



GREEN BONDS RESOURCES

Green Bonding, also known as Environmental Impact Bonding (EIB), is a type of bond which informs investors that the issuer includes ESG transparency and accountability in their bond. While many municipal EIB projects to date have been green stormwater projects they are not limited to such projects. According to the ICMA Green Bond Principles, projects can include renewable energy, energy efficiency, pollution prevention and control projects, and more.

Recent guidelines/articles regarding green bonding, include:

- [ICMA Green Bond Principles](#)
- [Better Buildings Initiative by the Department of Energy](#) green bonds explainer
- [Energy.gov](#) resource on utilizing bonding authority for renewable energy and efficiency goals
- [American Green Bank Consortium Industry Report](#) (2021)
- [Brookings Institute](#) article on potential green bond benefits for municipalities.
- [ACEEE](#) green bonds toolkit
- [NRDC](#) resource on issuing green municipal bonds
- [C40 Knowledge Hub](#) green bonds guidebook and webinar
- [International Capital Market Association](#) is a group that has issued guidance in the form of principles which clarify the characteristics of green bonds to ensure stakeholder confidence.
- [Maryland Clean Energy Center: Clean Energy Capital Program](#) can issue bonds in conjunction with governments to finance energy projects. See the [Bankrolling Energy Projects](#) webinar.
- The [Infrastructure Reduction Act](#) includes a \$27 billion Greenhouse Gas Reduction Fund, the first federal-level green financing model.
- [Virginia Resources Authority](#) State of Virginia entity which can assist in developing green bonds
- Fidelity [whitepaper](#) on municipal bonds
- Refinitiv [whitepaper](#) regarding municipal bonds

Examples of green bond applications for renewable energy:

- [Union County New Jersey](#) issued renewable energy bonds for the procurement, installation, operation, and maintenance of multiple solar energy facilities.
- Write up and webinar of [City of Burlington Electric Department & Net Zero Energy Revenue Bonds for EV adoption, EV charging, and more: Case Study with City of Burlington, VT](#) case study in green bonding for renewable/net zero energy.
- [New York State Energy Research & Development Authority](#) Manages a green bond program that supports solar installations and energy efficiency projects.
- Connecticut Green Bank has done several issuances based on solar. See their [Green Bond Framework](#).
- [California Community Choice Financing Authority](#) issued two bonds totaling over \$2 billion for the purchase of clean electricity. Used to prepurchase power to reduce energy costs. Not explicitly green bonds but still a governmental use of bonding authority for renewable energy.

- [Chesapeake Bay Foundation](#) CBF has experience with green bonds. Guided Hampton, Virginia in using Environmental Impact Bonding to finance several projects. ([EIB Case Study](#))
- [DC Water](#) DC was one of the first cities to employ EIBs for infrastructure.
- [Atlanta Watershed](#) Atlanta was the second city in the country to employ an EIB for green infrastructure financing.
- [Quantified Ventures](#) Consulting agency that supported DC, Atlanta, and CBF is developing EIBs.
- Hampton Virginia projects funded through EIBs: [Big Bethel Blueway and Lake Hampton and North Armistead Avenue](#)

Note: The [DC Green Bank](#) has bonding authority but has not yet used it. It would expect to be able to use their bonding authority for public or privately owned projects. The [Montgomery County Green Bank](#) has also not issued green bonds yet to-date.