

Creating Gender-informed Strategies, Policies and Regulations for Clean Energy Projects and Programs

—Transcript of a webinar offered by the Clean Energy Solutions Center on 13 December 2018— For more information, see the <u>clean energy policy trainings</u> offered by the Solutions Center.

Webinar Panelists

Denise Mortimer	Power Africa
Jennye Greene	Sustainable Energy Solutions
Monica Maduekwe	ECREEE
Kalee Whitehouse	Cadmus
Christine Lins	GWNET
This Transcript	Because this transcript was created using transcription software, the content it contains might not precisely represent the audio content of the webinar. If you have questions about the content of the transcript, please <u>contact us</u> or refer to the actual webinar recording.

Vickie

Hello, everyone. I'm Vickie Healy from the National Renewable Energy Laboratory and welcome to today's webinar which is hosted by the Clean Energy Solutions Center in partnership with Power Africa. Today's topic is focused on creating gender informed strategies, policies and regulations for clean energy projects and programs. Just a few things about the webinar features. For audio, you do have two options. You can either listen through your computer or over your telephone. And if you choose to listen through your computer, please select the mic and speakers' option in the audio pane. If you choose to dial in by phone, select the telephone option and a box on the right side will display the telephone number and audio pin that you should use to dial in. And lastly, for our panelists just a gentle reminder to mute your audio when you are not presenting so that we can avoid interference from background noise.

If you would like to ask a question you may do so by typing your question into the box labeled questions. If you would like copies of today's presentations, we will post PDF copies on the Solutions Center's website at CleanEgerySolutions.org/training. Also, a video and audio recording of the webinar will be posted to the Solutions Center training page and added to the <u>Solutions Center's YouTube channel</u>. Finally, one important note of mention. The Clean Energy Solutions Center does not endorse or recommend specific products or services. Information provided in this webinar will be offered in the Solutions Center's resource library as one of many best practice resources reviewed and selected by technical experts.

Today we have a very exciting and full agenda with a panel of excellent speakers. Following my own review of the Clean Energy Solutions Center, my colleague Dr. Ellen Morris will provide opening remarks and introductions of our speakers followed by presentations from Denise Mortimer at Power Africa, Jenny Greene from Sustainable Energy Solutions, Monica Maduekwe from the ECOWAS Center for Renewable Energy and Energy Efficiency, Kalee Whitehouse and Julie Curti from the Cadmas Group and Christine Lins from the Global Women's Network for the Energy Transition.

Topics covered in this webinar will highlight the steps you might take in developing gender informed energy infrastructure projects highlighting groundbreaking work being done in West Africa and will introduce tools to help guide you in developing progressive policies and regulations. After the presentations, Ellen will moderate the question and answer session where the panelists will address your questions. And once we adjourn the webinar you will be automatically prompted to complete a brief survey to offer your feedback and we thank you in advance for taking a few seconds to respond.

As mentioned earlier, this webinar is provided by the Clean Energy Solutions Center which is an initiative of the Clean Energy Ministerial. The Solutions Center focuses on helping government policy makers design and implement policies, regulations and programs that support the deployment of clean energy technologies. This is accomplished through providing no cost expert policy assistance which I'll talk more about in just a moment and peer learning and training tools that includes our webinar program. The Clean Energy Solutions Center is co-lead by the governments of Australia and the United States. We are funded through several sources including Power Africa that has generously supported the Solutions Center's gender mainstreaming work in West Africa as well as ongoing support in the southern African development community and the east African community.

The Solutions Center's marquee feature is the Ask an Expert service and this service provides free quick response expert policy assistance to eligible governments and is the mechanism we use to work with equity on the ECOWAS gender mainstreaming and energy access policy as well as the regional directive on gender assessments and energy projects. You'll learn more about this work in just a few moments from Monica and from Jenny and from Denise. But more broadly, the ask an expert service matches policymakers with one of the more than 60 global experts selected as authoritative leaders of specific clean energy finance, regulation and policy topics.

As an example, in the area of energy access and gender mainstreaming we are very privileged to have Miss Jenny Greene from Sustainable Energy Solutions as one of our experts and happy to have her as one of our presenters today. Lastly, if you have a need for policy assistance in any of the clean energy sectors listed on this slide, we encourage you to use this valuable service. Again, the assistance is provided free of charge and we can mobilize our experts quickly. Requests can be submitted through our simple online form at <u>cleanenergysolutions.org/expert</u>. So, with that I'd like to turn things over to Ellen Morris for her opening remarks and some introductions. Ellen, the mic is yours.

Thank you Vickie and thank you to the Clean Energy Solutions Center. This is a real honor for me to be guiding this work in my capacity as the lead on university partnerships for the National Renewable Energy Laboratory. But prior to that I was working very much on the work that we're presenting today on gender and energy access. So, I'll briefly introduce our panelists today. And then as we go through the presentations, I will make a note on what they will be presenting. And then at the end we would encourage you to write in your questions about any of the topics. And hopefully we will allow enough time to get to all of those questions.

Ellen

So, our first speaker today is Denise Mortimer and she is working with Power Africa to ensure that gender considerations are responsibly integrated into Power Africa's activities. Denise has deep experience working in sub-Saharan Africa in natural resource management, environmental protection and energy. And today she will be setting the stage for us for our webinar and discussing the importance of engaging women across the energy value chain.

Next slide. The next speaker to follow Denise will be Jenny Greene who is an expert in energy enterprise development and business planning. And she leads the day to day operations of a company called Sustainable Energy Solutions which is a boutique consulting practice that provides development partners with technical assistance, research and planning around energy access and enterprise creation. And today Jenny is going to be walking through the practical aspects of developing a gender informed energy policy. And Jenny and I worked together for many years and still continue to collaborate on these topics.

Next slide. The next speaker will be Mrs. Monica Maduekwe and she'll be following up Jenny. And she is a mobilization specialist at the ECOWAS Center for Renewable Energy and Energy Efficiency that's based in Cape Verde as well as the director of the ECOWAS program on gender mainstreaming in energy access which she created. Monica has been a monumental innovator and champion who led the work to design and launch the ECOWAS policy on gender mainstreaming for energy access as well as the follow-on ECOWAS legal directive requiring gender assessments in energy projects. And today, Monica will really give you a bird's eye view of what it took to create and successfully launch that legal directive on gender assessments and energy projects. And as an aside, Monica was part of the core team working with Jenny and I on all of the work in ECOWAS. So, she's been a real leader in this space.

Next slide. The next speakers, they will be presenting jointly will be Kalee Whitehouse and he colleague Julie Curti. Kalee Whitehouse is a senior analyst at the Cadmus Group, a DC based consulting firm and she will be as I said presenting with Julie. Kalee's work focuses on renewable energy policy, deployment, access and social equity for governments, NGOs and private sector clients who are looking to expand markets for renewable energy. And she has – she and her colleague Julie have done very interesting work to produce practical guidance on women's role in energy regulation. So, we're very much looking forward to that presentation. So, as I said presenting with Kalee is Julie, next slide. And Julie is an associate with Cadmus, the same company, where she leads Cadmus' work on climate and energy equity. She works with clients on climate and energy strategy, policy, planning and program design in the public, nonprofit and philanthropic sectors.

And then last but not least we're very thrilled to have Christine Lins and she is the cofounder of the Global Women's Network for Energy Transition. She cofounded this in 2017 with the aim to empower women in the sustainable energy sector. And Christine brings tremendous amount of experience to this webinar today having served as the executive secretary of REN21 which is the renewable energy policy network of the 21st century which is housed at the UN environment program. She has done that since 2011, from 2011 till 2018. So, she will be speaking to us to introduce us to the Global Women's Network for the Energy Transition and to describe the role of that group in the field that we're talking about today. And with those introductions I'd like to welcome our first speaker who is Denise Mortimer from Power Africa. Denise please take it away.

Great. Thank you. Can everybody hear me? I'm just going to assume that everybody can hear me and everybody is on mute. Fantastic. Thank you. All right. So as Ellen and Vickie noted, I serve as the gender advisor to Power Africa. I'm going to begin with a very brief introduction to Power Africa. Power Africa is a US government partnership which is aimed at doubling access to electricity in sub-Saharan Africa. And we have very specific goals of increasing generation by 30,000 megawatts and increasing access by 60 million connections as well as establishing the enabling conditions that catalyze sustained investment in African power sector.

> When I describe Power Africa as a partnership, I'm referring to three kinds of partnerships. The first is the fact that Power Africa is comprised of 12 US government agencies with USAID serving as the coordinating agency. But the other 11 US government agencies include the Department of Energy, our host today, NCC, OPEC, XM, Department of State, Commerce, Treasury, USTDA, USADF, USDA and finally the Army Corps of Engineers. In addition to our US agency partners, we also partner with a number of development agencies including the AFDB, the EU, DIFID, the governments of Canada, France, Sweden, Israel, Japan, Norway and Korea.

> And finally, a very important component of our partnership is that we partner in a very significant manner with the private sector. We have more than 150 private sector partners. And as I mentioned USAID is the coordinating agency for the entire partnership. Now each one of these partners has a different mandate and different tools that they bring to bear. But we are all collectively advancing the single goal of increasing generation by 30,000 megawatts and increasing access by 60 million connections. And I note these

Denise

goals again because they're very ambitious and because they are ambitious Power Africa needs to be very strategic about where we put our efforts and our investments.

Power Africa is firmly committing to advancing gender equality and female empowerment because we think it's the strategic thing to do. Yes, we are committed because it falls within our mandate to advance USAID's policy. So, in other words, we have to do it. And yes, we're committed because we think it's the right thing to do. But I think most importantly for this presentation today, is to underscore the fact that we really see this as a strategic investment. Because we feel strongly that we will not meet our goals, if we fail to capitalize on the talents and fail to meet the needs of Africa's population. So that brings me to finally to the title of this presentation today which is strengthening the power sector through gender equality.

Trying to move to the next slide and it's not moving. There we go. Perfect. Now I spoke to the, to meeting the needs of Africa's population and so I'm going to start with that need piece. There is a strong body of evidence that demonstrates that women bear the brunt of energy poverty and very similar evidence that demonstrates that women and men who experience energy poverty experience it differently. And so, I put up just a single photo but I note that this photo could be a collage demonstrating the different energy needs or the differential energy poverty impacts that men and women feel so on health, education, income generation, mobility, all of these facets of people's livelihoods. But I think all of us participating in this webinar today know these issues well so I will not dwell on these.

So, moving on to the talent piece, I spoke about capitalizing on the talent of all of Africa's population. A growing body of evidence demonstrates a very strong correlation between gender diversity and a company's financial performance. Across multiple sectors and all around the world organizations and companies with a greater share of women on their boards and within their workforce see, experience higher performance. Specifically, within the energy sector, the 2016 Ernst and Young report noted that the top 20 most gender diverse utilities significantly outperform the bottom 20 in terms of return on equity. Beyond that, we know that having women in the highest corporate offices is correlated with increased profitability according to a study of nearly 22,000 publicly traded companies in 91 countries.

We also know that companies with gender diverse boards outperform those with no women in terms of share price performance during times of crisis or volatility. And yet, data from the world economic forum shows us that the largest gaps of female participation in the economy are found in the STEM fields. Compared to fields like health care which is 61 percent female, women comprise only about 25 percent of the workforce in the energy sector so that's where the star is at the bottom showing our sector. So, this would suggest that our sector is failing to capitalize on the talent and the obvious positive outcomes of having women in the workforce.

So, Power Africa looked at all of this data, right? We acknowledge the fact
that women bear the brunt of energy poverty. We acknowledge the
contribution that women make to a company's success and we acknowledge
that our sector does not have strong participation by women. And we decided
that we needed to do something about this, that our investments in this sector
needed to address these challenges. So, we launched a few programs focused
specifically on promoting women's advancement within the energy sector.
The image at the top is from the Young Women in African Power Leadership
Program. This is a program that we launched just in October of this year. It's
a four-week training program that's aimed at strengthening the leadership

a four-week training program that's aimed at strengthening the leadership skills of young women in this sector. So, the idea behind it was not so much to focus our training on issues or content specific to energy topics but rather build the leadership skills of these women so that we could foster the next generation of women leaders in this sector. The image on the bottom of the slide is from Engendering Utilities. Engendering Utilities is a program that's aimed at promoting the participation of women in electric utilities.

So, we're working – this is a global program, but that is currently working with three utilities in Africa. And we are working with the utilities for them to adopt policies and programs that help support, well, that both bring more women into their workforce and then help support or advance the careers of women currently within their workforce. In addition to these professional development focused activities we also support efforts that focus more on women's access to energy. And so, you will hear from some of the women working on these initiatives today without stealing their thunder. You will hear about their accomplishments developing new policies but also new tools that are aimed at mainstreaming gender across energy sector initiatives.

What I'm looking forward to today is the fact that they're not going to be speaking about theory so much but about the very practical solutions that they've applied to addressing the challenge of promoting women's access to energy and their participation in the energy sector. With that, I want to thank you all for listening to this introduction and note that I'm very eager to hear from the rest of our speakers today.

Thank you very much Denise.

Thank you.

Ellen

Denise

Ellen

And it's really wonderful to hear that Power Africa is dedicated to gender inclusion. By creating the workforce of tomorrow in a more gender balanced way and also encouraging your partners to take a more proactive approach to gender inclusion. And I think all of that is really just fantastic and it really sets the stage nicely as you have done by now focusing on the what and the how to really get down to business and get work done. So, our next speaker is Jenny Greene and she is from Sustainable Energy Solutions. And she's really going to walk us through what the steps are and why we took these certain steps to create the gender policy in ECOWAS and so we looked at that as an example to create a real practical guide for what you might think about if you and your organization want to tackle the development of a gender and energy policy. So, Jenny, please take it away.

Jenny Thank you, Ellen. Hello everyone. I'm thrilled to be here today on behalf of Sustainable Energy Solutions. Quite briefly this guidebook or blueprint was commissioned by Power Africa and the NREL Clean Energy Solutions Center. It was meant to explore and package the lessons learned from several of their previous efforts working with various African regional centers for renewable energy and energy efficiency. Mainly the ones in west Africa, east Africa and southern Africa. The goal of this project was that other national and regional policymakers might benefit from seeing s stepwise process, case studies and intermediate work products that they could then adapt to their own context.

> Since you all are attending this webinar you probably already have an idea about the usefulness of gender in energy policy. However, in developing such a policy, it's important to keep that rationale front and center for the benefit of all the other stakeholders, some of whom may have only recently been introduced to these issues. The justifications for a gender in energy policy tend to fall into rights-based arguments, that women and men for example both deserve the same life expanding opportunities afforded by clean modern energy and instrumental arguments.

> Examples of instrumental arguments are some of the things that Denise just touched on, that programs, policies, companies, even entire markets will on average perform better once gender nuances are understood, disparities are address and women and men participate fully. The steps in this guidebook were organized into two main categories, the preparatory phase and the direct policy development phase. In the preparation phase we included activities like choosing the institutional home, the champion, scoping and fundraising, issuing RFPs, etcetera. But the actual policy development we identified steps such as in session planning, background papers, validation workshops and support for adoption and implementation as being key.

And we described the reasons for these choices in the guidebook. In brief though, throughout the entire process, success ultimately hinges on creating a high level of stakeholder engagement. This includes nurturing partnerships, reaching out to the public through various methods and soliciting their input, building broad coalitions of support and working transparently.

The next two slides are going to be about the getting started phase which is shown on the left. So, let's talk for a moment about laying the groundwork for a successful gender and energy policy. It goes without saying that the policy development work must be embedded in an appropriate institutional home and led by a committee champion. But with an intersectoral policy, where is that home? It could be in energy ministry or could it be a gender and social affairs one or even a different government agency or a civil society organization.

After our research, we determined that there's no one right answer. But we identified the following characteristics as increasing the chances for success,

that the institutional home has sufficient stature to be taken seriously by others, that it has a mandate aligned to the proposed policy, adequate human and financial capacity and the ability to work well with others. The champion, usually an individual or perhaps a small team not only has to be willing and capable of shepherding the policy through a long multistep process but must also be "bilingual" and able to speak credibly to both the energy and gender technical experts in the government.

Finally, we also identified the responsibilities framework as an ingredient for success, the ability to effectively assign complimentary roles as needed whether that's for day to day management or high-level oversight or technical advising. Parceling out these roles to the most capable parties not only ensures that they perform well but it also encourages those parties to become invested early on and continuously after that in the final outcome. The recommendation about the responsibilities framework is ultimately driven by the intersectional nature of the policy. There's usually no one stop shop institution which is both globally competent across disciplines and unilaterally authorized to execute such an effort. So, the need to work together smartly becomes all the more critical.

And now that the who has been decided we examine the what and the how of putting together the gender and energy policy. Setting the proper foundation for the policy development requires some thinking and negotiating around the scope of the eventual policy. Is it just about gender or gender and other priorities for social inclusion like youth and refugees, minorities, people living with disabilities and so on? Will the policy only apply to energy access type issues? Will it only deal with small scale solutions? Will it limit its sector, limit its scope to the renewable sector only or will it include all energy subsectors?

Today I've been using the word policy for shorthand but it's also important to think about what is the final form going to be for the instrument. It could be a strategy paper, a regulation, a law or even something else. These choices must be made wisely. Including too many groups and sector could increase the research and workshop budgets beyond what is feasible or lead to a policy that is watered down in order to accommodate and please too many different stakeholders or doom the policy to die a slow death by inaction. On the other hand, too narrow scope and you're opened up to maybe criticism for maybe not doing enough or for being exclusionary yourself.

As another example, pushing a text through a legislative chamber may be a much heavier lift than say pursuing an executive action. All of these considerations and more have to be weighed carefully. Once the scope is defined, it's time to identify various types of activities and expertise needed throughout the process. These are likely to include research and analysis, consensus building and navigating political economy issues, advocacy and awareness raising and implementation. And then the easy part, the funding has to be cobbled together which can come from direct government budget support, grants or in-kind contribution. Finally, it's time to develop the policy. There's an inception phase at first to align everyone's vision and strategy for the project, usually a background paper covering key issues on the ground and available data, then review of that background paper by technical experts and political stakeholders, the creation of draft policy documents, validation of those documents line by line and it's adoption and publication by the relevant authority and then likely capacity building will be needed to ready actors for implementation and a monitoring system should be operationalized.

As you can see, the process outlined here is not new or unique. What you'll find in the guidebook we've prepared however is that each of these steps is contextualized for gender and energy specifically and there are examples and supporting materials and work products from along the way. For example, we've included an illustrative outline of what a situation analysis might cover, sample terms of reference and a conceptual framework in thinking about how to construct the actual policy document.

Also included in the guidebook is a case study of the ECOWAS Center for Renewable Energy and Energy Efficiency or ECREEE which created the first ever regional gender in energy policy and has now embarked on this development cycle pictured here once, twice – so once for the policy and then a second time for the gender in energy regulation. My colleague Monica will be speaking next with more particulars about that experience.

As has been mentioned earlier the real challenge of creating a gender and energy policy boils down to its intersectoral and sometimes poorly understood nature. There are for example distinct knowledge bases and technical terminology on both the energy and the gender sides which have to be bridged. Overall initial awareness of specific issues may be low and often each camp much be asked to look either slightly left or right from their main priorities in order to see the broader impacts at the nexus of gender and energy.

Overcoming all these stumbling blocks requires working across and between organizations. It requires investing in relationship building and creating trust. It requires stepping back from ideological arguments and presenting compelling data and evidence in the neutral fashion. And last but not least a long-standing criticism of many gender and energy efforts relates to weak follow through and the lack of long-term accountability. The work of creating a gender and energy policy will not automatically be exempt from these problems, therefore early and substantial commitments to monitoring and reporting protocols are needed and these should be baked in and resourced as early in the scoping phase as possible.

And there you have it. It's really pretty straightforward when you break it all down into bite size steps. Easy? Perhaps not but doable. The folks at ECREEE have done it and others are well advanced in the process. We're able to circulate a copy of the guidebook to you after this webinar and would invite you to just skim through it and reach out to any one of us if you have any questions. Thank you so much for your time and now I'll turn it back over to Ellen.

Ellen	Well, thank you very much, Jenny. That was really an awesome distillation of a seemingly complex and sort of not well understood topic into something that was clear and concise and you really presented excellent insights from the work you have done in ECOWAS showing very clearly that there's no singular path but multiple paths to get to a well-reasoned and successful approach. And I think your final point about the importance of follow through and accountability really resonates with this group assembled here of practitioners and people really putting things on the ground. And with that, you mentioned our colleague Monica Maduekwe and really you can't say enough great things about Monica because she really was that champion.
	She was that institutional knowledge. She was so many of those things illustrated in Jenny's slides to really put that policy in place in ECOWAS, serve as example for other regional bodies in Africa that are ongoing now to replicate that in east Africa and southern Africa. And what they have done, what Monica and her team has done is now to take that next step of this taking the policy and then translating that into something very real on the ground as it relates to energy projects happening in the ECOWAS region. And this talk that Monica will give is really about that next step that she and her team at ECREEE took to develop a legal directive around requiring gender assessments in energy projects. So, Monica, please take it away and we look forward to hearing your remarks.
Monica	Thank you very much, Ellen. Hello to everyone and I would like to say that Jenny provided all of the processes we went through in developing the policy and the directive which I'll be talking about today. First, I would like to recognize everyone who made possible, Power Africa, the Clean Energy Solutions Center and also the advocates for international development which is a global charity that connects teams to top notch legal expertise. So, through them we're able to get some lawyers that develop this directive for free actually. So, a brief on ECREEE. We are a specialized agency on ECOWAS. ECOWAS stands for the Economic Community of West Africa States.
	So, we're a regional block comprised of 15 countries. And ECREEE being a specialized agency, we work with the other energy departments and institutions to contribute to the sustainable development of ECOWAS region through promoting sustainable energy markets. ECREEE does this by among other things, developing policies or legal instruments and having these discussed and presented by energy experts through that process is picking up by the energy directorate that presents it to the energy ministers and keeps on going until it gets to the heads of state. So, I'll be talking about the process, what we went through to develop this directive and where we are at the moment. So, let's see.
	How do I put it on the next slide? So, moving on to the next slide, I've already talked a little bit of what I'll be presenting. But first I think it's good that you have an idea of the countries in west Africa and you see that on the map. And I'll be talking a little bit about all of the things we consider before we decided to settle on the directive and what you can expect from us moving

forward. So, the directive is a legal framework established to implement the ECOWAS policy for gender mainstreaming in energy access which Jenny talked a little bit about. Now the policy has a number of objectives, most of them working towards increasing awareness on gender issues, widespread awareness on gender issues and to increase the _____ women in public in the public sector as well as in the private sector.

Another key objective of the policy is to show that all this _____ impacts from investment and infrastructure for this are recognized and addressed so the directive, taking this objective looked at what are the challenges that could happen to women and men and other vulnerable groups during the planning, design and implementation of energy infrastructure projects. So, we recognize that there are three areas that the could be gender related issues and that includes displacement and resettlement issues.

The second one is in workforce participation which is that the fact that an energy project could bring about unique economic opportunities and as you heard from Denise's presentation, sometimes not having the skills, the

______ skills as you see that most women do not have in STEM fields could cut out some group from taking advantage of the opportunities infrastructure projects present. And the third part is in input, having the ability to provide input during consultation and benefitting from whatever is decided through that consultative process.

So, based on these conditions we came up with certain objectives for the directive. And the first one is to show that the specific interests of women and men as stakeholders is taking into account when energy projects are designed and implemented. We also want to make sure that through this directive, whatever impacts that could come out as a result of that initiative is recognized, avoided or mitigated to the extent possible. We also want to improve transparency in the planning and implementation process to ensure that women and men can contribute either as customers, managers, investors in several capacities and want to ensure that through this step we're taking other ECOWAS countries via policies, their legal instruments are harmonized in a way that promotes the principles of these directives.

So how did this directive come about? It was proposed during the validation of the policy. As I talk about, we had different objectives and somebody in the group said we really need to have a legal instrument to sort of define all of these things we're talking about. When we got that recommendation, we thought hard about it. We really thought long and hard about coming up with a legal instrument because we felt that that was quite ambitious. And committing the member state to something even ______ isn't very easy. So, we looked at different options to convince ourselves that we definitely needed to be more ambitious in our approach.

So, the program study paper is a good document to show you all the things we went through before we decided to come up with the directive. So, the team looked at different scenarios. We looked at what are the, what options should we take in terms of should we incorporate directives, should we incorporate regulations? But we also asked ourselves questions like do we really need to go for a legal instrument? Maybe we should just stick to what is already existing. And found that it was definitely necessary based on the surveys that happened because we had online surveys. There were several interviews and desktop research that made us to settle on the directive.

Now the difference between the directive and the regulation is that a directive has certain kind of flexibility that it allows the member states in the sense that they could decide what approach they want to adopt in order to meet the global objective agreed at the regional level. Whereas a regulation immediately is adopted it becomes impossible. You can't choose how you want to implement it. You just have to go with it. Now the reason why we came up with the directive was because the regulation being more iron clad, it would make the process of being adopted more difficult because different member states have different levels of awareness on gender and also the capacity either human or financial resources to carry out whatever we came out from with the directive with the legal instrument.

And we understand that a lot of people with varying degrees of ______ whether we need to have a gender assessment. So obviously going for the scenario, the first scenario which is the ECOWAS directive was better because we achieved quite the number of successes. For scenario C it was something we considered seriously. We saw that it wouldn't be an option if we really wanted to make a difference in promoting gender considerations in thinking of when energy projects would _____. Some of the reasons were at first some people said yes we do conduct the assessment and some said no we don't. So, there were varying degrees of what those gender considerations mean, even those who said that it was being done in their countries.

The regulators for example would say no, we don't do that. So, it was unclear if people understood what gender considerations were. And even when they do include gender it's just a paragraph saying we think we may benefit from this project as well. So, we needed to make it clear, come up with real steps on how do we conduct during the assessment, what are the – what should your report look like? What should your management plan look like? And we see this as not being standalone except in the member states decide to have it as standalone. But being incorporated into existing legal instruments.

So, moving forward as I said this directive which was developed by ECREEE and the other energy institutions had to go through several processes, the validation, free validation where we had consultations in terms of different stakeholders. We also made the document available to the public to review and provide comments. It was after this process that we organized an expert meeting comprised of people the regulatory agencies, the ministries of energy, gender ministries and NGOs.

So, this was done like I said. It was really debated and we passed that level so now where we are is having the document be reviewed by statutory bodies. So, it's going through the level of being reviewed by the _____ and we hope that in the next few days there will be council of ministers meeting and the heads of state meeting. The directive will be presented and debated and hopefully it should pass. So, after that, after it's gone through this process at

the regional level, the next one is to take it down to the national level where the member states would look at it and tailor it to their own realities.

So, this is a picture of the validation process, what happened in _____. As you could see we tried to make sure that our meeting, all agendas balanced, we have men and women from the energy ministries and every relevant agency debating on it. That's the ECOWAS process. So, before the document can be adopted, each line needs to be debated on and agreed. And the fact that this went through I think for us is very important. As Jenny talked about the process leading to the validation is really important because people need to feel that their interest is being reflected and that this is something that will move the region forward in terms of development.

So, where we are at the moment, of course this is the regional instrument. But the real implementation is at the national level. So ECREEE as a regional institution, we have policies based on our mandate. And some of the things we focused on is working with the member states to establish gender focal units in the ministries of energy. We've established this unit, also identified NGOs that are very active in the different regions, different countries of the region. And we've organized training workshops for them. So, quip them with the skills, the knowledge to carry this policy and directive forward. Also, ECREEE is not waiting until the heads of state adopt this directive.

We are looking at how our energy projects, the ones we design can reflect the principles of the directive. And we've experimented, already we started. I'm happy to say that we have a number of projects in the pipeline that conducting the assessments developed. And of course, we are looking at working now with the member states to develop national strategies and legislations. We're happy to say that we got some support from ISE which a Spanish agency for international development corporation. So, they will be working with the member states to come up with national strategies and _ starting next week.

This is an example of some of the successes we've had with training. So, beginning of this year through the support of CTCN, which is the Climate Technology Center Network the training was organized and you can see difference between the slide on the left and the slide on the right. How just by training these people we have, they understand more what gender means, the importance of gender in energy, what the policy is about and how they can come up with gender indicators for renewable energy. Obviously based on the post evaluation, this is an area for further training to happen the _____.

So, what to expect at the different levels of implementation. After the document has been reviewed and adopted by the heads of state a lot of institutional changes would happen. This was something we captured in the background study paper and something that is also included in the directive document. So, in the directive will be circulated they are going to have a process where the competent authority will be identified. This will be have to involve a lot of stakeholder consultation and looking at who is the best fit to carry this directive forward. Of course, it will be capacity building and development at the regional level and at the national level.

The other implementation level is legal and regulatory. From the regional directive, it will have to be translated into national law. And at the operational level, the countries after translating this into national law would have to come up with how they want to apply each of the provisions in their national law. Of course, more training will be necessary and monitoring and evaluation will be important. So, these are people we work with. I'm very, very grateful for the support ECREEE continues to receive from these different organizations. Thank you. Ellen, you can take over now.

Yes. Thank you. Sorry. I was muted. Thank you very much Monica. That was an excellent overview of really the groundbreaking work that ECREEE and ECOWAS have done and showing really what's possible with commitment, resources, vision and support to your member states. So, we all are looking on with very interested eyes to see how this directive and the policy begins and continues to roll out in your region. So, thank you for sharing those very, the quick overview of your process in doing that. And we look forward to hearing more in the questions about it because there are some questions coming in for you. I just want to take a moment for the webinar participants to let them know that the presentations will definitely be available to you after the session as well as links to all of the documents that have been referred to in the webinar as tools and resources for you.

> So next up on the agenda is Kalee Whitehouse and Julie Curti from the Cadmus Group. That is a consulting firm and Julie will be leading us off followed by Kalee. They're going a tag team presentation to talk about the importance of the regulatory work and creating again what's really nice is a practical guide for women in energy regulation. So, this builds very nicely on Monica and Jenny's work. Again, another practical tool to really help in integrating gender into the energy regulatory world. So, I'll turn it over to Julie and then Julie you will turn it over to your colleague Kalee.

> Great. Thanks. Hi everyone. We're really happy to join today's conversation. In 2017 and 2018 we had the opportunity to work with the national association of regulatory utility commissioners known in short as NARUC. NARUC is a nonprofit organization dedicated to representing and supporting public service commissions who regulate utilities that provide essential services including energy, telecommunications, power, water and transportation. And so, in its work nationwide or worldwide. Excuse me. NARUC has observed disproportionately low levels of participation by women in energy regulation. And they also observed the need for a resource that can inform and provide guidance for energy regulators on how to improve gender equality.

> So, to help meet this need we put together the practical guide to women in energy regulation. And what this guide does is introduce concepts around gender equality and energy regulation. And it details a menu of strategies for regulators to use to help improve gender equity within their areas of influence and jurisdiction. And we also wanted to note that this guide was generously supported by USAID and Cadmus's role was to collaborate with NARUC to produce the guide.

Ellen

So, what we want to cover today in our presentation is to just give you a brief introduction and taste of the guide and its contents. And we'll cover how women are involved in energy regulation and then highlight one of the chapters from the guide on gender equity in energy regulation. So, the guide itself has three topical chapters and they're meant to focus on women's employment in energy regulatory commissions, a section on gender inclusive energy regulatory policy. And then a section on gender sensitive infrastructure development. And what each section of the guide does is introduce known barriers to women's equality within that topic area and then it outlines practical strategies that energy regulators can use to improve gender equity for women within that space. And all of the guidance is accompanied by examples from countries worldwide as well as several in depth case studies that explore strategies in practice.

So, there's multiple reasons why women's equality matters in energy regulation and Denise covered a lot of these points earlier to I'll make this section brief. But a few key points are that gender diverse work forces are good business practices and this includes for regulatory commissions. So, hiring pools that are more gender diverse pull from a broader pool of talent. And research studies have shown that productivity and quality of work are improved when there's higher percentages of women in the workplace. Additionally, gender equity also improves economic prosperity for all citizens and can improve policy outcomes and so this matters for energy regulators as well because female headed households often face greater financial barriers to energy access. And by ensuring that energy is accessible to women, regulators can minimize the uneven utilization of energy and help support local economies.

And then finally improving gender equity in energy regulation helps to advance UN human rights principles of gender equality and the UN sustainable development goals of ensuring universal access to affordable, reliable and modern energy services by 2030. So, to better understand how the energy regulator's role relates to gender equity our guide starts by exploring the ways in which women interact with the energy sector. And obviously women have very societal context. But generally, women are engaged in the energy sector in these four ways.

First, women are engaged as energy users. They use energy for both domestic and commercial purposes. And in many places, women owned businesses are run out of the home. And from a regulatory context this means that there's differential tariffs oftentimes residential and commercial users that can impact women in particular. Women are also employees in the energy sector and including in regulatory commissions though underrepresented and ideally would have more leadership roles on those commissions. Women are involved in the energy value chain. They can be entrepreneurs, generators, developers, installers, vendors and involved in the informal economy. And again, regulators can touch women in the value chain in different ways through their tools and levers. And then finally women are decision makers and stakeholders and, in that way, can interact with regulatory commissions and help provide input into the decisions that they're making around regulating the energy sector.

So, energy regulatory authorities, their work includes implementing regulatory frameworks that lead to harmonization of energy principles, tariff stability, great collaboration amongst energy entities and consumers and increased investment in the energy sector. And to be effective in working towards these outcomes, regulators require specific core capacities that are outlined on this slide. So those include autonomy, authority, accountability and ability. And within these principles there's many opportunities for regulators to infuse gender equity particularly within the areas of authority overseeing energy markets and utilities.

So, you see on this next slide and what's in our guide in more detail is how the different roles that women play in energy sector can connect to the tools that energy regulators have. So, for example, regulators can impact energy users and improve gender equity via their tariff setting policies and their licensing policies. And within their internal organization, regulators can create human resources policies and programs that increase the number of women employed at the commission and the number of women who stay in the field and advance to leadership roles.

And so, this next slide shows another way to think about gender equity and energy regulation and that's to look at the specific levers that regulators have within this authority. What you see on this slide are different levers that regulators have and how those correspond to different areas where gender equity comes into play, within employment and regulatory commissions, within energy regulatory policies and then within large infrastructure projects. So, at this point I'm going to turn it over to Kalee who is going to dive deeper into some of these levers within one of the specific chapters of our guide on regulatory policy.

Great. Thank you, Julie. So as Julie mentioned the guide focuses on three main realms of influence of energy regulators, specifically employment, infrastructure and energy regulatory policies. And to give you an understanding of the types of barriers and strategies for gender equity I'll quickly provide a snapshot of our own section, of our section on the regulatory policy. So also, as Julie mentioned energy regulators play an important role within the energy sector. They should be – energy regulators should be aware that energy regulatory policy can have gender disparate impacts. And as through our research we identified a number of barriers that can prevent or discourage energy regulatory policies from promoting gender equity.

As Denise mentioned, energy access, poverty and health for women are often interlinked. Lack of access to electricity due to affordability issues, remoteness, discrimination and reliability may impact women's time and health. And so, for instance in areas that depend on biofuels for cooking, they may require women to collect the fuel and cook, reducing their time to pursue educational and alternative labor opportunities and exposing them unevenly to the impact of indoor air pollution. Women also face barriers in terms of

Kalee

limitation on influence in policy decision, participating less in local and national governments and providing less input on policies and decisions.

At national level, policies similarly can create barriers for women by not connecting gender policies to the energy sector or creating policies and regulations that are gender neutral and that do not provide equitable needs for women to pursue the same opportunities as men. So, for instance many gender-neutral laws such as lengthy and complex registration, incorporation and licensing practices can be barriers to entry for women entrepreneurs. This could also include licenses to sell energy equipment such as solar equipment, licenses to install solar equipment or licenses to generate, distribute and/or transmit electricity. And underscoring all of these barriers is the lack of data that delineates the gender disparate impacts of policy on women and a lack of gender desegregated data to better inform the development of policies.

So, energy regulators can utilize strategies related to their unique role within the energy sector to minimize negative impact on women and support positive outcomes. Specifically, regulatory authorities can think about ways to incorporate gender equity within their role as the sector regulator and policy mechanisms within their control. This can include incorporating gender perspectives into tariff setting, collecting gender aggregated data of consumers, engaging women in stakeholder convenings and ensuring that they are represented, providing guidance to licensees on gender representation and employment best practices and monitoring and evaluating projects and programs within the gender criteria. And strategies identified in the guide for energy regulators to consider include to work towards gender equality include collecting gender disaggregated data to understand the impacts of regulatory policy such as electric tariffs on women and inform the development of new policies.

Providing tariff options and incentives that are informed by gender data to ensure electricity access and affordability, National policies aimed at gender mainstreaming often do not address the energy sector and for instance many gender-neutral laws such as – so for instance regulators can reflect these national policies within their internal organizational policies and licensing requirements. And so, our guide provides key spotlights of regulators and the energy sector participants implementing strategies for gender equity.

And so, I'll go through an example from Tanzania and then talk briefly about some of the other case studies reflected in our guide. So, the energy and water utilities regulatory authority in Tanzania is responsible for technical and economic regulation of the electricity, petroleum, natural gas and water sectors. The function of the authority includes licensing, tariff review, monitoring performance standards with regards to quality, safety, health and environment. The authority is also responsible for promoting effective competition and economic efficiency, protecting the interests of all low income, rural and disadvantaged customers. In 2017, the authority's strategic plan included goals centered around gender equality. The policy aimed to develop a framework for gender integration into the authority by creating equal opportunities in terms of employment and ensuring gender balance within decision making. This framework will include mandating gender responsiveness through both regulatory functions and organizational systems and policies.

And to implement this plan, the authority is undergoing the following strategies and tracking the following indicators. They're looking at tracking gender disaggregated data through operations. So, they're looking at employment within the authority as well as consumer data. They're tracking the number of women involved in decision making at the managerial level and within the stakeholder processes. They're implementing gender responsive plans and policies and they're measuring discrimination harassment cases reported within the authority. They're finding ways to integrate gender equity within corporate policies and practices such as including gender perspectives into investment requests for utilities and gender responsive future tariff adjustments. The authority is also a host for the national association of regulatory utility commissions, pilot women and energy regulation internship program. This program provides qualified women with the ability to intern short term with a regulatory commission to gain experience and foster an interest in the field of energy regulation.

And also, not mentioned here but I will briefly mention it. We also include a case study on Ghana and the work that they've been doing. So, in 2017, the government of Ghana launched the Ghana power compact in partnership with the millennium challenge corporation. And a major component of the power compact is to further integrate gender and social inclusion in the energy sector specifically with Ghana's two regulatory bodies, the energy commission and the public utilities regulatory commission. And you can learn more about that within the guide.

And so, within the guide there are additional sections focused on gender equity within employment practices as well as practices by regulators and developers for large energy infrastructure projects. The guide also provides case studies from Coast Rica and Laos. In Costa Rica the case study focused on the intersection of national employment policies and the implementation within the energy sector. In Laos the guide focuses on strategies that have been implemented by national policy and by hydro power developers to include women in decision making, consultation processes and capacity building initiatives. And so, energy regulators can use this guide to better understand gender-based barriers and strategies for improving gender equity within their spheres of influence.

Since the guide identifies a range of strategies to pursue, energy regulators should create a process for identifying a commission's priorities and creating a plan. Commissions can do this by establishing an executive commitment, creating opportunities to engage more diverse stakeholder groups internally and externally and identifying key barriers and strategies and implementing those strategies and monitoring results. And we recognize that each energy regulatory commission will begin from a different starting point and the guide is intended to provide a range of strategies informed by expert input and implementation on the ground for advancing gender equity within energy regulations.

Regulators serve a crucial function, independently overseeing the technical and economic performance of the electricity sector and protecting and balancing the interests of all consumers in the private sector. Given this unique role, regulators can adopt strategies to more adequately address the needs and integrated perspectives that women as employees, decision makers, energy users and impactive stakeholders. So, we would invite you to access the guide on NARUC's website to learn more or reach out to Cadmus or NARUC.

Ellen Thank you very much Kalee and Julie. That was an excellent summary of the important work that you've done with support from NARUC. And I think what really resonated with me personally is your discussion of the regulatory authorities and the importance of the regulatory authorities in countries and my suggestion and what came to mind is sort of the idea in your workforce development is getting women at the table as a regulator. And I know that's difficult in the United States and in Europe as small numbers of women in those high profile very important positions and regulatory commissions. And I think that would be an important awesome step if this helps to not only look at explicit considerations of gender in policies, tariffs, licensing and many of the things you mentioned but also to really get women at that high-level decision making to start to influence it from the top down.

So, with that discussion of empowering women and thinking of women being active in the energy transition, I want to turn it over to Christine Lins who is going to talk about her work in founding, in cofounding the Global Women's Network for the Energy Transition. So, Christine, please take it away.

Christine

Thank you very much Ellen. Good afternoon, good morning ladies and gentlemen. It's a pleasure to be here with you. Thanks for the invitation. As Ellen has mentioned in the outset, I've been working for over 20 years in the sustainable energy space. And as a matter of fact, the amount of women there is quite low. IRENA conducted a survey in 2016 where they found out that about 35 percent women work in renewable energy. That was based on a sample of 90 companies compared – this is higher than the conventional energy sector where this year is about roughly 20 percent. But still we are far away from a 50/50 situation. We are right now working with IRENA on a survey on women in renewable energy.

This new study will be launched on the 12th of January at the IRENA ______. But what I can tell you already is that it's 35 percent number through more than 1,5000 women in this survey is roughly confirmed. And in there you will find much more findings also on different situations between modern energy context and existing context as we've heard. I fully agree with the previous presenters that policy is very important and if we don't have the right policy frameworks and the data going with it, it's very difficult to make progress in that area and that is absolutely needed. But I think what is also needed and I have encountered this very often is that women might not be as well connected as their male peers. And also, some of the women look for role models of women that have been working in this space for a while.

And that brought me together with my cofounders to create GWNET, the Global Women's Network for the Energy Transition which aims to advance the global energy transition by connecting and empowering women working in sustainable energy in both developed and emerging developing countries. I'm absolutely convinced that this energy transition is going to go quicker and also socially more fast if this really is done through the women's world. And I'm rushing through the presentation to make sure also that you get time for answering your questions.

So, in a nut shell we have been set up in May 2017 and have grown into a network with members all ______ from over 50 countries. We have forged partnerships with different industry associations but also with strategic partners such as IRENA, REN21, SE4ALL. And in the short time what I would like to bring to your attention is a mentoring program that we are currently operating. It's in I would say I think the first global energy mentoring program that runs since spring 2018 with mentors and mentees from Africa, Europe, the main countries North America and Latin America. That is a program that is mainly done online. It's energy sector specific and it's for women in junior management positions.

We are testing the process of launching a new call, the new program will start in March and will last for another 20 months. We put a lot of effort on selecting the suitable mentor for the mentee. And we also offer a company knowledge transfer webinar. So, if you're interested in this, you'll find information on our website. And also, I think what is characteristic for GWNET we understand ourselves as an inclusive platform. There are many initiatives in different regions out there. We're aiming to work with them be it in India, in Mexico, in the Nordic countries, in Central America and in many other places. I have on my to do list also to each out to the North American networks.

• ...•

	and we are really encouraging everybody to join. According to IRENA in 2050, 280, sorry 28.8 million people are going to work in the renewable energy sector from 10.3 million right now. Our objective is to have by then at least 50 percent women in that sector if not more. With this, I thank you very much and I give back to Ellen.
Ellen	Thank you, Christine. And I understand that you have to run to catch a train. So, what I will say is that if there are questions specifically that come up for you, I will pass them along to you and maybe you could respond to the Clean Energy Solutions Center so that they can distribute your answer. Is that ok with you?
Christine	I would be more than happy to do so. Thank you very much and thanks for your understanding.

Ellen	Ok. Thanks. I hope you make your train. So, I wanted to open it up now to questions. There are about 20 questions coming or 15 questions coming through the lines. And if you have them please send them along. We have about – is it ten minutes Vickie, to answer questions?
Vickie	Yeah. We have about ten minutes and we can go a few minutes longer if people have time.
Ellen	Ok. So, I have a few questions of my own but I think it's actually more interesting for the panelists to hear what folks are saying and what they're thinking about. And I'll do that. So, I've noted a few questions which I think bring out different dimensions and have been mentioned in the presentations. And my expectation is if someone wants to jump in from the panel. I'm directing a question to a specific person but please feel free to add your own insights to the specific questions if you have them. I'll start with Jenny Greene from Sustainable Energy Solutions.
	And one of the questions coming in is about how to ensure that people, women at the base of the pyramid, so women in the far-flung rural areas who aren't necessarily in the policy making arena in the capital cities. How do you make sure that the processes and the methodologies are such that the concerns of women who might otherwise not have access to all of the facilities and the sort of policy legwork that's being done? How do you assure that these last mile users, women and men are not forgotten in all of this high-level process of policy development?
Jenny	Thank you for that question. That's a really, really good point to raise and there's obviously tensions there when you're doing a high-level policy such as a national or regional policy trying to make sure that the concerns get incorporated. I think at the foundation it's important to do the consultative and participatory work to reach out to groups of those women perhaps via civil society and grassroots organizations and to organize focus groups to get their feedback and input. And of course, that's something that just has to be budgeted for from the outset and it is expensive to do but very important. I also think I want to bring up something from Monica's presentation because she was talking about the directive. Another benefit of ECOWAS choosing a directive is that now that the regional work is done because it's very difficult to conduct focus groups and participatory exercises with people spread across 15 different countries. But
	now that that stuff is done and it's being pushed down to the national level, each country is going to have the flexibility to go out and make sure that whatever it comes up with in terms of actual implementing protocols and actual laws on the books is going to be responsive to the needs of this population.
Ellen	Exactly. And Monica did you want to add anything on that sort of making sure that this is an inclusive process?
Monica	Yeah. I think what Jenny has said covers it. It's important to have representatives of that group even if you're going to have a high-level

	stakeholder workshop. So that was the same thing at the ECOWAS level. So, we even had to pay the – we funded some of those people's participation. We identified them. We made We made representatives. So, we paid for their flight and per diem to attend those meetings. And so that we're able to get their voices included in the work. But of course, as Jenny said it is also important to go down to the national level and have even more smaller group consultations to make sure that your work is very inclusive.
Ellen	Excellent. So, Monica, since you have your mic open, I'll take the opportunity to ask this question which is about the timing of the process. And someone has noted that there was an 18-month lag between the experts meeting in June of 2017 and the discussion of the directive at the energy ministers meeting in December of 2018. And this person notes, wants to know sort of what were some of the challenges you faced that may have caused this lag between the really unanimous agreement at the experts meeting and the consideration at the energy ministers. And I would just add as a footnote we had also a similar pretty long time between in the policy as well where it took a little time to get to that final point for the energy minister. So maybe you could just give people a little insight into what are some of the sort of timing issues that you saw with you process.
Monica	I think the main thing is that we have to wait until it's called in arranged and there's several partners that play into when the energy ministers actually sit down to review those documents. So, it's not really in the hands of ECREEE and it's not because maybe it was rejected and we had to go and redo it. I think we've been very fortunate in the sense that when the document is reviewed, it's looked at very positively and even when they are required it's not anything that is material in a sense like doesn't change their vetting. It doesn't change the approach. It's more like improving it with this or that. So, the time lag is more administrative at the ECOWAS where they need to find the best time to assemble the respective And that's what you can expect when you're dealing with a conference.
Ellen	Yes. Excellent point. And in my view when I think about the timeline from my perspective, I think it was record time. But I'm in a different environment where things take forever so for me that was a relatively short time from the research and the consultation to the eventual sign on by the energy ministers. So, I guess it depends on where you're sitting.
Monica	No. Actually, you're very right Ellen. I mean I know some other policies even at national level that have taken many, much, much longer to $-$
Ellen	Yeah. Exactly. So just switching gears a little bit to something very concrete and specific for Kalee and Julie. Someone would like to know if you could talk a bit more about incorporating gender considerations in tariff setting and what are some of the specific ways that this could be done?
	Kalee, Yeah. That's a great question. So, one of the key functions of an energy regulator is to create tariffs about energy distribution. And one of the key considerations for that is energy regulators have to balance the need to have the tariff be related to the cost of service but then also be acceptable to

	the people that they're trying to serve. So, one of the key things that we noted throughout the guide is a key barrier for a lot of these energy regulators is that they don't necessarily have the data gender disaggregated to understand how consumers are using the energy and which consumers are using the energy. And what we know from a lot of the research and as a lot of the speakers noted today, women and men may use energy in different ways depending on what functions they need it for whether it's for domestic or commercial use. And they might use it in different ways generally.
	So, one of the things that we've noted as a strategy is that as part of the consumer survey process which many regulatory agencies undergo, they can also ask potential questions to collect that gender disaggregated data and better understand their consumer base so one of the key things here is not necessarily that women and men should have separate tariffs. It's really just stating that it provides that extra level and an extra lens for energy regulators when understanding tariff settings and understanding the potential impacts of the tariffs as they do provide.
Julie	Yeah. And I think just building on that one example we uncovered via the guide from our country was a place where commercial and residential rates were set differently with commercial rates for electricity being much lower than residential rates. But in this same place, women tended to work more from the home with their businesses rather than from a designated commercial space. And as such we're actually paying higher electricity rates than men who had commercial spaces for their business. So that would be an example of something that data could help you uncover and then a tariff change regulator could make to ensure that there's equal cost for men and women.
Ellen	So everyone, that was Denise Mortimer from Power Africa. And since you have raised your voice, Denise, I wanted to ask you a specific question related to some of the programs that you're working with. And someone has asked the question as many sub-Saharan African countries female representation in the energy sector is low as you know. And how can we work to increase women and girl's participation in science, technology, engineering, arts and math and to advocate for a policy and to really push that at the national level. That question is coming in from the Congo. So maybe just delve a little bit deeper into how to really encourage and how to reach success in getting women and girls in that work career pipeline.
Denise	Sure. This is Denise. Although I think the last person who spoke was that Jenny or Kalee speaking?
Ellen	That was Kalee.
Julie	Julie.
Denise	Sorry. I meant to say was it Kalee or Julie. So that was Julie following up on Kalee's comments. So, the question was on how to encourage women and girls in the STEM fields. I mean I think there's lots of ways of going about that. And it's a – yeah. There's lots of ways of going about that and you can

do outreach at the university level but then you can also reach a lot farther back and do outreach all the way down to elementary schools and secondary schools to encourage girls to pursue these topics.

But I think probably one of the, one thing that's powerful is demonstrating to girls that there are career opportunities for them in this sector so that they know that if they do take that class or do pursue that field of study that there will be an opportunity for them at the end. And so, what can people who are active in this sector do. I think if you mentor young women who are new to your organization or your company or your agency or your institution that can go a long way to demonstrating to the younger girls who have not yet entered the pipeline that this is a field that's welcoming to them. But I really think there's no end to the amount to what one can do to promote girls' interest in STEM fields.

And just to follow up on that Denise, I think some of the networks that Christine mentioned as well as the longer standing work of ENERGEA, the network on gender and energy that's been around for more than 25 years, their business is really around how to create that workforce and how to empower women and girls to really enter and succeed in this field. So, thank you for those remarks. And sorry to Julie and Kalee. I missed that cue from you and I didn't realize it was Julie speaking so sorry for that.

So, I understand you have to leave Denise. So that's fine. Maybe just a final question for Monica. It's coming from Ghana and it really is about your comments around helping to really operationalize the policies and the directive at the national level. And she's wondering how can women in energy in Ghana help push the national agenda on adopting the directive in their own country?

Monica

Ellen

Thank you very much Ellen for that question. I think it's very, very important. So, for us we think yes, working with the member states is good but really trying to empower the _____ with the NGOs because these are the people that really put pressure on _____ to be accountable. So, we know that there's this regional document that has been adopted by the heads of state and now they're trying to translate it into national. I think this is where women's groups can really ensure that the government carries forward with what it has adopted by participating in meetings. So, you need to know where those consultations are happening and you need to take yourself there.

I would like to say that I have seen firsthand how women's groups sitting in meetings can make a difference. I was with 2014 or so much earlier when Nigeria had the sustainable energy for all launch. And there were women standing there saying that we're not happy with the price of kerosene, things like that. So different women standing up and asking why was kerosene so high. And the governments there, the vice president ministers were there. So, they had to stand up and consider. So, I think that's where the power is, where NGOs, women groups sit down in those meetings, those stakeholders' meetings and handle a talk and call their governments to do more than what they're doing. That's my comment.

Ellen	Excellent Monica. So, I just want to wrap this up and if each of the panelists could tell us from your vantage point what is the most important thing in a couple of words to creating gender informed strategies, policies and regulations on clean energy. So just one or two or three words from where you sit in your own work day to day. What do you see as that most important level or thing to be done to really create these more gender informed strategies, policies and regulations? So, I'll start with Denise if she's still on. I'm not sure. No? Then I'll go to Jenny from Sustainable Energy Solutions.
Jenny	Hi. Thanks Ellen. And one word I have to say it's the champion behind the initiative who just is tenacious and keeps pushing and refuses to give that seems to get the job done.
Ellen	Great. Kalee?
Kalee	Yeah. So, we would say gender disaggregated data is really important to collect and an executive commitment to keeping this topic and the priority within an organization.
Ellen	Julie?
Julie	I'll go ditto with what Kalee said. We came up with that one together.
Ellen	Ok. And Monica, you've got the last word.
Monica	I would say being able to tie it and to demonstrate strongly beyond reasonable doubt that this contributes to development goals, broader development goals.
Ellen	Awesome. Well, I want to thank everyone for the excellent presentations, the excellent attention to all of the questions. There's many more questions that have come in and so I guess Vickie and her team will help to distill those out and parcel those out to you because I think it's important as a sort of foundation. And what we've talked a lot about here is consultation and listening. And so, you will find in these questions there are some important items being raised that we need to all think about as we move this forward. So, I'll turn it back over to Vickie but I just want to offer my personal thanks and really awesome to hear old friends on the line and hear about the great work that's being done in this area.
Vickie	Great, Ellen. Yeah. Ellen, great. Thank you so much. Can you hear me? Am I unmuted?
Ellen	You're good.
Vickie	Good. Great. Well, anyway again Ellen, thank you so much for your outstanding moderation and I just want to say on behalf of the Clean Energy Solutions Center I'd like to extend a very hardy thank you to all of our expert panelists and to our attendees for your participation. We very much appreciate your time. We know you have busy schedules. And we hope in return by attending this webinar you've received valuable information that you will find useful in both your professional and personal lives. Excuse me.

We invite you to inform your colleagues and those in your networks about the Solutions Center resources and services including and especially the no cost policy support that we offer through our Ask an Expert service.

I invite you again to check the Solutions Center website in a couple of days if you would like to view the slides and listen to a recording of today's presentations as well as review previous webinars and learn about upcoming webinars we have in the works. We will be posting PDF copies of these presentations to the Solution website so you can download those presentations as well as have the recording available to go back, review and listen and invite others to do so as well. So finally, I would like to ask you just to take a moment to complete the short survey that will appear after I close the webinar. And please enjoy the rest of your day. We hope to see you again at future Clean Energy Solutions Center webinars and other events. And with that, this concludes our webinar.