



Ulster County GREEN NEW DEAL

April 2021 Plan

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LETTER FROM THE COUNTY EXECUTIVE

I am very excited to share this Green New Deal plan with our residents and businesses and invite you all to join us in our work.

As we continue to emerge from the COVID-19 pandemic, laying the foundations for a green, equitable economy is one of the most critical steps we can take to rebuild, realign, and reinvigorate our communities.

We have urgent and immediate work to do to stabilize our climate, transition to clean energy and protect and regenerate our natural resources. And we have equally urgent work to undo generations of economic and environmental injustice and create opportunity for everyone.

A Green New Deal connects these twin urgencies, generating prosperity by committing to do the work at scale. Laid out over a nearly twenty-year time horizon, with a suite of immediate actions, intermediate targets, and aggressive but achievable long-term goals, this package of policies and investments represents the right level of ambition and determination to tackle the challenges before us.

There are many ways to get involved. Everyone in the County can sign up for solar energy through our Solarize Ulster campaign. Businesses can get help cutting their energy costs and connecting with other green businesses through our Green Business Champions and Green Economy Network programs, launching later this summer. Jobseekers can contact our Career Center for help launching a green career. And the work is just beginning here. We will need a sustained community effort over the next twenty years or more, and we need everyone involved.

Please join us in meeting this incredible challenge – and opportunity – head on, together.



Patrick Ryan

Ulster County Executive

WHY A GREEN NEW DEAL?

Our communities are at a crossroads. We are facing multiple, intersecting crises, both environmentally and economically.

The impacts of climate change are already here and growing. Left unchecked, the changing climate will produce ever more severe storms, heat waves, and droughts, threatening our infrastructure, our food supply, and all the natural resources we depend upon and enjoy. Globally, we could be seeing catastrophic sea level rise, flooding, and the displacement of millions of people by the end of the century.

At the same time, a legacy of structural economic injustice and increasing inequality have left nearly half of Ulster County households struggling just to get by in the present, let alone to plan for an increasingly uncertain future. The COVID pandemic has laid bare just how profoundly these inequalities impact our entire community, while further stressing families that already lived close to the edge.

We could continue to muddle on with incremental measures to address these generation-scale challenges. That would be the wrong approach, and we would continue to fall short. To meet the urgency of the climate challenge and redress decades of injustice, we need a national mobilization on the scale of the original New Deal.

Over a few short years in the 1930s, the New Deal created more than 20 million jobs, building more than 600,000 miles of highway, 124,000 bridges, and over 40,000 schools, as well as power plants, airports, and public buildings. Civilian Conservation Corps workers planted billions of trees and created 8,000 parks and thousands of miles of trails. The Tennessee Valley Authority brought electricity to homes and farms across seven states, spurring development in rural areas that had been left behind by a rapidly changing economy. The New Deal programs transformed American life and built infrastructure we still rely on today.

We have a similar chance now to translate all the work we need to do to stabilize the climate into opportunity and prosperity for all our residents. And the opportunities are massive.

Truly confronting the climate crisis will require a complete overhaul of the ways we produce and use energy. We need to install more than a million solar panels, upgrade our energy grid, and add battery storage to back it up. We need to improve our aging buildings and roll out carbon-free ways of moving people and goods. We also need to prepare for the impacts of climate change, ensuring that our roadways and landscapes are resilient to storms and flooding, helping our farmers adjust to changing conditions, and protecting all of our natural resources.

The needs are both high-tech and hands-on. And they can generate thousands of jobs here in Ulster County.

To take just one example, crucial to meeting our climate goals will be retrofitting our homes to high energy efficiency standards and replacing aging furnaces with carbon-free heat pumps that provide both heating and cooling. These upgrades will save the average homeowner, renter, or landlord around \$200 each month or more on energy bills. They will also make homes more comfortable, less drafty in the winter and cooler in the summer, while improving the indoor air quality, in some cases even reducing emergency room visits and lost days of school or work to asthma attacks and respiratory illnesses. Completing this work on Ulster County's 75,000 homes – most of which were built before any energy standards existed at all – will generate more than 2000 jobs per year over the next twenty years. It is a win-win-win solution that we must invest heavily in.

As we take on the work of this transformation, it is essential that we do not repeat the economic injustices of the past. Core to our work must be translating opportunity into prosperity for all our residents. That means centering and continually broadening education, job training, and small business development opportunities and ensuring that the jobs created in the green economy are high-quality ones, paying family-sustaining wages. We also need to redress the environmental injustice that has left low-income communities and communities of color struggling with the highest burdens and least access to our bounty of natural resources.

In 2019, New York's nation-leading Climate Leadership and Community Protection Act (CLCPA) put a stake in the ground for the transformation we need to make: 70 percent renewable energy by 2030, reaching 100 percent by 2040. Massive investments in clean energy and energy efficiency, resulting in an 85% reduction in greenhouse gas emissions statewide by 2050. The CLCPA also centers environmental justice, requiring 35 percent of state clean energy funds to be invested in historically disadvantaged communities.

Those are big goals, and they are what's needed. Now it's up to communities on the ground everywhere to make it happen.

A GREEN NEW DEAL FOR ULSTER COUNTY

The phrase *Green New Deal* entered public dialog as an ambitious federal policy agenda addressing the intersecting crises of climate change and structural inequality. It was adopted by Governor Cuomo to describe a series of ambitious renewable energy and climate action goals, many of which were later formalized in the CLCPA. Since then, cities from New York to Los Angeles and Seattle have developed detailed Green New Deal plans specific to the needs, resources, and opportunities in their communities.

To our knowledge we are the first county in the country to adopt a Green New Deal. As the interface between state and federal governments and the towns, villages, and cities where our residents live and work, counties are *ideally* placed to translate policy into progress.

Because while we need policy frameworks -- like the CLCPA -- at the state and ultimately the federal level to set standards and mobilize resources, the real work of transformation happens on the ground.

We need to site renewable energy facilities, constructing them in ways that best fit into our rural and urban landscapes without compromising our farms and forests.

We need to update building codes and permitting and inspection processes so that new buildings are high performing from the get-go and older ones are brought up to high efficiency standards.

We need to modernize our transit systems, electrifying our bus fleets, making our streets safe for walking and biking, and creating new, more flexible carbon-free ways of getting around.

And we need to equip our workforce with the skills to do all this work and educate the next generation of students to thrive in the coming green economy.

All of this work is local, carried out by counties and by municipalities, community colleges, and school districts with county support.

Counties are able to take both a broad and highly detailed look at infrastructure, housing, environmental, and economic needs and translate state and federal policy into real projects that get done. For example, over the past several years as part of the Hazard Mitigation Plan process, Ulster County's Department of the Environment has worked with communities across the County to identify bridges, embankments, and culverts that flood repeatedly or are vulnerable to erosion. We are now mobilizing state, federal, and local dollars to work our way through the resulting list of several dozen infrastructure improvement projects.

In addition to all the hands-on work that happens in county planning boards, transportation councils, economic development agencies, and workforce development boards, counties are also conveners and catalysts, bringing our many stakeholders together to share information and best practices. And – as we learned while COVID-19 unspooled in our communities – we are the leaders our communities look to in a crisis.

In order for this transformation to happen everywhere in the country – and it must happen everywhere if it's going to be successful – counties must be at the leading edge of implementation.

Over the past two years, Ulster County's Green New Deal efforts have focused on two areas: greening our own County government operations and laying the foundations for opportunity for our workforce in the green economy. We've started our second major solar project and ordered our first electric buses. We've continued to invest in energy efficiency within our own buildings and built out a network of electric vehicle chargers that serve both County vehicles and the public. And together with SUNY Ulster and an array of community partners, we've started the Green Careers Academy to offer our residents accessible, affordable training for clean energy jobs.

Now with this comprehensive Green New Deal plan, we are turning our attention outward to spur transformation across our community. In the pages that follow, we've laid out an ambitious agenda across three areas:

Accelerating the transition to clean energy, so that by 2040 we've achieved transformation of our electricity supply, buildings, and transportation systems.

Building the equitable green economy, connecting all our residents to economic opportunity, and creating the educational and business development foundations to place Ulster County at the leading edge of the new industries this transformation will spawn.

Conserving our natural resources and building our resilience to the impacts of our changing climate, guiding our development with sound conservation priorities, and ensuring that all our residents enjoy the bounty of our natural resources.

In each area, we map progress across three time frames: immediate efforts that we will launch this year, aggressive interim targets for 2025 to guide our work, and long-term transformative goals to reach by 2040. The programs we will launch this year include a Solarize campaign to enable all our residents and small businesses to access solar energy, green internships for young people and career changers, a water solutions accelerator to jump-start innovative businesses in the water sector, and a climate smart farming network to help our farmers benefit from practices that promote soil health while helping to reverse climate change.

This framework is built on Ulster County's resources and strengths to meet Ulster County's needs. But we hope it will also serve as a starting point for other communities to develop their own approach towards meeting the challenges and immense opportunities that face us.

GREEN NEW DEAL PROGRAMS	IMMEDIATE ACTIONS	2025 GOAL	2040 GOAL
Accelerate the Transition to Clean Energy	<ul style="list-style-type: none"> • Launch programs to help residents, businesses, and municipalities access renewable energy and energy efficiency • Begin Community Climate Action Planning process • Oppose new fossil generating plants in Ulster County 	<ul style="list-style-type: none"> • Community Climate Action Plan lays out a road map to a clean energy transition for the county • High efficiency and standards for new buildings • Retrofit and weatherize 1000 homes per year • 20% of Ulster County’s fleet are green vehicles • Conduct electric micro-transit pilots 	<ul style="list-style-type: none"> • 100% renewable electricity in-county • All county residents have access to zero carbon transportation • 50% percent of homes and buildings retrofitted, with the remainder by 2050
Build the Equitable Green Economy	<ul style="list-style-type: none"> • Launch Green Careers internships and job matching program • Establish Green Growth Fund for infrastructure • Combine low-income home weatherization with job training opportunities • Launch water solutions accelerator • Require prevailing wage for County renewable projects 	<ul style="list-style-type: none"> • Launch the Center for Climate and Environmental Solutions • Pilot green careers education in middle and high schools • Create Green Jobs Corps service year program • Connect more than 1000 green employers and jobseekers 	<ul style="list-style-type: none"> • One quarter of Ulster County’s businesses and jobs are green • The Hudson Valley is recognized as a center green economy innovation • The Center for Climate and Environmental conducts cutting edge research, launching businesses and training workers
Conserve our Natural Resources and Build Resilience	<ul style="list-style-type: none"> • Assess all County roadways for storm resilience • Develop natural resources inventory to guide housing, energy, and development planning • Convene climate smart farming network • Promote low impact tourism 	<ul style="list-style-type: none"> • Trails network development prioritizes connecting our population centers to walking and biking • Complete inventory of resilience projects • Relocate key critical infrastructure • Redevelop foreclosed brownfields • Install EV chargers at all trailheads and develop car-free access to the Ashokan Rail Trail 	<ul style="list-style-type: none"> • Complete infrastructure resilience work • 100 percent of Ulster County farmers utilize climate smart practices and benefit from participation in state/federal carbon sequestration incentive programs • All our population centers are connected to our trails network

ACCELERATE THE TRANSITION TO CLEAN ENERGY

The most urgent step towards stabilizing the climate and protecting our environment is to accelerate the transition to clean energy. By 2040, we need to be getting 100% of our electricity from clean, renewable sources. We need to retrofit our homes and businesses into healthy, comfortable, high-efficiency spaces that no longer need to burn fossil fuels. And we need to ensure that all of our residents have access to clean, efficient electric transportation.

Ulster County has been advancing our own clean energy transition for many years now. When our new solar array on the site of a former tire dump at Quarryville comes online in late 2021, we will be more than halfway to meeting our goal of using 100 percent locally-generated renewable electricity to power the County's operations by 2030. By the end of 2021, we will also have our first electric buses on the road, and we will add to our growing network of publicly available electric vehicle charging stations throughout the County.

Now we need to bring that same transition process out into our communities. Through programs we launch in 2021, we will help our residents, our businesses and organizations, and our municipalities access local renewable electricity, decarbonize their operations, and save money on energy. We will also start a Community Climate Action Planning process to map out our clean energy transition for the whole County.

By 2025, we need to be well underway with that transition. Our 2025 goals include high-efficiency, low-carbon standards for all new buildings and scaling up the retrofit of existing buildings to 1000 homes per year. We will also establish voluntary energy benchmarking for public and commercial buildings to help building owners and their users track progress towards meeting climate goals.

On the transportation side, we are updating the County's Green Fleet policy to establish a 2025 goal that 20 percent of the fleet will be green vehicles, with at least 20 percent of those battery-only. We will also ensure a County-wide network of electric vehicle chargers is available to all residents and pilot electric micro-transit in at least three communities in the County. We also need to ensure that our communities are safe and accessible for the most low carbon transportation options of all – walking and biking.

By 2040, our electricity transition needs to be complete, so that 100 percent of all electricity used within the County comes from zero-carbon renewable sources. Similarly, 100 percent of all County vehicles will be powered by renewable fuels, and all County residents will have access to zero-carbon transportation, including safe and accessible walking and biking in all of our population centers. The intensive work of retrofitting our homes and businesses needs to be at least halfway complete, with the capacity built to complete it by 2050.

The programs we will launch in 2021 include the following.

SOLARIZE ULSTER

Renewable electricity is the foundation of the clean energy economy. Ulster County currently gets less than ten percent of our electricity from local renewable sources, mostly solar and small hydro. We get another few percent from large wind and hydro installations further north.

Community solar allows anyone to purchase solar electricity from solar projects located here in Ulster County and the Hudson Valley, without having to install anything at your home. The community solar provider works with Central Hudson to bill the customer for solar electricity rather than the utility default supply.

IMMEDIATE ACTIONS	2025 GOAL	2040 GOAL
<ul style="list-style-type: none"> • Ulster Solarize lets residents plug into local community solar • Green Business Champions helps businesses and organizations access renewable energy and energy efficiency • Climate Smart Communities helps municipalities lower their emissions and save on energy costs • Community Climate Action Planning process begins • No new fossil power plants in Ulster County 	<ul style="list-style-type: none"> • A Community Climate Action Plan lays out a road map to a clean energy transition for the County • All new buildings are built to high energy efficiency, carbon-neutral ready standards • Voluntary benchmarking program for commercial, public, and multi-family buildings • 20% of Ulster County’s fleet are green vehicles, with at least 20% of those battery-only • A County-wide network of EV chargers is available to all residents • Pilot electric micro-transit in at least three parts of the County • Retrofit and weatherize 1000 homes per year by 2025 • Promote bikeable/walkable communities/complete streets 	<ul style="list-style-type: none"> • 100% of all electricity consumed in-county from zero-carbon renewable sources • At least fifty percent of all our homes and buildings have been retrofit to zero emissions, with the capacity to complete all by 2050 • 100% of County vehicles powered by renewable fuels • All County residents have access to zero-carbon transportation, including non-motorized transportation options in population centers

This year, Ulster County is working with three community solar providers to solarize Ulster County. Subscribers will save up to ten percent on your electricity bill. Each provider will donate \$100 for every new customer to our Green New Deal fund, which will support all the rest of the programs in this plan. Learn more and sign up for community solar at <http://solarizeulster.org>.

The County is also making community solar available to municipal accounts at our Quarryville project in Saugerties. Municipalities can contact the Ulster County Department of the Environment to sign up.

GREEN BUSINESS CHAMPIONS

Nearly 20 percent of all greenhouse gas emissions in Ulster County come from our businesses and organizations. Just like our homes, our commercial buildings need investment to improve aging structures and systems, increase energy efficiency, and access renewable energy. Green investments often make good business sense! Most of these investments will reduce energy bills, in some cases paying off the upfront cost within three years or less. Others improve building comfort, employee productivity, and customer safety.

We know that many business owners are interested in greening their operations, but don't know where to get started. They are juggling many other concerns – especially now – and don't have time to sort through all the options and the variety of state and utility programs available to help with upfront costs.

The Green Business Champions program aims to help every business in the County green its operations. We will help you determine which green investments make sense for you and help you connect to service providers and financial assistance. We will also be recognizing and celebrating businesses that take the green plunge. The program is expected to launch in Fall 2021.

CLIMATE SMART AND CLEAN ENERGY COMMUNITIES

New York State provides support and incentives for municipalities to green their operations through the Climate Smart Communities (CSC) and Clean Energy Communities (CEC) programs. Fifteen of the County's twenty-three municipalities participate in the Climate Smart Communities program. Five – the towns of Marbletown, Saugerties, and Woodstock and the town and village of New Paltz – are Bronze certified, while the city of Kingston is Silver Certified. Ulster County has been Silver certified since 2016 and recently submitted our recertification application. The Clean Energy Communities program has recently launched a new round of actions and funding incentives.

The Department of the Environment supports municipalities in pursuing Climate Smart Communities certification through trainings and facilitation via the county Climate Smart Committee and its new Municipal Task Force. In Spring 2021, we also piloted a program with Bard College to pair graduate-level climate policy students with municipal CSC committees to assess community resilience to climate impacts. The Ulster County CSC Municipal Task Force looks forward to continuing this work and facilitating additional partnership projects with local educational institutions.

DRAWING THE LINE ON FOSSIL POWER

Investing in cleaner sources of energy is an essential component of our climate stabilization strategy. We also have to acknowledge that the time has come to stop building older, polluting technology. Ulster County opposes the construction of any new fossil fuel power generation in the Hudson Valley. While advocates of fossil power installations argue that dispatchable plants are needed to “back up” a renewable grid, we believe such backup must prioritize clean, fossil-free sources, rather than relying on business-as-usual strategies.

We therefore oppose the expansion and repowering of the Danskammer gas facility and urge serious consideration of cleaner alternatives for the site. And we will work with our municipalities to review their zoning for any loopholes that could make them vulnerable to unwanted power plant proposals.

COMMUNITY CLIMATE ACTION PLAN

To take this work further, in 2021 we will begin a Community Climate Action Planning process that will lay out a road map to a clean energy transition for all communities in the County. It will develop detailed action steps to reach our 2025 and 2040 goals, review and set additional goals for the coming years and – using strategies from the second and third pillars of our Green New Deal – ensure that the opportunities and benefits of this work reach everyone in the County.

BUILD THE EQUITABLE GREEN ECONOMY

“The new economy is going to be a green economy, and we intend to be at the center of it.”
- *County Executive Pat Ryan*

The urgent need to decarbonize our economy and our built environment creates enormous opportunity. Over the next ten years, we will need to install over 30,000 heat pumps and over one million solar panels. We will need to thoroughly rehab and update

thousands of homes, insulating attics, plugging air leaks, and installing efficient appliances. And we'll need to continue the transformation of everything we produce, exchange, and consume so that it is compatible with a sustainable environment. There is *a lot* of work to be done!

A crucial task to shape the green economy is to ensure that all that work translates into economic opportunity and generates prosperity for *everyone* in Ulster County. The fossil energy industries of the twentieth century have long been a primary source of high-quality, family-sustaining jobs. Jobs in the clean energy industries of the twenty-first century must provide similar wages and opportunities. That's why we have established a requirement that all renewable electricity the County consumes come from projects that pay prevailing wage rates during construction, and we are urging our municipalities and the Ulster County Industrial Development Agency to do the same.

We are also creating a Green Growth Fund to invest in green infrastructure, broadband internet access, efficient affordable housing, and healthy communities across the County. A centerpiece of that investment will be to leverage state and federal funds to expand our home retrofit program to weatherize and upgrade home efficiency, prioritizing the homes of those who can least afford the work and will benefit most from the energy savings. We'll work with employers and training partners to use these worksites for hands-on job training. By 2025 the Fund will have generated hundreds of well-paying jobs and helped to lay the foundations for a clean and thriving economy for decades to come.

We will also launch several programs this year to broaden the offerings of the Ulster County Career Center for green employers and jobseekers. The Career Center – run by our Office of Employment and Training – provides training and job matching services across a wide range of industries. In 2020, we convened the Green Careers Coalition, bringing together employers, training partners, and labor and community organizations across the clean energy and green buildings sector to help ensure that trainings meet employer needs and help jobseekers access clear and well-connected career pathways in a variety of green careers.

What we are finding as we work with green employers to develop training programs is that green careers require a different mix of skills from the jobs of the past. Instead of the sharp distinction between blue-collar jobs – or manual labor – and white-collar jobs that are mostly “head work”, *green-collar* jobs require a mix of hands and head. They combine rapidly advancing technology, analysis of how to utilize that technology on the ground in specific situations, and the manual ability to install, assess, troubleshoot, and repair it. They offer an exciting range of possibilities to many young people and career changers who don't want to be just a pair of hands and a strong back and also don't want to be confined to an office chair and a computer screen. They also offer the opportunity to do

truly meaningful work that benefits both their own neighborhoods and the entire planet, a value that we are finding is central to many of today's jobseekers.

Preparing a generation of job seekers for these emerging careers will require changing how we educate. Our Green New Deal success will depend on combining creative curricula design and skills training to meet human resource needs and expand the problem-solving talent in the region. As early as middle school, we need to reinvigorate a focus on the traditional science, technology, engineering, and mathematics (or STEM) fields alongside opportunities for hands-on learning and cultivating creativity and critical thinking through the arts and humanities. Post-secondary education, too, will need to combine learning-by-thinking and learning-by-doing with expanded opportunities for internships and co-op work experiences, hands-on research, and practical skills training alongside classroom learning.

In all this work, equity must be an active pursuit, not just a passive value. We must seek out, uncover, and redress the economic, legislative, and policy frameworks that led to environmental injustices in historically disadvantaged communities. These communities are at a higher risk for compromised health, environmental and climate threats, and food insecurity, to name a few, requiring greater equity in decision making, problem solving, and solutions deployment countywide.

Although clean energy is a major focus of the Green New Deal, the green economy goes far beyond simply changing how we produce and use energy. Over the coming decades, we will need to redesign everything we use – from the spaces we live and work in, the clothing we wear, how we grow, process, and distribute our food, and all the items we use every day – to make them less wasteful and less resource-intensive. That means designing new products, new materials, new ways of interacting with customers, and whole new business models. New industries will be created, and old ones reshaped.

Our vision is that by 2040, Ulster County and the Hudson Valley will be seen as the center of innovation and business growth in burgeoning new fields including green design and construction, renewable materials, regenerative agriculture, water resource management, development and manufacturing of low waste product ecosystems, and more. We believe these sectors can become a key growth driver for the Ulster County economy, reaching one quarter of Ulster County businesses and jobs by 2040.

As a centerpiece and engine of this process, we envision a Hudson Valley Center for Climate and Environmental Solutions, a consortium of regional higher education institutions, green business leaders, and community partners that will combine research, prototyping, testing, and scale-up of the pipeline of environmental solutions that we will need in the 2030s and beyond with the education and training infrastructure these industries will demand.

By 2025, we aim to establish the bones of that Center, collaborating with educational partners, entrepreneurs, and investors to develop business incubators and accelerators, shared education and research space, and business-integrated learning opportunities in multiple green economy sectors. We will also work with our K-12 schools to pilot educational programs that will prepare the next generation for the multi-faceted needs of the green economy. And we will design and launch a Green Jobs Corps, offering young people the opportunity for a year of service making their community cleaner and more sustainable while learning valuable skills to prepare for work in the green economy. Through all of these efforts, by 2025 we aim to have helped more than 1000 green job seekers and employers connect with each other.

IMMEDIATE ACTIONS	2025 GOAL	2040 GOAL
<ul style="list-style-type: none"> • Continued expansion of Green Careers Coalition to additional partners and sectors • Green Careers Network matches job seekers with green employers • Green Summer Youth Internships offer a variety of career exploration opportunities • Ulster Green Economy Network brings green businesses together for networking and support • Green Growth Fund established to finance Green Infrastructure projects • Water solutions innovation accelerator launched • Executive order requiring all County renewable electricity be procured from projects paying prevailing wage in construction 	<ul style="list-style-type: none"> • Launch the Center for Climate and Environmental Solutions as a hub for research, innovation, education, and training for the green economy • Pilot Green Careers education in middle and high schools • Green Jobs Corps offers a service year improving the climate performance of our homes and buildings • Ulster County Green Growth Fund provides support for county and municipal Green Infrastructure priorities • UGREEN reaches 10 percent of businesses countywide • Successfully connect 1000 green job seekers and employers 	<ul style="list-style-type: none"> • Fully one quarter of Ulster County’s jobs and businesses are green • The Hudson Valley is recognized as a center of excellence in green economy sectors, including green building, water resource management, and renewable materials and product design • The Center for Climate and Environmental Solutions is a centerpiece of the green economy, conducting cutting edge research, accelerating businesses, and training workers

Programs we will launch in 2021 include:

GREEN CAREERS COALITION AND NETWORK

This year, the Green Careers Coalition will broaden its work to include additional partners and fields, including water resources and water supply management. And we will launch a Green Careers Network, offering job matching services across the green economy. If you want a career making a difference to your community's environment, whether it's working on the frontlines of the clean energy transformation, stewarding our natural resources, or designing the next generation of products and materials, get in touch and we will help you find the opportunities and the training you need. And if you're an employer working in this space, get in touch to post your jobs, find talented candidates, and join our quickly-expanding Green Careers Coalition. Get connected at <https://gnd.ulstercountyny.gov/green-careers/>.

GREEN SUMMER YOUTH INTERNSHIPS

This summer we will offer several different internship opportunities for youth and jobseekers exploring green careers. The Career Center will offer a green track on our Summer Youth Employment Program. The program offers a five-week paid work experience for income-qualified youth ages 14-20. Green worksites this summer will include Organic farming, Green Retail & Customer Service, Green Construction, Green Educational Programming, and Green Landscaping. The program runs from June 28 to July 30, 2021.

We will also be partnering with the New York City Department of Environmental Protection to offer internships for college students in environmental studies, biology, and engineering in water quality monitoring, research, and engineering. And we'll be partnering with Citizens for Local Power to offer their second Empower Kingston Green Jobs Apprenticeship, a four-week opportunity for hands-on training with a variety of clean energy and green building contractors. Participants in all of these internships are eligible for Green Careers Academy courses at SUNY Ulster and additional on-the-job training opportunities through the Career Center. Learn more about these opportunities at <https://gnd.ulstercountyny.gov/green-careers/green-internships/>.

ULSTER GREEN ECONOMY NETWORK (UGREEN)

The Green Economy is a diverse group of businesses that cut across traditional sectors. Some green businesses directly provide environmental services – such as green construction, clean energy, energy efficiency, water quality management, landscaping, and green design. Others provide a wide variety of goods and services – bakeries and

breweries, real estate and insurance companies, media and software developers – doing what they do in the most sustainable way possible.

UGREEN will bring green economy businesses, investors, and individuals together with our Office for Economic Development and our business development partners to understand green business needs and facilitate productive connections. Quarterly gatherings will combine informative and inspiring presentations with opportunities for networking. They will also be an opportunity to promote Green Careers training offerings and job openings and to celebrate new Green Business Champions. Smaller facilitated peer networks within green subsectors will provide opportunities for information sharing, problem-solving, and sector-building. The Office of Economic Development will use all this information to target business support to growth areas and leverage points within our green economy. By 2025, our target is that UGREEN is networking and supporting 500 green businesses, or more than 10 percent of all businesses in the County.

WATER SOLUTIONS CLEAN-TECH ACCELERATOR

Ulster County is partnering with the Kingston-based Global Center for Social Entrepreneurship Network (**GCSEN Foundation**), **Sustainable Hudson Valley, Fala Technologies**, and a broad network of innovators in the water sector to offer an accelerator experience for early-stage businesses that can grow jobs in the County. Based on the top 15 nationally-ranked **Gener8tor** accelerator model, the program will offer three-month intensive experiences for five to ten companies in each round, with up-front investment, mentorship, and networking with potential customers and investors. Each company will have an innovative water solution addressing sectors such as water pollution, water infrastructure, wastewater treatment, environmentally-sensitive hydroelectric power, water testing, and filtering. Companies will include US and international high growth startups with manufactured or software products, as well as Hudson Valley growth-oriented small businesses. For more information on how to collaborate, contact Tony DiMarco (tony@gcsen.com).

GREEN GROWTH FUND

Drawing on a variety of state, federal, and local sources, Ulster County will create a Green Growth Fund to power all the work we need to do to protect and transform our communities. Working with municipal, community, and labor stakeholders, we will develop a list of Green Infrastructure projects (see box) in areas including road and bridge flood resilience, efficient, affordable housing construction and retrofit, clean transit and walkable streets, and universal broadband access. The Green Growth Fund will be used to work through this list, generating hundreds of well-paying jobs while we ensure a healthy, resilient, and low carbon future. Ulster County municipalities who participate in the

Climate Smart and Housing Smart Communities Programs will have priority access to these funds.

GREEN INFRASTRUCTURE PROJECTS

- Water and sewer upgrades to existing infrastructure and new construction in priority growth areas
- Flood resiliency road, bridge, culvert, and storm sewer projects
- Green housing construction
- Home weatherization and retrofit with job training on project sites
- Transit electrification and electric micro-transit pilot programs
- EV charging network buildout
- Universal broadband access
- Bikeable/walkable communities/complete streets
- Trails development and connectivity to our population centers

CONSERVE OUR NATURAL RESOURCES AND BUILD RESILIENCY

Protecting our natural resources has never been more important. While we must do everything we can to slow the flow of heat-trapping gases into the atmosphere so that natural systems can recover, we must also recognize that the impacts of climate change are already here and will continue to be for decades to come. We can expect stronger storms and more intense flooding, but also more frequent droughts, disruptions to agricultural cycles, and stresses to every natural ecosystem. We may also see an influx of new residents from places that are more deeply impacted by the changing climate.

We must make sure that both our natural and our built environments are resilient to climate disruptions and the social impacts they may induce. And we must be more vigilant than ever in protecting our land, air, and water and ensuring the benefits of our natural resources are available to everyone in our communities for generations to come.

Ulster County's Departments of Environment and Planning will continue their efforts to preserve farmlands, protect our drinking water, support a sustainable mix of new development and conservation, and plan for transportation infrastructure that is safe and storm-resilient, all with the ongoing impacts of climate change in mind. This year, we will conduct a study of county and local road networks, identifying priority projects to improve our transportation network's ability to support us under stress. We will continue work to inventory road-stream crossings that need to be repaired and resized to accommodate storms and allow wildlife to pass through unimpeded. And we will continue to identify and help move critical county and municipal infrastructure out of flood zones.

It is also essential to ensure that where and how we use our environment for economic development, tourism and recreation, energy production, and housing are compatible with ongoing resource and ecosystem health. This year we will build upon County and municipal habitat and resource mapping work to create a countywide natural resource inventory (NRI).

The NRI will provide a critical underpinning to municipal efforts to complete DEC-supported drinking water source protection planning and to identify priority areas for conversation and development. It will identify those areas that can support development, enabling efforts within our Housing Smart Communities Initiative for each municipality to identify priority sites for needed housing development. We will also work with **Scenic Hudson** and other partners to help communities use sophisticated mapping resources to support smart decisions about the siting of solar projects. By 2025, our goal is that at least half of Ulster County municipalities have used these resources to support their housing, drinking water source protection, solar siting, and/or open space planning.

We will also prioritize the return of brownfield sites within the County to productive use. By 2025, we will assess contaminated and blighted properties on the foreclosure eligible list for use for renewable energy, economic development, or open space, remediate their environmental and legal issues, and move them into redevelopment.

Of course, the beauty of our natural resources is core to our quality of life here in Ulster County and a major economic driver. The Ulster County Trails Advisory Committee estimates that in 2019, users of our rail trail network spent more than \$10 million in the local economy. Continuing to build out our spectacular trails network remains a key priority for us. But we must also recognize that many of our most scenic areas and trails are accessible only by car, limiting access for the more than 5,000 Ulster County households without a car and driving up greenhouse gas emissions. We must prioritize connecting our trails into our community centers, and especially our environmental justice communities, and developing carbon-free ways to reach our scenic areas.

In 2021 we will open the Midtown Linear Park in Kingston, running from Cornell Street to Kingston Plaza, and begin work to connect from there on to the O&W Rail Trail, which runs from Hurley into Marbletown and Rochester. We will continue to support work to connect Ellenville via trail into Minnewaska State Park and to the O&W Trail from the south, and to support improvements to the Wallkill Valley Trail in New Paltz. We will also complete a trail planning study for a 5-mile section of the Ulster & Delaware Railroad corridor in Shandaken, connecting Big Indian to Highmount, which will add access to the Pine Hill hamlet, Belleayre Ski Center, NYSDEC Day Use area, and over 2000 acres of state land.

By 2025, we will develop transit or other car-free connections from Kingston to the Ashokan Rail Trail. We will also install EV chargers at our major trailheads, supporting

carbon-free access for EV drivers. And by 2040, all of our population centers will be connected into our trails network.

IMMEDIATE ACTIONS	2025 GOAL	2040 GOAL
<ul style="list-style-type: none"> • Transportation resiliency study examines all roadways in the County for vulnerability to flooding • Countywide natural resources inventory provides support to municipal conservation and development planning • Low impact tourism initiative encourages stewardship ethic and more sustainable use of natural areas • Housing Smart Communities Initiative supports identification of priority development areas and core habitats to conserve • Collaboration with Scenic Hudson and other partners on implementing conservation priorities within renewable siting processes • Continue to expand the Ulster Trails network prioritizing trail access and connectivity • Launch climate smart farming network 	<ul style="list-style-type: none"> • Complete inventory of road-stream crossings in need of repair and resizing and critical infrastructure in floodplains • One half of municipalities utilizing natural resources inventory to support conservation, development, solar siting, and drinking water protection planning • Foreclosure-eligible brownfields are redeveloped • Ulster Trails network connects residents and visitors in all parts of the County to outdoor recreation opportunities, with public health, transportation, and wildlife corridor benefits • One quarter of county farms utilizing climate smart practices • Prioritize low carbon tourism in our tourism sector • Install EV chargers at all trailheads and develop car-free access to the Ashokan Rail Trail 	<ul style="list-style-type: none"> • Complete work to make county roadways, road-stream crossings, and critical infrastructure flood resilient • All our population centers are connected to our trails network • 100 percent of Ulster County farmers utilize climate smart practices and benefit from participation in state/federal carbon sequestration incentive programs

We will also promote low-impact, low-carbon tourism. In 2021, we will work with our tourism businesses and attractions to support education for visitors on stewarding the resources they enjoy. By 2025, we will develop a low-carbon tourism initiative, working with our hospitality, arts, and recreation industries to promote sustainable ways of enjoying Ulster County.

In some cases, our conservation work can not only help us adapt to climate change, but also help us reverse it. Emerging practices in agriculture – sometimes called regenerative

or “climate smart” farming – can help capture and store carbon in soils and plants and remove it from the atmosphere, while increasing the climate resilience of farm operations. Our forests and agroforests are another important carbon sink. In 2021, we will work with farmers and partner organizations to create a forum to support research and peer education on the most effective practices. We are following the **Soil Health and Climate Resiliency bill** introduced by Senator Hinchey to create a state program of technical and financial assistance to farmers to reduce on-farm greenhouse emissions, improve farm resilience to flooding and droughts, and increase carbon uptake in healthy soils and ecosystems.

Our goals are that by 2025 one quarter of Ulster County farmers and producers are using climate smart farming practices, and that by 2040, all Ulster County farmers are benefiting from participation in state and federal programs to increase carbon sequestration in soils and plants.

New programs to be launched in 2021 include:

NATURAL RESOURCES INVENTORY

In 2021, the Department of Environment will update and build upon the county core habitat mapping that was featured in National Geographic in 2016, producing a set of mapping resources to support comprehensive municipal resource planning. We will link town-level natural resource inventories and conservation plans with County maps to create a countywide natural resource inventory. The inventory will reveal connections between resources across municipal borders and allow the identification, protection, and enhancement of critical corridors linking the town, county, and regional scales and providing support for municipal planning and land use decisions.

HOUSING SMART COMMUNITIES INITIATIVE

Ulster County’s **Housing Action Plan**, released in February 2021, recommended the creation of a Housing Smart Communities Initiative to support municipalities in increasing the supply of housing across the affordability spectrum. A cornerstone action in the Initiative is a community-driven assessment of housing needs, and proactive identification of priority building sites, in the context of core areas to conserve. In 2021, the Planning Department will support the first municipal Housing Action Plans, using Natural Resource Inventory data to support the mapping of potential development sites.

LOW IMPACT TOURISM INITIATIVE

2020 saw a massive increase in the use of our hiking and biking trails and preserve lands as both residents and visitors sought safe and revitalizing outdoor activities. While we

welcome the increased engagement with our natural areas, an influx of visitors also poses a significant risk to these resources. Some areas faced crowds, traffic jams, and far-overstretched parking, creating safety risks as well as environmental ones. In 2021, the Departments of Environments and Tourism will work with our lodging businesses and recreational destinations to educate visitors about how to decrease their impact and promote a stewardship ethic towards the places they enjoy. We will also update reboot and promote our *Reconnect* recreational information mapping resource to help visitors learn about leave-no-trace principles and to connect with other, less-traveled sites to visit as well as businesses nearby.

CLIMATE SMART FARMING INITIATIVE

This year we will work with partners including Cornell Cooperative Extension, Ulster County Soil and Water, Hudson Valley Farm Hub, and Scenic Hudson, as well as farmers and regional grower organizations to create a climate smart farming network. The network will support carbon sequestration research on Ulster County soils and create opportunities for demonstration, peer exchange, and public education, as well as to help farmers adopt practices to mitigate crop loss from flooding on their lands. We will also explore opportunities for carbon sequestration and agroforestry demonstrations on County property and with municipalities, landowners, and solar developers to minimize the use of agricultural land for solar development, prioritizing sites that have already been industrialized or disturbed.

CONCLUSION AND NEXT STEPS

The plan we've laid out in these pages is ambitious and aspirational. We believe the current moment demands nothing less.

In the coming months, we will launch an array of programs across all three of our Green New Deal components, advancing clean energy, green jobs, and conservation. We'll also begin the longer-term Community Climate Action Planning process to map out our pathway to our 2025 and 2040 goals.

As we continue to emerge from COVID-era restrictions, we look forward to casting a much wider net of public participation in that process, for we truly believe that this work must both come from and serve all of our diverse communities in order to be successful. If you'd like to add your voice to that process, please send a note to gnd@co.ulster.ny.us and we will keep you updated as that work develops.

Meanwhile, please visit <https://gnd.ulstercountyny.gov/> to learn more about Solarize Ulster, Green Careers, the Ulster Green Economy Network, and all of our other programs, and get involved!