



SCEP

STATE & COMMUNITY ENERGY PROGRAMS

Justice40 & the Energy Efficiency & Conservation Block Grant (EECBG) Program

EECBG Justice40 Training Presentation
May 11, 2023



Agenda

- **Part 1:** Opening Remarks
- **Part 2:** Introduction to EECBG Program
- **Part 3:** Introduction to Energy Justice and the Justice40 Initiative
- **Part 4:** Achieving Justice40 with EECBG
- **Part 4:** Case Studies
 - Alabama Brownfield
 - San Diego low-income solar program
- **Part 5:** Q&A

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 - SDG&E low-income solar program
 - Alabama Brownfield
- **Part 5:** Q&A

Opening Remarks by Dr. Tony Reames



Agenda

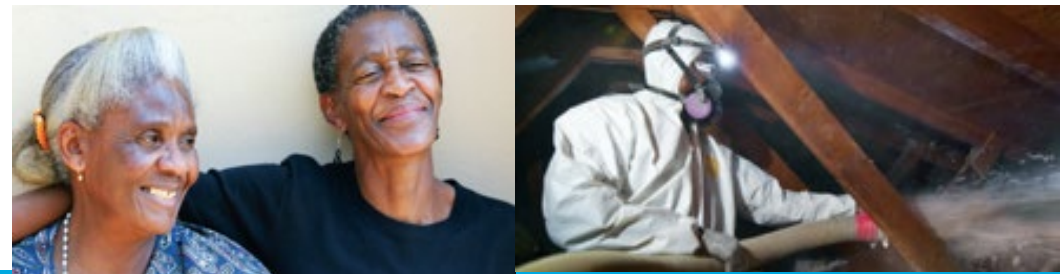
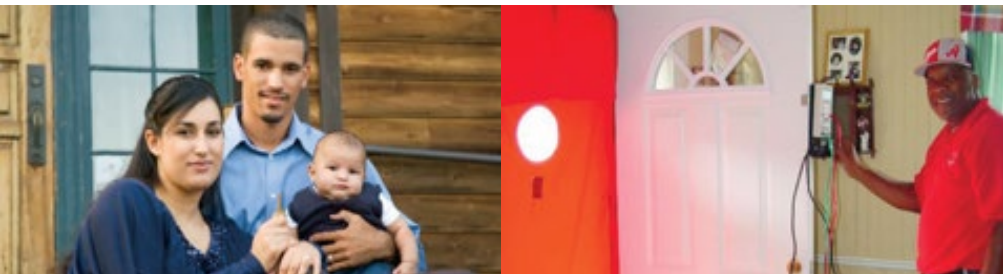
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EECBG Program Overview

Program Purpose: support state, local, and tribal governments to

- **Reduce fossil fuel emissions** in a manner that is environmentally sustainable and maximizes benefits to communities
- **Reduce their total energy use**
- **Improve energy efficiency** in the transportation, building, and other sectors

Total IIJA Appropriation: \$550 Million for states, local governments, & tribes



EECBG Program Eligibility & Funding Distribution

Total IJA Appropriation: \$550M

Formula Grants:
\$431.2M
2,708 eligible entities

68%
of grant funds

1,878 Local Govts.
\$299.2M

28%
of grant funds

50 States, 5 Territories & Wash, DC
\$123.2M
States must pass through at least 60% to
ineligible local governments

2%
of grant funds

774 Indian Tribes
\$8.8M

Competitive Grants:
\$8.8M
Formula ineligible entities

**Local Governments, Tribes &
Consortia NOT eligible for
formula grants**

*Distribution does not reflect \$110M set aside for DOE to deliver an effective and efficient program and to provide technical assistance to eligible entities before distributing remaining funds to eligible entities.

EECBG Program Timelines

Formula Program Deadlines

- 1 Pre-Award Information Sheet Due: July 31st
- 2 State Applications: July 31st
- 3 Local / Tribal Applications:
 - Application Period #1: April 28th
 - Application Period #2: July 31st
 - Application Period #3: October 31st
 - Application Period #4: January 31st, 2024
- 4 DOE will take 30-60 days to review complete applications*

Competitive Program Deadlines

- 1 Concept Paper: June 5th
- 2 Concept Paper Notifications: Mid-June
- 3 Full Application due: August 7
- 4 DOE Selection Date: Late September
- 5 Award Notification: October - November

**Award processing times are estimates. Grants not following blueprints will take a minimum of 90 days to review. Timelines do not include the time required for applicants to prepare and submit an application to DOE.*

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Introduction to Energy Justice and the Justice40 Initiative

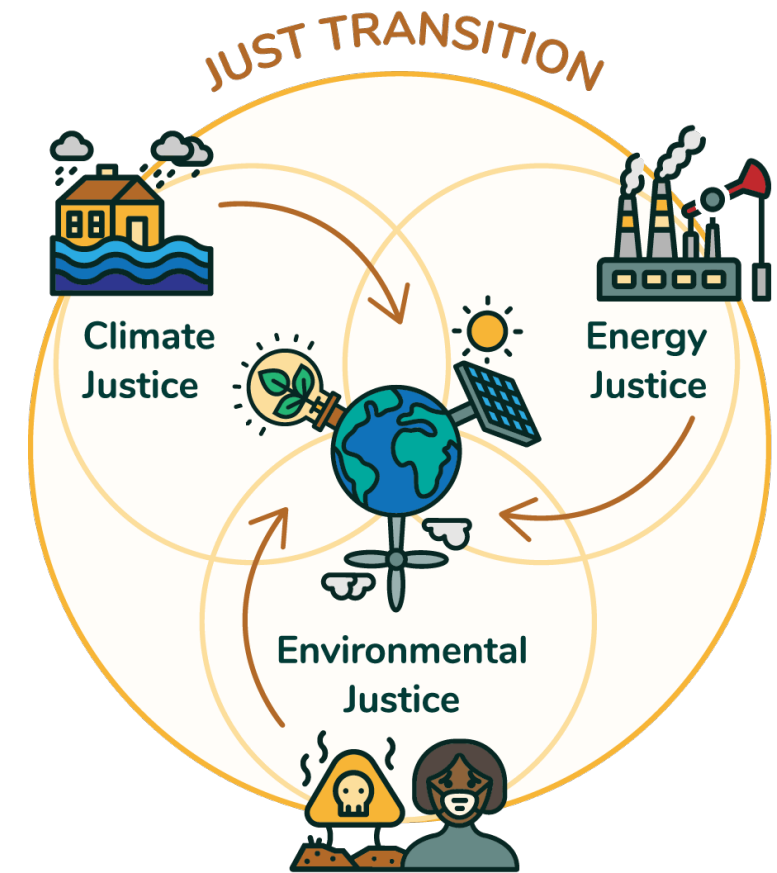
What is Energy Justice?

Seeks **equity** in the **social** and **economic** participation in the energy system

While **remediating** social, economic, and health **burdens** on “frontline communities” explicitly centering their concerns

Aims to make energy more **accessible**, **affordable**, **clean**, and **democratically** managed for all communities.

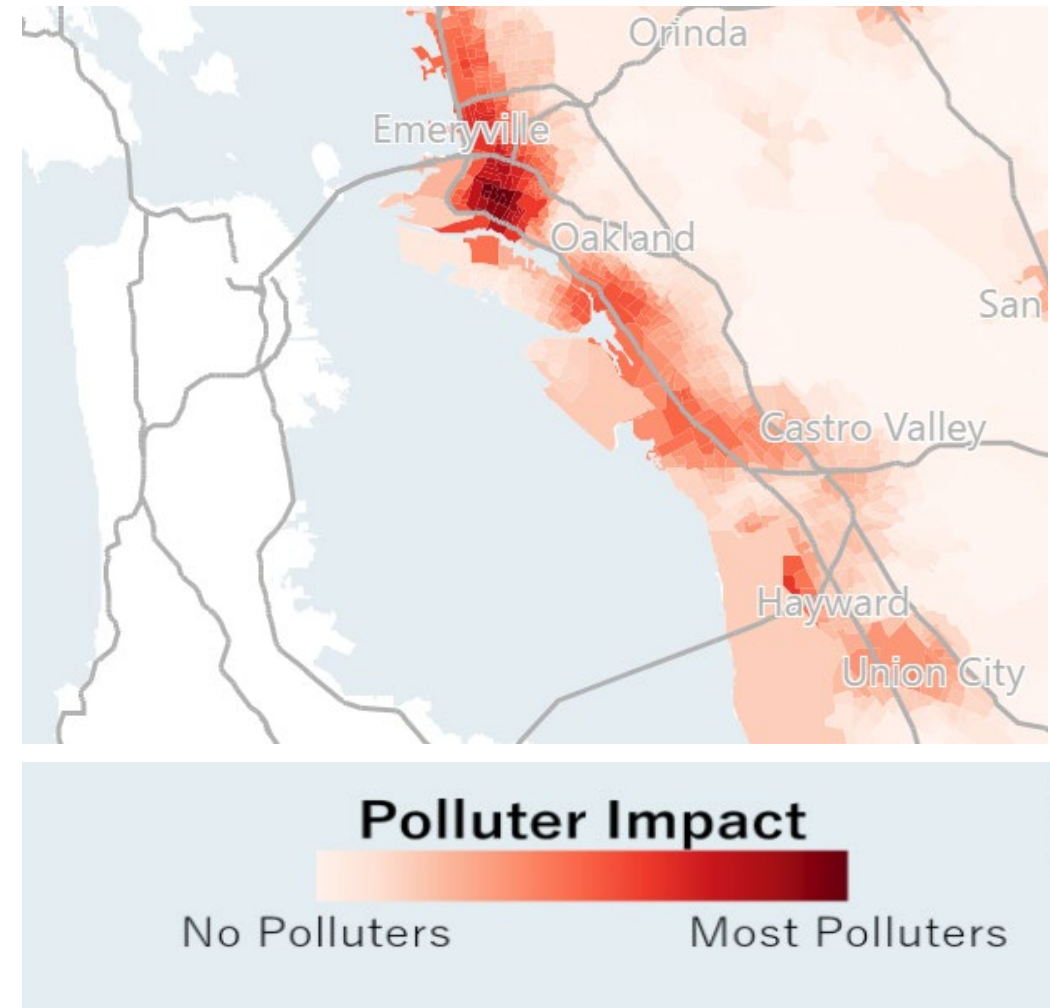
Image Credit: Initiative for Energy Justice [Section 1 - Defining Energy Justice: Connections to Environmental Justice, Climate Justice, and the Just Transition - Initiative for Energy Justice \(iejusa.org\)](#)



Why Energy Justice

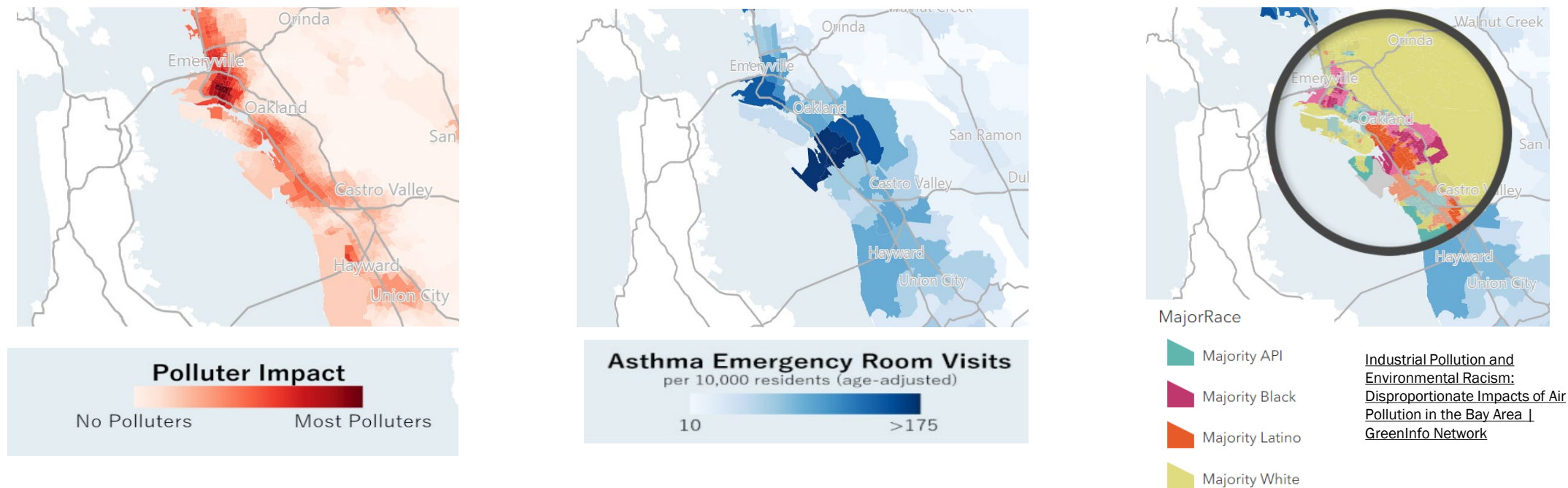
Why is Energy Justice so important?

The outputs of our energy and transportation systems have had **disproportionate impacts** on certain individuals and communities....



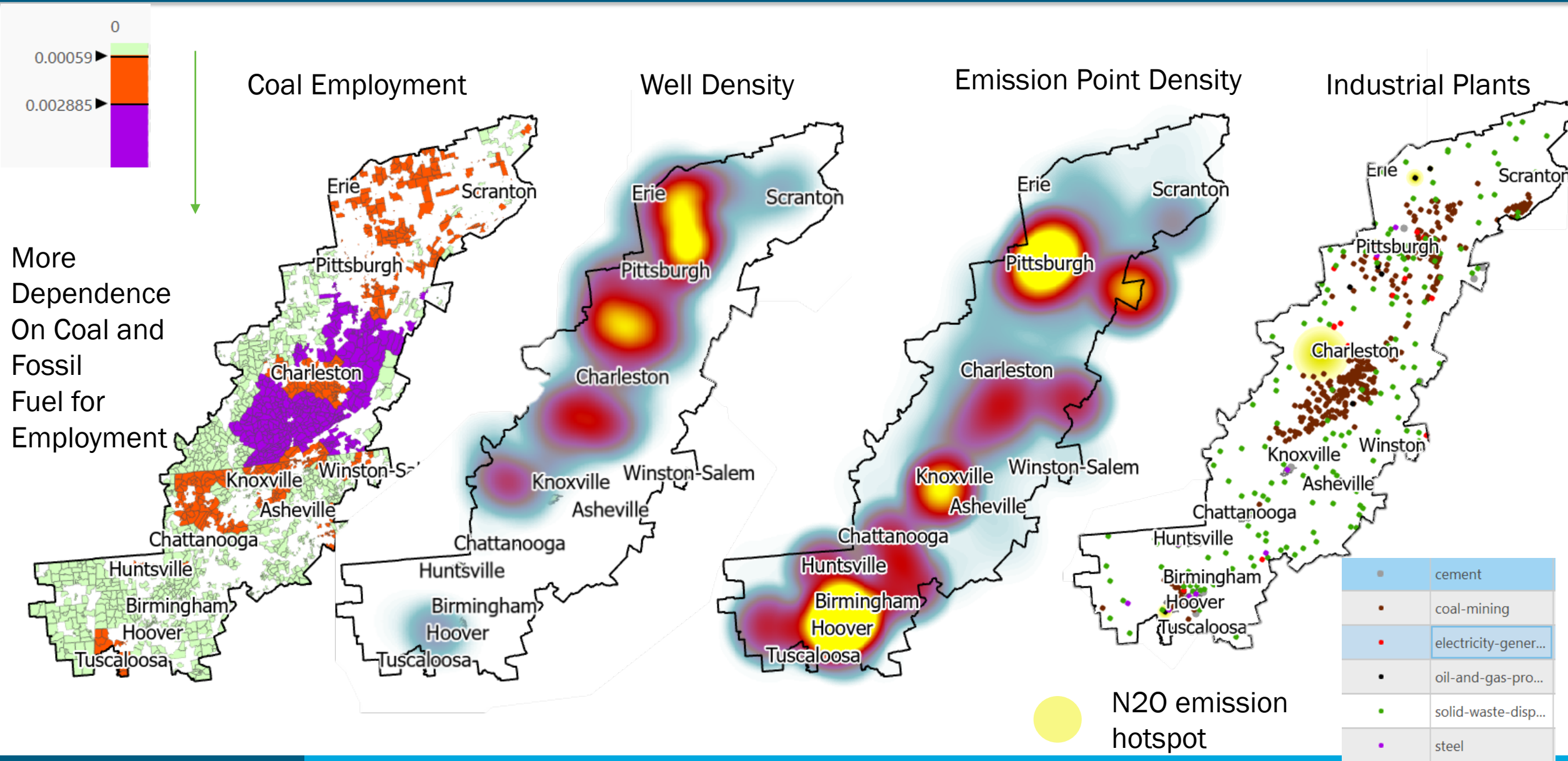
Disproportionate Impacts | Health

Our energy system infrastructure has disparate impacts on certain communities...



Communities near power plants and energy infrastructure are subjected to toxic pollutants that contribute to high rates of asthma, cancer, heart disease

Disproportionate Impacts | Employment



Disproportionate Impacts | Income & Poverty

\$53,546

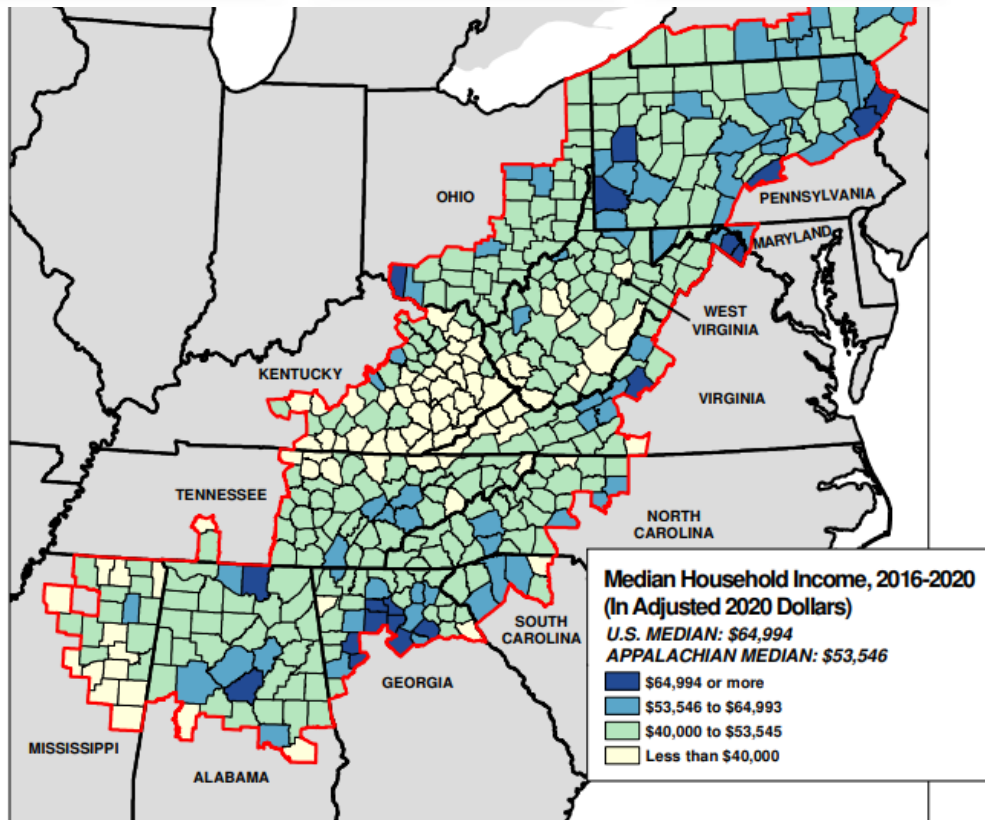
Appalachia's Median Household Income

\$64,994

U.S. Median Household Income

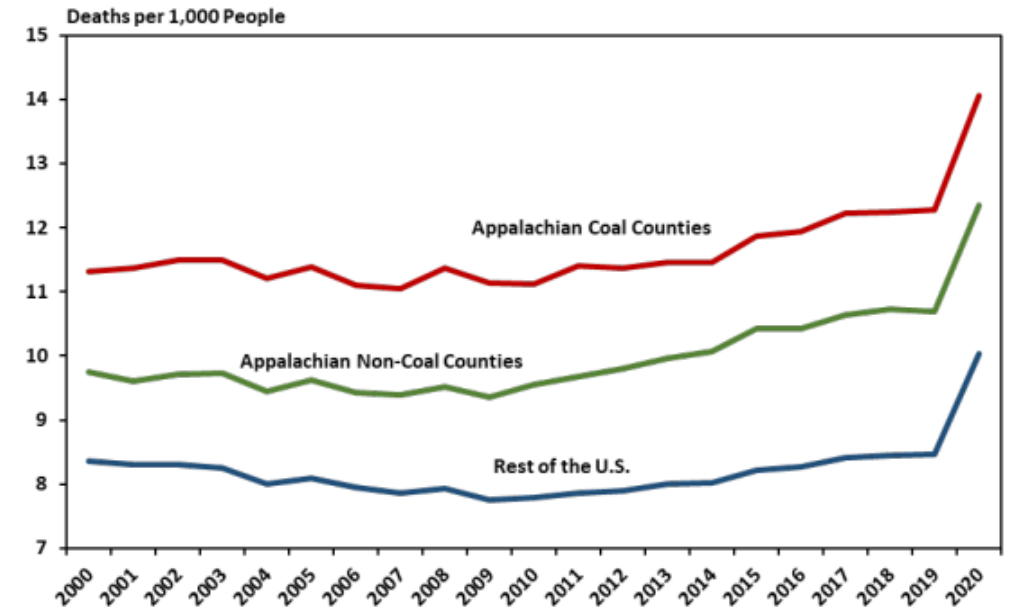
14.7%

Poverty Rate in Appalachia



Map Title: Median Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 33: Mortality Rate, Appalachian Coal Counties, Appalachian Non-Coal Counties, and the Rest of the United States



Source: U.S. Centers for Disease Control and Prevention
Note: Rates are not age-adjusted.

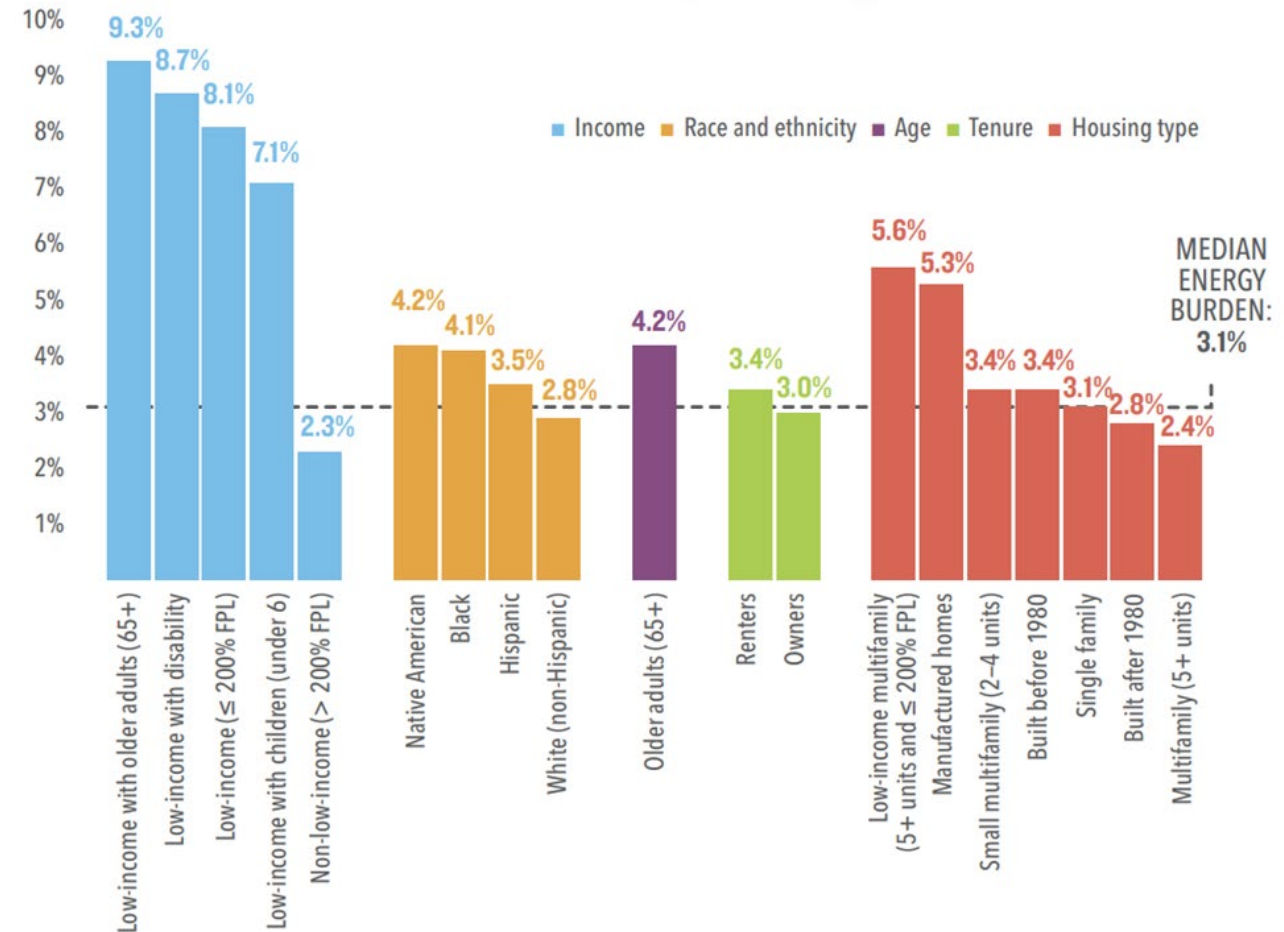
“[H]ealth disparities exist in coal mining regions of Appalachia compared with other areas of the region or the nation, including elevated mortality rates for total causes, lung cancer, and some chronic illnesses.” [Mortality in Appalachian Coal Mining Regions: The Value of Statistical Life Lost](#)

Disproportionate Impacts | Energy Burden & Costs

“Low-income households spend three times more of their income on energy costs compared to the median spending of non-low-income households”

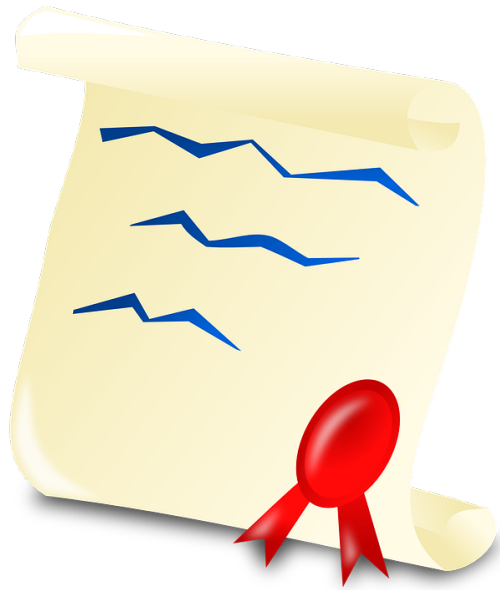
- How do we begin to address these disparities?
- What can we do moving forward to ensure these communities gain access to resources that reduce energy burden, provide clean energy, and generate opportunity?

FIGURE ES1. National energy burdens across subgroups (i.e., income, race and ethnicity, age, tenure, and housing type) compared to the national median energy burden



Source: Ariel Dreihobl, et al. "How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burden across the United States." American Council for an Energy-Efficient Economy (September 2020).

The Justice40 Initiative



E.O. 14008, Section 223, January 27, 2021

“...the Director of the Office of Management and Budget, and the National Climate Advisor, in consultation with the Advisory Council, shall jointly publish recommendations on how certain Federal investments might be made toward a goal that **40 percent of the** overall benefits flow to disadvantaged communities.”

What are the Primary Elements of Justice40?

...of certain
Federal
investments...

How do we
define J40
investments?

... flow to
disadvantaged
communities

How do we
define
disadvantaged
communities
(DACs)?

40% of the
overall
benefits...

How do we
measure and
track the
benefits of J40
investments?

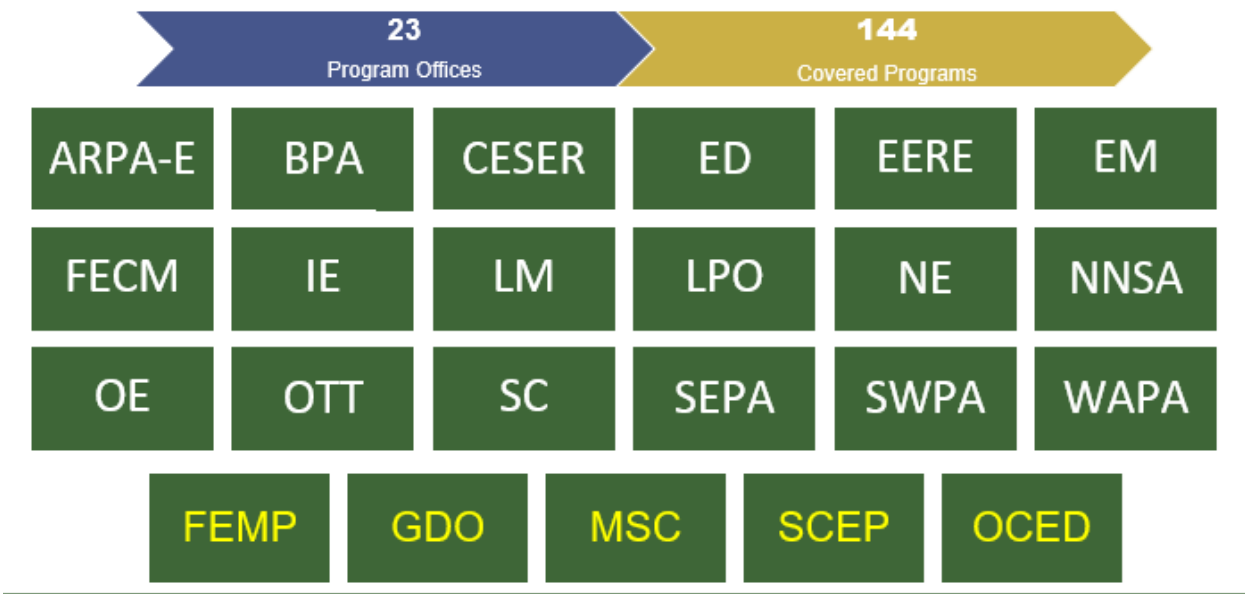
E.O. 14008, Sec. 223: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

Interim Implementation Guidance for the Justice40 Initiative: <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

Justice40 DOE Covered Programs

“Existing and new programs, including those created by the Bipartisan Infrastructure Law (BIL), that make covered investments in any of [the previous] categories are considered Justice40 covered programs." **OMB Guidance**

Over 140 DOE programs are covered under the Justice40 Initiative



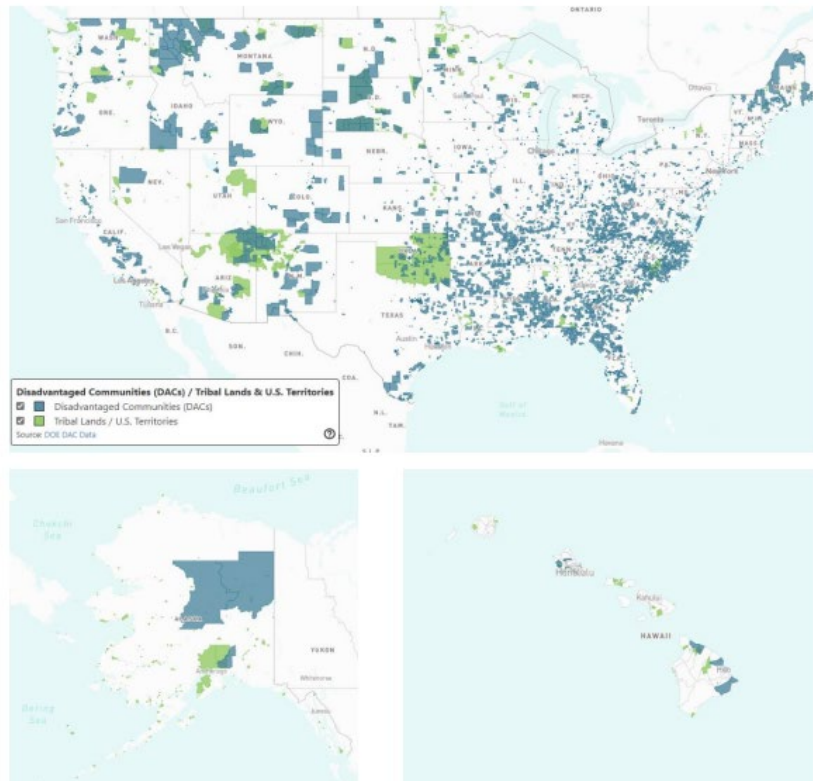
E.O. 14082, September 12, 2022

“In implementing the Act [IRA], all agencies...shall, as appropriate and to the extent consistent with law, prioritize... the **Justice40 Initiative**...to protect and improve the health and well-being of fence-line and frontline communities in the United States;”

Tools | Identifying Disadvantaged Communities (DACs)

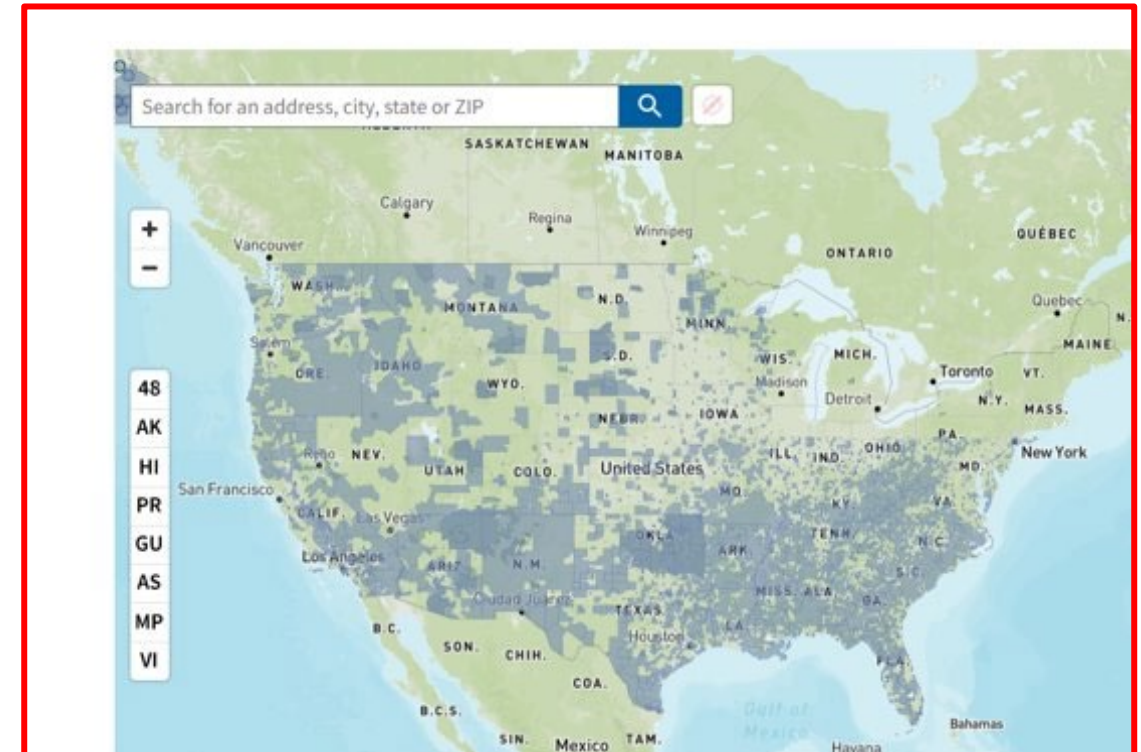
DOE DAC Reporter Tool:

[Energy Justice Dashboard \(anl.gov\)](https://anl.gov)



CEQ's CEJST Mapping Tool:

[Explore the map - Climate & Economic Justice Screening Tool](#)



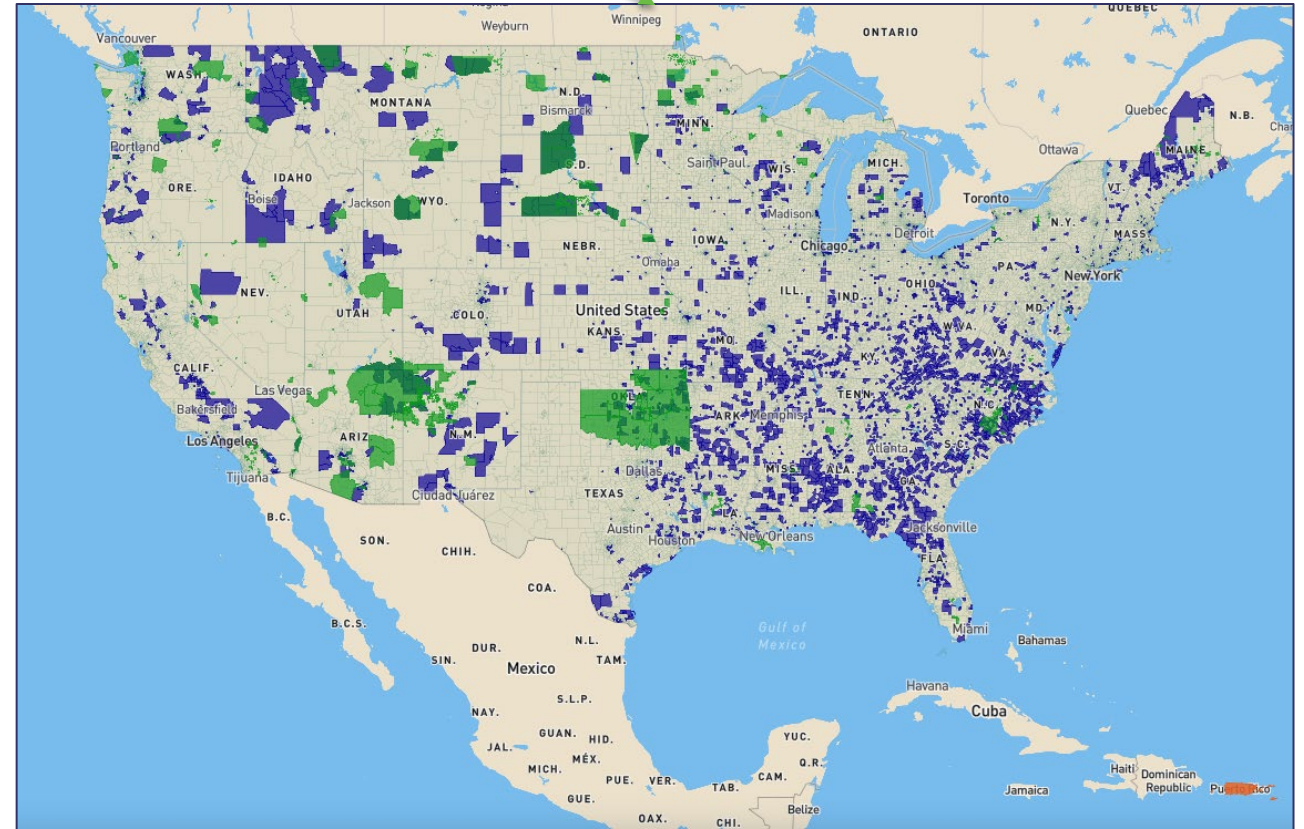
What are benefits? How do they Flow to DACs?

What

DOE Policy Priorities

1. Decrease in energy burden
2. Decrease in environmental exposure and burdens
3. Increases in jobs/training
4. Increases in enterprise creation
5. Increases in energy democracy
6. Increases in low-cost capital
7. Increases in clean energy access and adoption
8. Increases in energy resilience

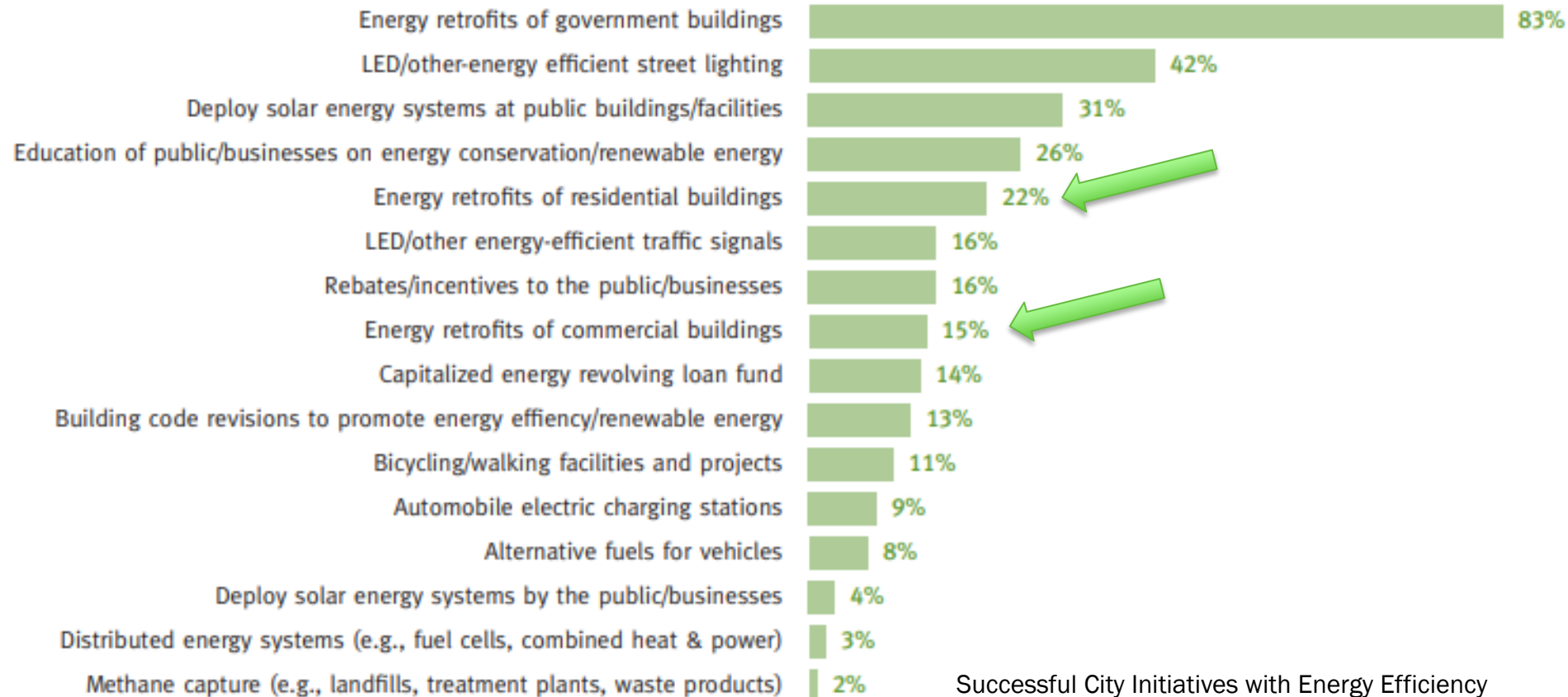
Where



How EECBG funds were used in the past...

How Did Cities Use EECBG Funds

(percentage of cities)



Successful City Initiatives with Energy Efficiency and Conservation Block Grant (EECBG) Funding, A 204-City Survey, February 2014, Mayors Climate Protection Center, [0227-report-eecbgsurvey.pdf](https://www.usmayors.org/0227-report-eecbgsurvey.pdf) ([usmayors.org](https://www.usmayors.org))

Metrics | Common Benefits and Metrics

Retrofits	Transport	Govt, Schools	Renewable Energy	Building Codes & Standards	Energy Planning	Energy Audits	Training and Education	Stakeholder Engagement
Number of buildings retrofitted	Number of alternative fuel vehicles purchased	Number of energy efficient: HVAC units purchased, streetlights,	Number of PV, wind, or solar thermal systems installed	Number of new building codes adopted	Number of CAPs updated or completed	Number of audits performed (investment and non-investment)	Number of orgs receiving TA (Tribal, rural, DAC?)	Number of community engagement events
Estimated retrofit savings	Number of new alternative refueling/stations installed	Number of energy efficient lights purchased	Total capacity of systems installed		Number of policies developed or updated (DACs?)		Number of employees hired to further EE or sustainability	Community attendance
Reduction in fuel consumption	Length of sidewalks installed	# of efficient water heaters purchased	Number of geothermal or hydropower		Number of GHG inventories completed		# workshops or training sessions held	Community benefits agreement

Metrics | Example – Building Retrofit Program

Policy Priorities

1. Decrease in energy burden

2. Decrease in environmental exposure and burdens

3. Increases in jobs/training

4. Increases in enterprise creation

5. Increases in energy democracy

6. Increases in low-cost capital

7. Increases in clean energy access and adoption

8. Increases in energy resilience

Retrofits	Energy Audits	Government, Schools	Financial Instruments	Renewable Energy
Number of buildings retrofitted	Number of audits performed	Number of energy efficient: HVAC units purchased, streetlights,	Number of loans given	Number of PV, wind, or solar thermal systems installed
Estimated retrofit savings		Number of energy efficient installations/appliances/lights purchased	Value of grants provided	Total capacity of systems installed
Reduction in fuel consumption		Number of energy efficient water heaters purchased	Total value of money raised	Number of geothermal or hydropower

Count

Count

Model

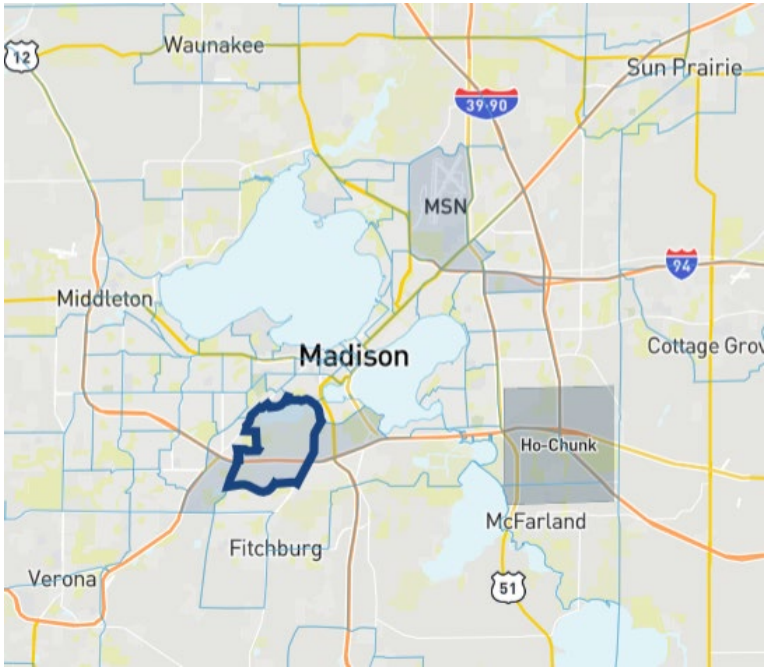
Count

Model

+ Metric

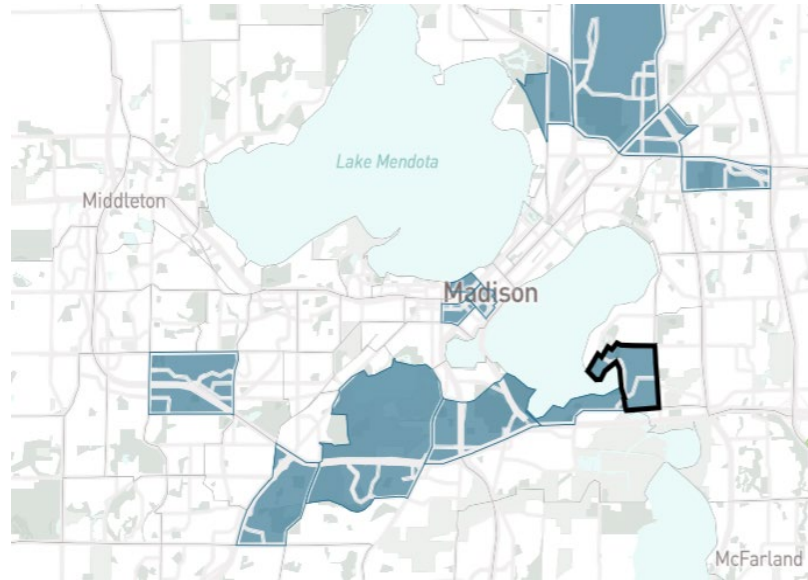
What communities will benefit?

Understanding Communities | Federal Tools



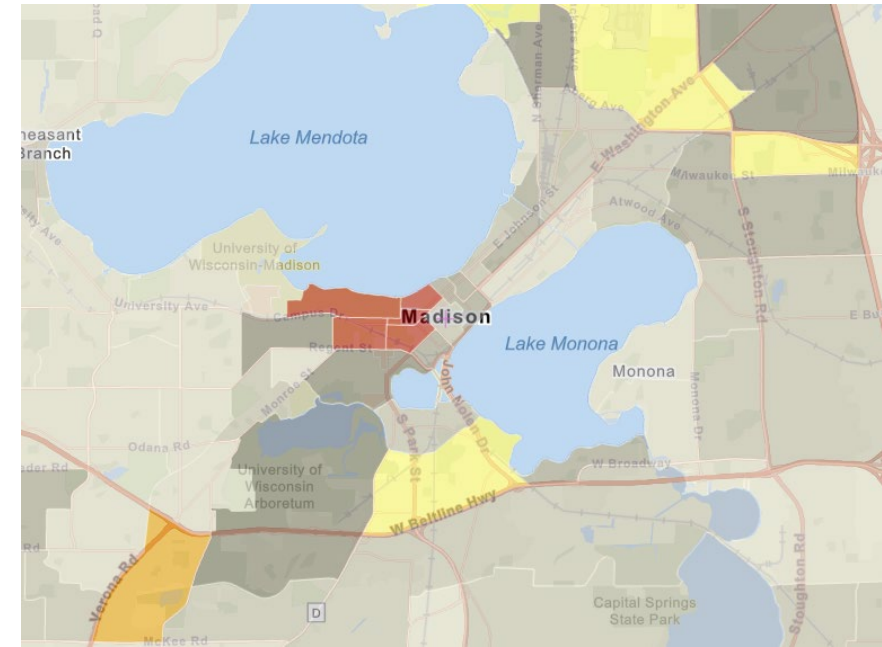
1. Start with CEJST to identify DACs

- High School Education
- Income



2. Follow up with DOE EJ DAC Reporter

- High Cumulative Burden when compared to other state census tracts



3. Other helpful tools: EPA EJ Screen

- Red, yellow and grey reflect high rates of asthma,

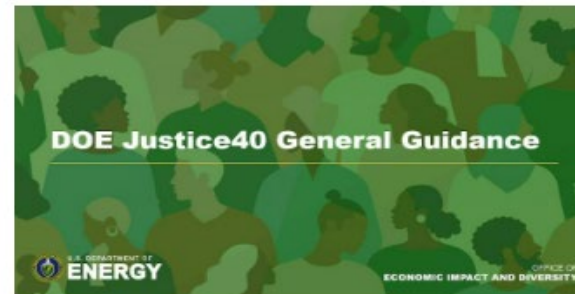
DOE-Wide Resources | Justice40



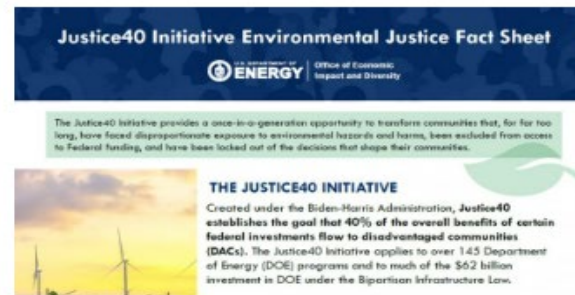
Department of Energy

General Guidance for Justice40 Implementation

DOE Justice40 General Guidance



Environmental Justice Explainer



List of Community Relevant Justice40 Programs

Justice40 Factsheet



Justice40 Covered Program Highlights



[Final DOE Justice40 General Guidance 072522.pdf \(energy.gov\)](#)

[Justice40 Initiative | Department of Energy](#)

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Justice40 & EECBG Program

Key Initial Questions

1. WHO to serve

- Which communities should we focus on?
- What problems are most acute in those communities?

2. WHERE

- Which neighborhoods or census tracts?

3. WHAT project or program

- Which activities would best meet the communities' needs?
- What opportunities are the communities interested in?

Center the community in your EECBG Program

Plainville Original:

We want to do LED lighting upgrades in our City Hall

1. **WHAT:** LEDs because they save energy costs and lower emissions
2. **WHERE:** City Hall
3. **WHO Benefits:** Municipal Govt employees, all taxpayers

Plainville Revised:

How can the EECBG program benefit the most vulnerable people in our community?

1. **WHO:** Community members in low-income neighborhood, mostly seniors
2. **WHERE:** Historic community on the East Side with highest energy burdens
3. **WHAT:** Low-income weatherize and solarize campaign

Centering the Community in Your EECBG Projects and Programs

Scoping & Design for maximum community impact

- 1 RESEARCH: Consider data to inform your decision-making.
- 2 LISTEN: Solicit ideas, feedback, and input from the community and key stakeholders.
- 3 ADAPT: Narrow focus and refine project plan to center the needs, values and culture of the community.

Implementation with continuous feedback and improvement

- 4 IMPLEMENT the project in a way that allows for ONGOING INPUT and promotes sustained community relationships to ensure that community priorities shape the project or program

EECBG Program Design for Justice40 | Research & Tools

Key elements to help you answer the WHO & WHERE

- **Demographics:** Income, non-English speakers, race, unemployment, housing stock, education levels
- **Pollution:** Superfund sites, vehicle pollution, power plants, industrial pollution, etc.
- **Climate vulnerabilities:** Sea level rise, heat island, HVAC access, grid resiliency, cooling & warming centers
- **Household energy burden:** Percent of monthly income households spend on energy bills
- **Transportation:** Transportation costs and access, traffic volume & proximity

Data and Tools

Climate & Energy Justice Screening Tool (CEJST)

Discover which neighborhoods are designated as "disadvantaged." CEJST provides census tract-level demographic data, and vulnerabilities

Low-Income Energy Affordability Data (LEAD)

View more granular income, housing & energy burden data

State & Local Planning Tool for Energy (SLOPE)

Find out average household energy burdens and transportation burdens by county

Tools | Climate and Economic Justice Screening Tool

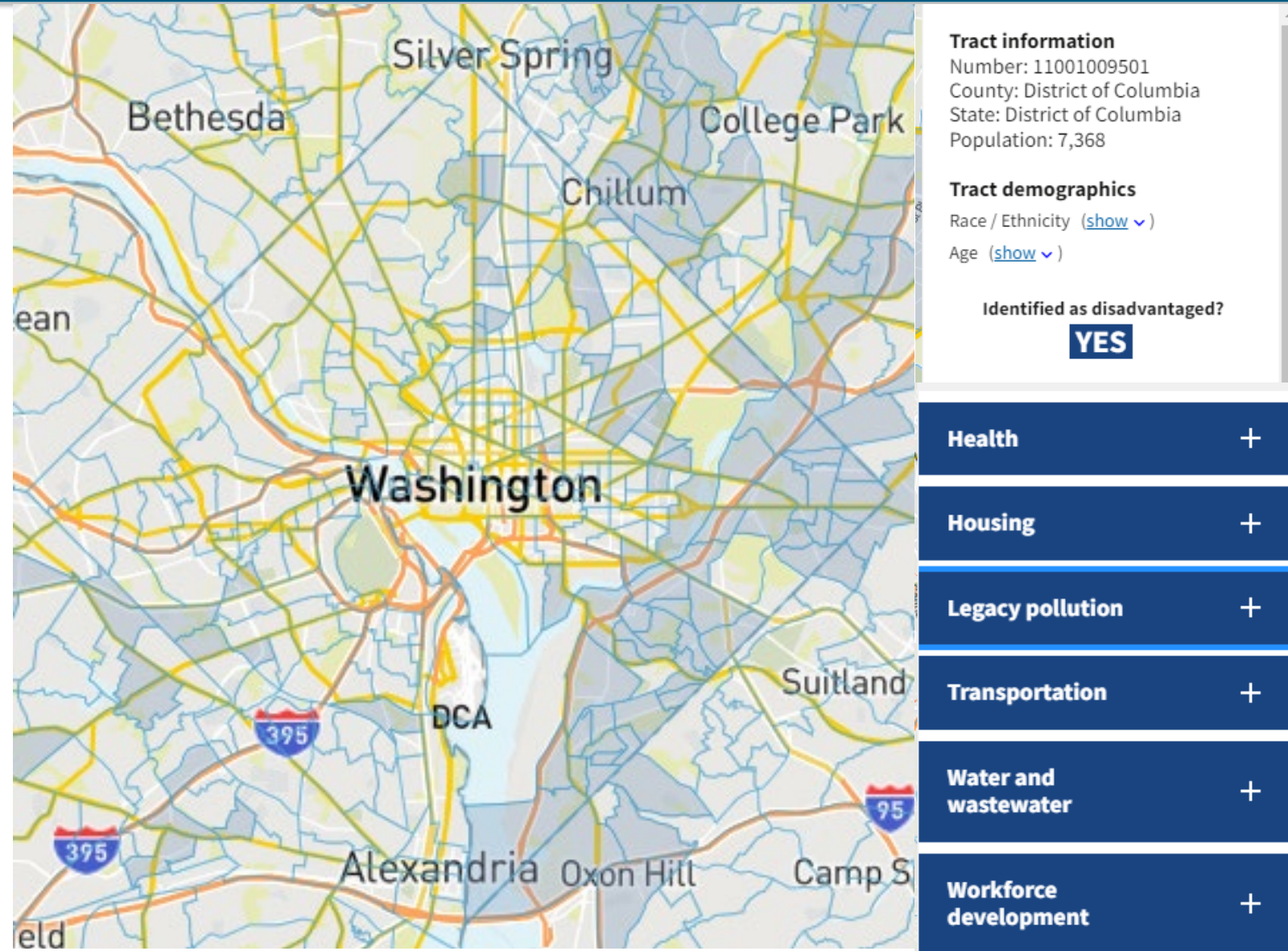
Go to screeningtool.geoplatform.gov/
or Google it: CEJST TOOL

Example question 1:

Where are the disadvantaged communities in my area?

Example question 2:

What factors make those areas disadvantaged?



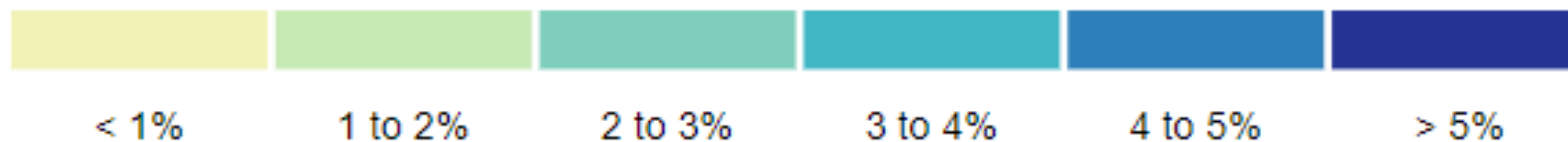
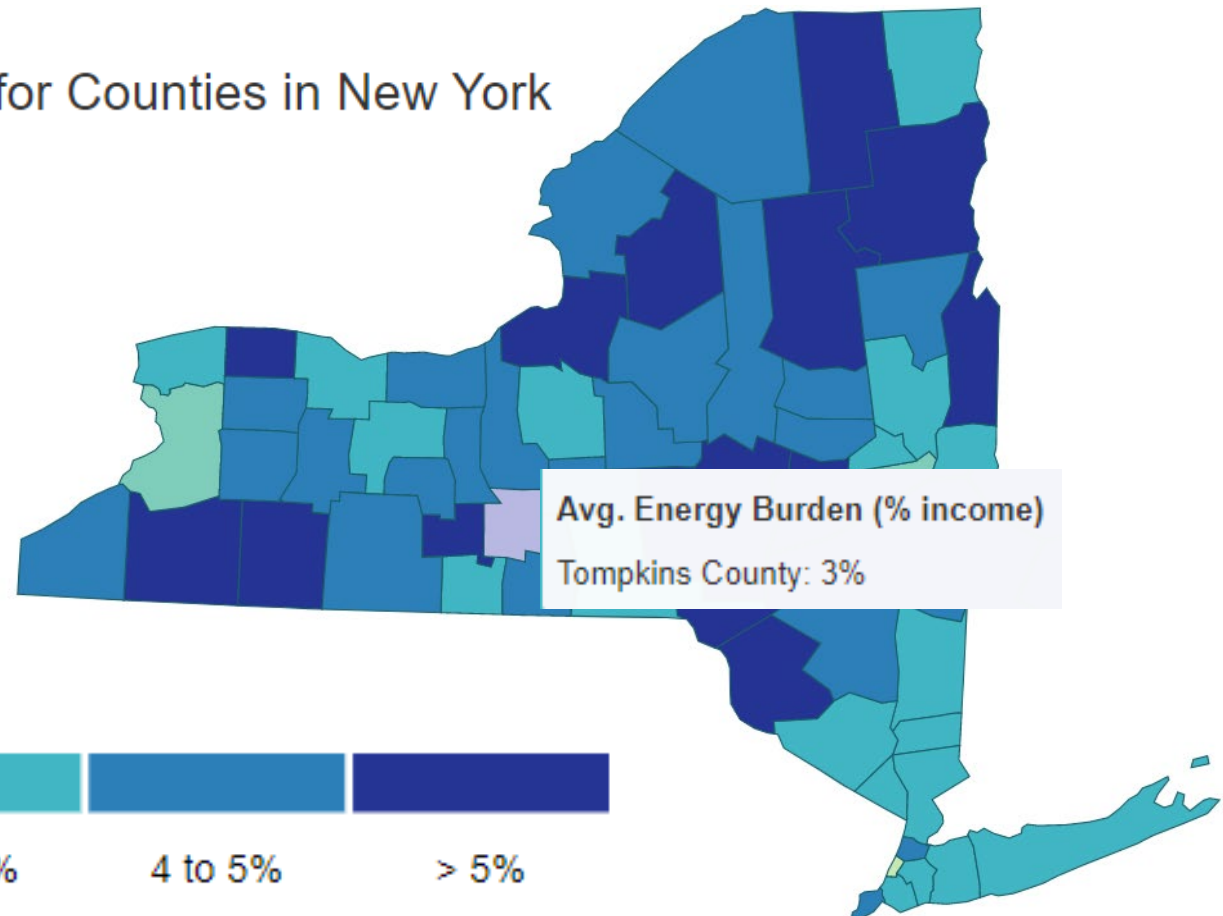
Tools | Low-Income Energy Affordability Data (LEAD)

The Low-Income Energy Affordability Data (LEAD) Tool visualizes energy burden and low-income household characteristics

Avg. Energy Burden (% income) for Counties in New York

Now, check out the LEAD Tool

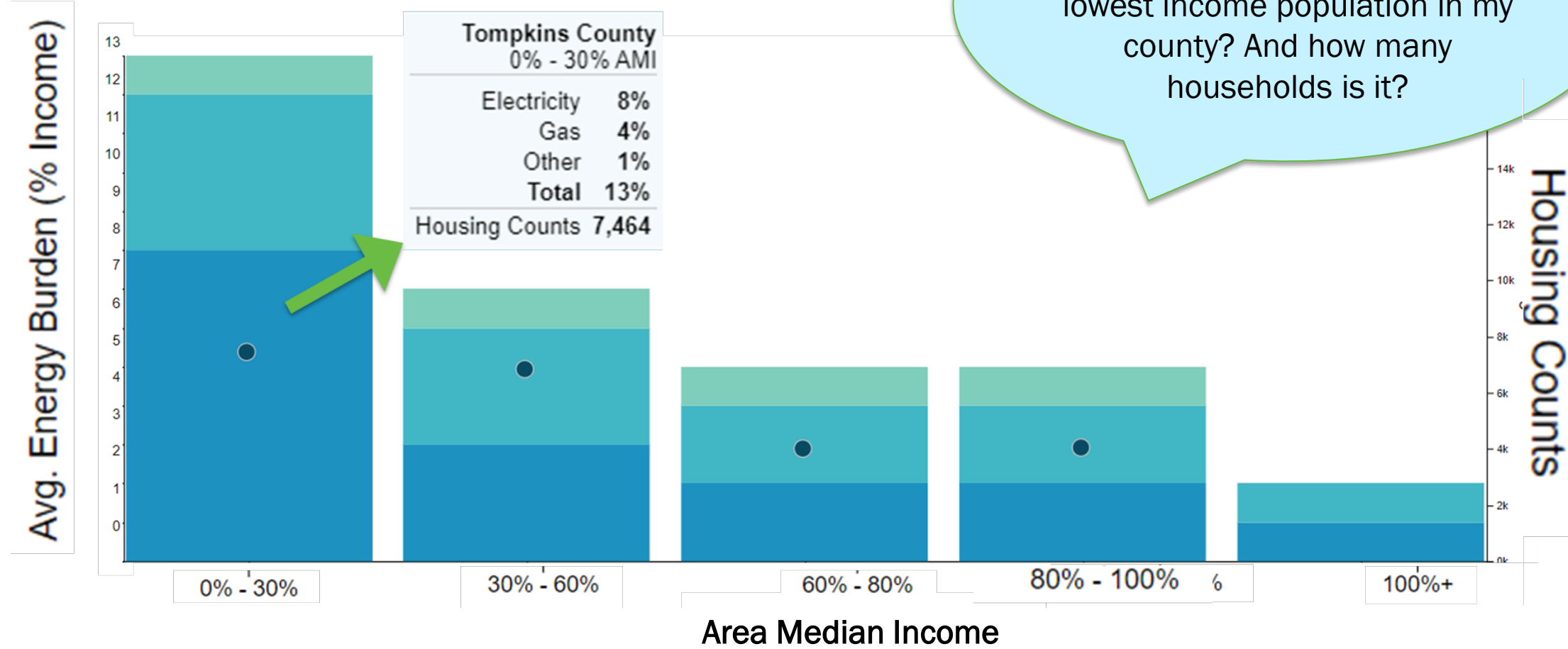
Go to energy.gov/scep/slsc/lead-tool
or google it: DOE LEAD tool



Tools | Low-Income Energy Affordability Data (LEAD)

Avg. Energy Burden (% Income) for Tompkins County

Example question:
What's the energy burden of the lowest income population in my county? And how many households is it?



EECBG Program Design for Justice40 | What

Now, WHAT should we do?

How can your EECBG projects and programs help address the community's concerns, while advancing clean energy goals?

DOE has evidence-based ideas:

- 1 **Blueprints:** Evidence based best practices & road maps for implementation
- 2 **Program Guidance:** Includes example activities and connections to technical assistance

J40 Goal		EECBG Activity
Lower Household Energy Burdens	→	<ul style="list-style-type: none">• Weatherization,• Electrification Campaign,• Solarize campaign,• Community solar
Lower Transportation Burdens	→	<ul style="list-style-type: none">• Electric buses,• Upgrade public transit,• Bike paths,• Community e-bikes• EV Charging for the Community
Increase Job Opportunities	→	<ul style="list-style-type: none">• Workforce development
Address pollution	→	<ul style="list-style-type: none">• Energy planning,• Renewable energy,• Electric transportation

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Implementation with continuous feedback and improvement

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It's not just about the metrics, it's about the process

Why community engagement matters...

1

Projects, and programs are more likely to **be sustained** over time

2

We have greater **understanding of their needs *without assuming*** what their needs are

3

Builds better **trusting relationships** between government & the community, which is essential for the future

Case Study: Railroad Park- Birmingham, Alabama

Why Discuss Birmingham?

- ❑ Represents legacy urban cities - significant energy burden imposed on low wealth residents, dilapidated, underutilized downtown spaces, polluted land, and poor air quality

How did Birmingham Engage Community?

- ❑ Stakeholders engaged in online participation, town halls, charrettes, community-initiated meetings at popular venues such as fast-food chains, schools, worship halls; The City collected, analyzed and braided input to produce a conceptual drawing.
- ❑ Project demonstrates creative and unique participatory approaches to solve problems, i.e., mitigate emissions and pollution, improve air quality and leverage net-zero technology such as solar lighting and surveillance cameras

Why choose this park?

- ❑ City's redevelopment plan was pivotal to sustainable relationships aligning community needs, values and culture



Railroad Park: Birmingham, Alabama

City government addressed stakeholders' ideas, needs, and desires, creating sustainable relationships and transforming distressed downtown areas into:

- ☐ 19 acres of urban/downtown community greenspace
- ☐ Complemented City's Comprehensive Plan
(i.e., reduce emissions and pollution, meet green, energy & climate goals, create affordable/mixed income housing, improve quality of life, preserve neighborhoods, walking and bike trails, downtown vibrancy)
- ☐ Outdoor public free venue
- ☐ Generated jobs
- ☐ Spurred development downtown
- ☐ Increased City tax revenue
- ☐ Motivated downtown investments
- ☐ Generated retail, restaurants, entertainment venues
- ☐ Stimulated downtown visitors, activities, traffic



Research results: *community satisfied, developer & public officials very satisfied with project outcome*

San Diego Solar Equity Program

Providing solar, at little or no cost, to income-qualifying, San Diego residents

May 11, 2023

Demetra Tzamaras, P.E. - DER Senior Manager



Center for
Sustainable
Energy™

About CSE

Mission-driven national nonprofit

Center for Sustainable Energy® (CSE) is a national nonprofit that accelerates adoption of clean transportation and distributed energy through effective and equitable program design and administration.

- Administer cutting-edge programs valued at over \$4 billion for governments, utilities and the private sector across the U.S.
- Leader in data-driven incentive program design and administration for:
 - Electric vehicle and EV charging incentive programs
 - Renewable energy incentive programs (solar and storage)
- Headquartered in San Diego with more than 250 employees across the nation

Objective and trusted

- Governments, utilities and the private sector trust CSE for its data-driven and software-enabled approach, deep domain expertise and customer-focused team.
- CSE's fee-for-service business model frees it from the influence of shareholders, members and donors, and ensures its independence.
- CSE's data and insights have informed policy at the local, state and federal level.

One mission —

DECARBONIZE.®

Our vision is a future with sustainable, equitable and resilient transportation, buildings and communities.



Program Overview

- 10-year, equity-focused residential solar incentive program
- Funded by San Diego Gas & Electric (SDG&E) shareholder funds as part of the franchise agreement with the City of San Diego
- \$1 million/year to assist income-qualified customers in installing solar on their homes
- \$4/Watt incentive with additional incentives available for electrical panel upgrades (\$3500) and job training hours (\$1000)
- Flexibility for annual program design updates



Understand if You Qualify for a Solar Installation Incentive

The **San Diego Solar Equity Program (SDSEP)**, launched in the fall of 2022, offers monetary assistance to income-qualified, single-family homeowners in the City of San Diego to offset the installation cost of a solar panel system.

Benefits of Going Solar



Reduce your energy costs and save on your monthly electricity bill



Reduce your emissions – you'll use clean and safe energy from solar power.



Receive up to \$4 a watt, intended to cover 100% of the cost of installing solar.

Do I Qualify?

To be eligible, you must meet all the eligibility requirements:

- **Property Type:** Owner-occupied, single-family homes, duplexes, quadplexes, mobile homes or manufactured homes.
- **Home Address:** Located in one of the City of San Diego's Communities of Concern per the Climate Equity Index.
- **Household Income:** Total household income of less than 120% of the Area Median Income (AMI). In 2022, 120% of AMI is \$128,280 for a family of four.

Program Development and Deployment

Establish Goals

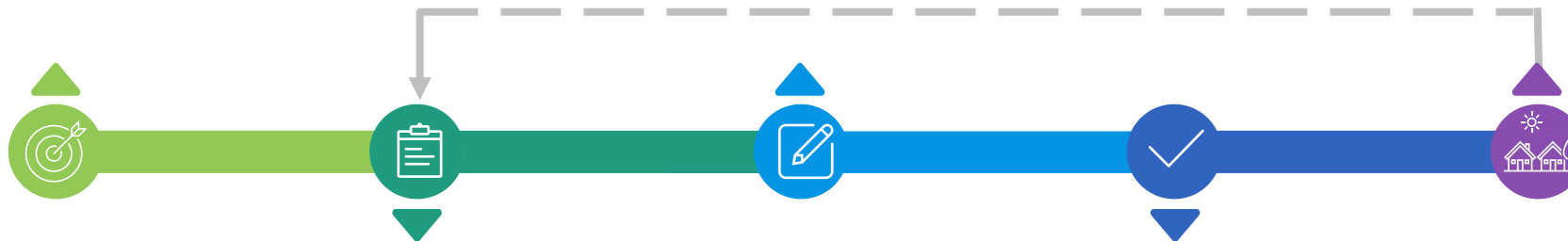
- Deploy as many solar systems as possible
- Target income-qualified residential customers

Draft Program Design

- Develop program design parameters based on consultation input

Launch Program

- Update the program website and program materials
- Open to applications



Consultation

- Participating solar contractors
- Local community-based organizations (CBOs)
- Local technical organizations
- City Sustainability and Mobility Department
- City Council Offices

Review and Approval

- Initial approval from City Council President
- Updates reviewed and approved by City Sustainability and Mobility Department and SDG&E

Eligibility Requirements



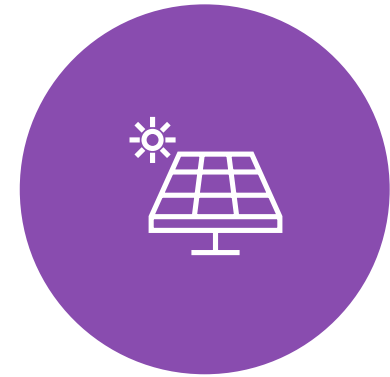
Homeowners

- Must be located within a Community of Concern
- Must have a total household income of 120% Area Median Income (AMI) or less



Solar Contractors

- Must pay prevailing wages to all individuals working on installation
- Must discuss energy efficiency with potential customers
- Must be certified to install solar per the California Contractors State Licensing Board (CSLB)



Equipment

- System size up to 6.5 kW
- Must be on California Energy Commission's Solar Equipment List
- Must be installed for the duration of its useful life
- Must meet program warranty requirements

Year 1 Statistics (as of 5/8/2023)

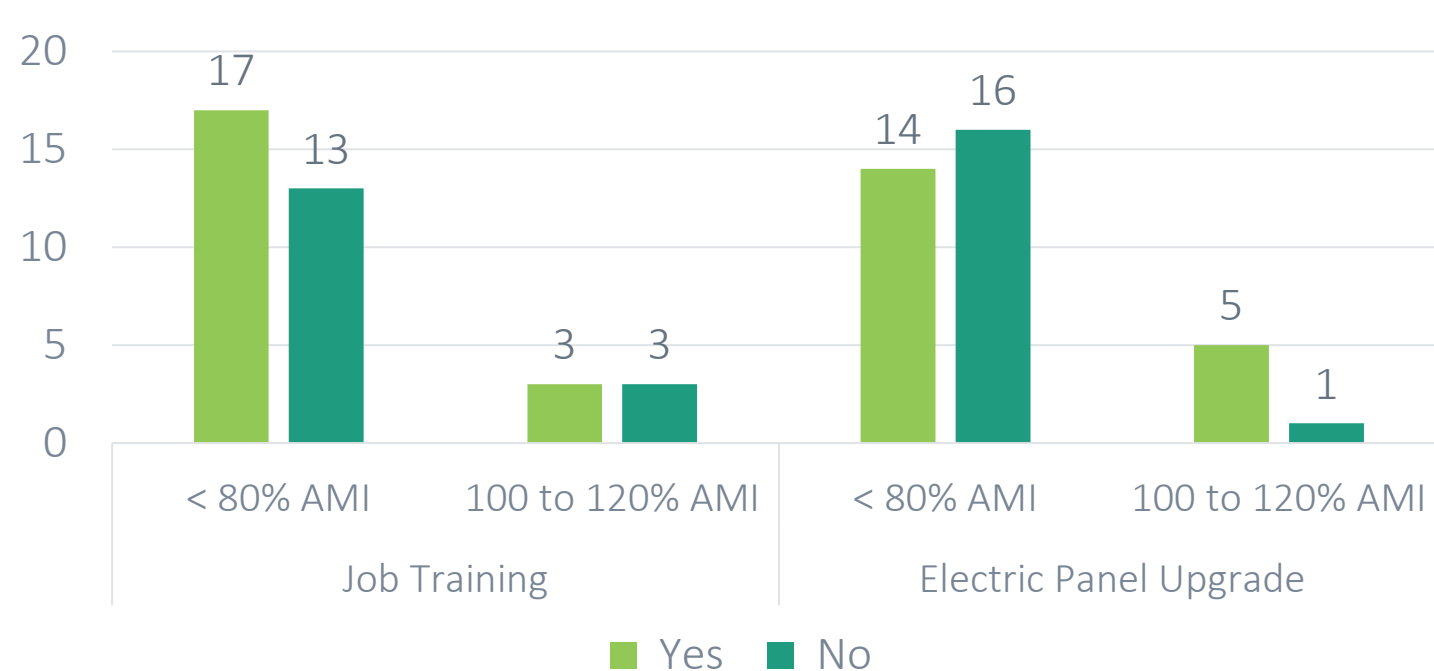
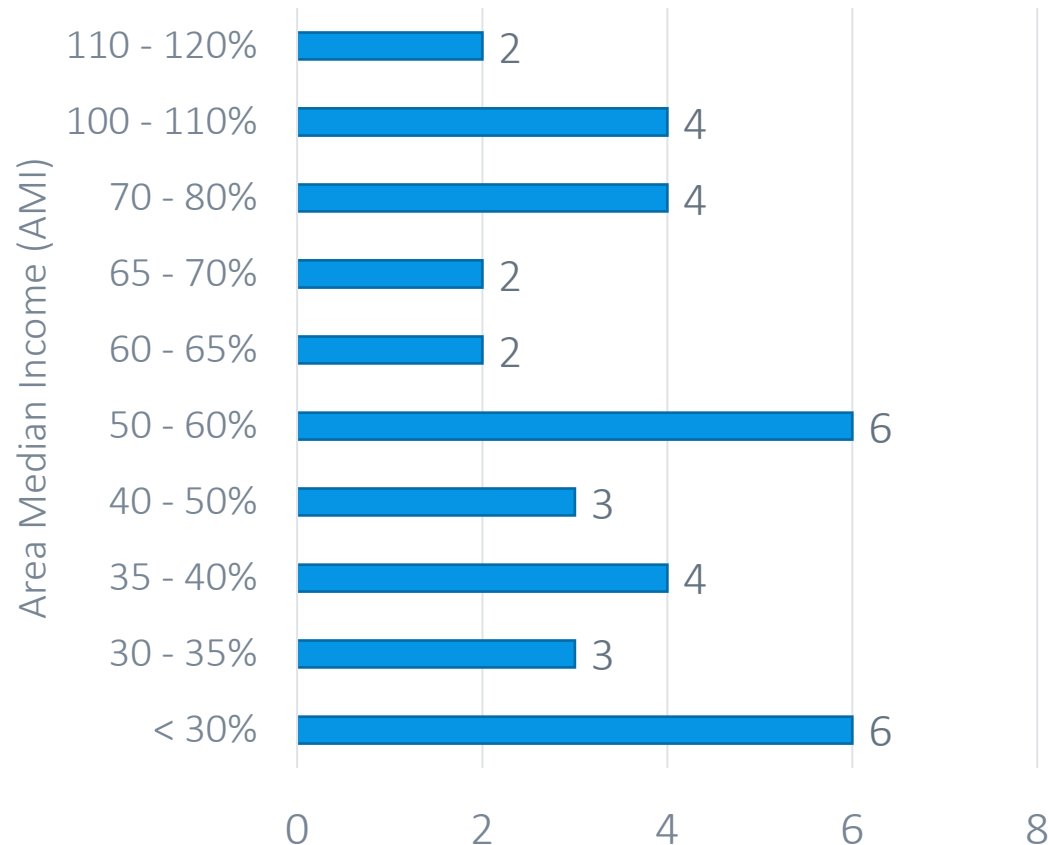


57 applications received

- 21 cancelled
- 32 active (28 approved, 4 in progress)
- 4 completed



\$22.5k and 5 kW average
\$812,630 in incentives total



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