

File No. 120126

Committee Item No. 1

Board Item No. 5

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Land Use and Economic Development Date April 9, 2012

Board of Supervisors Meeting Date April 17, 2012

Cmte Board

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| <input type="checkbox"/> | <input type="checkbox"/> | Motion |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Resolution |
| <input type="checkbox"/> | <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | <input type="checkbox"/> | Legislative Digest |
| <input type="checkbox"/> | <input type="checkbox"/> | Budget and Legislative Analyst Report |
| <input type="checkbox"/> | <input type="checkbox"/> | Legislative Analyst Report |
| <input type="checkbox"/> | <input type="checkbox"/> | Youth Commission Report |
| <input type="checkbox"/> | <input type="checkbox"/> | Introduction Form (for hearings) |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/> | <input type="checkbox"/> | MOU |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Grant Information Form |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Grant Budget |
| <input type="checkbox"/> | <input type="checkbox"/> | Subcontract Budget |
| <input type="checkbox"/> | <input type="checkbox"/> | Contract/Agreement |
| <input type="checkbox"/> | <input type="checkbox"/> | Form 126 – Ethics Commission |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Award Letter |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Application |
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OTHER

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Completed by: Alisa Miller Date April 6, 2012

Completed by: Alisa Miller Date April 11, 2012

An asterisked item represents the cover sheet to a document that exceeds 25 pages.
The complete document can be found in the file.

1 [Accept and Expend Grant - Existing Commercial Buildings Energy Performance Policy
2 Implementation - \$180,000]

3 **Resolution authorizing the Department of the Environment to retroactively accept and**
4 **expend a grant in the amount of \$180,000 from the Kresge Foundation to implement the**
5 **Existing Commercial Buildings Energy Performance Ordinance (San Francisco**
6 **Environment Code Chapter 20).**

7
8 WHEREAS, After a competitive process, the Kresge Foundation has selected the
9 Department of the Environment to receive funding to implement the Existing Commercial
10 Buildings Energy Performance Ordinance (San Francisco Environment Code Chapter 20);
11 and

12 WHEREAS, The Board of Supervisors for the City and County of San Francisco has
13 directed the Department of the Environment to reduce carbon dioxide (CO₂) emissions within
14 the City and County of San Francisco to 20% below 1990 levels by the year 2012; and

15 WHEREAS, Annually, the building sector accounts for more than half of all greenhouse
16 gas emissions in San Francisco; and

17 WHEREAS, Building energy performance labeling and disclosure policies are emerging
18 tools intended to motivate investment in energy efficiency by highlighting the value of energy
19 savings for building owners, tenants, and energy service providers; and

20 WHEREAS, San Francisco recently adopted the Existing Commercial Buildings Energy
21 Performance Ordinance (Environmental Code Chapter 20) calling for the use of energy
22 performance labeling and disclosure; and

23 WHEREAS, Energy performance labeling and disclosure policy requires each
24 commercial building of 10,000 square feet or greater to publicly report its energy performance
25 annually and undertake a comprehensive energy audit at least once every 5 years; and

1 WHEREAS, Energy performance labels for commercial buildings are powerful
2 motivators for energy efficiency improvement when disclosed to the market; and

3 WHEREAS, This innovative approach is cost effective for both local government and
4 building owners; and

5 WHEREAS, A request for retroactive approval is being sought because the Department
6 of the Environment needed to determine the staffing and budgetary requirements to
7 administer the grant; and

8 WHEREAS, No grant funds will be expended until the San Francisco Board of
9 Supervisors has approved acceptance of the funds; and


10 WHEREAS, The grant budget includes \$31,934 for indirect costs; and

11 WHEREAS, The grant does not require an ASO amendment; and

12 WHEREAS, The term of the grant is from January 1, 2012 through December 31,
13 2013; now, therefore, be it

14 RESOLVED, That the Board of Supervisors hereby authorizes the Director of the
15 Department of the Environment to retroactively accept and expend \$180,000 from the Kresge
16 Foundation to support the implementation of the Existing Commercial Buildings Energy
17 Performance Ordinance.

18
19 Recommended:

Approved: 

for Mayor

20
21 
22 Department Head

Approved: 

23 Controller
24
25

TO: Angela Calvillo, Clerk of the Board of Supervisors
FROM: The Department of the Environment
DATE: January 24, 2012
SUBJECT: Accept and Expend Resolution for Private Grant
GRANT TITLE: Existing Commercial Buildings Energy Performance Policy Implementation

Attached please find the original and 4 copies of each of the following:

- Proposed grant resolution; original signed by Department, Mayor, Controller
- Grant information form, including disability checklist
- Grant budget
- Grant application
- Grant award letter from funding agency
- Other (Explain):

Special Timeline Requirements:

Departmental representative to receive a copy of the adopted resolution:

Name: Rachel Buerkle

Phone: 415-355-3704

Interoffice Mail Address:

Certified copy required Yes

No X

(Note: certified copies have the seal of the City/County affixed and are occasionally required by funding agencies. In most cases ordinary copies without the seal are sufficient).

File Number: 120126
(Provided by Clerk of Board of Supervisors)

220233 / EVCBEP-12

Grant Resolution Information Form
(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: Kresge Foundation Support for Existing Commercial Buildings Energy Performance policy Implementation

2. Department: Department of the Environment

3. Contact Person: Rachel Buerkle Telephone: 415-355-3704

4. Grant Approval Status (check one):

Approved by funding agency

Not yet approved

5. Amount of Grant Funding Approved or Applied for: \$180,000

6a. Matching Funds Required: \$ not required

While a match is not required, current Department of Environment funding for existing staff and services were used as leveraged funds for this grant.

b. Source(s) of matching funds (if applicable):

7a. Grant Source Agency:

b. Grant Pass-Through Agency (if applicable): Kresge Foundation

8. Proposed Grant Project Summary:

The Department of the Environment was awarded a grant of \$180,000 from the Kresge Foundation to support implementation of the city's Existing Commercial Buildings Energy Performance Ordinance (San Francisco Environment Code Chapter 20.) This ordinance, adopted February 2011, requires each commercial building of 10,000 square feet or greater to publicly report its energy performance annually, and to get an energy audit every 5 years. Public disclosure of energy performance will motivate investment in energy efficiency by highlighting the value of energy savings for building owners, tenants, and energy service providers.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

Start-Date: January 1, 2012

End-Date: June 31, 2013

10a. Amount budgeted for contractual services: \$20,327

b. Will contractual services be put out to bid? Yes

c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Yes

d. Is this likely to be a one-time or ongoing request for contracting out? One-Time

11a. Does the budget include indirect costs? Yes No

b1. If yes, how much? \$31,934

b2. How was the amount calculated? Amount allowed by the funder.

c1. If no, why are indirect costs not included?

Not allowed by granting agency

To maximize use of grant funds on direct services

Other (please explain):

c2. If no indirect costs are included, what would have been the indirect costs?

12. Any other significant grant requirements or comments:

****Disability Access Checklist** (Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

Existing Site(s)

Existing Structure(s)

Existing Program(s) or Service(s)

Rehabilitated Site(s)

Rehabilitated Structure(s)

New Program(s) or Service(s)

New Site(s)

New Structure(s)

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.

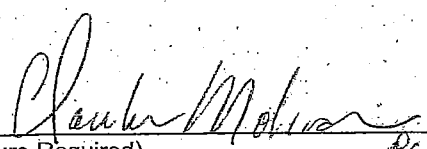
If such access would be technically infeasible, this is described in the comments section below:

Comments:

Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Claudia Molina, Departmental ADA Coordinator, Payroll Personnel Clerk

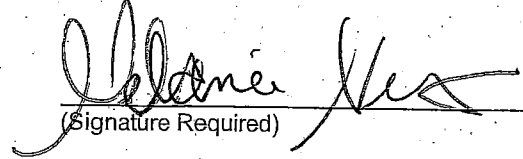
Date Reviewed: 2/2/12


(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Melanie Nutter, Director, Department of the Environment

Date Reviewed: 2/1/2012


(Signature Required)

**Accept and Expend
Kresge Foundation Grant to
SF Department of the Environment**

| | | From Kresge Foundation | Leveraged Funds | Total Project |
|---|---|------------------------|-------------------|-------------------|
| Personnel | | | | |
| Private Sector Green Building Coordinator- Sr Env Spec 5642 | Integrating ECB ordinance with energy efficiency financing. Year 1= .5 FTE, year 2= .1FTE Leveraged funds are from in-kind staff time already funded. | \$ 8,440 | \$ 8,440 | \$ 16,880 |
| Private Sector Green Building Specialist -Env Spec 5640 | Managing ECB program implementation. Year 1=.6 FTE, Year 2= .8FTE. Leveraged funds are from in-kind staff time already funded. | \$ 63,441 | \$ 63,441 | \$ 126,882 |
| Green Building Associate -9922 | Tracking day-to-day compliance and providing technical support. Year 1=1FTE, Year 2- 1FTE. Leveraged funds are from in-kind staff time already funded. | \$ 40,486 | \$ 40,486 | \$ 80,972 |
| Climate Program Manager- 5644 | Program oversight and management. Matching is based on in-kind staff time. Leveraged funds are from in-kind staff time already funded. | | \$ 22,966 | \$ 22,966 |
| Climate Action Coordinator- Sr Env Spec 5642 | Implement climate action plan, including energy efficiency policies. Matching is based on in-kind staff time. Leveraged funds are from in-kind staff time already funded. | | \$ 28,675 | \$ 28,675 |
| Sustainability Information Management-Env Associate 5638 | Data management and analysis. Year 1=.25FTE, Year 2- .25FTE Leveraged funds are from in-kind staff time already funded. | \$ 15,372 | \$ 15,372 | \$ 30,744 |
| Subtotal | | \$ 127,739 | \$ 179,380 | \$ 307,119 |
| Professional Services | | | | |
| Benchmarking Training and Workshops | Contractors will be selected based on standard City procurement practices | \$ 15,327 | \$ 8,000 | \$ 23,327 |
| Database Development | Contractors will be selected based on standard City procurement practices | \$ 5,000 | \$ 9,000 | \$ 14,000 |
| Subtotal | | \$ 20,327 | \$ 17,000 | \$ 37,327 |
| Total Project Direct | | \$ 148,066 | \$ 196,380 | \$ 344,446 |
| Indirect Costs | Based on 25% of salary and benefits as allowed by the funder | \$ 31,934 | \$ 48,595 | \$ 86,111 |
| TOTAL PROJECT (direct + indirect) | | \$ 180,000 | \$ 244,975 | \$ 430,557 |

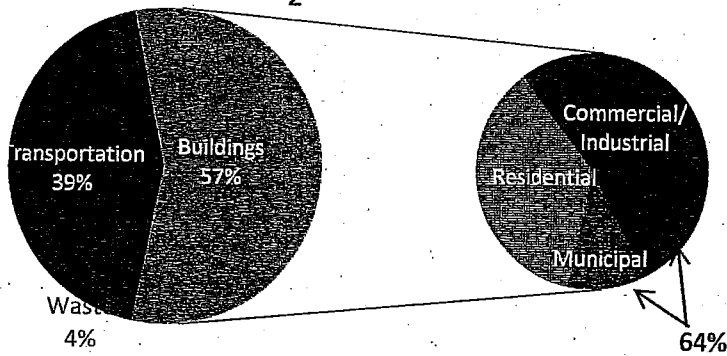
**Implementing San Francisco's
Existing Commercial Buildings Energy Performance Ordinance
Proposal to the Kresge Foundation
November 2011**

The Department of the Environment for the City and County of San Francisco (SF Environment) is pleased to submit this proposal to the Kresge Foundation to support implementation of the City's Existing Commercial Buildings Energy Performance Ordinance.

Challenges to Implementation

Cities are essential to the resolution of environmental challenges, from addressing local sustainability concerns such as land use, to providing a laboratory for solutions to mitigate and adapt to the impacts of global climate change. Improving the resource efficiency of building stock in San Francisco is a direct, measurable, and cost-effective path for citizens, businesses, and city agencies to improve energy security, save money and become climate stewards.

Figure 1: San Francisco's 2010 Citywide CO₂e Emissions



Based on the latest data, the construction, operation and demolition of buildings accounts for 57% of San Francisco's greenhouse gas emissions (Figure 1.) Commercial, industrial, and municipal buildings together account for 64% of building-sector emissions.

The City has rigorous green building standards for new construction – requiring energy efficiency 15% beyond California's energy code, which is currently the strictest in the nation. San Francisco requires large commercial buildings to include renewable energy generation and to commission energy using systems prior to occupancy. However, on average, new buildings account for a mere 0.8% of the city's building stock per year; it could take more than sixty years to 'green' even half of San Francisco by relying solely on new construction.

To address this gap, the Mayor convened an Existing Commercial Buildings Task Force (ECBTF) to identify the actions necessary to maximize energy efficiency in commercial buildings. It included representatives of building ownership, property management, building operations, engineering, finance, and lawyers, as well as U.S. EPA Region 9, the California Energy Commission and Pacific Gas & Electric Company (PG&E), the City's primary energy provider.

Informed by the Task Force's recommendations, San Francisco adopted the Existing Commercial Buildings Energy Performance Ordinance in February, 2011. The ordinance is designed to empower owners, managers, operators, and occupants with key information to manage energy efficiently, including the specific cost-effective retrofits and operational improvements available to them. This initiative promises to reduce greenhouse gas emissions, conserve resources, and enhance local electric grid reliability. The policy supports the local economy by improving the competitiveness of commercial buildings in the city, and expanding the market for jobs related to energy efficiency.

Currently, little information is available about the amount of energy that individual commercial buildings use. Thus, the collection and dissemination of information is critical. Understanding the performance of specific sectors, types of buildings, and portfolios will be invaluable to providing integrated targeted programs to capture all available cost-effective efficiency improvements.

The ordinance is intended to both motivate immediate improvements and gather baseline information for additional policy, education, and incentive programs. It requires owners of nonresidential buildings 10,000 square feet and larger to:

- *Have An Actionable Plan:* A credible energy efficiency audit identifying specific, cost-effective measures that would save energy.
- *Benchmark:* Tracking and annually summarizing the energy used by each building, enabling trend analysis and comparison to similar buildings under similar conditions across the city and nation.
- *Make Energy Performance Transparent:* Annually sharing of a concise overview of each building's energy benchmarking results with SF Environment and with tenants. SF Environment is required to make this information available to the public.

In 2008, the California Energy Efficiency Strategic Plan set a goal of getting 50% of existing commercial buildings to net zero energy by 2030. Since this aspirational goal is not physically possible

within San Francisco's dense urban make up, the ECB Task Force suggested an achievable goal with equivalent impact—cutting commercial energy use 50% by 2030. To attain this goal, it will be necessary to reduce commercial energy use by an average of 2.5% per year after accounting for new construction, primarily through cost-effective energy efficiency improvements.

SF Environment's Energy Watch rebate program, which is delivered under contract with PG&E, has demonstrated that lack of access to a credible energy audit is the biggest barrier to implementing efficiency retrofits. Energy Watch provides outreach, energy audits and energy retrofit support to businesses and multi-unit buildings. Participants are not required to take further action after receiving the audit. However, 40-60% take advantage of the compelling rebates available and implement significant retrofits. SF Environment anticipates that voluntary retrofits spurred by the ECB ordinance will exceed this pace during the first five years of implementation by requiring that the entire stock of non-residential buildings—more than 2,700 buildings totaling more than 225 million square feet (Table 1) – receives comprehensive energy audits and publicly discloses energy performance (Table 2).

Table 1: Facilities affected by the Existing Commercial Buildings Energy Performance Ordinance

| Group | Size (square feet) | Number of Buildings | Total Square Footage (million square feet) |
|----------------------|-----------------------|------------------------|---|
| Private Sector | 50K+ | 804 | 151.1 |
| | 25K-50K | 559 | 19.7 |
| | 10K-25K | 1,254 | 19.7 |
| Private Sector Total | | 2,617 | 190.5 |
| Municipal Facilities | 50K+ | 52 | 15.3 |
| | 25K-50K | 26 | 8.4 |
| | 10K-25K | 23 | 11.8 |
| Municipal Total | | 101 | 35.5 |
| Overall Total | | 2,718 | 226 |

Ensuring decision-makers have the information necessary to manage energy effectively, while leveraging very specific financial resources such as California ratepayers' ongoing investment of nearly \$1 billion per year in energy efficiency and attractive financing (including the nascent Green Finance San Francisco Property Assessed Clean Energy (PACE) program for commercial buildings) will contribute to the impact of this type of policy. Data provided by PG&E indicate energy efficiency

program spending in the commercial sector in San Francisco has averaged approximately \$24 million per year in recent years, and was minimally impacted by the recession. Audits and retrofits motivated by the ECB ordinance are expected to nearly double the demand for incentives and services to \$39 million per year for the first five years of implementation.

The ECB ordinance is also backed by a groundswell of interest in sustainable operations (measured by 34 million square feet in San Francisco having attained LEED certification, 80% via LEED for Existing Buildings Operations and Maintenance.) Thus, providing other motivators such as educational support, inspirational examples of excellence, differentiating certifications such as ENERGY STAR, recognition from local leaders, and tools to replicate successes will also significantly increase ordinance success.

This consistent, deep engagement to implement energy efficiency improvements is projected to yield an average reduction in energy use of more than 4% per year in the commercial sector during the first five years of implementation (Table 2), reducing building related greenhouse gas emissions proportionately. In the process, SF Environment will obtain the necessary data to target and fine tune incentives, policies, and educational programs for specific sectors and building types.

Table 2: Impact of SF Existing Commercial Buildings Strategy

| Scenario | Estimated Net Annual Energy Reduction ¹ | Maximum Annual Incentive Budget ² | 10-Year Net Present Value to Private Sector ³ | Annual Greenhouse Gas Emission Reduction (Tons CO ₂ e) |
|--|--|--|--|---|
| 2006-2008 Baseline: Voluntary Audits and Efficiency Incentives | 1.3% | \$24 million | \$382 million | 35,000 Tons CO ₂ e |
| Baseline plus ECB ordinance | 4.2% | \$39 million | \$612 million | 70,800 Tons CO ₂ e |

¹ Estimate includes savings attributable to implementation of recommendations from ASHRAE Level I and Level II audits. All estimates have been reduced by 0.8% to compensate for projected annual increase in local commercial building stock.

² Incentive budget refers to ratepayer funds regulated by the California Public Utilities Commission and used by investor owned utilities for energy-related public benefit programs. The estimate above includes but is not limited to San Francisco Energy Watch. Each incentive budget estimate is conservatively high because all energy savings reduce ongoing energy costs, but some of the net annual energy reduction will be attributable to California's Title 24 Part 6 energy code requirements.

³ Present value is estimated as the sum of total construction costs, incentive rebates, and energy savings. This estimate is based on 9% discount rate (which is the rate applied by SF Department of Finance.)

SF Environment will need to maintain and expand collaborations with labor, educational providers, PG&E and trade organizations – particularly the San Francisco chapter of the Building Owner and Managers Association – to realize the full potential of the policy. It must provide even-handed implementation, consistent communication, and accentuate the positive by recognizing both leadership in energy management, and ongoing improvements in facilities that are not currently exemplars of energy performance.

Goals and Activities

San Francisco's Existing Commercial Buildings Energy Performance Ordinance, as with similar policies in New York, Washington, DC, and Seattle, will provide the richest baseline information ever assembled about the performance of commercial buildings across a city. San Francisco is using information and recognition to motivate immediate improvements, while at the same time gathering critical information for additional policy, education, and incentive programs. After the first three years, SF Environment will have sufficient data to inform the steps necessary to maintain or accelerate adoption of energy efficient technologies and practices – data that will support similar national policies.

Critical activities to demonstrate the efficacy of energy performance auditing, benchmarking, and disclosure policies include:

1. Engagement and Customer Service
 - a. Clearly and consistently communicating the requirements and the value of information for energy management.
 - b. Quickly identifying and solving the inevitable challenges of implementing a new policy.
 - c. Providing tools to help owners, managers, and occupants mutually benefit from efficiency improvements.
2. Communication
 - a. Demonstrating value by promoting diverse examples of the benefits of efficiency in buildings old and new, large and small, and representative uses (office, supermarket, health care, etc)
 - b. Consistent, timely public reporting of energy performance label information.
 - c. Visualization and mapping to make data accessible.

3. Training

- a. Collaboration with City College of San Francisco, San Francisco State University, the Pacific Energy Center, and key trades to meet demand for qualified energy auditors.
 - b. Collaboration with trade unions, Building Operator Certification program, the Pacific Energy Center, and others to enhance building operators and managers' expertise in efficiency in day-to-day operations.
4. Assisting other governments to adopt consistent approaches, and to facilitate professional exchange to adjust course when needed.
- a. Leveraging funding from the Urban Sustainability Directors' Network, collaboration with the Institute for Market Transformation, and numerous existing partnerships with communities across California and beyond (Green Cities Coalition, Living Cities, U.S. Conference of Mayors, Bay Area Climate Collaborative, etc.)

Collaborations

Formal partners include trade groups and organizations that represent critical, deep, and substantially distinct constituencies for collaboration in successful implementation of energy performance policy:

- Building Owners and Managers' Association – San Francisco Chapter (BOMA-SF): BOMA-SF has been a key supporter of the ECB Task Force, the ECB ordinance, and environmental initiatives in San Francisco. BOMA-SF also conducts extensive educational programs supporting energy efficiency and benchmarking. It will provide access to its networks, events, educational forums, and communication resources; this professional network is the keystone to successful implementation of the ECB policy. More than 75% of affected square footage is in the 852 nonresidential buildings that are 50,000 square feet and larger, and BOMA-SF member facilities account for more than 250 of the largest of these facilities. Active participants in the chapter serve or directly engage with hundreds more.
- National Association of Institutional and Office Properties (NAIOP): Where BOMA-SF consists predominantly of property management and operations professionals, the San Francisco NAIOP chapter includes substantial participation among building ownership, investors, real estate professionals, and capital providers. Though its membership is smaller than the other trade groups, its members are extraordinarily influential – opening doors and helping to set up educational forums that attract key principals, brokers, and service providers.

- U.S. Green Building Council Northern California Chapter: USGBC-NCC membership cuts across other organizations – representing ownership, management, design, construction, legal, and financial sectors. USGBC-NCC coordinates educational events and has the broadest communications platform of all local partners.
- City College of San Francisco: With support from SF Environment, BOMA-SF, and PG&E, CCSF was recently awarded a two-year grant to develop and deliver model curriculum for energy auditor training. This program, which will initiate in November 2011, will be the single largest source of trained, qualified energy auditors in the region – bolstering workforce capacity critical to the success of the audit requirement.
- Business Council on Climate Change: BC3 provides a unique venue for public-private engagement, where business leaders are recognized for their commitments to transparency, sustainable business practices, and collaborative innovation. The Green Tenant Toolkit – which BC3 prepared through a broad collaboration including most of the formal partners on this list, provides a resource to recognize and replicate win-win solutions to owner/tenant split incentives. Promotion and ongoing development of the Toolkit will be a significant contributor to market transformation in San Francisco.
- Pacific Gas & Electric: PG&E provided technical support in the development of the ordinance, continues to provide educational workshops on energy efficiency and energy management, manages the incentive funds that will make the ECB policy highly effective, and provides key services such as automated upload of energy billing data to Portfolio Manager.
- The Institute for Market Transformation: The similarity of disclosure policies across the nation is due in significant part to the in-person networking opportunities, white papers, and online resources identifying trends, opportunities, and best practices that IMT provides. IMT will continue to aid in connecting SF Environment to regional and national real estate executives, policy technical support tools, and mechanisms to engage with other governments.
- The Urban Sustainability Directors' Network: SF Environment and the Institute for Market Transformation are preparing to convene municipal stakeholders from around the country who are adopting or implementing similar energy benchmarking and disclosure programs. Grant funding from Grant funding from USDN will help increase attendance by defraying local government staff travel costs. Delivered in concert with USDN member jurisdictions, IMT, and

the Urban Land Institute, the workshop will include best practices exchange, model policy development resources, and direct feedback from industry, utilities, and the federal government.

- University of Pennsylvania: David Hsu is analyzing benchmarking disclosure data from New York City, Seattle, and is negotiating to evaluate San Francisco data as well. Comparing results within cities, between cities, and across sectors will reveal trends and opportunities for policy refinement.

Informal partners include:

- San Francisco Chamber of Commerce: The Chamber of Commerce is the single largest trade organization affected by the ECB policy. The Chamber supported the adoption of the policy, and offers the ability to communicate with its broad membership. Similar trade organizations able to offer limited support including entrée to key sectors or neighborhoods include: Culturally based chambers of commerce, the Hotel Council, Union Square Association, Golden Gate Restaurant Association, and the Professional Property Management Association.
- International Facility Management Association (IFMA): Facility operations personnel are responsible for day-to-day decisions about how building systems will be utilized. While management support is essential, engagement and empowerment of chief engineers and operators is essential to realizing the significant potential of operational measures identified through audits and commissioning. Engagement with IFMA will yield educational collaborations including policy briefings and professional skills development, as well as case studies of retrofits.
- San Francisco is party to, and a leader within, numerous networks of sustainability professionals in governments and public-private engagement programs that provide channels to communicate the results of this program to others throughout the region, state, and nation. Examples include:
 - Stopwaste.org: A regional agency in nearby Alameda County helping the cities of Hayward, Albany, and Berkeley develop energy disclosure policies.
 - The Bay Area Climate Collaborative: Convening regional forums on energy disclosure and policy adoption.
 - Green Cities California, Living Cities, and the US Conference of Mayors: Providing engagement between local government management and elected leaders on sustainability best practices.

Making a Difference

A 50% reduction in commercial building energy use in 20 years will have the same effect as taking 50% of commercial building stock to zero-net energy, but at lower cost⁴. Tripling the pace and coverage of energy audits – combined with strategic actions to maximize implementation of cost-effective projects – is estimated to reduce climate emissions by at least 64,000 tons per year. This tremendous environmental benefit will be achieved not at a cost, but at a net savings of hundreds of millions of dollars over the next decade (Table 2.) Effective implementation of this policy, in concert with complementary financing, rebate, education, and outreach activities is anticipated to double the already substantial pace of energy efficiency retrofit activity in the city, and to demonstrate a model for the nation. This grant will directly provide the resources necessary to leverage this opportunity.

Measuring and Disseminating Results

Efficacy of policy implementation is first measured in direct compliance – the number and scale of buildings that obtain an energy audit, benchmark, and publicly report energy use. Over the grant period, compliance will be the most essential metric to establishing a culture of energy efficiency.

In addition to making energy performance disclosure data available to the public, SF Environment will engage with academic institutions to validate and analyze such reports. At the time of proposal, SF Environment is negotiating with the University of Pennsylvania to participate in a combined analysis of energy disclosure data from New York City and Seattle.

It is also in close communication with PG&E. With their continued cooperation, SF Environment will measure installed retrofits by tracking increases in rebate transactions, as well as uptake of the Green Finance San Francisco PACE financing program.

Obstacles and Plans to Overcome Them

The strength of the market-based approach of the Existing Commercial Buildings Energy Performance Ordinance is also its weakness. Retrofits are voluntary; building owners can choose to not implement cost-effective measures. The ordinance and all communications about its implementation are structured to defuse this problem: ongoing disclosure makes the case for ongoing attention to energy management.

⁴ Based on the much lower cost of efficiency compared to renewables, bringing half of buildings to "net-zero energy" would be more costly than achieving the same aggregate result by improving the performance of the entire stock.

Buildings that perform better than their peers are already being demonstrated to perform better on each of the most important metrics in commercial real estate. Reducing utility costs improves net operating income, which can be directly monetized at the time of sale. But even under the current paradigm of limited disclosure only for the high performers that earn the ENERGY STAR, independent peer-reviewed studies by academic economists and by real estate professionals repeatedly demonstrate statistically significant benefits in rental rates, occupancy, and effective rent. There will be building owners who choose not to act, but the market will correct these actions in time.

In addition to market forces, the policy is supported by development of spokespeople and case studies featuring leaders within partner organizations speaking to the benefits of saving money, of the declining perception of risk in implementing common efficiency retrofits, and the essential value of sustainability.

One necessity to achieving the goals of this project is to obtain funding to maintain staff who will support critical collaborations, create educational and outreach opportunities, as well as provide for technical support. SF Environment does not receive funding from the City's General Fund and thus relies heavily on fundraising to support the implementation of its more innovative work.

In Conclusion

If all cities were to adopt policies similar to San Francisco's Existing Commercial Buildings Energy Performance Ordinance, it would have a tremendous national impact on greenhouse gas emissions and climate change. However just adopting a policy is no guarantee success. For something as multi-faceted as an energy performance and benchmarking, there must be a fair amount of follow-up and support. San Francisco has the opportunity and imperative to demonstrate efficient implementation, share valuable lessons and resources and create road maps for other municipalities instituting comparable legislation. Funding from the Kresge Foundation ensures that the City is able to serve in that capacity.

Existing Commercial Buildings Energy Performance Ordinance Timeline

1. Energy Benchmark

| | | | | | |
|--|--|--|---|---|---|
| | Up to 120 Days after Approval | 10/1/11 | 4/1/12 | 4/1/13 | 2014 and beyond |
| | Educate property owners about upcoming requirements. Support early action | All buildings >50k ft ² benchmark First year data is confidential | All buildings >25k ft ² benchmark. Public disclosure for >50k ft ² | Require all buildings >10k ft ² to benchmark Public disclosure for >25k ft ² | Continue benchmarking. Re-evaluate options for buildings <10k ft ² . Public disclosure for >10k ft ² |
| Public Facilities Lead By Example | Communicate \$35M 10-year ongoing investment in energy efficiency in public facilities | City facilities benchmarked, with performance made public on the same timeline as private sector facilities. (Energy performance is currently reported at the department level for Climate Action Plans) Ongoing investment in energy efficiency in municipal facilities. | | | |

2. Energy Efficiency Audit

| | | | | | | | | |
|--|---|--|--|---|---|------|------|--|
| | Up to 120 Days after Approval | Preparation | Audits Due 10/15/12 for First Group | Audits Due 4/1/13 for Second Group | Audits Due 4/1/14 for Final Group | 2015 | 2016 | 2017 |
| | SF Environment notifies building owners of energy efficiency audit requirement. | 12 months before first energy audit due date | Approximately 33% of buildings must obtain an energy audit | Deadline for second 33% of buildings to obtain an energy efficiency audit | Deadline for third 33% of buildings >10,000 ft ² have clear plan for saving energy | - | - | 20% complete new energy efficiency audit, identifying remaining cost-effective opportunities |

Support for Action

| | |
|--|--|
| | SF Energy Watch and PG&E programs provide rebates for energy efficiency improvements Green Finance SF program offers financing for commercial energy efficiency, renewable energy, and water efficiency retrofits Federal incentives include accelerated depreciation and 179D tax deduction for qualifying improvements |
| | Energy Center (www.pge.com/energyclasses) and EPA ENERGY STAR (www.energystar.gov/benchmark) |

THE KRESGE FOUNDATION

November 18, 2011

Ms. Melanie Nutter
Director
Department of the Environment
City & County of San Francisco
11 Grove Street
San Francisco, CA 94102

Dear Ms. Nutter:

Congratulations! I am pleased to inform you that The Kresge Foundation has approved a grant of \$180,000 to Department of the Environment, City & County of San Francisco for the Existing Commercial Buildings Energy Performance Ordinance project for the period January 1, 2011, through June 30, 2013. Your grant has been assigned request number 244814. Our staff looks forward to continuing our communication with you as you are engaged in this important work.

Jessica E. Boehland is the Program Department staff member assigned to your grant and will serve as your primary contact at the Foundation. In addition, staff of our Grants Management Department will be pleased to assist you should questions arise concerning your Kresge grant. Required grant reports (described in the "Reporting" section) should be submitted to the attention of the Grants Management Department, 3215 West Big Beaver Road, Troy, MI 48084, or e-mailed to grantsmanagement@kresge.org. Please use the request number mentioned above when you send correspondence about this grant to the Foundation.

Grant Payments and Conditions

Upon our receipt of your signed acceptance of this Grant Agreement, we will pay your grant as follows:

- \$120,000 within 30 days of receipt; and
- \$60,000 on November 30, 2012.

We will make payments on the grant upon our receipt and approval of any required reports, provided your organization has maintained its U.S. Internal Revenue Status (IRS) tax status as a public charity or governmental agency.

We reserve the right to cancel, modify, or withhold any payments that might otherwise be due under the grant, to require a refund of any unexpended funds, or both, if in our judgment any of the following occur:

- Grant funds have been used for purposes other than those specified by this Agreement;
- Such action is necessary to comply with the requirements of any law or regulation affecting your organization's or our responsibilities under this grant or to avoid the imposition of penalties or excise taxes; or
- Your organization's performance under this grant has not been satisfactory.

Reporting

Our staff looks forward to learning about the progress of your work under this grant. Please remember that for accounting and financial reporting purposes, this grant is restricted to the period January 1, 2012, through June 30, 2013.

We require the following grant report(s) to be submitted:

- For the period ending September 30, 2012, a report is due November 1, 2012;
- For the period ending June 30, 2013, a report is due August 1, 2013.

The reports must include both a narrative update and a financial report (as described below), which must be submitted together.

- Please provide a narrative report summarizing your progress toward achieving the goals of the project, including progress against the following objectives:
 - Educating building owners about their responsibilities under the Existing Commercial Buildings Energy Performance Ordinance and how to comply with those responsibilities;
 - Reporting energy performance data to the public;
 - Collaborating with other stakeholders to meet demand for qualified energy auditors and to encourage efficient building operations; and
 - Assisting other governments in their efforts to adopt consistent and effective approaches to rating and disclosure policy.
- Please provide a financial report describing expenditures against the approved budget of \$655,342 submitted on November 3, 2011 (which may be greater than the amount of the Kresge grant). Your financial report must display the approved project budget, expenditures against each line item since the start of the grant, and balances remaining (or overruns) for each line item. If the approved budget covers multiple years, each submitted financial report should include cumulative expenditures since the beginning of the grant period. For the final report, we ask that you explain all overrun variances that exceed either \$1,000 or ten percent of the budgeted line item amount.

Grant Accounting Requirement

You are required to maintain financial records and supporting documentation for expenditures and receipts related to this grant for five years after the grant end date. You also are required to permit us to have reasonable access to your files, records, and personnel during the term of this grant and for five years thereafter.

Use of Grant and IRS Requirements

Under United States law, Kresge Foundation grant funds may be expended only for charitable, scientific, literary, religious, or educational purposes within the meaning of the Internal Revenue Code of 1986, as amended ("IRS Code"). This grant is to be expended solely in support of the objectives detailed in your proposal submitted on November 3, 2011, as amended or amplified during the review process. Foundation grant funds may not be used to carry on propaganda or any voter registration drive, or otherwise attempt to influence any legislation or election, within the meaning of the IRS Code.

By accepting this grant, you certify that, to the best of your knowledge, your organization, members of your governing body, your staff, and any consultants/contractor(s) for your project do not advocate, plan, sponsor, commit, threaten to commit, or support terrorism. By your acceptance of this grant, you agree to provide us with information required for us to comply with Executive Order 13224, the USA Patriot Act, and other applicable laws, administrative rules, and Executive Orders. By accepting this grant, you further agree that all funds, including sub-awards to sub-recipients, will be used in compliance with all applicable anti-terrorist financing and asset control laws, regulations, rules, and executive orders. You also agree to take reasonable steps to ensure that no person or entity expected to receive funds in connection with this grant is designated on (a) the Annex to Executive Order No. 13224, as amended or supplemented from time to time, or (b) the Lists of Specially Designated Nationals or Blocked Persons maintained by the Office of Foreign Assets Controls of the U.S. Department of the Treasury. Finally, you certify that you will not provide material support or resources to an individual or entity that you know, or have reason to know, is acting as an agent for any individual or entity that advocates, plans, sponsors, engages in, or has engaged in, terrorist activity, or that has been so designated, and will immediately cease such support if an entity is so designated after the date of this Grant Agreement.

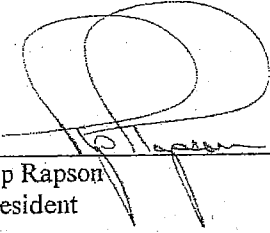
Acceptance

By signing and returning a copy of this Grant Agreement, you are agreeing to the grant conditions as stated in this Grant Agreement and confirming that the project dates and referenced budget are correct. You also confirm that the project funded by this grant is under your complete control. Your organization further confirms that it has and will exercise control over the process of selecting any secondary grantee or consultant, that the decision made or that will be made on any such selection is completely independent of us, and further, that there does not exist an agreement, written or oral, under which we have caused or may cause the selection of a secondary grantee or consultant. This letter contains the entire agreement between your organization and The Kresge Foundation, and there are no terms or conditions, oral or written, governing the use of the grant funds other than those contained in this letter. We may withdraw this grant if we do not receive your acceptance within 30 days of the date of this Grant Agreement.

Please sign this Grant Agreement in the space provided below and return **one** complete copy of the signed Grant Agreement. You may return to us an original signed copy, or a photocopy, facsimile, electronic copy, or other signed copy, which you agree will have the same effect for all purposes as the original. In countersigning this Grant Agreement, you represent to us that you have the authority to sign this Grant Agreement on your organization's behalf.

We look forward to working in partnership with you during the life of your grant and wish you much success in your work.

For The Kresge Foundation



Rip Rapson
President

For Department of the Environment, City &
County of San Francisco

Melanie Nutter
Director