

Hi everyone and welcome. I'm going to give it just another

minute or before we get started to let anybody else

who's planning to join a log in be on our way shortly.

While welcome to the Industrial Decarbonization and Emissions

reduction demonstration to deployment, notice of Intent

webinar, we are very excited to have you all here today and

thank you much for joining to learn more about this upcoming

funding opportunity. I am Christina Walrond. I lead

stakeholder engagement for our industrial and advanced nuclear

programs within DOE Office of Clean Energy demonstrations. So

before we get into the presentation.

And I introduce some of my colleagues who are here with me

today. Let me cover a couple of housekeeping items. this

teams webinar is being recorded and will be posted on the US

Department of Energy Office of Clean Energy Demonstrations

website.

Participants, all of you are currently in listen only

mode. for your awareness all attendee names are visible to

you right now, but they won't be visible in the recording. If you

would like to turn on live captions, click on three dots

for more in the top banner and select turn on live captions.

We're not taking questions and feedback today, however, we include a link to the industrial demonstrations program at the end of this presentation, and there are a number of ways to get more information in the content we're about to talk through today. And then finally, these slides, and a copy of today's presentation will be posted on our web page.

By Friday and then the recording of today's session will be available on the same page in a few weeks.

next slide.

Bear with me a bit more on the disclaimer front. the purpose of this webinar is to raise awareness about the recently released notice of intent only publicly available information provided in the notice of intent will be discussed in this webinar. the notice of intent is for informational purposes only. We are not seeking comments on the information and applications are not being accepted at this time.

Attending this webinar and watching the recording, it's completely voluntary. It won't impact an application. There are no advantages or disadvantages.

With respect to attending the webinar today, the webinar is not a rule or regulation. If there are any inconsistencies

between the notice of intent in the statements in this webinar,

the notice of intent is the controlling document and should

be referred to.

with that next slide.

Before we get started, I want to set the stage for today's

presentation in this opportunity, as we see it. we

really feel that this opportunity gives the United

States a fundamental opportunity to lead the world in the next

industrial revolution by addressing some of our most

difficult to abate emissions. And we view that we have an

incredible chance to accelerate high impact and large scale

transformative projects in our nation's industrial sector.

You know, our hope is that this funding will garner notice

in boardrooms across the country that we can accelerate

decarbonization projects. The companies are tackling that

you can move some of the goals that you had for the decades to

come up sooner. And we believe that this will give us an

opportunity not just to reduce greenhouse gas emissions, but

also showcase US leadership and industrial innovation and

position American companies as leaders in a clean economy.

Next slide.

before we get started, I'd like to describe it a high level. The goals for the webinar today. first I want to introduce you to the office of Clean Energy demonstrations where new office, we have a unique missions space and I know it can be really helpful to put that in context with where our mandate fits within the Department of Energy. And then next I'll introduce my colleague Jeremy Leong, who's our industrial demonstrations, program manager, and he'll describe the industrial demonstrations to deployment funding opportunity through details from the notice of intent.

After Jeremy, you're going to hear from Jill, who's one of our energy justice liaisons on community benefits planning. And then finally, I want to come back and wrap up to give some context about where you can find other opportunities around the department. There is a wealth of information for the industrial sector these days, and we want to make sure that you are aware of all of it and know where to find additional information.

first, the office of Clean Energy demonstrations. I

think we can go 2 slides.

Next slide.

let's start with our mission space and I actually think this is fairly important when it comes to putting context around what we're trying to do with projects. our mission is really to deliver clean energy technology demonstration projects at scale in partnership with the private sector. And so let me pause there and I want to emphasize the importance of this clause and the mission because the partnership with the private sector is absolutely critical for the work that we are trying to do. We can't accomplish our mission without you. And we want to work closely with you to truly understand. Opportunities that you're seeing, constraints and challenges that you're facing and we know that really understanding these pieces as we work through projects will be critically important to accomplishing the second part of this mission statement, which is to accelerate the deployment, market adoption and equitable transition to a decarbonized energy system. we often talk about our objective not just to build the 1st 123 or four of a kind of a technology at commercial scale.

But to build those few projects depending on the part of our portfolio in such a way that the private sector can pick up and

build the next 5 to 100. And we know that integrating these pieces is really critical to solving for the questions that you all are going to have as you look at some of these technology opportunities.

the equitable transition to decarbonized energy system, it's a really important component and that's why part of our presentation today focuses on community benefits planning. And you'll hear more on this from my colleague Jill and a little bit. next slide.

I want to put our mission statement in context, I'm going to talk a little bit about our mandate. you know, we really seek to become a center of excellence for clean energy demonstration projects and project management oversight within the department. A really important component of our mission space is to deliver full scale, clean energy demonstration projects. And these are often really complex projects. And that's where this really fits in.

We are centering the goal of meeting carbon goals through an equitable energy transition, and this is to help enable the 100% clean electricity by 2035 and net zero emissions by 2050 through an equitable energy transition.

And follow on investment, which I think is spoken to fully in our mission statement in the scale up components. It's really at the core of our work. I'll talk a little bit about our funding and our technology spaces. And though it sounds like a lot we take very seriously the importance of stewarding these funds well. And we recognize as well that to meet the scale of the challenge that we're facing, we need to unlock a trillion dollars in clean energy, follow on investment from the private sector and other sources of capital.

I think risk is a really important piece to talk about as well. You know it's inherent to any new technology and it's one of the reasons why the department is working on funding the technologies in the industrial sector as well as others. You know, we are really looking across our portfolio to actively manage risks as we bear some of the risk and de-risking new technologies for the private sector.

And then finally, engagement and outreach, which is why I have my role within this office, it's really critical to the work that we do. my objective is to establish strong two way communication with stakeholders like you. yes, that's to

raise awareness about opportunities like this one. But

also its important to integrate the information, the answers to

some of the questions that I've been describing that we can

help meet our technology commercialization engagement and

scale up missions.

Next slide.

OK, the slide can be a bit of an eye chart, but I actually think

it's quite helpful in placing OCED and context of the

department's traditional mission. rather than reading

the slide, although of course you're welcome to, I think the

important thing to take away is that if you look at the bars,

you see a lot of weight to the left side of your screen. And

that's because the department has traditionally and really

continues to be a world leader in advancing research from the

earliest stages up through the commercial and pilot or up

through the pilot scale demonstrations, excuse me. And

then we have a suite of deployment.

Opportunities as well and ways to help industry take up

once technologies have been derisked. But there's a

really critical innovation gap that our office seeks to fill

and it's borne out of the recognition that once

technologies are proven at the pilot scale. They're often perceived as actually too risky for adoption by the private sector.

And I do want to say that the chart should be thought of as a guiding continuum rather than prescriptive. But generally speaking, by a time a technology comes into OCED , a lot of the technical and project risk should be proven out. Our role is really to address the risk factors of commercial scale demonstrations and market adoption, such as regulatory and permitting risk, first mover disadvantages and cost of course.

next slide.

I mentioned before OCED scope and our funding level. So we are a multi technology office and we've been tapped by the bipartisan infrastructure law and the Inflation Reduction Act for more than \$25 billion in programming. And like I said, close collaboration across the department is really critical. you'll see on this slide that we're working on a range of programs that might impact the industrial sector. And I can imagine that learnings from these programs will be important to many people on the call. Regional clean hydrogen hubs,

carbon management.

Long duration energy storage and more, and though we'll focus

today on the industrial demonstrations program and this

notice of intent, I would encourage you all to take a look

at some of these other pieces and stay tuned for additional

information. If they're parts of our office that you're

interested in.

next slide.

I would encourage you, if you're interested in any of the

programs you saw in the last slide and frankly this one as

well to visit our website to learn more. The best way to get

news about what's going on with us is to sign up for our

newsletter, which is available via this link. Again, the slides

will be posted you can click through and look at the live

links. There are a number of others within this presentation

as well.

You can view our funding opportunities, including rest

requests for information, notices of intent like this one

on OCED exchange, and then once you're registered for exchange,

you can self nominate to be a merit reviewer, which we would

encourage you to do. We have a lot of need for experts as we

move forward with all of the great programs that we're working on. next slide.

And with that, I'd like to introduce my colleague Jeremy Leong, who is going to talk a little bit more about the industrial demonstration program and this notice of intent. So Jeremy's our industrial demonstrations program, program manager, and I'll turn it over to you, Jeremy.

Thank you Christina. It's really great to be here today.

And I wanted to 1st personally. Thank all of you for taking the time to join us. I counted almost nearly 550 attendees live and hopefully many others see The recording after the fact.

let's go to the next slide please.

Replicable solutions. Next slide please.

That said.

our colleagues at the former Advanced Manufacturing Office undertook a strategic road mapping exercise with many stakeholders and some of whom are likely here today. if you're in on the line, thank you for your input. They chartered the necessary technology development pathways. What some refer to as the pillars for meaningful decarbonization, including

energy efficiency.

Which can provide, near term opportunities without major

changes to the industrial processes, electrifying

processes that currently rely on combustion.

Low carbon fuels and feedstocks and energy sources to

decarbonize process emissions, as well as heat and then for the

emissions that can't be abated through other means. Carbon

capture, utilization and storage.

Through this program, we anticipate having an opportunity

to fund new technologies along these pathways, but I wanted to

state that these pathways are interconnected in many cases

and taken together, offer the potential to accelerate industry

towards net zero.

Next slide please.

the industrial decarbonization road map that I

described in the previous slide focused on some of the most

energy intensive industrial subsectors because they have

some of the greatest decarbonization challenges. And

for this funding, Congress too has prioritized these

subsectors.

If you look at the Inflation Reduction Act, that act provides

that eligible facilities include domestic non power, industrial or manufacturing facilities engaged in energy intensive industrial processes and these include iron, steel, steel mill products, aluminum cement and concrete, glass and ceramics, pulp and paper.

we recognize that there are quite a few sub sectors on that previous slide and we know there are a great many potential technology approaches that could be of interest. when you think about the program priorities, there are three main areas of priority consideration, the first being decarbonization including both direct facility and product level GHG emission reductions.

As well as industry wide potential for GHG emissions reduction, the second being uptake potential including the financial and market viability, with a priority for bringing market purchasers. it's heading back to our mission in the ability of the technology to be replicated and adopted by other facilities, but taken into consideration. And then finally, the third being community and that includes the projects.

That could create the greatest benefit for the greatest number

of people in the locations vicinity.

my colleague Jill Capotosto will devote her section of the presentation to providing additional details about this topic, but at a very high level, we'll be looking at community and labor engagement, creation and retention of quality jobs, diversity, equity, inclusion and accessibility.

Whether the benefits flow to disadvantaged communities and the potential for air quality improvements and harm reductions, next slide, please.

The bipartisan infrastructure law on the left side of the page here provides \$500 million for this program. Using this funding, we anticipate funding somewhere around 2:00 to 10:00 projects at a range of in the vicinity of 10 to maybe \$250 million per project. And unless otherwise specified in the FOA itself, DOE will require at least 50% non federal cost share per project.

Since these are demonstrations.

All the dollar figures you see on this slide represent federal share, which means that the total project cost will actually be at least doubled.

And of this funding scale and then at the lower end of the

funding scale, we may anticipate having the opportunity to support testing and validation for emissions reducing technologies.

on the right side of this chart here, the Inflation Reduction Act.

Provides the bulk of the funding with about \$5.8 billion, and for these funds we anticipate funding somewhere between 35 and 75 projects at a cost of around 35 to \$500 million in federal share. Again, these projects have a minimum cost share requirement of 50%, the total project cost will at least double the amount here.

Retrofits that existing facilities and more brownfield sites.

We can fund cross cutting approaches at multiple facilities, either through a common technology base or approach or similar infrastructure. Again, these are just the areas we're anticipating, stay tuned for the FOA which will have a lot more detail.

Next slide please.

we've been able to describe in the notice of intent a few additional factors that we anticipate considering as we

evaluate application and 1st being programmatic

considerations. And those ones include the technical merit and impact, the financial and market viability of the solution, the projects work plan, the team and partners and the Community benefits plan. We anticipate providing awards to teams.

Led by a single entity, what we refer to as a prime, though, all applicants are encouraged to partner with experts. As you develop your applications. This can be particularly helpful for technical engineering, support or analysis life cycle analysis.

And community benefits. Again, there will be more information in the flow, but we hope that this can at least get you started as we think about projects. Next slide please.

Now for our anticipated timeline, you'll see here that the exact time frame is very notional and a lot of this will be published in the full itself until on the top here of the timeline, you'll see do activities and on the bottom the industry activities, we anticipate releasing our funding opportunity announcement in the large time frame, we will likely require concept papers.

Now, concept papers allow us to evaluate projects.

Described at a very, very high level and will be required in

order to submit the full application.

After a review period of the concept papers, we will issue, encourage and discourage notifications to the potential applicants.

Next slide please.

Look at last, what happens if a project is selected and also said we're taking a standardized project management approach and after negotiations you'll see that we have a four phased process for each project, starting with the detailed project plan and then moving into development and then construction and then finally ramp up in operation, you'll see that we will.

Be evaluating regularly the projects on a go. No go decision point throughout the life cycle of the project.

And we anticipate looking at 5 areas. A few of these I think you would expect is engineering, procurement and construction, the permitting and it's safety and the technical data and analysis.

But I also want to highlight that we'll be looking at the business development and management or market uptake factors as well as community benefit plans throughout the

lifecycle of the project.

And then finally on the bottom here.

Independent Project review teams, comprised of the industry experts that we pulled together, tell it specifically to each project will conduct regular evaluations in accordance with our offices commitment to demonstration, project management oversight. with that, I'd like to introduce my colleague, Jill Capotasto.

Jill is an energy justice liaison in our office, and she'll discuss the Community benefits plan and the environmental and energy justice components of the applications.

Jill.

Thanks Jeremy.

I.

And the next slide, we'll just get started as Christina highlighted at the top of the hour, we have an unprecedented opportunity here to lead the world in the next industrial revolution by addressing our most difficult to abate missions. And to that end, part of our mission is to accelerate the equitable energy transition to a decarbonized energy system. this means that equity and justice must really be a central

focus of that energy transition and of the next industrial revolution.

And as we hear at OCED, strive to become a center of excellence within the federal government in advancing energy and environmental justice in these large scale demonstration projects, we are requiring that all projects incorporate plans for community and labor engagement, quality jobs and workforce development, diversity, equity inclusion and accessibility and the.

this includes investments in clean energy, climate change and workforce development. And I just want to highlight that we're referring to 40% of the benefits of this funding, not 40% of the funding itself flowing to disadvantaged communities. And the next slide covers what we mean by disadvantaged communities.

to help project applicants to help project applicants identify communities that qualify as disadvantaged, DOE has developed a definition and tools, including the disadvantaged Communities Tracker, which is shown here in this screenshot, to be considered a disadvantaged community, a census tract must have at least 30% of its

households classified as low income, and additionally it must rank in the 80th percentile of the cumulative sum of 36 burden indicators. These burden indicators include.

Also, dependence, energy burden, environmental and climate hazards, and socioeconomic vulnerabilities. Now I really encourage you to look at the disadvantaged communities tracker to explore these indicators and work depth.

we will also recognize disadvantaged communities as defined and identified by the White House Council of Environmental qualities, climate and economic justice screening tool?

Next slide, advanced industrial technology supported by this program will reduce greenhouse gases. They also can and should provide meaningful benefits to host communities and workforces beyond these greenhouse gas reduction.

A new technologies can help reduce the criteria air pollutants that can be produced by industrial processes, helping mitigate their harmful impacts on respiratory and cardiovascular health.

It's support these and other benefits. we will require all applicants to create a Community benefits plan which

has been mentioned a couple times since presentation that covers 4 standard topics that we mentioned earlier. This is community and labor engagement, workforce development and quality jobs, diversity, equity inclusion and accessibility and the Justice 40 initiative.

More details about their requirements for the Community benefits plan will be included in the FOA and alongside the FOA we will publish guidance documents to support applicants developing their plans.

And there are some guidance documents that have been published for already released FOAs that are available on OCED exchange for people who are interested in seeing what the structure of these plans and those guidance documents are.

The Community benefits plan will be implemented and updated during each project phase and will be included in go No GO decision criteria.

Next.

The Community benefits plan guidance documents will help applicants move their plans from vision to implementation, provide by providing additional information. Clear examples related to industrial emissions and resources that can support

applicants, and developing strong assessment goals and

outcomes related to community benefits.

But and sacrament will be provided under the application

document section on the OCED exchange website. As I've

mentioned already, and applicants are encouraged to be

that guidance document and the frequently asked Questions page

which is highlighted here on the slide. Prior to writing, your

Community benefits plan just to have the most information and

resources available to make that a strong plan.

Next slide.

to close out the webinar, let me bring back Christina to

provide context considerations and next steps.

Thank you, Jill. Thanks, Jeremy. I hope this information has

been helpful and has shaped your understanding of the notice of

intent as well as the Community benefits plan. next slide.

the Department of Energy, as I mentioned earlier, we have

many, many resources for industry. And this notice of

intent, it's just one piece of many interconnected programs

that we hope you'll leverage. on this slide, and as I

mentioned earlier, these slides will be posted with live links,

but we've included three offices in addition to OCED that you

should explore. our partners in the office of the Under

Secretary for Science and Innovation Focus on research and

development for early and mid stage technologies as well as

lab and pilot scale demonstrations.

And then finally, the office of Manufacturing and energy

supply chains or MESC is our sister office and a partner on

this notice of intent. And MESC strengthens and secures

manufacturing and energy supply chains that are really needed to

modernize our nation's energy infrastructure. And they also

work on a clean and equitable energy transition. these mask

has programs for domestic clean energy manufacturing and

workforce capabilities and opportunities that are focused

on small and medium enterprises and communities.

again, I really encourage everyone to check out these

these resources as well. Next slide.

to provide some operating opportunity context for this

notice of intent, I've brought back the header from the eye

chart that we showed you before, but it really is the research,

development, demonstration and deployment continuum and have

tried to chart here some of the opportunities to give you just a

little bit more context to where this notice of intent

represented by the Yellow star sits within the department. And

the slide also highlights some additional opportunities within

the Office of Clean Energy demonstrations.

That you may want to look at, but you'll see here that some of

our partner offices in the office for the under Under

Secretary of Science and Innovation, AMMTO and IEDO have

released a number of opportunities that get at the

research development and then early stage demonstrations. So

then you know the office of Clean Energy demonstrations are

office really comes in at the full scale commercial scale

demonstration piece. And like I said before, there are other

parts of the program that could be of interest, especially

around carbon capture and hydrogen hubs.

And then the deployment side, which really has many

resources that I want to encourage folks to take

advantage of the industrial assessment Centers Program

Center of Excellence Funding Opportunity announcement is

linked here.

There's also two notices of intent that are out

there on advanced clean energy manufacturing and recycling

grants, as well as on site energy, technical assistance

partnerships. And these are really just a few of the deployment focused opportunities that our offices at the department are looking at. really take a look at some of the websites that I've linked before.

That may have some additional information about existing programs, ongoing programs that could be of benefit.

Finally, your registration checklist the notice of intent if you haven't seen it already, is linked on this slide. At the end of the notice of intent in the last pages of the documents, there is a step by step checklist for things to do before the funding opportunity announcement comes out. And I do want to mention that the best way to stay up to date is to register for the office of Clean Energy Demonstrations newsletter that I mentioned before. But please.

Go to the OCED funding opportunity exchange where we anticipate publishing the FOA and again where you can self nominate to be a reviewer.

Grants.gov registering here will allow you to receive automatic updates when amendments to funding opportunities are posted. The system for awards management, or sam.gov.

It hosts the process for designating an electronic

business point of contact and obtaining a special password

that's known as a marketing partner identification number.

both of these are really important steps in the process

and worth doing before the FOA if you haven't already.

I just want to thank everyone for attending this webinar. We

really appreciate your enthusiasm for the opportunity

and interest in this funding is Jeremy has mentioned and both

Jill and I also highlighted in our remarks. We think this is a

really incredible opportunity. We are excited and you know

really appreciate your interest in learning more. I hope the

webinar has helped illuminate some content in the notice of

intent and will help you prepare for the FOA. As I mentioned

though, we won't be taking questions.

At this time, we welcome that you submit comments for

consideration to this e-mail address. These can include

anything that we should consider during the process. They'll

Please note, we can't entertain pitches for specific projects or

outcomes for any current or planned financial assistance

activity, including this FOA.

as I mentioned before, the recording of the webinar will be

posted to our website within the next few weeks and finally

circling back to our housekeeping, Please note that

as a reminder, the notice of intent remains the controlling

document. If information was presented in a differently

within this webinar from the notice of intent, you should

refer to the notice of intent as the guiding document. thank

you. Enjoy the rest of your day and we appreciate your interest.