

Unknown Male Speaker -Ladies and Gentlemen please welcome our next panel American clean and renewable energy exports promoting energy security and climate action our moderator The Honorable Sherri Goodman, Secretary General, International Military Council on Climate & Security, and Senior Fellow, Wilson Center, and Member, EXIM Council on Climate. She's joined by Eric Trestle house CEO ESS Incorporated the Honorable Eno Ebong director us trade and development agency Dan sugar CEO next tracker and David Wilhelm Chief strategy officer heenergy it's you can't really see anyone that's you don't have to worry about your fear of crow exactly

The Honorable Sherri Goodman, Secretary General, International Military Council on Climate & Security, and Senior Fellow, Wilson Center, and Member, EXIM Council on Climate - Okay good morning everyone good morning good morning great it's great to see you I can see there's so much great conversation going on here and as I was I'm Sherri Goodman and like many of you I wear hats in both the private and the public sector I chair the uh International military Council on climate and security and I also serve on a number of clean tech and climate Tech boards and advisories and I'm so thrilled by this conference especially I told uh Chair Lewis Reta my dear friend I'm so thrilled that she has put the two clean energy panels front and center at the beginning of this conference it really speaks to the direction that the world is going and so the bank will soon celebrate its 90th birthday like my mother in its 90 years however EXIM has only been financing climate and clean tech in the last few years and even though green and climate Tech is a newer area of financing EXIM is poised to enable the US to become a superpower in clean tech exports think about it in 2021 EXIM financed 10 million just \$10 million in climate and clean tech in 2022 it grew to 175 million and this year it's almost a billion dollars let's give EXIM a round of applause okay and you know until recently such growth was impossible as many of the components of these businesses think solar panels um and batteries were not all the components were efficiently made in the US but that is changing thanks to the inflation reduction act the bipartisan infrastructure bill and the chips and science act and if we can keep accelerating this pace the US can be the clean energy export superpower it already is in other forms of energy thanks and so if we can keep bending that curve towards renewables and clean energy like nuclear power then we may have a passing hope of keeping global warming below the 1.5 degree temperature rise that has already turned climate change into a threat multiplier but you're not here this morning to hear about my book called threat multiplier you have to come back next year for that okay we have an Allstar panel this morning a stellar panel of clean and green climate tech leaders three of the most accomplished clean energy leaders in the US. Eric Dresselhuys, CEO, ESS, Inc. Energy Storage Systems think batteries grid storage batteries. Dan Shugar, CEO, Nextracker founder and CEO of NEXTRACKER think solar trackers and David Wilhelm, Chief Strategy Officer, Hecate Energy, and Member, EXIM Council on

ClimateWilhem of hectic energy solar and energy storage the second largest in the US. Joined by our public sector uh Stellar leader Enoch Ebong, Director, U.S. Trade and Development Administration leading efforts to develop sustainable clean infrastructure and economic growth in emerging economies this is truly a Powerhouse panel so each of our private sector leaders has built a clean tech uh green energy business in the US and is now rapidly expanding into the export market so I'd like to Dive Right In with our CEOs uh first and ask you to um each of you to explain how the recent legislation the inflation reduction act the bipartisan infrastructure act and science how has that changed what your business can do Eric.

Eric Dresselhuys, CEO, ESS, Inc - Well I'll jump in uh for us the IRA and the joint uh the bipartisan infrastructure act I think have really been game changers for the industry and I'll call out a couple of things the first within the IRA um maybe the obvious thing is that we now have a production tax credit for building batteries here in the US so at ESS we're long duration energy storage company uh we're based outside of Portland so we live The Motto here the create locally export globally we're doing business here in the US but also in Europe and in Australia New Zealand the PTC helps level the playing field my competition is overwhelmingly Chinese because we build batteries and where do most batteries come from most batteries are coming from China most of the processing of the minerals is happening in China so we have a non-lithium battery that we build here in the US that's seeing great demand around the country the other thing that I would say that I think is exciting for us is the uh IRA has a provision what's known as an ITC an investment tax credit for project developers now that's not money that comes to ESS that's money that goes to people who develop renewable energy projects uh here in the US and you might say well what does that have to do with export uh I think there's a really interesting phenomenon that's happened where there's kind of a fear of missing out that's happened in Europe a fear of missing out in Australia New Zealand and other markets where we're seeing the existence of the IRA and that ITC here in the US is forcing governments in those areas to come up with their own equivalent program so I think it's been a game changer that's.

Dan Shugar, CEO, Nextracker- Yes, so uh Dan sugar next tracker so we manufacture solar structures and control systems to support solar utility scale power plant last year we shipped 17 Giga Watts of material about 2/3 the US 1/3 overseas and we're very appreciative to be partnering um with UMO uh the EPC Sun Africa on the really amazing project sponsored by EXIM in Angola what the IRA has done for us is we massively scaled our us operation we started about a year before the IRA we've catalyzed 15 factories across the United States at least 100,000 square feet per factory we've had six public factory openings because we think it's really important that we all communicate what this policy is meaning for clean energy jobs creating our technologies that are lowering costs advancing energy security and helping a clean

environment we had the Secretary of Energy uh secretary Grant help us cut the ribbon uh for as one example on a factory in Pittsburgh that had formerly made steel for Bethlehem Steel many decades ago and had been idled as a factory so we're rebirthing these factories we did another one in Texas we did one in Pittsburgh we had an Electronics Factory opening in Silicon Valley we did one in Las Vegas a few weeks ago so this huge amount of capacity for us we have contractually uh enabled 25 Giga Watts of annualized production capacity in the US for or either us use or for export and uh supporting the EXIM with the export import Bank program we uh support a project last year in Latin America u in um Honduras and we have uh projects uh for example the project Angola will be supporting with uh much cleaner us steel before the IRA we didn't at least I didn't appreciate how much cleaner the US steel is it's one tenth on average the CO2 per ton of Steel as the overseas Steel on average uh uses so we've collocated these tracker solar tracker manufacturing facilities with the newest cleanest steel mills in America we're re birthing it there's never been a more exciting time to be in renewable energy and our industry is sort of rebirthing it's the new Industrial Revolution but it's all around clean tech so we're extremely excited and appreciative and the IRA partners brilliantly with uh ex EXIM's leadership in this program.

David Wilhelm- Thank you Dan David sure um I um our group HEC energy has come together about 10 years ago we were startup today we're the second largest uh developer of solar projects in the United States but when we came together uh we had a plan we had a dream that in addition to development we would also build manufacturing plants of American made and even union made solar equipment for the American Marketplace that was our dream that was our plan we worked hard for 10 years we tried to build those projects we got people to sign on board I got major utilities to sign on board I did everything we did everything that a company could do to launch solar Manufacturing in the United States but for 10 years we failed we couldn't get it done I will not go into all the reasons why but there was always a reason why we couldn't build Manufacturing in the United States but ultimately the reason why we couldn't do it is we didn't have a policy framework that permitted it and now we do now we do through the uh inflation reduction act through EXIM through DF through every everything that the government is doing we are now seeing our dream come into reality we I have to be careful about I can't get a ahead of our announcement but in the Upper Midwest in a state that rhymes with boys um we will be launching a cell and uh module manufacturing plant at a former uh Caterpillar plant now shuttered but about to be revitalized that will produce cells and modules under a neutrality agreement with the United Steel Workers employing about a thousand people that is a hugeway and a huge way that these this policy framework has made a difference and a huge way that this policy framework has provided new opportunities for our company so I'll I'll

come back to some of the other ways that the policy framework we're now we're now launching uh into uh Global markets but I'll come back to that if we have a chance.

Sherri Goodman - Okay thank you so much David I think it's really fair to say this point we are living in the midst of a once in a generation energy transition energy revolution industrial revolution into a new era of energy that is decarbonized net zero to the extent possible that will help us achieve our climate goals and these are some of the brilliant leaders who are helping us take us there and I know many of you are in the room uh sharing that same goal so now I want to turn to our public sector leader Enoh Ebong and tell us how USDA is enabling this and helping the many companies and private sector leaders who are here today to achieve uh these their aspirations.

Enoh Ebong - Thank you so much Sherri and it is such a pleasure to be here I am energized and excited um just in listening to my co-panelists in in understanding what it is that we are doing what we are creating what the government is facilitating uh and it really is um a very important moment uh that from our respective purchase we are responding to uh so I am Enoh Ebong I lead the US trade and development agency um which really is in existence to ensure that the solutions the Technologies the innovations that my colleagues here and so many of you are producing um are able to be exported overseas to Emerging Markets um for us infrastructure is really central to energy security and to climate uh without uh clean energy infrastructure uh it the ability to uh you know address uh whether it's extreme weather events uh whether it is uh other kinds of distress situations I think becomes very challenging so in terms of clean energy and that's really carbon free um uh systems uh so uh those uh carbon free uh systems uh really are the critical piece um of what we look at uh 40 at USDA um and it's really why when you think of you know wanting to not just rely on imported uh fuel systems um when you think of trying to withstand um emergent situations um the switch to renewable energy which includes nuclear is um an important way to do that and it's why we see countries from Eastern Europe to the Pacific Islands and Caribbean islands wanting to make that switch um including to the kinds of technologies that the US um can produce so having said that though their challenges project preparation which gets us to the kinds of um infrastructure that can with and uh the various um challenges that we see it's expensive um and many of the markets and emerging economies don't have the resources to meet uh those costs and the expertise needed to develop projects that financiers like EXIM and banks will then uh Finance um in addition their risks both perceived and real could be political risk could be technical risk Financial Risk um that it's difficult for companies to face uh and then the cost when you think of large infrastructure um the cost to prepare those projects can be very steep so an agency like USDA which was founded in 1992 in the jobs through export Act was founded precisely to try to address these risks to um provide grant funding for project preparation so that project developers can select us companies um to design their projects uh so that then

they can um uh stand that up and attract financing so what we're doing in this context of um you know uh renewed ability to produce to Market to sell is to ensure that um our developing uh country or emerging uh economy partners know of what we have to offer off um have the ability to plan for it um and to get the financing for it um and to make sure that there is a market for all that is being produced I'll give just one quick example um in Zambia we're working with a company called and it's we can work with either the private sector or public sector in emerging economies uh this is a private sector company called uh Greenco Power um which is seeking to expand its battery storage actually um and become one of the largest uh battery storage uh developers in southern Africa why this is important and a bit different is that they're doing so in a way that can um change the model of trading so there is a South African power pool the idea is to create Zambia is a central point where anyone in the region can buy power and store it um and then sell it to members of the pool so this is a way of using a technology connecting it to the region ensuring power but innovating around the model to do so a USTDA feasibility study grant is helping to bring that to fruition and it's a local company a Maryland company K&M advisers that is doing the feasibility study work so our role is really to facilitate all of the Innovation that you are doing and make sure that we have partners that can be um cognizant of what we have that can plan for it and can get it financed ultimately.

Sherri Goodman - Thank you know that that was a really wonderful explanation and if I could just connect the dots for you here so many of you are here uh pursuing your business purposes but also has a very deep public purpose in in what we're doing because uh in the a in the climate era now you know we've gone from the nuclear era to the to the climate era um with climate as a threat multiplier we need to be exporting not just our goods but our exports also provide climate security and stability in countries around the world which is the only way we're going to bend the curve uh on the variety of risk that we so deeply face in the world right now and with that I wanted to ask um we only have a couple of minutes left by the time is gone by but I would like to ask our CEOs what um what challenges you're facing what would you like to see um done differently and if you want to comment on how we're addressing the critical mineral um supply chain issue for renewable energies um address that as well Eric we'll start with you.

Eric Dresselhuys - I'll go quickly on the critical mineral side I think the best answer is to find a different way to do it that's controversial and makes it hard but you're not going to out mine China if our strategy is to out mine China I think we're doomed so let's find different ways to solve the problems and then we can own the solution and the second thing in terms of what I like to see we have a lot of tools as everybody here has recapped uh over the course of the last few minutes we have an amazing number of tools more tools than we've ever had coming from Washington to help address these

problems my suggestion would be we use the tools right we have a lot of things and this is true of IRA we still here we are a year plus into IRA and we don't have IRS rulings on what specific tax treatments would be and we have customers I'm sure and us of saying hey listen as soon as I know what the rules are I'm going to go because margins in this business are really Slim for Developers and so slight differences in how the IRS rules are interpreted can make the difference between make or break so let's go you know use the tools that we have let's go spend the money the authorizations whether it's EXIM or USDA or things coming out of uh Congress uh through the Department of Treasury let's use the tools we have uh and do it as fast as we can wonderful.

Dan Shugar - Well first I want to say it's wonderful to see EXIM really back on its feet and getting things done Chair Lewis's uh momentum is inspired I want to give a shout out to Craig o Conor uh who is here who thank you Craig so in 2005 in my prior company we did we did the first renewable energy project funded by EXIM um and it was in South Korea that was really successful so EXIM knows what it's doing with this uh reauthorization a few years ago the momentum it's incredible I think the biggest challenge is we need to be Fearless in how we move forward we need to move forward with confidence where with velocity and make bold decisions where we might not have all the information and that goes to all of us in each phase of what we're doing we at next tracker made a decision to scale massively the US manufacturing footprint before a year before the IRA was policy and that enabled us to have these 15 factories you know pumping Out product today as we move forward with overseas projects we need to have confidence these are going to happen and you know maybe not every small detail of diligence you know is fully complete but we need to as in an individual project that's okay move forward we're g to we figure it out together and I think the second Big Challenge is we have a failure to communicate in renewable energy we're not the little we're not the little Underdog anymore we last year half the power generation installed in the world was solar okay we're creating hundreds of thousands of jobs in solar hundreds of thousands of jobs in energy storage there have been 59 new factory announcements in the United States in the last year alone in renewable energy we need to communicate what we're doing that we have Solutions this tech is proven and we're going to deliver lower cost that advances energy security creating clean jobs and economy while we're protecting our clean air and clean water we don't talk about climate because you lose a big chunk of people when you we and I we don't want to have that we don't need to have that debate when you win on all the other stuff it wins for everybody so I think those are the two issues move forward fearlessly and actively communicate all the benefits we're bringing to uh communities and to the economy.

David Wilhelm - Very quickly we're out of time but I think the next decade will be the decade of the export import Bank when it comes to renewable energy almost inevitably

because what is being built in the United States right now is a worldclass world leading manufacturing capability that simply didn't exist two to three years ago there was nothing to export now we're going to be leading the way so there's no way that the export import bank that the USDA will not be in the middle of this re- it's not really revitalization it's the first time we've had this in the United States uh but we're leading the way it's an exciting time the next decade is the decade of the export import bank and the USDA let's go yeah.

Sherri Goodman - Okay Enoh last word.

Enoh Ebong - I'll just very quick say um that in addition to all of that absolutely use the tools and we do need to communicate exactly what all the tools that are available I would also say take advantage of the Partnerships that we are forming multi-stakeholder Partnerships are the key here and we are doing this in the government on the basis of our fellow partner well um like-minded Partners um for us at USDA with industry um and it can actually provide results the third thing I will say is that you have in USDA an agency that is willing to take considered risk with respect to new technologies with respect to your innovations that is what we are set up to do and so to the degree that uh there is a need to test to Pilot um to test um in markets overseas this is an agency that can help you do that um and therefore create the playing field for EXIM to finance we're doing interesting work in Ocean teach and uh technology energy conversion in small modular reactors in pumped Hydro storage just a whole uh variety of um Technologies in in the CL clean energy space I'll just give one plug for an event that we are hosting beginning the 30th of October through November 3D which is a US Africa climate action week um where we climate Innovation week where we're bringing delegations from across Africa who are looking to build projects in resilience and in abatement and in methane etc. to come and see our technologies across the country it's this kind of connection and this kind of partnership that is going to help to get products out there and projects completed um so yes use the tools thank you for that.

Sherri Goodman - with that please thank our spectacular panelists you know what I wanted, all right.