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Mobilizing Public Markets to Finance Renewable Energy Projects: Insights from Expert Stakeholders

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June 2012

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Executive Summary

Financing renewable energy projects in the United States can be a complex, time consuming, and expensive process. Currently, most equity investment in new renewable power production facilities is supported by tax credits and accelerated depreciation benefits, and is constrained by the pool of potential investors that can fully use these tax benefits and are willing to engage in complex financial structures.[1] For debt financing, non-government lending to renewables has largely been provided by foreign banks that may be under future lending constraints due to economic and regulatory conditions.[2]

To discuss these and other renewable energy financing challenges and to identify new sources of capital to the U.S. market, two roundtable discussions were held with renewable energy and financing experts in April 2012. This report summarizes the key messages of those discussions and is designed to provide insights to the U.S. market and inform the international conversation on renewable energy financing innovations.

According to roundtable participants, securitization, where illiquid financial assets are transformed into tradable investment products, provides a potentially useful mechanism by which to attract investment from as-yet untapped sources of capital such as institutional (e.g. pension), retail, and sovereign wealth funds. Expanding the pool of capital and increasing the liquidity of the investment class should, in theory, drive down renewable energy financing costs and significantly expand opportunities for deployment.

However, the market currently perceives an array of risk-related barriers to renewable power project securitization. Experts participating in the roundtables widely agreed that institutional and other long-term investors are reluctant to invest, in a significant manner, without better quantification and mitigation of two primary risk factors: long-term power production capability and customer, or off-taker, default. These risks, if better understood through improved and more accessible datasets, could be mitigated via credit enhancement strategies or accurately priced into the securitized investment.

Roundtable participants also agreed that investment securitization requires standardization of contractual documents and project evaluation procedures. Standardization may offer the opportunity to minimize due diligence requirements of institutional and other investors, which is necessary for wide-scale and rapid investment. Other securitized assets such as auto loans and credit cards are highly liquid due to the standardization of procurement documents and comprehension of underlying asset values.

Finally, participants agreed that it is important to integrate financial or securitization solutions in the renewable energy sector with complementary efforts in the energy efficiency space.

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[1] See Mendelsohn, M.; Kreycik, C.; Bird, L.; Schwabe, P.; Cory, K. *The Impact of Financial Structure on the Cost of Solar Energy*. Golden, CO: National Renewable Energy Laboratory, 2012. Accessed April 19, 2012: http://www.nrel.gov/docs/fy12osti/53086.pdf.

[2] See Mintz Levin. "Renewable Energy Project Finance in the U.S.: An Overview, 2010-2013 Overview and Future Outlook." 2011. Accessed April 19, 2012: http://www.mintz.com/media/pnc/5/media.2775.pdf.

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Background

On April 5, 2012, and April 13, 2012, two renewable energy investment roundtables were convened in Stanford, California, and New York City, New York, respectively. These small gatherings, collectively referred to as the "Renewable Energy Investment Roundtables," probed broadly into the issues that currently inhibit renewable energy investment in the United States. The goal of these discussions was to generate insight on possible innovative financing options that could expand lower-cost financing for renewable electricity generation in the United States and spark international conversation on renewable energy financing practices.

The Stanford and New York City Renewable Energy Investment Roundtables consisted of 4–5 hours of in-depth facilitated discussions. To encourage an open dialogue, these discussions were held under Chatham House Rule where participants may report the information discussed but not attribute that information to any one individual or organization.

The roundtables focused on critical barriers to new financial market innovations and the steps to consider for implementation. Particular attention, however, was paid to options **not requiring legislative actions or any new Congressional authorities**. Additionally, these discussions centered primarily on commercially available renewable energy technologies.

The 38 participants who attended the roundtables consisted of industry thought leaders in renewable energy finance. These participants were selected to represent a diverse cross-sampling of renewable energy finance stakeholders, such as:

- Venture capital investors
- Renewable energy developers
- Large commercial banks
- Rating agencies
- Union investment offices
- Universities and research institutions
- Non-profit clean energy organizations
- Private equity investors
- Industry counsel and accountants
- Mid-size regional banks
- Insurance companies
- Investment management companies
- Department of Energy
- National laboratories.

A sampling of key questions posed to the participants included:[3]

- What innovations can be brought to financing utility-scale projects to significantly expand the array of potential investors and lower the financing costs?
- Can a distinct asset class for renewable energy be developed to increase the pool of available capital by targeting institutional and retail investors?
- Why have no public financial market mechanisms been created for investing in renewable energy generation projects?
- Which potential solutions provide the most promising or least complex path to access additional sources of large scale investment in the short and medium term?

[3] See Appendix for a detailed agenda from the Stanford discussion; the New York City discussion generally followed this agenda.

Current Insights from Renewable Energy Project Investment Roundtable Participants

Several recurring themes were discussed that characterize the current state of the market and challenges in financing renewable energy in the United States. The statements below synthesize the key messages expressed by the participants in the renewable energy investment roundtables. **It is important to note that these statements are intended to capture the more widely agreed upon points of emphasis in the discussions only. They do not, however, necessarily represent a consensus among all participating parties or the specific opinion of any one individual.**

These include, but are not limited to, the following broad categories: Sources of Capital, Investor Considerations, and Data and Standards.

Sources of Capital

- ***For renewable energy investments, there are limited opportunities to raise capital sourced from a public financial market.*** Roundtable participants strongly agreed that renewable energy project sponsors generally rely on private, commercially sourced forms of financing. This is true even for historically proven renewable energy technologies such as utility-scale wind or crystalline silicon solar photovoltaic systems. Consequently, the cost of this type of capital is comparatively high relative to publicly sourced capital, because supply is constrained and concentrated among of select number of financing providers.
- ***Retail investors have limited opportunities to invest in renewable energy projects.*** Renewable energy investment opportunities for an individual investor are largely confined to investments in publicly traded companies. Opening alternative financial mechanisms such as master limited partnerships (MLPs) or real estate investment trusts (REITs) could enable investment through more liquid and transparent investment vehicles.[4,5] However, MLP application would likely require legislative changes; REIT application may be possible through a clarification from the Internal Revenue Service.
- ***Tax equity investment for renewables, while economically valuable, is limited in supply, creates uncertainty, and can be expensive to structure.*** Although the relative benefits and challenges of tax equity investment are well documented elsewhere,[6] participants repeatedly discussed the difficulties of financing renewable energy when supported by tax-driven

[4] MLPs are a specific business structure consisting of limited ownership units that can be traded on a public exchange. For more information on the application of MLPs to renewable energy, see Sherlock, M.F.; Keightly, M.P. "Master Limited Partnerships: A Policy Option for the Renewable Energy Industry." Congressional Research Services, 2011. Accessed April 19, 2012: http://www.ieeeusa.org/policy/eyeonwashington/2011/documents/masterlmtdpartnerships.pdf.

[5] REITs are tradable securities designed to enable investment in income-producing property. To find out more about utilizing REITs in financing renewable energy, see Mendelsohn, M. "Tapping the Capital Markets: Are REITs Another Tool in Our Toolbox." NREL, 2011. Accessed April 19, 2012: https://financere.nrel.gov/finance/content/capital-markets-reit-real-estate-investment-trust-renewable-energy-project-finance-prologis-KIMCO.

[6] See Mendelsohn, M.; Kreycik, C.; Bird, L.; Schwabe, P.; Cory, K. *The Impact of Financial Structure on the Cost of Solar Energy*. Golden, CO: National Renewable Energy Laboratory, 2012. Accessed April 19, 2012: http://www.nrel.gov/docs/fy12osti/53086.pdf.

mechanisms. Limitations in the transferability of tax incentives were identified as a major barrier to investment in renewable energy from a broader, more diverse pool of investors.

- ***Participants suggested that foreign and domestic commercial banks, a primary source of financing for renewables in the United States, are highly capital constrained at present and may have limited appetites for long-term investments.*** Furthermore, stricter financial regulations (such as Dodd-Frank, Basel III, and Solvency II) could impede capital flowing to renewable projects that have investment periods of 20 or 25 years. Participants also suggested that the new regulations could limit long-term lending by European banks and provide an incentive for banks to move long-dated renewable energy assets off their books.
- ***Utility investment represents a relatively untapped source of capital and could be assessed further.*** Utilities are a significant source of low-cost capital and are creditworthy off-takers of power. To date, accounting regulations surrounding utilization of the investment tax credit (ITC) and accelerated depreciation have reduced the economic value of these incentives to utility-owned systems. However, the planned 2017 reduction of the ITC from 30% to 10% could negate some of that competitive disadvantage. Participants suggested utility ownership and financing of renewable energy systems should be included in future assessments.[7,8]

Investor Considerations

- ***Financing strategies for distributed versus utility-scale developments are vastly different and will likely require distinct solutions.*** Because distributed systems are more common and easily bundled by installers, the roundtable participants considered them to be more easily pooled and securitized. Utility-scale systems would likely be more difficult to securitize, although standardized contracts, interconnection processes, and other relevant documentation could mitigate utility and financier due diligence requirements.
- ***Although reportedly interested, most U.S. institutional investors have historically avoided significant renewable energy investment.***[9] The current mechanisms for investing in renewable energy development do not closely resemble traditional investments by large institutional investors (e.g., pension funds, select insurance companies, family offices, private wealth funds, and unions). Many participants reported that institutional investors are increasingly indicating their desire to invest in long-dated, climate-related investments but have been slow to invest in projects outside of their traditional risk and return comfort zone.
- ***Institutional Investors' minimum investment requirement eliminates all but the largest renewable energy projects from consideration***. Project capital is highly fragmented between sponsor equity, tax equity, and debt, which may reduce the institutional investor's contribution. Alternatively, bundling several mid-sized renewable energy projects, or aggregating a large volume of small projects, may offer some institutional investment

[7] See Scharfenberger, P. "'Normal' Accounting Rules Limit Utility Ownership of Renewable Energy Projects." NREL, 2011. Accessed May 8, 2012: https://financere.nrel.gov/finance/content/normal-accounting-rules-limit-utility-ownership-renewable-energy-projects.

[8] For more information on the federal ITC see the Database of State Incentives for Renewables and Efficiency. http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US02F&re=1&ee=1.

[9] For example, see Croce, D.; Karminker, C.; Stewart, F. "The Role of Pension Funds in Financing Green Growth Initiatives." 2011. Accessed April 19, 2012. http://www.oecd-ilibrary.org/docserver/download/fulltext/5kg58j1lwdjd.pdf?expires=1334938167&id=id&accname=guest&checksum=D1C8BA9F28BF5FC39138ED38ECBD7726

opportunities. Absent greater levels of standardization, however, such bundling would significantly increase the complexity and transaction costs of the arrangement.

- ***Investors may be wary of potential insolvencies among manufacturers of renewable energy generation technology due to intense international competition.*** Low market capitalization, poor debt-equity ratios, fierce competition, and uncertain policy outlooks put many manufacturers of renewable energy generation equipment under severe financial stress. Doubts as to manufacturers' continued existence affect investor faith in their technical support and the real value of their product warranties.
- ***The risk and return profile of a renewable energy project investment may not conform well to traditional energy investment classification.*** Renewable energy projects are capital intensive but have low operating costs and zero fuel costs. This investment profile was suggested to more closely resemble financial assets such as a fixed-income investment (e.g., a bond), an infrastructure investment (e.g., a toll road), or a real estate investment. Education about the risk and return profile of renewable energy projects may allow institutional investors to consider these opportunities more broadly.

Data and Standards

- ***The lack of historical, publicly available data addressing renewable energy risks is one of the greatest challenges in engaging untapped capital***. In particular, there is an immediate need for publicly available performance data for all renewable energy technologies both within and outside of equipment warranty periods. Additionally, historical data on default rates by the energy purchaser was noted as critical to assess creditor risks and develop solutions through financial innovation.
- ***There is little information available on the valuation of renewable energy generation assets after their eligibility for tax incentives ends.*** Most renewable energy plants are assumed to have a useful life of 20 years or more, often backed by manufacturer guarantees. This time span is significantly longer than a project's eligibility for tax benefits (e.g., tax credits and accelerated depreciation). The expiration of tax incentives increases the transferability of assets and could open the market to new types of investors, assuming the availability of reliable information and criteria for asset valuation.
- ***For renewables, there is no homogeneity among financial transactions, which greatly increases structuring costs and the due diligence requirements for each investment.*** Moreover, there is no standardization for contractual design and wording. In the absence of a standardization mandate—for example, by state public utility commissions (PUCs)—electric utilities tend to use their own power purchase agreements (PPAs), which differ widely in their terms.
- ***The credit rating agencies have a large role to play in the development of new financing opportunities for renewables.*** A "turn-key" process for acquiring an asset rating could help the development of institutional investors. It was suggested that institutional investors do not have the time for the extensive due diligence that the rating agencies can provide.

Looking Forward: Potential Vehicles to Enable Capital Investment

Roundtable experts indicated a strong need for highly liquid financing vehicles, a process generally referred to as asset securitization. Through securitization, non-tradable or illiquid financial assets are transformed into tradable investment products. Securitization enables certain asset classes, such as automobiles, real estate, and pipelines, to attract financial capital by spreading risk and minimizing transaction costs associated with the purchase and sale of ownership shares. Asset-backed securities operate efficiently in many asset classes and could potentially tap vast sums of capital for renewable energy projects, while avoiding the challenges associated with the mortgage-backed securities which are widely seen as a major cause of the financial crisis of 2008–2009.[10]

Roundtable participants referred to financing renewable energy projects through various liquid vehicles currently available in the market for investment in other assets. These vehicles potentially include REITs, MLPs, asset-backed securities, municipal and infrastructure bonds, and other facilities. These mechanisms are fairly liquid (i.e., more easily bought, priced, and sold among the investor community) and may match the long-term return requirements of pension funds and other institutional investors.

But significant regulatory and market barriers remain to the application of these mechanisms to renewable energy project finance. For example, MLPs are generally considered not applicable to solar and wind project development (the MLP-enabling legislation refers to depletable natural resources).[11] REITs may be available to solar property if the property is bundled with real assets or if solar properties (or some portion thereof) are specifically ruled on as real property.[12]

Roundtable participants also asked whether institutional investors would invest in fixed-income portfolios of renewable energy projects. Institutional investors are not completely new to the industry, as there has been some, albeit limited investment through debt offerings to date. Importantly, participants raised concerns with classification of the renewable energy portfolios that may be created through these vehicles and if they would fit neatly within institutional investors' investment criteria, existing asset classes, and risk and return expectations. It was suggested that ongoing risks—for example, those caused, by uncertainty over transmission access rights—will remain significant barriers to liquid vehicle success.

Municipal infrastructure investment (e.g., by municipal or port authorities) was also offered up as a potential vehicle. For example, the mayor of the City of Chicago introduced the Chicago Infrastructure Trust, where private and municipal funds would be used in an innovative manner

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[10] For example, Crotty, J. "Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'New Financial Architecture.'" *Cambridge Journal of Economics,* 2012. Accessed April 19, 2012: http://cje.oxfordjournals.org/content/33/4/563.full.

[11] See Sherlock, M.F.; Keightly, M.P. "Master Limited Partnerships: A Policy Option for the Renewable Energy Industry." Congressional Research Services, 2011. Accessed April 19, 2012: http://www.ieeeusa.org/policy/eyeonwashington/2011/documents/masterlmtdpartnerships.pdf.

[12] See Sturtevant, J. "THE S-REIT: An Investment-Driven Solution to Solar Development Problems." The George Washington University Solar Institute , 2010. Accessed April 19, 2012: http://solar.gwu.edu/Research/Sturtevant_S-REIT.pdf

to raise investment in support of energy efficiency projects.[13] Moreover, municipal bonds have long been used to finance infrastructure projects.[14] Increasing their application to renewable energy investment would allow municipalities to lend their balance sheets and thus reduce the cost of capital.

Two additional points of discussion were the topics of green banks (which could enable the securitized market to grow) and the integration of financial or securitization innovations in the energy efficiency space.

[13] For more information, see "Mayor Emanuel Announces Chicago Infrastructure Trust to Invest in Transformative Projects." City of Chicago, 2012. Accessed April 19, 2012: http://www.cityofchicago.org/content/city/en/depts/mayor/press_room/press_releases/2012/march_2012/mayor_emanuel_announceschicagoinfrastructuretrusttoinvestintrans.html.

[14] See also Bolinger, M. *Financing Non-Residential Photovoltaic Projects: Options and Implications*. Berkeley, CA: Lawrence Berkeley National Laboratory, 2009. Accessed April 19, 2012: http://eetd.lbl.gov/ea/EMP/reports/lbnl-1410e.pdf.

Potential Solution Ideas and Areas for Future Investigation

Roundtable participants discussed potential areas of analysis and market changes that may improve the ability of renewable energy developers to raise capital at low cost and with modest transaction fees. Multiple options were considered, but four key conceptual themes were raised repeatedly and agreed upon by a large majority of the roundtable:

1. **Improve availability of data so that the risks of renewable energy investment can be better understood and mitigated.**

Data and knowledge are critical to risk mitigation. The industry requires larger and more comprehensive datasets to enable improved evaluation of risk and the pricing of products and services that mitigate such risks. Participants referred to a wide array of potential data that can clarify risk perception, including but not limited to:

- Actual equipment performance versus predicted
- Actual energy losses versus predicted
- Actual net production versus predicted
- Actual operation and maintenance costs versus predicted
- Actual customer payment/default versus predicted
- Actual useful life of asset versus manufacturer guaranteed or predicted

There was general agreement that the market could benefit from robust databases that organize historical operating and payment data. To the extent possible, the databases could represent broad geographic regions (and thus, weather conditions) of the country, be easily accessible to the public, and be searchable with a wide array of relevant criteria.

NREL, Sandia National Laboratories, and other organizations have recently started an initiative to collect and organize large quantities of data relevant to module and project performance as well as customer default and payment history. Standard reporting—given that it complies with issues of confidentiality and does not jeopardize competiveness—will be crucial to successful implementation.

2. **Convene "standardization for securitization" process to harmonize project documentation and evaluation practices.**

Roundtable participants remarked that "standardization" was critical to attracting capital, but the concept was not entirely fleshed out. Overall, the parties agreed that the current due diligence process on a one-off project basis was cumbersome and inconsistent with a more liquid, open investment environment. Standardization is perceived as a fundamental element to reducing the due diligence workload, as it may allow for consistent project documentation, evaluation processes, and risk assessment elements.

Two types of standardized documents were referred to by roundtable participants:

- U.S. Department of Housing and Urban Development (HUD) documentation, which standardizes the evaluation of prospective residential homeowners with a consistent set of income and other criteria[15]
- International Swaps and Derivatives Association, Inc's (ISDA) master agreement, which is a commonly used master contract for over-the counter derivative transactions.[16]

Several participants referred to standardized PPAs—the power contract between the project owner/operator and the off-taker or power purchasing entity (i.e., a utility or end-use customer). Standardized PPAs are used in certain states, including California and Arizona, but have not gained prominence across broader regions due to the fact that state-specific rules and regulations—implemented by state legislatures and public utility commissions—may require unique contract attributes. Roundtable participants agreed that standardized PPAs could only apply to regions with consistent PUC contractual requirements, and even so, may require unique securitized portfolios by customer sectors (residential, commercial and industrial, and utility-scale), technology, or other factors. Nonetheless, standard PPAs could greatly reduce the innumerable contract variants currently applied in the market, significantly mitigating the due diligence requirements of potential investors.

Attendees encouraged convening entities to work with the National Association of Regulatory Utility Commissioners (NARUC) and individual leading state PUCs and utilities to assess the opportunities for contract standardization.

It was also suggested that standardization could be applied across a broader selection of relevant documents that, again, could reduce the due diligence requirements of potential investors. Documents that could be standardized include: partnership or lease arrangements, and interconnection and operating agreements (to the extent a third-party operator is involved).

Resource and project evaluation were also referenced as a potential goal of standardization. Roundtable participants indicated extensive due diligence was required to confirm the claimed natural resource of a given site (e.g., the quality of the solar resource for a given project location). Other aspects of the financial projections included power production based on system design factors such as azimuth and tilt, DC-AC losses (due to inverter efficiency, wiring, and other "derate" factors), and financial metrics assessed in the evaluation process.

3. Utilize detailed rating agency evaluation criteria.

Rating agencies are an important overseer of the industry and a potential gateway to expanding the pool of capital. Several rating agencies have offered guidance to the industry in establishing bond offerings for larger projects and a securitized debt instrument pooling smaller projects, respectively.[17]

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[15] Note that the HUD documentation that standardizes the evaluation of prospective residential homeowners was discussed in general terms; however, no specific document was referenced. For more information, see http://portal.hud.gov/hudportal/HUD.

[16] See the 2002 ISDA Master Agreement at http://www.isda.org/publications/isdamasteragrmnt.aspx.

[17] For example, see Dennis et al. "Rating Criteria for Solar Power Projects." Fitch Ratings, 2012. Accessed April 19, 2012: http://www.fitchratings.com/web/en/dynamic/fitch-home.jsp. and Giudici, A.J.; Kim, J.; Yagoda, B. "Will

Participants noted the Topaz bond offering—which successfully raised $850 million in an oversubscribed first debt offering and expects to raise total debt capital of roughly $1.2 billion—represents a valuable milestone in the industry project capitalization.[18] Participants were also quick to recognize, however, that Topaz was uniquely supported by Mid-American Energy, part of Warren Buffett's Berkshire Hathaway investment platform, and would be difficult to replicate without such a strong counter-party and/or the construction cost warranty offered by Mid-American.

Still, roundtable participants indicated uncertainty of rating agency criteria applications in atypical cases (e.g., new technologies, project owners, or credit enhancements offered). Many of the participants were unaware that multiple agencies have published criteria on how they evaluate renewable energy assets at the utilty scale, and that the rating process continues to evolve. Participants suggested that the rating agencies continue to open their risk-assessment practices for public scrutiny, and if possible, harmonize their guidance offerings and specified criteria to provide the industry with a clear path to accessing capital markets successfully.

4. Educate investors.

Finally, roundtable participants indicated that institutional and other potential investors new to the renewable energy industry continue to have critical gaps in the comprehension of renewable energy technologies, financial structures, certainty of cash flows, and other aspects relevant to their investment participation. Educational outreach measures could include a series of regional roundtables that build on the aforementioned insights and seek to engage a broad spectrum of potential investors, such as public, institutional, pension, retail, sovereign wealth funds and others.

Each of these four classes of potential solutions will require coordination among the various stakeholders in renewable energy financing. Going forward, specific and frequent discussions will be necessary to address some of the challenges and possible solutions highlighted in this report.

Securitization Help Fuel The U.S. Solar Power Industry." Standard & Poor's, 2012. Accessed April 19, 2012: http://www.standardandpoors.com/ratings/articles/en/eu/?articleType=PDF&assetID=1245327716473.

[18] For more information on the Mid-American/Topaz offering, see Lowder, T. "MidAmerican Takes Solar Out to Wall Street." NREL, 2012. Accessed April 19, 2012: https://financere.nrel.gov/finance/content/midamerican-solar-thin-film-utility-scale-project-Topaz-550-MW-megawatt-bond-financing.

Appendix: Renewable Energy Investment Roundtable Agenda

Stanford University (Note that the New York City discussion generally followed this agenda)
April 5, 2012
9 a.m. – 12:30 pm

9:00 - 9:15	Welcome Introductions Context Setting
9:15 - 10:15	Discuss Key Questions and Challenges *All* 1) What are the key challenges to broadening and deepening the renewable energy investment pool? 2) What are the primary concerns that may currently inhibit investment in renewable energy? 3) What key pieces of information or risk mitigants are needed to communicate and characterize the merits of renewable investment? 4) Why haven't investors created a public financial market for investing in renewable energy generation projects? 5) Can a distinct asset class for renewable energy be developed to increase pool of available capital by targeting institutional and retail investors?
10:15 - 10:30	Brainstorm/Workshop Possible Solutions (No discussion) *All* 1) What mechanisms can the renewable energy sector explore to engage untapped capital from institutional and retail investors?
10:30 - 10:45	Break
10:45 - 11:45	Discuss Possible Solutions *All* 1) What securitization or asset class creation structures are best applied to the wide variety of renewable projects seeking investment capital? 2) What are the relative merits and challenges to each approach? 3) What evolutionary steps are required to develop the top approaches? 4) How can fund managers target the lower risk/return spectrum of the value chain that corresponds with renewable energy generation investment? 5) What would the fund management compensation/governance structure look like?
11:45 - 11:50	Gather Lunch and Quick Break
11:50 - 12:30	Wrap-up Over Lunch *All* 1) What mechanisms warrant significant further investigation among investors, intermediaries, government officials, and industry experts? 2) Which options provide the path of least resistance? 3) Which options have the greatest potential to increasing capital? 4) What are the next steps in conveying the messages expressed today?