

**AACC SEED Center Webinars**

**Transcript of Webinar**

**The Community Colleges Leading Rural-Based Green Economy Initiatives Webinar**

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*Transcript by  
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TODD COHEN: Welcome, everybody. We've got an absolutely fantastic discussion today: Community Colleges Leading Rural-Based Green Economy Initiatives. My name is Todd Cohen. I'm with the American Association of Community Colleges.

And as we as a country continue to think about how to revitalize the economy's rural areas, we tend to notice that students from rural areas that need to be prepared for good careers can often get lost in the mix, lost in the discussion.

And while it's true that some rural areas have fewer marketable assets to attract jobs, attract businesses, and certainly in many cases fewer marketable assets to retain some of the smart students that you have, we are seeing more and more communities, especially those in rural areas, begin to build around this concept of energy independence and long-term sustainability as a means for achieving healthy communities and good jobs – jobs with family-sustaining wages.

And so today we're going to talk about some of the challenges faced in rural areas in building that green economy but really more focused on the opportunities that exists. And, of course, central to all of this conversation today are the role that community colleges play in these efforts and really what it looks like when a community college is doing this well.

I'm going to turn it over to Brian for a couple of housekeeping items.

BRIAN KEATING: All right, great. Thanks, Todd.

Again, my name is Brian Keating, and I'm your webinar facilitator today. I'll keep it brief but if this is your first time joining us, just a couple things I want to point out real quick to you.

The first thing is you'll notice the main area of your screen is being taken up by the presentation slide area, and that will be your main focus throughout the webinar today.

Also, at the top of the – top of the – top left-hand side of your screen you'll see an attendee list, and that just shows you who's joining us today. We had a couple hundred people register, and we appreciate you joining us.

And then, at the bottom left-hand side of your screen you'll see that there is a chat room. And many of you are already typing in who you are and how many of you are joining us and where you're from, so thanks for that.

Just a little bit more about submitting questions – you're going to be able to submit your questions and comments throughout the webinar today. Now, right now that chat is open. In a moment I'm going to close it down, but you'll still be able to ask questions or make comments at any time. As you can see there, you just type it into the text field at the bottom of your screen and then click the little chat icon, or even just click "enter" on your keyboard – hit enter that is – to ask a question or make a comment.

If you could let us know to whom the question is directed, that would help us out. And then you'll actually see that question show up on your screen. But it is private, so the presenters will, you know,



know what questions have been asked; other participants won't see what you type. So feel free to, like I said, ask questions or make comments at any time.

Now, again, if you haven't yet done so, go ahead and, in that chat room, type your name, the name of your organization, your location, and the number of people who are attending today, if you're attending in a group, so that way we know you're here and some of your circumstances. And we appreciate you doing that.

And so without any further ado, I'm going to go ahead and turn things over to Todd.

Todd, take it away.

MR. COHEN: Sure. Thanks. And I do; I encourage folks to really – to post your questions at any time. This is intended to be dynamic back and forth conversation, so if you get that, we will field that at the end.

Just a couple words about the hopes of this conversation, brought to you by the Sustainability Education Economic Development Initiative. SEED Initiative is really the first national coordinated strategy to support community colleges specifically in building a green economy, created by the American Association of Community Colleges, AACC. We hope you visit us at [theseedcenter.org](http://theseedcenter.org).

And then we're happy today to collaborate with ATEEC, the Advanced Technology Environmental Energy Center, and ATE center out of Eastern Iowa Community College District that aims to foster a network of educational communities supported through public and private partnerships, ensures human health safety and global sustainability.

To learn more about ATEEC, please visit their site at [ateec.org](http://ateec.org). And we're happy also to have Jeremy Pickard, associate director of ATEEC, on the phone. He may jump in at some point too.

So just before I turn it over, let me just say a couple words about today, sort of the burning platform, if you will, the underlying themes that we're going to hit on – the first being that the green economy, and particularly renewables, energy efficiency, alternative fuels and sustainable agriculture really do provide enormous potential to revitalize rural areas, from both a jobs perspective but also from a financial savings perspective.

And yes, we acknowledge that there are things that need to happen for that to come to fruition, but what you're going to hear today is – certainly, from a federal level and, you know, at a state level and regional level as well, that it is a very viable still investment, and those investments are happening today.

Secondly, really, how colleges are taking on new roles – colleges in rural areas in particular – beyond preparing workers for careers in a number of green sectors. But really, what we're seeing now in rural areas, again, where economic growth opportunities are few and far between, are that these colleges are even more deeply engaged with industry, with economic development and with the broader community as the community plans for its own sustainable future.



So looking at the cities now that are planning around sustainability, community colleges are increasingly at the heart of those conversations, and we've got a couple of those here today that we're happy to highlight.

And then, finally, what does all of this look like on campus and in the classroom for students, instructors, sort of getting at the elements of quality alternative energy? And in particular, actually what we'll focus on really is sustainable agriculture and those programs.

So really, I'm honored actually to have three amazing speakers today. And I'll start first with Judith Canales, administrator for rural development, business and cooperative programs at USDA. Judith has over 20 years of experience working at the national and local levels in federal local government. Her expertise really involves rural and urban development, community development, economic development.

In 2009, Judith received her second presidential appointment from President Obama, named as the first Hispanic woman to serve as the administrator for rural business and cooperative programs in USDA. And she's responsible for overseeing the national rural business and cooperative programs portfolio for USDA, and I believe actually, at least at one time, was a faculty member at a community college in Texas.

Anyway, one of the reasons we wanted the USDA is they're going to highlight some of the programs that are available for communities. And not all the programs – grants, loans and those kinds of programs – are directly for community colleges necessarily, but certainly programs that are of value to institutions and individuals that have partnerships with community colleges, so important to take that information back to the community.

Secondly, Timothy Crowley, president of Northern Maine Community College – Tim has been with the college for 25 years, from being a student to vice president and academic dean, to president. And under his leadership, Northern Maine Community College really transformed itself around green technology and sustainability. It got a new Renewable Energy Center of Excellence that is adjacent to the campus with classroom and hands-on lab space for wind technology, solar, biomass and residential energy efficiency projects.

And I believe Northern Maine Community College had New England's first associate's degree in wind technician program, and I want to say in its first year, last year, had, if not a hundred percent placement, had pretty close to that, which in this economy is really impressive.

But the reason we wanted Tim today is he speaks very eloquently about the community college as an economic development engine in rural America, and we just thought that that message from leadership was really important to this conversation today.

And then, finally, Robin Kohanowich, sustainable agriculture coordinator for Central Carolina Community College in North Carolina – Robin is a coordinator and lead instructor for the sustainable agriculture program at the college. She's developed and taught organic farmer education and training curriculum and worked directly with aspiring and beginning farmers for over a decade.

And we received an increasing number of inquires and comments across the country about the starting – initiating farm-based renewable energy and sustainable production programs. And we often send them



to Central Carolina Community College because it's such a great model and they're doing it really well. And we wanted to have Robin kind of drill down and talk about what goes on in a program like that.

So without further ado, I'm going to turn it over to Judith. Thank you so much.

JUDITH CANALES: Thank you very much. Thank you to Todd Cohen, the American Association of Community Colleges. Thank you to Jeremy Pickard for your leadership as well. And we appreciate very much the opportunity on behalf of the USDA Rural Development to serve on this very important webinar.

And thank you also for mentioning the fact that I am a part of the community of community colleges, first of all as a graduate of Southwest Texas Junior College in Uvalde, Texas and then later on, years later, becoming adjunct faculty of – it was my – that was my night job in teaching for our community college for seven years, as well as doing some work for our workforce training and development program within Southwest Texas Junior College, which at the time we were looking at, as you all can well imagine, how we can be better sources for support of getting more trained students to become engaged in the businesses and of course being a great partner for economic development.

So I am a part of your world and will always be, and I appreciate this chance to work with you all today.

So I'm here on behalf of USDA and to speak in regards to Rural Business and Cooperative Programs. That is my agency. I've been on board now for going on three years as part of the Obama administration. And one of the very important efforts that we are doing within Rural Business Cooperative Programs is our whole emphasis on renewable energy and, in particular, how it relates to sustainable agriculture.

As you will note here on the slide, sustainable agriculture actually being addressed 20 years ago practically, from the 1990 farm bill, and the term meaning an integrated system of plant and animal production practices having a site-specific application that will satisfy, over the long term, human food and fiber needs, environmental quality, make the most efficient use of nonrenewable resources, sustain the economic viability of farm operations, and enhance the quality of life for farmers and society as a whole.

Seeing that definition, but now let's put it into practice, and in particular as we talk about what we do at USDA rural development, the more recent farm bills, 2002 and then in particular 2008, provided for the support of renewable energy as well as energy efficiency, loan and grant products, meaning we have the funding to support businesses – small businesses located in rural communities, and we also have the funding to be able to support small producers who are also obviously in rural communities. And I'm going to speak to some of those programs that we support.

Before I go any deeper into one in particular, I will be highlighting the Rural Energy for American program. I want to just highlight some of the examples that we have mentioned here as to how this becomes practical, because this is where community colleges are strong supporters and, I believe, can provide the technical assistance.

I believe that you also can provide that guidance in working on some of these applications, but even more so too, how to assist these producers and business owners with the business plans that are needed



to also help them think about what – how they want to grow their business, how they want to also, within that business plan, think about expanding that business, or even, as some examples, there may even be small business start-ups.

Some examples that we have provided here in regards to some of the businesses that have been supported with the Rural Energy for America program, for example, are the financing of mobile slaughter units to work with small producers. As there's more and more demand for knowing where your source of food comes from, they, these naturally raised livestock market products, are also very key to this.

There may be another example where there is a business plan or feasibility study for organic milk to develop value-added dairy products. Another example is providing that technical assistance and funding for training small-scale vegetable producers. So these are all very important examples.

And another is anaerobic digesters, which are of course working with dairy farmers so that they can figure out a way to not only resolve an issue that is an environmental challenge, but the anaerobic digester produces energy as well. So these are very important areas that I want to be able to focus on for today.

In continuation, the Rural Energy for America program, what are the requirements for this program? The requirements are that the business is located in a rural area unless you're an agriculture producer. The agriculture producer can be located in any location, but we do, of course, try to emphasize, of course, the producers who are, of course, located in rural areas.

Must be commercially available. So when we talk about that, we are speaking about the technologies that include wind, solar, biomass, geothermal, hydropower and hydrogen-based sources. The projects can produce any form of energy, including heat, electricity or fuel. So these businesses, as well as energy efficiency applications, are critical for that business owner or for that producer to help them reduce their bottom line costs.

How, again, you can be of assistance is to provide – is to understand this application process, is to work with that producer, to work with that business owner. Sometimes there can also be, regarding the community college, an actual financial opportunity here. You may have a small business development center or a technical assistance center that provides a service – a fee for service. I know that those are certainly options for community colleges.

And so these are ways that community colleges can engage more strongly in providing for that technical assistance as well as being able to help that producer or that business owner with the business plans or even the feasibility studies. And there is financing for those particular opportunities.

To continue on, learning a little bit more about the Rural Energy for America program, there is a grant program and a loan program, and there is also a combination of loan and grant. On the loan side, that means it's a guaranteed loan. It's a loan that is guaranteed – the loan is made by a bank and the loan guarantee is made to that bank. That enables that bank. And, predominantly, most banks that work with Rural Business Cooperative programs are usually community banks. That is very much our world.



What we have been doing has been to try to encourage more and more banks to lend under the whole notion of bringing access to capital to rural communities. And so for example, under this guaranteed loan, the actual cost here should not exceed – or the loan should not exceed 75 percent of the project cost.

So that means that there would be another – there would have to be another source of funding into that particular project. It may be the equity that the actual business owner provides, or there may also even be state and local energy efficiency programs. More and more states are engaging in this type of effort.

Renewable energy, the minimum request is \$5,000. The maximum request is 25 million (dollars). So you can see that's a pretty broad scale. And what we are seeing in the renewable energy has been projects that are in the, usually, 1 million (dollars), \$2 million range. They may also bring in a grant component as well as another funding source that puts for a very solid funding source for that particular effort. In addition to that, energy efficiency is also – again, minimum request would be 25 million (dollars).

And so that is a pretty broad example of where the ability to finance these projects is there, and as we're seeing the producers and the business owners think more and more – small business owners, we see the examples where it may be a store – it could be a grocery store that needs a new refrigeration unit. It could be a gasoline station convenience store that needs new lighting.

All those are examples of where energy efficiency comes into play because it becomes a very important decision-making on the part of that business. They are seeing that they may have – their own facility may have some aspects that are antiquated. How can they become more energy efficient in how they add on new structures so that they can reduce their energy costs? So that has become a very important aspect for our program.

In addition to that, on the grant side, the grant is – in this case, cannot exceed 25 percent of the project cost, and the criteria is also there for both renewable energy and energy efficiency. The maximum grant on renewable energy is \$500,000. And in regard to energy efficiency, it's \$250,000.

We believe that there is no farm too large or too small to capture efficiency and contribute to the economy. There is a place for both, and we support small operations that feed the community, and we also support large farms that of course feed the world. That's what we do at USDA.

So to continue on, and more examples of what we're seeing: This is one example that I had an opportunity to visit personally in Vermont. And this is an anaerobic digester under the Rural Energy for America program. And in this particular instance it is also an important fact that USDA entered into an agreement with the dairy industry to work towards the goal of reducing greenhouse gas emissions by 25 percent by the year 2020.

And so we are looking at this as an opportunity to support that very important goal of meeting the improvement for the anaerobic digesters and allowing for these farms to be able to produce not only energy but to resolve the topic of environmental concerns.



Continuing on, another example in the Rural Energy for America Program is a farm that I also had the chance to visit with, anaerobic digester that is going to be not only providing for that resolution of the environmental responsibility, but it also will be providing for the production of electricity for this community region of Rutland, Massachusetts. So it's another important area.

Continuing on is an example of a cooperative back in Missouri, Sho-Me Cooperative, that is using biomass pellet production using seed and native grasses that are part of the feedstock. And in this regard, again, another important aspect of how they're able to produce energy and also reduce their bottom-line costs.

Continuing is another example in Missouri in which a \$20,000 – (inaudible[23:24]) – grant. So again, \$20,000 has a huge impact. And in this regard, providing for a BTU biomass – an 800-BTU biomass stove to heat four chicken houses to be able to reduce energy costs for that particular operation.

Continuing on, last year, 2011, we were able to finance \$91 million worth of loans and grants to be able to serve 1,800 projects in a diversity of types of projects. But in addition to that as well, we leveraged bringing in other funding, be it equity or other funding sources, from states and local governments that are making this contribution. They're seeing that it merits – because it becomes a win-win for energy efficiency and renewable energy in the community.

And over the lifespan of our program, the Rural Energy for America program, what we have seen – I gave you the 2011 money amounts, but 2003 to 2010, what we saw was an important coverage of almost 6,000 projects throughout the United States, very diverse in the – very kinds of businesses that we are wanting to see community colleges train their students under workforce development and other aspects so that you become that viable partner at the local level.

And, ultimately, we have within Rural Business loan guarantees. We also have our revolving loan funds. All of this is available on our website.

And I'll feature the last slide, which is a slide in which you can look at visiting our website, remember that – I know this is a national call. We operate through our state offices that are 47 state offices throughout the United States. Every state, though, has coverage. Get to know who your state office is. Get to know who our business program director is.

And we also have an energy coordinator in every state. That is the go-to person. So if you've got a project in mind, this is where you can learn more about how USDA rural development can be a strong partner for you on the financial aspect, as well as providing technical assistance and information as to how we can work together at the local level.

We encourage this partnership and we look forward to more activity from our community colleges that are highly located in rural communities. Usually you are the premier educational institution in a rural – in a rural setting. We recognize that. And for that reason we're very pleased to have been on this call today.

Thank you, and I look forward to future questions.

MR. COHEN: Thank you, Judy. I appreciate those words.





And also, just for folks again, all of this will be available – I mean, I know there was a lot of great information there. This will all be available for you, and you see that on the left-hand side of your screen, where to get that.

But let's keep going.

And Timothy?

TIMOTHY CROWLEY: Well, thank you very much. And, Judith, thank you for the great information. Rural development has a tremendous impact in Northern Maine. We worked with them for years, and very excited about the opportunities that you laid out today.

It's my pleasure to take a few minutes here to talk a little bit about the activity in Northern Maine in terms of supporting and developing the green economy here. And I'd like to first begin by giving you a little bit of sense of where we are.

If you look at the map before you of the state of Maine, Northern Maine Community College is one of seven campuses in the Maine Community College system, and we're located not too far from the northern border. Aroostook County is the county that we are in, and we – on the right-hand side of that screen you can see the outline of the county.

The opportunities here are that it's a very heavily forested area, and that certainly is a plus for us but it creates some challenges for us too. We have a small community college here. We have about 1,200 matriculating students and we serve another thousand people or so on our campus through noncredit training, which is primarily done at different business locations within our community.

This area has seen some pretty dramatic changes in the last 20 years, and one of the most challenging things for us is the change in the population here. We have seen a dramatic decline in the number of people living in this region. In the 1990s we saw the closing of Loring Air Force Base, which was a strategic air command base here, which really is something that the region struggled to recover from. The redevelopment of that facility continues to be a challenge today because we are so remote.

But the population decline is getting to a point where we feel we're almost at a critical mass. And if we don't make some changes in the way we're doing things, then we feel that the economic rebound here will not be what we all hoped that it would be.

Sometimes that type of challenge can create change, and we think that there is an opportunity before us, particularly with renewable energy, to help take another look at how we relate to the resources, the natural resources, that are around our communities and connect with them to provide new and different opportunities for the people that live and work in this region.

This area is very heavily dependent on natural resources, as I mentioned before. Forestry and farming have been the mainstay of industry here for a long time. And with forestry, the paper industry, which has had some very challenging times in the last 10 years, is struggling. The woods industry, in terms of manufacturing and producing materials for building, has been relatively challenging as well.



So the farming component of this region is – we’ve been reduced from what used to be – probably 60 percent of our economy was in farming, producing potatoes and broccoli. A lot of the family farms have gone away. We’ve gone to larger farms but fewer acres and greater yield on the farms that we have. But the farming industry is changing as well. And with some change we think will come opportunity, but farming and forestry we think are also key to the future for us but maybe in a different way as we look at the development of new products and services in this region.

The region has had a declining population. We also have an aging population. I guess everybody has an aging population. But ours is a little more significant. This may be a little bit hard to see, but if you break the population in this region down by age categories, it’s very difficult to find an age category – and if you look at traditional community college students that may be in their mid-20s, we continue to see a decline in projections of all of those categories in terms of the number of young people that are going to be available in the workforce in this region.

The other thing that’s happening to us is that the age of our students in the community college has gone up. We’re looking at people that are now 27 or 28 as the average age here. And when a 28-year-old, or a family member with one or two children with a student here, decides to leave the region because there is no job, then we’re not just losing one person who is maybe 18 or 20, decided to leave and see the world after they graduated, but we’re losing a family.

So the continued decline in the population is creating challenges for the economy, and if we aren’t – if we don’t respond rapidly and aggressively to this, we lose the critical mass we need to build an infrastructure that would support new business. So again, with this decline it’s a little bit frightening but it’s also an opportunity.

The residents and business in this area have struggled for years with very high electricity and very much dependent on heating oil, heating fuel for our region. And 80 percent of the homes in this area use heating oil. We live in an area that has abundant forest products, yet we are tremendously dependent on heating oil.

About a year-and-a-half ago, a group was convened that was called Mobilize Northern Maine. It was convened by the local Economic Development Commission, and we created from that a cluster of groups that would look at energy in this region and created an energy cluster to determine what the opportunities might be to help reduce the cost or the dependence on heating oil.

And that clearly began to show us some opportunities for the use of wood products for heating. Now, heating with wood in Northern Maine is not a new idea. Everybody has a wood stove somewhere. But the technology is changing to do that, and the opportunity is changing to use new equipment.

So we decided we would get involved with the renewable side of this and create programs that would support renewable energy, and certainly looking at biomass and wind and solar are areas that we thought was important, so we started down that road.

We began with the creation of our wind power technology program. And it was important for us to get out of this region to do that. And by that I mean to take more of a global look at this. So we had been



working with a local utility. Maine Public Service was the utility that was creating a wind farm in our region.

And we partnered with the Maine International Trade Center and sent to folks on a trade mission to Europe to look at what opportunities were there in terms of wind power technology and what we could bring back to help us create a program.

We did this at a time when the state really did not – was not excited about us spending funds to send faculty to Europe. So we raised the money to do that. And that has proven to be tremendously beneficial to the college and to the program over time, but we did create a wind power technology program which now serves roughly 18 new students a year.

The first wind power plant in New England was created in this county at Mars Hill Mountain. And this is a shot of Mars Hill Mountain with 28 turbines that provide electricity basically into the grid that – and most of it is utilized south of here in the Boston market. But wind power in this region, because we are rural, because we have strong wind, and because we are accepting to it, has begun to grow.

In addition to residential and commercial wind, offshore wind in Maine is a very hot topic at this point, and the University of Maine is heavily involved in the research that is moving offshore wind forward. We are positioned well to support the need for technicians, both at the commercial end of this and, as well, on the wind-based or the sea-based portion of this once it evolves. The University of Maine at Orono at this point is heavily involved in that research and development.

Our strategic elements here for the development of alternative energy in this region are laid out before you. I won't touch on all of them but did want to say that in terms of innovation, the initial concept for us was to – with the University of Maine at Presque Isle – and that's what the UMPI is. There is a branch campus right in this community with us. And then the University of Maine at Fort Kent and the University of Maine – basically they have the higher-education groups involved in this region take the lead in terms of developing programs and supporting research and development.

And initially this was – this concept was to be really virtual, that we were going to create an inventory of resources that we had and then begin to disperse those resources. But the more we worked on this, the more we felt that we really had to have a site where we could implement this.

So the college went forward and created the Northern Maine Center for Excellence and Alternative Energy Education and Training, and that really has provided tremendous education and development for this region in terms of education training and products.

In this facility we are providing wind power – residential wind power training. We have a turbine that we use that is located at this center that generates about half of the electricity. We have biomass capability in this facility, and solar as well.

It becomes a model for students who are interested in seeing how this works – students that are in the elementary and middle school levels. We also obviously are teaching classes in this space, but it has provided a tremendous amount of, I would say, excitement around alternative energy. And we felt that



by establishing a facility, a place that people can go and see the technology working, it would help develop it.

We really are hoping that all of this work is going to bring us to a reduced cost for energy in this region. The use of biomass, wind, better use of the energy that we have, and solar, will move us in that direction and support a stronger manufacturing base. That's the goal, and this center is providing some leadership and direction for that.

As I mentioned a little bit earlier, we traveled to Europe to talk about opportunities, and we've had support from the communities, the European community, particular people that are looking to generate and to sell products to support the wind industry. So the college has received several donations, tools that are being used in our programs to support our efforts to train students to work on turbines. And so that has been something we didn't expect but certainly something we were very eager and willing to accept.

In addition to the wind piece of this, we are working with what's called the Efficiency Maine Trust, and we received a grant to provide weatherization training on our campus, so BPI certification is available here. And the advantage to putting this all in one facility is that it really – it really puts renewables in front of – all of the renewables that we are working with in front of people all at once. And we think that's been a tremendous advantage.

If you just look at the housing stock in this region, 70 percent of the homes in this region were built before 1975. So the idea of teaching people weatherization skills and making better use of what we have and the technology that's available to tighten homes up and save energy that way.

The training that we are doing in that area, after having this available for only a year, has grown from 15 to students to over 80, and we expect that more and more contractors will use it. So we've really tried to bring together what we're doing with wind power, with solar, with biomass, into one facility, and we've used private-public resources. We have used grant resources to do it.

The region has to move to an energy-based, or an alternative-energy-based, platform if it's going to support the development of industry in this area, and we think biomass particularly has the greatest opportunity to do that and we have begun to move in those directions.

At this point there are 11 different facilities that have introduced biomass boilers. This campus is one of those. And that is creating jobs. That creates jobs in using forest products in a different way: It creates jobs with transportation, it creates jobs for new technicians with new skills, and it reduces our dependency on foreign oil. So the wood-to-energy program, through the forestry department, is having a very solid impact here, and we're pleased to be able to support that.

So I appreciate your time. I've run a little bit over, but look forward to answering your questions as we get towards the end of the seminar. Thank you very much.

MR. COHEN: Thanks, Tim.

And, Robin, you're up.



ROBIN KOHANOWICH: Hello, everyone. Thank you for inviting me to participate. My focus will of course be on agriculture, but here at "Green Central" we have renewable energy programs as well as the kind of energy conservation programs that were just being talked about.

The photo here is of our newest buildings. And I'll go back just so we can look at those. That's our Sustainable Technologies Building, and there you can see some of the technologies that we can train students on for renewables. And in that building are our programs, the sustainable ag program classrooms, the green building program, and then we have a biofuels and renewable energy program, as well as a Natural Chef program.

And so you can see the other new building. These both came on campus between 2009 and 2010. We were just able to open them up in the fall of 2010.

So we are a small campus. We just doubled our size by adding those two buildings. And we are able to serve, on this campus, about 300 students, and we are part of a three-county system. So I just want to give you kind of a picture of where we are first and then talk more specifically about our program.

This is sort of a bird's eye view of part of our farm, taken from the top of one of our buildings, and I'll talk a little bit about how we, as a program, got started through real grassroots efforts from our community. And I'll talk a little bit more about that as we move forward.

But just to show you where we are, Chatham County is right in the center of North Carolina, and we are, as I said, part of a three-county college. And so Chatham, Lee and Harnett Counties, right below those are part of Central Carolina Community College.

We are one of two campuses with a farm. However, the Chatham campus farm has been the longest operating, and we are the one campus that has the curriculum program in sustainable agriculture. Our West Harnett facility has a farm, and we're trying to build that program in that county.

As far as rural, we are not especially rural. Chatham is a large county, as you can see there, but we are on the edge of some of our more developed counties in the state in some of our larger cities. So we are very close to Raleigh, Durham and Chapel Hill. And so that is the community that we are operating in as far as markets and the population of – a lot of the population of students that we are drawing from.

And so this slide is just giving you a picture of just our county, the opportunities for students who are interested in farming to see who's out there practicing sustainable agriculture. And then we are surrounded by, as I said, those other counties that have pretty active sustainable agriculture farms and food-related businesses.

So the program here at Central Carolina Community College in Pittsboro was initiated through, as I mentioned, the community. At the time, in the mid-'90s, there was an increased population shift to Chatham County from the areas surrounding Durham and Chapel Hill especially, where people were buying more land and wanting to do either homestead farming or were interested in organic and sustainable agriculture.



And the desire to emulate the already established farmers in this area was kind of tapping into the individual resources of those farmers. So it was the efforts of people who were already farming in our area, along with other organizations already established in the region.

And these are some of our partners here, which folks have been our partners for quite a while to come to the community college and say there are needs in this community along the lines of organic agriculture education that are not being met in other ways, and can we try to do that at the college?

And so by partnering with Central Carolina Community College and our small business center, they offered a continuing education class that was primarily focusing on, you know, looking at a small-scale farm, say five to 10 acres, and diversified vegetable production. So markets in our area have been established since the '80s, and so those types of market-focused diversified farms were, you know, pretty well established, and that was sort of the example that these new folks were interested in emulating.

So starting in '96 and going on for several years, this process of curriculum development around a continuing education program – so a noncredit program – was developed through this group.

So it was these organizations here: so North Carolina State University; NC A&T; as well as our organic farming association, Carolina Farm Stewardship Association; and the North Carolina Rural Entrepreneurship Through Action Learning Enterprises; and American Livestock Breeds Conservancy, all which are across the state in their activity and somewhat across several states, but also centered right here in Chatham County so that their work, as well as farmers in our community, consumers, and educators, along with the community college, got this program up and running as a noncredit program.

And the folks who were farming at the time, a lot of those were coming from the same type of population that we are seeing in our students, and that is they were people who did not grow up on farms. And so the curriculum that they developed was one that addressed the needs of students who they knew would not have the kind of skills that somebody who grew up on a farm would have.

And so one of the key aspects of the program was that they recognized the need for a research and demonstration facility for this hands-on type of agriculture so that students who had never driven a tractor or operated a tiller or, you know, planted a seed even had the opportunity to do that right here on campus.

So the development of the program over time, through continuing education, showed the community college that there was an interest in this type of education, and the interest was coming from a diverse population. However, the age of the students tended to be in that late 20s range, and that was typical for continuing education.

And then, when we began a curriculum program, that's kind of been our steady age, but I'll show you some trends a little bit later about how that has changed a little bit over time. So the student farm component, which was established, again, in the '90s and then as the program developed, the farm developed, as well.

We really were looking for the opportunity for students to just be able to learn about soil science and walk outside and take a soil sample and, you know, learn about organic crop reduction by actually doing



it, and learn about marketing by participating in marketing opportunities. And so we have a CSA on the farm.

And this is just another shot of our farm and students that are involved in an organic crop production class.

So with the support of students continuing to be interested in studying sustainable agriculture, even though it was a nondegree program, we went through the process of determining whether it would be a viable curriculum program. So between 2000 and 2002, we went through that process surveying prospective students, employers and just folks in the area to see whether we could run a curriculum two-year degree in sustainable ag. So that happened in the fall of 2002.

And we had two – excuse me, we had 15 students attend that first year as degree students. And you can see there that they did come from around the country. CCCC had the first Associate of Applied Science in sustainable ag. And so we were drawing students who had been doing things like WWOOF-ing and interning on farms and really seeking something more organized in their education about agriculture.

And so we were drawing from not just North Carolina but from around the country. So in this semester you can see there that we are still pulling from around the country for our students. The students right now – just a quick snapshot – we have about half and half, male and female, in our student population. And then the second little chart there: The number of students that come to us with a four-year degree already is a large percentage of our population, and that has been true throughout the time that we've been offering this program.

The smaller number is often students just right out of high school. And then that third, some college. So student may start a four-year degree and complete two years or so and decide that's not what they want to do.

And the new population that's starting to increase for us are veterans, and so we are starting to see, since about 2008, that the veteran population in our student population has increased. So this is – we have 76 students enrolled this semester, and that's just a little snapshot of the breakdown.

MR. COHEN: Hey, Robin, just about 30 seconds warning.

MS. KOHANOWICH: OK.

OK, so I'm going to move quickly to some other slides because you all can look at slides, and just talk a little bit about best practices.

Some of the things that we do really allow for the hands-on, and I think that students really benefit from having large blocks of time allowing classroom and hands-on in the same day. And because a lot of our students are working students, that benefits them to come once a week and get both of those activities in, and then perhaps be working the rest of that time.

Am I out of seconds here?



MR. COHEN: Yeah.

MS. KOHANOWICH: OK.

MR. COHEN: No, no, I appreciate it. We can get, Robin, to the – we've got some questions and answers and we can get to some of this too.

MS. KOHANOWICH: OK.

MR. COHEN: Great. I appreciate that.

For all of you, we've got about five minutes, and I know we've got some questions to hit. Let me start – and so I'd ask the presenters just to keep your answers as concise as possible.

But let me start with you, Judith. Somebody had asked – and you definitely highlighted this. I mean, you could say a little more about, broadly speaking, some of these grants programs, you had mentioned going through the state energy office. The community college, what should the actual process be?

I mean, is it go there and get the information there? Is there somebody there that's available, then, to provide information about who's eligible and how that money gets send down back through the small business or other individual?

MS. CANALES: OK, I want to be real clear: When I speak about a state, I'm talking about the USDA Rural Development State Office. So these are federal employees, not state government. I'm talking about USDA. We have a state office and we also have local offices.

So it's always important to find out who the state director is as well as the energy coordinator. That would be the first line of thinking. And then also, a lot of times our local offices, there's one close by these community college locations. They may even be in the same community. That is critical to building that relationship and learning more about the opportunities of rural development.

What I would also offer to you, that in regards to the students, that there are going to be also internship opportunities that we would love to be able to partner with you in that regard. So let's park that one – let's include that one as well.

And then the other thing, I saw that there was questions about who's eligible. The eligible applicants are small businesses located in rural America. And when we speak of rural America, we speak of communities of a population of 50,000 and below. And then in regards to the small producers, they can be located not necessarily in rural America – we work more in rural America but the can be in any location.

MR. COHEN: Great. Thanks.





And somebody asked – this is really sort of for Tim and Robin and probably may have to be the last question, actually, but part of building the green economy – and you both highlighted this, but it's understanding the consumer interests and demand in those kinds of products and services.

And I'm wondering if you could talk a little bit about what you found in you own communities – you know, Robin, I guess, from the food side and the demand for folks that want sustainable organic food. And then, you know, Tim, maybe more on the renewable side. What's you sense from the community folks you're interacting with and their demand for this?

MS. KOHANOWICH: Well, we have seen an increase just real steadily since, I would say, 2006 and then really bumped up in 2008, where people's awareness has really increased about, you know, just access to local food and then wanting to ask for it and being happy that it's available in the community. So a lot of support and increasing steadily.

MR. CROWLEY: There's been – in renewables there's been a tremendous demand for wood pellets, and there's one manufacturing plant in this area that does that, and they have grown dramatically in the last two years.

Pellets are being used – pellets and wood chips are being used in the commercial boilers that are being installed in this region now. The next step for us is the – is the residential market, and that requires us to create a financing plan for people to make that shift, and also training the technicians that are going to be able to service those commercial heating furnaces that would go – I'm sorry, residential furnaces that would go into homes.

So the interest in terms of the product – the development of products, primarily pellets and chips, has been pretty significant in the changes in the heating systems that we are supporting and training for people has grown steadily. So we hope that that growth will continue.

MR. COHEN: Great.

You know, I think we could have had at least 10 more minutes of Q-and-A but we did promise folks we'd get them off in an hour. So I want to thank the presenters for your time and your great information.

Robin, I apologize we couldn't get to all of this, but – all your slides, but this will be available for view in a number of different places. I think you see that information on the left. And to the extent that folks from – these presenters or some of their staff are available for additional information follow up, we will present that as well.

I want to say thank you to everybody else that participated in here. We appreciate it.

Two last things you see on the screen there. We really encourage folks to attend AACC's Workforce Development Institute. It's a fantastic conference. It's coming up in January. It covers all sorts of industry sectors but there's actually going to be a full day green job SEED workshop where you're going to hear from some of the best colleges across the country on how to do a lot of this, what we're talking about here.



We actually have some free tickets available for that. I encourage you to email that, what you see there, that name, Katya (sp), on that email there. And then ATEEC, our partner, has their technology workshop. It's SEED – not SEED, a different thing but it's a great professional development opportunity for instructors and faculty from community college and high school on a host of clean energy topics. So I urge you to look into that as well.

And thank you again.

MR. KEATING: All right, great. And this is Brian Keating. And stay with us if you can for the next few minutes. We're actually going to go ahead and transfer over now to a feedback session. So we'll go ahead and, in a moment, end the audio conference portion of today's webinar, but we'd just love to get your feedback.

So as you can see, many of you are already voting there, but go ahead and rate the audio quality of today's webinar in that poll there that you see at the top of your screen. Right below that there's another poll where we'd love to get your feedback about the overall quality of the poll.

Just in case you weren't able to download the slides earlier, that's at the bottom of your screen. And then on the right-hand side you'll see two polling windows, actually open chat windows. One asks you for any general feedback about the webinar and the other asks about any new topics that you'd like to see covered.

So we'll leave this webinar room open for the next few minutes. Please take a moment now if you'd like and go ahead and let us know any feedback that you have. But we'll leave it there in terms of the audio for today, and thanks so much for your participation. We look forward to seeing you on future webinars. Have a great day, everybody.

(END.)

