

# H2Hubs Applicant Informational Webinar

## Transcript from Jan. 12, 2023

0:01

hello and welcome to the hydrogen Hub applicant webinar I'm Katrina Pielli

0:06

director of the engagement office in the office of clean energy demonstrations or OCED as we call it and I will be your

0:12

moderator for today first a few housekeeping items this team's webinar is being recorded and will be posted on

0:19

the US Department of Energy's OCED website all participants are in listen only mode and the names of attendees

0:26

will not be available in the recording to turn on live captions click on the

0:31

three dots for more in the top Banner and then select turn on live captions

0:37

note that we are not taking questions and feedback today however we include the link to the hydrogen hubs webpage

0:44

and Q&A email address at the end of the presentation finally a copy of today's presentation

0:50

and the recording of today's webinar will be posted on the OCED webpage shortly next slide please

0:59

the purpose of this hydrogen hubs webinar is to provide broad feedback and address certain themes that emerge

1:05

during the review of concept papers from applicants only publicly available information provided in the OCED funding

1:13

opportunity announcement or FOA will be discussed in the webinar attending this

1:18

webinar and watching the recording is completely voluntary and will not impact an applicant selection there are no

1:24

particular advantages or disadvantages in the evaluation process with respect to participating on the webinar today

1:31

this webinar is also not a rule or regulation and the recommendations it contains may not apply to a particular

1:38

situation based upon the individual facts and circumstances so if there are any inconsistencies between a specific

1:45

FOA and the statements in this webinar that FOA is the controlling document an

1:50

applicant should rely on that FOA language next slide please

1:56

for today's webinar we will first hear opening remarks from OCED director David crane then we will dive into the details

2:03

of applications and discuss Community benefits plans and energy Justice we

2:08

will close by discussing the U.S national hydrogen strategy and other related opportunities across the

2:13

department we would like to note that during the community benefits plan portion of our

2:18

webinar we do have two non-DOE officials whose views do not necessarily reflect

2:24

the views of the department and their discussion does not supplement or amend the requirements of the FOA now with all

2:31

that please join me in welcoming David Crane the director of the office of clean energy demonstrations David we

2:37

look forward to your remarks thank you Katrina and thank everyone who

2:43

is participating in this call for your interest in our H2 Hub program I

2:48

particularly want to thank the prospective H2 Hub sponsors who submitted an H2 Hub concept paper on our

2:55

before November 7th of last year and by so doing qualify themselves to submit a

3:01

full application on or before the due date of April 7th of this year we at the

3:07

DOE are very excited about the opportunity we have been given through multiple acts of Congress to catalyze

3:15

the transition to the hydrogen economy and we were gratified to find out from

3:20

the just concluded concept paper phase of our process that the privilege and

3:25

excitement we all feel at being at this pivot point in the energy history of our country is shared by so many of you

3:33

to put some numbers against what I am saying the DOE's office of clean energy  
3:38 demonstration was allocated eight billion dollars by Congress to this H2 Hub program making it one of the largest  
3:46 financial assistance programs in DOE history in September we committed six to  
3:52 seven billion of that amount to a FOA which elicited in November 79 concept  
3:58 papers representing an aggregate total project cost of over 200 billion dollars  
4:03 some 60 billion of which constituted a request for federal funds with the  
4:09 remaining 150 billion ish being a commitment of private sector capital  
4:15 in December after thorough independent and internal review the sponsors  
4:21 associated with those 79 potential concept papers each received encourage  
4:26 or discourage letters from our office I am pleased to report that 33 of the  
4:32 prospective applicants representing approximately 34 billion dollars of  
4:37 requested federal funds were encouraged to submit full applications the depth  
4:43 and breadth of the response to our FOA I believe eclipses by a significant margin  
4:49 any of the hydrogen programs being pursued by our friends and other like-minded countries around the world  
4:56 raising the prospect that all of you catalyzed by us at the DOE will secure  
5:02 first mover Advantage for the United States in the race to fully commercialize hydrogen as the go-to  
5:09 energy commodity of the 21st Century so today I have the privilege of kicking  
5:15 off this informational webinar which I'm told is itself and unusual if not unprecedented feature of DOE  
5:22 solicitations there is one and only one purpose underlying this event and that  
5:27 is to give all of you the clearest possible steer that we can give you on how to strengthen your proposals between  
5:33 now and the final submittal date of April 7th I encourage everyone to listen  
5:39 carefully to everything said on this call and if you miss something go back and listen again as Katrina said this  
5:46 webinar is being recorded final proposals are going to be subject to an extremely rigorous review process and we  
5:54 want all of you to work as creatively and intelligently as possible to make our evaluation task as difficult as it  
6:02 possibly can be to make every H2 Hub proposal a hundred percent worthy of  
6:07 federal funding before I pass the floor back to Katrina to introduce the experts who  
6:14 really know what they're talking about let me very briefly give you food for thought on five topics first  
6:21 somewhere in your proposal focus on the impact of your project of course  
6:26 positive impact begins with giving us confidence that you can successfully implement what you propose  
6:33 but spend at least a little space elaborating your vision of what your project could unleash we are tasked by  
6:40 congress with using the hydrogen Hub funds to create sooner rather than later the pillars of a national hydrogen  
6:48 economy and that guides us towards replicable long-term commercially viable  
6:53 hubs with the strongest possible ripple effect rather than one-off demonstrating  
6:59 dismantle science projects second think carefully about the  
7:05 boundaries of your H2 Hub proposal and make sure they are clearly delineated for our consideration  
7:12 per my first point above we are pleased to know what hydrogen related infrastructure outside the boundaries of  
7:19 your proposal that you think may be catalyzed by us giving you federal funds  
7:24 to direct inside the project boundaries but we need to have a clear idea what

7:30 aspects of your project we are being asked to apply Federal funding to on this point  
7:36 let me reiterate a point that we tried to make clear in our encouraged discourage letters geographically  
7:43 adjacent or geographically overlapping hubs are absolutely permitted to combine  
7:49 their efforts during this final application Phase if you the sponsors  
7:54 believe that by so doing you create a one plus one equals three situation if  
8:00 we agree that we are all for it but the decision to combine or not to combine at  
8:06 this point is in the sole discretion of you the various sponsors  
8:11 third take very seriously the community benefits program section of the FOA as  
8:17 set forth in the FOA the evaluation waiting assigned to this element is very significant and we take it very very  
8:25 seriously even if your institution as a sponsor likes to believe that being a good  
8:31 neighbor is embedded in your institutional culture I would encourage you to consider a level of Outreach and  
8:39 inclusion of affected stakeholders that may be beyond anything you have previously contemplated  
8:46 and let me emphasize that we ask you to consider this not only because it simply is the right thing to do but also  
8:53 because from the DOE perspective to do so materially de-risk the project  
8:58 timetable from delay due to state or local opposition the last thing we want  
9:04 to see at the DOE is a billion dollars of our precious hydrogen Hub Capital not  
9:10 deployed because an otherwise worthy project ran into entrenched opposition  
9:16 from local communities which had been disregarded during this process fourth we have been asked repeatedly by  
9:24 interested parties to describe what we At DOE consider to be the perfect H2 hub  
9:30 the answer to that question is that there is no such thing there is no  
9:35 single DOE endurance prototype of an H2 Hub that we can point you to  
9:41 Congress quite explicitly has directed OCED to fund a series of hydrogen hubs  
9:46 which are geographically dispersed use a variety of input fuels and serve four  
9:52 distinct addressable markets all within the overarching goal of laying the foundation of a national hydrogen  
9:58 economy as such in furtherance of congressional intent we will utilize  
10:04 portfolio Theory not only to evaluate the proposals based on their intrinsic strengths but also on how they fit into  
10:12 the Mosaic of our overall hydrogen portfolio we recognize that this  
10:18 introduces an element to this competitive process which is somewhat beyond your control  
10:23 but we nonetheless believe that if you remain mindful of oset's hydrogen Mission you can make strategic and  
10:30 tactical decisions over the next couple months which will enhance the prospects of your application  
10:37 and finally for those of you listening very carefully you will note that I have already mentioned the final proposal  
10:43 submission date of April 7th 2023 twice during my uh remarks please  
10:51 take that date April 7th 2023 very very seriously for reasons that are too  
10:58 numerous to mention and too compelling to describe the chances that that due date April 7th 2023 gets extended are  
11:07 extremely remote please do what it takes to get your submission in on or before that date to  
11:14 be a little more specific April 7th 2023 at 5 PM eastern time okay now I've  
11:20 mentioned April 7th six times so with that Katrina let me pass the microphone  
11:25

back to you with a final word of gratitude to each and every one of you thank you for applying your  
11:32  
extraordinary experience and expertise to our H2 Hub forward process and thank  
11:37  
you for the privilege of working with you to kick off the hydrogen transition for the benefit of all Americans and  
11:43  
ultimately for the benefit of all Humanity Katrina back to you  
11:50  
great thank you so much David next up we'll hear from Eric Miller Eric is the associate director for OCED  
11:57  
project management and also the division lead for hydrogen hubs Eric the floor is yours  
12:06  
good morning I'd like to first thank all the applicants for preparing and submitting concept papers the papers gave us great  
12:13  
insight into how parties are working on their hubs and how the hubs are likely to materialize my comments today are  
12:19  
largely based on what we learned reading those concept papers first thing I want to talk about is the  
12:25  
need for specifics in the applications in many of the concept papers we saw descriptions of hubs with multiple  
12:32  
elements and by elements I mean production plants end uses storage and  
12:37  
connective infrastructure and we saw a wide range of Technologies capacities and combinations of these elements which  
12:44  
highlights David's point that hydrogen hubs will not be a one-size-fits-all situation  
12:50  
somewhat understandably since this was only for concept papers we did not see many specifics on cost and other items  
12:57  
for each of the elements but in the applications we will want to see these specifics so we want to see we want you  
13:04  
to be clear on costs schedules risks community community benefit plans for  
13:10  
each and all elements of your hub let's talk a bit about the scope of your  
13:17  
applications and again this is echoing a comment that David made in preparing  
13:23  
your applications consider classifying the elements of your Hub are the elements I should say into two  
13:28  
categories first are elements which you are proposing for joint funding those are the elements for which DOE  
13:35  
needs the most information I'm going to call these your proposed elements or your proposed hub  
13:41  
second are elements and activities that are in the same vicinity as your proposed Hub but for which you are not  
13:47  
proposing to be part of DOE funding these could be elements that maybe already exist or they will be built in  
13:54  
the future without any assistance from DOE I'm going to refer to these as out of scope activities  
14:01  
ideally your application will describe the out-of-scope activities and how they will help Foster a regional Marketplace  
14:08  
but we won't need the same level of information about them as we need for the elements of your Hub proposal  
14:15  
in concept papers there was a little bit of uh lack of clarity on  
14:21  
whether elements were part of the proposed Hub or the out of scope activities again it's somewhat  
14:27  
understandable at the concept paper stage but in your applications please distinguish between these types of  
14:33  
elements next I want to talk about cost estimates  
14:38  
we expect in your applications to see the most information on cost for phases  
14:44  
one and two as those are relatively near term for phase three which is the  
14:49  
construction phase and our terminology we understand the cost estimate will be  
14:54  
less certain at the time of application and it but it should become more certain as we progress through phases one and  
15:01  
two your application still needs to give us an estimate of construction costs and  
15:07  
when you're putting that estimate together and describing it please also discuss your plans for funding your  
15:13  
portion of the costs and also your plans or your proposed plan for handling cost overruns eue is not accepting the cost  
15:20  
overrun risk and therefore we want to see your plan for handling it and your ability to fund your portion of the

15:26  
construction and frankly all costs will be a factor we consider in selecting recipients  
15:33  
and one more point on costs for your proposed elements give us both  
15:38  
the total cost and the amount you're asking DOE to pay and if for some reason and this is  
15:44  
acceptable if for some reason you are proposing different DOE funding levels for different facilities or different  
15:51  
budget categories please be clear on that as well  
15:56  
so ultimately DOE wants to fund projects that get built and your application should help us assess How likely this is  
16:03  
to occur towards that end you should discuss where your Hub stands on key development activities and especially on  
16:10  
Commercial agreements for off take and Feed Supply we realize these kinds of agreements and  
16:15  
other development activities are likely a work in progress at the time you are preparing your application but the more  
16:22  
you can help us understand their status the better so for instance if you have started discussions on your off take  
16:28  
agreement let us know that if you have an MOU in place tell us that and of  
16:34  
course if you have a signed off take agreement let us know about that and this doesn't just apply to off-take  
16:40  
agreements if your production plan requires electricity or natural gas or some other feedstock  
16:47  
give us an update and let us know where your work stands on  
16:53  
obtaining an agreement to obtain those feedstocks next I want to talk about the prime and  
17:00  
sub recipients or prime and sub applicants in your application please be  
17:05  
clear on the parties or the party that will serve as the prime recipient and if  
17:11  
there's any sub-recipients identify those as well ultimately any award would be between  
17:16  
the prime recipient and DOE and the prime recipient is going to be responsible for implementing the project  
17:23  
the prime is also the one that will submit invoices to DOE that will receive payments from DOE and will be  
17:30  
responsible for ensuring all federal requirements for financial assistance are met so again be clear on who is  
17:36  
going to play the role as Prime recipient and describe the qualifications of that entity to both  
17:42  
execute the project and to comply with requirements for federal financial assistance  
17:49  
and while we're talking about Prime and sub-recipients please note that in the hydrogen hubs FOA there are requirements  
17:55  
that both the prime and the subrecipients be domestic entities and to be a domestic entity as it's laid  
18:02  
out in the FOA the entity must be formed under laws of a U.S state or territory  
18:07  
and have majority domestic ownership and control and have a U.S place of business  
18:13  
to streamline our review process we would like applicants to declare their domestic entity status in their  
18:19  
applications this is a slight change to the FOA and we will issue a minor modification on this point and as has  
18:27  
been discussed in the some of the questions and answers that have been submitted we will consider waivers to  
18:33  
the domestic entity requirements but we can only do so as part of the application reviews and we'll have to  
18:39  
consider each one on a case-by-case basis we've also received several questions on  
18:46  
confidentiality of information submitted in applications as a former developer I'm familiar with these kind of concerns  
18:53  
I suspect many of the questions come from concerns about Freedom of Information or FOIA requests being made  
18:59  
to DOE you should know that confidential business information received by DOE as  
19:05  
part of an application is generally Exempted from being released under FOIA and DOE will protect your confidential  
19:11  
information to the maximum extent Allowed by law after the selections are made the final  
19:17

agreement and award documents may be releasable under FOIA but we will continue to work to protect the  
19:23  
underlying confidential information containing your applications if you have information you're especially concerned about please follow  
19:29  
the instructions of the FOA and the Q&A log about clearly marking documents and files that contain confidential  
19:35  
information next I want to talk about two topics that are related in a way uh NEPA are  
19:44  
the National Environmental Protection Act and financing milestones DOE's funding actions are subject to  
19:51  
NEPA and DOE will need to complete its neighbor review prior to the start of construction  
19:57  
again phase three and our timeline our NEPA review will need to consider the potential impacts of DOE funded  
20:04  
activities including any connected actions the decision on what counts as a  
20:10  
connected action will be made by DOE based on the specifics of each Hub and the proposed activities  
20:17  
for hubs with many elements DOE could potentially complete NEPA reviews separately for some elements  
20:25  
but only if DOE can determine that those elements have independent utility meaning those elements can and would  
20:32  
operate independently from other elements in the hub if applicants want to facilitate this  
20:39  
kind of analysis they miss this DOE determination by describing how certain elements may meet the criteria for  
20:45  
independent utility you could do this in your application or you could also do it afterwards as part of phase one  
20:52  
activities but keep in mind the decision as to whether a set of Hub elements have  
20:57  
independent utility will be does in a similar vein financing Milestones  
21:04  
may need to be met by the entire Hub or could be done for select elements  
21:09  
again prior to approving the start of phase three DOE will want to see Milestones completed similar to what  
21:16  
would be needed for a private project financing again if you're proposing a hub with  
21:22  
many elements DOE can consider allowing a subset of the hubs elements to move  
21:28  
into construction according to their own progress but only to the extent it can be shown that those elements are  
21:34  
economically viable on their own this is similar to NEPA and the DOE will  
21:39  
determine if the elements are economically independent but recipients can assist with us with making that case  
21:47  
last topic I want to cover is permits and regulations again we want to fund  
21:52  
projects and hubs that get built and obviously receipt of permits will be critical to this  
21:58  
and we expect that in many cases to receive your permits there will need to be some progress made on State and local  
22:05  
regulations as they relate to hydrogen and this work could also be important to  
22:10  
helping us move towards a national hydrogen Network for these reasons we want applications  
22:15  
to assess both the need both permits needed for the project and development of any accompanying regulations  
22:23  
so to give an example if your Hub involves installing the first Hydrogen  
22:29  
refueling stations in a given State and you are uncertain how the state's Regulators May apply their rules to  
22:36  
hydrogen then your work plan should factor in the time the effort and perhaps the risk needed to clarify the  
22:42  
regulations and obtain any necessary approvals hopefully that helps explain what we are  
22:49  
thinking of when we're talking about regulations and permits those are all the topics I have for  
22:55  
today one final point though please take note of the content in the encourage  
23:00  
discouraged messages we posted in exchange at the completion of the concept paper reviews as that message  
23:06  
was carefully crafted again thank you for your attention and  
23:11  
interest in hydrogen hubs now I'll hand it back to Katrina

23:20  
great thank you so much Eric now I would like to introduce Dr Catherine Clark who  
23:25  
is an energy Justice liaison for o said Catherine will describe several themes from our review of the community  
23:31  
benefits plan components of the concept papers Catherine over to you  
23:38  
thank you Katrina as Katrina mentioned today I'm going to  
23:43  
talk about some things to consider When developing a community benefits plan or CBP this is not meant to provide a  
23:51  
comprehensive overview of CBP requirements but like Eric who we were just hearing from my comments today are  
23:58  
largely based on what we learned reviewing the concept papers wants to fund hubs that get built  
24:05  
and this will depend on engagement with and support from host communities  
24:10  
relevant laser partners and workforces and other impacted groups I would note  
24:16  
that in the United States there have already been hydrogen projects canceled due to community pushbacks and concerns  
24:23  
hydrogen hubs Community benefits plans which include community and labor  
24:29  
engagement investing in the American Workforce diversity Equity inclusion and accessibility and the justice 40  
24:35  
initiative will help projects be successful and long-lasting while driving the creation of good paying jobs  
24:42  
tackling the climate crisis and ensuring stronger access to economic environmental and other benefits for  
24:49  
underserved and overburdened communities well the community benefits plan for  
24:55  
requirements are intentionally flexible to generate the best approaches from applicants and their partners that are  
25:02  
appropriate for their Hub and responsive to the communities workers and groups impacted by their proposed Hub  
25:08  
applicants should ensure that they are addressing all four CBP topic areas with  
25:14  
thoughtfulness and depth DOE wants to see HUD proposals that  
25:19  
proactively address both benefits and negative impacts on of hubs on  
25:26  
communities and workforces many of the concept papers describe  
25:31  
potential benefits of hubs to communities and workforces and understandably since this was only the  
25:37  
concept paper phase we didn't see many specifics especially on potential negative impacts that could occur from  
25:44  
these hubs in applications we want to see specifics for both benefits and  
25:51  
potential negative impacts each application should include detailed  
25:56  
description of benefits and negative impacts with special attention to existing cumulative burdens historic  
26:02  
harms and priority concerns raised by impacted groups this is especially critical for cases in  
26:10  
which hubs will impact communities already facing significant burdens finally these specific benefits and  
26:17  
negative impacts should be specific and measurable and to the greatest extent possible include metrics and methods to  
26:25  
track Monitor and Report each impact over time you'll notice that the requirement is  
26:32  
for a community benefits plan and not a community benefits assessment  
26:37  
and that's because the core purpose is really to move Beyond sort of a vision or assessment and towards concrete goals  
26:44  
outcomes and implementation plans in other words really answering the  
26:50  
question what will the project team do to ensure projects deliver meaningful  
26:55  
benefits and minimize and mitigate any negative impacts these clear and concrete implementation  
27:02  
strategies should be matched with milestones and metrics to measure their success  
27:07  
and finally of course a plan wouldn't be meaningful without the capacity to implement it so DOE asks applicants to  
27:14

outline what resources including staff with relevant expertise and budget will be used to implement the CBP  
27:22  
high quality implementation plans will include robust methods to ensure  
27:28  
accountability to impact communities and workforces providing real Pathways for  
27:34  
their priorities and feedback to impact decisions in All Phases of the Hub  
27:39  
for example applicants could discuss how citing decisions could be made based on  
27:45  
community input and demonstrate plans to enter into negotiated Workforce and Community agreements  
27:52  
Community benefits plans should include transparent mechanisms for two-way engagement and accountability to  
27:58  
impacted groups do we recognize that there are many ways to develop hubs in partnership with  
28:05  
labor and community we also recognize that some of these approaches may be new to applicants  
28:12  
in addition to this webinar we've developed a guidance document that is posted with the FOA that provides  
28:19  
detailed information and examples all applicants are encouraged to read the  
28:24  
community benefits plan guidance under application forms and templates in  
28:29  
exchange as they develop their Community benefits plans thanks so much for your attention and  
28:35  
Katrina I'll turn it back to you excellent thank you so much Catherine so  
28:42  
next we will have a deep dive from two experts who will share some of their observations about implementing projects  
28:47  
to ensure Community benefits and minimization of farms but first I'd like to provide some framing remarks about  
28:53  
the transformative and historic opportunity that we are embarking on together the bipartisan infrastructure law or  
29:00  
Bill is a long overdue investment in our nation's energy and transportation infrastructure the hydrogen hubs overall  
29:07  
program represents eight billion dollars to advance a national clean hydrogen Network that will contribute sustainably  
29:14  
and substantially to decarbonizing multiple sectors of the economy and help us meet our climate goals the bill  
29:21  
programs will be incredibly important not only for addressing our infrastructure needs but tackling the  
29:26  
climate crisis while also providing good jobs and benefits to communities that have traditionally been excluded from  
29:33  
these opportunities this includes communities of color and low-income communities who have unfortunately  
29:39  
disproportionately bore the environmental burdens of the energy system while reaping so too few of its  
29:46  
economic benefits and so as DOE strives to reinforce and Revitalize our energy infrastructure it  
29:53  
is incumbent on all of us to ensure that our Energy Systems in the future are not nearly functional but just  
30:00  
and this means that we must seek to remediate the historic harms on our Frontline communities and strive to  
30:06  
ensure that our future energy systems are more equitable accessible affordable clean and consider  
30:12  
the input and voices of those who have historically lacked access to the decision-making process in the past  
30:18  
this is energy Justice and energy Justice is fundamentally about ensuring  
30:23  
the benefits and burdens of the energy system are equitably distributed these benefits are broadly defined to include  
30:30  
more than just dollars they Encompass activities and outcomes that improve communities and create more  
30:36  
opportunities for access to clean affordable energy we've identified eight policy priorities that projects can  
30:43  
directly Target to meet the goals of the justice 40 initiative by identifying measurable trackable  
30:49  
benefits that flow to underserved overburdened communities such as dollars  
30:54  
invested jobs created energy costs lowered and more we can achieve the essence of the justice 40 initiative and  
31:01  
transform communities for the better and so as we think about implementation of our hydrogen hubs we must think  
31:08  
critically about how commercial scale facilities can be more inclusive of the feedback expressed by communities with



31:14 energy Justice concerns and underrepresented groups and we must also ensure that we design programs to ensure  
31:21 minimal environmental impact including impacts that risk exposure to additional pollution and already overgrown  
31:27 communities and mechanisms for accountability to and transparency with those communities  
31:33 as Catherine mentioned again and again research shows that communities of color are routinely exposed to more  
31:38 environmental hazards and pollutions than they create and these Frontline communities understand that new projects  
31:44 even if they're designed to avert catastrophic climate change could mean increased exposure to these  
31:50 environmental hazards and harms for their communities and their families and so because of this history and these  
31:56 patterns and the legacy of the impact of our Energy System our efforts must extend beyond simply hearing Community  
32:02 feedback to be effective we must also acknowledge the potential environmental harms associated with our hydrogen hubs  
32:09 including safety considerations potential for increased emissions of non-greenhouse gas pollutants and our  
32:15 host communities we also must be forthright I've been committed to answering how these  
32:20 possible harms can be addressed and mitigated from Project beginning to end and so this means we need to get Broad  
32:27 and meaningful participation from all areas of society involved and make a special effort to include those  
32:33 communities that are now most burdened by our existing Energy System and so here at DOE we're working hard to  
32:39 ensure that communities impacted by the legacy of pollution will have the support that they need to actively  
32:45 participate in shaping our future and so all of us have the responsibility to  
32:50 ensure that communities on the front line receive the benefits of our clean energy transition and so I really appreciate you taking  
32:57 the time to join us today and as you think about the Innovation and Ingenuity that we need to make all this possible I  
33:03 really want to impress upon each of you that your work must be inclusive and it must consider carefully the things that  
33:09 we've highlighted today I encourage you to put all of the levers at your disposal to creatively conduct  
33:15 this work building these hydrogen hubs so that it is respectful our environment our resources and our people that is our  
33:22 Collective goal and so thank you so much for the work that you do and the work that you're about to do and so now we  
33:28 have a wonderful opportunity to hear from two Workforce energy Justice engagement and tribal experts about  
33:34 their experiences with implementation of community benefits activities and so just a quick reminder I do want  
33:40 to flag again that these panelists are not DOE officials and so their views do not necessarily reflect the views of the  
33:46 agency and again the discussions of this webinar do not amend or supplement the requirements of the FOA and the FOA is  
33:53 the controlling document an applicant should rely on that language so thank you so much now I would like to  
33:59 introduce our first speaker we're excited to have Doug block principal and strategic consultant with  
34:05 block strategies with us today so Doug the floor is yours  
34:11 thank you very much Katrina and I want to thank the department of energy for the opportunity to participate today it  
34:18 is a pleasure to be here in my nearly 30 years of doing this work  
34:23 I've often found myself sitting at a table with employers labor unions and Community  
34:30 groups and each group is looking at the other one like they're speaking a foreign language  
34:35 in my experience this is particularly true for the employer side of the table because truth be told they're just not  
34:43 as many American workers and unions as there used to be for many employers the union is outside  
34:49 their realm of experience so when a union person says  
34:56 different language now I've also seen employers come in excited to talk about the work they  
35:03

they're doing or things like their bottom line and competitive disadvantage  
35:08  
and the community-based organization comes back at them with historical grievances that actually predate the  
35:15  
employer's very existence I want to applaud the DOE for their comprehensive approach to trying to  
35:21  
bridge these gaps and my hope is to demystify some of the language around the community benefits  
35:28  
plan but first let me tell you what a union is a union is an organization formed by  
35:35  
workers who are employed by the same employer for the purposes of securing better wages benefits and working  
35:42  
conditions and let me tell you what a union is not a union is not a third party who takes  
35:50  
over management of your employees or sets company policies you still get to  
35:55  
do that if your workers form a union the union simply advocates for workers when  
36:02  
they feel like management is being unfair and a good union is a partner because a  
36:08  
good union recognizes that an If an employer isn't making money then there's nothing to share with the workers  
36:16  
now I'm a Storyteller so let me tell you a story that resulted in one of the most robust Community benefits agreements  
36:23  
I've seen there were four parties involved a government agency a team of developers  
36:30  
labor unions and community-based organizations the government agency had land they  
36:36  
wanted to lease for development it was Prime real estate next to a port so they wanted to develop it for trade and  
36:43  
Logistics to keep the port competitive they also wanted the guaranteed revenue  
36:48  
of a long-term lease and good jobs for the local community second was a group of developers that  
36:55  
wanted to lease that land build some warehouses on it sublease them out and  
37:00  
do some other Port related development third were the labor unions who wanted  
37:06  
good jobs for workers they not only wanted their members to build everything they wanted to  
37:12  
represent the workers in the permanent operations jobs after things were built  
37:17  
and fourth were the groups in the adjacent Community who carried a serious grudge against the port  
37:23  
this was primarily a community of color who saw very little of the port's economic benefits and got all of its  
37:30  
problems they suffered much higher asthma rates than the rest of the area due to poor  
37:36  
related pollution and this community opposition was politically potent  
37:42  
all this developer had was an exclusive negotiating agreement with the agency they still had to finalize the deal and  
37:50  
the agency told them they needed to include a community benefits agreement to do that  
37:56  
does that sound familiar to the applicants so negotiations begin  
38:02  
and agency officials set the broad terms of the agreement they used their power to convene the different parties and  
38:09  
assign staff to help where possible the unions and the developers started  
38:15  
meeting and very early on came to a project labor agreement or Community Workforce agreement which established  
38:22  
the terms and conditions for all the construction work on the project  
38:27  
this was good for the unions because it mandated that all contractors and subcontractors on the project hire  
38:34  
workers through the various union hiring halls and pay them union wages and benefits  
38:41  
it was good for the developers because not only were they guaranteed a supply of skilled and trained labor  
38:47  
they also got labor peace meaning the unions agreed to no strikes or labor  
38:53  
disputes during the project and finally the unions agreed to  
38:58  
publicly support the project and I cannot stress the importance of that enough because the elected officials

39:04  
valued Labor's views on the project still with such intense Community  
39:10  
opposition that support was not enough the community groups were very focused  
39:16  
on Equity issues making sure that workers from the local community and those with disadvantaged backgrounds  
39:22  
could get equal access to the jobs they also wanted assurances that the project would not increase the  
39:29  
environmental impact of the port on the nearby community and again this is where the community  
39:35  
Workforce agreement came into play because it provided a legal framework to  
39:40  
incorporate the community's equity goals into the project but before we could do that we needed to  
39:48  
get people talking the labor unions and Community groups had some historical  
39:53  
issues but through a lot of hard work they eventually joined forces and negotiated jointly with the developers  
40:00  
in the agency it was not always pretty in the process but in the end the project won unanimous  
40:07  
approval and we all got to stand at a press conference where we shared the terms of a groundbreaking Community  
40:14  
benefits agreement half of the construction jobs would be for local residents  
40:21  
all new production of the jobs had to be for  
40:26  
newly hired people every worker on the project was guaranteed the local living wage and  
40:33  
seeing as we wanted good jobs we negotiated a first in the nation standard limiting the use of temp  
40:39  
agencies in the warehouses employers are prohibited from asking  
40:44  
about criminal backgrounds when hiring so the more people from the nearby community could get jobs  
40:51  
on top of that half of all the permanent jobs on the project had to go to workers  
40:56  
from the local community we set up a One-Stop shop with seed  
41:02  
funding from the local agency so workers know where to go to get jobs and training and employers know where to go  
41:10  
to find workers we leveraged that seed funding to get a half a million dollar planning Grant  
41:16  
from the state to establish a training program with the unions and a local community college and that has since  
41:24  
secured even more funding the developers got approval for a 66-year lease and development agreement  
41:31  
and the local agency gets 66 years of Revenue in return  
41:37  
and furthermore the elected officials got to hang their hat on an agreement that was not only  
41:43  
good for the local and National economy but one that had support from Community  
41:48  
groups labor unions and the business community that's a win-win-win-win  
41:55  
now I won't lie the negotiations were not easy nobody got everything they  
42:01  
wanted but in the end everyone understood that if they didn't agree to something then they would get nothing at  
42:07  
all and that understanding along with an open mind honest communication integrity  
42:14  
and the same sort of strong leadership we see from the Biden Administration is what got this done  
42:21  
it took a lot of people like me doing shuttle diplomacy who could speak everyone's language so I encourage you  
42:28  
to seek out help the DOE can offer suggestions and resources to that end  
42:34  
as I said this community benefits agreement was a win-win and my hope is  
42:40  
that many of you can come back and take my place on a future panel to tell a similar story  
42:45  
thank you for your time and I hope this was helpful and now I'm going to turn it back over to Katrina  
42:53  
great thank you so thanks Doug and uh non-DOE speaker Dr Ginger Gibson  
43:01

Dr Gibson is the director and negotiation lead with the firelight group Dr Gibson the floor is yours  
43:08  
thank you so much and good morning everyone thanks to the DOE for the invitation today I'm going to talk about  
43:13  
something that's a little bit different than Community benefit agreements but has many similarities in Canada we call  
43:19  
these impact and benefit agreements next slide please as I noted I'm within an indigenous  
43:26  
owned company in Canada um we're called the firelight group and we provide Research Services and support  
43:32  
on community benefits agreements and impact benefit agreements across Canada and in the United States on these kinds  
43:40  
of issues we work with communities to provide community-based research to support indigenous rights interests and  
43:46  
values and today I'm coming to you from treaty six territory next slide please  
43:52  
in Canada impact and benefit agreements started in the 1990s it we call them  
43:57  
IBAs impact and benefit agreements they deal with the impacts environmental and social and otherwise and the benefits  
44:04  
it's a contract that is set out between a company and a community that provides  
44:09  
indigenous consent and support for a project they play an important role in  
44:15  
maintaining indigenous rights and directing specific benefits that communities choose into their  
44:20  
communities they can also mitigate social impacts so they give project  
44:25  
certainty to the proponent and they're very much a part of the proponent's social license they're even required in  
44:31  
legislation so in Nunavut and the Northwest Territories these Agreements are legally required and are being  
44:39  
conducted and concluded all across the country next slide please there's all of these types of Provisions  
44:46  
so my the previous speaker spoke to some of the employment and training benefits the procurement benefits but there's  
44:53  
also Financial benefits that are required there's Environmental Management and environmental controls  
44:58  
that communities have over projects in addition these kinds of agreements can touch on culture and cultural heritage  
45:06  
all of these things are negotiated it takes some time and that most of the Agreements are confidential a few  
45:14  
agreements in Canada are public and we use them as the standards out there next slide please  
45:21  
one particular area I'll dig into is employment benefits can  
45:26  
assist industry there can be many different kinds of benefits that are unlocked the focus can be across uh diff  
45:34  
all of the different salary price points all of the different types of areas that so communities in  
45:41  
the Northwest Territories for example are accessing as a result of community benefit agreements all different areas  
45:47  
of employment from and we have Targets in these agreements that set out  
45:53  
how many indigenous employees are going to be brought along and  
45:58  
included in the project this means that employment is local it also means that there's a strong and  
46:05  
secure Workforce that's set in place for the proponent many of the agreements also touch on the  
46:11  
barriers so they look specifically through research and understanding what those barriers are they set out a  
46:18  
program to address those barriers that deal with recruitment retention and advancement being a very  
46:25  
tricky one in particular because of the kinds of training and education requirements that are often required for  
46:32  
indigenous employees these are all mitigated through the IBA next slide  
46:38  
please a particular area that was raised to me as um of concern for uh the hydrogen  
46:45  
hubs was the question of restorative justice so today I'm going to focus briefly on three different cases where  
46:51  
restorative justice or that question of how do you reach the vulnerable populations and how do you address  
46:57  
historic loss I'm going to touch on three cases that address that issue so

47:03  
the first case is an abandoned uranium mine operating in the 1950s and 60s in Northern Canada through  
47:09  
government-to-government agreements so this shows really a clear role for the federal government there has been a  
47:15  
restorative justice addressed this began in the early 2000s but now in the last  
47:21  
two years agreements have been put in place between the indigenous government and the federal government to address  
47:27  
the historical loss of area the contaminated site and the remediation of  
47:33  
that site the proponent themselves also have to pick up many of the obligations that have been set out in the federal  
47:40  
government agreement such as employment requirements the restorative justice  
47:45  
approach in this case focuses on a range of topics first of all control over  
47:50  
decision making so the indigenous government has the opportunity with the federal government to Control  
47:55  
Contractors that are selected uh employment targets for example  
48:00  
they also have an opportunity to recognize and heal both the land but also the people who have been excluded  
48:07  
from that area so oftentimes when you have an area that is in as they call it in the United States a Superfund Site we  
48:14  
don't use that same language in Canada but the um the opportunity to address recognize and think about the  
48:22  
historic Health impacts that were experienced by the indigenous population the story is being told and uh and the  
48:30  
federal government and the proponent along with the indigenous government are co-developing that story and telling the  
48:35  
story of loss through a co-developed museum exhibit their truth-telling about  
48:40  
the experience of impacts and they are uh engaging in joint monitoring that's  
48:46  
going to be led by the indigenous government this is accompanied by funds for monitoring to ensure that there's an  
48:52  
ability of the indigenous group to reserve resume their cultural activities on the land  
48:57  
so that's one example of restorative justice as practiced in uh  
49:03  
in this one case in the next slide I'll talk about another case that last case looked uh at the at the  
49:11  
um at a case of uranium mining back in the 1950s this case now looks at impacts  
49:18  
that will be experienced so when an extractive project in Northern Alberta  
49:24  
was considered what the parties realized was that there would be 40 Years of loss  
49:29  
of use for an indigenous group of peoples that loss of use was recognized  
49:35  
and while the proponent had a community benefits agreement that they held with the community the federal government  
49:41  
also set out an agreement to address the cumulative impacts outside of the  
49:47  
project site so when the project area was discussed was discussed it was recognized that the proponent and the  
49:54  
community could control impacts in the smaller area where the project was going to be whereas the federal government and  
50:02  
the community could address project effects that were more extensive that went outside of the project area  
50:08  
so in this case restorative justice was prospective what I mean by that is it was looking at  
50:15  
the restorative justice for potential loss of cultural use and rights practice of Rights in an area that was very broad  
50:22  
outside of the project area and that would be experienced if the project proceeded for 40 years  
50:28  
so the program of work focused on a forward-looking redress of loss of practice of culture due to those  
50:35  
industrial impacts and a fund was set aside for the indigenous government the indigenous Community to continue to  
50:41  
practice their rights for a 40-year period so this gives you an example of looking  
50:48  
forward understanding that there will be impacts and setting out a program of work that will allow the indigenous  
50:54

government and the parties to address that loss of use in the final case it's a very similar  
51:02  
issue in the next slide which looks at Marine shipping in this case where there  
51:07  
was Major Marine shipping infrastructure in a First Nations territory the lands are going to be completely and  
51:13  
irreversibly transformed the nation's kitchen sink um their entire area will be  
51:20  
transformed in a way that they cannot access their lands or their Waters in  
51:25  
this case the recognition was made that the impacts would be so severe that the project proponent cannot address them in  
51:33  
the foreshore of the Marine shipping area again restorative justice was is being  
51:39  
addressed through long-term investments in infrastructure so the nation has the capacity to move into different areas  
51:46  
and has the capacity to practice their rights the long-term impacts were also  
51:52  
documented recognized by the parties and uh and addressed through a long-term fund again a prospective long-term fund  
51:58  
as a part of the restorative justice approach in my last slide I'll reflect on some of  
52:04  
these um these issues and what they mean for Community benefit agreements and explicitly what they might need for the  
52:10  
DOE hydrogen hubs approach so Community impact agreements  
52:17  
um in Canada we as we as I said we call them IBAs and we explicitly consider  
52:22  
environment and culture uh and in this case most of the IBAs are actually  
52:27  
transacted with indigenous people as you call them tribal peoples in the United States uh it's a there's an explicitly  
52:35  
different Focus for indigenous people where the focus is on environment and on culture as well as the other benefits  
52:42  
expect I suggest that you may want to expect that these kind of issues will emerge in CBAs with indigenous peoples  
52:49  
in Canada restorative justice has reviewed past harms and addressed losses restoring those losses and attempted  
52:56  
we've been attempting to Monitor and remediate against past losses I'll note a few patterns  
53:04  
first of all where there has been tremendous loss and people have been not able to access their lands there often  
53:11  
is a period of truth-telling and acknowledgment that is required this requires an open heart and an open mind  
53:17  
and often requires that hard truths are discussed and described I encourage  
53:23  
people not to shy away from these hard truths but to acknowledge them I've also told you about two cases where  
53:30  
we've talked about addressing future losses it's absolutely fundamental to understand what the nature of impacts  
53:37  
will be and then to consider ways to address those impacts that means they need to be clearly described and clearly  
53:44  
understood and as I noted for you there's a rule for federal governments to address those historical harms and to  
53:51  
address future losses through government-to-government agreements in Canada the practice now is to have  
53:57  
government to community agreements that address harms that cannot be addressed by a proponent  
54:03  
this often requires joint decision making as well as monitoring and Remediation that monitoring and  
54:09  
Remediation can be years and years of work that is jointly developed by the community and by the proponent requires  
54:17  
oversight and Community employment and allows a community to connect to their  
54:22  
lands provides meaningful long-term employment as well as the ability for people to gain trust and regain a  
54:30  
connection and relationship to the land that they hold their rights to with that I'll thank everybody for their  
54:37  
time and uh turn it back to you Katrina  
54:42  
great thank you so much Dr Gibson so next we'll move into our U.S national  
54:48  
hydrogen strategy discussion we will hear from Dr Sunita Satyapal director of  
54:53  
the hydrogen and Fuel Cell Technologies office and the DOE hydrogen program coordinator Sunita will cover the

55:00 national hydrogen strategy and opportunities Sunita over to you great thank you Katrina and if we go to  
55:08 the next slide I would just like to emphasize this is such a critical time  
55:13 for hydrogen and for the nation and a big thank you to all the stakeholders  
55:19 who've been interested in hydrogen over the decades we have an all hands on deck approach and the hydrogen program as a  
55:26 reminder is coordinated across all DOE offices covering basic science to  
55:32 applied research developments demonstration and deployments and it includes the entire value chain from  
55:38 hydrogen production through end use as shown in the h28 at scale graphic which  
55:45 includes hydrogen production from all of our domestic resources Renewables  
55:50 nuclear fossil with ccs for clean hydrogen and then we can use that  
55:55 hydrogen across sectors it provides us with that versatility again especially  
56:01 in those hard to decarbonize sectors the hydrogen energy Earth shot is also a  
56:07 critical piece of the program is launched by the Secretary of Energy last year it includes bold ambitious goal of  
56:14 one dollar for one kilogram of clean hydrogen in one decade and that includes research all the way through deployment  
56:21 so getting to scale such as through the hydrogen hubs is a critical piece of  
56:26 that activity so we have a number of resources such as the DOE wide program plan and the draft National clean  
56:34 hydrogen strategy and road map which I summarized on the next slide  
56:41 and as a reminder we released the draft for public comments in September now the  
56:48 comment period closed in December so we're reviewing all of the stakeholder feedback and plan to publish the final  
56:54 uh later this year but it really had three critical components first is  
57:00 Target strategic high impact end uses for hydrogen so especially those heart  
57:06 decarbonized sectors and seize the potential for 10 million metric tons of  
57:12 clean hydrogen by 2030 and as much as 50 million metric tons for the United  
57:18 States by 2050 which is aligned with our long-term climate strategy as released  
57:25 by The White House second is reduce the cost of clean hydrogen so there of  
57:30 course the hydrogen shots the hubs are extremely critical because again we have  
57:35 to get to scale to drive the cost down and enable commercial viability and then  
57:41 three another critical component of the strategy is focus on Regional networks  
57:47 which includes the bipartisan infrastructure law provision on  
57:53 deploying at least for regional clean hydrogen hubs and ramping up scale now  
57:59 of course we have a number of enabling activities as shown in the bottom Workforce Development is critical safety  
58:05 codes and standards we have new policies incentives such as the tax credits  
58:11 stimulating private sector Investments such as through our Loan program office and then of course in everything we do  
58:18 we want to emphasize the importance of energy and environmental justice  
58:23 so if we go to the next slide I would like to end with just highlighting a few  
58:29 additional opportunities that some of the stakeholders out there may be interested in if you missed the  
58:35 announcements so as we all know there's 8 billion for the hydrogen hubs but in the bipartisan  
58:43 infrastructure law there are two additional Provisions one billion for electrolysis research development and  
58:50

demonstration that some of you may be interested in and then half a billion for manufacturing and recycling  
58:56  
activities related to hydrogen and through end use and there are additional  
59:01  
opportunities as well so across offices again as a reminder this is uh all hands  
59:06  
on deck approach across DOE in our office of Technology transitions which  
59:12  
collaborates across offices includes the technology commercialization fund or TCF  
59:18  
there's an open funding opportunity announcements now on the street and that  
59:24  
includes collaborations with National Laboratories so  
59:29  
facilitating the technology transfer for example from our National Labs to the  
59:35  
private sector and then their additional opportunities again across multiple offices including  
59:43  
Energy Efficiency and renewable energy fossil energy and carbon Management's nuclear energy the office of science  
59:50  
ARPA-E, the Loan program office and so stay tuned and then very exciting if you  
59:56  
missed the announcement just a few weeks ago the notice of intent that we issued  
1:00:01  
uh two one is 750 million dollars a planned FOA or funding opportunity  
1:00:08  
announcements which will include clean hydrogen electrolysis manufacturing and Recycling and then the hydrogen and Fuel  
1:00:15  
Cell Technologies office FOA supportive hydrogen shot which also includes component development relevant to  
1:00:22  
hydrogen infrastructure and other technologies that stakeholders may be interested in so if we click once more  
1:00:29  
just want to end with there are many resources available such as our h2iq monthly webinars where we publicize  
1:00:37  
eyes all of the activities across DOE hydrogentools.org the center for  
1:00:42  
hydrogen safety the newsletters and then finally if you'd like to save the date we have our annual Merit review or AMR  
1:00:50  
for the first time in person since covid so the week of June 5th to 8th again we  
1:00:56  
showcase across DOE all of the hydrogen related activities so we hope to see you  
1:01:02  
there in person and again the hydrogen.energy.gov is uh the main  
1:01:09  
portal website where you can stay tuned to all the various hydrogen activities so again this is a very exciting and  
1:01:17  
unprecedented time in history for hydrogen for the nation and even globally and I want to again emphasize  
1:01:23  
and thank all of you involved as we work together to address our climate crisis  
1:01:30  
so with that thank you Katrina I'll turn it back to you great thank you so much Sunita and  
1:01:37  
finally we'll hear from Todd Shrader who is the director of the project management division at OCED who will  
1:01:43  
reiterate key themes and closing thoughts on the floor is yours thank you Katrina, I think you have  
1:01:50  
seen today among all our speakers a tremendous excitement for this program as David mentioned at the  
1:01:58  
beginning this is a pivot point potentially in this country for energy production and how we do work  
1:02:05  
moving forward this program has support throughout the department of energy  
1:02:10  
and even throughout the government I think you also realize based on what Sunita said and others this is a all of  
1:02:16  
DOE and all of government and frankly all of society effort we are on we realize with Cooperative agreements it's  
1:02:24  
very important that the government has their role but industry also has a role and we look forward to working with  
1:02:29  
industry on these Partnerships again we understand excellent hard work  
1:02:35  
that's going into this these are lots of lots of effort lots of resources we put  
1:02:40  
in as Eric said the concept papers provided lots of information and we  
1:02:46  
again thank you for all the hard work and we realize there's more to come I will emphasize again the April



1:02:52  
deadline for the submittal of the application this webinar we hope has  
1:02:58  
been helpful giving you more information again there's a Q&A website any questions you have please submit it we  
1:03:05  
Endeavor to answer those as quickly as possible going forward also as Katrina  
1:03:10  
said there are lots of opportunities here even if in the end a hydrogen Hub is it doesn't work out for a certain  
1:03:17  
industry certain community certain area there are other opportunities uh both with funding opportunity announcements  
1:03:23  
within OCED and with hydrogen specific activities throughout the department of energy and so I encourage you to look at  
1:03:30  
both the OCED website and DOE websites in general for other opportunities that might be there again thank you for  
1:03:37  
everyone I think this is an exciting time there's lots of opportunities going forward and I look forward to a few  
1:03:44  
years down the line seeing projects being built project coming online and  
1:03:49  
addressing the pressing needs of this country so that Katrina I'll turn it back to you  
1:03:55  
great thank you so much Todd and thank you again to all of our presenters on  
1:04:00  
behalf of the entire department of energy hydrogen hubs team we thank all of the attendees for listening to this  
1:04:06  
hydrogen hubs application discussion we sincerely hope this webinar format helps  
1:04:11  
illuminate some of the content and our thinking in the FOA and a final reminder the FOA does Remain the controlling  
1:04:18  
document if information was presented differently in today's webinar from the FOA the FOA is the guiding document an  
1:04:25  
applicant should refer to the FOA the recording of This webinar will be posted to the OCED website shortly and finally  
1:04:32  
as Todd mentioned our team continues to welcome questions and comments at the email you see on this slide which is the  
1:04:39  
formal FOA question and answer email so thank you again for attending we wish you a great rest of your day take care.