

# Energy Investment District (EIDs)

## Policy Concept Paper

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**ENERGY INVESTMENT DISTRICT POLICY CONCEPT PAPER**

**TABLE OF CONTENTS**

**Policy Proposal**

I. Introduction..... 3

II. Background..... 3

- Opportunities ..... 3
- Challenges..... 4

III. Overview of the Energy Investment District Solution ..... 4

- Definition ..... 4
- Principles ..... 4
- Structure..... 4
- Diagram of structure..... 5

IV. Legislating the Energy Investment District Solution..... 6

V. Funding..... 6

VI. Creation and Operation of the Energy Investment Trust..... 7

VII. Creation and Operation of EIDs..... 7

VIII. Criteria for EID Designation..... 9

IX. Standards for EID Projects and Examples..... 10

X. Closing..... 11

**Appendices**

Appendix I: Potential Funding Sources for EIDs..... 12

- Public Funding..... 12
- Private Investment..... 14

Appendix II: Existing Models Resembling EIDs and Energy Investment Trusts..... 17

Appendix III: Federal Policies to Support EIDs..... 23

## I. INTRODUCTION

The Center for Social Inclusion (CSI) works to identify and support policy strategies to transform structural inequity and exclusion into structural fairness and inclusion. Over the past four years, CSI has focused on energy democracy as an opportunity area for achieving structural inclusion. Energy democracy means that community residents are innovators, planners and decision-makers on how to use and create energy that is local and renewable.

Based on research, an extensive scan of local energy projects and engagement with local and national leaders, CSI has developed the concept of **Energy Investment Districts (EIDs) as a policy solution that enables communities, particularly communities of color, to develop local renewable energy generation and energy efficiency programs that are accountable to the community and produce healthier neighborhoods, reduce energy costs, create good jobs, build the local economy, and combat climate change.**

This paper outlines a framework for how EIDs could be created, how they would operate and a wide range of possible sources of financing. This is not meant to be a one-size-fits-all solution but rather a starting point that can be adapted to different localities and circumstances.

## II. BACKGROUND

### *Opportunities*

Current opportunities that can spur a new energy economy include:

1. Improved technology (e.g. smart meters, solar panels, wind turbines) driving down costs and encouraging more participation in renewable energy projects.
2. The recognition that community-scale distributed generation can be more efficient, economical and resilient compared to remote or large-scale renewable energy systems that rely on new power lines and long transfers of energy.
3. A burgeoning national movement to get college endowments and public pension funds to divest from fossil fuels and reinvest in community-scale renewable energy.
4. Community-led efficiency and renewable energy projects sprouting up across the country that can be expanded and replicated to create quality jobs and build local economies.<sup>1</sup>

### *Challenges*

Despite the opportunities, many of us are left out of the new energy economy. Most energy efficiency and renewable energy efforts are supported by federal and state tax credits and grants that benefit higher-income homeowners and exclude tenants and lower-income households, who are more likely to

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<sup>1</sup> The Center for Social Inclusion, "Community-Scale Energy: Models, Strategy, and Racial Equity". August 2013. <http://www.centerforsocialinclusion.org/community-scale-energy-models-strategy-and-racial-equity/>

be people of color. We need more inclusive policies to address the multiple challenges facing communities, in particular:

1. A lack of access to financing;
2. A lack of technical, legal and business skills or support;
3. Exclusion from planning and decision-making processes.

### III. OVERVIEW OF THE ENERGY INVESTMENT DISTRICT SOLUTION

#### *Definition*

An Energy Investment District (EID) is a designated geographic area eligible for financing and other supports that enable residents to plan and implement community-scale, energy efficiency and renewable energy projects.

#### *Principles*

1. EIDs use clear criteria to target investment to communities of color and low-income communities that have suffered inequitable environmental and economic hardships.
2. EIDs build community capacity to engage effectively as planners, implementers and owners in the new energy economy.
3. EIDs employ democratic practices that give residents a decisive role in their community's energy future.
4. EIDs are dedicated to creating clean and sustainable energy in ways that positively impact people and the planet and generate profits that build community wealth.

#### *Structure*

EIDs utilize a two-tier structure:

1. Resident-controlled district councils with authority to plan and implement energy projects.
2. An *Energy Investment Trust* responsible for developing and channeling public financing, private investment and capacity building support to EIDs.

## ENERGY INVESTMENT DISTRICTS

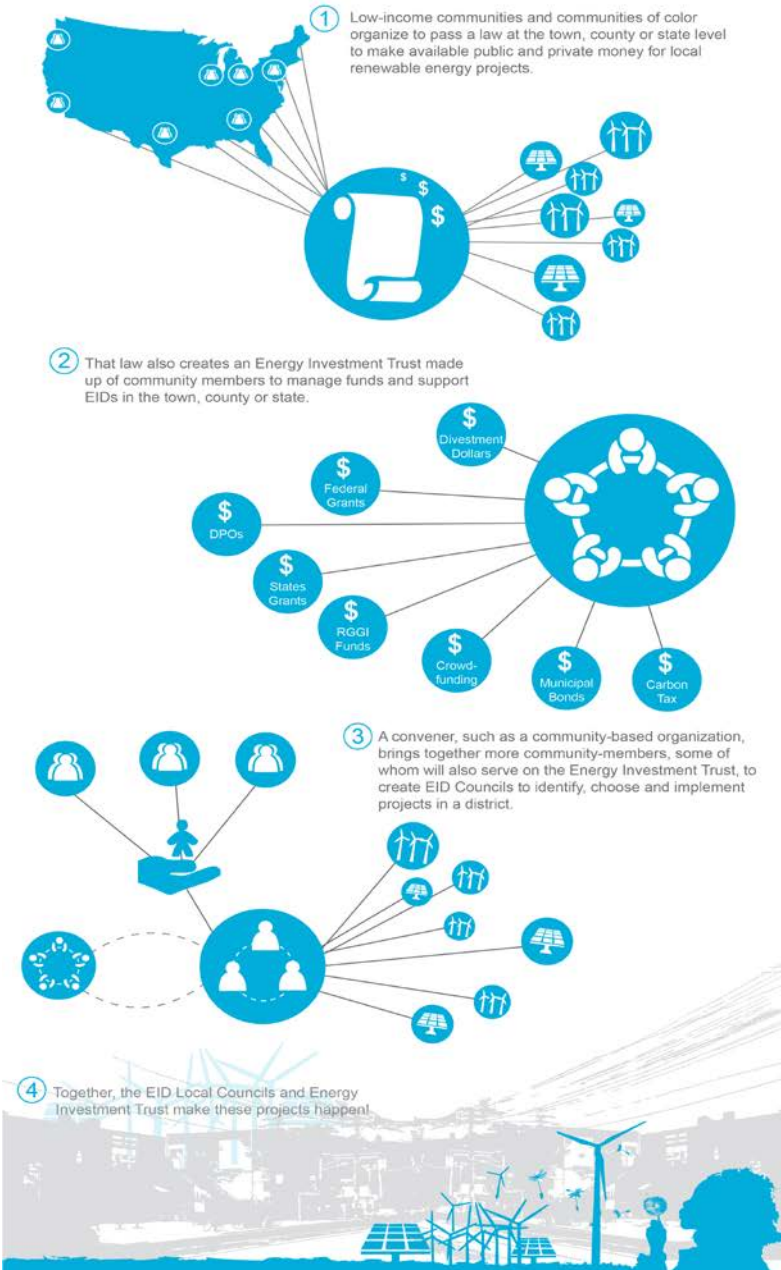
Energy Improvement Districts (EIDs) allow communities to develop local renewable energy generation and energy efficiency programs in their neighborhoods.

EIDs:

- Build local economies by creating good jobs and community wealth.
- Help communities combat climate change
- Enable communities to be planners, decision-makers and owners of local energy systems



### HOW IT WORKS



#### IV. LEGISLATING THE ENERGY INVESTMENT DISTRICT SOLUTION

Energy Investment District (EID) legislation<sup>2</sup> at the state, county, or municipal level would make geographic areas that have suffered environmental and economic hardships eligible for funding and other supports for community-scale energy efficiency and renewable generation projects. An EID law would create a mechanism to develop and channel public financing, private investment and technical assistance to EIDs. We propose that an EID law:

1. Establish and allocate start-up funding to a central Energy Investment Trust that supports EIDs and is accountable to EID communities;
2. Define a process for creating EIDs, including the establishment of participatory and accountable planning and decision-making processes;
3. Set criteria for designating an area to be an EID and charge a city/county agency with identifying eligible areas;
4. Delineate standards for projects to be developed in the EID.

Note that a few states have legislation in place authorizing the creation of energy improvement districts, which share some features with this EID proposal. Others have created entities similar to the Energy Investment Trust. (*Please, see page 16 for examples.*) While similar, these existing models have significant shortcomings. They do not target communities most in need, mandate strong resident engagement nor establish clear transparency and accountability metrics. It may be possible, however, to repurpose existing models to encompass these EID principles.

#### V. FUNDING EIDs

Responding to the critical need for financing, especially in communities of color and low-income communities that wish to enter the new energy economy, a key component of the EID concept is harnessing a broad array of potential funding sources. The Energy Investment Trust would be charged with generating financing to support community-scale projects in Energy Investment Districts. Financing can come from a combination of local, state and federal government funding and private investment.

Existing public funding sources for EIDs include: infrastructure bonds; greenhouse gas funds; Feed-in-Tariff Programs (FiTs); Property Assessed Clean Energy (PACE) programs; local or state workforce, economic development and small business loans and grants; and US Department of Energy, Agriculture and Environmental Protection Agency programs.

Private investment could come from the divestment of college endowment and public pension funds from fossil fuels, pooling investors through online crowdfunding platforms, Direct Public Offerings,

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<sup>2</sup> In some places, state enabling legislations is required before counties or municipalities can adopt EID laws.

revolving loan funds, linked deposit programs, program related investments from foundations, and individual investors pooling tax credits through Limited Liability Corporations.

Drawing on a variety of funding possibilities should make the EID concept feasible and sustainable. ***For a detailed description of potential sources, see page 11.***

## VI. CREATION AND OPERATION OF THE ENERGY INVESTMENT TRUST

CSI proposes that EID legislation should establish an Energy Investment Trust, a central body that develops and channels public financing, private investment and technical assistance to EIDs. It could be managed by:

1. A quasi-governmental entity;
2. A Community Development Finance Institution, which expands its focus on lending and development to include energy projects; or
3. A local non-profit institution or partnership between local organizations, such as a university and a community-based membership organization.

EID legislation should ensure that the Trust has start-up funding for its initial operations. How much is required may depend on whether the Trust is managed by a new or an existing entity.

Governance of the Energy Investment Trust will depend on how the Trust is organized. A new entity would establish a Board of Directors, whereas a Trust managed by a CDFI or other institution with an existing governance structure, should create an Accountability Board. In either case, CSI proposes that the Board include both representatives of the constituencies served by EIDs and local individuals with technical expertise to ensure successful implementation. For example, the Governor, County Executive or Mayor (depending on whether a state, county or municipality legislates the policy) could appoint agency representatives or community-based leaders who have expertise in energy planning, budgeting or infrastructure development. The appointees would work with the county or city planning offices to provide comprehensive needs assessment, set up EID zones and help establish EID Councils. Once EIDs are established, EID Council representatives should comprise the majority of the Board with each EID Council having at least one seat.

When appointing representatives, the Mayor, County Executive or Governor should consider the following criteria:

- Knowledge and experience in financing, particularly around small business loans;
- Knowledge and experience in economic development;
- Experience with the barriers and challenges of entrepreneurship;
- Experience with energy systems such as utilities, microgrids, or renewable energy technology;
- Experience with job development;



- Relationships and experience working with grassroots community leaders;
- Familiarity and experience with environmental justice communities;
- Familiarity and experience with participatory policymaking processes;
- Familiarity and experience working with federal agencies.

Regardless of what entity manages it, the Trust must be accountable to and responsive to EID communities. The Trust should adopt transparency and accountability metrics that include:

1. Ensuring that all data ranging from financing to project details is accessible and comprehensible;
2. Providing multiple opportunities, formats, and venues for citizen engagement, feedback, monitoring and review;
3. Holding timely and periodic strategy meetings with EID Councils to continue to assess and support EID projects;
4. Ensuring access to information and participation to stakeholders who are not proficient in English; and
5. Evaluating outcomes to ensure that the intended communities benefit from and lead energy democracy projects.

## VII. CREATION AND OPERATION OF EIDs

CSI proposes that EID legislation should establish a simple process by which residents can organize and claim status as an EID. For example, if a community meets the eligibility criteria, a local organization (such as a local community-based organization, community development corporation, or local college or university) serving as convener could request certification as an EID from the Trust.

The convening organization will define the physical size of the EID, which will vary depending on community needs and resources. It should be large enough to have some impacts, such as reducing greenhouse gases and providing economic opportunity, yet targeted enough to ensure that sufficient financial investment can be secured to make projects feasible.

Once certified, an EID would be eligible for start-up funding, such as a planning grant, in order to form a local EID Council representative of the area's residents and other community stakeholders. Ideally, EID Council members should be elected by District residents.

A major role of the EID Council will be to facilitate a democratic planning and decision-making process aimed at developing and prioritizing ideas for community-scale energy projects. CSI recommends that EID Councils adopt planning practices like those used successfully in participatory budgeting processes.<sup>3</sup> For example:

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<sup>3</sup> For more examples, please see: The Participatory Budgeting Project. <http://www.participatorybudgeting.org/>

1. Fair opportunity for residents, local businesses and community groups to present needs, projects and plans;
2. Adequate time for dialogue and discussion to identify root problems and assess which projects will have the most impact;
3. An open voting period in an accessible venue allowing residents to vote on which projects should be developed; and
4. An annual progress report that incorporates and emphasizes verbal and written feedback/evaluation from residents about the creation and implementation of EID plans.

The Trust should provide the EID Council with financial and technical support for the planning process. When the plan is completed, the Trust should work with the EID to secure financing and other supports for the specific energy conservation or generation projects the district residents chose to pursue. One support could be a dedicated project manager or developer that EID communities choose to help ensure that projects are completed.

An additional role of the EID Council is as liaison with the Trust and appropriate government officials to address policy or planning issues, such as streamlining permitting or zoning to allow for project development.

## VIII. CRITERIA FOR EID DESIGNATION

To determine whether an area is eligible to become an EID, the law should establish a set of metrics to measure economic and environmental hardships that impact a community's health and sustainability along with potential for renewable energy and energy efficiency development to create new opportunities.

CSI drew from three models to draft a proposed set of criteria. The first is the Coalition for a Livable Future's *Regional Equity Atlas*,<sup>4</sup> which assesses the economic opportunity and social wellbeing of neighborhoods in the Portland, Oregon, region based on factors ranging from housing and transit access to air quality, pollution and access to parks.

The second is the *Environmental Justice Screening Method (EJSM)*,<sup>5</sup> produced by Dr. Manuel Pastor and the Program for Environment and Regional Equity. The EJSM uses a cumulative impact assessment by measuring over 30 different indicators from health, environment, climate, and social vulnerability. The EJSM can help lawmakers identify communities where more targeted investment is needed. Building off the EJSM is our third model, the *CalEnviro Screen*.<sup>6</sup> This model was adopted by the California Environmental Protection Agency and the Office of Environmental Health Hazard

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<sup>4</sup> For more information, please visit the Coalition for Livable Future at: <https://clfuture.org/equity-atlas>

<sup>5</sup> For more information, please visit UCS's Program for Environment and Regional Equity at: [http://dornsife.usc.edu/assets/sites/242/docs/screening\\_for\\_justice.pdf](http://dornsife.usc.edu/assets/sites/242/docs/screening_for_justice.pdf)

<sup>6</sup> For more information, please visit the Office of Environmental Health and Hazards Assessment at <http://oehha.ca.gov/ej/>

Assessment at the urging of activist organization including Asian Pacific Environmental Network (APEN) and Communities for a Better Environment (CBE). The *CalEnviro Scan* measures an array of environmental health and social wellbeing indicators from air quality and hazardous waste sites to health, education and poverty.

CSI proposes that criteria for certifying that an area is eligible for EID status include the following data at the census tract level:

- Poverty rate is 1.5 times or more than that of the metropolitan statistical area (MSA), county, region, or state;
- Median household income is 1/2 or less than that of the MSA, county, region or state median;
- Unemployment or underemployment rate is 1.5 times or more than that of the MSA, county, region or state average;
- Percentage of jobs that are fossil fuel dependent are higher than 10% of the MSA, county, region, or state average;
- Percentage of residents that are African American, Latino, Asian, Native American or Hawaiian/Pacific Islander exceeds the average for the MSA, county, region or state;
- Percentage of Li-Heap recipients is 1.5 times or more than that of the MSA, county, region, or state;
- Percentage of homes built before 1960 is 1.5 times or more than that of the MSA, county, region, or state;
- Percentage of mobile homes manufactured before 1976 is 1.5 times or more than that of the county, region, or state;
- Air particulate matter is higher than the local average;
- Child asthma rate is higher than the local average;
- There are more brownfields, toxic release sites, and remediation sites in a neighborhood than the local average;
- Broadband adoption rates are lower than the MSA, county, region, or state average;
- There are significant community assets (churches, nonprofits, schools, public space, abandoned property) that could be utilized in developing renewable resources;
- The area has significant solar, wind, or geothermal potential as measured by the US Department of Energy.

EID legislation should assign an agency, such as the planning department, the responsibility for applying the metrics and identifying eligible areas.

## IX. STANDARDS FOR EID PROJECTS AND EXAMPLES

EID legislation should define standards for what projects receive EID funding in keeping with the goals of cutting emissions, saving energy, spurring renewable generation, providing economic opportunity and building the wealth of communities that have been marginalized and suffered disinvestment.

CSI proposes that EID projects should:

- Benefit multiple households or businesses through clean energy generated and distributed;
- Be environmentally friendly enterprises (for example, waste to energy trash incineration plants that may be carbon neutral, but still dirty, would not be eligible for EID funding);
- Hire a certain percentage of their workforce locally, providing quality, living wage jobs;
- Have a viable business plan to show sustainability;
- Support cooperative development or community-ownership;
- Utilize abandoned, blighted or brownfield spaces for siting projects;
- Utilize shared or public spaces such as schools, parks, or other areas for siting projects;
- Incorporate youth development through education and job opportunities;
- Support solutions to other intersecting community needs such as housing, food, transportation, water conservation and environmental health.

#### *Examples of EID Projects and Activities*

EIDs can employ a variety of approaches to meet the needs of their communities. The Center for Social Inclusion's report, *Models, Strategy, and Racial Equity*, offers many more detailed models, but these few examples suggest the range of possibilities:

1. An EID could support projects to install solar panels on schools and other community institutions, turn brownfields into solar farms, or develop community-owned wind farms.
2. An EID could make seed capital available to a worker-owned cooperative that conducts energy audits and retrofits for residences, government facilities, community institutions and small businesses.
3. An EID could offer incentives for clean energy companies to locate within its boundaries if they agree to hire locally and pay living wages.
4. An EID could help build the capacity of residents to engage in energy planning and business development through training and technical assistance.

## **X. CLOSING**

While the country waits for national and global action on climate change, local communities are leading the way. The EID policy concept creates a mechanism for more communities with the desire, will and emerging capacity to engage in the new energy economy.

The EID solution combines public and private dollars to spur investments in renewable energy and energy efficiency, particularly in areas that have been economically marginalized and environmentally damaged. These communities of color and low-income communities have been left out of energy planning and decision-making, but EID policy gives them a way to take charge of their energy future. Through targeted investment and community engagement, EIDs can be a pathway to rekindling local economies and decreasing our reliance on fossil fuels.

EIDs are certainly not the only way to address climate change, but it is a solution that fosters the innovative spirit of communities who are forging their own solutions, EIDs can be an important step towards a more sustainable, just and healthier community and planet.

## APPENDIX I: POTENTIAL FUNDING SOURCES FOR EIDs

### Public Funding

1. **Infrastructure Bonds.** All states, many counties and most municipalities can issue bonds to raise money for infrastructure investments, such as developing water systems or new buildings. Bonds should also be used to finance renewable energy development. In the case of EIDs, the Energy Investment Trust can work with states or localities to issue renewable energy bonds to provide upfront financing for its portfolio of projects. At the state level, Delaware used bonds to implement its Sustainable Energy Utility program, which funded energy efficiency upgrades for several state agencies and colleges.<sup>7</sup> At the local level, Union County, NJ, raised \$500,000 in bonds to fund renewable energy projects on public buildings in multiple towns.<sup>8</sup>
2. **Greenhouse Gas Funds.** In states that have passed “cap and trade” or “carbon tax” legislation, there is a sizeable amount of funding that can be redirected from the dirty energy system into clean energy projects. California and New York each have \$1 billion Greenhouse Gas Reduction Funds, while other Northeastern states have some funds as a result of the Regional Greenhouse Gas Initiative.<sup>9</sup> A portion of these funds should be set aside for EID projects, helping to support the communities that have been most marginalized by the coal and oil industries.
3. **System Benefit Charges.** A system benefit charge is a small charge that customers pay on their utility bills, often at a rate of \$0.005 per kilowatt hour. Generally mandated by a state’s public utility commission, the charges usually apply only to investor-owned utilities, though municipal utilities and rural cooperatives sometimes choose to participate. The funds collected are used for purposes ranging from upgrades to the grid to weatherization programs and renewable energy installations. The Washington, DC, SEU is a good example of a system benefit charge being used for community-focused models for energy efficiency and renewable energy projects, including in low-income communities.

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<sup>7</sup> For more information, please visit Delaware Sustainable Energy Utility. <http://www.energizedelaware.org/>

<sup>8</sup> For more information, please visit The Union County Investment Authority, Renewable Energy Initiative. <http://www.ucianj.org/RenewEnergy.asp>

<sup>9</sup> For more information, please visit The Regional Greenhouse Gas Initiative [http://www.rggi.org/rggi\\_benefits/program\\_investments/new\\_york](http://www.rggi.org/rggi_benefits/program_investments/new_york) and California’s legislation on AB 1532 [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201120120AB1532](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB1532)

4. **Feed-in-Tariff Programs (FiTs).** Feed-in-tariffs, or clean contracts, are agreements between a producer of renewable energy and a utility that buys the excess energy created. Because they set a specific price over a specific period of time, these contracts provide a guaranteed revenue stream that can be used to secure financing for installation costs. Utilities generally cap FiTs to a certain number of kW per producer and MW of total energy produced. Where utilities are publicly owned, they can be required to give preference to small-scale producers within an EID. The Los Angeles Department of Water and Power FiT program, for example, places an emphasis on neighborhoods that are economically disadvantaged, yet have high solar potential. (FiTs are listed here under public funding because most are being implemented by public or municipal utilities. Private or investor owned utilities can also offer FiTs.)
5. **Property Assessed Clean Energy (PACE) programs.** Local governments can implement PACE programs to loan property owners money to install renewable energy systems or make efficiency upgrades. The loan is paid back incrementally through a property tax assessment that remains connected to the building regardless of owner. PACE primarily serves homeowners but can produce energy savings for tenants if their landlords participate. Over 20 states, plus the District of Columbia, currently operate PACE programs or have enacted PACE legislation.
6. **Local or State Workforce, Economic Development and Small Business Loans and Grants.** Many localities and states have workforce development, economic development and small business loans and grants that can be tapped to support EID efforts, such as training for new jobs opportunities, capacity building for small businesses and working capital for entrepreneurship. For example, the city of Boston's Department of Neighborhood Development and Office of Business Development created a microloan pool of \$350,000 to provide up to \$25,000 in loans to small business entrepreneurs in its Empowerment Zone. Similar loan programs could be targeted to EIDs.
7. **US Department of Energy (DOE).** The DOE primarily funds research and development of new renewable energy technologies. However, the DOE could partner with EID communities and provide funding for research and development of solar or other renewable technologies that are responsive to community needs, making EIDs a ground for innovation. The Sunshot Initiative and Solar Decathlon are two examples of programs through which the DOE could collaborate with EID communities. Recently, President Obama authorized the DOE's Sunshot Initiative to provide \$15 million towards a new Solar Market Pathways Program.<sup>10</sup> The aim of this program is to help support regional, state, tribal, and local community efforts to deploy a five to ten year energy plan that would oversee development of solar projects within the area of focus. The goal is to drive down cost, create economic development and show how solar energy connected to the grid can

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<sup>10</sup>For more information, please visit the US Department of Energy at <https://eere-exchange.energy.gov/Default.aspx#Foaldef4fe006-4fea-4a3c-ac84-beg8ce1962f6>

benefit communities. The program will support innovative financing such as PACE, programs that promote shared ownership of community solar projects, and efforts to include solar in resiliency/emergency response planning.

8. **US Department of Agriculture.** USDA's recently established Energy Efficiency and Conservation Loan Program provides low-interest loans to Rural Electric Coops and other rural utilities to make energy efficiency upgrades on their own facilities and their customers' homes and businesses.<sup>11</sup> The utility can re-loan funds to customers to finance upgrades and use on-bill financing to secure repayment of the loans. Funds can also be used to conduct home energy audits and consumer education and outreach programs, and for renewable energy systems. Rural EIDs can also utilize USDA's Renewable Energy for America Program (REAP), which supports energy efficiency and renewable generation for farms and rural small businesses. The program provides grants, loans and combination grant-loans to support energy audits, feasibility studies and actual project development.
9. **US Environmental Protection Agency.** The EPA has multiple grant programs that can support EIDs, including:
  - a. *Brownfield and Land Revitalization Program.* Grants can be used to support community planning and assessments, clean up, workforce development and technical assistance around redevelopment. Revolving loans provide resources for project implementation at low-interest rates, particularly for Tribal communities.
  - b. *Environmental Justice (EJ) Small Grants Program.* These grants support non-profit organizations, tribes and tribal organizations to build collaborations to address local environmental issues.
10. **Community Development Financial Institution Fund.** Community Development Financial Institutions (CDFI) provide financial services and opportunities to disinvested communities to promote economic development, create jobs, develop affordable housing and provide an alternative to predatory lending. CDFIs could be key investors in EIDs, leveraging federal programs, including the Community Development Financial Institutions Fund, Financial Assistance and Technical Assistance Awards and New Market Tax Credits to support local energy projects.

### *Private Investment*

With fewer than five percent of banks loaning money to community solar, EIDs will also need to leverage private financing.<sup>12</sup> The greatest potential lies with social impact investors seeking the triple bottom line of helping people and minimizing harm to the planet while still earning a return on their

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<sup>11</sup> For more information, please visit the USDA's Rural Development Office: [http://www.rurdev.usda.gov/uep\\_homepage.html](http://www.rurdev.usda.gov/uep_homepage.html)

<sup>12</sup> For more information, please visit Center for Social Inclusion, *People Powered Policies*. July 2013.

investment. Energy Investment Trusts can be the mechanism for these investors to achieve their goals by supporting local energy projects. Private funding sources and approaches include:

1. **Divestment Dollars.** College and university endowments, private retirement funds and public pension funds could be a significant source of funding for local renewable energy projects thanks to the divestment from fossil fuels campaign being waged by climate change activists. Massachusetts, for example, is considering divesting from coal and oil, which is about 2.6% of its public holdings.<sup>13</sup> Divestment of the state's funds would remove nearly \$1.4 billion from the fossil fuel industry over a five-year period, a potential boon to renewable investments. EIDs offer a way to invest in beneficial local projects.
2. **Pooling investors to support community projects.** Online platforms, such as Mosaic, which pioneered the idea, connect investors with community-based solar projects.<sup>14</sup> Investors earn a set return on their investment over a fixed term from the revenues produced by the solar energy the project generates.
3. **Direct Public Offerings.** Direct Public Offerings (DPOs), also known as "investment crowdfunding" are a way to seek smaller investments from community members to raise capital necessary for projects without relying on a middleman, like an investor bank. DPOs provide a way for community members to be part-owners/shareholders of a project and reap the benefits through a dividend, owner-equity or simply the improvement of their community. Often utilized to provide matching funds for another investor, such as a cooperative loan fund or CDFI, DPOs can be a way to support community-owned projects in EIDs.
4. **Revolving Loan Funds.** Revolving loan funds are a way to pool donations to provide very low-interest loans to community energy projects. Projects pay back the loans through the energy created, replenishing and growing the loan fund so new projects can be supported. RE-Volv, a nonprofit organization, is using this model to support projects in Berkeley, California.<sup>15</sup> Energy Investment Trusts can do the same.
5. **Linked Deposit Loans Programs.** These programs deposit state funds with financial institutions that agree to lend to qualified borrowers for a particular purpose stipulated by the state. The state agrees to a lower than market rate interest on its deposits and the bank in turn charges a lower interest rate to borrowers. Linked Deposits could be used to support EID projects.

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<sup>13</sup> Ailworth, Erin. "A Call for Greener Investments" *Boston Globe*. September 9, 2013

<sup>14</sup> For more information, please visit Mosaic. <https://joinmosaic.com/>

<sup>15</sup> For more information, please visit RE-Volv <http://re-volv.org/>



6. **Program Related Investments (PRI).** PRIs are low-interest loans made by foundations to support projects that are relevant to the foundation’s mission. Foundations interested in climate change and sustainable local economies could provide seed capital for EID projects.
  
7. **Pooling Tax Credits.** Individual investors who don’t want to, or can’t, install solar on their own properties can form Limited Liability Corporations (LLCs) to take advantage of renewable energy tax credits and fund solar installations on churches, schools or other non-profit institutions within an EID.

## APPENDIX II: EXISTING MODELS RESEMBLING ENERGY INVESTMENT DISTRICTS OR ENERGY INVESTMENT TRUSTS

### *Energy Investment Districts Models*

#### **1. Ohio Special Energy Improvement Districts<sup>16</sup>**

In 2009, the Ohio state legislature passed enabling legislation that granted municipalities bonding authority to finance energy efficiency upgrades and renewable energy projects on real property within designated areas known as Special Energy Improvement Districts (SEID). Municipalities have the authority to set the criteria and guidelines for the program and issue bonds. Residents of an SEID can apply for funding to improve their homes through efficiency and renewable energy projects. They pay off the loans through a Property Assessed Clean Energy (PACE) program, which adds an assessment to their property tax bills over a number of years.

SEIDs are created through real property owner petitions or application from an existing qualified nonprofit corporation. SEIDs are governed by a nonprofit corporation. A majority of members of the corporation's Board of Directors are appointed, while the remainder are elected by real property owners within the district.

Most SEID programs focus on the residential sector, though the city of Cleveland partners with the First Suburbs Development Council to create commercial loans for energy improvements. Churches and local, county, state or federal properties are not allowed to be considered within a SEID unless they are specifically part of the nonprofit corporation or seek acceptance through a formal application process.

The Ohio SEIDs create an opportunity to leverage PACE programs to focus public financing for efficiency or renewables in specific places. This allows a municipality to better leverage funds or for residents to pool their consumer power to negotiate bulk purchasing of efficiency services or renewable energy installations.

#### **2. Arkansas Energy Improvement Districts<sup>17</sup>**

In 2013, the state of Arkansas passed enabling legislation paving the way for municipalities or government entities to create energy improvement districts with the independent legal and financial authority to finance PACE programs for the District's residential, commercial or industrial residents. Districts can be as small as a city and as large as county or statewide.

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<sup>16</sup>For more information, please visit the Ohio State Legislature's Codes <http://codes.ohio.gov/orc/1710>

<sup>17</sup>For more information, please visit the City of Fayetteville, Arkansas <http://bit.ly/1nq7bAi>

The city of Fayetteville took advantage of the new law to create an Energy Improvement District that allows real property owners to access upfront financing for water and energy improvements, paying back the loan through property taxes. The Fayetteville Energy Improvement District is governed by a seven-member Board of Directors, all appointed by the Mayor and City Council. The Board of Directors has the authority to issue municipal bonds to finance the PACE programs, provide loans to interested residents and create and manage a revolving loan fund that helps make the program sustainable.

### 3. Connecticut Energy Improvement Districts<sup>18</sup>

In 2007, Connecticut passed enabling legislation granting municipalities the authority to create energy improvement districts to help the state meet its target goals of cutting emissions by 2020 through investment in efficiency improvements on commercial and public buildings, and the development of microgrids, distributed generation projects and renewable energy production. Within these energy improvement districts, local governments can establish commercial and industrial corridors as districts for renewable energy development. Bridgeport, for example, is using an EID designation to rezone the city's landfill as a space for a solar array. The city is also negotiating with energy service companies to help businesses and residents within an EID lower their energy consumption and costs.

An EID in Connecticut is governed by a Board of Directors comprised of residents and property owners within the district who are appointed by the Mayor or City Council. The Board of Directors has the authority to issue municipal bonds or seek private investments to finance the EID improvements.

#### *Shortcomings of These Energy Investment District Models*

While these models are similar to CSI's EID proposal in targeting investment to particular places, they differ in important ways from CSI's more inclusive and democratic approach.

First, because these models focus largely on property owners, they shut out many low-income people and people of color who are renters. CSI's EID policy focuses on supporting community-led innovation that allows renters and lower-income residents the opportunity to participate.

Second, these state laws do not establish criteria for which communities receive EID designation. In contrast, CSI's policy proposes specific criteria to ensure that funding goes to communities that can benefit the most—those that have the least financial resources and have been on the frontlines of environmental hazards.

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<sup>18</sup> For more information, please visit The Connecticut General Assembly: <http://cga.ct.gov/2007/rpt/2007-R-0672.htm>

Third, existing models lack effective community accountability. Each district has a Board of Directors, but most are appointed by the Mayor and City Council, with the exception of Ohio, which allows residents to vote for some of the directors. And none of the enabling laws or local ordinances define metrics to measure transparency and accountability in the planning processes or distribution of funding. CSI's policy focuses on community participation in the planning, decision-making and implementation processes as well as clearly defined transparency and accountability measures.

### *Energy Investment Trust Models*

#### **1. Delaware and District of Columbia Sustainable Energy Utilities**

A Sustainable Energy Utility (SEU) is an "independent and financially self-sufficient entity responsible for delivering energy efficiency, energy conservation and customer-sited renewable energy to end users."<sup>19</sup> SEUs can be managed by the state or a nonprofit organization and have the authority to raise revenue through bonds and service fees, and to attract private investment for renewable energy projects. SEUs are charged with managing funds and investing in energy projects in the public and private sector.

The Delaware SEU, the first of its kind in the nation, was created by state legislation.<sup>20</sup> It manages a variety of funds and invests in energy efficiency and renewable energy projects at all levels: residential, commercial and public. A nonprofit entity, the SEU is governed by a nine-member Board of Directors representing a cross-sector of leaders ranging from the fields of social work, medicine and technology to the State's Public Advocate and Natural Resource and Environmental offices. All are appointed by the Governor and leaders of the State House and Senate. The SEU manages funding from tax-exempt bonds, the Green Energy Fund (financed through a utility surcharge), and revenue from the Regional Greenhouse Gas Initiative (RGGI) fund. Through a \$72 million bond issue, the SEU upgraded energy systems at several state agencies and colleges including Delaware State University, a HCBU (Historically Black Colleges and Universities). It developed Dover Sun Park, a 10 MW solar facility, through a Solar Renewable Energy Credit (SREC) procurement program.

Similarly, at a local level, the Washington DC, City Council created the DC SEU, which is managed by a nonprofit entity working with the Department of Natural Resources.<sup>21</sup> The DC SEU is funded through a system benefit charge on all electricity and natural gas usage. These funds are expected to bring in \$20 million per year to finance residential and commercial energy efficiency upgrades and solar installations in lower-income communities. In the first two years, the SEU has served

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<sup>19</sup> Houck, Jason and Rickerson, Wilson. "Sustainable Energy Utility Model for Energy Service Delivery" *Bulletin of Science, Technology, and Society*. April 2, 2009.

<sup>20</sup> For more information, please visit Energize Delaware: <http://www.energizedelaware.org/Sustainable-Energy/>

<sup>21</sup> For more information, please visit The DC Sustainable Energy Utility: <http://www.dcseu.com/>

more than 54,000 households, including over 14,000 low-income homes, and it has contracted with local solar installers that hire and train DC residents.

## 2. Massachusetts Clean Energy Center<sup>22</sup>

Established by state law, the Massachusetts Clean Energy Center (MassCEC) began operating in 2009 providing research, technical assistance, planning support, and financing to municipalities and counties to spur the development of energy efficiency upgrades of locally controlled and owned renewable energy projects. The MassCEC utilizes funds from the Renewable Energy Trust Fund, a service benefit fund created in 1998 through a small charge on utility bills.

MassCEC operates three divisions. The Renewable Energy Generation Division “provides financing and planning assistance to communities, businesses, and residents seeking to adopt clean energy.” The Industry and Innovation Support Division assists in business growth and workforce development programs. And the Clean Technology Division invests in clean energy companies for research and development of innovative renewable energy technologies. MassCEC is governed by a 12-member Board of Directors appointed by the Governor.

## 3. Connecticut Clean Energy Finance Authority<sup>23</sup>

Created by the state legislature, the Connecticut Clean Energy Finance and Investment Authority’s mission is to attract and distribute capital that can finance projects and initiatives to support clean energy, develop strategies that keep clean energy affordable and provide rebates or other financing mechanisms to support clean energy innovation. The Investment Authority is a quasi-government agency, governed by a 10-member Board of Directors appointed by the Governor.

To date, the Investment Authority has deployed over \$150 million to fund energy efficiency and renewable energy projects. A vast majority of financing comes from a systems benefit charge on investor-owned utilities’ customers. Additionally, the Authority has gotten federal grants to finance projects (such as the Department of Energy Sunshot initiative), utilized Connecticut’s share of Regional Greenhouse Gas Initiative dollars, deployed a commercial PACE program and sought philanthropic support through grants and program related investments to finance certain projects.

## 4. Community Development Finance Institution (CDFIs)

Community Development Finance Institutions (CDFI) are non-governmental agencies whose mission is to provide investments in communities that have been historically redlined. Deeply engaged in lending and development, CDFIs have invested in projects including affordable housing, bringing healthy food to communities and energy efficiency for low-income homeowners and renters.

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<sup>22</sup> For more information, please visit The Mass Clean Energy Center <http://www.masscec.com/about>

<sup>23</sup> For more information, please visit The Connecticut Clean Energy Finance and Investment Authority: <http://www.ctcleanenergy.com/Default.aspx?tabid=62>

CDFIs are certified by the US Treasury Department and leverage private financing by using a variety of public resources including the CDFI Fund, the New Market Tax Credits Program, Community Development Block Grants, and other federal and state programs. Examples of CDFIs that have been successful in pooling a variety of financial resources to support innovative community entrepreneurship around energy and food issues include Craft 3 in the Pacific Northwest, MACED in Kentucky, The Reinvestment Fund in Philadelphia and Self Help operating in several states.

### 5. Coop Power<sup>24</sup>

Co-op Power is a consumer-owned cooperative with a network of autonomous Local Organizing Councils in Massachusetts and Vermont working together to create “a multi-class, multi-racial movement for a sustainable and just energy future.” Members get discounts on products and services and invest in local businesses decided on and developed by the Local Organizing Councils with help from local engineers, financial experts, green building specialists, community economic developers, lawyers and business planners. The businesses so far include Energia (a multi-family/commercial/residential energy efficiency business); Northeast Biodiesel (a 3.5 million gallon/year recycled vegetable oil biodiesel processing plant), five solar installation businesses, two green electrician businesses and a window restoration/thermal window insert fabrication business.

Coop Power’s 450 members have invested more than \$320,000 in member equity. Coop Power also has raised \$840,000 in member loans and over \$850,000 in other local investment to support the development of community-scale clean energy projects and to build the organization. As a cooperative, Coop Power is governed by its members. Each Local Organizing Council elects one representative to the organization’s Board of Directors and each member has one vote in elections for at-large Board members, which takes place at the organization’s annual meeting.

### 6. Boston Impact Initiative<sup>25</sup>

New to the scene, the Boston Impact Initiative (BII) is an investment fund that invests in local businesses and organizations in communities that have been impacted by racial, social and economic inequality. The aim of the fund is to create transformational and systemic change in urban communities.

BII believes in an integrated capital approach to create more resilient, strong and equitable local economies. This means the fund deploys a variety of capital tools including loans, credit enhancements, equity investments, royalty finance, direct public offering, crowdfunding and grants. With many tools to choose from, BII can tailor its support to each project’s stage of development. BII evaluates returns on its investments according to the triple bottom line of impact on people, planet and

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<sup>24</sup> For more information, please visit Coop Power <http://www.cooppower.coop/>

<sup>25</sup> For more information, please visit The Boston Impact Initiative <http://bostonimpact.com/>

profit. To assess how projects are positively impacting their communities, BII looks at the following questions:<sup>26</sup>

- *Ownership*: Who has access to ownership?
- *Opportunity*: What kind of opportunities are being created for those people who have been impacted by racial, social and economic inequality?
- *Community Relationships*: How are you building meaningful relationships with your community—customers, suppliers, employees, business partners and even competitors?
- *Place*: How much business activity (both supply and demand) is generated locally?
- *Nature*: What contribution does your business make to stewarding and restoring the ecological environment?
- *Measurement*: How do you evaluate success at work?

BII is managed by a six-person team, which includes long-time community activists and advocates for racial, social and economic justice.

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<sup>26</sup> Boston Impact Initiative. "What is Integrated Capital?" <http://bostonimpact.com/integrated-capital/>

### APPENDIX III: FEDERAL OPPORTUNITIES TO SUPPORT EIDS

Several existing federal programs are cited above as possible funding sources for EIDs. But the federal government could play a much stronger role in supporting EIDS in the development of community-scale energy efficiency and renewable generation projects that will create a more sustainable American energy future. Support can take the form of grants, loans and/or technical assistance. It can also take a more active partnership approach.

#### *Current Models for Federal Engagement*

Two successful models could be adapted to support EIDs:

1. **The EPA Community Action for Renewed Environment (CARE) program:** CARE partnered with communities to tackle toxic pollution by supporting collaborations among local non-profits, businesses and government. CARE provided grants and technical assistance to support community need assessments, strategic processes to identify and prioritize solutions, and implementation of the solutions.
2. **The Partnership for Sustainable Communities:** The Partnership was an interagency (HUD, DOT and EPA) effort to support innovative economic development practices that “improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment.”<sup>27</sup> The agencies coordinated grantmaking and technical assistance, including support for local capacity building around planning and project development. The Partnership fostered local decision-making while providing guiding frameworks to help ensure equitable decisions and practices.

#### *Future Opportunities for Federal Engagement*

With climate change and economic stagnation continuing to challenge our nation, Congress could create federal EID legislation to help jumpstart the economy, spur innovation, support small businesses and deploy renewable energy in communities across the country. Meanwhile, the Obama Administration has proposed two energy programs that can support EID development.

1. **Energy Security Trust.** The Trust, proposed by President Obama to direct federal revenue from fossil fuel production towards clean energy investment, could provide funds for EIDs.<sup>28</sup> A good approach would be to use a portion of public dollars collected in the Trust to provide federal matching grants to Energy Investment Trusts that would reward local governments, social entrepreneurs and crowdfunding practices that invest in energy efficiency and renewable generation in communities of high need and impact. In 2009, 12 Congressional co-sponsors

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<sup>27</sup>For more information, please visit Office of Sustainable Communities <http://www.sustainablecommunities.gov/aboutUs.html>

<sup>28</sup> President Barack Obama. 2013. “The President’s Plan for a Strong Middle Class and Strong America”



introduced a similar concept, America's Energy Security Trust Fund, which would support energy industry transitions to renewables; invest in renewable energy and technology.

2. **Energy Efficiency Race to the Top program.**<sup>29</sup> Modeled after the Education Department's Race to the Top program, these competitive grants would support states that propose innovative ways to increase efficiency and cut waste. This program could be expanded to include community scale renewable generation to achieve improvements in how we use energy, but also create it more cleanly. This program could be an excellent mechanism to incentivize state and local governments to support EIDs. Applicants for these grants should be required to demonstrate how they:
  - a. Have included, and will continue to include, communities as participants and decision-makers in planning and implementing efficiency efforts;
  - b. Will invest in the capacity of community-based groups and local small businesses that are creating living wage, sustainable jobs in communities with high unemployment;
  - c. Will benefit communities whose residents live in older homes, pay more for electricity, and cannot afford weatherization and other efficiency upgrades.

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<sup>29</sup> *Ibid.*