Explaining FECM’s Societal Considerations and Impacts Framework: What are we doing and why?

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Science and Technology is Awesome

but we have four big challenges

I. There’s a lack of diversity in STEM — which can lead to continued inequality, as well as lost opportunities for both workers and firms.
2. People often don’t know about our technology or why it is useful in the energy transition, and the public is often left out of decision-making — which can worsen trust between scientists and the public, and inhibit deployment.
3. The **benefits, harms, and risks** from innovation and industrial development are often **unevenly distributed**

**Redlining’s fingerprint lingers in the nation’s air**

Levels of nitrogen dioxide pollution in 2010 tended to be worse in areas graded **C** or **D** than areas graded **A** or **B** on government mortgage maps dating to the 1930s.

- **A “Best”**
  - 2M people
  - -5 parts per billion
  - Less NO2 pollution than city average

- **B “Still Desirable”**
  - 2M people
  - 0

- **C “Definitely Declining”**
  - 2M people
  - More NO2 pollution than city average

- **D “Hazardous”**
  - 2M people
  - +5

Most residents of D-graded areas breathed dirtier air than their city’s average in 2010.

Note: City averages are population-weighted mean values calculated for HOLC-graded blocks only.

Source: Lane et al., 2022

John Myskens/The Washington Post
Science and Technology is Awesome
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1. There’s a lack of diversity in STEM — which can lead to continued inequality, as well as lost opportunities for workers and firms

2. People often don’t know about our technology or why it is useful in the energy transition, and the public is often left out of decision-making — which can worsen trust between scientists and the public, and inhibit deployment

3. The benefits, harms, and risks from innovation are often unevenly distributed

4. Many communities are struggling with a lack of quality jobs that pay a family-sustaining wage
The four parts of the Societal Considerations and Impacts framework:

- Diversity, Equity, Inclusion, and Accessibility (DEIA) plan
- Community and Stakeholder Engagement plan
- Justice40 Initiative plan
- Quality Jobs plan
Why address these challenges in our programs? The short answer:

We know from experience that community and stakeholder engagement and addressing impacts is key to success.

1. Office of Fossil Energy and Carbon Management priorities
2. Department and Administration priorities
3. We want projects to be successful
“FECM is committed to incorporating justice principles throughout our work. FECM prioritizes the meaningful participation of communities, with special focus on disadvantaged communities; a just distribution of benefits; and emphasis on remediating legacy harms while also mitigating new impacts. These principles will be at the center of funding decisions, including implementation of Justice40, and partnership development.”
Prioritizing DEIA

“[T]he Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Affirmatively advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the whole of our Government. …

By advancing equity across the Federal Government, we can create opportunities for the improvement of communities that have been historically underserved, which benefits everyone.”

The head of each Agency shall make advancing DEIA a priority component of the agency's management agenda and agency strategic planning.
## Prioritizing DEIA

<table>
<thead>
<tr>
<th>Diversity</th>
<th>Equity</th>
<th>Inclusion</th>
<th>Accessibility</th>
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<tbody>
<tr>
<td><em>(Welcome and engage all people and perspectives: “workforce looks like America”)</em></td>
<td><em>(Ensure fair outcomes and access to opportunities and career advancement)</em></td>
<td><em>(Create an environment where everyone belongs and can thrive)</em></td>
<td><em>(Establish ease of use for all abilities)</em></td>
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### Federal Definition:

**Hire and promote** Nation’s best talent:
- Diverse and representative workforce,
- identify talent,
- announce vacancies in multiple ways,
- develop pipeline,
- mitigate bias,
- address potential barriers in accessing job opportunities.

**Federal Definition:**
- Consistent and systematic fair, just, impartial treatment of all, including underserved communities.

**Opportunities parity** to advance in careers and grow as leaders;
- mitigate biases/barriers;
- ensure fair outcomes and access to services.

**Federal Definition:**
- Ensure employees feel supported; strengthen feedback loops.

**Provide opportunities to learn/develop/grow**
- so that employee talents are supported/ utilized/embraced →
- and create engaged and high-performing workforce.

**Federal Definition:**
- Consistently design, construct, develop, and maintain facilities, technology, programs, and services so that all people, including people with disabilities, can fully and independently use them.

**Modernize infrastructures** to support rapid adoption of tech. innovations;
- include accessibility in decision-making for physical and virtual environments.
Prioritizing DEIA

Addressing DEIA can:

• Improve employee retention and have more productive workplaces
• Support people from underrepresented groups in STEM
• Support collaboration – and share benefits – through stakeholder engagement, especially with underserved communities
DEIA: How to think about it?

Formulate why you are focusing on DEIA, beyond funding requirements.

• Cultivating a workplace that attracts and retains top talent
• Aligning practices with the values that members hold
• Acting on research that shows how more diverse organizations have higher levels of creativity and productivity

Assess the current state of DEIA in your project/company

Develop goals and desired outcomes: what would success look like?
Setting SMART goals.

Develop implementation strategies to reach those outcomes.
Community and Stakeholder Engagement

Why is stakeholder engagement important?

- Effective stakeholder engagement can improve community-employer relations, increase support for projects and provide the community and company an opportunity to leverage resources.

- Community engagement as a potential risk management strategy can help avoid losses from regulatory delays and litigation due to non-compliance, community opposition and negative public relations.
Community and Stakeholder Engagement: Not just a plan for outreach or comms

**Traditional Communications**
- Providing project updates
- Maintaining a website
- Sending email blasts to stakeholders
- Developing talking points for staff

**Community and stakeholder engagement**
- Holding listening sessions
- One-on-one meetings with groups; relationship building
- Collaborating on community-based monitoring
- Co-developing emergency response plans

Making public presentations
Holding open houses
Prioritizing Environmental Justice

Environmental Justice
Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

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.
What is Justice40?

EO 14008, *On Tackling the Climate Crisis at Home and Abroad*, establishes a goal that **40% of the overall benefits** of certain federal investments flow to disadvantaged communities (DACs).
What does Justice40 Cover?
All FECM programs!

Federal Investments:
✓ Federal grant and procurements
✓ Financing (credit, loans, and guarantees)
✓ Staffing costs
✓ Provision of goods and services
✓ Others per OMB

In these areas:
✓ Climate change
✓ Clean energy and energy efficiency
✓ Clean transportation
✓ Affordable and sustainable housing
✓ Training and workforce development
✓ Remediation of legacy pollution
✓ Clean water and waste infrastructure
**DOE Disadvantaged Community Definition**

**Cumulative Burden.** Census tract must have at least 30% low-income households and rank in the 80th percentile of cumulative sum of 36 indicators, where each input is equally weighted. Rankings are state-relative.
A project will result in a permanent increase in truck traffic.

Disbenefits:
1. Increase in safety risk from accidents
2. Increase in dust and noise pollution
3. Increase in tailpipe emissions
4. Potential decrease in home values

- Define metrics and units corresponding to each impact (number of accidents, change in noise level (dB) and visibility, NOx, HC, SO2, PM Ozone; home values)
- Determine who experiences these impacts and their cumulative burden
- Examine alternative routes
"We want these good-paying, union-friendly jobs in every pocket of the country." - Center for Energy Workforce Development EnergyCareers 2021

"I agreed to serve as Secretary of Energy in this administration because I am absolutely obsessed with creating good-paying, union jobs… And I am absolutely convinced that clean energy will be the most powerful engine for job creation this century." - United Brotherhood of Carpenters and Joiners Executive Secretary-Treasurer Meeting, Oct. 2021
Prioritizing Quality Jobs

• Majority of jobs created by the Bipartisan Infrastructure Law (BIL) won’t require a traditional four-year degree

• These jobs will increase opportunities for earn-as-you-learn, on-the-job training, including apprenticeships (which lead to a nationally recognized credential)

• Opportunities to create on-ramps to jobs (especially permanent, full-time jobs) with competitive wages and long-term career potential, especially for disadvantaged and underrepresented workers.
Prioritizing Quality Jobs

Incorporation of strong labor standards:

• Strong health and safety standards, predictable work schedules, clear processes for dispute resolution

High-road workforce development programs:

• Improving job access for marginalized and historically underrepresented workers; registered apprenticeship and quality pre-apprenticeship programs

Supporting the creation of good-paying jobs with the free and fair choice to join a union.
Pastor and Sanchez, “#WomenCanBuild: Including women in the resurgence of good U.S. manufacturing jobs,” University of Southern California Program for Environmental and Regional Equity, 2015
How DOE and the Administration is supporting jobs and manufacturing

- Prioritizing domestic content
  - Now required as per Build America, Buy America Act
  - Goal of strengthening domestic production and domestic supply chains
  - Developing tools to preference domestically made products
- DOL’s Good Jobs Initiative (and MOU with DOE)
- Construction work on BIL projects covered by Davis-Bacon
- Use of the Defense Production Act (DPA) to accelerate domestic production of solar PV, grid hardware, heat pumps, insulation, and electrolyzers
Moving from these priorities to **action-oriented plans**

**Vision:** We affirm we care about justice / engagement / DEIA

**Assessment:** We mapped or assessed underserved communities / stakeholders / DEIA

**Goals:** From our assessment, we know X is lacking, so we want to improve in X

**Outcomes:** We know we have succeeded when Y (specific target) is reached

**Implementation:** To achieve Y, [specific actor] has to do Z [in specific timeframe]
Increased effort in societal considerations and impacts can...

• Benefit projects via increased productivity and ownership among team members

• Create more robust pipelines for worker readiness and training, especially for disadvantaged workers

• Increase opportunities for small and disadvantaged businesses, and for people who are underrepresented in STEM and other careers

• Help local and regional economies to become more resilient, equitable, and sustainable

• And more!
Further resources

• Guidance documents for project teams include advice on:
  
  • **Process**: Steps for creating a plan and advice on how to go about it
  
  • **Content**: A walkthrough of required elements, with details about what they might look like
  
  • **Frequently asked questions and resources**
Questions?

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