

# Project Sales: Market Update

*The following is an edited transcript from a roundtable discussion in late January at the Infocast Projects & Money conference in New Orleans about what to expect in 2011 in M&A transactions in the US power sector, particularly renewable energy. The panelists are Ted Brandt, CEO of Marathon Capital in Chicago, Charles Costenbader, an associate director with Macquarie Energy in Houston, and Daniel East, a vice president of The Carylyle Group in New York. The moderator is Keith Martin with Chadbourne in Washington.*

MR. MARTIN: Ted Brandt, many people are expecting 2011 to be a big year for M&A transactions. Will it be and, if so, why?

MR. BRANDT: I think it will be a good year. The main drivers in both wind and solar really revolve around capital costs. While it is difficult for renewable energy developers to persuade utilities to enter into new long-term power purchase agreements, there are a number of PPAs that were priced in late 2009 and early 2010. Capital costs have dropped dramatically since then. For example, in wind, a lot of projects were priced at \$2.2 or \$2.3 million an installed megawatt and they are being built at \$1.8 million and \$1.9 million. That obviously translates into lots of net present value. We are seeing developers of very late-stage contracted solar and wind projects who can make \$400,000 a megawatt by selling, and they would just rather have the cash and then build more.

MR. MARTIN: Any other views on whether 2011 will be a good year for sales of projects or companies?

MR. EAST: In 2008 and 2009, M&A felt like an academic exercise. You had had a dramatic drop in demand for power, and the capital markets were essentially in distress if not closed. The market recovered in 2010 in terms of volume of transactions, and the trend has continued into early 2011.

MR. COSTENBADER: A lot of capital has been on the sidelines for the last year or two, and fund managers will either have to put it to work in 2011 or give it back to their investors.

MR. MARTIN: The big news in the last week was the proposed merger between Duke and Progress Energy. Many people thought the 2005 energy bill would trigger a wave of

utility consolidation. Does anyone on the panel think that the Duke-Progress merger is the start, and we will now see more rapid consolidation of utilities?

MR. BRANDT: Marathon is more focused on the independent power market, but our friends who focus on regulated utilities suggest waiting to see how the regulators react to the proposed merger before labeling it the start of a major trend.

MR. MARTIN: Ted Brandt, you think 2011 will be a good year for the M&A market in terms of transaction volume. You and I had the same discussion around this time in 2009. That year proved not so good because bid-ask spreads remained wide. What makes you think that sellers will be more realistic about what their projects are worth this year than they were in 2009?

MR. BRANDT: In 2006 and 2007, my phone would ring and it was “Ted, how do I get into the wind business?” In 2008, it was “Ted, how the heck do I get out?” [Laughter]

MR. MARTIN: What are they asking you in 2011?

MR. BRANDT: A lot has changed. The terms on offer in the debt market have probably never been better. You also have this drop in capital costs that can't be underestimated because it really fattens up the value that is embedded in contracted solar and wind projects, even for projects that have not been built yet. There is a lot of embedded value. Sellers are trying to figure out how to realize it. I expect a number of sales of holding companies that own multiple projects as well as sales of individual projects. I also agree with Charlie Costenbader. Put together the fact that there is an awful lot of money trying to find a home, the low cost of money in the debt market and this embedded value, and I think you have a perfect storm.

MR. MARTIN: Charlie Costenbader, you are a buyer. Are you finding more opportunities to close deals this year?

MR. COSTENBADER: Yes. I expect the deal velocity to pick up. I think what held it down for the last two years was low natural gas prices. They do not help renewable energy or the spark spreads on merchant plants. There was also the general recession. I see both things improving.

One of the dynamics I have noticed is that people are starting to believe assets have value / continued page 2

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beyond a simple discounting of projected cash flows. They are assigning value to the location. There may be value to having existing infrastructure. They are expecting the economy to recover. More buyers are willing to stretch on valuation. They are looking at embedded options in the plants such as the potential to expand or to repower an asset into a lower heat rate.

MR. EAST: Other things that are contributing to a more buoyant outlook among buyers is an expectation that both the economy and electricity demand are on the upswing and, among some buyers, a belief, or perhaps a bet, that natural gas prices will increase.

MR. MARTIN: Do you see more demand for particular types of projects—wind versus solar versus geothermal versus gas-fired power plants? Projects already in operation versus those that are merely still under development? Where do you think most of the action will be?

MR. BRANDT: I think solar, particularly ground mounted PV solar, will continue to be busy.

There are a lot of solar PPAs. We have been involved in Ontario where there are supposed to be a thousand megawatts of contracts on ground-mounted projects, which will lead to a lot of action. The bigger and better wind companies are still getting PPAs. Wind will remain the largest dollar segment.

MR. EAST: In terms of sheer volume, contracted solar and wind projects will carry the day. However, there are a number of buyers who are gearing up to look at assets that are a little bit higher on the risk spectrum like merchant power plants.

MR. COSTENBADER: Many solar firms will start to pick up speed, and some of them will make it and some of them might not, but we see solar as definitely a big area. We are also keen to do biomass projects, but unpredictability of the fuel supply remains an issue.

MR. MARTIN: Let me play devil's advocate for a moment on solar. I moderated a panel discussion at the Solar Power International convention three months ago in San Diego. One of the panelists, a leading tax equity investor, said that financiers cannot figure out how anyone is making money on solar. The numbers don't add up. Reaction?

MR. COSTENBADER: I think solar compares favorably with biomass projects. It is hard to build a new biomass project costing \$4,000 an installed kilowatt with a PPA for 10¢ a kilowatt hour, but solar can work at that price as long as you keep the costs to less than \$4,500 a kilowatt with the section 1603 cash grant and SREC-type incentives.

MR. BRANDT: We are seeing construction costs come in on solar below \$4 an installed megawatt all-in and fully loaded. What that effectively does in Ontario, for example, where they have a feed-in tariff of \$440 a megawatt hour is that even if you can generate electricity only about 1,100 hours a year up in sunny Canada, there is something like \$5 million of net present value for every 10 megawatts of capacity.

### Lessons from 2010

MR. MARTIN: So a lot of action in solar. How would you characterize the M&A market last year? What lessons did you learn from watching the market last year?

MR. EAST: A number of large strategic investors were buyers last year and picked up projects opportunistically. There were few large auctions. Most deals were negotiated privately. It will be interesting to see whether we move back to auctions in 2011. That is generally what happens in a market when the number of potential buyers increases.

MR. MARTIN: Were there any other lessons from 2010?

MR. COSTENBADER: A lot of what happened in 2010 can be traced to \$4 gas. Low natural gas prices changed the dynamics of the market. It hurt renewables and peaking plants.

Another dynamic in 2010 was the way Congress waited until the last two weeks of the year to announce that renewable energy developers would have more time to start construction of new projects to qualify for Treasury cash grants. That created uncertainty and led to a rush to start construction. A lot of developers were probably pretty concerned around December 12 about whether the deadline would be extended.

MR. BRANDT: We were involved with several auctions that ultimately resulted in final bids that were disappointing to sellers and the deals were cancelled. One lesson from 2010 is always put in some kind of an arrangement so that the bankers don't work completely for free.

MR. MARTIN: An important personal lesson.

### Current Buyers

MR. MARTIN: Who are the current buyers? Chinese? Spanish? German? US private equity funds?

MR. BRANDT: We divide up the world between strategics, who tend to be either utilities or large independent power companies, and segment specialists—a company might only be interested in solar, only in wind—on the one side and then we also market to virtually all the financial players.

The big development in terms of new / *continued page 3*

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entrants is pension fund money. The pension funds have set up direct investment arms that now view contracted power projects as an acceptable form of long-term infrastructure investment, and we are seeing lots of that money coming in directly.

MR. MARTIN: Can pension funds really play in a renewable energy market that is so heavily tax driven? They have no tax base against which to use the large government incentives for these projects.

MR. BRANDT: We are working on a structure with a major utility that will provide tax equity alongside the pension funds, and we think the answer is yes, but it is not an easy thing unless you bring your own tax equity.

MR. MARTIN: Let's drill down further into particular market segments. Who are the major potential buyers or equity investors in the wind sector?

MR. BRANDT: I don't know who is really psyched about holdco equity in wind these days. There are some people, who happen to be based in Juno Beach, who would love to consolidate the business if they can buy everything at a discount, but the Europeans with satchels of money who were coming over in 2006 and 2007 have not been as interested more recently in buying portfolios of undeveloped projects.

MR. MARTIN: It seems like the Spanish, Portuguese and Italians are having to conserve cash.

MR. BRANDT: We see the same thing. When we see some of the banks from those countries fund deals out of their South American branches, it is a sure sign that the environment has changed. You mentioned the Chinese. We continue to see the Chinese as players, although they have not closed much and our experience has been that they are still more in a looking mode. The single biggest buyers currently continue to be the private equity funds.

MR. MARTIN: Two of you said you expect the solar market to be hot. Who will be the buyers in that market?

MR. BRANDT: Some manufacturers are buying unbuilt solar projects as a strategy of vertical integration and as a way of deploying product. Otherwise, you have a rational market that is trying to buy to a return and trying to build scale into these businesses. You have some people, like AES Solar and some very well-capitalized companies, that have done it over in Europe and are now trying very hard to diversify in the United States.

MR. MARTIN: Dan East, you are with a private equity fund, and Charlie Costenbader, you are backed by private equity

money in a sense. How do private equity funds play in a sector when the yields for developers seem to be in the high single digits?

MR. EAST: We are focused on putting our capital to work in the development stage where there is a higher return commensurate with the higher risk, but then using our experience and skills to manage the risk.

MR. COSTENBADER: We are also focused on projects that have a little bit more risk or merchant exposure, but then we work on the funding and hedging options to limit the amount of equity that is needed.

MR. MARTIN: Dan East, is the Carlyle Group putting equity or mezzanine debt into the projects you described?

MR. EAST: Our group is a mezzanine opportunities fund. We have a pretty wide mandate focused primarily on the US and Canada, but within that geographic footprint, we can do anything from upstream oil and gas down through power and renewables. There are no carve outs. There are some areas in which we will be more active than others.

MR. MARTIN: Ted Brandt, you mentioned the Chinese as potential buyers. There have been rumors in the market that the Chinese bring exceptionally favorable financing with them. Have you seen any evidence of such financing?

MR. BRANDT: I have seen no evidence. I have heard the same rumors now for about three years, and we keep hearing that such financing is on offer but have not yet seen it.

MR. MARTIN: Has anyone seen any such financing?

MR. COSTENBADER: I agree with Ted on the micro level. However at the macro level, if one believes the media reports, it appears the Chinese keep their currency exchange rate at a lower level than market, which makes their exports cheaper and ultimately gives their equipment manufacturers a pricing edge, at least with the equipment and solar panels that they are exporting to the United States.

## Valuing Projects

MR. MARTIN: I used to keep on my computer screen a curve that showed how value builds in an average wind farm. A project is worth \$X a megawatt when a PPA is signed. It is worth \$Y a megawatt when all the permits have been obtained and the project is ready to start construction. Ted Brandt, any sense where average project values are? You have been running auctions.

MR. BRANDT: The auctions have usually been of operating projects, so let me start with them. The first thing you have to do is figure out how old the project

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is. In 2000, Garrad Hassan changed its methodology for measuring wind. A P50 forecast that was done before 2007 is almost certainly wrong. There was a systematic bias that was something like 10% too optimistic. To get to a value, you also have to look at whether the project is benefiting from investment credits, Treasury cash grants or production tax credits. If it is production tax credits, how much of the subsidy is left? Have the remaining tax benefits already been transferred to a tax equity investor?

Turning to a new project, what we are seeing is that at the time of full permitting, transmission connection and a PPA, the typical such project sold at auction is getting around \$100,000 a megawatt. That is before anything is constructed and when all the construction and equipment costs remain to be paid. Projects with power contracts that were signed in late 2009 or have seen the projected capital cost drop compared to what was assumed in the power contract might have a net present value approaching \$300,000 or higher per megawatt.

MR. MARTIN: Turning to utility-scale solar, what are such projects worth today? How much do you have to pay to purchase a contracted project that is still under development?

MR. BRANDT: A US project would sell to about an 8% yield in today's market. In Canada, what they typically do is ignore depreciation and carry it forward, and unless you've figured it out, Keith, there is no tax equity market up there. The discount rate for the calculation tends to be the same as in the US. That is an unleveraged after-tax yield.

MR. MARTIN: That is for solar utility-scale PV. Would a buyer in the current market use the same rate for wind?

MR. BRANDT: Wind is a bit higher.

MR. MARTIN: Why?

MR. BRANDT: The cash flow is more variable. The debt tends to carry a little higher premium in wind than in solar. A buyer would price to an 8.5% or 9% yield.

MR. MARTIN: Where were those rates last year?

MR. BRANDT: I can tell you from running a bunch of auctions that the differences between buyers and sellers almost always come down to different views of the wind forecasts or operating costs. The seller insists that the project will operate at a 35% capacity factor while the buyer is only willing to assume 31%. Rates of return have been pretty constant since the 2008 meltdown, although they have edged up somewhat during the liquidity crunch in early 2009.

MR. MARTIN: Charlie Costenbader, you have spent a lot

of time looking at biomass projects. What do you think a developer can get for selling a biomass project that is still in the development stage?

MR. COSTENBADER: It depends on a number of things. The fuel story is always key. There are few tipping fees or tolling agreements in this market. The return requirements are higher than 8% because of the fuel risk. The return a buyer will want also depends on the technology. Circulating fluidized bed is usually preferred. The next three items on the diligence checklist are the projected operating costs, the risks of an outage, and the management team.

MR. BRANDT: For an existing biomass facility, it is fuel first and operational track record probably second.

MR. MARTIN: What discount rate would the typical buyer use to value a biomass project?

MR. COSTENBADER: It depends on where you are in the asset life cycle: development versus construction versus operations. Development is generally north of 25% as an overall return for a developer, possibly even higher. Construction is between 15% and 25%, depending on whether you have an EPC wrap and good permit plan.

MR. BRANDT: Those are leveraged returns?

MR. COSTENBADER: Unleveraged.

MR. COSTENBADER: Once the plant is operating and has a PPA, the rate is down around 7% to maybe 12%.

## Development Pipelines

MR. MARTIN: In the past, panelists on this type of panel have said that the market doesn't really assign any value to large pipelines of projects that are under development, but that are not expected to be completed in the next year or two.

MR. BRANDT: Unfortunately, I think that is still true. The tangible assets, which would include signed PPAs, tend to be valued. Buyers typically reimburse the developer for hard expenses and then it is an earnout above that. That is pretty much the formula for how development pipelines tend to sell. That being said, there are still a few exceptions—for example, if you have a fully permitted project in New York, a good area of Pennsylvania, New England or California, even without a PPA but with a position in the transmission queue—the project would sell for more than just reimbursement of costs.

MR. MARTIN: So in states where it is hard to connect to the grid or to get permits to build, passing those milestones builds value, even if the project is not ready to start construction.

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MR. BRANDT: That's right. I don't know that it is tied to time as you are suggesting in your question. As the developer checks various boxes—site lease, permits, PPA, queue position, network upgrade studies—value builds.

MR. EAST: Deal pipelines are nice, but they can also be a distraction. We want the developer to get the project that is farthest along or in the best position to execute across the finish line. His ability to do that may be diminished if he is chasing all these other projects at the same time.

MR. MARTIN: It is not a selling point for a developer to say the company has 40 projects in the works, especially if the company has only a handful of employees. You want the company to have a laser-like focus to get the first project done.

Ted Brandt, you mentioned the typical structure is some money down to reimburse costs and then nothing else is paid until the project is completed. The balance is in the form of an earnout. Nothing further is paid until completion?

MR. BRANDT: Not everything is done that way. Some additional money might be paid when a PPA and interconnection agreement are signed. There might be other milestones. The payments might serve as incentives to keep the developer focused. If the buyer plans to keep the management team in place as well as acquire a development portfolio, then the deal is more likely to be structured with a series of incentive payments. There are other deals where a big company basically says, "Look, you're nice guys but thanks for getting the PPA signed. We'll take it from here."

MR. EAST: Even in the former case, the development fee premium usually isn't paid until after the facility is up and operating.

MR. MARTIN: Is it possible to give a rule of thumb about how large that premium is or does it depend on the particular transaction?

MR. BRANDT: It depends. If the project is finished and ready for prime time, it will be worth more. On the other hand, it may be like the guy that says he caught a bear as he is running through the camp with a bear chasing him. "I've got a PPA, but I need \$20 million." That's a different valuation discussion. [Laughter]

MR. MARTIN: Is it typical for a developer to keep a carried interest and, if so, how much?

MR. COSTENBADER: We have a project now that we are trying to sell. We have an interested buyer, and we have decided that we would like to have a carried interest in the

project. There is a bit of a valuation gap, so a carried interest is one way to bridge it. Sometimes the carried interest works. It requires a lot of brain damage keeping track of it going forward. Sometimes people like to cash out and be done with it. I haven't seen any particular pattern.

MR. EAST: It is a tool in the toolbox to bridge valuation differences.

MR. MARTIN: Does the carried interest start at X% at completion and then ramp up as progressively higher returns are reached by the buyer?

MR. EAST: It could take a number of forms. There is no one approach to such interests in the market.

MR. COSTENBADER: If you're negotiating 1%, it is not worth the legal costs. Five or 10% would be more typical.

MR. BRANDT: It really depends on the circumstances. Most big companies hate the notion of having partners, and so the big buyers will typically resist carried interests. They want to pay the money, get on to the next thing and run the project as part of their fleet. A carried interest is more common in deals where the buyer is a private equity fund. Even in those deals, we often hear from a developer, "If I'm getting \$11 million from this deal, I'd like to put \$2 million back in and be a partner," but almost always when we check again at the end of the process, the developer says, "Nah, I'd rather have the cash."

### Where to Probe

MR. MARTIN: I'm down to my last question. If you are a buyer, where are you most likely to find a problem with a project that says you are wasting your time? What one thing is it best to probe first?

MR. EAST: We tend to drill down initially on the technical aspects and, by that I mean, whether the developer has a good permit plan and a good engineering plan. If the developer has not engaged a third party permitting consultant and has not engaged a Black & Veatch or similar company to do an engineering review, then that is a double red flag for us. It says the company has not spent the earnest money required to prove the project. The developer hasn't done his basic homework.

MR. COSTENBADER: On biomass, it is fuels first and operational track record to the extent that the facility is up and operational. On wind, it is studying the wind data and any complexities in the PPA.

MR. BRANDT: When we screen projects, we look for a lot of things, but the problems are most / *continued page 6*

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likely to turn up with permitting and transmission. Lots of potentially great projects, particularly in the upper Midwest, are having trouble with transmission. If the project is in a place like California or in some parts of the northeast, you have a combination of NIMBY and environmental issues, and the difficulty getting the project permitted cannot be underestimated.

MR. EAST: Part of the transmission issue is where the offtaker is taking delivery of the electricity and whether there is congestion in that location that might lead to congestion charges that the project will have to bear or whether the

project risks being curtailed because of inadequate capacity on the transmission lines to take the electricity to the grid.

MR. MARTIN: Ted Brandt, coming back to you on transmission, is the problem in the Midwest inability to connect to the grid within a reasonable time? Congestion charges? Curtailment? Which?

MR. BRANDT: It is situation specific and ISO specific. I don't really have one way to talk about it other than to say we look for the developer to take us through the transmission story, and we feel at this point that we have had enough experience to judge whether it is cogent. ☺

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