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CHINA'S ASSET MANAGEMENT PLATFORMS  
& CLEANTECH SECTOR\*

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## I. PANEL ONE: CHINA'S ASSET MANAGEMENT PLATFORMS

*A. Opening Remarks by Mr. Mikhail Izrailev, Mr. Daniel Silverman, and Professor Charles M. Yablon*

MR. MIKHAIL IZRAILEV: Good Morning. I'd like to welcome you to this year's symposium. It's hosted by the Cardozo Journal of International and Comparative Law and our Symposium Editor, Daniel Silverman is responsible for the event today. We'd like to thank our participants ahead of time and I know it will be a fantastic day. So Daniel, the floor is yours.

MR. DANIEL SILVERMAN: Thank you Mike, and good morning to all of you. Welcome to Cardozo School of Law. Our Journal, the International and Comparative Law Journal is happy to welcome you as well as we explore various issues related to Chinese investments. And in the later sessions, in the afternoon, Chinese-related outbound investments, and renewable energy and wind power. We have a very interesting panel for you today headed by a moderator that should need no introduction but will receive one nonetheless. Professor Charles M. Yablon, who has been with Cardozo Law School for many, many years. He is now a professor of law.

A few years back he was the director of the Samuel and Ronnie Heyman Center for Corporate Governance here at the law school, and he is now the Director Emeritus of that institution. He is on research leave, but has agreed despite that to give of his time as did the panelists who are before you to present today. I'm going to turn the floor over to Professor Yablon and allow him to introduce the panelists respectively. Thank you.

PROFESSOR CHARLES M. YABLON: Thank you very much. Thank you all for coming today. As Dan just reminded you I've been a professor here for many years, which means I'm old. And being old you get to reflect on things, important things that have happened in your lifetime. And I think one of the most, and perhaps the most important thing that has happened in my lifetime, which is an old lifetime, is when I was young approximately one-fifth of the world's population lived in countries that could be called rich. Didn't mean everybody in them was rich, but at least the countries themselves had produced sufficient GDP [Gross Domestic Product] that they potentially enabled their citizens to lead relatively comfortably lives and have economic opportunities. So one fifth of the world was rich and

four fifths were poor.

Now, we live in a world in which three-fifths of the world are moderately rich to rich and have the wealth to enable their citizens potentially to have greater economic opportunities and higher standards of living. The most important part of that, of course, is the rise of Asia and particularly the rise of China. Our panelists today are people who are intimately involved with that rise, have seen the economic development first hand, and are going to talk to us about various aspects of the economic developments in China and particularly investments, both in bound and out bound from China.

So our first speakers are Jillian Ashley and Gary Lazarus. Both are associates at Allen and Overy. Distinguished graduates of distinguished law schools. Allen [and] Overy is a firm that originated in London. It's known as one of the very few [elite] firms—it's a magic circle firm. So they've got some magic and they've tried to spread it not just from London but to New York and China.

The role of law firms in globalization, I think, is under appreciated. The role of western law firms, not just a certain type of expertise but a certain conception of law and what you can do with law is an important aspect of what law firms do and I think that hopefully Gary and Jillian will give us some indications of that as they speak in a couple of minutes.

Next we have Henry Levine, who has a very distinguished career, both in the public and in the private sector in terms of a relationship to China. He had a very distinguished career as a foreign service officer, knows both the politics and the economics of China very well and I'm hoping he will give us some insights into both the political and the economic side.

And then, finally, we move to a little bit more of a focus on the Cleantech aspect of our discussion today with Andrew Worden, who is the head of a very successful private equity firm, Barron Partners. But it's not just a financially profitable firm, it's also a firm that does good and invests in good things like Cleantech. And as you know, China is a leader in Cleantech, which may come as a surprise to anybody who spent a hot summer day in Beijing, but none the less it is indeed a leader in that area.

So it should be a great panel. I'm looking forward to it and I hope you will all join me and have many questions for the distinguished panelists.

*B. Panel One: Discussion**1. Remarks by Ms. Jillian Ashley*

MS. JILLIAN ASHLEY: Good morning everyone. I'm going to be speaking this morning about asset management in China. What exactly are we talking about when we say asset management? We're talking about the fact that currently in China there is a large pool of wealth. That wealth the moderator mentioned a moment ago. And investors are interested in putting that newfound pool of capital to use, either in investments in China or outside of China. And at the same time there are many investors outside of China with funds they would like to invest into China. So it goes in both directions. And we're going to talk this morning about methods of doing that.

Just to run through an outline of what we're going to be speaking about, first we're going to talk about the market and market trends. Then I'm going to give you a little bit of background on the regulatory framework in China that makes moving funds in and out of China and engaging in investments there a bit more difficult than it is in some other parts of the world. And then we're going to talk about the specifics of PRC [Peoples Republic of China] fund structures. So the investment funds that one might use to invest in assets from China or from outside of China.

So, market-to-market trends. There is huge market potential here—lot of money to be invested in both directions. Just to run through some of the statistics. The PRC experienced 8.7 percent growth in GDP in 2009. PRC foreign exchange reserves are at U.S. \$2.4 trillion dollars. [The] PRC fund management industry has grown by 37.9 percent in 2009, bringing total assets to \$392 billion. Pension assets available for investment are expected to rise to \$130 billion by 2013. The CIC, which is the China Investment Corporation responsible for investing China's state assets, currently holds \$9.6 billion in U.S. stocks alone. FDI in China, meaning Foreign Direct Investment going into China, reached \$90 billion in 2009 and rose 7.7 percent year on year in the first quarter of 2010.

So who are we talking about here that is looking to invest their growing assets? There is retail demand from high net worth individuals in China. This is a truly growing area. There are institutional fund managers including the National Social Security

Fund responsible for managing China's social security system, and the China investment corporation that I mentioned a moment ago. Private and state owned companies, private PRC limited partnerships and their management companies as well as financial institutions.

So there are three prevalent structures for investments into and out of China. The first is offshore funds. These are funds that raise their capital offshore and then invest into China, since it's foreign investors going in. There are onshore funds, and onshore funds are involved in two aspects of investment. One is investing onshore individual's funds or companies funds in China. And the other aspect is investing outside, looking outward. And then there's also the possibility of [using] combined platforms, finding a way to connect offshore and onshore funds and allowing money to flow in both directions. So we're going to talk about some ideas for that.

The regulatory framework. In China investments generally are highly regulated, much more so than in many other countries. And in particular, foreign exchange is highly regulated. The Chinese currency is not really exchangeable. You can't just move it in and out of the country freely. There are a lot of regulatory hoops that one has to go through in order to do that. So some of the major players, no matter what kind of foreign investment into China or out of China you're dealing with, are the National Development and Reform Commission, known as the NDRC. They are responsible for the policies for economic and social development in China. So you may have heard of the five year plan, this is the area that they work in.

There's the Ministry of Commerce, which is primarily responsible for foreign investment into China as well as PRC outbound direct investment. There's the State Administration of Foreign Exchange, or SAFE, responsible for foreign exchange policy. There is the State Administration for Industry and Commerce, which is responsible for business enterprise formation. It's kind of the equivalent of the Secretary of State in the U.S. where you would register your corporation or your limited liability company, but in China it's much more hands on. And then there are the specific industry regulators. The CBRC [China Banking Regulatory Commission] for the banking industry, CSRC [China Securities Regulatory Commission] for the securities industry, and the CIRC [China Insurance Regulatory Commission] for the insurance industry.

MOFCOM, the Ministry of Commerce, is responsible for implementing what's called the Foreign Investment Catalog. Now this is a catalog that lifts, encourages, restricts and prohibits areas for foreign investment. So there are certain areas where foreigners are encouraged to invest that are really priorities of China. Where they really want investors to come in. And those areas where they'll have investment incentives, [so] it will be much easier to get regulatory approval for your investment, etc.

There are restricted areas where foreigners are permitted to invest, but they may be subject to restrictions in terms of percentage of investment so that a Chinese partner has to be majority owner of the enterprise. And then there are areas that are simply prohibited to foreign investors.

There are also different levels of approval authority required for a foreign direct investment into China depending on a couple of factors. The primary ones being whether the enterprise you're looking to invest in is restricted or encouraged. And the other factor being the total amount of the investment. So depending on the size of the investment you may need approval at the local, and the provincial, or even at the national level.

In the foreign exchange area, as I mentioned before, FAITH, the Foreign Exchange Regulator, very closely regulates, [moves] the funds into and out of China, and the exchange of currency in connection with that. I won't go through the details of what we've set out on this slide but suffice it to say that this is a regulated area for both PRC nationals and for foreigners, but it's more regulated for foreigners than it is for PRC nationals. Foreigners face more restrictions when it comes to exchanging currency.

I've set the stage for what Gary's going to be speaking about in a bit more detail later. China has recently put in place a means to form foreign partnerships. Meaning a limited partnership structure in which both foreigners and Chinese nationals can invest together. This is very new. The regulations are not entirely clear, but we are beginning to see in China foreign and Chinese investors using this to form investment funds structures. It's a very interesting area for growth and we're continuing to look for further guidance but it seems promising.

In this area as well, at the local level, several cities have issued their own guidelines or measures to begin experimenting with investment fund structures. We've set out a few of them here for Beijing, for Pudong and for Shanghai. But several other cities and municipalities have these as well, [they are] just experimenting

with different methods of doing this joint investment funds with Chinese and foreign partners.

I'm now going to go into a bit of detail about specific fund structures used for investing in the PRC. First, I'll talk a bit about offshore funds for investment in the PRC. There are three models that we see used here. One is the pooled foreign direct investment model that I'll talk about first. One is what's called the QFII model or Qualified Foreign Institutional Investor Model. And then finally we'll talk about conduit funds.

So, the pooled FDI model. This is perhaps the classic fund structure for foreign investors looking to invest into China. Essentially this structure involves foreign investors pulling their funds offshore in a master fund. But then invest[ing] in one or more special purpose vehicles to make equity investments in private equity or alternative class fund investments in the PRC. By alternate class what we're talking about here is not your standard stocks listed on the stock exchange, but instead hard assets such as infrastructure, real estate, various private equity projects.

Investments then are typically done through an FIE structure, meaning a foreign invested enterprise structure. In China a company that has foreign investors is subject to a separate regulatory regime than a purely domestic Chinese company and therefore is subject to some of the rules and regulations. And that can be in the form of either a joint venture or a wholly foreign known enterprise.

And this slide just sets out kind of the structure of how this works. As you can see at the top level you have investors putting their funds into the master plan. Then under the master fund you'll have a special purpose vehicle for each individual investment the fund is looking to make onshore in China. Then onshore in China you'll have various wholly foreign known enterprises or joint ventures.

The second model is the QFII model. This is relatively new. It's Qualified Foreign Institutional Investor is what we're talking about. Foreign investors through this model have the ability to make investments on the Chinese stock market, which they could not ordinarily do. It does, however, involve a regulatory approval process and in order to be a "qualified foreign institutional investor" you have to meet certain criteria. A growing number of institutional investors, such as major international banks are getting this qualification. But obviously not everyone can do it, so

it's only an option for a segment of the investing population.

And this slide sets out how the QFII structure works. I won't go into the details but you have offshore various institutions making investments into the QFII and then onshore you'll have relationships with the clearing agency, a custodian bank, and securities firms, in order to put in place all the arrangements needed to invest in the Chinese stock markets.

The third structure is the conduit model. This model involves foreign investors making investments offshore with the return being linked to investment activities carried out by an onshore asset manager in the PRC. There are several steps to this. It's a little less direct than the other two models. Offshore investors enter into a contractual investment arrangement with the onshore entity. And then the onshore entity collects funds through an offshore subsidiary affiliate. The onshore entity then uses its own funds in an equivalent amount as that [which] is raised offshore to make investments in the PRC. And then to return foreign funds offshore, the onshore entity enters into a management or services contract with the offshore entity and registers with SAFE, so that it can remit the offshore entity those contract fees. The offshore entity then distributes the gains to the offshore investors.

The advantage of this structure, it's more convoluted, but its advantage is that it allows investment both in those alternative classes infrastructure, real estate, and in equities at the same time. This diagram shows how that structure works.

Finally, this slide sets out a comparative view of these three different models for offshore investment into China. I won't go through this in detail but just to run through what some of the limitations of each are, and there are limitations to all of them.

The pooled FDI model—which is the one that allows investment in alternative classes assets—[includes] limitations that each investment is subject to a relatively complex approval process in China. And the scope of the investments is limited to those in the foreign investment catalog. And there are also potential cash traps for remittances of returns due to states limitations. For the QFII model you're limited to PRC listed securities and other financial products available on the PRC capital markets, and there's no potential for capital appreciation through alternative investment classes. Also, again, only a limited number of institutional investors are eligible in this area.

For the conduit model the onshore entity must be highly liquid. The onshore entity must have an offshore subsidiary or

affiliate. The credit risks are significant for offshore investors, and offshore investors may have difficulty enforcing their rights onshore.

Now my colleague Gary Lazarus is going to talk to us about going native and look at onshore funds retirement.

## *2. Remarks By Mr. Gary Lazarus*

MR. GARY LAZARUS: Thanks, Jillian. I particularly like this slide. I think it's clear that the Chinese President takes this topic a lot more seriously than the western colleagues that he's flanked by. Following on what Jillian spoke on, I'm going to go into a little bit of detail about the various models by which onshore money in the PRC can be invested either outside of China or inside of China and some of the structures that we see emerging in this market.

The first model, or the earliest model that came to light, and this was in 2003 is the FIVCIE model. It was really China's first fore into legislating a private equity structure that could be used onshore for investment by PRC investors into the Chinese market in a typical private equity fashion. I think the key here, or the few keys, is that this was more of a corporate model than a partnership model. Although it did have the concept of a requisite investor that was a kin to what a general partner would be in a Delaware limited partnership. But there were some key limitations to this structure. The first being that investors could not exceed fifty, which is a relatively small fund. And the other key limitation was that investments by FIVCIE are limited to the high tech industries.

So this really wasn't available to those sponsors that wanted to create a fund to invest in some of the asset classes that Jillian was speaking about. They could only invest in the high tech sector. And this is a chart showing the general structure of this model. As you see we have a foreign fund sponsor at the top that would invest or create an SPV that would then create a general partner onshore, or the requisite investor onshore. That requisite investor would then control the RMB [Renminbi] fund and the domestic LP's [limited partners] would be your domestic PRC investors that would invest in this fund structure. And then off to the side the offshore asset management company would also create an onshore presence that would act as the onshore asset management company to the fund itself.

The next model to emerge after the FIBSEE model was what's called the FIE GP model. And this sort of took the

evolution to the next step. The key here was that the FIE GP model is based on a limited partnership model instead of a corporate structure that FIVCIE was based on. So what you have is a typical private equity fund structure where you have a general partner and limited partners and that gives you two things. It gives you greater flexibility in terms of the way you can structure the partnership, and it also gives you some tax benefits.

To run through some of the details of the FIE GP model, again you can have no more than fifty limited partners in this fund so you still have that restriction. But you didn't have the restriction on high tech industry, which was critical because then this opened this structure to investments into all the alternative class that Jillian was speaking about. The other thing that I just mentioned as sort of the tax benefit of this, you are not bound by a corporate structure but by a partnership structure, so you get the benefit of the flow through treatment of the partnership. And I think what we've been seeing in the market is this is really emerged as the preferred model by which foreign fund sponsors are forming private equity funds in China. And as you can see by the names here, Blackstone and Softbank are two of the sort of elite private equity firms that have used this model to form funds onshore.

As Jillian mentioned each of the different municipalities within China are in the process of formulating their own rules on private equity. And so you have different rules coming out of Shanghai, Beijing, and other cities. One of the key recent developments that we've seen in the FIE GP structure is the concept of a QFLP, which is a Qualified Foreign Limited Partner. And this has come directly out of Shanghai. So currently it's only available in Shanghai but this may change as other cities across China develop or implement this model as well.

Basically what this allows is not only domestic investors to participate in an FIE GP fund onshore, but it also allows foreign limited partners to participate along side them. To run through some of the details of this rule, it allowed obviously the foreign limited partners to convert currency, which they would otherwise be restricted from converting, let's say the U.S. dollar or the euro into RMB for purposes of their investment into the fund. It also allows the foreign general partner to convert up to four percent of the capital in the fund from a foreign currency into RMB so they can make investments into the fund. And that's important because that was something that wasn't clear when the rules first came out

for the FIE GP and in the private equity industry it's expected that the general partner will partake alongside the limited partners and investment in the fund, sort of so they have skin in the game. And so their interests are aligned with the limited partners. So by implementing this rule it firmed up the ability of the general partner to do this and sort of come in line with what would be international market practice in the private equities sphere.

One of the key restrictions though that still remains and what people were hoping wouldn't be the case but what it appears as to turn out to be the case, is that Shanghai's clarified that if a foreign limited partner takes part in an onshore fund it will effectively taint that fund. Meaning that it will cause the fund to be treated for all purposes as a foreign investor within China. And so what that means is that that onshore fund, if it takes money from offshore limited partners, will be subject to all the same restrictions that Jillian was speaking about in terms of foreign investment, the key one being the investment catalog restrictions, and also some of the foreign currency exchange restrictions.

I think people were generally cautiously optimistic that this would not be the case. So that even if an onshore fund accepted money from foreign investors it would still be treated as a purely domestic entity. But so far it seems like the regulations are going in the other direction. And that actually could potentially create a bit of a disincentive for this model going forward only because it will disincentivize onshore investors from participating in a fund that also accepts foreign money, because then those onshore investors will be subject to all the restrictions that an offshore investor would be subject to.

The last point here is an interesting one—the ability to potentially negotiate better terms between competing cities. I think this is something that we're seeing a bit of on the back channels. As Jillian indicated each of the cities are setting up their own regimes and so there is the potential if you are a large investment manager to potentially pit one city against another, or potentially get a better deal in one city than another city in terms of some of these investment restrictions. So it's not set in concrete that this is, [rather] these are the rules that you may be subject to, but this is certainly what's on the books right now, at least in Shanghai.

And this chart just runs through the FIE GP model where you have a foreign fund sponsor that creates an SPV. That SPV then creates an onshore general partner entity that then controls the

fund. They also set up a management company that would be the investment advisor to the onshore fund. I think one key here to focus on is the structure of the general partner itself. The FIE GP structure gives you the flexibility to set up the general partner as either a wholly owned foreign enterprise, or as a joint venture with a local PRC partner. And that's critical because what we're seeing in the market is that it's very typical for an offshore investment manager to set up the general partner as a joint venture with the local investment advisor for two key reasons.

The first [reason] is that the local partner obviously will be able to better navigate the regulatory landscape in China and hopefully assist in pushing through and getting the appropriate approvals. But also they will be a key partner for any offshore investment advisor in terms of raising local capital because they're often the ones that have the connections with the insurance company's high net worth individuals and others that offshore investment advisors are looking to raise capital from.

The next model to speak about very briefly is the Foreign General Partner model. This is almost identical to the FIE GP model. The only difference being, and I'll skip to the charts so it's more clear, the only difference in this model is that the general partner is an offshore entity. It's not set up as a subsidiary of the offshore entity within China. And so this takes away the flexibility I was just discussing in which you could partner with the local PRC investment advisor. But really, other than that, this structure is largely the same.

The next slide is just a comparative view of the three general structures I went through. Again, I think the key takeaway from this chart is that the FIE GP model probably offers the most flexibility at this point. And it offers the ability to take on QFLP's and it also, as we've seen in the market at least emerging as the favorite for non-Chinese investment advisors looking to get into the market.

I just want to go very briefly through structures that can be used by PRC entities and individuals looking to do outbound investment. Really the key is that for any money coming out of China over a very minimal amount the individual investor or the company making the investment needs to seek regulatory approval to exchange their RMB into the foreign capital for the investment. Three ways that this can be done, obviously, and this can be done in any context, is direct acquisitions by PRC companies of offshore targets, acquisitions through an intermediary in a third party

country, or the third option, which is [that] an RMB fund can gain exposure to offshore assets by investing in an offshore fund.

The next program that I just briefly described as the QDII program, or the Qualified Domestic Institutional Investor Program, this is really the flip of the QFII program that Jillian described. And in this context instead of qualified foreign investors being able to invest into China, this allows certain qualified domestic investors in China to invest outside of China, but they're limited to a very short list of investment types, which are mainly equities, mutual funds, and other fixed income products. And they're also limited in the jurisdictions that they can invest in, and that's a very narrow scope of investment.

The next slide shows basically how the QDII structure works, and again as with the QFII model, this is a highly regulated structure and it involves partnering with various parties including custodians and asset managers both onshore and offshore, and getting approval for all those entities and for the structure itself.

The last method of outbound investment, or potential method for outbound investment, is the contractual method. And again, this is sort of a mirror image of what Jillian was describing as the conduit method. In a nutshell, and I'll skip to the slide that shows the structured chart, but in a nutshell what this structure allows you to do is it allows an onshore conduit entity, let's say a bank, a Chinese bank, to pull money from investors onshore. And through a contractual relationship with an offshore conduit entity, it basically allows the onshore investors to get synthetic exposure to investments offshore. I think really the main context in which this works is in the context of a bank or another regulated Chinese entity that has a presence both onshore and offshore, because in reality the way this works is that it's a contractual relationship between the onshore conduit and the offshore conduit, without cash ever actually crossing borders. So you sort of get around all the SAFE and foreign exchange regulations around converting and remitting money.

The last chart on this section is really a comparative view of the three structures I just briefly outlined. I think the key takeaway here is that the last model, the contractual model, gives you the greatest flexibility. It also eliminates a lot of the regulatory hurdles that you need to go through. But it is subject to potential scrutiny by the regulators because [of] its potential circumvention of some of the regulations that they put in place to keep RMB within China.

The last topic that I'll just speak on briefly is the potential for this combined platform. This isn't something that is fully, necessarily fully possible in the market at this stage. But we see it as the potential next step in the evolution of asset management both for investment into China and out of China. It's very similar to the contractual method that I just described, except it would give both onshore investors in China exposure to investment opportunities outside of China, as well as offshore investors the ability to invest in projects within China.

And the last slide in our presentation sort of gives you a flavor of one way in which this structure could work. And again it's based on a typical fund structure but it also adds in the element of the contractual structure that I just spoke about where you're in some instances not actually remitting cash in and out of China, but you're doing it through a contractual relationship in a synthetic exposure to different investments. So with that that ends our presentation. I'll turn it over to the next speaker.

### *3. Remarks of Mr. Henry Levine*

MR. HENRY LEVINE: Well thanks, first of all, to the organizers, Professor Yablon and in particular Daniel Silverman for inviting me down here and making the arrangements. Let me say that I'm particularly happy to be here because I am not an attorney and I come out of Washington, D.C. And having spent twenty-five years with the U.S. State Department working on U.S.-China economic relations from the policy perspective, and now doing sort of similar kind of things in the private sector it has been my observation, and this builds to a certain extent on something Professor Yablon had to say, it has been my observation that often in the policy world there is some under appreciation of the role of lawyers and legal issues as we look at U.S. China economic relations. And similarly it has been my observation that there is sometimes an under appreciation for legal practitioners of the broader policy environment in which we're operating with regard to transactions with China, [and] overall U.S.-China economic relation[s].

So for that reason I'm particularly pleased that Cardozo here has decided to inject sort of the policy perspective, which I bring into this seminar and try to bring together both aspects.

I'll make a number of points, this may be a little bit more stream of consciousness than I would normally like to do, but hopefully layout my view, and again this is very heavily

Washington centered. The issues that we're talking about here, on the one hand involve very difficult and complex legal issues, structures of investment and so forth, sitting inside the beltway in Washington, D.C. I will tell you the expression of all of this is an enormous amount of political angst, and thinking, and blowing off steam, and so on. And I guess by way of explaining that let me first make a point, which I don't need to emphasize too much here, but the fact is [that] China is emerging as a major power in the world, and China is changing the world.

And again I draw a distinction here between an India, Brazil, a Russia, all of which are important countries, but the fact is China holds a special place because of the impact it's having on the world, and that then flows by the way through our political system and creates a variety of issues.

Second, I would say that China itself is changing of course rapidly, and certain elements of that are very positive and there are new regulations almost every month, certainly every year on certain aspects. And some improvements, certainly with regard to new opportunities, new vehicles, for example for foreign investors and so forth. Yet at the same time I would argue in the last couple of years we have seen a China that is increasingly difficult to deal with. A China which has begun broadly speaking to take a slightly different perspective toward the role of foreign companies in the Chinese economy, and we can get into this in a lot of detail. Certain of the elements that play here, number one of course—China went into the financial crisis in much better shape and much better fiscal shape, for example, than the U.S. China has come out of the financial crisis much faster than any other major economy and is in much better shape.

As a result of this, one significant result of this is that China is increasingly, some colleagues call it confident, others like to call it arrogant, with regard to its role in the world, with regard to what China and its companies have to offer relative to foreign companies. In addition to all of this, of course China has continued to run huge current account surpluses, and the state owned enterprises have run up large profits, which for the most part they are not required to turn over to the Chinese government. So there is a huge pull, and I think the point was made, a huge point of liquidity slashing around in China. Let me say that as China has become more difficult to deal with, I think this has created something of a backlash, and again I'll come back to that.

The topics that we're discussing here, I guess I would say, and

I hope we'll have a lot of time in the question and answer to get into specific issues, from the policy point of view we're trying to get our arms around a number of different issues here. This huge pool of liquidity that exists in China and the opportunities that foreign companies see in Chinese economic growth, has many aspects. We have to think about the issue of Chinese companies' manufacturers making investments abroad in the manufacturing sector. There's the issue of Chinese company's, SOE's investing in China. There is of course the question of Chinese banks, state owned for the most part, and their sovereign wealth fund, the CIC, that was mentioned, making portfolio investments abroad. And then of course the issue of Chinese and foreign banks, I'm sorry, foreign banks and private equity and other funds investing in China.

So we've got a very complex set of issues. Let me say from the policy point of view, from the point of view of the U.S. government and the politics in Washington, at the end of the day most of the concern boils down to the unease over China's growing influence in the world, and the impact that this huge amount of liquidity has in the real economy, to use that phrase from the days of the financial crisis. And let me say specifically what I mean.

First of all, of course, when we think about the viewpoints of the different players here, Chinese companies, for the most part of course are driven by profits. However, the state owned companies have a unique and complex relationship with the Chinese government. And in areas such as resources and other areas, they can be influenced by the Chinese government so there is an inherent tension. And the fact that Chinese companies, and of course the sovereign wealth fund, are amenable to influence by the Chinese government raises a lot of concerns with regard to Chinese investment abroad.

From the Chinese government's viewpoint there are several goals that they are trying to achieve here. One is they are encouraging outbound investment. Underlying this is the desire to create globally competitive companies to take the lead in technology; to get out from under what they feel is the domination in key sectors by foreign companies. And so there has been in recent years a strong flavor of favoring Chinese companies to the disadvantage of foreign companies, particularly in the China market, and then of course favorable policies in terms of export credits and lending to assist the growth of Chinese companies abroad and their foreign investment abroad.

Other key goals of the Chinese government, they want to secure raw materials and any of you who follow this have seen the enormous amount of Chinese activity, resource based activity investments in Africa, Latin America, and other parts of the world. Another major driver of the Chinese government in this is to diversify out of U.S. dollar holdings. And one of the lessons they took out of the financial crisis having a trillion plus dollars I guess in the treasury instruments was that they were too reliant on the U.S. dollar. And so their goal is to number one increase their returns also, but number two reduce their dependency on the dollar.

Another related point, and something we can talk about in more detail in the Q&A, is a goal to internationalize the use of the Chinese currency, the RMB. They are already moving in a number of ways to increase the use of the RMB for a settlement in trade related transactions. Ultimately I think the Chinese see the RMB as, if not, a major global reserve currency, certainly at least a secondary level reserve currency though. I think that will be a long time in coming.

And then finally I would say the other overriding Chinese goal is we're thinking about whether it's their regulations on foreign investment, whether it's their encouragement of companies going abroad, one of the top government priorities at the moment is to increase innovation in China. The Chinese have concluded that they do not want to remain the low value added manufacturing capital of the world with assembly operations screwing together all the widgets that all of us consume, they want to move up the technology ladder and they have a variety of policies here, including the investment catalog, one of the mechanisms, and others aimed at driving toward moving up the value added chain and encouraging technology leadership.

Now, from the U.S. point of view let me say we've got a complex picture here. I think when you think about the role, the view of U.S. companies, and let me say manufacturing companies in this case, first of all there is an enormous concern, particularly in the high tech and the advanced manufacturing field. Enormous concern over the competitive impact of state-backed Chinese companies in the U.S. market and in third country markets, and in the China market as well. Companies are very concerned about discriminatory policies by the Chinese, some of you may have followed the comments by Jeff Immelt of G.E. [General Electric] going back six or eight months. He was at a, what he thought, was

an off the record private dinner in Italy and he was quoted as saying that he was increasingly sort of discouraged about the Chinese market and felt that increasingly the Chinese government does not want foreign companies to succeed in China. They want the technology but they don't want the companies to succeed.

One of the areas, by the way, where G.E. has particularly taken a beating, is the wind power sector and something I know we'll talk about this afternoon. But again, from the policy perspective here, the Chinese have been clear about what they want to do and U.S. companies are increasingly concerned.

Now, from the point of view of a U.S. investor, you know obviously there are plenty of opportunities in the private equity, venture capital, and other areas. But as I say, from the broader perspective of U.S. companies, particularly major multi-nationals in the advanced manufacturing and high tech sector, enormous unease about the mechanisms China is using to promote innovation.

Let me say with regard to the investment issues, with regard to the actual process of investing in China, and again something we can get into, and I think some of my colleagues here probably have more hands on experience with, you know doing business in China remains a difficult time intensive none transparent environment. And again, [this] was already mentioned in many cases, [but] the regulations are not very precise. On top of that you've got enormous issues of corruption, you have questions of companies, target companies, for example, that you want to invest in keeping multiple sets of books. And of course over arching all of this you continue to have an enormously large Chinese government role.

The American Chamber of Commerce in China just issued their most business climate survey this year, just several days ago, and they noted that there's Chinese government involvement, problems of getting permits and government licenses and approvals has shot up as a negative factor in importance for foreign companies operating in China. So again, when one thinks about the process of investing, in undertaking it on the ground, rules aside, as I say there's just an enormous amount of difficulty on the ground and many challenges; including, as I say, growing nationalism in China. The sense is, as I mentioned, that China needs to develop its own national champions and global leaders and foreign companies are, generally speaking, more important as sources of technology than as equal players in the Chinese market.

Finally, let me just say a few words and really the core of what

goes on in Washington, and this has to do with the U.S. Government's perspective. And as I say, coloring I think the environment in which all of this goes on.

First of all I think the issue of U.S. investment going into China, generally speaking, is not a huge issue as far as the U.S. government is concerned. No one, I don't think, worries about it all that much. The issue really has to do with this liquidity with Chinese investment coming out into the United States or to third countries. And I think there are several aspects here.

One, in theory of course, the U.S. government continues, and particularly state and local governments, continue to encourage investment in the U.S. by Chinese companies and others. So as a general matter people recognize the value of inward investment, particularly as it relates to job creation. However; the state of U.S.-China relations, the nature of the Chinese economy and its political system, create some sensitive political issues, which have bubbled to the surface in a number of ways.

One of these has to do with, as I mentioned, the extent to which Chinese companies are seen as individual actors, or as actors on behalf of the Chinese government. And given the unease in certain quarters in the U.S. over the rise of China, whether it is the Sovereign Wealth Fund, CIC, or whether it is a major Chinese state owned enterprise, there continues to be sensitivity about the effect, the impact of allowing a state influenced or state controlled entity to invest in the U.S., particularly in certain sectors.

To the extent that we're talking about the Sovereign Wealth Fund, for example, making a portfolio investment; for example buying a piece of Blackstone. Again, the sensitivities do not loom too large. However, when we get into the issue of actual investment by Chinese manufacturers, particularly in a number of sectors we run into several concerns. One is the issue of infrastructure and I think it's fair to say that Chinese companies seeking to invest in U.S. infrastructure are going to have a tough time of it. Infrastructure, I think, defined broadly here, we found going back a couple of years when the China National Offshore Oil Company wanted to buy Unocal, a U.S. oil company, this was a deal that was blocked; not by any formal government process but rather by a political uproar in the U.S. congress and it ultimately caused withdrawal from that deal.

A related issue to this is an area that I know that Cardozo is famous for, and this gets into the area of intellectual property rights, and this can surface in odd ways. You know the Chinese,

one of the areas that would potentially be most right for Chinese investment in the U.S. would be High Speed Rail. They have world leading technology and they have the financing to back it up. One of the issues that has come up, are the allegations that the Chinese have basically taken French and Japanese technology and tinkered with it a little bit, and as a result of that have now come up with an improved product. And these kinds of things begin to surface as political issues. If we see a major push toward High Speed Rail, something that in fact Arnold Schwarzenegger, previously as Governor of California, was very enthusiastic about but it became clear as he began to look at this question that there were a lot of political sensitivities with regard to Chinese High Speed Rail.

Finally, of course, we get into the broad issue of in these types of deals of U.S. content versus Chinese content and ultimately the issue of jobs. And we have seen several investments in the U.S. which have run into political head winds because the sense was that there was not sufficient U.S. content in the deal and that not a sufficient number of jobs would be created in the U.S. This particularly is the case when any kind of public funds are going to be used. And so we had a famous case involving a wind farm down in Texas in which ultimately the Chinese company was forced to negotiate with the United Steelworkers Union over the question of where the components would come from—the amount of local content that would come from the U.S. versus abroad.

So when we look at this question of outbound investment, as I say, there's a whole world of sensitivity here and that doesn't even take a count of the formal government procedures, the main one being the CFIUS process, the Committee on Foreign Investment in the U.S., which reviews high tech investments in which in recent years has denied several potential Chinese investments in the U.S. on the basis of the sensitivity of the technology involved. That formal process, as well as I say a number of broader political issues.

Finally, let me just say that there is one broader issue that is of concern in Washington. And this has to do with the role of Chinese investment around the world. There is the perception that the Chinese government heavily backs its companies, particularly in the resource sector, in places like Africa, Latin America, and so forth. But they do so, on the one hand they do so on terms that allow the Chinese to compete unfairly, on highly subsidized terms. And at the same time the concern is that the

Chinese government does not require any kind of conditionality with regard to anti-corruption, with regard to improving the governance. And so you have countries in Africa for example, where the U.S. and the European governments feel they have been trying to change the behavior of the local governments by insisting on conditions in the loans they provide, only to have China come in and provide massive amounts of funds for Chinese projects and not require any conditionality with regard to governance, anti-corruption and so forth. And so that issue also continues to simmer.

I will sum up simply by saying that what we're really talking about here is the rise of a new power in the world. The most recent experience with this, I'm not a historian, people like to note that in the 1930's and 1940's we dealt with such a situation with regard to Germany and Japan and it didn't turn out so well. Others look at the history of the United States and say the rise of the U.S. as a global power maybe worked out better. We didn't wind up in a world war as a result of the rise of the U.S. But I think when we think about China we think about the vast pool of liquidity, how it's being deployed abroad, [as well as] subsidies the Chinese government gives at home. Underlying all of that discussion is the question of how do we integrate a new rising power into the global system without blowing up that system. Thank you.

#### *4. Remarks by Mr. Andrew Worden*

MR. ANDREW WORDEN: I'm Andrew Worden and I'm glad to be here and I'm honored to be here. Thank you for inviting us. Basically, let's see, twenty minutes, so I'll keep a close eye here. Basically I was fascinated with China since I was a kid. My uncle married a Chinese lady so I was kind of around and about Chinese culture for a long time. And I studied, when I was an undergrad at Harvard, I was engineering focused. However, I studied Chinese history as a kind of minor just for fun, history and culture, and I was always fascinated that China was the biggest economy in the world for an awfully long time. Although it's interesting that India and China were kind of passing each other over the centuries, which I kind of never really realized.

But anyway, and China historically, also something interesting, they had, except twice they have never really been aggressors outside the borders. And the first time it was, actually the first and the second time, it wasn't actually the Chinese, it was

Genghis and then Kubla Kahn, so again when Genghis Kahn came in from Mongolia and he ended up kind of taken over all kinds of goodies like Russia and stuff. And then his son, Kubla, tried to invade Japan but that didn't go so well because that big storm came and all the ships sank. But other than that, so hopefully you're wrong about China being the next Japan and Germany, but I guess only history will tell.

MR. Levine: Just to clarify, I'm not suggesting that's the case. I am just saying that that is the issue.

MR. WORDEN: But anyway, its been really interesting hearing the panelists, basically the legal structure side of trying to do business with China only. We're looking at the government side and how important the government is there and also the issues of local corruption and also government power and influence there, which is enormous and needs to be navigated. For us, we look at another side, which is the relationships with entrepreneurs, kind of aligning our personal interest, our interest as a business with their interest in business and really staying close to the people because ultimately you can have legal protections, you can even have government protections and so on. But if the entrepreneurs aren't aligned with you as an investor, you can have big problems. If you're the same as say two people in the same bed dreaming different dreams, right? So it's going to be really bad.

And we also heard, I mean as the panel has mentioned, especially Henry, the issues of corruption in China. I mean not that they're not in many, many other countries as well, but we were very, a lot of people warned us about this and we were very, very careful and we set up a domestic, sorry, local presence in China from the very beginning because we heard, we built a staff in China very, very early. I think we got lucky. Our first investment in China was '04. We started Barron Partners in '02, we invested about half a billion since then. And we started investing in China '04 primarily because the values in the United States were harder to find starting in '04. And the first company [we] invested in, in China privately, ended up going public on the New York Stock Exchange, as the first Chinese company listed on the New York Stock Exchange. But I think we just got lucky because we really didn't know what we were doing. So that was interesting.

Then we established a local presence right after that. Now we're approximately sixty percent China, forty percent U.S. I really agree with the comments here on the Chinese government

emphasizing technological innovation. [In] the latest five-year plan that just came out, they're extremely heavy on that. And you know, wisely, because if you look at the rising Asian economies over time they've transitioned from kind of a low value add[ed] goods: from textiles or whatever or little plastic widgets and toys and stuff. And then going up and up and up the chain and that's been a great part of the, the kind of Asian miracle story.

Anyway, I want to just do a little more stream of consciousness here in my remaining fifteen minutes. So, basically to tell a story, I just went to China a couple of weeks ago for the eighteenth time. So I flew in on a Saturday night, I landed on a Saturday night, I had everything in one backpack because now, even though I run every day, which is how we got into Cleantech, I met, you know with that iPad now you can stick all your books on that iPad, so I had like everything in one little backpack all the way to China and I read the twelfth five-year plan there because I was speaking on it, there was a lot of media interviews and they wanted someone to talk to in America who was an expert in Cleantech and supposedly I'm an expert on [the] twelfth five-year plan so I had to memorize it pretty well. And there's a lot of really interesting things there, absolutely. The technological innovation is huge. Cleantech, pollution reduction, social welfare, [and] social welfare is a huge new part of the twelfth five-year plan.

I studied Chinese history—just even as an undergrad—and people call this a communist government. It's kind of like a dynasty. I mean the structure, the provinces are all there, it's very, very similar, it's very, very, if you really look at Chinese history, it's interesting, the parallels. And basically if enough people get mad enough the Chinese government gets tossed. I mean it's pretty simple. And the [Chinese] local, that incident with people jumping off buildings because of the labor conditions, although statistically I don't know how relevant it is, but it was a lot of media; and [the] labor race going up in the coastal cities in China and so on.

The Chinese government is very cognizant of this and they're really pushing for higher labor rates and keeping the people happy and with better medical care, etc. So pushing medical care out to the farmlands and so on; which causes again more value added manufacturing, innovation, technology innovation, because if you're making cheap stuff with crappy margins, pardon my French, with low margins, you can't make cheap stuff and lower the margins and then just kind of slam the workers all the time. Long

term it's not doable. You have to increase [the] value added.

Let me just go quickly through my days. So anyway, got up the next morning, I had breakfast with a PRC law firm, named King and Wood. I'm sure you guys work with a lot of these guys, they're one of the top guys. And we talked about setting up an RMB fund - is what they call them there. And basically, you know we're in Shanghai so there's the Pudong exemption that you guys mentioned, which is kind of a, Pudong is like a neighborhood. It's like the cool neighborhood, or like the most cool touristy neighborhood in Shanghai, I guess. We're actually in Hong Chow because we're not that cool and it's cheaper, but it's near the airport and the new train station, Hong Chow, which is where the high-speed trains run on which is a lot of fun.

So we met those guys and basically, the 50,000 foot gist of that was from what we understood, and as you guys said, really kind of not there yet. I mean is not completely hardened yet what's going on and they were very non-committal. But they thought that you could kind of do something where say we do like [a] \$100 million dollar starter shot. So we put five percent in [the] local market, foreign money. If we put in more than five percent into the pot in China to make RMB investments, Chinese companies, and take the public on Chinese markets, if we put in more than five percent then we're going to have problems getting things done quick because the Chinese government has to sign off on every check we write. Which isn't the end of the world but it's kind of a pain in the neck.

So the question is if you want to put in more foreign money, according to what they were saying, it's going to be more tricky. So that's something we're looking at. But there's this kind of like Chinese way, exemption maybe thing where you can like kind of put in five percent and the other ninety-five percent is commitments. So like the private equity model kind of draw-downs that haven't happened yet. So maybe you're putting your five percent in, the other ninety-five percent in and some of it kind of doesn't come in really soon or maybe never; it's kind of uncertain. And these things are all, I'm sure you guys know this way better than me, but they're all kind of vague right now. But it's really interesting, we were considering, most likely we're going to do, start a small RMB fund just to get our feet wet. Why would we want an RMB fund? Until now we've only invested in China's companies that have gone public outside of China. Either U.S, Hong Kong, Singapore, whatever, although Singapore not so much

anymore.

We are more and more our origination people on the ground in China are running into companies that say we don't want to go public outside of China since the 2006 regulation has gotten much more tricky and also the Chinese stock market feels much hotter to people than other stock markets so people are very excited about being public in China. I think it's also some naturalistic tendency; you want to be public in your own country. It just makes a lot of sense.

The other advantage is Chinese regulators are on your side. I mean we've seen some pretty scary headlines on people who do stock fraud in China. I don't believe in certain forms of punishment personally but certainly there's very, very strict punishment for people who have done stock fraud and so on. So as an investor it's nice to have the regulators more aligned with you, whereas the companies that list outside of China it's much less certain what the PRC enforcement is going to be. At least on our side we haven't seen the same kind of focus.

So anyway I woke up, I went running, and running's a big part of my story because (a) I love running, and (b) it got us into Cleantech because I started going to China in '05 and I run every morning and it's pretty, I'm not used to that. I live in New York and people say the air's not clean, but parts, when you're in China some is fine. Some parts of China are fine. But a lot of parts in China I've run and also some other countries as well of course, but the pollutions a real issue. And I got really kind of—I don't like it. So we really started looking at the Cleantech. And we also noticed that the Chinese government was very proactive about Cleantech. I mean we'd been looking at it for a while and the United States, United States started windmills thirty years ago. If you drive from L.A. to Las Vegas you see all those farms, there's a lot of windmills back then thirty years ago. Used to be Enron Wind that G.E. bought and they built a ton of them. But the problem in this country has been the stop-and-go on the subsidies and so on. So China's very aggressive about that.

We more often tend to a Cleantech fund, two-thirds Cleantech. And it was driven by, we're an investor but we also like to invest in things that are either neutral or good. That's kind of our philosophy. So basically the Chinese push on Cleantech has been hydro, which is not terribly scalable and in terms of investments it's not so, for us we couldn't find anything we really liked in the hydro-space. But in the wind space there's a whole

supply chain of widgets that go up to the windmills. We don't invest, obviously as a foreigner, so that's not our game. That's not something we can do really. But in terms of companies that made the widgets to sell to the SOE's [State owned enterprises] ultimately, and to private companies, big forged rings. We look for things that are hard to make, that are big complex metal stuff that gets sold out to the supply chain into the big companies.

So anyway I woke up, I had breakfast with these lawyers and then we used to drive through Wuxi which is where we have a factory that makes big forged rings and shafts and so on for Chinese windmill makers and so on. It used to be about a three-hour drive when I started going to China, then it was about a two, two and a quarter hour drive, and now we went on the fast train, the high-speed bullet train, forty-one minutes. It was pretty cool. I got on this thing, we sat down, had a coffee, and then I was with a couple of my team members there and then there's a, the LED read out there and it was 330 kilometers an hour. Wow, forty-one minutes. And now the new train goes from Shanghai to Beijing, starts in June, three hours fifty minutes. So center center. No hold ups, no weather, no this, no that. It was unbelievable.

And basically China's putting up some of these high speed rail lines now that it's really going to make a difference in terms of reducing air travel in those hubs, although they're also coming out with their own jets in 2014. And in 2016 they're going to be in production rate on their own commercial planes, regional planes.

So technology issues, innovation/other things, whatever. But it's certainly; it's amazing what's going on. And we got China Wind, which is our portfolio company there which is a great story of a whole process. We invested in this company in Wuxi in about, almost four years ago. And at that time they were at factory that had been around for fourteen years making these kinds of big machines for dye and textiles. This is kind of a classic Chinese transition store. So this is factory making machine[s] and fabricating these big machines, [which] are kind of like from here to that wall and they look like [there is] this big metal tube just sticking out of it. And basically they're selling these things in China now and kind of making good money because they're basically really cheap. They've really managed the cost really hard. They're just really very careful about all the details of the business.

But they started going into the wind business because the boss saw that the textile business was kind of, you know it's kind of what's next? And it's not really some phenomenal growth

business anymore. So he started looking at the wind business from a businessman's perspective, [whereas] we're interested in the wind business from a little more of a macro perspective because the Chinese government is pushing it very hard. The Chinese windmills—costs are coming down very quickly. Chinese windmills today are thirty percent to forty percent less expensive than their worldwide competitors; which kind of makes wind work really well economically. In fact, it's in line with coal if you put it in the right places where the wind is constant and steady relatively speaking and so on, and if the transmission grid isn't too much of an issue.

We see wind as other than hydro, which isn't totally scalable, and GEO [Geo-thermal energy] which has its own issues, but wind is a large resource which can really make a dent in the whole carbon problem. Right? Especially, I mean in light of the recent tragedy, potential tragedy with nuclear energy, there's more focus there. But wind is obviously much less expensive, although it's not as steady in terms of basic electricity obviously with intermittency issues. So the Chinese have become number one in the world of wind, both in installed [windmills], and also total capacity. And now they're turning their guns to the export market. Let me rephrase that, they're refocusing their export market as well.

As was mentioned, the Chinese banks are putting an awful lot of money, it's kind of like here you want our windmills, and oh by the way here's the money too, which makes the purchase decision relatively easy, which makes some people uncomfortable and I can understand that.

It's a little tricky for us because we have kind of ethical dilemma. We really believe that, I mean not to be too tree huggy about it, but we really believe that there's a problem pumping endless amounts of CO<sub>2</sub> [Carbon Dioxide] into the air. I mean it's ultimately a problem; it's a problem today already because [of] the pollution issue, but it's a problem tomorrow, and [in] twenty years and [in] forty years because of other issues, climate issues, etc., which some people debate. But let's say it's even not the case, just also from scarcity issues of fossil, ultimately fossil goes up in price. So we really believe that no matter what we have to do something about this and wind is scalable. So it's kind of what do you do? Do you fight it or do you embrace it? It's a tough call and politically, it's a very hot potato. I mean I spoke on the 19<sup>th</sup> of January when President Barak Obama and Robert Kennedy the next day echoed it—the idea. And basically we both said the same

thing, except we used slightly different numbers. I used an exact number and he used a range because he's certainly smarter than I am. But we both said even with cheap Chinese windmills coming into U.S., or say inexpensive Chinese windmills [which] come to [the] U.S., the job creation in the U.S. of sticking the stuff in the ground, putting all the rebar, which is steel and concrete under the ground, building the things, maintaining the things, building the towers in the U.S. with local steel content from steelworkers, whatever, a union like that, you still have, you have a cost effective windmill solution, which does not require subsidies if you do it right in the right place. And that's a big caveat.

I said fifty percent, I don't remember, I think I said sixty-five percent of the jobs are created in the U.S.[relating to windmill production, installation and maintenance] and Robert Kennedy said fifty percent to eighty percent or something. But they ended up on the same point. But basically the concept being that there's huge job creation [potential] in the U.S. Whereas if you take expensive windmills made by G.E, there's a need for subsidies and then it really doesn't work, unless the taxpayers can write a big check, which is an issue because I don't see it happening soon. But it's an issue.

So we're kind of torn on that but we'd rather see Cleantech happen. We're making affordable Cleantech happen, that's kind of one of our slogans. We kind of rather would see it happen period, even if some people get their feelings hurt by the steel job creation in the U.S. It's a tough call but I don't know. We'll see what happens. It will play itself out the way it will play itself out. And basically I have one minute left so I'll just quote one last story real quick, one minute.

Then that night we came back on the fast train to Shanghai. China Wind was going through a whole modernization process. They've gotten into the wind business, they're now fifty percent wind and is very, they built a huge forging facility, of thirty or forty million total cap spent in U.S., which we gave them half the money, and half through their own profits. They just now are doing international business providing solar furnaces for the biggest guy in the world in the furnace business for which ninety percent of the silicone cells are now made in China in terms of export marketing. That's a good example of China dominating an industry in terms of export. I had dinner that night with a lady who has a Chinese company who has led in Nigeria, this is an interesting point of China going to these markets of resources,

lands using batteries, etc., etc., which is a huge need for china. So, Ms. Wowee [phonetic], we actually invested in her company a few years ago, which is one of the handful that didn't do too well. She was in the faucet business and copper, she got into Nigeria because of copper. Now, she runs lead mines, she's importing lead. She imports about eighty Chinese million, so whatever, nine U.S. million trucks, made in U.S. trucks.

So she's doing this whole [thing], and she wants to put a lot more money there and have us give her a lot more. But we're [thinking], Africa's a whole other world. But it's just interesting; the Chinese are very aggressive in that resource side, internationally. It's something that we're looking at but not really doing anything yet. Anyway, that's all I have for now. Thank you.

### *C. Panel One: Questions and Answers*

PROFESSOR YABLON: Well that's great. Thank you very much. Looks like all the panelists were very interesting with their presentations. And I'm going to assert my powers [as] moderator to extend the period a little bit if there are questions. I think there are a lot of very interesting issues raised. So other questions?

QUESTION: [Male Voice. Too Far from Mic to hear]  
PROFESSOR YABLON: The question is about the regulation of foreign exchange in China.

MR. LEVINE: I'll make a couple of comments and then maybe some of our other colleagues may have more detail. I mean from the broad perspective, and I'll get beyond my depth if I get too much into the details here, from the broad perspective there is no doubt that China wants to internationalize the use of the RMB and already, by the way, they have a number of agreements, of currency swap agreements with other countries. There is a small but growing amount of trade that is settled in RMB in fact. And so I think their goal clearly over time is to loose some control on the RMB. You know on the current account exchange of RMB for a current account use is relatively open; the capital account is the main issue. But in fact, as I say, settlement of some trade transactions can be done in RMB already and they are expanding that.

The constraint is the fundamental constraint that underlies everything the Chinese government does. And if you ever want to predict what the Chinese government is going to do on any issue, the question you have to say to yourself is does this policy step potentially increase stability in the country or decrease stability in

the country. And the Chinese government, when they wake up in the morning their first, second, and third concerns are domestic stability. Chinese, not to digress too much but according to Chinese government statistics there's something on the order of 80 or 90 thousand mass incidence a year. These are riots and demonstrations. This is a Chinese government statistic. And so as they are looking at foreign exchange policy, as they are looking at investment policy, as they are looking at any policy, the issue they have is does it increase stability or decrease stability because they're scared to death about maintaining stability.

And so the point is that while they will move, I believe, to internationalize the RMB, I believe for that matter they're going to move over time to continue to allow it to appreciation and ultimately some day get to really a market based currency. It will all happen slowly in my view because they are just not prepared to sort of make a big break and let things go because they're just too worried about what kind of affects that will have. So I think a slow process would be my view of it.

MS. ASHLEY: I would echo what Mr. Levine said. I think China is very focused on the internationalization of the RMB but it will be a slow process. Just in the past five years, however, there has been an explosive growth of RMB, offshore RMB products, particularly in Hong Kong that are now available on the market. There is some cross-boarder trade settlement that is now possible. There are RMB dominated bonds that are issued in Hong Kong offshore. We expect to see equity IPO's [initial public offerings] in Hong Kong that are RMB denominated. And that's largely because a pool of RMB has built up in Hong Kong at this point. There is RMB liquidity there and we expect that that will also spread to some other markets over time, including New York.

Just recently in New York we've seen some of the Chinese banks with branches in New York begin to offer RMB denominated accounts in New York. So this is definitely an area where the Chinese government is looking outward and is allowing more to take place. I think that will increase over time. But I echo Mr. Levine in thinking that will happen gradually.

MR. WORDEN: Yeah, and one perspective we have—we are pretty much the other way. We're just sending money in so it's a little different. But we definitely see, there's varying timeframes to convert dollars to RMB going in and it depends on many different factors. Many which we don't totally understand at given times. And it seems like local government also has a big kind

of[stake], depending on how much pull they have with who and how. So it always goes to, our experience is our dollars always go to RMB because they want it for local investment. And kind of like what you are saying about in the states with the local and state governments wanting Chinese investment, they'll really grab it. Same with the Chinese local governments. They'd really love to grab those dollars again to create jobs and tax revenues and so on in their area where the central government isn't terribly fond of it, but they kind of look the other way because it's the whole thing with the provinces. The emperor goes to the provinces and it's like they don't want to get people too upset. We don't deal with that because our companies are listed offshore; we have them listed offshore so we have shares. So we don't take dividends out. So we have none of that issue.

MR. LAZARUS: Yeah, I think the issue of getting the money out is actually a bigger issue where you're not looking at IPO exit. For a lot of these equity firms or funds that we spoke about, if they're investing in hard assets, like real estate infrastructure and there is some sort of an IPO model, or an IPO exit, there are greater issues with getting the money out and you have to stick to a certain schedule of returns. You can't just say well we're done, we want our money out. It's not that easy. You still have to go through an approval process.

PROFESSOR YABLON: Other questions?

QUESTION: [Female voice. Too far from mic to hear.]

MR. WORDEN: I think I can definitely get something here. I mean in the American sense of unions I definitely don't see that any time, personally I don't see that any time soon. However, the collective, as we hear, and has been historical in China, the collective angst kind of ultimately rules the day and I think the recent significant increase in labor rates, especially coastal areas like Shenzhen is definitely, it's kind of similar, it's not formalized but again it gets us to a similar point where it's an issue in dynamic. I mean the labor rates in the coastal areas are really cranky, really up this year, really big. For example the company I visited Sunday, China Wind Systems, they were really just groaning and moaning about their margins this year. It's going to be, it's going to be a lot tougher with higher labor rates.

MR. LEVINE: I just want to sort of follow up and say that again from the sort of macro view here. You know a lot of debate about sort of freedom in China, lack of freedom and what does the Chinese government tolerate and what doesn't it tolerate. And

unfortunately I think it's fair to say in the last year, even in the last six months things have tightened up a little bit. But as a broad statement I'd say the following. You know if you went to a Chinese university and you listened to students and faculty talk you'd be surprised, I think, at the broad range [of] even criticism of the government and so forth that takes place. And so, you know there is a certain amount, certainly more, I think, political freedom in a sense today in China than there was five years ago, ten years ago. Though as they say, unfortunately in the last six or eight months with the Jasmine revolution and so on, some tightening up.

But, the hard line that the Chinese government draws, the absolute hard line, it will not allow the establishment of any organization independent of the Chinese government. And so on the question of religion for example, religion is flourishing in China. There are more Roman Catholics, more Catholics I should say in China today than there were before the communist revolution, and Protestant church[s] and so forth and so on. However, these are all state affiliated churches. They are under the state. And the same thing goes for labor unions.

So if the question is are we ever going to see a labor union movement in China, which is independent of the Chinese government, and you think about the Poland model for example as how that developed, or labor unions in the U.S., I don't see it for the foreseeable future, absolutely out of the question, the Chinese government will now [not let them] get their freedom.

Now, what they have done, and again based on their concerns over stability, based on their, one of the big elements of the twelfth five-year plan now is to shift from reliance on export lead growth, to more of an economy driven by domestic consumption. And as they say, of course to move up in the value chain in terms of the manufacturing. As a part of all of that, the Chinese government has been very supportive of wage increases, and in that sense then they have allowed, maybe encouraged, but certainly allowed the official labor union, there is an official labor union, they have allowed them to agitate a little bit more on the issue of increasing wages.

So, the answer is independently the unions driving issues independent [of the] government [is] not going to happen for the foreseeable future. But it's not to say that the unions, and even the Chinese government don't have some concerns about the welfare of workers and increasing wages in particular, and they are

not only allowing but to a certain extent I think driving that. And indeed the rising wages in China are a huge big issue and it's a whole other topic. When you talked about China's future as a manufacturing entity I think rising wages are an important factor to think about in that - - .

QUESTION: [Female voice. Too far from mic.]

MR. WORDEN: In terms of IP [intellectual property] in charge of specific things like that, yeah. So Chinese, I'll give you an example; we have a company that we've invested in the states that works with American Super Conductor, which is an American company that designs really big, really technology advanced windows. And then they license their technology to the Chinese companies who make all the widgets, all the steel, and put it all together and sell them and everyone's happy. And this company, this American company needs to figure out how to stay at the cutting edge. They're kind of like, they're selling you the Betty Crocker book to make a windmill and they get a slice every time. But they're not taking too big of a slice, so it works. They've figured out the Chinese model how to work, and the Chinese are really good at manufacturing innovation, making all of these high-end very precise widgets really, really well, and also really [by being] good innovators. So the question is where would it cross the line, right? So would they cross the line and rip off the technology. So, I think as an American company if you're technology innovated, the key is to keep technologically innovating.

So for example, that company is always coming out with the next new thing, which is even harder to do. And always moving the game, and Cleantech is particularly good because there's so many technological innovations that are always driving the cost down, which is really important. So you can't be making the junk from, the stuff from five years ago is junk now. The stuff from three years ago is, it's like the new, you really have to keep pushing the envelope on efficiency on solar and wind all the time.

I wouldn't say IP [intellectual property] isn't important, but it's more important to some things than others and Cleantech is, I don't know if that's exactly the answer you're looking for. It's kind of, it's the way. It's the not so hard line I think.

MR. LEVINE: I'd add just a footnote and say I think the important thing to keep in mind is the Chinese's sort of economic model currently, and particularly over the last couple of years has been a return to a somewhat heightened level of government

driven economic growth and government driven innovation. And in that context the Chinese have identified a series of sectors in which they want to drive innovation. They want to become the world leaders. And the Cleantech sector is one of those. And they have deployed an impressive array of policies, whether it's low credit, cheap land, whether it's use of government procurement to giving favorable treatment to Chinese produced products in government procurement. Whether it is through their mergers and acquisition policy and on and on and on.

And while I don't endorse this at all, and I'm not sure I agree with it, but if you take a look at the filing, a thousand some odd pages, by the United Steelworker's Union last year, they filed a section 301 case with the U.S. government alleging a massive amount of WTO [World Trade Organization] illegal activities by China in support of the Cleantech sector. And so 1,500 pages or so gives you a great example. And as I said I'm not necessarily endorsing it, I'm not sure I agree with all of it. One result, by the way, was that the U.S. government has taken a case to the WTO now specifically with regard to Chinese practices, primarily subsidies in the wind power sector.

So the answer is do the Chinese want to pursue this? They sure do. They're taking a huge number of policies, and as I say, the political reverberations, you have folks like G.E. and others who are very uneasy and very unhappy about the direction. Now having said that, and I think Andrew made a good point; there's a lot of debate in the U.S. I mean from the point of view an environment NGO [Non-Governmental Organization] in the U.S., or somebody who cares about climate change, one could take the attitude that this is fine. I mean the Chinese are really ramping up these green technologies, lowering the cost both on the solar as well as wind, and contributing to solving the problem of climate change. However, it also has an impact on major U.S. companies and some not-so-major U.S. companies and that's where you get into the political situation.

Finally, on the question of IPR—broadly speaking intellectual property rights, and again I think there's a lot of expertise here at Cardozo that goes well beyond mine—my sense is that depending on your timeframe; if you go back ten years, ten years ago to now I think it's fair to say there has been a significant improvement in the enforcement of intellectual property rights in China. It certainly is the case that the Chinese have in place a body of laws and regulations that are very impressive on paper and terrific. The

issue in IPR, and in every area in China, is fair, effective enforcement of the laws, which largely doesn't exist.

Having said that, over a ten year period I think you would say it has improved. However, it still falls far short of what certainly most U.S. companies would like to see in the market. And again I would commend to you all the report issued three days ago by the American Chamber of Commerce in China, on their website, their most recent business survey in which they polled their members on the question of IPR enforcement and sadly this recent survey showed what appeared to be a slight deterioration in the effectiveness of Chinese IPR enforcement when compared to last year's survey. This is [a survey of] U.S. companies operating in China.

So it continues to be a significant problem I guess I would say. But over a ten year period I think there's been improvement.

MR. LAZARUS: And just add in terms of encouraging investment and clean energy and those related technologies, if you look at all the regulations that have come out in the RMB fund products that we discussed, time and time again the government has come out and said we really encourage these funds to be set up for investment in a list of enumerated items. And at the very top of that list is usually clean energy and related technologies. The government isn't necessarily interested in foreign investment managers coming in to China to set up a fund to invest in real estate or cement or steel or any of the traditional areas. They really would like these funds to be used as a focus to drive the growth in some of these Cleantech areas.

MR. WORDEN: One example would be so we like to talk about win-win with Chinese manufacturers. I'll give you an example, we have a company that we invested in the U.S., which was the biggest maker of the furnaces for G.E. Solar, which is the biggest in the world and they polysilicone cell production, which is basically more than half of their solar cells out there, plus or minus. And Chinese companies are now making something like eighty-five percent or ninety percent of the modules, and then the cost for those have come down from sixty percent, seventy percent, or eighty percent in the last two years and the Germans are installing huge amounts and create a huge Cleantech economy embracing Chinese inexpensive panels. The point is, so this U.S. company was seeing it's customer selling all of their polly production lines to Chinese companies, but they're making them in Massachusetts, which kind of didn't work because you have to

make them, and then there's these huge taxes to send them over there when you bring them in the door; import taxes, this, that, shipping costs, it just didn't make sense to sell them in China.

So this company started outsourcing to Korea and the Chinese were completely missing the boat. Well it turns out one of our factories can make these things; it was just never on the website because they're not too good on the marketing side—so we decided in a conference room once. So we hooked them up and now they're making them and they're making them in China, for Chinese companies and the U.S. company it turns out is great because they can go to high level value and their manufacturing plants are making more complex solar manufacturing equipment for the next iteration of technology and so on. Not that it's terribly different, it's just more complex. So there can be win-win if you just keep playing it right, but it's tricky.

#### *D. Panel One: Concluding Remarks*

PROFESSOR YABLON: And with that I want to thank our panel. Very insightful and interesting set of comments. [Applause] And so we'll take a break and Dan when do you want to reconvene?

MR. SILVERMAN: Let us schedule to come back at around 11:30. We might push that off just a little bit because we've gone slightly over. But let's try to get out, grab a bite, and come back around 11:35 to reconvene for the second panel. Many warm thanks to our panelists. They say March comes in like a lion, out like a lamb. Obviously, they didn't see the weather today nor did they see China and the issues that we've been discussing. So, I guess out like a lion also. But thank you very much to our moderator and to our panelists. Enjoy.

## II. PANEL TWO: CHINA'S GREEN OUTBOUND DIRECT INVESTMENT PROFILE

### *A. Opening Remarks by Mr. Daniel Silverman and Mr. Douglass Sims*

MR. DANIEL SILVERMAN: Welcome back ladies and gentleman. Once again the Journal of International and Comparative Law here at Cardozo warmly welcomes you. This is the second panel of a two-panel symposium on asset management and renewable energy in China. This is the renewable energy, with

a focus on wind turbines, panel. Today, our moderator graciously joins us. His name is Mr. Douglass Sims. He has previously worked at the international law firm of Allen & Overy for many years. And afterwards, after many transactions, international transactions, [he] decided to devote his talents to renewable energy, [and] natural resources, where he currently finds himself—at the Natural Resources Defense Council. So, thank you Mr. Sims for joining us.

We will also be hearing from two attorneys at Allen & Overy. One is a partner and heads their China practice. His name is Mitchell Silk. Mr. Silk thank you for joining us and for contributing your, and your firm's, energy and resources over the last number of weeks and months assisting me in planning this symposium. Many thanks to you.

Sitting to his left is Rebecca Perkins, an associate at Allen & Overy who will also be presenting from PowerPoint slides as well as, I guess, off the cuff.

We have two other panelists who will be giving a government perspective as well as a business commercial perspective to the panel. Andrew Worden joins us today, thank you Mr. Worden for being here. Mr. Worden founded Barron Partners, which is an investment firm that does a significant amount of investment in China as well as in the United States. His firm focuses on renewable energies, technologies, and investments in that sector. We welcome his input and thank him.

And lastly, as I mentioned just previously we will be hearing from Henry Levine, who was stationed overseas in China for many years. Currently is the Senior Vice President and head of the China practice at the Albright Stonebridge Group in Washington, D.C., and we look forward to his input on the government perspective, both the Chinese and the United States. So after that long introduction I turn the panel over to your able hands Mr. Sims and good luck.

MR. DOUGLASS SIMS: Great. Thank you. Thank you, Daniel. We're going to start with Mitch and Rebecca, they have some slides on the Chinese role in the U.S. wind sector and then we'll have two short presentations by Andrew and by Henry. Take it away Mitch.

## *B. Panel Two: Discussion*

### *1. Remarks by Mr. Mitchell Silk and Ms. Rebecca*

*Perkins*

MR. MITCHELL SILK: Well thanks very much for that kind introduction Daniel and it's always good to hook up with old colleagues. I'm sure that Douglas will be as even handed with the whip as I was when he used to work for me.

MR. SIMS: Impossible.

MR. SILK: We've got an interesting story to tell which relates to the growth and the emergence of the Chinese wind turbine manufacturers and to a lesser extent Chinese wind developers of wind power, both inside and outside of China. But really what the specific point and issue that we'll be looking at is how this particular sector has grown exponentially in a very short period of time and how that domestic growth has led to exploring opportunities abroad first in Europe and then in the United States. And what we'd specifically like to talk about are some of the both interesting phenomena and some of the challenges presented in this area. So the way that we'll be dividing things up is that we have a little bit of information on the development of the wind energy sector in China both from the legal and the market standpoints, and Rebecca and I will be splitting that up.

Rebecca will tell you a little bit about some of the initial efforts of Chinese wind turbine manufacturers to go into the European market. And then I will take you through some of the both legal and market developments and some of the challenges to wind turbine manufacturers from China penetrating the U.S. market and then provide a couple of forecasts for the future.

Just to start with some very general background. As I said a bit earlier, what we've seen particularly over the past five to seven years is an extraordinary exponential growth of both wind turbine generating capacity in China and also domestic Chinese wind turbines manufacturer's ability to meet demand by producing wind turbines in China to meet the generating demand. And so what we'd like to build on is what impact that exponential growth has had on the domestic market, and efforts of those manufacturers and developers to get into the international markets.

So what I'd like to do is turn over to Rebecca just to talk about some of the legal developments and the framework that has fostered this growth.

MS. REBECA PERKINS: Thank you Mitch. There's sort of a lot that happens here in detail. I'm going to take us through in sort of broad strokes just to get the general idea.

The development in this sector began initially very

sporadically in the mid '80's. We saw the first wind farm built in China and thereafter, sort of over the next decade, we see China sign up to the United Nations framework convention on climate change and sort of past the first regulations, the first national programs that we're exploring sort of the role that wind energy could play in China. As the decade sort of drew to a close, change accelerated in that arena. There started to be more legal developments more quickly and the Kyoto Protocol, which China signed in 1998 had a very impact on the wind market when it came into force in 2005. Following that sign up there were several programs in 1999 and in the beginning of the decade including China signing up to the WTO which heralded sort of a more open positive global trade in general, as most of you know. And one of the most significant developments in that period was the having the value added tax, which is a tax that's applied throughout the supply chain and therefore had a very big impact on the cost of investment in China.

As the decade ended there was only 406 kilowatts of wind power installed in China throughout the various provinces, which represents about one percent of what exists in China today. So in the past eleven years we've seen almost 100 percent growth. In 2005, which is the midpoint of this decade, we really see a formalization in Chinese policy. All the, sort of, sporadic and accelerating changes really formalize into comprehensive and overlapping policies that combine together the eleven five-year plan that lays out an aggressive renewable energy policy. The first renewable energy law comes into effect, which basically gives priority connection to power generated from renewable sources. And then significantly, as I mentioned, the Kyoto Protocol and local NDRC requirement that was later repealed or also passed in 2005.

These policies that all came into place over the course of those two decades really led to a build up in terms of manufacturing capacity, which is something that Mitch will address more in depth, but the legal changes basically lead to the result that by the time China was passing goals for installed renewable energy capacity in 2005, 2007, and 2009, the manufacturers were prepared to meet these goals ahead of target because there was so much manufacturing capacity. In fact, when that was passed in 2007 was met, it was a five year goal and it was met two years ahead of schedule and 143 percent above target. And so with that I'm going to let Mitch tell you a little bit more about big capacity

that was actually installed.

MR. SILK: So let me run you through a little bit of the data that just shows how very phenomenal the growth was beginning in 2005 when the legislative and policy framework really settled in China. And first let's just take reference to the earliest point in the period and look at the position in respective installed capacities. So we're really going to be looking at two different sets of data. One relates to installed capacity, that's the measurement of the ability to generate power, the amount of power. And then also I'd like to take reference to and show you some of the data on the actual ability of local manufacturers to build the turbines that are producing the actual power.

So looking at the early 2000's and to the midway point in the 2000's up to about 2005 or so, this is really when the generating capacity started to take off and it was the earliest period when we started to see domestic turbine manufacturers put out kit for sale in China. By the end of 2004, there was a core cluster of local manufacturers in China that were able to produce commercially viable wind turbines and they had sold up to that point about 200,000 off-grid wind turbine generators. As of 2004, just as a reference point to what we're going to be seeing a little bit later in time, domestic suppliers had about eighteen percent of the market.

The exponential growth in terms of generation capacity really started at about the midway point in the 2000's. In 2005 domestic wind generating capacity grew at a rate of sixty-four percent on the year. But the real big ticket growth really took off in 2006 when from that point onward, year on year growth actually exceeded 100 percent every year and this next slide gives you an idea, both in terms of the capacity, the megawatts, which are tracked by the left bar and the gray line, and also in terms of the year on year percentage growth.

And so what you can see is that year on year starting in 2006 105 percent growth for the year capacity went up to a total of 2588 megawatts. And then moving into 2007, again a very strong year, 127 percent growth, year on year, with capacity basically doubling and then more than doubling the following year in terms of capacity with 106 percent growth. And then a phenomenal 113 percent growth for 2009 when total installed capacity actually exceeded 25,000 megawatts. So it's a very interesting and exciting story.

Let's take a little quick look at some of the data on the domestic turbine manufacturers that were following and tracking

this growth. It was really at the earliest point of development, all of the kit for these projects were either foreign supplied or domestic supplied under foreign license. The Chinese turbine manufacturers actually started to basically take a very strong foothold in the market in the mid 2000's. Their growth in terms of capturing market share was again in the multiples of 100 percent growth beginning in 2005. And interestingly, by 2009 the domestic turbine manufacturers had captured 87.7 percent of the local market. Now there are a couple of interesting points that come out of this and we can see that on the next graph.

I think one of the earliest panelist in the asset management program had commented that a domestic Chinese kit is priced roughly about twenty to twenty-five percent lower than foreign manufactured equipment, and you can see that price differential in this chart where the differential between the blue line, which is the foreign brand wind turbine prices, and the gray line roughly is in the twenty to twenty-five percent range. But the other interesting point that you can see from this graph is that both for foreign produced kits and for domestic kits, and this is a particular issue for the domestic kit given the rapid growth of their share of the market, is that the price on per kilowatt hour of the turbines has actually dropped very considerably. And so what one impact of that very significant drop in price of equipment has been the growth of domestic competition, which is a very relevant factor for one of our premises that we're going to get on to in just a moment, which is what are some of the drivers pushing these domestic turbine manufacturers abroad.

The next slide gives you a very interesting overview of the trend that I identified a little bit earlier of the domestic turbine manufacturers taking over the domestic market from the foreign suppliers. So you can see in 2004 the shaded area which shows the foreign market share of turbine sales in China being at roughly a little bit over three-quarters of the market, with the Chinese suppliers capturing 21.1 percent of the market in that particular year. If you jump just five years later to 2009 the position is reversed and then some, with the Chinese domestic suppliers dominating 87.7 percent of the market with the foreign share being just at around 12.3 percent.

Now, the issue of competition, as I said, is one of the major motivators, domestic competition, for Chinese turbine manufacturers to go abroad and seek opportunities. And one of the ways of looking at the vast opportunities abroad for the

Chinese manufacturers is by taking reference to what the forecast is for global demand of wind energy and what you can see based on these projections is that there is expected to be a year on year growth in installed capacity and wind generation globally.

Just a final reference point in terms of the emergence of domestic wind turbine manufacturers is on this particular chart which shows the top ten wind turbine manufacturers in 2009. The interesting reference point there is that the third company listed, Sinovel and the fifth company, Dongfag are both domestic turbine, Chinese domestic turbine manufacturers who have now appeared in the international arena as emerging players. There are some limitations on what they can be doing abroad and so in respect to those limitations let's first take a look at what the initial experience was in Europe.

MS. PERKINS: Thanks Mitch. So again to sort of go from the industry side again back to the legal side. The first experiment that China really had in exporting in the wind turbine sector was in Europe. And a lot of Chinese companies began to look at Europe after they passed a comprehensive cap and trade system in 2001. So while the EU [European Union] passed sort of an overreaching policy, individual European jurisdictions passed enabling regulation and some of that did it faster than others. We can see from this chart here that Germany, Spain, and Italy were actually the first European jurisdictions to enact enabling legislation and incentives that actually encouraged wind growth. And we can see that it was quite effective for the time that it lasted.

All of these countries essentially enacted a form of fee and tariff. It gave not only priority purchase again to electricity generated from renewable sources, but also it gave priority connection, priority transmission, distribution, and even payment. And so it really removed a lot of the risk for potential investors and renewable energy and it also bridged the gap a little bit in terms of financing what was initially a more expensive source of energy.

Unfortunately after they had a very big impact in Europe these, most of these programs came to a pretty rapid halt with the recession in 2008. Spain is usually as an example of regulatory risk in this arena. They not only announced that they would lower those tariffs that they were providing for new projects going forward, but actually considered lowering them on existing projects, which were set up with an income stream that depended obviously on these tariffs. So that created a lot of risk for investors

and for a short time many parties were actually considering litigating to get some of their funds back.

MR. SILK: So kind of all dressed up with no where to go as it were, and the question that Andrew put a bit earlier about his partner, domestic partner who was originally in textiles was saying to themselves it's getting all too competitive, what should we do. The obvious answer being well why not get into the wind business. So [a] similar issue confronting the domestic turbine manufacturers, domestic competition growing, initial fore into Europe but slightly being closed down, [was] what to do. It wasn't as radical a jump as textiles to wind, but rather a geographic jump. And really there are two phenomenon that have emerged as a result of domestic competition and the constricture [sic] in Europe, one has been consolidation domestically of wind turbine manufacturers which is an emerging play. It will be a very interesting space to watch. But the other has been the full forward thrust into the U.S. market. And so I'd just like to tell you a little bit about what's been going on in the U.S. side because it's a very interesting story.

The beginning part of this story is that there's a massive demand for wind power in the United States and we've got a number of data points that we can point to both in terms of the requirements that we need domestically to meet our kind of safe reserve margins. But then there are also a whole slew of very interesting incentives and legal developments that are supporting all of that. Daniel's told me that we have to cover some technical legal content, but at the same time he's also told me that we only have about three minutes left in the program. So I think we'll try to do a sufficient enough dive to satisfy the CLE [Continuing Legal Education] requirements while not getting bogged down into the details.

Let's start with the demand side of things. As you can see from this slide there are gazillions and gazillions and gazillions of units of energy that are required in the United States to meet safe reserve margins. And as a result of policy and projection a very good slice of that is meant to be met through wind. And you can see on the next slide where we are now in terms of the power mix and where renewables sit. At present, this is very small type and we actually had percentages worked out but if you kind of look halfway down of total capacity wind is at this point a relatively small percentage of the capacity mix. But the overall demand, [overall] power demand increase that's projected by 2030 is

twenty-nine percent. And a good part of that is slated to be met through renewables. Wind is one of the most efficient and economy of scale type power products that can meet this and there are some interesting statistics here on what the projections are in terms of the wind portion of the overall mix.

One of the major means of encouraging wind development has been the introduction of renewable energy standards. This is a movement that is a legal movement that is happening on a state by state basis and you can see on this chart by color which states have already implemented renewable energy standards as a part of their overall power mix. Which means that if they've implemented legislation they've committed themselves to a certain percentage of renewable energy out of their total installed capacity. And then there are other states that are introducing voluntary standards, and then there are other states that have yet to really do anything. But the projection is that over the next ten years every state will have implemented a renewable energy standard, thereby kind of providing the foundation for continued growth of renewables, in particular wind.

Much of this is supported by incentives, without which renewable projects, energy projects, are not really viable commercially. The main programs are certain types of tax incentives in the form of tax credits or cash grants. There's also a federal loan guarantee program that provides a form of efficient and lower cost financing of these projects. And this has actually given rise to one of the issues that we heard about a little bit earlier and which Rebecca's going to get into in just a couple of minutes.

With all of that fanfare about the growth of just how the Chinese have reacted domestically to the immense growth opportunities, and how agile they've been in expanding and what the immense opportunities are domestically for wind power, we then get to the question of where the Chinese are domestically. And it's a very interesting answer because if you look at the position now where the Chinese have already been in the States for the better part of five years, they really only have a minuscule part of the market, both in terms of turbine supply and also in terms of being developers of wind power projects. In other words, [they are] equity investors.

At present, there are only six Chinese companies that have sold turbines that are in commercial operation in the States, and there are a couple of new projects underway. But the performance

has been very weak so far. The next slide gives you a little bit further information about those Chinese companies that already have units installed and their capacity and they're just completely dwarfed by the big ticket manufacturers that we heard about a little bit earlier; G.E. Wind, Mitsubishi, Vestas to remain three of them at the bottom where you can see G.E. Wind supplying almost 9,000 total units in 2010. Where the Chinese suppliers performance being so small that you can't even see the blip marks on the chart, and we actually had to break them out as a sub-chart to show that A-power has installed just over two units, CPC New Unite 1.5, Sany two, Goldwind, which did a very large IPO and has it's headquarters in Chicago 1.5 units. And then Baoding Huide installed 10 units in 2010.

So what are the reasons? Why is there so little activity given the extraordinary expedient growth that we saw domestically. And the two issues that we've identified are really issues of financing—ability to finance. And secondly, political resistance, which we've heard about a little bit earlier.

On the finance side the main issue is that as the Chinese turbines have not been deemed by financiers, both banks, lenders, and insurance companies that ensure these projects, as proven technology for purposes of the U.S. market. There are no U.S. project financiers who are prepared to extend limited recourse project finance debt to any project that is using a Chinese wind turbine, whether it's manufactured in China or in the States. And that's just simply a reality. I attended a conference in San Francisco two months ago that looked at this very issue and people spent two days talking about a lot of interesting stuff, providing a lot of interesting data, but the end conclusion is the reality is there isn't going to be any local debt on a project finance basis to these projects until the Chinese wind turbines are deemed proven technology for project finance purposes.

The other issue has been political resistance. We've heard from Mr. Levine a little bit earlier about the United Steelworker's case and Rebecca's going to tell us a little bit more about that in just a moment.

So how do we deal with the financing challenges? I think we'll skip forward a couple of slides and talk about how the Chinese can potentially deal with this gap period, from now until the time at which local financiers in the U.S. are prepared to look at Chinese equipment and say that it's proven and safe and reliable for financing safety and reliability purposes.

So there are really two broad areas of financing technique. One of them where the Chinese have been quite adept and I think probably will start to yield some fruit over the next year or two. The Chinese wind turbine by manufacturers rely on offshore financing, which means that they would raise financing to support these domestic projects. Whether they're plants or wind generation facilities from offshore sources, either directly as that or as getting back stomps from guarantors, typically in China. And then use that money raised offshore for finance of the projects here, typically by way of either on lending or equity contributions. And just to give you an idea of the wealth that's available in this area, if we flip forward just a couple of slides you can see that a number of the Chinese companies that are already active in the states, we talked about, how Baoding Huide a little bit earlier, Goldwind, A-Power, all of these companies have existing lines for limits or products that are available to them from Chinese financiers or Chinese market players that can be used and some of which is dedicated actually for expansion in the United States. And these things, these financial things let's call them, actually come in a number of different forms.

Goldwind did a very large public offering. It raised quite a lot of money, and all of that has been earmarked for U.S. expansion. In addition to that, they have a \$6 billion dollar U.S. commitment from China Development Bank that they can draw on for qualifying projects in the U.S. And so it goes down the line with the number of these players.

The other means by which the Chinese Turbine manufacturers have been able to make some progress with financiers, is to provide bank stopped warranties that will back their turbine supplies. This is a little bit more of a technical area and I'm afraid we don't have enough time to get into it but there's a little bit of detail on the slide. But certainly by far on the larger play and the more reliable play is the offshore financing play. So that's the position with financing. Now over to Rebecca for a little bit more color on the political dimension.

MS. PERKINS: So as Mitch mentioned, why aren't these Chinese manufacturers bigger players in this market and so the initial big hurdle is our financing and political resistance, which is sort of tied together. As Mitch mentioned, they're sort of a necessity to have these subsidies or incentives in place as part of the financing in order for the projects to go forward, so the political resistance becomes significant in that it's actually a source

of funding that's making these projects happen.

I won't go into too much detail because as Mitch mentioned Mr. Levine has touched on most of these points. But in 2009, you know, sort of the initial fore by Chinese manufacturers to supply a wind farm was sort of putting their toe in the water, which resulted in a pretty large controversy. U.S. senators got involved, and essentially the objection was that this project is going to take American jobs. Now, we don't take any position on that. There's a lot of local jobs that are created as Mr. Levine mentioned, but the point here only being that there was sort of this political outcry about what was going on.

And then in 2010 the current controversy is, again as Mr. Levine mentioned, the section 301 filing by the United Steelworker's Union. That is still sort of in progress. On December 22nd the U.S. [found] China in violation procedurally. What that means is that they're going to initiate talks, which they're in the process of doing. If they can't resolve them they will bring suit at the WTO, which has happened before in other industries. But that's sort of currently under discussion. Part of the reason it was interesting is that the Bush administration had not previously accepted complaints against China but the Obama administration did, which China was sort of quick to point out. But as this year begins we see the ties between the countries growing closer; which sort of indicates that this political resistance may past very quickly as it has in other industries.

The [Chinese] Premier's visit in January highlighted the massive investment that China has had in the U.S., supposedly \$6.2 billion in the last year alone. And the Chinese are really trying to emphasize the way that they're helping the American economy. And so many deals were signed during that visit, which indicates that this is really a relationship that's going to continue to grow closer and may just overcome both of these challenges that we've discussed.

MR. SILK: So the projects, some of the projects that were signed in this area are listed on page fifteen of the paper that we wrote, that appears in the materials. None of the projects that were signed were actually for domestic wind generation or for domestic U.S. wind turbine manufacturing. So there was a limit to what did happen when the premiere was here. A lot of these cooperation projects we're exactly that, they were for cooperation to look into opportunities, a lot of which focuses on U.S. companies going into China to explore opportunities and

renewables.

So where does all of this leave us? So just a couple of kind of forecasting points and conclusions. So just to sum up very briefly where we started was to take a look at the growth of the sector in China, both in terms of generating capacity and turbine manufacturing capacity. And what we saw there was that the domestic side of things in China has come an extraordinary way in a very short period of time. I think we can safely characterize the domestic Chinese wind sector as one of the most vibrant in the world, based on those numbers. And as a result of that, and what has happened, there's been an increasing amount of domestic competition. That competition is having two results, one of which is consolidation and the other, which is internationalization.

In terms of internationalizing really the primary challenge is for the Chinese wind turbine manufacturers to ensure that their kit can be deemed proven technology in the international financing arena. It probably was not terribly helpful when a Sinovel produced turbine on somewhere, I believe in Texas, lost a blade the day before yesterday. And so that probably doesn't do too much to instill a high degree of confidence. But they are working on it. The point that I would like to make here, which is very relevant to answering the question of whether the Chinese are going to take over the world in this area, is that the Chinese did extraordinarily well in getting other forms of more highly technical generating technology that they produced, deemed as proven technology by the international financing community much much earlier. One of the projects that I worked on, which was a Power Project, which closed in 1998, was a great example of that, where the tables were very interestingly turned.

It was the first joint venture power project in China that held more than one power facility in a single joint venture company. There were four power facilities and a total installed capacity of over 3,000 megawatts. It was a \$2.6 billion dollar project, which at that time was very, very, very large, and it was initially slated to have Westinghouse generating equipment supported by U.S. Exxon. The Chinese finally threw up their hands after numerous fruitless negotiating sessions with Westinghouse, U.S. Exxon, and their respective council and financial advisors and said we've had enough of this. And they just decided to switch to domestic Chinese kit, which was, I think, Babcock and Wilcox license, but it was domestically produced. There was a big discussion about whether it was deemed to be reliable enough and proven

technology was just about that point. But the financing went through. U.S. Exxon was kicked out, [and] replaced largely by a syndicate of domestic Chinese banks, which was one of the first times that that happened, domestic Chinese banks lending in dollars and in RMB to a large limited recourse project financing. But ultimately the deal closed on the back of Chinese generating equipment. And I don't need to tell the audience that coal fire technology, which this was, while not being the most sophisticated or technologically challenging as say gas fire or nuclear, it's still far more complicated than effectively taking a blade and putting it on a big old stick and sticking that in the ground.

So if they were able to do it with coal and gas, one can only conclude that they are going to do it in respective wind. So their greatest challenge really is this financing challenge, which ultimately I expect that they will overcome and it will be more a question of when and not whether. But the real open issue is the political dimension and on that front we've got people that are far more expert in the area than Rebecca and myself. And so with that I think we will pass back to Doug, who I suspect will then pass on to Mr. Levine.

MR. SIMS: Thank you Mitch. Which one wants to go first?

MR. LEVINE: Whatever.

## *2. Remarks by Mr. Henry Levine*

MR. SIMS: Let's go into politics. Let me go straight to you.

MR. LEVINE: Good, well thanks. Again thanks to the organizers for the chance to be here. I will be brief, more brief than last time, in part because for those of you who were here this morning, I think a number of the themes were covered. We did address them and we do want to make sure we have a lot of time for information, for discussion.

I would make a few points, [including] the following. To me one of the things I find fascinating about the wind power topic in particular is that it is really a microcosm for what I see as the core issue in U.S.-China relations. U.S.-China economic relations today. Some in Washington would tell you the value of the Chinese currency, the RMB, which members of congress spend a lot of time hyperventilating about. Some would tell you that's the key issue. I don't believe that's the case. I think the core issue that we're facing now, and that takes up a lot of air time and a lot of thinking among particularly as I said, large multi-nationals in the advanced manufacturing and high tech sector, is the whole

question of the Chinese model going forward. Of economic development and of promoting innovation. In other words, with China's increasing reliance on government lead innovation of projects, what are the implications of that, both for China and the United States, and in particular what is the impact on U.S. companies.

I will say that inside the beltway in Washington one of the, if you go to the think tanks and hear people talking about U.S.-China relations, one of the terms you will hear is the repeated concern over the lack of strategic trust between the U.S. and China. Now most people talk about this in terms of our two militaries, the defense departments' concern that China wants to build up its military and use it in ways that are harmful to [the] U.S. interest. But I would argue that this issue of strategic trust goes deeper, and particularly on the economic side, one piece of this is what is it China is trying to do in terms of innovation, in terms of economic growth, and how are they trying to do it. And as I say, I think this wind power case is a terrific microcosm of that.

It has, of course, the added dimension that we talked about a little bit before and that is the environmental angle. I mean one argument could be great, let the Chinese subsidize production of a wind power, and for that matter solar and other technologies, it's good for the environment. It lowers the cost of these technologies, helps deal with the issue of climate change, and I think that's a reasonable perspective. But if we come back to the issue from the perspective of major U.S. manufacturing companies, as I say, the heart of the issue is where are the Chinese going and more importantly, how do they want to get there.

And I would emphasize that if it were only in the area of wind power that this issue arose, it would be an interesting little footnote to bilateral economic relations. The fact is, again, that there is a sense among major companies that across the board, and whether it's for example, in the IT sector, telecommunications sector, whether it's wind power, whether it's semi conductor manufacturing, whether it's biotech, whatever it is, there is a consistent and concerted effort by the Chinese government to favor Chinese companies at home through a variety of policies to help them succeed at home and strengthen them in going abroad to the detriment of foreign companies.

I would say though, as we play this out and I think it gets to the issue that was raised, what does this mean ultimately? And if we're looking at the development of the sector and particularly

Chinese greater entry into the wind power sector in the United States what does this mean? I guess my feeling is much like U.S. elections, presidential elections, it really hinders on the state of the U.S. economy. And one of the reasons that we see so much concern about Chinese government policies, subsidies and other policies in the high tech and advanced manufacturing sector, has to do with the state of the U.S. economy. And if unemployment in the U.S. starts to fall again and people, Americans in general, feel the economy is coming back, I think there will be less sensitivity. And the politics in congress on these issues will get easier to handle.

By having said that I guess my feeling is looking at the situation in China today, the direction they're headed and we could talk about five or six of the factors that are driving them, but looking at the direction they're going, looking at the current state of the U.S. economy, I guess my feeling is this will continue. This broad set of issues over the direction of the Chinese innovation and the way to get there will continue to be a significant political issue in the U.S. And it will play out as a factor in wind power. And I guess what I would say is sort of taking a best guess here and projecting forward—I don't believe that we're going to see legislation, which is going to have a direct impact on Chinese wind power producers in the U.S. Unlike the area of the exchange rate where there continues to be a lot of talk about actual legislation that would oppress the issue of the alleged Chinese under value RMB.

Nobody that I'm aware of is talking about specific legislation in this area. On the other hand, I think we will see specific actions that have an impact. One, as mentioned, I mentioned and as was mentioned earlier, we already have a request for consultations at the WTO by the United States specifically with regard to Chinese policies in this area alleging import substitution policies related to subsidies that Chinese manufacturers get. In other words, requiring the Chinese components products be used as a condition to getting these subsidies for export. According to the U.S. government this policy is inconsistent with the WTO; consultations are under way and we'll see how that plays out. But I believe on that specific issue, and potentially then other aspects of China's support for green tech, I think we can expect to see more direct U.S. government involved with the Chinese government, and potentially more WTO cases. So that's one.

Second, I think we're going to continue to see a lot of project-

by-project sensitivity, and this just goes to the point of what we've seen already. And when you get to the point, because so many wind power projects do require public money of some kind or another or are involved in a public entity in the U.S., the whole issue is [whether] China [is] competing unfairly, [and] are they creating enough jobs in the U.S. and so forth. And when you get into the spectacle of the United Steelworkers, you know a Chinese company having to negotiate with the United Steelworkers over which components of a wind farm in Texas are going to be made in the U.S. versus made in China, I think you know then we have reached a point of high political concern. And I think those types of project-by-project concerns, in other words the political obstacles that have been mentioned, I think will continue.

In addition to that let me say that I think we see the impact of this in other ways that are not immediately visible and directly related. The fact is there has been a strong push in recent years for a more aggressive U.S. government policy with regard to alleged unfair trade practices by China. And whether that's anti dumping cases, whether it's the use of counter veiling duties against alleged subsidies in China, whether it's potentially the use of what I refer to as section 421 cases. We had a famous one involving tires a year or so back. The point is that I think concern over this sector combined with the concern over other sectors will continue to keep trade frictions between the U.S. and China at a relatively elevated state for the coming years.

Finally let me say, and I should say and a mention was made of the shift from the Bush administration approach on these things to the Obama administration and I concur completely. And I think it's important for all of us to recognize. For me it is a function of two factors. One is the state of the economy, as the economy plunged and unemployment went up the pressure on any president to take strong action against allegedly subsidized Chinese imports or unfair trade practices increases. And had Republicans stayed in the White House and had the economy then continue to deteriorate I think they would have felt the increased pressure too.

Second is, as we all know, the Democratic Party, the base of the Democratic Party is heavily influenced by organized labor, and other groups, which I think is fair to say, have had a less positive attitude toward free trade and therefore it is natural that a Democratic administration is going to face increased pressure.

For those reasons, as I say, I think across the board and

specifically as well in this sector, we'll continue to see a lot of attention and some impediments.

Finally, let me just say that the big issue that underlies all of this is the following. For the past twenty plus years the main stabilizing factor in U.S.-China relations has been the strong support by large U.S. companies for positive U.S.-China relations. And there are numerous organizations in Washington and millions and millions of dollars that large U.S. multi-nationals have spent in lobbying congress to prevent what the Chinese would call anti China legislation. Prevent the congress from taking action that would blow up U.S.-China relations. The issue that we have today, we are not at this point, but the issue is when you have a Jeff Immelt telling an audience that he's really concerned about the future of G.E. and China, those are my words rather than his but that was the essence of it, if we reach a point where U.S. companies feel that their future in the China market is being closed in, and if at that point they are less aggressive about lobbying the [Capitol] Hill and working hard to maintain a stable U.S.-China relationship, the politics on this issue on China will change in Washington for the negative.

And wind is particularly relevant here because as I say if you talk to the G.E. folks as I have, I mean that is one area that if you ask them what's the problem they'll talk in great detail about wind and the dramatic falloff in their market share in that sector in China. So as one example, over broader problem, as I say, I worry that if China continues on its current path we could potentially see outcomes that would be negative for U.S.-China relations.

Finally, let me just pose a question because I'm not sure I have the answer to it. I guess, well I have views, but you know an interesting question here, and this is broader again than the wind sector. And in my view what we're seeing, take wind as an example, we are seeing the Chinese government saying we want to be leaders in a number of sectors. We're tired of being subject to these big multi-nationals and their technology, and we the government are going to drive innovation and growth and market share in these sectors and that includes wind and a bunch of other things.

The question is whether this is good for China in the long term. And I guess, I'll say my personal view is that over the long run I do not believe it is good for China. I think a lot of Chinese companies, and I don't know enough of the technology of the wind sector, but I think it's currently the case in other sectors,

telecommunications and others, they can make a lot of progress in the short term by borrowing technology, by expanding market share based on subsidies and other activities. But over the long run the question becomes are you creating an environment in China which really promotes genuine innovation and will the next iPhone or iPad or the next new green technology that none of us have thought of yet, is that going to come out of China. And so this is more of a philosophical point than anything else, but I guess there's a question in my mind as to whether the current direction of Chinese policies is really going to be in China's interest.

When I discuss this with colleagues from the business community in Washington, by the way their response is man, that's an interesting long term question but I've got to tell you in the short term, Chinese companies are killing us and the Administration and the Congress and somebody has to do something about it. So as I say it's a long term and philosophical question, but nonetheless I think an important one.

MR. SILVERMAN: Thank you Henry. Andrew, let's move you right away without further ado.

### *3. Remarks by Mr. Andrew Worden*

MR. ANDREW WORDEN: Okay great. I'll try to go as quick as possible here. So first of all I want to tell an analogy. Well two very quick ones. One of the first times I went to China, my first hire in China was a fellow named Fernando, who was born in Buenos Aires actually. But he's Chinese, he's Shanghainese actually. He said, and I was telling him my strategy when going to deal with companies I'm very, I'm just very strong. Just this is how it is, this is what we're going to do, da da da da. And he was like, he said Andrew this is how it is. America is like an oak tree. It's very strong. If the wind blows it blows and the storms miss it, but eventually maybe it snaps. And the Chinese way is like the grass. So the wind can blow and blow and the grass can keep standing and bending and bending and it never breaks. So I was like okay whatever. And eventually the years go by, the more and more I realize his analogies are interesting. And another one of his [analogies] was of the water flowing down the hill and there's the water flowing down the hill and there are rocks, and the water is always going to go around the rocks, it's never going to try to go over, it's just going to always find the easiest way to go down the hill.

So anyway, why are these analogy's interesting or relevant,

maybe not interesting but somewhat relevant I hope, so basically the way I look at this whole picture is essentially the United States, look at other countries as well of course, but the United States ultimately uses energy, there's sort of three of ways to make energy—plus or minus. One is burning stuff, which the problem with burning stuff, there's a lot of problems. I don't even need to go into why. Burning stuff ultimately is not the greatest solution. The other is kind of nuclear energy, which has other issues, waste, where to store, how do you store it, how do you transport it, and potential melt down issues, etc. And there's also, in the United States especially there's a location issue, not in my backyard. Maybe, whatever, not near me. So if everyone doesn't want it near me then there's not going to be any.

And then the other way to do it is clean energy, and no matter how you cut it, wind, it's pretty affordable. It's pretty affordable and it's coming down all the time as the charts that Mitchell showed. I mean the price of wind is always coming down. And it's getting there. It's really getting there, where you put it in windy places and there's already a grid kind of near by, it's really getting close, it's really getting interesting economically.

So the reality is, in my opinion, and I know Henry kind of commented on this as well, but no matter what happens, somehow it's got to happen that we've got to pull out a lot of wind eventually and I don't know anywhere else in the world where it's going to be made as inexpensive as China. I don't see it. So as a Cleantech investor, I'm not going to try to go over the rock and I'm not going to try to be an oak tree, I'm going to be in the supply chain of Chinese wind companies selling windmills at really good prices. And if I were G.E, I would be very upset that my market share's gotten demolished in China because Chinese companies have taking it away and I'd be even more scared that they're going to lose in the U.S., which I definitely will, as will Vestas etc. Those guys are all happy in solar, looking solar. Ninety percent of Silicon is Chinese made now; eighty-five percent or ninety percent. Tell someone ten years ago they'd be laughing at us. And the same thing, I see it as the inevitable trend.

I don't know, maybe the solution is some kind of a localization or partnership, like some way where the Americans can make the towers. Certainly Americans put the rebar under the ground, that's steel. All the steel and the big chunks of cement under the ground. It's a big construction building. Sixty percent of the jobs end up staying in the State. The maintenance of the

windmills, there's a big industry around it. The finance, the legal people, all that stuff. There's a whole industry and it can be big.

I read in some source and I don't know, but they said 19 million jobs in 2035 and wind becomes twenty percent of our power. Now I don't know if that's a combination of wind and solar and maybe another ten or twenty or something, it sounded a little high to me, but there's a huge job creation opportunity if you build a huge Cleantech economy. Of course I guess you could also argue that you're not building the coal plants and your not building gas plants and all that other stuff so you're kind of not out of those jobs so maybe it's kind of skewed right? But anyway, I'd like to skew in the favor of Cleantech because we're a Cleantech investor right?

So I guess I mean that's basically my point. From our perspective it's a difficult issue to navigate and somewhere of a win-win somehow where there can be job creation in the U.S., so everyone's happy. Somewhere in there that can work and I just don't see another solution on the Cleantech side of things.

The one other point in China is, from the companies we invest in, we haven't had the luxury of government subsidies. Companies that we invest in make the big widgets that go in the windmills, and these guys are just scrappy Chinese entrepreneurs that manage cost down really aggressively and they're just always pushing to get higher output. Take a machine that's supposed to be this many widgets an hour, it makes this many widgets an hour. I mean these guys are, they're really smart tough entrepreneurs. And a big part of the cost change we've seen has been from Chinese entrepreneurs just grinding cost down. And also the money that's gone from westerners. Goldwind did what a billion dollar, \$800 million dollar raise last year. [China] Mingyang [Wind Power Group, Ltd.] did \$400 or \$500 million I think, [a] Morgan Stanley deal.

These companies have raised billions of dollars, even in the last year or two, from investors, American investors, Hong Kong investors, whatever. So I don't know, yes it's true, the government has given land for solar companies especially. There's a lot of government help. But I don't know if you really add up all the dollars, I'm not really sure how much is Chinese government [subsidization] and how much is commercial. I would guess that much more of it is commercial by probably a big multiple. That would be an interesting point, I should really look into that. Anyway, that's my ten minutes. I'm good.

*C. Panel Two: Questions and Answers*

MR. SIMS: Okay. We'll have a couple of questions quickly and then we can ask the panelists themselves any inter-panel questions maybe for two minutes and then we're going to go to the audience. So I think the first thing I wanted to talk about a little bit was I think the general paradigm we've seen today and we've seen in other industries, like solar, is that the Chinese don't innovate typically. They have innovated up until now. They focus on improving processes that were already understood in grinding out incremental improvements. I think now we have interesting things happening in a couple of areas. One is offshore wind that the Chinese had deployed, some early technology off shore. Another one is in the carbon capture and storage. And the question for the panel is do you think the Chinese, and also you see partnerships between people like Duke Energy and Chinese companies trying to develop CCS [Carbon Capture and Storage]. Because in the development cycle of technology you may create it in Silicone Valley but at the end of the day you have to deploy it and see how it works in the field. And to get things deployed in the U.S. and Europe sometimes it's difficult because of environmental constraints and because of other constraints where the Chinese tend to throw things up pretty quickly.

So there's a potential opportunity for the Chinese to start innovating in certain areas, like offshore wind and CCS, but also to play a role in commercialization of new technologies. Do you see that as being, do you agree with that thesis? What were the leading technologies that were [developed and implemented] from that trend?

MR. WORDEN: It's interesting you said that. We had a banquet last night for the CEO of a portfolio company of ours who is a technology innovator. He runs kind of a smart phone, advanced communications company in Beijing. And they're number three in smart phones in China, number one for the police force. And they're a true technology innovator. They're opening in the United States now to start selling, they already sell products in the U.S. They have this phone, you take the phone and you could like hammer a nail in with the glass part and throw it on 3 meters under the water, it's called The Jungle Phone. And all of a sudden American consumers are like where do I get that? Everyone wants The Jungle Phone. But more specifically than that they have, in terms of game, motion games, they're the biggest patent holder. And it's interesting that patents in China, they filed

over 100 patents in China in motion gaming patents, like if you tell your pet to go attack something or whatever, all these things.

So they have an IP site in China, they're filing enormous numbers of patents, which is really interesting because [if] someone told me China was filing patents a few years ago, I was like why bother? Right? Just last night we were having dinner with them and it was really interesting because now they're rolling out their [own product], and they didn't rip [anyone] off. They actually created these things themselves because they never existed to someone before. So it's kind of interesting. I mean on the Cleantech side though, honestly I don't see it the same way, but that was just an interesting example that was twelve hours old.

MR. SIMS: Do you have a view on this Becca and Mitch?

MR. SILK: I mean offshore wind and carbon capture are emerging areas. I would say that they're probably secondary to China cracking the bigger issue. They've certainly done extraordinarily well on solar and I think that that's going to continue in every indication and every jurisdiction around the world. And so probably their issues there are how to be more efficient, not only in respect of their technology but in respect of project development and financing. And cracking this major knot of penetrating the U.S. I think that those are by far greater targets. So that would be my view.

My take on China in offshore wind is that they've got much farther to go in that technology than they do in other areas. It's an emerging area and there are a number of companies that have been doing it for much longer than they. It's far trickier than just erecting a windmill in the ground.

MR. SIMS: Any thoughts Henry?

MR. LEVINE: No, thanks.

MR. SIMS: My last quick question is just on the thesis that there is some game in between the U.S. and China. And I think we saw, we were talking about some of the manufacturing, some of the solar paradigm where clearly manufacturing is much cheaper in China, and that's why I've taken opportunity in California. But Bloomberg, last year, did a study on the actual value that goes into some of these installations. So it turns out that if you look at the entire chain from manufacturing to transportation to raw materials to construction for a hypothetical three megawatt wind installation in the U.S. with a Chinese manufacturer. Bloomberg said last year that forty-four percent of the value actually is U.S., approved to the U.S. side. So I wonder is there another story that we can tell

which is not so zero sum, and are those opportunities going to be reducing, you know a tenth of China or is it going to be expanding those kind of opportunities?

MR. LEVINE: Let me offer a couple of quick thoughts. Let me say full disclosure, I'm kind of a free trade guy and I am not a protectionist and frankly do not, and particularly personally advocate the views of the United Steelworkers and some of the others on this. And indeed, I think in many of these things there is a win-win dimension here. The problem is the following, and I just say this as someone who lives and works inside the beltway in Washington.

One of the clichés, if you work on trade policy in the government, one of the clichés about trade policies is the affect of free trade. The positive affects of free trade are widely dispersed. The negative affects tend to be very narrowly focused. And so the fact is if you look over the last ten or twenty years the American people collectively have benefited enormously from inexpensive imports from China. And if you totaled up all those welfare benefits, it would be a huge number. But if you sit down with the head of a family owned company from the Midwest, which is having to close down due to imports from China, whether they're allegedly subsidized and unfairly traded or whether they're not, that person feels that pain intensely as do their workers and they're going to go running to the members of Congress and so on.

And I think that's the situation here. I don't question the analysis and I find it quite easy to believe that on a net basis, you know, importing subsidized Chinese wind turbines and so on could be good for the U.S. in many ways, including the number of jobs and maintenance and so forth and so on. The problem is you have major U.S. companies that feel their oxen are being gored. And as I say, were it just in the wind sector it would be sort of a little footnote and an interesting curiosity, but it is not. It is across the board and the Caterpillars and the Qualcomm's and the so many other manufacturers are very concerned about the direction that they see that China is taking. And they are not only is that, these are people who have some political voice.

And so the challenge, I think for the U.S. political system, and this is what politics is all about, is how do you sort of sort and manage and balance out these competing interests. And so far, to be honest about it, despite all the yelling and screaming, including the yelling and screaming over the value of the Chinese RMB for those who follow this issue, we haven't seen crazy actions, either

by the Congress or by any Administration. I mean we've seen some negative actions but nothing big. So far I think it's more of the danger and the concern that I have, and this is directed mainly at the Chinese, and I hope you get the sense, I'm not a China basher and I'm not somebody who's totally negative about China, but I am concerned at the broad, sort of the basic direction, particularly over the last couple of years, the Chinese have been taking on industrial policies. And I just worry about how that could impact the political dynamics in Washington because the affects can be very concentrated.

MR. SILK: I mean I have an interesting gloss, which is that [when] I started my career, I spent a good part of [the] initial years of my career representing foreign investors in China and have been now back in the States since 2005. I'm doing a fair bit of work on the ODI side, the Overseas Direct Investment side representing Chinese investors. And I guess the two interesting observations that I have are number one, the Chinese themselves are being confronted with when they're going abroad with the same exact issues that they confronted foreign investors with that were going to China.

So when they're going into Latin America, for example, and even to a degree although less so now in the States, issues of political risk, more kind of political risk in Latin America developing-country type political risk, but even here in the States, dealing with CIFIUS [Committee on Foreign Investment in the United States] issues. You know the tables have kind of been turned on that, and it's interesting to see how they react to it. But at the end of the day I think that the second observation that I have is that competition can't be an all bad thing. And I think that if it is true competition that is governing who ultimately succeeds, as opposed to regulation, or maybe regulation being a part, managing the regulatory risk being a part of the competition, that can't be all that bad.

I look at a couple of points. So we were talking a little bit earlier about this RMB issue and we had a whole panel on asset management. So what Jillian didn't talk about and what we took out of the slides were we had a number of data reference points about the pent up assets, the pent up capital within the government pension system, in the insurance company system in China, in the banking system in China, which is not being managed effectively to achieve the greatest returns for the shareholders of those companies. And there's absolutely no capability to do that

in China because there is no industry to do it and there are no products. There are no people and there are no products. What an extraordinary opportunity and we didn't have a chance, unfortunately to develop this in the first panel, for all of the U.S. financial institutions that are in the asset management space to be providing services and to be joint venturing and cooperating, which is where I think things are going to go. Because if that capital isn't managed effectively then those companies are, maybe they won't grow into extinction but they will be battered pretty hard economically.

And so I think that if competition is what ultimately reigns, then things can't be all that bad. And I look back at the early years of my career, despite my youthful appearances, in the '80's when the Japanese were coming in, you know we took reference to that a little bit earlier about the, it was really the Germans that you referred to early [on] and then probably the Japanese in a slightly different period in the '80's. But they were coming up and there was an extraordinary [fear], just as we're seeing now in respect to the Chinese about how they're just buying up. Rockefeller Center, God forbid; but they bought it and they got stung very badly. It was not a bad transaction net, both on the sell and on the purchase back for the U.S. And so it may be that there's a lot of money to be thrown around, but what the Chinese will learn, just as other foreign investors did that were similarly situated on a relative basis, is that if they don't invest smart they will get stung.

And the politics, the political dimension of it all doesn't always work in one direction. Interestingly, in respect of CNOOC, we talked a little bit earlier about the purchase was Unocal, right? So what happened on Chesapeake recently? A big Shale Gas play just concluded a couple of months ago. Why wouldn't a \$1 plus billion dollar transaction acquisition by the same exact company in Shale Gas, which may present even more sensitivities be any less of an issue than Unocal was at the time. Particularly when all of the major portion of the assets that CNOOC would have been getting were non U.S. assets of Unocal. And the reason, or at least the explanation that's being provided, is that CFIUS [The Committee on Foreign Investment in the United States] and other elements, in you know quadrants in Washington, took a view that after discussions as long as CNOOC decided to drop hands in investments in certain politically undesirable jurisdictions outside of the U.S., then CFIUS as a trade off would be prepared to allow them to invest into Chesapeake.

So I think at the end of the day things aren't going that bad for either side. And I think when it comes down to it, as long as competition can reign there will certainly be a check on concerns that people might have with the Chinese.

And finally, I think on Mr. Levine's issue a little bit earlier about this question of innovation and is what's happening good for China. I think my answer to that is if some cities and the way that the Chinese are borrowing technology are the only two things that are defining their success, then it's a problem for China. Then it is most definitely a problem for China. But I don't see those as being the two sole factors that are driving the developments. And if you look at wind, for example, what they've done in the wind space, I don't see tax grants, or even better yet cash grants, as being any less of an incentive. And particularly when viewed on an overall project economic basis, as I think you gave us a couple of good examples Andrew, any different then the subsidies that the Chinese are getting on the home country front.

And as far as financing subsidies, again, you have two levels of financing subsidies. One of them is the China Exxon's of the world, [and] the CDB's [China Development Bank] backing their exporters going out. No different than U.S. Exxon backing U.S. exporters going into other jurisdictions. The only difference being that China Exxon is being far more pragmatic in supporting their exporters and getting deals done in break neck speed. The lawyers can't even keep up with them. The lawyers just can't keep up with them. Whereas U.S. Exxon, in particularly U.S. Exxon's advisors, not only legal but also financial, are more of an impediment to getting deals done for U.S. manufacturers abroad than they are helping.

So the way that I look at it, at least on the financing incentives side, and also the second area of financing incentive are these, you know these statistics that we referred to earlier. They're raising capital, let's say, in China, for use and deployment abroad. Or they're taking guarantees from Chinese financiers. Well listen, again, getting back to the competition point, if the projects that they're using that capital to invest in, they raised the capital in China, [which has a] lower cost than here, or they're getting a guarantee, they have to pay for the guarantee. Or they're getting local financing on an offshore basis that they're using—on land or [to] contribute as capital here.

If the projects here don't pan out and their financial performance dips, there's a capital cost for that. Or if they default

on the loans that they take on offshore that are being used to support the onshore projects here in the U.S. and those projects aren't kicking off enough revenue to support the credits then the projects are going to go bust. So I think that as long as competition reigns then there will be a good balance point.

MR. SIMS: We've got five minutes left. I want to get to - - once. Can we go to the audience for questions? Yes sir.

QUESTION: I have a few questions. What does it mean you perceive - - from China to the United States and what I mean is [background noise] saying that - - see that any time in the near future - - if that will happen. And also, I was looking at this graphic on page 11 of the presentation - - and - - the diagram of Chinese turbine manufacturers in the United States, and I'm from Colorado and I know that there's, I think that this is a company, a Danish company that produces turbines, which started a manufacturing facility in Colorado. I don't know how popular it's been to have kind of a broader energy policy it's really cut down on a number of manufacturing jobs in the oil sector. And my question is what goal do States have in bringing Chinese manufacturing in? Sorry, there are two, kind of different questions.

MR. WORDEN: Well renewable energy credits, I think as you guys may have eluded to as well, a lot of states are starting to, I've heard eighteen percent to twenty percent of their energy has to be renewable by 2020 I think is a big day people are using. And so if they've got to do it, and they've got to do it cost effectively, basically entrepreneurs are sticking solar stuff in their roofs, or G.E. loops in the ground or whatever. And entrepreneurs can sell the renewable energy credits at a fat mark up to the utility prices. Like in Tennessee some utility dumped a billion tons of really nasty stuff in some river, I forget the name of it. And they're really getting embarrassed and the governor's like you guys have to crank up, you know your credit amount.

So if I'm an entrepreneur and I want to get some Cleantech stuff going, especially if I can get a fatter price on what I sell the energy for, I'm probably going to buy the cheapest stuff I can get right? So I just think that's, it's like that water is going to flow around those rocks. I don't know, you could try to stop it but I see, I don't know how it's going to stop and Chinese windmills are so much cheaper. In terms of technology content, moving from China to the U.S., I guess there's a bay here because of the Steelworkers Union. I mean if you, and guys, just a general idea,

can you make the steel stuff in the U.S.? And basically stuff that's really heavy and really big to ship from China to here, if that cost gets into the equation, at some point even the Chinese will want to make this stuff here. But really what it comes down to isn't much because Chinese steel is cheaper to begin with. But like the big plate steel in the powers, which isn't complicated technology, it's really low tech, but that stuff if you're going to roll it near the wind, if you're building a massive wind farm, like half a giga watt or whatever, you can roll those tower sectors there and then you'll bring in all the actual turbines from China and all that.

If you call that technology, I don't call that technology but it depends on how you define technology. You know what I'm saying? So that's my answer I guess.

MR. SILK: I think the A-Powers [Energy Generation Systems] response, which is one of the Chinese turbine manufacturers, was to say to hell with it. If you guys have a problem with our importing equipment from China then we'll just built a plant here. I don't know what the present position is but they had announced that they were going to be building a \$700 million dollar wind turbine manufacturing facility in Texas. And I don't think it will be long before there will be more of those things happening, particularly with the state of what's happening domestically in China in terms of consolidation.

MR. SIMS: Anyone else? Okay, sorry.

MR. LEVINE: Well I'll just offer a footnote somewhat on that. First of all I mean I happen to agree. I mean I think the bottom line is looking at the politics of this ultimately I think the Chinese wind power folks are going to have to do what the Japanese auto companies have done and that is do a lot of production in the U.S. And then they get Senators and members of Congress who are their biggest fans and biggest supporters, and if you ever look at the South Carolina delegation and how they talk about the Chinese white goods manufacturer higher, which has a large manufacturing presence in South Carolina, things turn around very quickly when you've invested in the state and so on. And I think ultimately looking at the politics that's what's probably going to have to happen. Again, recognizing the financing barriers perhaps and other things, but I think that's what's going to have to happen.

Just coming back to Mitchell's point earlier in the discussion I'll just say the following. Number one, I mean I agree completely. The bottom line is to the extent that competition is what is driving

the decisions in the market, nobody can complain or should complain. Recognizing there's no such thing ever as total free competition, and let's face it, the internet was invented with a lot of DOD [Department of Defense] money and Boeing has benefited from a lot of DOD R&D [Research and Development] and so forth and so on. So there's never, even in the United States it's never peer competition. But the issue that we face today is the perception, and I would argue the reality that if you look at the totality of Chinese government practices, they have slanted the playing field in favor of manufacturers in chosen sectors, including green tech and including wind power.

So for example, I mean even if you look at the issue of credit, I mean many economists would argue that credit is artificially cheap in China. I mean the market doesn't send interest rates in China after all. State owned enterprises have managed to run up large profits, in some cases in a protective market or with a monopoly. They then have big pools of money that they can deploy. Look at the complaint that the U.S. has taken to the WTO. I mean very concrete and specific, and they argued that the special fund for wind power manufacturing established by the Chinese government placed conditions on Chinese government support that violated the WTO. They required that you had to have X amount of Chinese content in order to win the support, and on and on. And so I guess my point would be that, and again some of this benefits the U.S.

I mean another way to look at it, let the Chinese subsidize and we benefit from that. But in terms of the politics of it, just to say that the closer we can come to the perception that the Chinese companies are succeeding or failing, investing or not investing, based on market forces and market realities—the closer we can come to that the more manageable the politics is in the U.S. The more there is a sense that the Chinese government, the heavy hand of the Chinese government is involved here in tipping the scale then that makes the politics that much more difficult to manage.

MR. SIMS: That makes a lot of sense. Thank you Henry. We're going to wrap this up. I will say one last thing about the state policies, I'm a policy guy now that I'm retired from this really hurly burly world. What drives me now is policy. If you talk to any major investor, I'm sure Andrew would agree, that what drives investments in anywhere, in Italy, in Spain, in the U.S. is what is the subsidy structure; particularly a feed in tariff. If the U.S. really wants to super charge it's own industry and actually pass a long-

term stable regime for energy prices that supports a deep industry here. If we passed a national energy standard rather than all these state piece meal, we'd have a massive demand kick up in the U.S. and all the capital waiting around would invest in the U.S. So China has a feed in tariff for wind and that's why they brought the prices down for wind.

So we in the U.S. need to, in my little humble opinion as a policy guy now, need to have our policies super charged to really meet the challenge of China and also the Europeans to really get domestic industries super charged. So with that I'm going to ask Dan to come up and finish the conference.

*D. Panel Two: Concluding Remarks*

MR. SILVERMAN: Thank you very much Mr. Sims for wrapping up and thank you all for coming. I think it has been an interesting event to say the least. There's been a lot done in the area and as you can tell there's a lot to do. If you have any questions you can forward them to the Journal of International and Comparative Law. I'm happy to field them, Daniel Silverman. You have my contact information as well as the Journal's contact information in your packet. So you can reach out to us that way. Thank you very, very much to our panelists for coming down and our moderator. If I can have a round of applause for everybody. Feel free to grab some bites on the way out and other refreshments, stand around, talk, enjoy.

