



Hudson Valley Regional Council

July 29, 2021

Green Innovation Grant Program
Environmental Facilities Corporation
625 Broadway
Albany, NY 12207

Re: Hudson Valley Regional Council Support for the Town of Wappinger's Hudson Valley
Circular Biogas Systems

To Whom It May Concern:

We are writing to express the Hudson Valley Region Council's (HVRC) support for the proposal from the Town of Wappinger for the Hudson Valley Circular Biogas Systems project to the Environmental Facilities Corporation's Green Innovation Grant Program (GIGP). This project will result in the construction and operation of an anaerobic digester and pyrolysis unit. The digester will convert food waste, biosolids, livestock waste, and the invasive water chestnuts clogging Hudson Valley waterways into energy as well as fertilizer. The pyrolysis unit it will create biochar, valuable to agricultural production, from wood and shrub waste and debris. This project meets the goals of the GIGP's Energy Efficiency practice as a Renewable Energy project.

HVRC strongly supports the goals of this project, particularly within their alignment to our 2019-2023 Comprehensive Economic Development Strategy's stated objectives of strengthening workforce development, and furthering sustainability efforts. We see this as an excellent opportunity for Wappinger to become more energy efficient and transition to a low-carbon future.

HVRC recognizes water as one of our region's most important assets. This project plays an important role in establishing an additional management method for the invasive water

chestnut, which has negatively impacted the Hudson River watershed over the past several decades, adding a financial burden to municipalities and impacting recreational activities. The project provides an opportunity for ecosystem repair while simultaneously helping the local community apply a renewable and local power source. This pathway could serve as a model for other communities to follow. Additionally, the byproducts of this proposed technology will help to decarbonize agricultural practices while offering a nutrient-rich local alternative to synthetically produced fertilizers – a valuable benefit for the region's agriculture sector.

We at the Hudson Valley Regional Council urge you to support funding for the Town of Wappingers' application for the Hudson Valley Circular Biogas Systems project. This project fits the goals of the Green Innovation Grant Program to improve water quality and mitigate the effects of climate change. The completion of this project will positively impact the economic health and sustainable development of the region.

Respectfully submitted,



Patricia Pomeroy
Executive Director



Carla Castillo
Deputy Executive Director / Clean Energy
Communities Coordinator



July 30, 2021

To Whom It May Concern:

Sustainable Hudson Valley strongly supports the GIGP funding proposal brought forth by Hudson Valley Biogas, the Cultivator, and Wappingers Falls to demonstrate the use of anaerobic digestion and pyrolysis with food waste and invasive plants to produce biogas and other useful products. By producing alternatives to fossil fuels for local use and providing alternatives to landfilling organic “waste” materials, such a facility directly supports the goals of New York’s Climate Leadership and Community Protection Act and the parallel Regional Climate Action Strategy that SHV is helping to coordinate. It will effectively provide proof of concept for a regional network of similar installations to support implementation of the new food waste composting law, a network we are happy to have helped bring together. If successful, this will definitely serve as a pathway for other communities to follow.

Significant damage is done by the invasive water chestnut on the Dutchess County shores of the Hudson, which over the past several decades, has brought upon an overwhelming financial burden to riverfront communities, and compromised recreation in the Hudson, while causing tremendous damage to the Hudson River watershed. Using water chestnut as a feedstock for this project is an innovative and valuable strategy that will reduce the fossil fuel burden of managing this species, which is presently shipped to a landfill! The proposed method of ecosystem repair appears to be economically viable as well as environmentally beneficial. The labor and technical expertise involved in harvesting feedstocks and managing the operation represents a source of job creation for disadvantaged communities such as those in and around Wappingers Falls.

By taking a systems approach to producing both fuel and biochar, with flexible feedstocks, this proposal serves a variety of environmental, economic and infrastructure goals for the participating communities and our region. Diversion of waste, production of energy, sequestration of greenhouse gases and other ecosystem services are all benefits of this innovative project design. This twenty-first century infrastructure will serve as the foundation for a grow-able network of related projects turning waste into resources and growing the Hudson Valley’s circular economy. We are gratified to see the support and participation of so many partners in local and county government, NGOs, commerce and academia, a diversity that will support scaling and replicating of the model.

We are enthused to offer this letter of support and welcome the opportunity to collaborate with these partners going forward.

Sincerely,

Melissa Everett, Ph.D., Executive Director

July 28, 2021

Application Review Board:

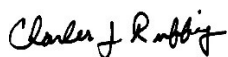
On behalf of the New York State Pollution Prevention Institute (NYSP2I) at Rochester Institute of Technology, I am writing to support the Town of Wappinger, Hudson Valley Biogas, and the Cultivator application for the Green Innovation Grant Program. This application addresses key New York State priorities in mitigating excess food waste, local wood waste, environmental justice and invasive species in a very creative model.

NYSP2I is a statewide research and technology transfer center funded by the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation (NYSDEC), located at Rochester Institute of Technology (RIT) and partnered with four additional universities. Our goal is to provide full geographic coverage of pollution prevention programs and services to businesses across New York State.

This circular economy solution for the Town of Wappinger clearly aligns with our vision and we believe has the possibility to inspire neighboring communities to take on more responsibility for their own waste and emissions while helping people become more sustainable where they live and work.

Please consider this letter of support as you evaluate this grant funding request.

Sincerely,



Charles J. Ruffing, Ph.D.
Director, New York State Pollution Prevention Institute



Clarkson

BEACON INSTITUTE FOR
RIVERS AND ESTUARIES
199 Main Street
Beacon, New York 12508
845-838-1600
clarkson.edu/beacon

July 30, 2021

New York State GIGP Committee:

Beacon Institute for Rivers and Estuaries is the Hudson Valley campus of Clarkson University, with administrative headquarters and a state-of-the-art educational facility on Dennings Point, Beacon, NY. The Institute's mission is to ignite citizen science, user-inspired R&D and education through collaboration and creative innovation, inspiring sustainable solutions for estuary and freshwater ecosystems throughout the Hudson Valley and across New York State. Wappinger Falls, Hudson Valley Biogas, and the Cultivator are introducing an energy efficiency GIGP proposal that coincides with many aspects of our institution. From sustainability, to social responsibility, to ecology, environmental justice, and knowledge for the greater good, we are very supportive of the community minded application which this creative group has introduced.

Denning's Point is surrounded by the invasive water chestnut, so this aspect of the project resonates deeply with our location. Clarkson University operates its own food waste digester and we have colleagues which specifically study assessment and management techniques for this destructive plant. We plan to work closely with the members of this proposal to share our experience as well as learn from the positive outcomes that this group is aiming to produce.

Presently, the New York Power Authority is collaborating with OPRHP and Beacon Institute to fund an additional group of unique and exciting projects at Dennings Point. Entitled the Energy-Efficient Park Project - A New York Power Authority Energy & Environmental Sustainability Project, these projects will improve public access, provide educational / demonstrative opportunities and enrich existing natural resources. The circular economy design and community engagement that this group is offering would be an ideal complement to our existing educational services which include K-12, public and family, and professional graduate programs. We offer a range of programming related to outdoor environmental and STEM and this installation has many qualities that we would welcome for integration into this curriculum.

True to its mission, the institute's campus serves as both a research institute focused on healthy water solutions and a provider of community services at all levels. We enthusiastically support this Wappingers application and welcome an opportunity for collaborative and impactful evolution of our educational programs and regional impact.

Dr. Michael T. Walsh

Michael Walsh

Executive Director, Beacon Institute for Rivers and Estuaries

Cornell Cooperative Extension Dutchess County

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Millbrook, NY 12545
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e. dutchess@cornell.edu
<http://ccedutchess.org/>

July 30, 2021

Application Review Board:

The mission of Cornell Cooperative Extension Dutchess County is to put knowledge to work in pursuit of economic vitality, ecological sustainability and social well-being. The circular economy proposal brought forth by Village of Wappingers Falls, Hudson Valley Biogas, and the Cultivator is an inspiring solution for managing organic waste streams and diverting them to be repurposed. Capturing waste nutrients and recycling them into a beneficial use is extraordinarily important for long-term sustainability and ecosystem preservation. It is great to see innovative opportunities such as this that serve the local community and the greater region.

We are supportive of this proposal's integration of education and environmental justice into its framework and its mission to build collective knowledge of sustainability among residents. We are also supportive of the Cultivator project's intent of involving key stakeholders and designing a program that generates positive feedback into the local community and are very interested in following along with the development of their work.

Sincerely,



Stephanie Radin
Interim Executive Director,
Cornell Cooperative Extension Dutchess County

Building Strong and Vibrant New York Communities

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.



July 30, 2021

GIGP Award Committee:

The mission of the Lower Hudson Partnership for Regional Invasive Species Management is to protect the rich biodiversity and ecosystems of the Lower Hudson region through partnerships and collaborations that focus on controlling the introduction, spread, and harmful impact of invasive species. We view the proposal put forth by Wappingers Falls, Hudson Valley Biogas, and the Cultivator as an important technological opportunity to learn more about diverse management techniques for invasive species and an intriguing way to offer renewable energy to the local community. Their system design appears to offer an economically viable and sustainable solution for actively addressing the aquatic water chestnut which is prevalent in at least 42 of New York's counties. The results of this installation have the potential to greatly incentivize removal efforts throughout the entire state and actively address ecosystem repair opportunities which have become overwhelming and neglected.

Trapa natans, more commonly known as water chestnut, is extremely destructive to our water systems and local ecology. The plant becomes rooted in water sediment and, over a short period of time, can completely transform waterways in ways that diminish local biodiversity and become unusable for recreation and tourism. Uncontrolled, this plant makes access areas of water nearly impenetrable and can be as much as a foot thick at the surface. Below this dense vegetation, the water's oxygen level becomes depleted and incapable of supporting many of the local fish and insect species that are necessary for a healthy ecosystem. For these reasons, we are highly supportive of this community's determination to actively manage their infestation in the Wappingers watershed and look forward to learning more about the results of their efforts.

Our organization is funded by the New York State Department of Environmental Conservation through the Environmental Protection Fund, and we are one of eight regional partnerships throughout the state acting as the go-to resource for invasive species issues in an area that stretches from Manhattan through Westchester, Putnam, and Dutchess Counties and west through Rockland, Orange and portions of Ulster and Sullivan Counties. We meet regularly to plan strategies to educate communities about invasive species and conduct training sessions and organize internships and volunteer programs. Our group is very interested in Hudson Valley Biogas' proposal to redefine this plant as a local resource for climate action, and we are optimistic about their success. Their method of management could be one for us to model and share throughout our network as a viable means to restoring our local biodiversity.

Sincerely,

Lindsay Yoder

Aquatic Programs Coordinator

Teatown Lake Reservation,

AIS Program Coordinator for the

Lower Hudson Partnership for Regional Invasive Species Management



July 30, 2021

Dear Grant Committee:

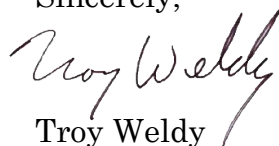
Since our founding in 1986, the Columbia Land Conservancy (CLC) has collaborated with partners to preserve the County's vibrant rural character. We work to position ourselves as a dynamic force in supporting and sustaining a strong and vibrant rural community, where agriculture plays a central role in the economy, where development respects historic traditions and natural resources and where there are accessible open spaces and abundant, healthy natural lands and wildlife habitats.

Upon examination of the proposal brought forth by Wappingers Falls, Hudson Valley Biogas, and the Cultivator, we recognize many of our own values prevalent throughout the intricacies of their design. They are presenting a system solution which ties together the many important facets of a strong community while effectively interweaving important aspects of conservation and the environment.

CLC works with our community to conserve the farmland, forests, wildlife habitat, and the rural character of Columbia County. While this application is within Dutchess County, we have strong ties to this neighboring region and recognize the important implications this energy efficiency project can have for our communities to the north. Part of our core mission is strengthening connections between people and the land, and we are greatly enthused by technology that has been chosen to be integrated with our agriculture sector and the local ecology. CLC cultivates connection to the land by providing outdoor and educational activities and, likewise, Wappingers' has proposed an instructional strategy that will engage residents throughout their county and potentially ours. This form of capacity building is absolutely necessary for instilling our own values of stewardship, community, tradition, and collaboration.

We are very excited to see the positive outcomes that this group can bring to the Hudson Valley, and we look forward to further engagement with their members. This is a group that truly cares for the well-being and sustainability of the region.

Sincerely,



Troy Weldy
President

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President

Conserving rural landscapes. Connecting people to the land.



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Kianga Daverington, Esq.
Managing Partner
Chief Investment Officer

July 30, 2021

GIGP Application Review Board:

Acre of America Partners LP is an impact investment management and advisory firm working at the intersection of new technologies & rural problems. Our team seeks to finance circular economy solutions that offer long-term and sustainable opportunities for our region and the world. We have reviewed the Wappinger GIGP proposal and are very optimistic about the implications that this project can have regarding energy efficiency and the environment. Having some familiarity with these technologies in our own portfolio, we are greatly enthused by this cooperative solution offered in coordination with Hudson Valley Biogas and the Cultivator.

Our group is very engaged with business and agriculture throughout the Hudson Valley. We have offices in Rockland and Columbia Counties which helps our team to bridge connections between high density cities and agricultural communities. We see a future where all waste is reclassified as beneficial-use material and is upcycled into new and valuable items. This mentality and ecological perspective are very apparent throughout the application, and the chosen technologies will produce a variety of renewable products for the local market.

When approaching our investments, we look for strong stakeholder alliances and partnerships that are likely to ensure success. The variety of organizations and respective specialties that are integrated into the Hudson Valley Biogas plan are well thought out and extremely encouraging. Our team views this network formation as a highly positive approach that is necessary for the community engagement Wappinger is aiming to establish. We are extremely supportive of the educational integration that accompanies this application and place a high value on the resident outreach component.

Investments in new technologies and sustainable systems are essential for New York State to meet its climate change mitigation goals. This proposal creatively reimagines these established solutions for smart integration with an economically viable outcome. We will closely follow the success of this program with the interest of replicating it within our own community to improve our sustainability, boost employment opportunities, and attract an increasing diversity of innovation. This is the most effective way to value people, nature, and the environment.

Sincerely,

Kianga Daverington

Kianga Daverington
Managing Partner
Acre of America Partners LP



Memo

29. juli 2021

GIGP Application Review Board

ClimatePoint is established in Oslo, Norway with the goal of improving climate compensation as we know it. We are actively getting companies to invest in the climate action solutions themselves to meet our global, long-term mitigation goals. Wappinger Falls, Hudson Valley Biogas, and the Cultivator are offering a circular economy system solution that improves energy efficiency, offsets carbon dioxide emission, sequesters carbon, and revitalizes local water resources. These are all very note-worthy aspects which align with our company's core ideology, and we are highly supportive of this innovative approach to address climate change.

Large parts of the business sector have set tough climate targets, but for many industries it's almost impossible to cut emissions under the Paris Agreement. Many people think that carbon offsets are businesses' only opportunity to compensate for emissions, and this is why our company offers another option. Wappingers Falls has put forth an application which enables the community to directly invest in technologies that reduce their carbon footprint, and this direct capacity building and stakeholder engagement is exactly the connection which ClimatePoint advocates. The proposed system is one which we are interested in incorporating into our own portfolio of economically viable solutions, and we aim to closely follow the success of this group.

As a Norwegian company, we are encouraged by the high ambitions set forth by New York State's Climate Change & Community Protection Act. Anaerobic digestion and pyrolysis are widely accepted as energy efficiency and carbon sequestration technologies among the international setting, and we are enthused to see these methods become employed throughout the USA. ClimatePoint sees Hudson Valley Biogas' unique solution as one which could be replicated on the global scale. We have many climate experts and experienced financiers on our team who are very interested in the development of this work. Our company is highly supportive of this quality investment for New York State and we welcome its implementation.

As we would say in the native language of Norwegian: "Vi anbefaler Hudson Valley Circular Biogas systemet på det sterkeste."

Best regards,

Nito Simonsen
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www.climatepoint.com