

# **Webinar on the U.S. Department of Energy Loan Guarantee Program for Clean Energy Manufacturing and Generation Projects**

Hosted By :  
The Northeast-Midwest Institute  
The Revitalizing Older Cities Congressional Task Force  
The Congressional Urban Caucus



December 16, 2009

# About the Host Organizations

- **The Northeast-Midwest Institute** is a Washington-based private nonprofit and nonpartisan research organization dedicated to economic vitality, environmental quality, and regional equity for the 18 Northeastern and Midwestern states. For more information: [www.nemw.org](http://www.nemw.org)
- **The Revitalizing Older Cities Congressional Task Force:** Members of Congress sharing an interest in restoring prosperity to America's great historic industrial cities have created the ROC Task Force to exchange legislative ideas and create effective policy that will lead to the rejuvenation of communities most impacted by population loss, lack of traditional employment opportunities, and overall economic disinvestment.
- **The Congressional Urban Caucus:** The mission of the Urban Caucus is to bring together Members who represent the nation's metropolitan areas. These members aim to create a roadmap for investment in our nation's urban communities by fostering discussion about the health of metro areas through policy forums, legislative proposals, and advocacy.

**U.S. Department of Energy  
Loan Guarantee Program for Clean Energy  
Manufacturing and Generation Projects**

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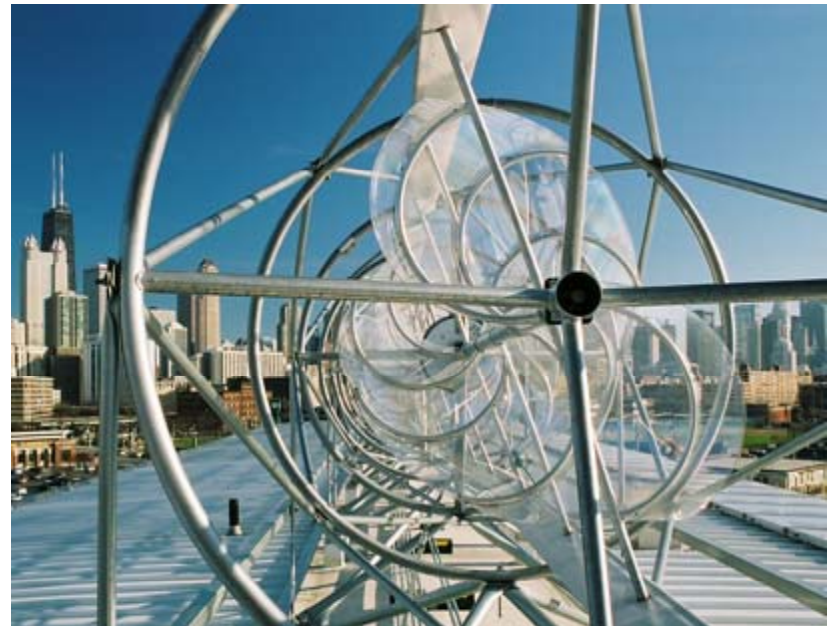
# Goals of the DOE Loan Guarantee Program

- Aggregate loan guarantee capacity of \$100 Bln with the overall goals of economic growth, environmental improvement, and a more stable and secure energy supply.
- LGP has parts, Sections 1703, (2005) and 1705 (ARRA, 2009):
  - Accelerate the manufacture and commercial use of new or improved clean energy technologies (1703)
  - Accelerate the manufacture and deployment of clean energy technologies already shown to be commercially viable (1705) in projects which are shovel-ready by 9/30/2011

# Section 1705 of the Recovery Act

1705 Program: authorized/funded by Recovery Act for renewable energy generation projects, related manufacturing facilities, electric power transmission projects and leading-edge biofuels projects **that will be shovel-ready by 9/30/2011.** At least 3 solicitations from DOE for use of the program:

- Transmission Infrastructure Investment Projects Solicitation issued July 29, 2009
- 1<sup>st</sup> Solicitation under Financial Institution Partnership Program (FIPP) for generation projects issued October 7, 2009
- 2<sup>nd</sup> Solicitation under FIPP for facilities manufacturing renewable technologies and/or components solicitation not yet released.



# Section 1705 of the Recovery Act, Continued

Temporary program with \$4 billion available to pay for the credit subsidy costs to support approximately \$48.6 billion in loans

- Except for transmission projects, guarantees must be applied for in FIPP by "lender-applicants," which can be either commercial financial institutions, or public or non-profit Development Finance Institutions (DFOs)
- Requires unguaranteed hold by lenders-applicants
- No minimum size; no maximum size but for development finance organization (DFO) lender applicants, transactions over \$100 MM require additional technical/underwriting assistance



# EPAct Title XVII Loan Guarantee Programs

Program	Purpose	Credit Subsidy	Fees	Criteria and Eligibility	Lenders
<p><u>Sec. 1703</u></p> <p><b>Innovative Technologies Loan Guarantee Program</b></p> <p>Permanent</p>	Issue Loan Guarantees to support early commercial use of advanced clean energy technologies in the United States	Self-Pay by applicant	Recover all costs from applicant through fee structure which includes: <ul style="list-style-type: none"> <li>• Application Fees</li> <li>• Facility Fees</li> <li>• Maintenance Fees</li> <li>• <u>Credit Subsidy Fees</u></li> </ul>	<ul style="list-style-type: none"> <li>• Avoid, reduce or sequester air pollutants</li> <li>• Reasonable assurance of repayment</li> <li>• Employ new or significantly improved technologies in the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• Applicants for less than 100% guarantees must be funded by eligible lenders other than the Federal Financing Bank (FFB).</li> <li>• 100% guarantees must be funded by FFB.</li> </ul>
<p><u>Sec. 1705 Recovery Act</u></p> <p><b>Commercially Available Technologies Loan Guarantee Program</b></p> <p>Temporary</p>	Issue Loan Guarantees to certain renewable, advanced biofuel and electric power transmission projects adversely impacted by the significant reduction of commercial credit in the marketplace.	Appropriated \$6B with a \$2B reduction for “cash for clunkers” resulting in \$4B to pay for the credit subsidy costs to support approx \$48.6B in loan guarantee authority	Same as above, <u>except for NO credit subsidy</u>	<ul style="list-style-type: none"> <li>• Avoid, reduce or sequester air pollutants</li> <li>• Reasonable assurance of repayment</li> <li>• Compliance with Davis Bacon Wage Requirements</li> <li>• <b>Must commence construction by Sept 30, 2011</b></li> </ul>	Eligible Lenders

# 1703 + 1705: Up to at least \$99.6 Bn in Capacity

FY 2007	FY 2008	FY 2009 Appropriation	FY 2009 Recovery Act
<p><b>\$4.0 billion Available until Committed</b> (Credit Subsidy – Self Pay)</p>	<p><b>\$38.5 billion Available until Committed</b> (Credit Subsidy – Self Pay)</p>	<p><b>\$8.5 billion Available until Committed</b> (Credit Subsidy –Self Pay)</p>	<p><b>Approximately \$48.6 billion</b> Expires Sept 30, 2011 (Appropriated Credit Subsidy)</p>
<p><u>Breakdown</u></p> <p>No carve-out stipulated by Congress</p> <p>Eligible: renewable and fossil projects</p>	<p><u>Breakdown</u></p> <p>\$10 billion for energy efficiency renewable energy and advanced transmission &amp; distribution</p> <p>\$18.5 billion – advanced nuclear power facilities</p> <p>\$2.0 billion – for “front end” nuclear fuel cycle facilities</p> <p>\$8.0 billion – coal based power generation, industrial gasification &amp; carbon capture &amp; sequestration (\$6.0B); and advanced coal gasification (\$2.0B).</p>	<p><u>Breakdown</u></p> <p>\$8.5 billion for renewable and/or energy efficient systems and manufacturing, and distributed energy generation, transmission and distribution</p>	<p><u>Breakdown</u></p> <p>Creates Section 1705</p> <p>\$3.935 Billion in appropriated Credit Subsidy (less 5% admin cost transfer)</p> <p>Renewable energy systems</p> <p>Electric power transmission</p> <p>Leading edge biofuel (not to exceed \$500M)</p>

# Financial Institution Partnership Program (FIPP)

- Under FIPP solicitations, proposed borrowers and project sponsors do not apply directly to DOE but instead, work with commercial, non-profit and public financial institutions satisfying the qualifications of an eligible lender-applicant – including the ability to share risk in each transaction. They apply directly to DOE for access to the federal loan guarantee covering up to 80% of the loan amount of a given transaction.
- 1<sup>st</sup> FIPP Solicitation released October 7, 2009 for conventional technology renewable energy generation projects – a FIPP manufacturing solicitation is in the works: expected early in 2010
- FIPP enlists the due diligence, credit underwriting, & portfolio management capacities of eligible lender-applicants to accelerate the identification and structuring of credit-worthy manufacturing and generation projects under the 1705 program.
- The lender-applicants will take the individual projects through their own approval/capital commitment process, but the LGPO will apply its own review/approval process based upon the finished documentation from the lender applicants.

# FIPP, continued

## Fundamental Project Financing Requirements Under FIPP:

- Minimum 20% equity requirement
- Up to 80% of senior loan amount (64% of total project costs) may be guaranteed by DOE
- Shovel-ready; i.e. project must commence construction by 9/30/11
- Projects must receive NEPA authorization
  - *NB: This requirement makes projects that can either obtain a Categorical Exemption from NEPA or require only a Environmental Assessment more attractive candidates for a guarantee than those requiring a full, de novo Environmental Impact Statement*
- Projects must comply with Davis-Bacon requirements



# FIPP, continued

## “Skin in the game” requirements of transactions:

- Commercial financial institutions must retain at least 20% of the loan amount , un-guaranteed by the DOE
- Eligible public and non-profit Development Finance Organizations (DFOs) lender-applicants must retain risk in an amount at least = 5% of the loan amount of each transaction – DFOs must also "circle" investors of remaining up to 15% not guaranteed by DOE, per Request for Information (RFI) issued 10/30/09
- For DFOs, retained risk can take the form of:
  - ✓ Loans and/or guarantees of senior or subordinate debt
  - ✓ Equity Investment
  - ✓ Conduit lending alone is not sufficient

# FIPP, continued

## Basic characteristics of a FIPP-eligible project:

- Borrower's ability to repay the guaranteed obligation and any other project debts - at least BB rating of the senior debt by an independent rating agency (or equivalent if debt amount is under \$25 MM)
- Minimum of 20% equity
- Commercial, public or non-profit lender-applicant's ability to satisfy DOE criteria
- Project's ability to meet statutory and policy goals of program, e.g., eligibility of the commercial technology, shovel-readiness by 9/30/11, NEPA compliance, adherence to Davis-Bacon, state and local permits, etc.

# FIPP, continued

Prospects for Financing of Small and Medium Size Enterprise (SME) Projects: DOE working on a number of initiatives, e.g.,

- Pooling of small transactions, with or without external credit enhancement
- Adjustment of application fee schedule to be more size sensitive
- Exception to external rating requirement for transactions under \$25 MM

# Urban Project Examples

- Manufacturing of clean energy supply chain components in existing, under-utilized manufacturing facilities
- Roof-top solar heating and/or power generation using commercial technology on existing industrial, commercial, and/or public or non-profit structures
- Fuel-cell power generation using bio-gas from land-fills or sewerage treatment plants, installed in existing buildings
- Retrofits of existing hydro-power facilities to increase output
- Combined heat & power (CHP) serving district heating/power grids
- Ground-source geothermal/heat-pump installations serving district heating/cooling systems
- Retrofits/expansions of existing MSW-to-energy plants



# Developing Eligible Projects for Your Community

1. Work with clean energy component manufacturers and/or clean energy generation project developers to identify potential projects which can be shovel-ready by 9/30/11 - look particularly for projects which can achieve a categorical exemption from NEPA
2. Identify potential sites for the project(s), e.g.: university campus for geothermal district heating and cooling project; multi-building solar roof-top project; a brownfields or vacant property available for combined wind, solar project
3. Find about state or local incentives for renewable energy projects from:
  - State and/or local energy office
  - State energy regulatory agency
4. Contact state Economic Development agency to find out if any public entity in the state is trying to qualify for FIPP lender-applicant status with RFI response or work with commercial financial institution(s) prepared to be lender-applicant(s)
5. Help expedite all necessary local approvals, e.g. zoning variances, tax abatement decisions, etc.
6. Support project applicants in dealings with state and federal officials, private financiers, and other key decision-makers.

# Consider A Longer Term Strategy for Your Area

- Given the timetable for getting projects ready to begin construction, the best short-term strategy is to identify projects for your community and bring them to a qualified commercial or DFO lender-applicant in your state. Consider ways in which local/regional public or non-profit sources may be able to help satisfy DFO "skin in the game" requirement, e.g. w/debt or equity investment, including grants or tax abatements, w/claw-back provisions in the event of default
- The longer-term strategy you may want to consider is having a local or regional Development Finance Organization (DFO) in your area seek FIPP lender-applicant status – or collaborate formally with other entities in a consortium arrangement – so that DFO can bring worthy clean energy manufacturing and generation projects forward for DOE loan guarantees

# Conclusions

- The Loan Guarantee Program is the largest clean energy financing initiative undertaken by DOE and will provide a substantial amount of funding for eligible alternative energy projects.

*NB: There are no geographic or sectoral distribution formulae for the Section 1705 FIPP program*

- The lender-applicant approach, while modeled on similar guarantee programs employing risk sharing partnerships at OPIC, Ex-Im Bank and SBA, will be the first to draw on the expertise and resources of DFOs, creating an important new channel for funding alternative energy
- House and Senate Energy bills both contain provisions for extending the LGP on an autonomous basis in the "Green Bank" or Clean Energy Deployment Administration ("CEDA") and to provide additional credit subsidy
- Stay tuned...

# Loan Guarantees and Brownfields and other underutilized or vacant properties

- Michigan has identified over 4,000 brownfield sites that have potential for solar or wind generation
  - Land Policy Institute*
- Costs associated with assessment and cleanup can be included in loan package as long as project remains economical
- Land Policy Institute, Michigan State University:  
<http://www.landpolicy.msu.edu/>
- More useful links:
  - Database of State Incentives for Renewables & Efficiency <http://www.dsireusa.org/>
  - State Energy Office Contacts  
[http://apps1.eere.energy.gov/state\\_energy\\_program/seo\\_contacts.cfm](http://apps1.eere.energy.gov/state_energy_program/seo_contacts.cfm)
  - American Council on Renewable Energy Member Directory  
<http://www.acore.org/front>



# Jobs Bill and the Loan Guarantee Program

- Restores \$2 billion in funding for Sec. 1705
- Makes important changes to program
  - Makes eligible *energy efficiency projects*, including projects to retrofit residential, commercial, and industrial buildings, facilities and equipment.
  - Projects under \$100 million would not require a third-party credit rating
  - “An eligible project may be located on two or more non-contiguous sites”
  - A project applicant or sponsor of an eligible project may submit an application for more than one eligible project at the same time
- The House is expected to vote today; the Senate, early 2010

# Useful Web Links

- U.S. Department of Energy Loan Guarantee Program:

<http://www.lgprogram.energy.gov>

- Suggestions for Strong Loan Guarantee Applications

<http://www.lgprogram.energy.gov/SS-LG-Apps.pdf>

- Examples of Eligible Projects:

<http://www.sdsgroup.com/docs/Examples%20of%20Eligible%20Projects.doc>

- Guidance on National Environmental Policy Act (NEPA) Compliance

<http://www.sdsgroup.com/docs/NEPA%20Guidance.doc>

- Request for Information (RFI) from State, Regional, Local and Non-Profit DFOs seeking to act as Lender/Applicants under FIPPS

<http://www.lgprogram.energy.gov/rfi.pdf>

# Thomas H. Cochran

Tom Cochran has served for more than 35 years in governmental and private sector roles concentrating on public finance policy issues and infrastructure finance transactions in the US and developing countries. He heads *CivilCredit Advisors LLC*, a consultancy focused on mobilizing capital for essential power, transport, water and other public infrastructure in the US and emerging markets, with clients including the US Department of Energy and State of Connecticut in the US, and the United Nations Capital Development Fund, World Bank Group and CMDC, a planned commercial financial guarantor dedicated to locally denominated infrastructure and other transactions in emerging markets. From 1997 until 2005, he was the Director in the Global Public Finance Group of the Insured Portfolio Management Division, MBIA Insurance Corporation responsible for remediation of high profile power and other infrastructure credits in Chile, Indonesia, El Salvador and the US. Prior to joining MBIA in 1997, Mr. Cochran advised on emerging market infrastructure and sub-sovereign finance as a consultant and non-profit executive; managed the North Atlantic region for Lehman Brothers' Public Finance investment banking group; founded and led the Northeast-Midwest Institute regional policy research organization on Capitol Hill (where he now serves as Chairman of the Board of Directors); and served as a policy advisor to the Governor of New Jersey. He began his career in the Office of New York City Mayor John Lindsay. He Co-Chairs the Infrastructure Experts Group sponsored by the Swiss Agency for Development and Cooperation and the UN Development Programme. He received his BA from Beloit College and his MPA from Princeton University's Woodrow Wilson School.

# Steven Klein

Steven Klein has worked for nearly 30 years in infrastructure finance, investment banking and the credit markets. He is the founding partner of **First Infrastructure Inc**, a consulting and advisory firm focusing on infrastructure and energy finance and capital markets. Among his current clients is the US Department of Energy for which he is assisting in the development of the expanded Loan Guarantee Program. Since the early '90's he has served in a series of progressively more senior positions in three major participants in the financial guarantee, culminating in his work since 2000 as a co-founder of a new triple-A rated company, CIFG. While at those companies, Mr. Klein has served in senior business development, product development and as head of Global Infrastructure and governmental finance. Prior to his tenure at CIFG, Mr. Klein worked in senior management positions at Enhance Financial Guaranty (now Radian) and FGIC (owned by GE Capital at that time). Prior to his financial guaranty experience, Mr. Klein served as an investment banker at Donaldson, Lufkin and Jenrette (DLJ) as a senior banker in public finance. Early in his career, Mr. Klein provided policy and program development consulting advice to over 15 state and local governments, under the auspices of a small Cambridge, MA based consulting firm. Mr. Klein received a J.D. from Boston University, a Masters in Public Administration from the John F. Kennedy School of Government at Harvard University and a B.A. from Haverford College.

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