn't worked?

And, you know, to the first question, I mean, I don't actually -- you know, the labels, I mean, you would wish for a world where everybody used the same label. That world doesn't exist. I don't live in it. But I don't think that we're distracted by the labels. Our collaboration with the U.N. is probably stronger on this than many collaborations in the past. And I'm not just telling you this. I mean, it's for real. And I think that the focus is on the nitty-gritty.

So, to segue to the skunk's question -- (laughter) -- Lisa, so in my opening remarks I talked about taking every country from where they are to where they need to be, want to be. And that pathway, that green growth pathway towards sustainable development means, in the case of the western Balkans that they need energy.

Nobody has installed any new energy in the western Balkans for more than a decade. Economic development, you know, is impossible without some form of energy. In the case of the western Balkans, economic development is a prerequisite for continued peace and stability.

Now, what are their resources that they have available? They've got lots of lignite. One could wish that they didn't, but they do. The gas is not going to come south from Russia for, you know, maybe a decade. There are renewable options, but they need base-load power. There are little bits of hydro, but nothing big, and nothing big that could be installed.

And so the question you have is not just for Kosovo but for the whole region, is: What is the decision now that helps build some kind of growth that will keep the region moving on? The future for the region is integration into the broader economic space.

And so, you know, we could say, okay, well there's nothing that can be installed now that we like, and so nothing will be installed. But they're already burning the lignite, in a filthy process, with a plant which is one of the filthiest in the world.

And so the questions really are, okay, this is where we want you to be -- probably gas, some more renewables, etc. But now it's about burning that lignite cleaner. And that's their green growth path. It might be unpalatable to us, wish it wasn't so, but that's the choice that we face. And so the choice is not to do, to help them do it. And those are questions that will be faced by the European Union, by the European financial institutions, by us, as we move forward with the government.

I think the other problem is that, you know, the financing of any kind of project of this size is actually quite difficult in the current economic environment, with the Euro Zone in crisis. So, I mean, there are lots of, you know, problems for the country to face.

But, you know, green growth is about taking people from where they are to where they need to be, and that pathway is going to be different for all countries.

Was there --

MS. SIERRA: Oh, yes, the price of carbon.

MS. KYTE: We'd love to see a global price on carbon. It seems to be a little bit difficult at the international level. (Laughter.) We're kind of focusing on the here and now. So, yes, it would be great.

I think, actually, one thing that's really interesting is that if you take the unit of practical account to be city or municipal, you're seeing all kinds of preparedness, you know, by cities, to really de-carbonize themselves and green themselves. You know, and the real boon will be when you can factor in a price on carbon and start hedging off that, and start having derivatives off that.

But, you know, that's not there at the moment. And so we've been concentrating on what the win-wins are, and the tradeoffs and the cost-benefits of, you know, of green growth policies, without factoring in what would really make this move a lot faster.

And so -- yes, that would be the big boon, but that doesn't seem to be close at hand at the moment.

MS. SIERRA: Andrés.

MR. MONTALVO: Yes, thank you.

I would like to start with this last issue of carbon pricing. And in Mexico, we haven't really discussed carbon taxes seriously. But we have done a lot of research on subsidies, especially subsidies to energy, which are very closely related to carbon.

And we have found that most of the subsidies, for electricity, for instance, and for fuel, for gasoline, goes to the highest deciles of the population, the ones with the highest income. So it doesn't make sense economically or socially to have those subsidies. It would make more sense even to give away the resources, instead, to the poorest segments of the population.

And some subsidies are so perverse -- for instance, we have a subsidy on electricity for water pumping for irrigation. So there's -- and [uh] a perverse incentive to waste water, to use more water than necessary, because you are being given away the electricity.

Second, on this question on the law, I have to apologize; I've been out of Mexico for 10 days so far, so I may have missed it. But we were all waiting for that to happen.

The initiative was already approved a few months in the senate, and was up for consideration at the lower level, for the congress, at the Chamber of Deputies. If it passed, the law would mean that the voluntary target that Mexico has of 30 percent reduction of emissions by 2020 would become mandatory. It will become a law. So, then, all the programs and several elections have to take place in order to fulfill that obligation, to honor that commitment.

It would also create new institutions for tackling, especially, climate change. It's a climate change law. So my own institution, INE, would become INEC -- the National Institute of Ecology and Climate Change. New areas would be developed within the institute to strengthen capacities on climate change, both for adaption and for mitigation. And, also, there will be new funding, of course, associated to this topic.

MS. SIERRA: Great. I think we have time for one or two more questions.

Gentleman in the back, there. And right here.

MR. WEINTRAUB: Thank you. I'm Leon Weintraub, University of Wisconsin, Washington Semester on International Affairs.

I think, from the first agreement at Kyoto back, and then looking forward to the recent discussions in Denmark a couple years ago, we've seen very, very strong opposition in the Senate of the United States to any U.S. participation in any of the processes that we're looking at.

I'm wondering if the panelists might help us understand, number one, how important is it that we get the U.S. Senate in a different frame of mind? And, second, do you see a way -- is there anything on the horizon that might be a game-changer, rather than incrementally changing one mind after another? Anything that might be a game-changer, as far as getting the Senate to look in a more positive way about some of the things we're looking at?

MS. SIERRA: Thank you very much.

And last question, in the front here.

MS. CRESPO: Hi. I'm Jackie Crespo from Cassidy & Associates.

This question actually was inspired by Mr. Orr, but I'd love to hear the panel's ideas. And that's this thought about having a multi-stakeholder approach to public-private partnerships, and making sure that they go beyond just a project level, something that's more of a platform, or an actually innovative financing tool.

And I wanted to hear more about, first, this idea of not just looking into the financial community, but also philanthropists and industry.

But, first, can you give me some examples -- and just to add a scope, let's just talk on energy, or renewable energy -- and then what are some examples you're thinking about? Is it securitization of returns on energy projects? What might that look like?

And what obstacles do you see that the private community faces beyond a price on carbon? Because I know that's always the easy answer.

MS. SIERRA: Thank you very much.

So I'll open it open up to all the panelists. I guess I'm going to broaden the question on the U.S. Senate -- how important are shifts in the U.S. policy, knowing that we have very thin policy space right now, to these debates?

And then speak to your examples on public-private platforms and multi-stakeholder processes, which are actually, if I read the speakers right, really taking a lot of energy forward -- have a lot of energy outside of some of the more pedantic U.N. processes that take a long time?

So let me open it open. Bob, why don't I ask you to start?

MR. ORR: It's never a career enhancer for a U.N. official to comment on any of our member states' specific policies -- (laughter) -- but, with that said, there's no doubt that the United States is a huge piece of this equation, both positively and negatively. Where the U.S. goes, the world inevitably, at some level, follows. So it does matter that the U.S. has been politically locked up on climate policy.

Here again, I think there is more potential for agreement and progress with the U.S. if you define this as energy competitiveness, economic competitiveness. I think the United

States has taken notice that China is not squaring off in a climate negotiation in the same way it used to. Instead, they're doing a lot on the ground. And, in fact, they're doing so much that it's actually made some people nervous up in the Senate and the House that China is doing so much, and may be gaining competitive advantage in some industries.

So, I think here the issue is whatever the motivation is for politicians -- whether it be in the U.S. or elsewhere -- we need to take their interests into account. And then if it's a question of competitiveness for the U.S., I'm happy to talk with any member of the Senate or the House about how the United States can stay competitive in this space -- or become competitive in this space, in many of the areas.

So I think, here, it's not just nomenclature. Again, we get down to specific policies that are needed, not talking about climate change or big, broad categories. Get down to specific policies. I think there's hope for some movement in the U.S.

I think, on the second question, about partnership, when I say "going beyond project level," the first element of this is getting agreement among a range of stakeholders, public and private, on what the "it" is -- what do we need to solve, what's the problem we're trying to solve?

Once you get some agreement across key players, across industries, across governments, across institutions that can do some initial financing, whether they're public or private -- governments, IFC, World Bank, you name it -- or, individual philanthropists. And, by the way, individual philanthropists are a much bigger source of capital than people realize, because philanthropists are not just in the U.S. or in Europe anymore. We've been doing work with philanthropists in Nigeria, in India, in Brazil, and in small African countries. So there is a source of finance out there that is generally untapped.

When you bring a multi-stakeholder coalition together, people like that can come into the mix and provide some of the initial capital necessary -- call it the venture capital, the "angel investors" of these public-minded projects. So you can put together philanthropic capital with, then, maybe more institutional capital, and incentivize, and have a conversation up front with the private-sector players that will be needed down the line.

It is an old truism of any kind of partnership, in any sphere, if people are brought in on the ground floor they're much more likely to invest in a major way. If they're getting added on to an already cooked deal, then you might partner at a certain level. But if you think this goes to the heart of your business, or the heart of your investment strategy, you're much more likely to do this at the scale that we need.

And so I think what we're finding -- and you asked for any examples -- before we undertook the Secretary-General's initiative with Sustainable Energy for All, we had an initiative of a similar, multi-stakeholder approach on women's and children's health -- an idea that surely everyone could agree with, we want to improve women's and children's health. Yet the health community had been at war with itself over "Are we trying to improve health of under-fives, under-ones, neonates -- ?" -- all these terms I had never heard of before. But once we got agreement with all the major stakeholders on what we were trying to do on women's and children's health, a lot of funding starting to move into this space. Because there was certainty, there was government backing, there was international institutions playing their role in building capacity. There were civil society organizations delivering the services.

If we look at the energy equation, we're seeing the same thing. Everyone thinks that this is just big infrastructure? No, not at all. There's a lot of decentralized processes that are necessary to deliver energy to the 1.4 billion who don't have it.

It's not going to be big, new infrastructure that's going to deliver energy to most of those 1.4 billion. It's going to be harnessing some of the existing technologies that make energy possible, and at an economic price that is payable by the poor people around the world.

So we have these models. We need to make the business case so that we can scale this up significantly, in a pretty tight timeframe. You know, to achieve universal access by 2030 is a big goal. But I think all the modeling that we've done, it's doable.

MS. SIERRA: Thank you.

Rachel -- and these questions, or any final comments you might want to make.

MS. KYTE: Sure. So, just, I mean, I think that the debate in this country -- again, larger stakeholder, career-ending move -- but I think the swivel to competitiveness is way overdue. And I actually think there's something, for those of you in think-tanks, civil society, and, you know, sort of the world around Congress, that for you to do, because I do think the debate is particularly siloed here in the United States.

So, you know, there's everybody who works on climate change. I don't think that's the focus to get the swivel pint that you need. But then, everybody who's working on education, working on IT, working on agriculture, you know the competitiveness is there across all of that.

So you can read this weekend in the newspapers, you know, where the U.S. is ranking on education, where the U.S. is ranking on access to broadband, you know, where -- so, I mean, these are all going to be the swivel points to the kind of competitive economy that the United States will need to be. And which will, in the process of becoming competitive, to make it be greener and more inclusive.

That's the urgent, burning bridge. You know, I think the climate change stuff will come on the behind of that. And, you know, I think that, you know, we can -- sometimes we can wallow in pity that, you know, Congress is where it is, and that the bandwidth is so narrow. But, you know, there's no time to be wasted in terms of building up the broad coalition necessary for that swivel point.

Which brings me to the public-private partnerships. I think this aligning of interests, or understanding where the alignment of interests may be, or is potentially, is terribly important. We've started to build these kinds of partnerships around all kinds of public-goods issues now -- food safety, where there is a global food safety. So for the private sector this is about the security of supply chains, which is fundamental to the bottom line. For the public sector, this is about, you know, global health. It's about the transmission of disease in the animal population and the human population. But it's also about food security and the security of the food that's being imported, increasingly imported. For poor countries, it's about competitiveness, being able to get into global supply chains and meet the standards necessary for the consumer at the end.

Around that alignment of interests there's huge opportunity. And you're seeing, you know, big retailers coming in, and the food manufacturers, alongside developing countries. And then, like the US FDA, and others, around how do we build coalitions around food safety?

The same for oceans. The oceans partnership which we will be launching in Rio+20 is an emerging partnership with people queuing up to sort of be in the definition of what are the goals that we are going to achieve, that we can achieve more as partners than we could individually? And here, it's everybody from the tourism industry and the shipping industry, to the seafood industry globally, to the fisherman, et cetera, as well as, then, coastal communities, coastal countries, but then also countries with no coastline who are dependent for 25 percent of the protein for the poor from what we're able to sustainably produce from the oceans. And so -- and that's without getting into the whole sort of pollution dynamics, as well.

So I think that this is the way to go. And actually one of the problems with the climate negotiations, or climate negotiators, is that they are still having public negotiations about what they think the private sector should do, or may want to do.

Getting the private sector into the problem definition, not just the "Okay, we've defined the problem, now can you help us with the solution?" -- that's the next step now in the way people think about partnerships.

And that goes to, then, you know, they'll tell you what their financing needs are. And the financing needs that they had two years ago are different than they are now. Two years ago, yes, there was a future for project finance. Project finance has collapsed now -- in large part because of the Euro Zone crisis.

Now what the developers need for that, you know, distributed energy generation system, or that small multi-use infrastructure project for water storage and electricity production, is that they need some kind of risk-hedging on their ability to refinance. That's a very different need than they would have told you they needed two years ago.

So this is the nitty-gritty of partnerships that I think we're getting better at. We've still got a long way to go -- but where I see more and more energy being developed.

MS. SIERRA: Thank you.

Andrés, final word.

MR. MONTALVO: Yes, thank you, Kathy.

On the first question, I won't get into U.S. domestic -- (laughter) --

MS. SIERRA: You don't have to.

SPEAKER: Oh, go on.

MR. ORR: Let's end three careers here today. (Laughter.)

MS. SIERRA: And this is my new career.

MR. MONTALVO: No -- just to mention that the fact that the U.S. didn't ratify the Kyoto Protocol was a major factor in weakening the Protocol itself. It was, at the time, the largest historical emitter of greenhouse gases. And just by it not being part of it, and the ambition of the Kyoto Protocol weakened by half, almost. And now that Canada, Russia, Japan

-- even Japan -- are stepping down, we have to think of a new arrangement, a new international arrangement for climate that includes maybe even emerging economies, China, India, and Mexico itself, which should be included more ambitiously if we are really serious about tackling climate change for the future, getting rid of old ideas of historic responsibility and who is to blame for what. That's my personal view on the matter.

And I think that part of the process is, besides the UNFCCC, the Climate Change Convention may help a lot. And the G-20, and all other processes, the one that was promoted by the U.S. with the largest emitters, all of them may help. But the U.N. process is the one that is a legitimate process, where all parties are involved -- 194, I think, so far. So that's the one we should aim for as much as possible, for an agreement.

MS. SIERRA: Thank you.

Well, I want to thank our panelists. I think we've heard a quite a wide ranging points of view on green growth that are, at least positioning, I think, our work at Brookings.

Rachel gave us a compelling of green growth, a new pathway to growth that's efficient, smart, and inclusive. And I underline "inclusive," because we heard that from all of our panelists. And she reminded us it's not just about clean energy and low carbon development, but it's also about food security, it's about clean water, it's about clean air, it's about natural resources going forward. So it's a much broader frame than that which we sometimes put ourselves into a corner in the climate negotiations.

Bob took us through the politics and processes that we're going to be seeing over the next several months. And thank you for that, because I do think that we haven't had enough conversation, at least here in Washington, on what's coming up in Rio+20. So I want to thank you for bringing that to the Washington audience -- as well as for your message about the new pathways for partnerships, more inclusive, multi-stakeholder partnerships that can contribute to, I think, both understanding but, hopefully, action on the ground.

Andrés took us through what's actually happening on the ground in a real country, moving away from just what's happening in the talk-shops, but what's happening in a country that has taken this in a very aggressive way, and shown leadership, not just in its domestic policies, but also in terms of its international leadership.

And that takes us to G-20, and thank you for the preview of what we're expecting to get there.

So we're looking forward to your green growth report, Rachel -- commercial.

We're looking forward to a successful Rio+20 -- another commercial -- and to hearing what the outcome of the G-20 is.

So, thank you all. And thank you for joining us this morning.

Thank you. (Applause.)

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