



AGENDA REPORT

TO: Jestin D. Johnson
City Administrator

FROM: Joe DeVries
Deputy City Administrator
and Chief Resilience Officer

SUBJECT: Acceptance of Funds, Partnership Agreement, and Contracting Authority In Support of Thermal Microgrid and Building Electrification Innovation

DATE: September 4, 2024

City Administrator Approval


Jestin Johnson (Sep 5, 2024 08:59 PDT)

Date: Sep 5, 2024

RECOMMENDATION

Staff Recommends That The City Council Adopt a Resolution Authorizing the City Administrator To (1) Enter Into A Statutory Partnership Agreement With People Power Solar Cooperative To Apply To The Environmental Protection Agency Community Change Grant For Nineteen Million, Nine Hundred And Ninety-Nine Thousand, Nine Hundred And Twenty Five Dollars (\$19,999,925) To Implement The Oakland Thermal Renewable Energy And Electrification (OakTREE) Project In Oakland Frontline Communities; (2) Accept And Appropriate Five Hundred Thousand Dollars (\$500,000) From The Federal Department of Energy's Energy Future Grants Program (EFG Grant), including One Hundred And Fifty Six Thousand, One Hundred And Forty Seven Dollars (\$156,147) To Hire A Program Analyst 1; (3) Waive The Competitive Bidding Requirement And Authorize The City Administrator To Enter into A Professional Services Contract With MMCI Solar, A Local Clean Energy Innovation Firm, For Three Hundred and Forty Three Thousand Eight Hundred Fifty Three Dollars (\$343,853) From the EFG Grant To Serve As Project Technical Lead For OakTREE; (4) Authorize The City Administrator To Enter into A Three Thousand Dollar (\$3,000) Professional Services Contract With Oakland-Based Revalue.io To Provide Technical Assistance, Document Review, Staff Training, And Related Services To Support Ongoing Advancement Of The City Of Oakland's Equitable Electrification Policies And Programs, Pursuant To The City's Equitable Climate Action Plan; (5) Waive The Local/Small Local Business Enterprise (L/SLBE) Certification Requirement For Both MMCI Solar And Revalue.io; And (6) And Make Appropriate California Environmental Quality Act Findings

EXECUTIVE SUMMARY

The Oakland Thermal Renewable Energy and Electrification (OakTREE) project aims to reduce renewable energy costs, air pollution, and greenhouse gas (GHG) emissions by deploying and validating a new concept for energy infrastructure based on a "thermal microgrid" concept: physically linking, via an underground network, multiple sites that either produce or use heat to maximize energy generation and minimize costs. It aims to make affordable, clean energy more accessible to low-income and frontline communities as well as small local businesses, while

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also growing Oakland's green economy. Ancillary efforts will support urban agriculture, prepared meal services, e-transport, and indoor air quality. The OakTREE concept is led by two Oakland firms – MMCI Solar and People Power Solar Cooperative (PPSC) – and is fully consistent with the vision and targets of the Oakland Equitable Climate Action Plan.

On April 4, 2024, U.S. Secretary of Energy Jennifer M. Granholm announced that the Department of Energy (DOE) had awarded \$27 million in financial and technical assistance to 40 partner teams of states, local governments, and Tribes through the Energy Future Grants (EFG) Program, part of the historic Justice40 Initiative that directs 40 percent of certain Federal investments to “disadvantaged” communities. The City of Oakland (City) was awarded one of the EFG Grants: a \$500,000 investment to support planning the OakTREE project in partnership with MMCI Solar, PPSC, and Creative Development Partners (see **Attachment 1**). A portion of this planning grant is intended to fund a one-year Program Analyst 1 (PA-1) staff position in the City's Sustainability and Resilience Division in the City Administrator's Office to support intra- and inter-agency coordination for OakTREE, including ensuring that the project is developed in ways that will accelerate future neighborhood-based clean energy projects in frontline communities.

On November 21, 2023, the Environmental Protection Agency (EPA) issued a Notice of Funding Opportunity (NOFO) for the Environmental and Climate Justice Community Change Grants Program. The EPA received \$2 Billion through the Inflation Reduction Act for the Grant program and will award 150 grants across the United States in all 50 States and Tribal Territories. All grants must support partnerships between a community-based organization and local government. The NOFO requires a legally binding Statutory Partnership Agreement be executed prior to submission of the application; entering into such an agreement requires Council authorization.

Adoption of this Resolution will allow the City Administrator to (1) enter into a Statutory Partnership Agreement with PPSC and submit an Environmental and Climate Justice Community Change Grant application to the EPA to remain competitive for \$19,999,925 to implement OakTREE once the initial planning phase is completed; (2) accept and appropriate \$500,000 from the EFG Grant to hire a limited-term (one-year) staff person to support OakTREE planning at one or more strategic locations in Oakland's frontline communities; (3) grant the balance of EFG Grant funds to MMCI Solar for technical leadership and engineering of OakTREE; and (4) establish a Professional Services Contract with Oakland-based electrification and energy firm Revalue.io from Fund 1010, Org 02161, Account 54919, for \$3,000, with the possibility to extend the amount in the near future based on available grant funds, to build internal City capacity to for continued electrification innovation.

BACKGROUND / LEGISLATIVE HISTORY

City Council adopted the [2030 Equitable Climate Action Plan \(ECAP\)](#) in July 2020, through Resolution No. [88267](#) C.M.S.. The ECAP details 40 Actions within the City's regulatory and legal control that will improve Oakland's climate resilience, advance equity, and reduce local GHG emissions 60 percent by 2030. City Council simultaneously adopted a 2045 full carbon neutrality target via Resolution No. [88268](#) C.M.S. The ECAP was groundbreaking in fully integrating climate, resilience, health, and equity strategies.

ECAP Action B-2 (*Plan for All Existing Buildings to be Efficient and All-Electric by 2040*) directs staff to pursue strategies that increase energy efficiency and reduce or eliminate fossil fuel use in existing buildings by 2040, including partnering with local businesses and community-based organizations (CBOs) on innovative technical, legal, and social projects.

The Justice40 Initiative was established by President Joe Biden in [Executive Order 14008 \(2021\)](#), and directs 40 percent of the benefits of certain Federal investments – including investments in clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; and more – to flow to disadvantaged communities, which are synonymous with what the City refers to as Frontline or Priority Communities, as defined in the ECAP, the OakDOT Geographic Equity Toolbox, and by the City’s Department of Race and Equity.

The EFG Grant is one of many programs implementing the Justice40 Initiative. It provides financial and technical assistance to partnership efforts that help scale local strategies for increasing resilience and improving access to affordable clean energy. As with the ECAP, EFG explicitly integrates health, economic development and jobs, grid resilience and adaptability, and emissions reductions with clean energy programs. PPSC, MMCI Solar, and City staff submitted an application in EFG’s “Cross-Cutting” topic area, and were awarded a \$500,000 planning grant for OakTREE.

ANALYSIS AND POLICY ALTERNATIVES

The ambitious but achievable target of ECAP Action B-2 will require the City to use every available lever to electrify existing buildings in Oakland. Thermal microgrids are a simple and potentially scalable innovation that can be applied in an array of settings and at various locations. Like the [EcoBlock](#), they are likely to become a versatile approach within Oakland’s equitable decarbonization set of solutions. The proposed OakTREE project and associated resolutions advance the following Citywide priorities: 1) holistic community safety – resulting from cleaner and more resilient energy systems; 2) housing, economic, and cultural security – resulting from improved employment opportunities for frontline community members; 3) vibrant, sustainable infrastructure – resulting from upgraded and resilient energy systems; and 4) responsive, trustworthy government – resulting from improved City processes and policies designed to facilitate community planning and cleaner, safer energy systems.

OakTREE Project Design

Thermal Microgrids convey heat from one place to another – or from multiple places that have any of a range of heat sources to others that need heating. The OakTREE concept includes a greenhouse and rooftop solar water heating systems that produce more heat than is needed on-site. Via a network of underground pipes, the thermal microgrid collects excess heat from these locations and conveys it to surrounding residential and retail units to meet their space heating needs.

OakTREE hinges on a Thermal Microgrid demonstration that integrates buildings with assets like heat pumps, solar thermal, and energy storage, with businesses, homes, and a greenhouse. Additional integrated components include a reusable meal container washing facility to eliminate plastic waste; a fleet of electrified vehicles to deliver prepared meals to

nearby food-insecure residents; and a closed-cycle greenhouse including an integrated composting system and community kitchen.

OakTREE also includes community resilience and workforce development components. Installation and maintenance of thermal energy networks will require both low-skilled and highly-skilled laborers, contributing to the growing high-road green economy that the ECAP targets. Project partners will develop specialized training, assess labor needs of a scaled-up regional thermal microgrid industry, provide internships, and more.

The \$500,000 EFG Grant for planning includes a year of funding for one City staff position to establish a process to accelerate future neighborhood decarbonization projects and coordinate: across internal City departments, including Planning and Building, OakDOT, Race and Equity, and others; with external agencies and utilities such as Pacific Gas and Electric Company (PG&E); and with CBOs. This builds on lessons from the ongoing EcoBlock project in the Fruitvale neighborhood. That project is more complicated than the OakTREE concept, but includes many of the same requirements for intra-departmental coordination, unconventional project approval needs, cross-sector coordination, and more. These types of interdisciplinary energy and climate projects will help Oakland to meet its ECAP targets. OakTREE therefore provides the City an opportunity to improve internal systems and policies to support future efforts in these areas. It also includes authorization for the City Administrator to enter into a professional services agreement with MMCI Solar, a local clean energy innovation firm, for three hundred and forth three thousand eight hundred fifty three dollars, for MCCI Solar to act as the project technical lead for OakTREE.

The Statutory Partnership Agreement with PPSC required by the EPA Community Change Grant will likewise lay the foundation to expand OakTREE and form similar partnerships that unite disparate sectors and communities to pursue highly efficient clean energy projects. The grants will help the City and its partners troubleshoot communication needs, expand capacity for more innovative projects, and evaluate project efficacy.

Technical Assistance

The final component of the proposed resolution is a three-thousand dollar (\$3,000) professional services contract to be awarded to Revalue.io for building the City's knowledge capacity to continue building electrification innovation. Revalue.io is a Black-owned small Oakland business that provides energy efficiency and electrification project development as well as equitable electrification program consulting and workforce training services. With deep local knowledge, governmental experience, and a diverse range of ongoing partnerships, Revalue.io is uniquely positioned to provide the intended suite of services:

1. Advise the Sustainability and Resilience Division, Oakland Workforce Development Board, and OakTREE project partners on the specific workforce development and on-the-job training (OJT) and placement needs related to neighborhood electrification;
2. Act as expert reviewer for the Oakland Building Stock Analysis and Holistic Electrification Cost Projection, particularly focusing on lessons from low-income home electrification, which will inform the forthcoming Existing Building Electrification Roadmap; and

3. In partnership with Cypress Mandela Training Center, develop and provide brief trainings and field trips to City staff to support continued learning about low-income electrification and thermal energy systems;

Waivers

Staff requests waiver of the Competitive Bidding requirement for the partnership with MMCI Solar in leading the OakTREE planning process. MMCI Solar developed the OakTREE concept and approached the City with partners in place, including PPSC to lead community engagement and partnerships, O2AA to host the first physical project, and CivicCorps (an existing City contractor) to advise the workforce development component of the project. A waiver of the competitive bidding process is warranted given the innovative and unique aspect of the project; the constellation of local, minority-led, and trusted community partners already in place; and the project’s full alignment with the targets and values of Oakland’s ECAP.

For the Technical Assistance component of this project, Staff contacted four local firms, and Revalue.io was the sole respondent that had the necessary expertise, capacity, partnerships in place, and interest to fulfill the needed scope.

Staff is also requesting a waiver of the L/SLBE requirement for both MMCI Solar and Revalue.io. While both firms are small, based in Oakland, and led by People of Color, neither has completed the L/SLBE certification. Both firms have begun the certification process so that future waivers will not be needed in the event that additional partnerships are sought.

FISCAL IMPACT

Accepting and appropriating the \$500,000 EFG Grant will not negatively impact City finances other than the negligible staff time needed to execute a contract with and transfer funds to MMCI Solar. The grant will be appropriated into Fund 2122 (Department of Energy), Account 46129 (Federal Miscellaneous) Project TBD. The \$156,147 for a one-year PA-1 position includes all fringe and overhead needed to offset the cost of retaining that position. The PA-1 will be in the City Administrator’s Office, Sustainability and Resilience Division, reporting to the City’s Climate Program Manager. This position is currently vacant and frozen. See **Table 1** for applicable funding code.

Table 1: EFG Appropriation

	Amount	Fund	Org	Project
Program Analyst 1, City Administrator’s Office	\$156,147	7760	54919	TBD
Regranted to MMCI Solar as Technical Lead	\$343,853	7760	54919	TBD
TOTAL	\$500,000			

Authorizing the Partnership Agreement with PPSC has no immediate fiscal impact to the City. If the EPA Community Change Grant application is successful, the award could be up to \$19,999,925 million over a three-year duration. A portion of that funding will go to PPSC and other Collaborative Entities, while the majority will support build-out of OakTREE. If that application is successful, staff will return to Council for authorization to accept and appropriate such funding, consistent with the Partnership Agreement.

Funding for Technical Assistance sought from Revalue.io to accelerate staff education and collaboration in support of the City's equitable electrification goals is located in the current Fiscal Budget, Org 02161, Fund 1010, Account 54919 (Miscellaneous Services).

PUBLIC OUTREACH / INTEREST

The EPA Community Change Grant includes extensive community engagement requirements. PPSC has extensive grassroots ties and a history of professionalism with City partner agencies. They will implement the community engagement plan in partnership with the City according to the plan included in the EFG submittal:

The City of Oakland aims to develop and execute a comprehensive community engagement plan for the OakTREE project, focusing on building relationships with community-based organizations (CBOs) and labor stakeholders. The plan includes creating a detailed stakeholder map, developing engagement strategies, and executing these strategies to ensure community input and participation. The project also seeks to establish workforce development initiatives, engaging with workforce training entities to begin defining training programs for the skills required in installing and maintaining Thermal Microgrids. The overall objective is to ensure that the project benefits and involves the local community, particularly in disadvantaged areas of Oakland.

Budget Period 1, Tasks/Subtasks (arranged by quarter)

- i) Subtask 1.1 – Stakeholder Community Mapping*
- ii) Subtask 1.2 – Preliminary Engagement*
- iii) Subtask 1.3 – Build Team Consensus on Engagement and Project Plan*
- iv) Subtask 1.4 – Generate Engagement Plan*
- v) Subtask 1.5 – Execute Phase I Community Engagement*
- vi) Subtask 1.6 – Evaluation of Community Engagement*
- vii) Subtask 1.7 – Select CBOs for future project participation*

COORDINATION

This project will be coordinated by the City Administrator's Office. Departments to be engaged during the Planning phase include Oakland Public Works, Race and Equity, and Economic and Workforce Development.

SUSTAINABLE OPPORTUNITIES

Economic: Consistent with the ECAP and preliminary findings discussed at the Public Works Committee on 2/16/23 in an [Informational Report Regarding Workforce Implications Of Building Electrification](#), there are numerous existing, emerging, and potential jobs associated with the clean energy transition and the shift to a carbon-free, just economy. OakTREE seeks to identify, describe, and create specific training for an important set of these jobs associated with providing clean, affordable heat and energy at the neighborhood scale. In the long-term, this work is expected to result in a higher percentage of Oakland's frontline community members being well-positioned to join the labor force associated with clean, affordable, and resilient energy; and a

subset of those possessing the skills and experience to lead the transition through entrepreneurship and small business expansion.

Environmental: The thermal microgrid projects envisioned through this project will advance the ECAP's targets of affordable, fossil fuel-free energy. Specifically, more Oaklanders will be able to meet their space heating and cooling needs without the use of natural gas. Additionally, this project stands to accelerate the affordable installation of efficient, onsite clean energy generation technologies, particularly in dense, frontline communities.

Race & Equity: The impacts of climate change on vulnerable communities requires development of sustainable and resilient physical infrastructure, as well as creating economic and workforce opportunities that will financially improve resilience in priority neighborhoods. This partnership prioritizes communities in East and West Oakland that are historically impacted by redlining, inequitable policies, and outsized impact of climate change.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

These actions are not considered projects under the California Environmental Quality Act (CEQA), specifically Public Resources Code section 21065, because they do not cause "either a direct physical change in the environment, or a reasonably foreseeable indirect change in the environment" given these are simply administrative actions to implement measures already set forth in the Equitable Climate Action Plan (ECAP). Alternatively, these actions would be exempt from CEQA under CEQA Guidelines section 15061(b)(3) (common sense exemption) because there is no possibility that they will result in any physical change to the environment. In addition, if any changes to the physical environment would result from these actions, they would result in the maintenance, restoration, or enhancement of natural resources pursuant to CEQA Guidelines section 15307 and preservation of the environment under CEQA Guidelines section 15308.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Adopt a Resolution Authorizing the City Administrator To (1) Enter Into A Statutory Partnership Agreement With People Power Solar Cooperative To Apply To The Environmental Protection Agency Community Change Grant For Nineteen Million, Nine Hundred And Ninety-Nine Thousand, Nine Hundred And Twenty Five Dollars (\$19,999,925) To Implement The Oakland Thermal Renewable Energy And Electrification (OakTREE) Project In Oakland Frontline Communities; (2) Accept And Appropriate Five Hundred Thousand Dollars (\$500,000) From The Federal Department of Energy's Energy Future Grants Program (EFG Grant), including One Hundred And Fifty Six Thousand, One Hundred And Forty Seven Dollars (\$156,147) To Hire A Program Analyst 1; (3) Waive The Competitive Bidding Requirement And Authorize The City Administrator To Enter into A Professional Services Contract With MCCI Solar, A Local Clean Energy Innovation Firm, For Three Hundred and Forty Three Thousand Eight Hundred Fifty Three Dollars (\$343,853) From the EFG Grant To Serve As Project Technical Lead For OakTREE; (4) Authorize The City

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Administrator To Enter into A Three Thousand Dollar (\$3,000) Professional Services Contract With Oakland-Based Revalue.io To Provide Technical Assistance, Document Review, Staff Training, And Related Services To Support Ongoing Advancement Of The City Of Oakland's Equitable Electrification Policies And Programs, Pursuant To The City's Equitable Climate Action Plan; (5) Waive The Local/Small Local Business Enterprise (L/SLBE) Certification Requirement For Both MMCI Solar And Revalue.io; And (6) Make Appropriate California Environmental Quality Act Findings

For questions regarding this report, please contact Shayna Hirshfield-Gold, Climate Program Manager, at (510) 238-6954.

Respectfully submitted,



Joe DeVries
Deputy City Administrator and Chief Resilience
Officer, City Administrator's Office

Reviewed by:
Daniel Hamilton, Sustainability and Resilience
Director, City Administrator's Office

Prepared by:
Shayna Hirshfield-Gold, Climate Program
Manager, City Administrator's Office

Attachments:

- 1) Notification Letter from US DOE Energy Futures Grant

City Council
September 17, 2024

Attachment 1: Selection Notification Letter, US DOE Energy Futures Grant



Department of Energy

Golden Field Office
15013 Denver West Parkway
Golden CO 80401

March 29, 2024

Shayna Hirshfield-Gold
City of Oakland
150 Frank H Ogawa Plaza Ste 6353
Oakland, CA 94612
shirshfield-gold@oaklandca.gov

SUBJECT: Selection of Application for Negotiation Under Funding Opportunity Announcement Number DE-FOA-0002870, 2023 Funding Opportunity Announcement for Energy Future Grants (EFG) Creating a Community-Led Energy Future

Dear Shayna Hirshfield-Gold:

We are pleased to provide this update on your application. The Office of State and Community Energy Programs (SCEP) within the Department of Energy (DOE) has completed its evaluation of your application submitted in response to the subject Funding Opportunity Announcement (FOA). The application below has been recommended by SCEP for negotiation of a financial award (**Note: This notification does not guarantee federal government funding, as funding will only be obligated upon completion of successful negotiations.**):

Application: Oakland Thermal Renewable and Electrification Enterprise (OakTREE), 2870-1549, Award Number: DE-SE0001152

Receipt of this letter does not authorize the applicant to commence with performance of the project. DOE makes no commitment to issue an award and assumes no financial obligation with the issuance of this letter. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement. Only an award document signed by the Contracting Officer obligates DOE to support a project.

The award negotiation process may take up to 60 days. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the stated negotiation deadlines. Failure to submit the requested information and forms by the stated due



date, or any failure to conduct award negotiations in a timely and responsive manner, may cause DOE to cancel award negotiations and rescind this selection. DOE reserves the right to terminate award negotiations at any time for any reason.

Please submit the information and forms listed below to the Grants Management Specialist, Paige Smith, at paige.smith@ee.doe.gov by within 30 calendar days of receipt of this correspondence. Failure to submit the requested information and forms by the stated due date, or any failure to conduct award negotiations in a timely and responsive manner, may cause DOE to cancel award negotiations and rescind this selection.

Please complete each of the following required forms, which are available at <https://energy.gov/eere/funding/eere-funding-application-and-management-forms>. All forms should include the award number in the header.

1. Pre-Award Information Sheet
2. Copy of your approved Indirect Rate Agreement or a Rate Proposal, following the guidelines in the Sample Indirect Rate Proposal – Pre-Award
3. Copy of the most recent independent Single Audit (for non-profits, states, local governments, and educational institutions) or independent Compliance Audit (applicable to for-profit entities)
4. Intellectual Property Management Plan (due 30 days from the date of this letter).

Your organization must have an adequate accounting system in place prior to expenditure of any award funds. Please see Accounting System Requirements on the Resources page at the link provided below.

For more information on the negotiation process and relevant regulations, please review the "Recipient's Guide to Negotiating," available on the Financial Opportunities Resources page at <https://energy.gov/eere/funding/eere-funding-application-and-management-forms>.

Please note, DOE's decision on whether and how to distribute federal funds is subject to the National Environmental Policy Act (NEPA) and DOE must conduct a NEPA review for all proposed project activities prior to authorizing the use of federal funds. Based on information available, DOE has not issued a final NEPA determination for this project. You should carefully consider and should seek legal counsel or other expert advice before taking any action related to the proposed project that would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE completing the NEPA review process.

You may not incur pre-award costs without prior approval of DOE. All pre-award costs are incurred at your risk (i.e., DOE is under no obligation to reimburse such costs if for any reason you do not receive an award or if the award is less than anticipated and inadequate to cover such costs). All costs must be allowable, allocable, and reasonable in accordance with the applicable cost principles.

Jestin D. Johnson, City Administrator

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SCEP
STATE & COMMUNITY ENERGY PROGRAMS

DOE does not guarantee or assume any obligation to reimburse costs where the costs were incurred prior to receiving written authorization from the Contracting Officer. If you elect to undertake activities that may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Contracting Officer override the NEPA requirements to obtain the written authorization from the Contracting Officer prior to taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives.

If you are unable to provide the information by the date requested or have any questions concerning the requested information, please contact the Grants Management Specialist listed above.

An informational webinar will be held on April 18, 2024 at 3 PM ET. A meeting invite will be sent to the Principal Investigator and Business Contact listed on the application documents.

On behalf of DOE, I would like to congratulate you on your selection for award negotiations. I look forward to working with you to successfully complete award negotiations.

Sincerely,



Stephanie Sites
Contracting Officer

cc: Mark Miles, Recipient Principal Investigator
cc: Brianna Farber, DOE Technology Officer
cc: Christian Philipsen, DOE Technical Project Officer
cc: Paige Smith, DOE Grants Management Specialist