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SMALL BUSINESS AND THE CLEAN ENERGY ECONOMY: LOWERING COSTS AND INCREASING RESILIENCE

FIELD HEARING

BEFORE THE

COMMITTEE ON SMALL BUSINESS AND ENTREPRENEURSHIP

OF THE

UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

SECOND SESSION

SEPTEMBER 13, 2024

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SEPTEMBER 13, 2024

SMALL BUSINESS AND THE CLEAN ENERGY ECONOMY: LOWERING COSTS AND INCREASING RESILIENCE

FRIDAY, SEPTEMBER 13, 2024

U.S. SENATE,
COMMITTEE ON SMALL BUSINESS
AND ENTREPRENEURSHIP,
Washington, DC.

The committee met, pursuant to notice, at 10:36 a.m., in University of New Hampshire at Manchester, Pandora Mill Building, Room 201, 88 Commercial Street, Manchester, NH 03101, Hon. Jeanne Shaheen, chairman of the committee, presiding.

Present: Senator Shaheen [presiding].

OPENING STATEMENT OF SENATOR SHAHEEN

The CHAIRMAN. Good morning. I am Jeanne Shaheen. I am currently the chair of the Small Business and Entrepreneurship Committee in the Senate.

And I am so excited to be able to be doing this hearing in New Hampshire with a number of our small business owners in New Hampshire who have worked on energy issues, as well as with some Government folks who are here to talk about what is available for resources for small businesses.

So, thank you all for joining us. I will officially open the hearing as soon as we hear from Dean Decelle who heads UNH Manchester, and we are so delighted to have you host this morning.

Mr. DECELLE. Thank you, Senator.

[Technical problems.]

Mr. DECELLE. For those of you who have not been here before, this is the University of New Hampshire's urban campus. We are home to about 1,000 graduate and undergraduate students here on campus. We have been here in the Millyard, this building in particular, since 2015. It is part of the university's commitment to support of students that want to attend their college education closer to home.

We are in general a commuter school that serves students that have complicated life stories. They work, they have families. And so we occupy, we think, a special space in the higher education infrastructure here. We also consider ourselves a gathering space. So we support K through 12 student outreach programs. We also, at the other end of the spectrum, deploy continuing education programs for adult learners. So we have a New Hampshire extension office here.

We also have the Osher Lifelong Learning Institute. We really see a spectrum of learners not limited to college learners. So this kind of conversation is something that we really are proud to support.

This conversation in particular holds a special spot for me. Before being here in higher ed, I spent several years running a renewable energy company down in Cambridge, Massachusetts. So this—there's more. [Laughter.]

Mr. DECELLE. So I hope you have a great conversation. I am looking forward to listening in to it as well. And enjoy your morning. Thanks. [Laughter.]

The CHAIRMAN. The Senate Committee on Small Business and Entrepreneurship will come to order. It is really an honor to be here today, and we very much appreciate Dean Decelle's remarks and hosting us this morning.

I want to welcome our witnesses who I will introduce officially in a few minutes, but I want to introduce some of the folks who are making this hearing possible this morning. And I think some of you have attended other small business hearings that we have held in New Hampshire, but for those of you who haven't, this is just like a hearing in Washington, DC.

We have the staff from the committee who have come up to make sure that we take notes, that everything is conducted properly. All of the testimony will go into the committee's record and will be shared with the other members of the committee. And so, anything that is done here will be done just as if we were in Washington, DC.

So with that in mind, let me introduce some of the people from the committee who are making this possible. And you will see how many people it takes to do some of this. First, I want to introduce Sean Moore, who is the staff director for the committee. He works for the majority because we are divided into majority and minority on the committee as we are on all committees.

Sujin Kim, who is with the majority staff. Sebastian Rojas, who is also with the majority staff. Kathryn Eden, who is the chief clerk. Kathryn, there you are. And then from the minority staff, we have Meredith West, who is the minority staff director. Thanks for joining us. And Corey Cooke, who is also with the minority staff, who actually went to UNH law, right? So, it's nice to have all of you here.

Thank you, and particularly nice for them to be here in New Hampshire at this time of year, right. I also want to introduce some of the folks from my personal staff who it is important, I think, for all of you to know. Tina Kasim works with small business issues with the staff. She is in the back of the room.

Elizabeth McKenna, who is on my energy staff, is here. Raise your hand so everybody knows how to find you at the end of this hearing. Jen Hughes is doing communications, so she will be taking pictures if you see her with the camera. John Jarvis is the head of operations for our offices, in the back.

And Will Garrity Binger is here from Washington. He does small business issues on the Washington staff. And Janelle DiLuccia does energy issues on the Washington staff. She is also here. And Robin

Hwang, who I think is here someplace. Where is he? Okay, good. He is signing people in.

So any of them, feel free if you have questions or there is something that you think our office could help with, please contact us and let us know. Now, to get back to the official remarks. Today, we are going to discuss an issue that I think is of real importance to small business. It is important to all of us but small businesses because they are on the cutting edge and often it is more of a concern for them.

We are going to talk about energy efficiency and reducing energy costs for small businesses. It is an issue that I have been very interested in since before I was Governor. Particularly energy efficiency, because I think efficiency is the cheapest, fastest way to deal with our energy needs.

And now, as the drivers of our economy, small businesses feel the squeeze of increasing costs first. They are especially vulnerable to market volatility. And as we saw after Russia invaded Ukraine in 2022, it is a particular challenge.

In 2021, Congress passed what we call the bipartisan infrastructure law that really invests in clean energy in a way that we had not to the same extent in the past. It includes a robust energy workforce and a cleaner, more reliable electric grid.

And there are key provisions in that legislation that I worked on with Rob Portman, who was then a Senator from Ohio. He and I had worked on that legislation for a decade. When we negotiated the bipartisan infrastructure law, we were able to get many of the provisions in there to address energy efficiency, to address electric vehicle infrastructure, to help us revitalize brownfield sites, and ultimately, hopefully create more good paying jobs in our communities.

A year later, Congress passed the most significant climate legislation in history, which is designed to dramatically reduce greenhouse gas emissions and invest in clean energy generation. That act invests nearly $370 billion in clean energy through expanded tax credits and funding for programs like the Rural Energy for America Program.

And we have a number of folks here who we are going to talk about a little later who can help put people in touch with some of those resources that are available. But the programs are aimed directly at small businesses and at farms in States like New Hampshire, where we have a big rural part of our economy.

Clean and efficient energy benefits everyone across all parts of New Hampshire, and for small businesses, it can slash energy bills while keeping up profits and keeping our communities vibrant. It also helps insulate small businesses from increasing costs. And what we are seeing more and more is severe weather from climate change. We see that here in New Hampshire. We see it around the world.

They are beginning to affect energy prices everywhere. And again, small businesses are the first to be affected by some of those higher energy prices. That's why it is so important to make sure that our small businesses can access the resources that are available to help with affordable, clean energy.

There are a lot of tools and opportunities that are available to our small businesses to cut costs and transition to clean energy. And following today's hearing, we will have representatives from several federally supported agencies and State, we have a number of State organizations with us as well, who we are going to talk about what is available to small businesses.

They are here to try and answer your questions and to be helpful. So, thank you again to our witnesses for joining us and for your testimony today and for being part of this discussion. And now I will begin and introduce each of our witnesses. First, Sarah Waring, who is on the far right, is the State Director for Vermont and New Hampshire at the United States Department of Agriculture Rural Development, or USDA RD.

I am sure that all of you get very frustrated with some of the acronyms, so I will try not to use them. But in her role, Ms. Waring administers a number of key rural development programs, including the highly successful Rural Energy for America Program, or REA. We are so delighted that you are here with us, Sarah, and looking forward to hearing your testimony.

Next to Sarah is Sam Evans-Brown, who is the Executive Director at Clean Energy New Hampshire. It is an advocacy organization that is working to move the State toward a cleaner and more resilient energy future. Clean Energy New Hampshire also provides technical assistance to small businesses on how to transition to clean energy and lower their energy costs.

Mr. Evans-Brown grew up in the Lakes region of the Granite State, and he spent over 10 years as a podcast host and radio journalist with New Hampshire Public Radio before joining Clean Energy New Hampshire. So you should be able to know how to get the word out about this.

Next to Sam is Dan Weeks, who is Vice President of Business Development at ReVision Energy. ReVision is an employee owned, Certified B Corp solar installation company. They work directly with small firms to help them secure funding for their clean energy transition and complete their solar installations.

Mr. Weeks is a 12th generation Granite Stater. That has got to be close to a record setting, Dan. And he has over seven years of experience at ReVision, leading and working with commercial and institutional partners to accelerate the clean energy transition.

And finally is Melissa Florio, who is President of Ambix Manufacturing. It is a small business in the White Mountains who provides plastic engineering and custom contact injection molding manufacturing. And I am sure she will explain it much better than I when we get to her testimony.

She also serves on the Small Business Administration's Office of the National Ombudsman Regulatory Fairness Board for Region One, a very important role. So again, thank you all for being here, and I will ask Sarah to begin.

STATEMENT OF SARAH WARING, STATE DIRECTOR, VERMONT AND NEW HAMPSHIRE, USDA RURAL DEVELOPMENT, MONTPELIER, VERMONT

Ms. WARING. Chairwoman Shaheen, and for the entire Senate Committee on Small Business and Entrepreneurship, it is an honor

to be here today and to provide testimony on this really important issue for New Hampshire businesses and for rural America, lowering energy costs and putting money back in the pockets of our entrepreneurs. It is a crucial discussion, and I am honored to be a part of the hearing.

My name is Sarah Waring. I am the Rural Development State Director for New Hampshire, the Granite State, and Vermont, the Green Mountain State. And first, I would like to offer my heartfelt condolences to the communities in Grafton and Coös County, who are still struggling to recover from flooding events this summer, and for our farmers and producers who are managing the impacts of last year's devastating May frost.

For as long as it takes, the Biden-Harris Administration and USDA Rural Development and our sister agencies will deploy every resource we have to be able to help rebuild and recover in New Hampshire.

As I mentioned, our jurisdiction covers two States, and both of those States are pretty rural. So 70 percent of New Hampshire residents and 90 percent of Vermonters live in communities with fewer than 5,000 people. Both States have heavily weighted employment percentages towards educational services, health care, and social services, which is why small business development is so important in our region.

According to the SBA, there are over 130,000 small businesses operating in New Hampshire as of last year, and that employs about 49 percent of our State's workforce. Today, I will focus on one of our flagship programs that lowers costs for those small businesses, but I want to first take a moment to tell you a little bit about how our agency injects money directly into rural communities through housing, infrastructure development, and business support.

We have over 70 grant and loan programs and products available that we offer nationwide. Over the last five years, we have invested roughly $1.3 billion in the Twin States, and that translates to more than 3,400 families with safe housing, 570 businesses supported and lowering their costs, and 260 community institutions, from town halls and transfer stations to high schools and hospitals that have been built or modernized.

Today, my focus is on the rural Energy for America or REAP program. The Biden-Harris Administration's historic and bipartisan Inflation Reduction Act saw significant changes to that program that has created an incredible response from our customers. REAP offers two pathways to funding, one for renewable energy projects and the others for energy efficiency projects. Under the Inflation Reduction Act, these program elements doubled.

The grant match went from just 25 percent of total project cost to 50 percent, and the dollar amounts went from $250,000 for an energy efficiency project, to $500,000, or $500,000 to $1 million for renewable energy projects. Since the beginning of the Biden-Harris Administration, USDA Rural Development has invested in 7,566 REAP projects in America for a total of $2.2 billion across the country.

And on average, the projects lower energy costs for businesses and recipients by about $25,000 annually, and they create enough

clean energy to power 630,000 households each year. I want to share just two stories from New Hampshire. A Place to Grow is a nature based childcare, founded and franchised in Brentwood by Jen Legere. In 2018, she applied for two small REAP grants, one to weatherize her building and one for installing solar.

With these combined projects, she saved her childcare business around $6,000 a year. Another good example is the Candia First Stoppe, which is a unique country store, gas station, truck stop, restaurant, and event space where co-owners Joe Sobol and Craig St. Peter jumped at the chance for nearly $838,000 grant in late 2023, which will install a 561.6 kilowatt solar array. This system will translate to more than $133,000 in annual savings for their business.

So whether the projects are large or small, they are ultimately making a big difference on the bottom line for our small businesses. I also want to celebrate our technical assistance partners, the New Hampshire Community Development Finance Authority, who is here today, Clean Energy New Hampshire, who is here today, have worked alongside Rural Development for years, supporting businesses and communities alike to navigate Federal funding.

Now, the Energy Circuit Rider Program, which Sam will talk more about, has been significantly expanded through Inflation Reduction Act, REAP technical assistance grants, where they work hand in hand with businesses to gain access to our funding. However, our supply has not met the demand, and the numbers tell the story.

In New Hampshire, we received 26 applications in 2022, 54 applications in 2023, and as of today, 84 applications in 2024. New Hampshire customers alone this year are requesting $21 million of energy improvements and renewable energy projects. When we include our Vermont applications, the demand has jumped 100 percent in 2023 and now an additional 68 percent in '24.

Furthermore, REAP is one of dozens of other business, housing, and utility programs that our agency offers that can address energy costs and energy transition. Accommodating and adapting to our increased portfolio, both in number of programs as well as changes in those program funding levels, has been incredibly difficult for our small staff.

In closing today, my key points are this, our programs are effective in driving down costs for small businesses. Your work, Senator, getting the Inflation Reduction Act passed has been transformational, and the Biden-Harris Administration has mobilized our agency to act on that transformation.

Our staff work incredibly well, but only as far as the capacity we have to process applications. And our partners on the ground offering technical assistance are crucial resources for our small business owners and farmers.

I want to thank you for the time today and we look forward to continuing to work with you and your staff for the State of New Hampshire.

[The prepared statement of Ms. Waring follows:]

Testimony Provided by
Sarah Waring
USDA Rural Development State Director
Before the Senate Small Business Committee
September 13, 2024

Chairwoman Shaheen, thank you for the opportunity today to speak before the Senate Committee on Small Business and Entrepreneurship on an important issue in New Hampshire and across the country: lowering energy costs for small businesses. This is a crucial discussion, and I am honored to be part of this hearing today.

My name is Sarah Waring, and I am the Rural Development State Director for New Hampshire, the Granite State, and Vermont, the Green Mountain State. First, I would like to offer my heartfelt condolences to the communities in Grafton and Coos County struggling to recover from the flooding events in July, and to the farmers and producers managing the impacts of last year's devasting May frost. For as long as it takes, the Biden-Harris Administration and USDA will deploy every resource at our disposal to help families, communities and businesses rebuild their homes, their lives and their livelihoods.

Like I mentioned, our jurisdiction covers both New Hampshire and Vermont. 70% percent of New Hampshire residents and 90% of Vermonters live in towns of less than 5,000 people. Both states have heavily weighted employment percentages toward educational services, health care and social services—which is why small business development is such an essential topic of discussion in our region. According to the Small Business Administration, there are over 130,000 small businesses operating in New Hampshire as of 2023, employing 49% of the state's workforce. My testimony today will focus on our Rural Energy for America program, but I would like to take just a moment to share the breadth of programs that our agency offers.

Federal policies emerging out of the Great Depression focused on rural American infrastructure like electricity, water, and housing. The Rural Electrification Administration, the Farmers Home Administration and other rural-focused programs were built over decades. Today, RD is a centralized agency acting as a lender, grantor and partner in projects that improve the quality of life and economic opportunity for rural residents.

Over the last five years, we've invested roughly $1.3 billion in the Twin States. That translates to more than 3,400 families with safe housing, 570 businesses with lower costs, and 260 community institutions, from town halls and libraries to high schools and hospitals, that have been built or modernized. Unlike most federal agencies that operate through state and county governments, our dollars go directly to the homeowners, businesspeople and communities we serve, so we establish relationships on the ground with our customers that can last generations.

Today, I want to focus my time on the Rural Energy for America Program or REAP. The Biden-Harris Administration's historic, bipartisan Inflation Reduction Act saw significant changes to the program that made the win-win proposition impossible to ignore among small businesspeople. REAP offers two paths to funding: one for renewable energy projects and the other for energy efficiency. Before the IRA, REAP offered a quarter match, with the grantee

required to provide 75 percent of project cost while USDA furnished the remaining 25 percent. During this period, grant amounts maxed out at $500,000 for renewable energy projects and $250,000 for energy efficiency. Under the IRA, these program elements doubled: The USDA match went to 50%, and maximum grants increased to $1 million for renewable energy systems and $500,000 for energy efficiency upgrades. The IRA also provided significant additional funding of $2 billion to REAP nationwide. Since the beginning of the Biden-Harris administration, USDA has invested in 7,566 REAP projects totaling over $2.2 billion into rural America. On average, these projects will lower energy bills by an average of $25,000 annually for recipients and create enough clean energy to power 630,000 households each year. I want to share two local stories that illustrate REAP's cost-saving impacts.

- A Place to Grow is a nature-based childcare business founded and franchised in Brentwood by Jen LegereIn 2018, she applied for two small REAP grants; one to weatherize her building and the other to install solar. With the combined projects, she saves her business roughly $6,000 each year.
- Another great example is Candia First Stoppe, a unique country store/gas station/truck stop/restaurant business, where co-owners Joe Sobol and Craig St. Peter jumped at the chance to secure an IRA-funded, nearly $838,000 REAP grant in late 2023 to install a 561.6 kilowatt (kW) solar array. The new system will offset the operation's electrical power needs, translating to more than $133,000 in annual energy savings.

Whether it's a big or small project, whether pre- or post-IRA, REAP is making a big difference for bottom lines of small businesses throughout New Hampshire.

There is an additional story here that I believe is vital to share, and it's about our partners in the field who provide on-the-ground technical assistance for communities, small businesses and farmers. These service providers include the New Hampshire Community Development Finance Authority and Clean Energy New Hampshire. These two organizations were previously funded through our Community Facilities TA programs, supporting businesses and communities alike. Now the Energy Circuit Rider program has been significantly expanded through IRA-funded REAP TA grants, where they work hand-in-hand with businesses to gain access to our program funding.

However, our supply has not met the demand and the numbers tell the story. In New Hampshire, we received 26 applications in 2022, 54 applications in 2023 and now 84 applications to date in 2024. New Hampshire customers alone this year are requesting $21 million dollars of energy improvements and renewable energy projects. When Vermont applications are included, the demand jumped 100% in 2023, and so far, already 68% in 2024.

VT and NH *as of 9/5/24

	2022	2023	2024*
# Applications	49	99	145
# Funded Applications	38	71	
$ Requested	$5,175,000	$13,745,000	$36,503,000
$ Funded	$3,700,000	$11,280,000	$17,208,835

NH Only *as of 9/5/24

	2022	2023	2024*
# Applications	26	54	84
# Funded Applications	20	37	
$ Requested	$1,982,000	$7,396,150	$21,988,000
$ Funded	$1,862,000	$5,470,000	$12,264,789

This increase in demand is due to the transformative changes of the Inflation Reduction Act, our agency's outreach, and our partners on the ground. However, staff are buried under an avalanche of new applications. Furthermore, REAP is one of dozens of other business, housing, and utilities programs the Agency offers. Accommodating and adapting to our increased portfolio, both in number of programs as well as changes to program funding levels, has been incredibly difficult without corresponding staffing increases. Because of this I wanted to thank you and your congressional colleagues for highlighting the crucial need in New Hampshire and Vermont to improve our hiring ability and timing.

In closing today, Senator, I'd like to re-emphasize a few points that I hope you'll take with you:

- Our programs are effective in driving down costs for small businesses.
- Your work getting the Inflation Reduction Act passed is integral in our work within the Biden-Harris Administration to improve the lives of rural residents.
- Our staff work incredibly well, but only as far as the capacity we have to process applications.
- Our partners providing technical assistance are crucial resources for our small business owners and farmers.

We are sincerely thankful for your time and your efforts, and those of your staff. We look forward to working with you closely to help rural New Hampshire small businesses thrive and succeed. Thank you again for including me on this panel and I look forward to a productive conversation!

The CHAIRMAN. Thank you very much for your testimony. Sam.

STATEMENT OF SAM EVANS-BROWN, EXECUTIVE DIRECTOR, CLEAN ENERGY NEW HAMPSHIRE, CONCORD, NEW HAMPSHIRE

Mr. EVANS-BROWN. Thank you, Chairwoman Shaheen, for inviting me. It truly is an honor. I will confess, I don't think I even realized how much of a big deal this was until I arrived here today. So I really appreciate everyone for bearing with me as this is certainly my first time sitting up in a chair like this.

Clean Energy New Hampshire is, as you have just heard, a recipient of the REAP technical assistance grant. If you have not spoken to them already, Gabe and Katherine, Gabe Chelius and Katherine Cusack are there on the right. They are the real experts in this program, and I encourage anyone who is interested to read the written testimony that they were extremely helpful in preparing that has more details in terms of what we have to say about the programs.

I think I will take a moment here just to talk about what we think is needed to really move the needle towards a clean energy future, which is an easy button. I think small businesses, as well as regular folks, and municipal governments need an easy button in order to figure out how to pursue these types of projects and one simply does not exist.

If you have a fossil fuel fired boiler in your building and it fails, the easy button is you call a contractor and that contractor replaces a like with like on an emergency basis, and that is overwhelmingly what happens out in the world.

And if you want to pursue one of the types of projects that we assist communities and small businesses with, you are in for a quite a journey. So when I started in 2021, we had Melissa Elander, who was our first energy circuit writer.

She had been—her position had been created in a partnership with the New Hampshire Charitable Foundation after an extensive process where the question was asked, why is it that communities do not pursue energy efficiency investments if these investments pay for themselves? And the answer was, it is complicated.

The funding landscape is confusing, and it is not easy to figure this out. And so, Melissa's position was created in an attempt to be the easy button for low income, rural communities in Northern New Hampshire. I benefited from all of that work.

And when I started at Clean Energy New Hampshire, overwhelmingly what I heard was we need more people like Melissa out in communities, and that is what we are endeavoring to do at Clean Energy New Hampshire.

The Energy Circuit Rider team now has seven employees. We have four employees who are helping drive municipal projects, and Gabe and Katherine who are helping with small businesses. So we are attempting to build that easy button, and we do so in partnership with all of our—all of the other actors in this space.

So great companies like Provision Energy, like the Energy Efficiency Contractors who are experts in the New Hampshire Saves programs, like CDFA who know how to work on community facili-

ties, as well as many lenders and other providers of services in this space. That said, it is still not easy.

What I have heard in talking to Gabe and Katherine that—was that the problems can be as prosaic as sitting down next to a small business owner and walking them through the same.gov website as they try to get themselves a Federal funding code, which is not a process that is as easy as you would like it to be, and that by itself can be a barrier to pursuing a grant that can make or break the economics of a project that you are hoping to pursue.

And it is not the only hurdle. Each of these programs is subject to their own somewhat arcane cost-benefits test and understanding the types of measures that are likely to be successful or to be funded through the various programs really requires an expert in order to know in advance if you are going to be successful.

And to drill down on that, I too consider myself an expert in these programs, but it was not until crafting the written testimony that I submitted that I really understood at a slightly more granular level how complicated it really is, and it was really Gabe and Katherine who have been doing this now for a year with small businesses who informed me the types of measures that are likely to be funded by the various funding streams.

So New Hampshire Saves, good for refrigeration and lighting and motors, not great for weatherization. REAP–TAG, sometimes you struggle to have an efficiency project get funding through REAP–TAG because of the way the payback period is calculated in REAP–TAG.

REAP unfortunately does not take into account the actual rate structure that small businesses pay where they are subject to a demand charge. So any benefits in reducing a demand charge are not considered in the payback period calculation. And all of these are impediments to getting projects done that I think that we need to think really hard about how we get over them.

That said, these funding sources are crucial. They are absolutely crucial. And there are many businesses that would not be considering pursuing any project other than replacing like with like if it were not for these funding streams.

And so, I encourage the Senate to think really hard about how to streamline the delivery of these funding streams, but also how we defend them into—going forward into the future until we find ourselves in a place where the market has transformed to such a degree that the easy button is being delivered by private services, which I think is where we all hope we'll wind up. With that, I will cease.

[The prepared statement of Mr. Evans-Brown follows:]

Sam Evans-Brown
Executive Director
Clean Energy New Hampshire

HEARING BEFORE THE SENATE COMMITTEE ON SMALL BUSINESS

September 13, 2024

The Impact of Energy Circuit Riders on New Hampshire Small Businesses

I appreciate the opportunity to share the experience we've accumulated through our small business energy circuit rider (ECR) program, and its impact on rural New Hampshire. At Clean Energy New Hampshire (CENH), we have witnessed firsthand the transformative impact of federal funding streams through the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) on rural small businesses and agricultural producers across the state. I am grateful for the chance to share these observations and I hope you'll agree that these vital programs are making the clean energy transition possible.

Clean Energy New Hampshire is uniquely positioned because our programming spans various incentive regimes, which gives us a "bird's eye view" of what motivates small businesses to invest and what doesn't. We have two full-time staff members dedicated to traveling across the state and providing no-cost technical assistance to rural small businesses and agricultural producers, helping them address their energy and business needs. These staff are funded by a Rural Business Development Grant (RBDG) and a Rural Energy for America Program Technical Assistance Grant (REAP-TAG). RBDG allows us to offer incentive-agnostic training and technical assistance to small businesses in rural areas in the North Country of New Hampshire. REAP offers grants and loan guarantees to agricultural producers and rural small businesses to help them purchase renewable energy systems and energy-efficient technologies.

These grants allow us to get a glimpse into the lives of many rural farmers and small business owners. It's incredibly eye-opening to see the passion, hard work, and respect they pour into their communities. Their role in New Hampshire is vital but fragile. Small businesses are incredibly vulnerable to changes in energy prices, and owners often cite increasing energy costs as a threat to their economic viability. From February of 2022 to February of 2023 we saw the cost of electricity for commercial end users spike by 27.5 percent.[1] Because businesses are subject to different rate structures than homeowners, and a substantial portion of their monthly bill is composed of demand charges which can be difficult to avoid, this hits small businesses particularly hard. While this rate shock has since subsided, these high price periods are a significant ongoing risk to our small businesses, and highlight a need to diversify our energy sources away from fossil fuels, whose prices are dictated by volatile global market forces.

On top of a volatile market, New Hampshire's small business owners are already beginning to feel the effects of climate change. Just this summer New Hampshire faced severe

[1] *Electricity data browser - Average retail price of electricity*. (n.d.). https://www.eia.gov/electricity/data/browser/#/topic/7?agg=0,1&geo=001&endsec=vg&freq=M&start=200101&end=202406&ctype=linechart<ype=pin&rtype=s&pin=&rse=0&maptype=0

flooding around the state.[2] Statistics from a FEMA-sponsored study highlight that following a natural disaster, 40 percent of small businesses will not reopen their doors.[3] It has become increasingly apparent that our farmers and small businesses need support confronting the impacts of climate change, while also assisting them in reducing their contribution to it.

While the new federal programs are providing fantastic opportunities, they have made the need for comprehensive technical assistance very apparent. CENH was awarded RBDG funds in both 2022 and 2023 to focus direct aid to businesses in the North Country. The RBDG program allows CENH to provide technical assistance to promote state and federal incentives for economic growth in tandem with clean technologies. This type of technical assistance is designed to be broad and all-encompassing, acting as a net to catch any available incentives and direct them to the people who need them the most. There is a significant gap between federal programs and their audience. Many business owners don't receive federal notices of funding opportunities and rely on community organizations to alert them to opportunities. Without significant outreach and assistance in navigating the federal funding landscape, these funding opportunities will tend to flow to already well-established businesses that have the capacity and wherewithal to pursue them and not to the struggling businesses that need them most.

In 2023, the IRA infused additional funds into REAP. The IRA, the United State's largest-ever investment in fighting climate change, increased the maximum grant size from $250,000 to $500,000 for energy efficiency projects and from $500,000 to $1 million for renewable energy systems.[4] In addition, "the federal share was raised to 50% for all energy efficiency projects, all zero-emission renewable energy projects, and all projects in designated energy communities and projects submitted by eligible tribal entities."[5] Without this 50% funding share, many of the projects that we assist business owners to pursue would not be viable, as their payback period would be too long. The high upfront costs of solar panels, anaerobic digesters, wind turbines, small-scale hydropower, heat pumps, and weatherization measures often deter small business owners from investing, even when the measures are cost-effective.

By facilitating investments in energy-efficient equipment and renewable energy systems, REAP helps reduce operating costs and improves energy independence for farmers and rural businesses, which increases profitability and leads to job creation. An example of a small business utilizing REAP funds is Super Secret Ice Cream in Bethlehem, New Hampshire. They were awarded REAP funds in the early Summer of 2024 to install a 10-kW roof-mounted solar array to offset 86% of their annual electrical use. They will save roughly $41,765 over the useful life of their solar project. This additional income can be used to pay staff salaries or be reinvested into their business and other energy-saving measures around the store. The Clean Energy NH small business circuit rider team was able to assist them in the solicitation of solar proposals, aided in gathering the necessary information for their REAP application, and was able to construct their REAP application for them.

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[2] *DR-4812-NH*. (2024, August 21). FEMA.gov. https://www.fema.gov/disaster/4812
[3] National Weather Service, et al. "HURRICANE TOOLKIT." *www.ready.gov*, 2014, www.ready.gov/sites/default/files/2020-04/ready_business_hurricane-toolkit.pdf.
[4] "Rural Energy for America Program (REAP)." Rural Development U.S. Department of Agriculture, www.rd.usda.gov/inflation-reduction-act/rural-energy-america-program-reap.
[5] Ibid.

Investments in renewable energy sources, such as solar and wind, reduce reliance on fossil fuels and lower greenhouse gas emissions. For instance, Spring Ledge Farm in New London, New Hampshire used a REAP grant that funded 25% of their 116-kW solar array to offset most of their annual electrical needs and funded 25% of a sustainable wood chip boiler which replaced four fossil fuel furnaces that provided heat for their greenhouses.[6] Owner Greg Berger said, "these projects result in savings of $29,600 annually, and monies which are used to help retain staff and reinvest in the farm business."[7] The solar array offsets over 110,000 kWh of electricity annually which is equivalent to 76.8 metric tons of carbon dioxide. The energy generated is enough to power the equivalent of 10 homes each year, and the biomass usage helps to create markets for local and regional waste wood that otherwise would decay on the forest floor, releasing greenhouse gasses into the atmosphere. Berger also noted, "Spring Ledge Farm contracted with two NH small businesses to install the solar arrays and the woodchip boiler".[8]

Clean Energy New Hampshire adopts a holistic approach to advancing a clean energy future for businesses throughout the state, addressing the diverse needs of the businesses we work with. We collaborate closely with a network of key organizations, including the Community Development Finance Authority (CDFA), the Plymouth Area Renewable Energy Initiative (PAREI), the NH Small Business Development Center (NH SBDC), New Hampshire's ratepayer funded energy efficiency programs (NHSaves) and the NH Small Business Administration (SBA). This collaborative effort allows us to offer a multifaceted support system for energy projects. We assist businesses in obtaining energy audits, identifying additional funding opportunities to support their projects, and writing the grant application when REAP is a good fit. Our partnerships and networks of clean energy service providers also enable us to facilitate access to loans, connect businesses with experienced developers, and provide tailored business counseling. By leveraging these resources and expertise, Clean Energy NH helps ensure that businesses can successfully navigate the complexities of implementing energy-efficient and renewable energy solutions.

Some programs can be combined with REAP such as the CDFA's Clean Energy Audit Fund, NHSaves, and the Investment Tax Credits (ITCs). CDFA offers grant funds through the USDA to cover 75% of audit costs up to $6,000, which helps limit the upfront costs of a business looking to apply for a REAP energy efficiency application. Businesses can also take advantage of the Investment Tax Credits (ITC) which "reduces the federal income tax liability for a percentage of the cost of a solar system that is installed during the tax year."[9] However, if a business has little to no tax liability—which is often the case for new entrepreneurs who are just starting out—the tax credits add little benefit or are a highly uncertain benefit, given that business owners may be uncertain of their revenue outlook during the carry over period.[10] NHSaves is funded by New Hampshire's electric ratepayers and is "a statewide energy efficiency program to provide New Hampshire customers with information, incentives and support designed to save energy, reduce costs, and protect our environment statewide."[11] Unfortunately,

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[6] G. Berger, personal communication, September 11, 2024
[7] Ibid.
[8] Ibid.
[9] "Federal Solar Tax Credits for Businesses." Energy.gov, www.energy.gov/eere/solar/federal-solar-tax-credits-businesses.
[10] Ibid.
[11] "Efficiency." *New Hampshire Department of Environmental Services*, www.des.nh.gov/climate-and-sustainability/energy/efficiency#:~:text=NHSaves%3A%20New%20Hampshire's%20electric%20utilities,and%20protect%20our%20environment%20statewide.

the NHSaves commercial programs are not as lucrative for small businesses as they are for residential customers. Most commercial rebates are for kitchen equipment such as refrigerators and coolers which do not apply to most non-restaurant businesses. The incentives provided for lighting retrofits are essentially not worth the hassle for businesses to apply for. It may not be cheaper, but it is certainly easier for businesses to just buy LEDs than to try and navigate the NHSaves offerings. Furthermore, most of the measures that score well for REAP, such as weatherization, are not eligible for NHSaves commercial rebates without doing a custom project application. This means that NHSaves tends to not be "coincident" with REAP funding.

While REAP has achieved remarkable success across the state, several key administrative challenges remain: funding limitations, awareness, accessibility, and transparency into what yields successful applications.

1. Funding Limitations And Competitiveness

The demand for REAP funding often exceeds available resources, a challenge which unfortunately has been exacerbated by the decision to increase the individual grant maximum to fifty percent. This has the potential to lead to an increase in the number of small businesses who are frustrated with the REAP program, and unwilling to apply in the future. The grant pool has become increasingly competitive, allowing applicants who have time and resources to be rewarded more often than struggling small businesses. Additionally, many rural small businesses are unaware that the program exists or lack the time to dig into program specifics. Lastly, many small business owners and farmers do not have the time or resources to submit an application. These challenges point to the essential nature of ongoing and continued support for technical assistance grants, such as REAP-TAG, which helps to overcome both awareness and capacity hurdles that limit access to the program.

2. Payback Period Calculation and Consideration of Demand Charges

The USDA's simple payback period calculation for renewable energy system projects is defined as: "(total project costs) ÷ (dollar value of energy units replaced, credited, sold, or used, and fair market value of byproducts as applicable in a typical year)."[12] This calculation includes ineligible project costs, such as roof upgrades, which are not part of the requested grant funds. These additional costs can adversely affect the payback period calculation, leading to lower project scores. The grant form also auto-populates the replacement or generation value without accounting for the percentage of historical energy usage being offset, only considering the cost to offset 100% of a business's historical use. However, when scoring grants, the USDA considers what percentage of historical usage is being offset. Fixing the grant form to auto-calculate the number that the USDA's scoring rubric calculates would eliminate this discrepancy.

Demand charges, which often constitute a significant portion of a business's monthly electricity bill, are not factored into the REAP grant calculations. This omission can reduce the scored economic benefits of certain projects. Certain types of projects, particularly energy efficiency and energy storage, can reduce demand charges in ways that dramatically improve the payback modeling of the intervention. However, the REAP calculation does not consider these

[12] "Federal Register." *United States Department of Agriculture Rural Development*, Vol. 86, No. 79, 17 Apr. 2021, www.rd.usda.gov/sites/default/files/reap_rule_4_27_21.pdf.

benefits, which biases towards projects that save the highest number of kilowatt-hours. For a variety of reasons, this means that the REAP scoring rubric is not aligned with interventions that will result in a least-cost grid, and can be at odds with what is needed to achieve the clean energy transition.

3. Long Delays in Award Notice, and Difficulties with Reimbursement Grant Structure

After submitting a complete REAP application, small businesses can expect to wait six to nine months to hear back if their project was awarded funds. For some projects where an applicant needs a new refrigerator for their summer season or to weatherize a building for the winter, applicants cannot wait for the turnaround time to hear back to begin a project. Applicants are advised not to begin construction until they have heard from the agency that their application is complete and that they have been awarded funds. For many small businesses, this hurts their ability to enjoy the benefits of energy independence and conservation, and increases the likelihood that they will simply "replace like with like" and replace failing equipment with the lowest-cost option.

Small businesses frequently encounter difficulties in covering 100% of project costs upfront. REAP operates as a reimbursement grant, meaning businesses are reimbursed 30 days after the project is operational. Businesses lacking sufficient cash on hand must seek additional funding sources, such as loans and lines of credit, which often come with high interest rates that can undermine the project's financial viability. Even after receiving a 50% reimbursement, businesses are left with significant loan payments, which can strain their finances.

4. Priority Projects are Not Getting Funded

Additionally, the types of projects that we have been asked to prioritize under our REAP-TAG award—small projects under $80,000—are not the ones being funded under the REAP scoring rubric. According to the USDA's Rural Development Funding Chart released in July of 2024, only three projects under $80,000 were funded for a total of $93,421 in grant funding.[13] The other $930,526 was allocated to five projects greater than this $80,000 marker.[14] The average grant amount was $127,993 for this funding cycle. Similarly in the January 2024 announcement of projects funded in Q4 of 2023 (September 30th deadline), the average grant awarded was $134,695.[15] Only three of the 11 projects were under the $80,000 project size with a total funding towards these three projects of $79,417.[16] Smaller projects struggle to score well against larger projects because they typically offset a smaller portion of a business's annual electric load and because they are smaller they have a longer payback period. While it's admirable that the USDA is hoping to use the REAP-TAG program to direct more funding to smaller businesses, unless this situation is remedied, that effort will go to waste.

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[13] "07/17/24 Funding Chart." *Rural Development U.S. Department of Agriculture*, 17 July 2024, www.rd.usda.gov/media/file/download/rd-nh-bp-cp-depsec-071724-funding-chart.pdf.
[14] Ibid.
[15] "VT NH REAP FY23 Q4." *U.S Department of Agriculture Rural Development*, 22 Jan. 2024, www.rd.usda.gov/media/file/download/vt-nh-reap-fy23-q4.pdf.
[16] Ibid.

Efficiency projects, such as those improving insulation or upgrading lighting, frequently struggle to compete with solar projects in the scoring process, despite their crucial role in reducing overall energy consumption. For efficiency projects, the USDA scores payback periods as follows: “less than 4 years, 15 points; 4-8 years, 10 points; 8-12 years, 5 points; longer than 12 years, no points.”[17] Conversely, for renewable energy systems like solar, the scoring is: “less than 10 years, 15 points; 10 years up to but not including 15 years, 10 points; 15 years up to and including 25 years, 5 points; longer than 25 years, no points.” [18] Efficiency projects must therefore achieve a much shorter payback period compared to solar projects to score well. Additionally, efficiency projects have strict energy-saving criteria: "under 20%, 0 points; 20-35%, 5 points; 35-50%, 10 points; greater than 50%, 15 points.”[19] As efficiency projects aim to offset more of a building’s total energy usage, they often face longer payback periods, creating a dilemma where only smaller, low-hanging fruit projects can achieve shorter payback periods, while more comprehensive projects result in longer payback periods. Solar projects typically do not face this same challenge, as larger arrays that offset more of a business's energy usage often have a lower cost per watt and a shorter payback period. Additionally, efficiency projects require an energy audit which requires an upfront cost for the business. According to the USDA’s Rural Development Funding Chart released in July of 2024, all eight funded projects were solar and not a single efficiency project was funded.[20] In the January 2024 announcement of projects funded in Q4 of 2023 (September 30th deadline), only two of the 11 projects were efficiency projects, eight were solar, and one was geothermal.[21] Scoring efficiency projects in their own category instead of against solar projects would help alleviate this issue and get more efficiency projects funded.

In conclusion, we are in the process of realizing the transformative potential of the federal funding opportunities created by the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) for rural New Hampshire, in combination with state programs and incentives. Clean Energy New Hampshire is dedicated to leveraging these funding streams to support local businesses and agricultural producers, recognizing the profound impact these investments have on the long-term viability of our local small businesses. Our experience highlights the crucial role of comprehensive technical assistance in navigating the complexities of these programs and the significant benefits they provide, from reducing energy costs and creating predictability, to reducing emissions and combating the climate crisis. However, as we advance, it is clear that addressing ongoing challenges—such as the payback period calculations, the exclusion of demand charges, and the gap between program availability and business capacity—will be vital to fully unlocking the power of these laws. Ensuring that these programs effectively meet the needs of all small businesses will require ongoing collaboration, targeted outreach, and a commitment to refining the support mechanisms. By continuing to adapt and enhance our approach, we can help bridge gaps, improve program accessibility, and ultimately drive a more inclusive and impactful clean energy transition across New Hampshire.

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[17] “Federal Register.” *United States Department of Agriculture Rural Development*, Vol. 86, No. 79, 17 Apr. 2021, www.rd.usda.gov/sites/default/files/reap_rule_4_27_21.pdf.
[18] Ibid.
[19] Ibid.
[20] “07/17/24 Funding Chart.” *Rural Development U.S. Department of Agriculture*, 17 July 2024, www.rd.usda.gov/media/file/download/rd-nh-bp-cp-depsec-071724-funding-chart.pdf.
[21] “VT NH REAP FY23 Q4.” *U.S Department of Agriculture Rural Development*, 22 Jan. 2024, www.rd.usda.gov/media/file/download/vt-nh-reap-fy23-q4.pdf.

Sam Evans-Brown
Executive Director

Clean Energy NH is a 501(c)(3) nonprofit organization. Our membership includes 130+ businesses, 41 municipal members—comprising over 430,000 NH citizens—and 400+ individuals in every corner of the Granite State. We advocate for the adoption of clean energy initiatives through a non-partisan, fact-based lens.

Sam Evans-Brown Biography

Sam leads Clean Energy New Hampshire in its effort to create a cleaner, more affordable, and more resilient energy system in the Granite State. Prior to joining Clean Energy New Hampshire in 2021, he was a podcast host and radio journalist for nearly ten years, during which he wrote stories about New England energy issues extensively and won several regional and national awards. Outside of work, he is an excellent bike mechanic, a Spanish speaker, and a father of two.

The CHAIRMAN. Thank you very much. Dan.

STATEMENT OF DAN WEEKS, VICE PRESIDENT, BUSINESS DEVELOPMENT, REVISION ENERGY, NASHUA, NEW HAMPSHIRE

Mr. WEEKS. Good morning. Thank you so much, Chairwoman Shaheen. Dan Weeks with ReVision Energy and it is an honor to be here. Also my first rodeo alongside Sarah, Sam, and Melissa. I am one of the co-owners at ReVision Energy, and while I enjoy—get to enjoy sitting here in a nice air conditioned room, I definitely want to tip my hat to my co-owners who are out on rooftops today.

It is a perfect fall day, although it I think it will reach up into the 80s. Not our usual back when I was a kid at least in September, and they are out there in all weather, all days of the year installing the clean energy future that is core to our mission, which is to make life better by building our just and equitable electric future.

ReVision is honored to work with and the team that I lead in our commercial business is honored to work with dozens at any given time of small businesses and independent businesses around New Hampshire, and we are proud ourselves to be a small, independent, and employee owned business with offices just up the highway in Brentwood, as well as in the Upper Valley.

As has been stated already, New Hampshire businesses do face significant costs, both in terms of direct costs from electricity and other energy needs, and increasingly as we are coming to realize the indirect costs of climate damage.

I am glad that Sarah mentioned the floods that have been so severe most recently in the North country, in New Hampshire, where my family comes from, and driving those streets just this past summer has been a stark reminder not just of the costs that towns bear in terms of infrastructure damage as roads and bridges wash out, but also businesses that are getting flooded and having to deal with these ever rising energy inputs.

I wanted to keep with the theme that Sam mentioned, and I will let my more detailed testimony speak for itself, but to draw a couple of key themes, and in particularly the challenges to implementation of what are proven commercialized technologies at this point, particularly when it comes to a category of—and I will focus on solar technology, although we also do energy storage, and EV charging, and thermal solutions.

But particularly in the case of solar energy when it comes to shared community solar projects or off site projects, which frankly are often the only way that small, very small businesses, as well as families can benefit from the clean energy transition because many of them, many of those 130,000 small businesses registered in the State of New Hampshire, don't own their own facilities and don't have an opportunity to install on-site. But first, a word on what is available to small businesses today.

Thanks in large part to the Inflation Reduction Act and other Federal incentives for small businesses that do own their roof and have a solar suitable facility, because of the 43 percent decline in the cost of solar technology over the last 10 years, because of the continuation of Federal incentives, which were supposed to be just a 10 percent tax credit here in 2024.

But thanks to the Inflation Reduction Act were returned to their historic level of 30 percent with the opportunity for bonus tax credits in certain cases, the combination of increasing efficiency, lowering cost of the technology, and continued and enhanced Federal incentives does mean that if a small business in New Hampshire owns their roof, chances are they can offset most or all of their energy needs and they can do so at a very reasonable return on investment, typically about a 10 year payback, sometimes as low as 7 years, with an internal rate of return somewhere north of 10 percent very often, which is better than the stock market most years.

And by doing so, as we already heard from Sarah, they can save $16,000 a year or more, depending on what their current energy spend is. It is a tremendous opportunity, and we have been blessed to work with over 1,000 small businesses and other commercial customers, along with nearly 20,000 residential customers over the last 21 years.

So for onsite applications, the technology has proven the permitting and interconnection are generally manageable, and the savings are very real. However, as noted, most New Hampshire small businesses just don't have the opportunity to install on their own facility, and they look to, and we hear from them very often wanting to find some way to participate in the energy transition.

The natural solution, which our company by virtue of operating in neighboring States as well as New Hampshire, has been able to put in place over the last 10 plus years is community or shared solar farms.

And I want to briefly mention three key challenges that I think the Federal Government can help to overcome, although they are in particular challenges we face at the local and State level, that are unfortunately impeding the development of offsite community solar farms in New Hampshire, even as other States are many years ahead.

The first set of challenges relates to net metering, which is a State level policy. But to put it in practical terms, the retail cost of electricity, if you take the average rate over the last three years, for small businesses in New Hampshire is about $0.18 per kilowatt hour. If you are offsetting your power needs on site, you are getting close to that for retail rate.

However, if you are getting your energy from a shared community solar project by virtue of New Hampshire's net metering statute, you are getting just 10.4 cents today. Not only is that a little more than half of the total rate, the retail rate, it is also about half of the empirical value of solar, as New Hampshire's Department of Energy has determined through value of distributed resources studies that they have completed and is also about half of the rate in other States where we are seeing community solar take off.

So net metering is a real challenge, and it is further made more difficult by the fact that we have an arbitrary cap of 1 megawatt on the size of projects that can serve small businesses or families or nonprofits in New Hampshire. Economies of scale are terribly important in these projects.

A second hurdle is around permitting, and I mentioned economies of scale because there are fixed costs that any offsite project must bear. Typically at least $100,000 just in obtaining State per-

mits. For New Hampshire, the threshold for requiring those permits is about 2 acres. In other States, it is about 20 acres for that very high level of permitting diligence that is required and that brings significant costs.

And then finally around interconnection, which I could spend all day on, but historically, it has taken weeks or months to obtain interconnection agreements, and those have cost a few thousand dollars in initial studies.

Today, for especially offsite projects, it is taking multiple years, and the cost of studies alone are generally $25,000 to $50,000, with interconnection upgrades anywhere from $100,000 to $1 million.

The CHAIRMAN. Dan, just explain very briefly what interconnection—what you are talking about when you say interconnection——

Mr. WEEKS. Yes. Thank you, Senator.

The CHAIRMAN [continuing]. For those people who might not know.

Mr. WEEKS. So these projects are by default grid tied, meaning that they are delivering their electrons directly to the utility grid.

And the utilities, whose primary and very important job is to maintain a reliable, resilient grid are often using that opportunity, you might say, to contribute to other beneficial upgrades.

So in New Hampshire, where we don't have any State interconnection rules, they can require a number of upgrades which are generally not required for comparable projects in other States. Reclosers, other protective devices, which is what brings the cost to $500,000, or $1 million, or more. So those are three challenges.

And just to wrap up, as I noted, in spite of these challenges, this is an exciting time in the renewable energy industry in New Hampshire. About $180 million was invested in just solar in New Hampshire last year. Our total installed capacity, about 280 megawatts. Sam can correct me there.

Although that is—unfortunately pales in comparison to what we see South of the border at over 5,000 megawatts of deployed solar in more than 1,100 in Maine. So there is a lot of room to grow. And the final note, I would say is while we have over 1,000 people working in the solar industry today in New Hampshire, about 100 at ReVision, the potential to grow that is enormous.

And one way in which ReVision has been focused on the workforce challenge is about seven years ago, we established the first in-house electrical apprenticeship program at a U.S. solar company.

So far, we have graduated—in a couple of weeks we will graduate I think our 60th or maybe 65th electricians here in New Hampshire, which we are very proud of. And it is a program that we are desperate to expand with support from Department of Labor and others because we believe electricians will save the world.

So, I will conclude in again tipping my hat to my colleagues who are out on rooftops today getting the job done. Thank you.

[The prepared statement of Mr. Weeks follows:]

Senate Small Business Committee Field Hearing

September 13, 2024

Draft Testimony

Dan Weeks, ReVision Energy

Introduction

Thank you for this opportunity to testify before the Senate Small Business Committee about energy-related challenges and opportunities facing small and independent businesses in New Hampshire. As a co-owner of one such business, ReVision Energy, my team and I are fortunate to work with other business owners across the state to understand and address their energy needs while advancing our company's mission to "make life better by building our just and equitable electric future."

As I will try to detail in this testimony, New Hampshire businesses face significant challenges when it comes to the high direct cost of energy and the high indirect cost of climate damage, both of which are affecting our employees, communities, and bottom lines. At the same time, small businesses are benefiting in tangible ways from clean technologies that lower energy costs and carbon emissions, thanks in part to the federal government's historic investments in the energy transition through the 2022 Inflation Reduction Act (IRA) and other legislation. The benefits vary considerably between onsite solar projects that power business loads directly and offsite projects that are designed to extend the benefits of solar to businesses that cannot install solar panels of their own. Fortunately, the federal and state government have levers they can pull to better enable both types of projects and thereby enable small businesses of all kinds to participate in the clean energy transition.

High Energy Costs and Climate Damage

For years, New Hampshire businesses and families have struggled to pay some of the highest energy rates in the United States. According to the U.S. Census, one in five New Hampshire households could not afford to pay their energy bills in the last year and nearly a third had to forego other basic needs just to keep the heat and lights on. The pain was particularly acute for businesses and families in 2022-2023, when electric rates doubled to become the highest in the continental U.S. The price of natural gas, a major source of both heating and electricity generation, has also spiked in recent years in New Hampshire, according to the U.S. Energy Information Administration (EIA). In fact, New Hampshire's total energy expenditures are currently the highest in the region at $6,440 per capita or $9 billion statewide per year. For our part, my family was shocked to see our utility bills skyrocket to over $1,000 a month for the first time ever last year, and I know we weren't alone.

Studies show that high energy costs are largely a function of our dependence on imported natural gas and other price-volatile, non-renewable energy sources, a leading cause of inflation nationwide. Fully 86% of New Hampshire's energy currently comes from non-renewable imports like oil, gas, and nuclear, and we rank near the bottom of states when it comes to deploying local, low-cost renewables. That means most of the $9 billion in hard-earned money Granite State businesses and families spend on energy each year leaves our state's economy.

At the same time as New Hampshire businesses and families face high energy costs, the price we are paying for climate damage caused by fossil fuel combustion is also steadily increasing. This is particularly true when it comes to flooding and other extreme weather events, which cost businesses, families, and towns millions of dollars a year in New Hampshire. According to the Fifth National Climate Assessment released in 2023, extreme precipitation has increased around 60% in the Northeast since the 1950s, with the latest New Hampshire examples including washed out roads and bridges and extensive flood damage this past summer. Nationwide, the Assessment found that the United States is facing a billion-dollar climate disaster every three weeks, on average, compared to every four months in the 1980s.

The New Hampshire Department of Environmental Services has also estimated that around 1,300 Granite Staters die each year from asthma and other preventable health problems directly linked to fossil fuel air pollution. This is a tragedy for the individuals and families affected, and also harms our businesses by raising healthcare costs and reducing worker productivity due to poor health and lost work days. NH DES

estimated that the public health cost of manmade air pollution was $5.1 billion in 2024 dollars. When combined with the mounting costs to our economy, infrastructure, and way of life from climate damage, I believe the need to transform our energy system is clearer than ever.

Fortunately, American cleantech innovation has made solar, wind, and battery storage the cheapest forms of energy on earth. Combined with hydropower, these renewable options are also the cleanest and most abundant homegrown energy resources in New Hampshire. They have the potential to significantly reduce energy costs for businesses and families while helping combat climate damage. This is true for both individual electricity consumers and the rate-paying public at large, as shown in the official Value of Distributed Energy Resources report released by the New Hampshire Department of Energy in 2022 and revised in 2023. Federal energy and tax policies are increasingly important components of the energy transition.

Onsite Solar for New Hampshire Businesses

For small and independent businesses in New Hampshire faced with rising energy costs, clean technologies like onsite solar generation, battery storage, and efficient building and transportation electrification are critical means of managing both costs and carbon emissions. In this testimony, I will focus on the primary cost-saving technology currently available to businesses, solar power, although ReVision Energy also assists businesses with battery storage, air-source heat pumps, and vehicle/fleet electrification. (These solar-adjacent technologies are fully commercialized but face state-specific regulatory/permitting hurdles that make them more difficult to deploy at scale in New Hampshire, in spite of significant private investment and federal incentives.)

Installing solar panels directly on business rooftops or adjacent land reduces reliance on grid electricity and provides the lowest available cost of energy in New Hampshire. The average retail price of electricity for small commercial customers in New Hampshire's major utility service territory (Eversource G rate class) over the past three years is 17.9 cents per kilowatt-hour (kWh), including supply, delivery, and other volumetric (per-kWh) charges. Time-of-use demand charges (measured per kW) can raise the effective rate another 25-50%. By contrast, solar energy that is generated and used onsite by small

businesses in New Hampshire typically provides a long-term levelized cost of energy (LCOE) between 2-5 cents per kWh, or 80-90% less than utility rates. This LCOE is inclusive of the upfront engineering, procurement, and construction (EPC) costs as well as annual operations and maintenance costs and inverter replacement midway through the system life. It also factors in local weather conditions and gradual degradation of the solar panels, which are guaranteed by manufacturers to produce at least 99.5% of the power generated in the prior year (0.5% annual degradation) over a 25-year standard warranty term.

As a result, businesses that are able to installing solar panels directly on their facilities typically enjoy a payback period of around 10 years or less in New Hampshire and sometimes as short as 5-7 years, a fraction of the 25-year warranty period and 40+ year commercial lifespan of today's solar panels. This translates to an internal rate of return (IRR) on their investment of between 10% and 15%, higher than the average performance of the stock market and well above even the current elevated cost of capital. When businesses choose to finance their onsite solar through local banks or other lenders, they are often cashflow-positive throughout the 10-15 year loan period. My company, ReVision Energy, has benefited in this way from rooftop solar generation at our branches and we have seen similar benefits across the nearly 1,000 onsite commercial projects we have installed in New Hampshire and neighboring states since 2003.

Offsite Solar for New Hampshire Businesses

The picture is significantly more complicated when it comes to offsite community solar farms in New Hampshire, which deliver clean electricity directly to the grid to offset the needs of small businesses and other designated energy users elsewhere in the utility service territory. Community solar projects are typically located on municipal landfills, brownfields, or other vacant lands, although neighboring states are also encouraging the use of parking lots and rooftops for such community-scale projects. Because of their versatility and scale, these projects are essential for both expanding access to cost-saving solar and accelerating the clean energy transition – especially for very small businesses and families that do not own their facilities or whose roofs/grounds are not suitable for onsite solar.

Small businesses can participate in offsite community solar farms as either a subscriber with no upfront capital cost and modest energy savings or as a shareholder with an upfront cost based on scale and

substantial energy savings. In the former case, the business subscribes their annual electricity load to the solar farm and receives monthly bill credits for a small portion of the value of energy delivered to the grid, while the bulk of the energy value goes to the system owner who financed and maintains the project. In the latter case, the business is a part-owner of the community solar farm and generates a reasonable return on their investment through the full energy payments they receive on their utility bills – provided the project can overcome a range of net metering, permitting, and interconnection hurdles. These three sets of hurdles are often prohibitively high in New Hampshire, which has yet to see community solar take hold even as other Northeast states are rapidly deploying both offsite and onsite projects. For our part, ReVision Energy has installed numerous community solar farms in neighboring states, which has allowed us to invest and hire more people outside than inside New Hampshire.

When it comes to the first hurdle, net metering policy, New Hampshire's PUC 900 rules effectively discourage offsite community solar projects by valuing electrons delivered to the grid between 25% and 50% less than those consumed onsite (depending on the utility and time of year). In practical terms, this means solar energy generated by a community solar farm today is valued at just 10.4 cents per kWh, roughly half the empirical value of solar according to the NH Department of Energy and roughly half the value paid under net metering in other states. This in spite of the fact that both onsite and offsite projects serve the same basic function of reducing system load around periods of high demand, thereby reducing our reliance on costly and polluting peaker power plants which increase electricity rates for everyone.

A related net metering hurdle is New Hampshire's arbitrary 1 megawatt (MW) AC cap on the size of community solar farms that serve businesses, families, and nonprofits – far below the standard 1-5 MW range for offsite projects in other states. This arbitrary cap corresponds to approximately 4 acres of land or 2 acres of roof/parking lot area, which is smaller than the size of most landfills or big box store roofs, and makes it difficult for projects to achieve meaningful economies of scale. Aligning net metering rates for both offsite and onsite projects with the empirical value of solar to the grid, and raising the arbitrary 1 MW cap to 5 MW, would create significant incentives for more community solar development and directly benefit small businesses. The New Hampshire Legislature has passed bipartisan legislation to expand net metering multiple times since 2018 only to see it vetoed each time by the current governor.

Permitting is also a large and growing impediment to offsite community solar farms in New Hampshire. During the past decade in which ReVision Energy has been actively developing community solar farms in New England, we have learned that scale is essential to making projects pencil given the largely fixed permitting and associated site preparation costs on projects between 1-5 MW. It is now common for civil/environmental permitting in New Hampshire to cost $100,000 or more on account of the state's unusual civil/environmental engineering requirements for projects as small as 2.5 acres; in Maine and other states, such stringent requirements only apply to projects 20 acres or larger and federal permitting is rarely at issue on smaller projects. Meanwhile, site preparation can reach as high as $1 million for community solar farms. Even when New Hampshire projects can afford permitting and site preparation costs, they have no assurance of actually receiving the required local and state permits as there are multiple veto points based on highly variable, localized zoning procedures. As a case in point, solar farms are sometimes treated like traditional commercial developments such as shopping malls, without due consideration of their actual environmental and community impact. We have had multiple community solar projects blocked in New Hampshire after years of development work based of seemingly arbitrary standards and local preferences.

Finally, the utility interconnection process is a major hurdle for offsite community solar farms and certain large onsite projects in New Hampshire. Historically, onsite solar projects were approved for interconnection by the local utility within a matter of weeks for a nominal cost while larger offsite projects took 3-6 months at a cost of $3,000-$10,000. Today, onsite projects as large as 1 MW can still be approved relatively efficiently while larger offsite projects are routinely held up for multiple years and required to pay $25,000-$50,000 for utility system impact and related studies, particularly in New Hampshire's largest utility where most community solar development is taking place. Interconnection approval is generally conditioned on the project developer paying the utility to make substantial upgrades to the local distribution grid, which cost between $250,000-$1 million for projects as small as 0.5 MW. Many of these system upgrades are far removed from the solar project itself and provide tangible benefits to the utility and the public, such as increased grid capacity and resiliency. The duration, cost, and scope of utility studies and upgrades in New Hampshire is significantly greater than those for comparable projects our company regularly builds in neighboring states, thanks to the absence of statewide interconnection rules or procedures utilities must follow here.

If New Hampshire policymakers wish to increase the amount of overall solar generation from its current low level of 1.84% of state electricity supply and enable small businesses that lack onsite generation potential to benefit from solar, they will need to address the net metering, permitting, and interconnection hurdles above. The current net metering docket at the NH Public Utilities Commission (DE 22-060) is unlikely to increase, and may decrease, the value of net metered solar electricity (against the findings of the NH Department of Energy) and there is little sign of improvement on permitting or interconnection in the next year. Utility interconnection rules are expected in 2026.

Federal Solar Policy

As I have tried to show above, there are significant gaps between onsite solar projects businesses install to power their electricity loads directly and offsite projects intended to share the benefits of solar with multiple participants. Federal solar policy, especially the Inflation Reduction Act, has been a game changer for small businesses going solar by reducing the upfront cost for projects of all kinds. It has resulted in onsite projects becoming highly economic in most cases, even for very small businesses that own their roof or land, and has expanded the range of feasible offsite projects in spite of persistent hurdles in New Hampshire.

When my team and I evaluate solar opportunities for a small business, one of the first questions we ask is whether the business or its owner(s) have sufficient tax liability to take full advantage of the Section 48 investment tax credit (ITC) since it was restored to its prior full value of 30% under the IRA. In most cases, the answer is yes, especially since the IRA extended the ITC carry-back period from one year to three while maintaining the 20-year carry-forward provision. Being able to reduce the upfront cost by 30%, instead of the nominal 10% scheduled ITC credit prior to passage of the IRA, is crucial for many businesses. It can often make a (non-essential) solar investment highly competitive with other capital projects, which might otherwise be higher on their priority list but which generally cannot deliver the same financial and environmental benefits over the long term.

In addition to restoring the 30% ITC for 10 years and providing much-needed certainty for business planning, the IRA also established "bonus" tax credits of 10-20% each, which are generally targeted to

low-moderate income communities but which can also be accessed by small businesses in certain cases. Businesses located in coal closure communities or on federally-recognized Indian lands are eligible for a 10% bonus ITC (currently not applicable in New Hampshire) and those which utilize domestically-manufactured solar equipment are eligible for the same. Fortunately, the American solar supply chain is rapidly expanding post-IRA, with several multi-billion dollar domestic investments in new solar manufacturing now underway; we expect to be able to provide customers with eligible domestic content in early 2025.

Federal REAP grants under the Renewable Energy for America Program at the U.S. Department of Agriculture (USDA) have also been crucial to solar adoption by small businesses, especially farms and other rural businesses that often lack the tax "appetite" to monetize the ITC and depreciation. The IRA doubled the amount of REAP grants eligible businesses could receive from 25 to 50% of project costs, capped at $1 million, and increased the total pool of available funds substantially. As a result, several dozen small New Hampshire businesses were encouraged to seriously consider solar with ReVision Energy for the first time. Although the spike in demand produced a sizable backlog of applications, we were able to secure REAP grants, in partnership with the local USDA branch, for more than ten small businesses across the state. Unfortunately, this month, September 2024 marks the last month in which businesses can even apply for REAP grants and we do expect a significant drop-off in interest in solar from rural businesses unless Congress is able to extend the program under the pending farm bill or other legislation.

Given the limited availability of REAP grants to-date and the possibility that they will be discontinued going forward, small businesses in New Hampshire will be in need of other financing or incentive programs to help them make the upfront solar investment. Interest rate buydowns or other financing mechanisms that bring the cost of capital below its current historically high rates would make a major difference. We are eagerly awaiting more information about such financing opportunities coming out of the Greenhouse Gas Reduction Fund at the Environmental Protection Agency, which was also established under the IRA.

Finally, we believe the federal government could play a significant role in incentivizing states like New Hampshire to remove unnecessary barriers to especially offsite community solar projects by adopting

established net metering, permitting, and interconnection best practices. It could also make more resources available for badly-needed upgrades to our outdated utility grid, not just at the transmission level for utility-scale projects but also at the distribution level for community solar. We are already seeing funds for utility upgrades flow into neighboring states and hope New Hampshire will also benefit so that more small businesses have the opportunity to participate in community solar.

Solar Industry and Economic Impact

In spite of the hurdles discussed above, solar has become a major contributor to New Hampshire's economy with an estimated investment of $187 million in 2023 alone, according to the latest 2024 Solar Market Insight report. As of Q2 2024, there are 287 megawatts (MW) of installed solar capacity in New Hampshire – enough to power 45,902 homes. This represents substantial growth although it is also a small fraction of the more than 5,300 MW and 1,100 MW deployed to date in Massachusetts and Maine, respectively. New Hampshire currently ranks 45th in the United States for solar capacity. Approximately 64 solar companies currently operate in New Hampshire, including 19 solar manufacturers and 22 installers/developers.

As one of New Hampshire's leading solar installers and a certified B Corporation, ReVision Energy is proud to employ approximately 100 solar professionals in state, including licensed electricians, electrical apprentices, engineers, project managers, and sales, marketing, permitting, and finance specialists. We are also a 100% employee-owned business, meaning each team member enjoys a shared stake in the success of ReVision Energy via our Employee Stock Ownership Plan (ESOP), an ownership structure that is encouraged by federal tax policy. We have learned over the years that socially-responsible business practices, as represented by our ESOP and B Corp certification, help our business thrive, especially when it comes to recruiting and retaining top talent over the long term.

As part of ReVision's commitment to our employee owners and workforce development broadly, we took the initiative in 2017 to launch the nation's first in-house electrical apprenticeship program at a U.S. solar company. Under ReVision Energy Training Center (RETC), individuals without prior experience in solar or the trades can earn competitive full-time wages and enjoy the full benefits of employee-ownership

while completing their mandatory 8,000 apprenticeship hours to earn their electrical license. More than 50 individuals have graduated from our electrical apprenticeship program to-date and we recently added additional apprenticeship programs in partnership with the U.S. Department of Labor. Through these and other initiatives, including daily educational programs offered to K-12 schools, ReVision Energy is committed to repositioning the trades out of our belief that "electricians will save the world."

The CHAIRMAN. Thanks very much, Dan. Melissa.

STATEMENT OF MELISSA FLORIO, PRESIDENT, AMBIX MANUFACTURING FREEDOM, NEW HAMPSHIRE

Ms. FLORIO. Hello, everyone. Okay. So, first of all, thank you, Madam Chairman, and all the members of the committee for holding this hearing and allow me the opportunity to share with you our journey to sustainability with regards to our reliance on the electric grid.

I will try my best to explain plastics injection molding, now that you have thrown that on me and please bear with me. I have spent the last few days in D.C. As Senator Shaheen said, one of my roles is as—Fairness Regulatory Board, and we just had our annual meeting. It was only two days, but I felt like two weeks.

We had so much squished into those two days. So Ambix Manufacturing, we are one of the 33 million small businesses here in the United States, and we were founded in 2008 up in the White Mountains of New Hampshire. And we provide plastics engineering and custom contract and plastics injection molding.

So if you imagine the olden days when you would play with your Play-Doh and you would have your Play-Doh in your whatever it might be, in your device and you would squeeze it and out would come your shape, that is kind of in a nutshell what we do. We would close loop injection molders that are all electric machines, and we heat up our resin sometimes to 500 °F with a lot of auxiliaries.

We color our resins on site and do all fancy things with them. They get into a barrel through a feeder. They get—that feeder screw barrel pushes them into our injection mold. The water cools the mold, opens the mold, pops out the part. So that is essentially what injection molding is for plastics and there is all different types. There is extrusions. There is ceramic. But we do plastic injection molding.

So we are an ISO 9000 certified company. We have responsibility to stakeholders as ISO 9000 certified company. We have to consider risks to Federal, State, local governments, residents of our town, our customers, our employees, and ensure that we are—always are providing, you know, a quality part and continuing operations. So for every potential new job at Ambix, we go through an assessment process.

Do we have the capabilities to do the job or are they looking for extrusion? Are they looking for injection molding? Do we have the capacity? Can we provide a quality product? And most importantly, can we compete on cost? It is always costs. We know the Ambix team can provide a high quality product.

Our Ambix team has been with us for years, some decades. That is not our problem. It is the wildcard is always cost. And in establishing Ambix, we were able to rely upon years of manufacturing and engineering experience consulting around the globe to take learned best practices and build our manufacturing floor to the most efficient leading manufacturer that we could be, minimizing waste.

However, you know, we can't eliminate all waste, and there are some costs, but we were able to get ourselves at a level where we

could compete with domestic manufacturers. But as you know, Ambix and other small businesses aren't competing just with domestic manufacturers. We are competing on an international level with manufacturers who are in countries that are subsidized by their home country that allows them to undercut us on our price points.

So over the years, we have picked off the low lying fruit, as anyone would. We have brought in, you know—so let me just kind of back up. So there are three main issues that we have is labor, raw resin, and of course electricity because we run all electric machines. And so in doing so, we added automation and reduced that labor cost, right.

As far as our resin cost prices, we were able to reduce only to a certain extent because we aren't that large domestic manufacturers, so we don't have railcars of resin coming into our backyard and going into silos. So there is not so much room on the cost of resin that we have wiggle room, but there is wiggle room with electricity.

So we did work with local, State, Federal programs, brought people in, ask for recommendations on what we could do to improve our facilities, and we implemented all of those, whether it be energy efficient lighting or upgrading our HVAC and machinery auxiliaries. So in doing so, however, we kept coming against the fact that no matter what we did, that electricity was always going to be a high aspect to our production costs that we provide on a piece part price.

So we went and we actually researched numerous times with ReVision Energy and looked at the possibility of what can we do to offset those costs, and it was just never affordable for us. It just was never going to be feasible. We don't sit on this huge pile of cash. You know, I would love to—I would love to sit on a huge pile of cash. We don't.

And when we do have any type of wiggle room, we usually invest in our buildings, our machines, and our employees. So every time we would do the analysis, we just would never make that breakeven point, if we had the cash flow, in order to make it happen.

In 2022, around August, we—that all changed when our electricity provider notified us that our electric rates were going to be increasing 52 percent. And like I said, so our three components, that third prong of electricity that was just going to cripple us. We couldn't pass those costs on to our customer. And so, we were really facing, how do we do this? How do we—you know, we are going to go out of business.

And that wasn't an option for us because it wasn't just our families that we, you know, are worried about at night. I stay up at night worrying about my employees' families and their lives. So I reached out to our local economic council, asked them what we could do, and they got us in touch with USDA and Tracy.

And we learned through Tracy for about, I don't even know how many hours he was on the phone with us, he was wonderful, about the REAP grant and the funding that was possible for us. And so, with that, we began the work. We applied for the grant. And the old adage that it takes a village is really true.

As a small business, all the people in this room right now are here to support us and it is hard as a small business to ask for that

help. You just kind of think, I am going to put my head down and I am going to make it work and it is going to happen.

But when you are going up against a 52 percent increase in electricity, that wasn't a reality that we could face alone. So the Government programs and their support were integral to our success.

So many people held our hands through the process, from the USDA to the CDFA, to our Economic Council. And as a result, in December 2022 we received the REAP grant and we immediately contacted ReVision Energy and said, let's go and began the process of constructing our system, which we do own our own building, so.

The system consists currently, they just finished this past June, of 142 solar panels. We produce up to 100 kilowatts of power. It just went live this summer and one of our engineers is like totally geeking out on it. He has got the app, and he runs around showing how many machines do we have running at this moment, how much power are we making.

And on days like, for example, the weekend, we don't run unless it is—unless there has been a climate change impact and we need to supply for the electric grid, ironically, then we are able to push energy back into our grid.

So honestly, it is a good feeling being sustainable at this point. We all know there are climate change incidents happening constantly, even in the White Mountains, and to be able to be sustainable and be able—a steward to our environment for the future generations.

The system allows us to minimize climate change and the risks on our operations from the electric grid, and most importantly, allows us to remain competitive and continue our operations and provide a domestic choice to businesses still—by still being a viable injection molder.

And when the envelope shows up, it is a nice feeling because one just showed up last week and, you know, when we done the numbers, it would probably come up to a 42 percent increase of cost of electricity, and we can rest assured that thanks to the REAP grant and those solar panels on our roof, that that is not going to impact our ability to provide that high quality, low cost product.

So in closing, I would just like to thank you again for holding this hearing today, for listening to Ambix's journey to achieving renewable energy at our property in Albany, New Hampshire.

And it is just—Congress supporting us with these lifesaving programs. It is really—it has been—we wouldn't be sitting here today as Ambix Manufacturing without them. I mean, we save approximately $75,000 a year for electricity.

[The prepared statement of Ms. Florio follows.]

Thank you Madam Chairman and all members of the committee for holding this hearing and having me here today to provide testimony on Ambix's sustainability journey. As Small Business and Entrepreneurship Committee Members, I am sure that you already know that small businesses are the backbone of the United States economy making up 99% of all businesses and providing employment to approximately half of the current workforce. And that many small business owners are doing all of it on their own.

Ambix Manufacturing is one of those 33 million small businesses. Founded in 2008 (I don't recommend starting a business during a Great Recession), and located in the White Mountains of New Hampshire, we provide plastic engineering and custom contract injection molding manufacturing to customers here in the United States as well as Mexico. We are also an ISO 9001 certified company and with that certification comes a responsibility to stakeholders - federal, state and local governments, residents of our town, our customers and our employees to ensure that we have assessed all risks of operations and are capable of providing a quality product to our customers. In fact, our quality policy states,

- Ambix Manufacturing, Inc. is dedicated to satisfying our customer's cost, quality and delivery requirements through excellence in its technology and products, and
- Ambix is committed to improving the quality, consistency and cost-effectiveness of its products and processes through continual improvement of the effectiveness of its Quality Management System.

For every potential new customer or job we get, we complete an assessment. Do we have the capabilities, do we have the capacity, can we provide a quality product each and every time off our lines, and can we compete on cost and still eek out a profit to continue to provide for our employees? We know that the Ambix team can provide a high-quality product. Our employees have been with us for years, they are Ambix. What is always the wild card is cost. In establishing Ambix we had the advantage of years of consulting and manufacturing experience in larger organizations around the world. We were able to take learned best practices and implement them on our floor. From the start, we were a lean manufacturer with no added waste and as we grew we utilized a all technological advances available to place us on the same level as larger domestic manufacturers. But as you know, Ambix and other small businesses don't just compete with domestic manufacturers. In fact, most of our competitors lie overseas where they receive substantial subsidies from their home country for operations allowing them to undercut our price points.

Over the years, we picked off all the low-lying fruit for cost-savings in our operations. As many do not realize what goes into plastic injection molding let me elaborate… it isn't much: labor, raw resin, and electricity. We have chosen robotic and other automation options to reduce our reliance on labor- which in our area of the NH has a shortage of available workers and free up our existing workers to focus on higher-level tasks. We do not have much room on resin costs as pricing is dictated by volume and the resin provider. Simply put, we do not purchase railcars and have silos of resin outside our doors. Limited stocking programs allows us some cost savings, but not much. So that leaves electricity. We have

utilized state programs to analyze our operations and installed energy efficient lighting, insulated our pipes and upgraded our HVAC systems, and switched our machinery to reduce our draw on electricity. But electricity remained one of our largest costs to production. We knew the only way to reduce this burden would be to install some form of renewable energy. We went through the exercise multiple times costing out our options. Unfortunately, it was always too cost prohibitive. We, like so many small businesses, are not sitting on a large cash base. When we do have extra, we take care of our building, our machines and our employees. Solar power was never within reach- it would take us years to reach the break-even threshold.

That all changed in 2022, when our electricity provider notified us that our electric rates would increase 52%. You can imagine our shock upon opening that envelope. A 52% increase would cripple us. We would not be able to pass those costs onto our customer and we couldn't eat the costs. We would be out of business. This was not an option we were willing to accept as it wasn't just our families relying on our continued operations, but our employees and their families. So, we reached out to our local economic council and were directed to the USDA where we were counseled of funds available specifically for renewable energy in rural zones through REAP. The USDA counselor spent a good two hours on that initial call answering all of our questions and continues to guide us through the process today.

The old adage, "It takes a Village", is never more true than for small businesses. We could not do this alone. Government programs and their support are integral to our success. So many people held our hands through the whole process from the people at the USDA to our local CDFA and Economic Council. As a result, in December 2023 we were awarded our REAP grant and we immediately placed a down payment with Revision Energy to begin construction of the system that would alleviate much of the cost burden of our electricity reliance. The system of 142 solar panels and up to 100kWh of power went live this summer. Our Engineering Director, Jeff Nicoll, loves to analyze the numbers on a continuous basis. Ambix now expects to offset between 55-60% of its power consumption with the solar generated power. Further, on days when we are not at full capacity or on the weekends, we are pushing energy into the grid - providing support to one of our stakeholders, the residents of Albany.

Honestly, it is a great feeling to be sustainable. Ambix has always had as a pillar to be a steward to the environment and to future generations. It holds true in the jobs we take on as we do not produce any single-use plastic and we use a close-looped system for our plastic raw material ensuring that we regrind all plastic waste and ensure it is incorporated into either our future products or that of another plastic manufacturer. This system also allows us to minimize risks due to climate change and their impact to our electrical grid. And most importantly, it allows us to remain competitive and continue operations that provide domestic choice to other businesses. And when those envelopes show up in the mail from our electricity provider - as they just did again last month - indicating a rate increase of 42%, instead of thinking it is the nail in our coffin, we know that thanks to the REAP grant and those panels on our roof that we will be a high-quality, low-cost plastic injection molder for years to come.

In closing, I would like to thank you again for holding this hearing and listening to Ambix's journey to achieving renewable energy and staying competitive in the global markets. I more importantly want to thank this committee and Congress for supporting us with these life-saving programs. You are ensuring that the U.S. remains a strong competitor in manufacturing. You are helping us support our rural community and our employees and we at Ambix greatly appreciate you working with us and other small businesses on these endeavors.

The CHAIRMAN. Well, thank you very much, Melissa. And thank you to all of our panelists for your testimony. I know that everybody in the audience would really like to ask them a lot of questions, but sadly, under our hearing format, you are not allowed to do that. [Laughter.]

The CHAIRMAN. I am the only one who gets to ask questions. We should have had people running around the audience asking you to write down any questions so I could do that. But we do have a number of questions. And Melissa, I want to start with you because how much—are you now producing all of the energy that it takes to run your operation?

Ms. FLORIO. It is a depends answer. So if we are running all our machines and auxiliaries, we can—we are about 65 percent that we are able to just run on the renewable energies. If we are only running, you know, half of them, we are—all of this is under that umbrella.

And like I said, so one of our engineers does run around and he is like, it is a little cloudy out today, you know. But for the most part, it is seeming to be, like I said, you know, because we have only been live for about a month since that resource finally changed over the meter. But what we can tell, we are—it is going to be very beneficial to us to reduce our costs.

The CHAIRMAN. That is great. So as a company that is actually not in the energy business, what would you say to other small businesses who are looking at their energy costs, who may not know a lot about how to save money on energy, and what do you think is the impediment and how would you suggest we encourage them to look at finding some ways to lower their costs?

Ms. FLORIO. You know, honestly, it is getting them into events such as this, other small businesses, where the resources are around the room to explain what is available. You know, that is how we learned years ago even about, you know, the energy efficient analysis that that can be done on your plant.

You know, so we, you guys—oh gosh, you age yourself, but maybe 12 years ago we had installed, you know, motion detector lights. So, you know, all that kind of stuff, those low lying fruits like I had said. So, you know, you could start there on those low things where you can implement them.

But to look at something big, and if they don't have their own roofs, that is a problem. Or, you know, if they are leasing and someone will—is willing to do that. You know, knowing that—ReVision Energy, they are clean energy, the USDA is there, and they will take the time to explain the programs to you.

It is just getting over the hurdle of the small business owner asking for help and knowing that, well then—like I was shocked, like there is help out there when we made that call, and it was a relief. It was a relief.

The CHAIRMAN. Yes. Great. Thank you. So, Sam, can you follow up on that and talk about how you start helping a business get started in the process. So you hear from Ambix. What do you do to start the process?

Mr. EVANS-BROWN. Yes. So because I am not the person who directly provides that assistance, I will encourage anyone who is curi-

ous to go talk to Gabe and Katherine because they can get you on the journey.

But the long and short of it is we put you through an intake, that we have an intake form on our website that asks some very basic questions. And then, the first step is really to start gathering together your energy bills.

Because larger businesses—and I am sure Ambix is a small business, but we are really talking about businesses that are even smaller, that are generally speaking, you know, often sole operators or just have a few staff. Those are the folks that often wind up in our circle.

So it is—so it really is, we are just talking about getting a year's worth of your electric bills together so we can get a sense of how much can be saved and that is where the journey really starts. Depending on the type of project that they are pursuing, often the next step is to get an energy audit done and there are—CDFA does have funding that can cover 75 percent of that cost.

And so, connecting them with those programs and sort of holding their hand to get that accomplished. Then you get your scope of work that says here is, you know, here is your target list of the lowest hanging fruit and let's go find, you know, match make with the various funding streams that are available and determine the best path forward for you.

And that actually is, I think, the thing that we are—that we pride ourselves at Clean Energy New Hampshire in being able to do is we try to be funding stream agnostic. Obviously we are the technical assistance grant recipients at Clean Energy New Hampshire, and so any time that we are spending helping a business with REAP is as time well spent for us.

But that said, if REAP is not going to be a good fit for the project that the business is looking for, we try to hand them off to whoever the right service provider is, and then if needed, give a little pokes and kicks along the way to make sure that that project keeps on the track. So it is a lot of one on one and it is a lot of handholding.

The CHAIRMAN. And Dan, just to follow up as somebody who is actually there, comes in probably after Sam and Clean Energy have done that evaluation of what can be done. How do you help those small businesses?

Mr. WEEKS. Thank you, Senator. There are a lot of small businesses out there, as we have heard. And so very often we will be the first call that a business makes. And we have learned over the years that to the extent we can replicate some of the great technical assistance that organizations like Clean Energy New Hampshire and the agencies provide, that helps our customers, it helps us make projects happen.

So at this point, I am leading our commercial business unit. I get to work with a team of now very experienced commercial designers, consultants who are well versed in the different technologies. Obviously I have focused on solar, but there is energy storage and EV charging and thermal solutions for heating and cooling.

So that consultant will do that site visit, often just taking that initial query. We will walk through the facility. We will inspect the roof. We will check the structural, check the roof age, or maybe there is adjacent land.

We will get into the electric panel, determine the capacity. We will review the electric bills, and we will be able to provide then a roadmap of options, solar being the most common, but oftentimes businesses are looking for a broader electrification set of solutions and then proceed step by step.

We are always thrilled when we can work with Clean Energy New Hampshire and the USDA. Megan on my team I know is in very common touch with your office there at USDA. And so, we have also been honored to complete REAP applications for dozens of projects, maybe up to 100 at this point over the years.

But it is—as Sam said, it is sitting down, understanding their needs, trying to—because they are busy running the business. They are expert in that. If we can lessen the load a bit and be expert in the energy part of their challenge, that makes their life easier, and it helps us because we are a construction company at the end of the day, actually build projects.

The CHAIRMAN. So is the biggest impediment knowing what is out there, having the capital to invest to go forward, the paperwork? What—each of you, what do you think is the biggest challenge and how could we move the ball?

Ms. FLORIO. All of the above. It would be knowing it was out there. And then once we did—I mean, we are a small business. We do have our accountants that we have to provide all that information, so we had it all in hand, but we didn't know what was needed until we did speak to USDA and Tracy.

And then with ReVision Energy, they walked us through everything. You know, they handheld us through the whole process of, give us your electric bills. And, you know, and so we would pdf them off to them. Give us your—okay, here you go.

Give us your—and so, if we didn't have that, we would have gave up because there would have been a machine down, there would have been something, and we just would have—we would have—we just would have gave up.

You know, just because the paperwork is definitely an impediment. Like understanding the process is definitely an impediment. And I consider myself an intelligent person but—I have some common sense to figure things out, but yeah, I would definitely say.

The CHAIRMAN. So Sarah, what can we do to make that easier?

Ms. WARING. Yes. Thank you, Senator. I would add that not only is the capacity of the small business—often it is not their expertise to walk through this sector. This is an entire sector, right, with technologies that are underused or underutilized, and we have experts in the sector in an industry that, as Dan has said, is trying to build its own workforce, right.

And is trying to build behind folks like them the workforce that will come in and be able to do this on behalf of all of us so that it is not just, as Sam sometimes says, it is not just affordable, it is automatic, right.

So capacity for small businesses is one challenge. Capacity within an agency is another challenge. I want to thank you and the delegation from Vermont and New Hampshire for recognizing that staffing at Federal agencies is one of those issues that helps us to loosen the pipeline and get more projects over those final hurdles of paperwork and environmental processing and so on.

But I also want to share that time is sometimes an issue. We have always had a delay between an application and the start of construction, and that time period, particularly as you have heard the number, the raw numbers of increases of applications, that time delay sometimes puts businesses out an entire season or a half a year from where they expected to start recouping those energy costs and savings.

There are a few other challenges that I think are important to mention for the particular program that we run, and I am really pleased that our other Federal agencies are here today and can speak to businesses about their programs.

Our Rural Energy for America Program does not serve nonprofits because it is a business, for profit business specific program. Similarly, leasehold improvements, as Dan mentioned. When a small business does not own its own asset that we can build on, we have to really just think about their equipment that we can help with, right.

We have to really narrow that window for how we can support those small businesses that are leasing. And then the other challenge with many Federal programs is that for small businesses that do not have cash flow, these are reimbursement based grants.

So the work needs to be done upfront, and the Federal cash comes in later. And that is because we are stewarding taxpayer dollars to make sure that the project is completed as planned and that all of the metrics are met. That being said, it is often difficult for our smallest businesses to front the cash, and that's a challenge.

The CHAIRMAN. And—do you want to add to that, Dan?

Mr. WEEKS. Just briefly, thank you. I did want to underscore the financing side of this. We are very concerned that REAP grants are now timed out where in the last couple of weeks of applications that I know your team will be very busily processing.

But that has been a game changer for especially small farms and really small rural businesses that while the tax credit is great, you can carry it back three years thanks to IRA and forward up to 20, a lot of businesses just don't have the profitability and therefore the tax liability to be able to take the tax credit or only very slowly over time and value of money, that is obviously diluted, therefore.

So having reaped grants has truly been a game changer, especially at that elevated 50 percent level. And we very much hope there is a way to bring—to continue that program after September. We are also eagerly awaiting the results of debt vehicles, reduced interest rates, etcetera under the Greenhouse Gas Reduction Fund. Right now, the cost of capital, Wall Street—prime rate is 7.5 percent. That is difficult to make projects——

The CHAIRMAN. We are waiting for that, too. [Laughter.]

Mr. WEEKS. So hopefully those interest rates are also coming down as I think they are. But with these last couple of years, these historically high rates, it has been difficult to finance, and getting access to cheaper capital can make all the difference.

The CHAIRMAN. So I know that the SBA just announced a program to try and focus more on financing for businesses that are interested in doing energy savings or green energy projects. Has that—have you talked to anybody who is aware that that has hap-

pened? And is there more that needs to be done to let people know about that initiative? Yeah, Sam.

Mr. EVANS-BROWN. Well, I mean, I would simply ask, you know, if you are at the owner of an ice cream shop in Bethlehem, you know, how do you learn about a notice of Federal funding opportunity, right.

So it is—I think the answer to that is yes. And really, it comes down to, in my opinion, just needing more boots on the ground that are aware of and understand the funding landscape and that doesn't just have to be, you know, technical assistance providing nonprofits like mine. I think what you have heard is that—and really how I envision that this will all work in the future is that it will actually be the businesses like ReVision and, you know, construction companies that understand this landscape and are doing that handholding.

So I think ReVision really is a model for how this—how the energy transition is going to happen. That they will become the easy button for their clients. But really what that requires, it requires all the service providers to want to get out of bed and do things differently than they were doing the day before and really lean into these new technologies.

The CHAIRMAN. And what is your experience in the private sector in terms of financing? Have you—I know that it has been challenging to get community banks and other private sector financing to take a look at the benefits that may come with energy savings projects. I don't know, Sarah, you want to respond to that?

Ms. WARING. Yes. Senator, thank you for that question. I mentioned in my testimony that there are a number of other programs that Rural Development in particular has that can provide a part of that capital stack.

One of the ones that I am most excited about is one that I hope that very soon New Hampshire will have a pot of capital to be able to play with. It is called the Rural Energy Savings Program.

The Rural Energy Savings Program is under our Rural Utilities Service, and it is a re-lending program where we lend capital to a utility, a green bank, or an eligible applicant through our de-lending programs, and they then re-lend that capital into the community at 5 percent or below.

So always below market rate. It could be matched then with our REAP grants. So what could happen is a small business could get some of that low interest capital to support those startup costs and those initial costs—could get the grant reimbursement for 50 percent of their project. That capital investment and that injection into our lending community is something that can then revolve and revolve and revolve and stay here.

And so, what I am really excited about is that there are other utility programs, there are other lending programs that allow the Federal money not just to be invested once, but to be invested again and again through a lender intermediary.

We are hopeful that we will be able to see some of that coming to New Hampshire in the coming months. And I am really proud of the fact that in addition to the REAP program, the RESP program and some of the others, we were able to just announce around $7 billion in two of the electric programs nationwide.

And those are the largest investment in electrification since President Roosevelt, right—in rural electrification. So the agency is really trying to move that Inflation Reduction Act funding on the front end of the time period that we have as much as possible.

The CHAIRMAN. That is great. Let me just—I know Dan wants to weigh in here, but let me also point out that SBDC, in addition to the Community Development Finance Authority, are here. I don't know if—I thought somebody from SBA was—is here too. Yes, thank you. I was looking right at you.

So they also can talk about some of these new financing mechanisms that SBA is looking at to try and help small businesses. Dan, you wanted to weigh in.

Mr. WEEKS. Thank you, Senator. Just one final comment on the financing side. These federal, lower cost financing options can be game changing, and they can be very difficult to navigate.

The CHAIRMAN. Yes.

Mr. WEEKS. And we have—unfortunately, there is sometimes a bit of a collective groan that goes across our team when we have an opportunity to help a client obtain Federal funds. The compliance requirements, especially around procurement—which is getting better. Starting in early 2025, we will be meeting domestic content requirements for many if not all of our solar projects, which unlocks an additional 10 percent tax credit, which is terrific.

The CHAIRMAN. Yes. Explain that so that everybody knows.

Mr. WEEKS. Yes. Under the Inflation Reduction Act, it returned the standard ITC investment tax credit to 30 percent instead of 10 percent or 0 for residential, and it also created bonus tax credit opportunities, a 10 percent additional tax credit if domestic content starts at 45 percent.

The CHAIRMAN. And domestic content means?

Mr. WEEKS. Sorry, domestically manufactured. All of the manufactured goods, the solar panels, inverters, etcetera, need to be domestically manufactured. The full supply chain is coming onshore, which is tremendous, and all of the raw materials, the steel for racking, etcetera, need to be 100 percent domestic.

So we will start meeting that next year and that will ease some of the challenges. But I am thinking of a project down in Keene. We have been waiting a year to get a waiver to unlock Federal funds that are crucial to allow that project to go forward and we just can't get the status of that waiver.

The CHAIRMAN. And you need the waiver because there is not enough domestic content?

Mr. WEEKS. Because today's components aren't quite at——

The CHAIRMAN. Yes.

Mr. WEEKS. And there are at least three different domestic procurement thresholds. This is the Buy America Act.

The CHAIRMAN. Right. Right.

Mr. WEEKS. Buy America, Build America, BABA. So navigating some of this has been a real pain point and it has unfortunately discouraged some projects from going forward. I think it will get better, but I would be remiss if I didn't say from an implementation standpoint, any time we can simplify, standardize, it will result in projects getting built.

The CHAIRMAN. Yes. No, I appreciate that and the challenge. I can remember the debate that we had over the whole domestic content, the Buy America provisions, and everybody wants those jobs here in the United States.

But sometimes that creates other impediments that business has to deal with. And so, the waiver provision was designed to try and help address that. But as you point, it doesn't always work, so.

Mr. WEEKS. Thank you.

The CHAIRMAN. Let me, I want to go back to the Circuit Rider issue, Sam, that you talked about, because as I think you are aware, one of the things we tried to do was to make the Circuit Riders a national initiative, because it has been so successful in New Hampshire, and it provides such assistance.

And it is something we have heard as we have traveled around the State from small businesses and from communities, actually. And so, we had language that we had hoped to get into the farm bill, which has been stalled in Congress, but our language didn't actually get in. But talk a little bit about what you think the ability to have that be more widespread would do for businesses and for communities across the country.

Mr. EVANS-BROWN. Yes. I love getting to talk about the Circuit Rider program, so happy to happy to take some time to do so.

We at Clean Energy New Hampshire have focused on municipal projects because we think that community projects have the potential to be transformative beyond just the energy savings that accrue to the taxpayers in that community, but also because they are so high profile.

And generally speaking, so first of all, not only when you put solar on the roof of a library or weatherize a fire department, not only is there is that—a bigger facility that likely is going to get more bang for the buck than going after, you know, a residential project.

But it is a public investment that in New Hampshire in particular you then go to town meeting and there is a warrant article that is going to have a fiscal note and every voter in that town is going to be confronted with the beneficial economics of the clean energy transition when they make that vote.

And what we have seen is that these projects pass, typically pass by overwhelming margins in their community. And then you have got solar on the roof of your town hall and there is very—there is now a robust academic literature on how the seeing that in your community every time you drive by has the effect of those individuals in the community then wanting to consider that—making that choice for their own residence.

So, we think that municipal projects are transformative, which is why we have focused on the municipal space to begin. But, you know, going back to my initial comment, what I have experienced in my own personal life is that there is—this is needed at absolutely every level.

And I am someone who I have spent my entire adult life studying these issues and wanting to pursue sustainability in my own life. And I will tell you that even as someone who is, you know, certifiably obsessed with this stuff, it is not easy to do.

I remember getting in an argument with an electrician who was telling me I was installing the wrong plug standard for my electric car charger and having to Google, sitting there in the garage to show him that, yes, I want an Ima 1450, not the 630 as—you know, as I ordered.

So, and just imagine if you are a regular person, an electrician tells you are installing the wrong plug, they are just going to say, okay. So, I think the, the, the world I am hoping we get to is one where you don't have to have that argument because we truly are driving towards a transformed market where people don't have to figure this out. We can figure it out for them.

The CHAIRMAN. Yes. And I know that we are getting close to the deadline that we gave to people for when we would stop the official testifying, testimony, and open to the resource fair. But I wanted to go back, Dan, to your testimony because you talked about three key challenges.

Net metering, which has been a challenge since back when I was in the State Senate, which has been in the 90s, so a long time ago. This is a challenge that the Legislature and I, and I know we have some Legislators in the room, so thank you for joining us. But this is a challenge that the Legislature has been dealing with session after session.

And I appreciate, I think we have representation from some of the utilities in New Hampshire here, some of whom have been more supportive of net metering, expanding net metering than others.

But I just wanted to make sure that folks understand that this is an issue that as we look at how we expand the localization of energy, it is going to be more and more important. And to the extent that we haven't addressed it in ways that encourage our uses of a variety of energy sources, it gives us a disadvantage.

And several of you have talked about how we compare to some of the other New England States on some of these issues. And so, I think it is important to point out that some of these challenges, we have got to—all of these challenges we have to work on together, but that is one that is really a threshold issue as we think about how to expand the ability of small business to increase their use of energy saving technologies. So, I don't know if you want to add to that.

Mr. WEEKS. Thank you so much for lifting that up, Senator. I joined the ConVal solar car team in the 90s. It has been a passion of mine for a while as well. And as I track New Hampshire's progress, I have to say that our net metering policy is the single biggest factor that explains why in New Hampshire today, a little over 1 percent of our electricity comes from the sun.

South of the border, it is 24 percent. Maine used to be the laggard at half of 1 percent five years ago. They are now at 11 percent. It is State policy that are determining that and that are causing us to unfortunately forego the thousands of good paying jobs, the billions of dollars in private investment supported by Federal tax credits that New Hampshire can realize if we can get this right, as well as some of the related challenges around, you know, permitting and interconnection.

Just I think it was on Tuesday this week got the frustrating news that one of our projects that is actually going to support, intended to support low income communities not too far from here was blocked on the permitting front because there were some local objections to how it looked.

And we are increasingly seeing that as solar farm is treated as stringently, sometimes even more than a shopping mall in terms of deemed 100 percent impervious surface, required to go through a level of local and State and sometimes Federal permitting review that just arguably isn't appropriate to that type, mindful of the actual environmental impact and benefits.

So we are still at the very beginning of the energy transition in New Hampshire, and working is a company that spans other States, it is painfully apparent just how much of our own investment in new jobs are going across State lines. I really want to build our team here more and more.

So, the final comment I would make is I do think while net metering is a State policy issue, I do think there is a significant positive role the Federal Government could play.

The CHAIRMAN. Good. Talk about that a little more. [Laughter.]

Mr. WEEKS. Thank you. We are already seeing billions of dollars on the related issue of interconnection flow into making substation upgrades, it is happening in Massachusetts and other States, that will enable that State to go from 24 percent to its eventual goals of 100 percent, of which a significant part will be solar. Not all, but a significant part.

Right now in New Hampshire, as I mentioned briefly, projects can wait multiple years to commence studies, which then cost $50,000 to $75,000 just to know if it will cost you a quarter of a million, or a million or more dollars to interconnect.

The Federal Government can significantly reduce those costs to help transition our grid from a 20th, even 19th century electric grid, to a 21st century grid that is designed and capable of integrating these distributed resources. That would be a game changer.

And likewise, I think perhaps, you know, incentivizing conditioning Federal funds on State streamlining permitting processes and perhaps even interconnection procedures. We see other places where the cost of solar is a bulk a watt.

Australia is a great example. In the U.S., it is three bucks a watt. It is small scale and most of that is soft costs. We have got a lot of room to improve there.

The CHAIRMAN. We do. Clearly, as you all point out, we have a lot to do in order to take advantage of the opportunities that exist, and from paperwork to policies, and making sure that people understand what is out there to help them.

But I very much appreciate your willingness to be here today, your contribution to this conversation, and it will go on because there is clearly a lot that we have to do. And I want to officially point out that the record will remain open for two weeks for additional questions and statements from the committee.

And I want to—I guess I have to—Sean, I need to close this out, do I, before we do the resource fair? Okay. So thank you all very much for joining us. I will now officially declare this hearing closed.

So but before you go, one of the exciting things about this morning is that we have so many staff from so many agencies, both federal, State, and nonprofit who are here to be able to provide some assistance. And we did a similar kind of hearing early—back in the spring on trade, and we had a resource fair at the end of that.

And one of the things that struck me the most, I wasn't able to stay for the resource discussion, but was how much of it was people in the different organizations talking to each other. Because it is not something that you all get to do on a regular basis sometimes. And so, I think that is a real benefit, to have everybody in the same room to know who the players are, and to be able to access the information from them.

So let me really share with all of you how much I appreciate your taking time this morning to be here. The—it is one of the advantages that we have in New Hampshire, that we do have the ability to work closely together. And let me just recognize a number of the organizations who are here. We have, along with Sarah, we have USDA's Rural Development staff. The EPA is here to talk about tools like Energy Star for small businesses.

Clean Energy New Hampshire with Sam is here. We have the Small Business Administration and the SBDCs who are here. They assist not just on energy issues, but a whole range of small business issues. We have the Department of Energy's Onsite Energy Technical Assistance Partnership here.

And the IRS is here, which as I said to them when I came in, I really appreciate your being here because it is one of the top constituent concerns, calls we get in our office.

We have the Community Development Finance Authority here, as we talked about earlier. And I think you just—you told me we have two other people who signed in at the last minute. Yes, DES and New Hampshire Saves.

So, thank you so much to all of our resource partners for being here today, for sharing with the people in the audience. And anything that we can do to be helpful in getting the word out, I hope you will let us know. And as I introduced all of my staff who are in the room, let them know we will do everything we can to get the word out.

So, again, thank you all so much for being here.

[Applause.]

[Whereupon, at 11:54 a.m., the hearing was adjourned.]

Statement for the Record
Ranking Member Joni K. Ernst
U.S. Senate Committee on Small Business & Entrepreneurship
"Small Business and the Clean Energy Economy: Lowering Costs and Increasing Resilience"
September 13, 2024

Thank you to Chair Shaheen for holding this hearing. When we discuss clean energy, it is important to highlight how far America has come. Over the past 15 years, the United States has led the world in reducing carbon emissions.[1] While that has occurred, China has become the top emitter of greenhouse gas emissions.[2] As we all know, China is one of the biggest threats to America's national security and frankly, to the global climate. In Iowa, we are consciously aware of the threat of China buying up farmland.

Under the prior Administration, American energy thrived and when President Biden took office on January 20, 2021, gas prices in Iowa were $2.33.[3] However, poor decisions by the Biden-Harris Administration caused gasoline prices to soar to an all-time high during 2022, with the highest recorded average being $4.76.[4] Under the Biden-Harris Administration, energy prices have plagued hard-working Iowans and Americans who work on their family farms or just need to drive their kids to and from school.

In theory this hearing is meant to highlight how great the clean energy economy is for small businesses and everyday Americans. But I really must question if this is the case. While the Biden-Harris Administration proposed reaching 100 percent carbon pollution-free electricity by 2035,[5] it appears that in order to make this feasible, renewable energy annual installation rates would have to nearly double what was seen in 2023, which was already the highest year on record.[6] And here in America, due in large part to the poor policies of this Administration, our supply chains that make new renewable energy project possible remain extremely vulnerable. An

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[1] Robert Rapier, *Why the U.S. Leads the World in Reducing Carbon Emissions*, FORBES, (Feb. 4, 2024), *available at* https://www.forbes.com/sites/rrapier/2024/02/04/why-the-us-leads-the-world-in-reducing-carbon-emissions/.
[2] EPA *Global Greenhouse Gas Overview*, *available at* https://www.epa.gov/ghgemissions/global-greenhouse-gas-overview.
[3] IOWA DEP'T OF AGRIC. AND LAND STEWARDSHIP, *Fuel Price Report through 12-29-21*, *available at* https://iowaagriculture.gov/sites/default/files/Fuel%20Reports/2021/Fuel%20Price%20Report%20through%2012-29-21.pdf.
[4] Ben Lefebvre, *Why Expensive gasoline is here to stay,* POLITICO PRO, (July 25, 2022), *available at* https://subscriber.politicopro.com/article/2022/07/as-us-refineries-close-high-gasoline-prices-to-become-constant-threat-00046083?source=email; AAA, *Gas Prices – Iowa Average Gas Prices*, *available at* https://gasprices.aaa.com/?state=IA.
[5]Press Release, WHITE HOUSE, *President Biden's Historic Climate Agenda*, (Jan. 27, 2021) *available* at https://www.whitehouse.gov/climate/#:~:text=As%20part%20of%20that%20vision,pollution%2Dfree%20electricity%20by%202035.
[6] Lori Bird & Joseph Womble, *State of the US Clean Energy Transition: Recent Progress, and What Comes Next*, WORLD RESOURCES INSTITUTE, (Feb. 7, 2024), *available at* https://www.wri.org/insights/clean-energy-progress-united-states.

example being that only about 20 percent of the demand for transformers, a critical component of our energy infrastructure, could be fulfilled by domestic supplies.[7]

When Vice President Harris cast the deciding vote for the Inflation Reduction Act (IRA), she put the climate, American energy independence, and national security at risk. The Administration claimed that the IRA's $370 billion investment would lower energy costs and provide billions of dollars in investment in clean energy.[8] But when you look at it, who does this investment actually benefit? Certainly, not American small businesses. Instead, the IRA continues to subsidize China.

Rather than supporting American companies, the Biden-Harris Administration allows IRA grants to purchase Chinese goods, made by companies on the Biden-Haris Administration's banned entity list.[9] For example, one of the biggest investors in solar panels is Sequoia Capital, a venture capitalist firm that also invests in numerous companies on the Biden-Harris Administration's banned entity list.[10] Sequoia Capital profits from the People's Liberation Army through AI development, drone production responsible for genocide in China, and their investment in TikTok.[11]

In theory, the IRA contained a slew of domestic manufacturing tax credits for our Nation's solar supply chain. However, with more than 80 percent of solar panels being produced in China, and even the Commerce Department noting that solar modules using Chinese-sourced materials represent three-quarters of U.S. module imports,[12] we must ask ourselves: if the Biden-Harris Administration's policies won't allow us to get the critical minerals we need right here in America, are we not just subsidizing Chinese products at the expense of our own small businesses and environment?

In closing, it seems to me rather than ensuring a better climate and clean energy, the Biden-Harris Administration has given China the ability to continue to pollute the world and block American small manufacturers' access to the critical minerals they need to produce these clean energy products here in the United States.

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[7] Lori Bird & Joseph Womble, *State of the US Clean Energy Transition: Recent Progress, and What Comes Next*, WORLD RESOURCES INSTITUTE, (Feb. 7, 2024), *available at* https://www.wri.org/insights/clean-energy-progress-united-states.

[8] WHITE HOUSE, BUILDING A CLEAN ENERGY ECONOMY: A GUIDEBOOK TO THE INFLATION REDUCTION ACT'S INVESTMENTS IN CLEAN ENERGY AND CLIMATE ACTION (Jan. 2023, Version 2), *available at* https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf.

[9] 15 CFR 744 - Supplement No. 4 to Part 144, Title 15, (Sept. 2024), *available at* https://www.ecfr.gov/current/title-15/subtitle-B/chapter-VII/subchapter-C/part-744/appendix-Supplement%20No.%204%20to%20Part%20744.

[10] Letter from Mike Gallagher, Chairman, and Raja Krishnamoorthi, Ranking Member, H. Select Comm. On the Chinese Community Party, to Roelof Botha, Managing Partner, Sequoia Capital, and Don Vieira, Partner and Global Chief Policy officer, Sequoia Capital, (Oct. 17, 2023), *available at* https://selectcommitteeontheccp.house.gov/media/letters/letter-sequoia-capital-its-prc-high-tech-investments-examine-implications-announced

[11] *Id.*

[12] Lori Bird & Joseph Womble, *State of the US Clean Energy Transition: Recent Progress, and What Comes Next*, WORLD RESOURCES INSTITUTE, (Feb. 7, 2024), *available at* https://www.wri.org/insights/clean-energy-progress-united-states.

The Senate of the State of New Hampshire

107 North Main Street, Concord, NH 03301-4951

Senator Jeanne Shaheen, Chair 9-12-24

Committee on Small Business & Entrepreneurship

United States Senate

428A Russell Senate Office Building

Washington, D.C. 20510

Senator Shaheen,

Thank you for your invitation to attend the Committee on Small Business & Entrepreneurship's field hearing regarding the clean energy economy in Manchester on Friday, September 13th. Unfortunately, my schedule does not allow me to attend the hearing but I did want to take the opportunity to provide some thoughts on the topic.

A clean energy economy will provide predictability and affordability for energy costs for our small businesses. More sources of clean energy produce more competition in the marketplace, and more competition in the marketplace produces more stability and efficiency for consumers. Production, competition, stability, and efficiency are good for the overall development and adoption of clean energy in our state.

At the same time, while increasing the availability of clean energy, we must also consider critical upgrades to our energy grid in order to ensure the new energy sources can get out to consumers. Without investments in grid modernization, many of the benefits of the clean energy economy will be missed. Grid modernization is the keystone in the wider project of the clean energy transformation. I look forward to working with you to guide these investments and keep the clean energy economy moving forward.

Thank you again for the invitation to attend the field hearing of the Committee on Small Business & Entrepreneurship and for your attention and leadership on the clean energy economy.

Sincerely,

Rebecca Perkins Kwoka (avc)

Senator Rebecca Perkins Kwoka

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