Public Financing Options for Microgrids

June 2016

MassDevelopment

Way to grow.

MassDevelopment

- Works with businesses, nonprofits, financial institutions, and communities to **stimulate economic growth** throughout Massachusetts.
- Promotes capital investment and economic development **by providing financing and development solutions**.
- In FY15, MassDevelopment financed or managed projects generating investment of more than **$2.5 billion** in the Massachusetts economy.
- These projects are projected to create more than **6,100** jobs and build or rehabilitate more than **2,000** residential housing units.

Energy Incentives

Bonding

- Tax-exempt and Taxable Bonds
- Qualified Energy Conservation Bonds (QECBs)
- Infrastructure Bond Financing Options
- CPACE

Sources of Funds

- REC payments
- DOER grants
- MassWorks grants
- Mass CEC grants
- Net metering

Tax Credits

- Investment tax credit ("ITC" – capital cost for renewable energy)
- Production tax credit ("PTC" – large scale wind, biomass, etc.)

Credit Enhancements

- Department of Energy Loan Guarantees
- USDA Loan Guarantees

Tax Deductions

- Accelerated depreciation on capital cost of energy projects
- Commercial energy efficiency deduction on capital costs

Third Party Models

- Power Purchase Agreements (PPA)
- Energy Savings Performance Contract (ESPC)
- Leases
- Non-profit Energy Services Company (ESCO)

Financing Options for Microgrids

Publicly Owned

- Tax-exempt and Taxable Bonds
- Qualified Energy Conservation Bonds (QECB)
- Infrastructure Bond Financing Options

Privately Owned

- Private Financing
- CPACE

Third Party

- Power Purchase Agreements (PPA)
- Energy Savings Performance Contract (ESPC)
- Non-profit Energy Services Company (ESCO)
- Leases

Tax Exempt and Taxable Bond Financing

- General obligation bonds
  - Can be financed with municipal bonds backed by the **general obligation** credit and/or tax revenues of the public entity.
- Rate payer financing
  - Financeable on a "project" basis off of guaranteed or highly predictable **revenue streams** and/or energy sales.

Qualified Energy Conservation Bonds ("QECB")

- Low interest cost bond.
- Interest rate is either subsidized by the US Treasury or issued as a tax credit (as of 6/27/16 = 2.90% for up to 30 years).
- Can be used for renewable energy, energy efficiency and/or distributed generation initiatives.
- $5+ million available. DOER will be finalizing the amount available and issuing an PON shortly for this allocation.
- **Scituate Wind** and **Fairhaven Wind** are privately owned wind turbines with a PPA with the each town.

Infrastructure Bond Financing Programs

- Infrastructure Investment Incentives Act ("I-Cubed")
- District Improvement Financing ("DIF")
- Local Infrastructure Development Program ("23-L")

  - **All programs** create a district and pay for public infrastructure through taxes
  - All programs **can be used independently or in combination** to meet a project's financing needs
  - A microgrid and any other infrastructure, **must benefit the district and must be owned or conveyed** to a public entity to be eligible for tax exemption.

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Infrastructure Investment Incentives Act (“I-Cubed”)

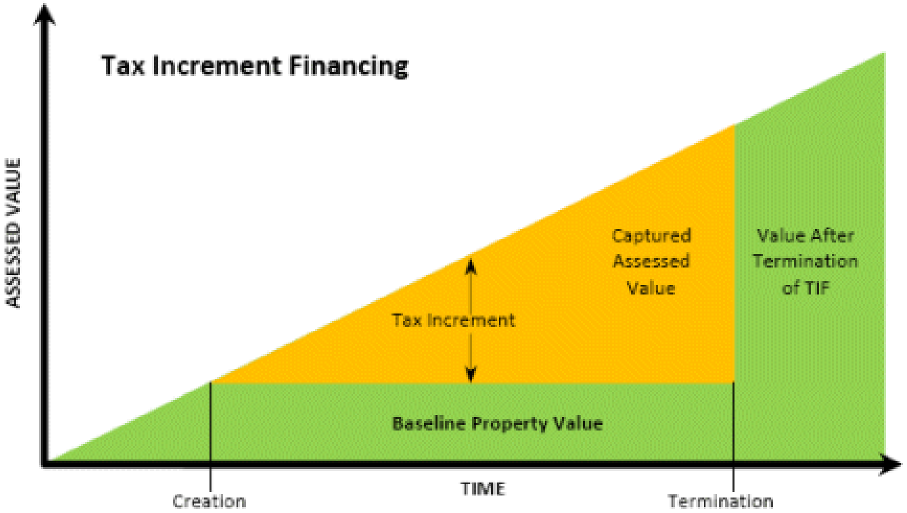
- **$600 million total investment state-wide** with a maximum of 8 projects per community.
- Designed for **larger development projects** with public infrastructure costs between $5 and $50 million that can be applied for in phases.
- Applications to Commonwealth must show that:
  - **But-For:** The Project would not happen or achieve the contemplated level of development, jobs, or other economic activity without support from I-Cubed.
  - **1.5x Debt Service Coverage:** The projected annual new state tax revenues will be a minimum of 1.5 times the debt service on I-Cubed bonds.
  - **Feasibility:** The Project must be financially feasible and the developer must demonstrate that it has sufficient resources to carry out the project.

District Improvement Financing ("DIF")

- **Uses future, incremental property tax revenues** collected from a predefined geographic area to pay infrastructure project costs either up front through bond or pay as you go annually.

- Incremental property taxes are **from new growth in a district** that will benefit from infrastructure investment.

- Bonds may be issued with or without a general obligation pledge from the municipality.



District Improvement Financing ("DIF")

- **Municipality creates District** and holds local public hearings and obtains local approvals. Requires Town meeting or City Council approval.

- Why DIF?

  - It's a way to direct funds to a **targeted investment**.

  - Borrowing is **not included in municipality's debt limits**.

  - Municipality has **flexibility to segregate debt service from general funds** and employ debt structures that would not otherwise be available as financing terms are negotiable.

Local Infrastructure Development Program ("23-L")

- Property owner(s) can **finance public infrastructure improvements** with tax-exempt bonds.
- **Credit** on bonds **based on property owner** and/or credit enhancement from developer or locality.
- Bonds issued by MassDevelopment and **debt service paid through special assessments** on property.
- Special Assessments **stay in place if the property is sold**.
- **Shifts burden** for infrastructure **to private sector**, landowner consent needed.

Local Infrastructure Development Program ("23-L")

- **Developer(s)/Landowner(s) file petition** requesting municipal approval **to create district** and special assessments.
- Municipality holds public hearings and approves by the planning board then its governing board.
- **Can be standalone or used with DIF.** If used together, special assessments may be levied to pay any tax increment shortfall in a given year.
- Private sector benefits include **non-recourse financing, long-term financing**, reduces equity/third party borrowing need, 100% debt financing, **tax-exempt** interest rates, interest reserves, no acceleration and no cross-collateralization.
- Public sector benefits include **shifting burden** of infrastructure **to private sector**, preserves debt capacity, new source of capital funding, off balance sheet financing and economic development growth (jobs, taxes, etc.)

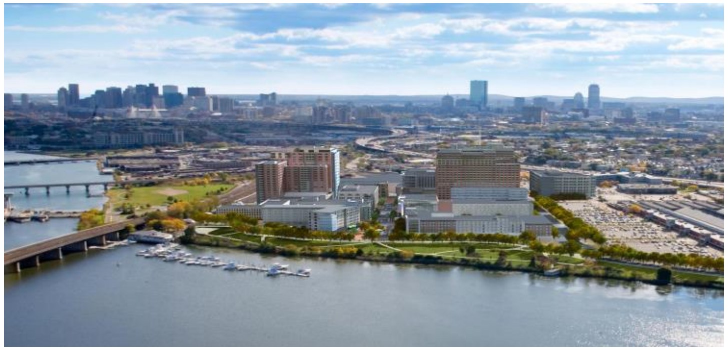
Example Infrastructure Projects

Fan Pier I-Cubed bonds financed $34.6 Million in infrastructure improvements.

Developer: The Fallon Company

Assembly Row I-Cubed bonds financed $10 million and DIF bonds financed $25 million in infrastructure improvements.

Developer: Federal Realty Investment Trust



Commercial Property Assisted Clean Energy Programs ("CPACE")

- Legislation **currently proposed in Massachusetts**
- More than **30 states** have passed **legislation that authorizes a special assessment**, secured by a lien, on properties as a means of repaying funds for resiliency, energy efficiency and renewable energy projects.
- Allowable projects will depend upon legislation.

Commercial Property Assisted Clean Energy Programs (“CPACE”)

- Private capital can provide up to **100% low-cost, long-term financing** securing through senior tax lien and repaid through property bills
- Capital costs are **assessed to end-users** on a pro-rata basis based on their projected ‘benefit’
- Microgrid developer **locks in repayment of fixed costs** for up to 20 years.
- Can be a combined **energy efficiency and microgrid project**
  - ➢ **Savings** from energy efficiency projects **helps project pencil out**

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