Proposed Bond Models Under Study
Fall 2012

The CE+BFI has been formed and will be managed by the Clean Energy Group (CEG), a national nonprofit, and the Council of Development Finance Agencies (CDFA), the national organization of development and bond financing authorities in the United States. The mission of the new initiative is to work together over the next several years to use bond finance tools to massively scale up clean energy funding.

The ultimate goal is to better equate renewable energy with traditional infrastructure development by creating new finance instruments and models that could enlist the capital markets, thereby providing a clear path for institutional and other investors to put their capital to work in the clean energy sector. (For this project, the term "clean energy" refers to both renewable and energy efficiency, unless otherwise noted.)

Toward that end, CE+BFI has started to explore various clean energy strategies using bonds and related financial tools. This list is a preliminary one, which captures some of the emerging bond models in clean energy, proposes some new ones, and also suggests some enabling financial strategies that would apply bond finance tools to greatly accelerate energy efficiency and clean energy development. We intend to work with our Task Force and industry partners to refine and deepen these strategies, and most important, to work in states with clean energy policymakers and bond authorities to scan opportunities that can use these tools to create new project pipelines for clean energy bond finance.

Project Based	**Tools to create additional bond finance for specific projects or groups of projects**
Morris County	Public entity issues government bonds for solar on public buildings, transfers low cost capital to developer for lower PPA price; we will explore the model and opportunities to scale-up in multiple jurisdictions for tax exempt and taxable bonds.
Tax Increment / Special Assessment	Bonds issued against tax revenue, increment or assessment, for small wind or energy efficiency (EE), usually in designated improvement districts; their expanded use will be examined.
Large Renewable Projects	Tax-exempt and taxable bonds for large wind projects (Windy Flats $500M, 20 year PPA); or solar (Topaz $2.4 billion); we will identify the right model(s) for public private partnerships with utilities, developers and bond issuers.
Nonprofit Finance	Use of 501(c)(3) bonds for nonprofits seeking clean energy (CE) or EE financing; we will identify common credit enhancement tools that can be applied nationally and in regions.
Suppliers/Manufacturers	Use of industrial development bonds to boost clean energy sector; example of NJEDA programs for suppliers and manufacturers; further use of these tools will be explored.

Project Based (continued)	Tools to create additional bond finance for specific projects or groups of projects
Aggregated Purchasing	Aggregated multi-state procurement of power from projects like offshore wind, combined with bond financing of projects, will be explored.
PACE Financing	Municipal bonds that fund EE retrofits and on-site solar PV that are repaid through an annual assessment on the property tax bill; will be one tool examined in EE.
CDFI funds	CDFIs could aggregate projects, provide companion financing and receive credit enhancement from bond-funded development finance agency programs, a new approach we will examine.
QECB Bonds	Bonds that fund energy conservation and efficiency projects in publicly owned buildings could be significantly expanded across the country.
IFA Moral Obligation Bonds	Illinois Finance Authority can provide loan guarantees or bonds to facilitate the development of renewable energy projects, and the guarantees or bonds are second to project revenues; we will examine the efficacy of this model.

Fund Models	Bonds to create new pools of capital to finance clean energy projects
System Benefits Charge Flows	Bond financing model that uses rated credit support in the form of a contingent intercept on existing System Benefit Charges ("SBCs") that would be tapped to compensate for defaulted loan payments; could be used in conjunction with a bond fund or a PACE program; this new model will be examined in many jurisdictions with SBC funds.
Investor-Backed Bond Fund	Model that would capitalize bond funds with investments from state and/or private funds in order to provide second- or lower- level backing for CE or EE projects; this potential model will be explored.
Pooled Bond Funds	Municipal bond issuance where proceeds are used—whether through an infrastructure bank, revolving loan fund, or other model—by a number of cities and projects in order to achieve market efficiencies for CE and EE development; we will explore both encouraging existing funds to emphasize CE and the creation of new funds.
Bond Backed Investment Authorities	General obligation bonds are used to finance authorities capable of making investments in funds, projects, and companies, all grouped around a specific purpose (e.g., Ohio Third Frontier and California Institute for Regenerative Medicine); we will explore the possibility of creating similar authorities for CE investments.

Fund Models (continued)	Bonds to create new pools of capital to finance clean energy projects
Collaborative Action	In recognition of the fact that neither geographic features nor energy grids perfectly align with state boundaries, a framework for state collaboration on cross-border clean energy investment for large CE projects could achieve significant savings; the legal and political challenges for such collaborations will be investigated.

Enabling Finance Tools	Explore complementary finance vehicles to boost use of bond finance
Standardization / Securitization	We will consider models that create liquidity for EE and CE loans by securitizing the federal or state-guaranteed portions of qualifying loans. We also will explore how to create a secondary market for energy-related loans as was done for small business loans through the private bundling and sale of SBA 7(a) guaranteed loans, which are underwritten, originated and serviced by non-government lenders using standardized SBA loan documents.
Tax Equity Pool	To access larger tax equity investors for renewable investment, and to go beyond the one-off syndication of such deals, we will consider creation of a tax equity fund model for CE, similar to the LIHTC investment funds that pool tax equity investment and facilitate affordable housing development; we will explore such pools as a means of expanding the availability of CE project capital sources that can be combined with bond finance.
CE Credit Enhancements	We will work with state clean energy funding agencies to explore how to leverage state CE funds by their provision of credit enhancement for bond issuances that raise capital for qualified projects.

