What is the purpose of the Energy Justice Dashboard (BETA)?

The Department of Energy (DOE) and the Biden-Harris administration have made it clear that those impacted by pollution need to be the first to benefit from clean energy solutions, and that equity will serve as their North Star. On his first day in office, President Biden signed *Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, which he followed a week later, on January 27, with *Executive Order 14008, Tackling the Climate Crisis at Home and Abroad*. Executive Order 14008 established the Justice40 Initiative, a government-wide initiative to deliver 40% of the overall benefits of certain federal investments to disadvantaged communities, including investments in clean energy, energy efficiency, clean transportation, affordable and sustainable housing, training and workforce development, the remediation and reduction of legacy pollution and the development of critical clean water infrastructure.

With the Energy Justice Dashboard (BETA) DOE is working to better understand how the Department's costs are distributed to overburdened and underserved communities that have been left behind and unheard from for too long.

What is included on the Energy Justice Dashboard (BETA)?

The Energy Justice Dashboard (BETA) includes all grants, cooperative agreements, and contracts created in DOE's procurement system that were either awarded or modified on or after October 1, 2019 with a place of performance in the United States. This includes awards made prior to October 1, 2019 if the awards were modified for any reason. Data from the National Nuclear Safety Administration and Energy Information Administration are included as these agencies utilize the DOE procurement writing system. Data from Bonneville Power Administration (BPA) and the Federal Energy Regulatory Commission (FERC) are not represented in the Dashboard.

Awards coded as "loans" may be included in a future iteration of the Energy Justice Dashboard (BETA), as the Loan Programs Office disperses loans supporting equity efforts. The spend represented on the Dashboard does not include miscellaneous obligations (public utility services, legal settlements/court directive, lease agreements, third party drafts, etc.).

The amounts on the Dashboard reflect costs or price/ expense of the resources used to produce a program, project, or activity by DOE. Because the Dashboard ties costs to the principal place of performance which at times is the location of the awardee, the location pinned on the Dashboard may not be where funding or the benefits of the work are actually captured. For example, the State Energy Program, managed by the Office of Energy Efficiency and Renewable Energy (EERE) funds state activities, so their funding categories on the Dashboard are pinned to the respective locations of the state agencies they support however, the Dashboard does not reflect where the areas within each state where the DOE funding is disbursed. Another item to note is that some grants, cooperative agreements, and contracts are funded by more than one program office. For offices that are not EERE or the Golden Field Office (GFO), the funding offices will NOT be displayed; the instrument will be associated to solely the initiating office.

The Dashboard displays DOE defined disadvantaged communities (DACs) and all Tribal lands as a default equity layer.

Contract, grant, and cooperative agreement are listed under Funding Category. What are these three categories?

A **contract** is a mutually binding legal relationship obligating the seller to furnish the supplies or services

(including construction) and the buyer to pay for them. Contracts include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not include grants and cooperative agreements. (See Federal Acquisition Regulation §2.101 *Definitions*.)

A **grant** is a legal instrument between the federal government and a State, a local government, or other recipient when the principal purpose of the relationship involves public purpose and substantial involvement is NOT expected from the federal government to carry out the activity contemplated in the agreement. (See 31 U.S.C. 6304)

A **cooperative agreement** is a legal instrument between the federal government and a State, a local government, or other recipient when the principal purpose of the relationship involves public purpose and substantial involvement is expected from the federal government to carry out the activity contemplated in the agreement. (See 31 U.S.C. 6305)

Grants and cooperative agreements do not include loans, subsidies, direct federal government cash assistance to an individual, insurance, and loan guarantees. (See 31 U.S.C. 6302)

How are disadvantaged communities defined?

The DOE working definition for DACs has been developed by an internal and external collaborative research process and includes data for thirty-six (36) indicators collected at the census tract level that each represent a distinct dimension of disadvantage. These 36 indicators can be grouped across the following categories (numbers in parenthesis show how many indicators fall in that category):

• Fossil Dependence (2)

• Energy Burden (5)

• Environmental and Climate Hazards (10)

• Vulnerability (socioeconomic, housing burden, transportation burdens, etc.) (19)

Additional information about the DOE DACs definition can be found in the *Energy Justice Dashboard (BETA) Resource Area* and on the *Justice40 Initiative* page located at https://www.energy.gov/diversity/justice40-initiative.

What is the methodology to identify Geographic DACs?

To identify the census tracts that could be considered DACs, the J40 Team took four main steps:
1. For each census tract, the J40 Team calculated the percentile values for each of the 36 indicators.
2. The J40 Team summed the percentiles across the indicators to create a score for each tract. Each indicator is given equal weight. The final scores for each tract could range from 0 to 36, where 36 would represent the largest disadvantage.
3. Based on the score, the top 20 percent of census tracts in each state were selected. This ensures that every state is represented.
4. To ensure wealthier locations are not inadvertently included, DAC eligibility is further restricted based on income. A census tract selected in step 3 is identified as a DAC if at least 30% of households:
    a. are at or below 200% of Federal Poverty Level and/or
    b. are considered low-income households by the Department of Housing and Urban Development, defined as making 80% of area median income.

Nationwide, 13,581 census tracts were identified as disadvantaged (18.6% of 73,056 total U.S. census tracts). Due to data limitations, U.S. territories are not yet included. They will be included in future iterations of this work.

Additional information about the DOE DACs definition can be found in the *Energy Justice Dashboard (BETA) Resource Area* and on the *Justice40 Initiative* page located at https://www.energy.gov/diversity/justice40-initiative .

How is J40 Relevance determined?

J40 Relevance categories originated through EO 14008, and include investments in clean energy, energy efficiency, clean transportation, affordable and sustainable housing, training and workforce development, the remediation and reduction of legacy pollution and the development of critical clean water infrastructure. J40 Relevance was determined by searching the award descriptions in DOE grants, cooperative agreements, and contracts. DOE program offices confirmed the relevance during their quality reviews prior to the Dashboard launch. To further ensure the relevancy of J40, the DOE procurement writing system contains a mandatory field where relevancy is determined at time of award or modification/amendment of a contract, grant, or cooperative agreement.

What is the source for the Dashboard procurement and financial data?

The Department's Integrated Data Warehouse aggregates from the agency's procurement and financial management systems and is the primary source of data used for the Dashboard.

How are costs defined and are they appropriated or non-appropriated?

Costs are defined as the price or expense of the resources used to produce a program, project, or activity. The financial data included in the Dashboard includes both appropriated and non-appropriated information (an example of a non-appropriated resource is non-federal reimbursable work or revenues received).

Why are there negative numbers represented in the cost amounts?

Cost amounts may appear as negative numbers due to refunds or returned costs in individual fiscal years. Costs may be returned for various reasons including returned costs as a result of closeout audits.

How often is the Dashboard data updated?

Dashboard data is refreshed the second week of the month after the accounting period closes. The data reflects costs as of the last day of the accounting month. For example, looking at the Dashboard data in May will show DOE costs for the April accounting period ending April 30th.

How are the Equity Layers defined and from where did they come?

Layer	Details
No Layers	No layer chosen.
DACs/Tribal Lands*	Displays DOE defined disadvantaged communities and all Tribal lands. This default layer can be switched on and off.
Minority Population**	The percent of individuals in a tract (statistical subdivisions of a county that aim to have roughly 4,000 inhabitants) who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic white-alone individuals. The word "alone" in this case indicates that the person is of a single race, not multiracial.

Low Income Population**	The percent of a tract's population in households where the household income is less than or equal to twice the federal "poverty level."
Energy Burden***	The average annual housing energy costs divided by the average annual household income. Annual housing energy costs are based on household annual expenditures for electricity, gas (utility and bottled), and other fuels (including fuel oil, wood, etc.).
Air Toxin Cancer Risk	Lifetime cancer risk from inhalation of air toxics.
Respiratory Hazards	Air toxics respiratory hazard index (ratio of exposure concentration to health-based reference concentration).
Ozone Level	Ozone summer seasonal avg. of daily maximum 8-hour concentration in air in parts per billion.
Diesel Particulate Matter	Diesel particulate matter level in air, µg/m3.
All Particulate Matter	PM2.5 levels in air, µg/m3 annual avg.
Lead Paint	Percent of housing units built pre-1960, as indicator of potential lead paint exposure.
Traffic Proximity	Count of vehicles (AADT, avg. annual daily traffic) at major roads within 500 meters, divided by distance in meters (not km).
Risk Facilities	Count of RMP (potential chemical accident management plan) facilities within 5 km (or nearest one beyond 5 km), each divided by distance in kilometers.
Hazardous Disposal Sites	Count of hazardous waste facilities (TSDFs and LQGs) within 5 km (or nearest beyond 5 km), each divided by distance in kilometers.
Cleanup Sites	Count of proposed or listed NPL - also known as superfund - sites within 5 km (or nearest one beyond 5 km), each divided by distance in kilometers.
Water Discharge Sites	RSEI modeled Toxic Concentrations at stream segments within 500 meters, divided by distance in kilometers.
COVID-19 Fatalities****	Displays rank quantile of cumulative deaths, per county, attributed to COVID-19, since Jan 1, 2020.
Award Details	Displays each DOE award as a map pinpoint or as a grey disk with the number of awards in that location (when zoomed out). This default layer can be switched on and off.
Cost Heat Map	Aggregated costs by location on the map. Areas of warmer colors indicate higher volume of DOE costs while areas of cooler colors indicate a lower volume of DOE costs. The colors are relative to the zoom level and to the other cost amounts displayed in that geographic view. For example, when the map is displaying the entire U.S., Lexington, KY is a light purple color as the costs in that location are compared against costs across the U.S.; however, when we zoom in completely, Lexington, KY is a bright red color as the costs in Lexington are much higher compared to the other locations displayed on the map. When most zoomed in, a static legend will display showing fixed ranges of dollar amounts each color represents.

Unless otherwise noted, all layers derive from the Environmental Protection Agency's (EPA) EJSCREEN's Environmental Indicators. The layer with the single asterisk (*) stems from DOE defined DACs/Tribal Lands shapefiles. These can be found in the "Energy Justice Dashboard (BETA) Resources Area" of the

dashboard under the section "Disadvantaged Communities Definition Resources". Layers with the double asterisks (**) are from the EPA EJSCREEN Demographic Indicators. The layer with the triple asterisks (***) stems from the Department of Energy's Low-Income Energy Affordability Data (LEAD) Tool. The layer with the quadruple asterisks (****) depicting COVID-19 fatalitiesis sourced from the National Center for Health Statistics, Centers for Disease Control and Prevention Provisional COVID-19 Death Counts in the United States by County.

How is a Minority Serving Institution defined?

A minority serving institution (MSI) is an educational entity recognized by the Office of Civil Rights (OCR), U.S. Department of Education and identified on the OCR's Department of Education U.S. accredited postsecondary minorities institution list. The list used for the Energy Justice Dashboard (BETA) is based on 2020 data from the U.S. Department of Education. It includes institutions that qualify for MSI funding and those receiving MSI funding.

Why is a Funding Office breakdown provided only when the Office of Energy Efficiency and Renewable Energy or Golden Field Office is chosen as a Program Office?

The Funding Office filter allows users more insight into which offices are funding a particular award. EERE and GFO were chosen as the first offices to pilot this new filter but assuming there is space to accommodate expansion, the goal is to open this feature to all DOE program offices in the future.

Where can questions, feedback, or problems be submitted about the Dashboard?

Contact the Energy Justice Dashboard (BETA) Team at j40groupmailbox@hq.doe.gov.