October 13, 2021

Dear Members of the Trust for Governors Island and Mayor de Blasio,

On behalf of Stony Brook University, we are delighted to submit our Expression of Interest to serve as the anchor institution for a Climate Solutions Center on Governors Island in New York City. We believe that the New York Climate Exchange powered by Stony Brook University will exceed the Trust’s vision for what is possible on Governors Island.

As one of the nation’s leading research universities with a long-standing commitment to serving the people of New York, Stony Brook University also has a history of success in launching and operating significant campuses and programs. Stony Brook University has the experience, skills, and strength to immediately and successfully launch this transformational initiative. Working with our exceptional partners, we will ensure that Governors Island and New York City emerge as the global center for addressing climate change.

In addition to its record of success in research, education, community partnerships, and operational efficiency, Stony Brook University has several assets critical for success in this initiative:

- Strong interest from numerous donors, including a commitment from a private foundation to catalyze growth of the New York Climate Exchange by matching up to $100M in philanthropic support from other sources.
- Direct experience in the development and management of multiple campuses that will inform our expansion to Governors Island.
- Deep roots in New York City. We have more than 115,000 alumni living across the five boroughs, Nassau County, and Suffolk County. Our proximate community of alumni will be invaluable assets to the programmatic development, and financial and community support of Governors Island.

One of the nation’s leading research universities, Stony Brook University has the depth, breadth, and reach to attract the world’s leading experts on climate change to Governors Island:

- We are the leading public research university in the Greater NYC area — the only public member of the Association of American Universities in our region.
- We have the support and collaboration of several leading global academic partners in climate studies and beyond, including the University of Oxford, the University of Washington, Brookhaven National Laboratory, Columbia University, Yale University, and Stanford University.
Our areas of foremost academic distinction are perfectly aligned with this opportunity, including our School of Marine and Atmospheric Sciences (SoMAS), our College of Engineering and Applied Sciences (CEAS), the Alan Alda Center for Communicating Science, and numerous other areas detailed in this proposal.

As a public university and a proud flagship member of the SUNY system, Stony Brook University is committed to meaningful engagement with the communities we serve. As a result, we approach this initiative with a deep appreciation of the role local and global communities must play in the fight against climate change.

- We are prepared to immediately begin offering **Community Action Seed Funding** to climate-focused non-profit partners, starting at $500k per year and scaling up as the Exchange comes online.
- We already have formed a **network of partnerships with 20 different non-profit, cultural, environmental justice, and community-based organizations**, and we plan to engage many more.
- Our work will be centered around doubling educational and workforce development programs, which will be available to all New Yorkers and visitors to Governors Island daily.

Our vision for the built environment on Governors Island will bring to life **a living laboratory and be a beacon of hope to the global community**. It will include:

- An estimated 335,000 square feet of green designed building space that will attract hundreds of students, faculty, research staff, and visitors to Governors Island.
- A unique combination of research labs, classroom space, exhibits, greenhouses, mitigation technologies, and housing facilities that will create a campus that is also a classroom at every turn.
- An engaging and interactive community experience that will provide New York City residents and visitors opportunities to engage hands-on with innovations unfolding on the Island in real time.

We thank you for your time and effort in reviewing our materials and for your consideration of Stony Brook University as the anchor institution for Governors Island. We are confident that we have the skills and experience necessary to be the ideal choice for this project, and we look forward to contributing to the fight against climate change in this meaningful way. We welcome further dialogue about the contents of our proposal or the possibilities for our collaboration.

Sincerely,

Maurie D. McInnis  
President

*We have prepared a short video to illustrate Stony Brook University’s strengths. To view, click [here](#).*
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STONY BROOK UNIVERSITY  
EXPRESSION OF INTEREST  
OCTOBER 13, 2021

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Executive Summary

Stony Brook University’s bold vision for Governors Island is an Exchange: a public platform touching every aspect of New York’s economy, culture, social fabric, and international influence.

Setting an Agenda

New York Climate Exchange

Climate change is here, and New York City is suffering its devastating effects. From extreme weather to air quality to flooding, New Yorkers and our city’s future are at immediate risk. Lower-income communities of color have been most impacted by climate change, and will continue to be harmed disproportionately by it without serious initiatives and investments.

This is a challenging moment for our planet and our region. But this moment is also an opportunity to address many of our problems at once. Climate change is an existential threat to our safety as well as our environment—but protecting ourselves against it can also create thousands of new jobs, a fairer economy, and help reverse historic inequalities in neighborhoods that have had the highest rates of pollution and the lowest levels of infrastructure investment.

For generations the New York Stock Exchange has been the world’s busiest and most important financial market, as well as a driver of the city’s economy. Now it is time to create a new marketplace for investment and collaboration, one that helps the city address today’s crises while producing innovative ideas that will pay future dividends to the city, our environment, and the people who most need us to meet this moment.

The New York Climate Exchange (The Exchange) Powered by Stony Brook University will generate transformative environmental, economic and social solutions to the climate crisis by creating partnerships with local schools and institutions, and convening thought leaders and key stakeholders—including previously excluded communities—to develop solutions for the most critical climate change issues facing our city and our planet. The Exchange will offer green jobs training—doubling the number of green job trainees from 16,000 to 32,000 within 10 years.

The Exchange also will house staff overseeing unprecedented collaborations among government, higher education institutions, and the low-income communities of color most impacted by climate change and in need of jobs and local investment. The Exchange also has the
potential to define the future of innovation and leadership in global adaptation, mitigation, and sustainability efforts. It will cultivate an engaging and interactive community-oriented experience, create meaningful connections, and contribute innovative technical and social solutions to the climate crisis.

Stony Brook University—a SUNY flagship and public member of the Association of American Universities (AAU) in New York—is deeply embedded in New York City and State. We attract more than 80 percent of our student body from the five boroughs of New York City and Long Island, more than 115,000 of whom have returned to the city and Long Island after graduation. We serve more than 27,000 students across our 1,452 acres in New York, with upwards of 200,000 accomplished alumni hailing from more than 100 countries and all 50 states. With our expansive main campus on Long Island, our Southampton campus, and our strong ties to New York City through local organizations and initiatives, Stony Brook University is uniquely positioned to ignite the New York Community and inspire collective action toward a sustainable future for the many diverse communities we, the city, and the state serve. As the anchor institution at The Exchange, Stony Brook University will orchestrate a network of partners that will help position The Exchange as a world leader in climate science, technology, and connectivity.

The Exchange also will invest in partnerships with community-based organizations working to mitigate the impacts of climate change, and help them pursue collaborative grant opportunities through The Exchange and by leveraging Stony Brook University’s unique access to federal, state, and city government. The Exchange also will include a Citizens Advisory Council, composed of key local stakeholders to ensure that partners’ and neighbors’ voices are not just
heard, but amplified. Stony Brook University takes pride in the deep connections we make with our communities—our partnership with the Long Island Latino Teachers Association hosts four annual events and reaches hundreds of students from underrepresented school districts. We look forward to replicating partnerships like this with The Exchange.

The Exchange will replace traditional academic settings that too often confine conversations and research efforts to silos with an open platform that invites new, previously overlooked voices into all activities, so the resulting solutions align with societal needs and are viable, and equitable for the planet, society, and the economy. Stony Brook University already has invested in expanding education and access to underrepresented and overlooked voices, exemplified by the SUNY Louis Stokes Alliance for Minority Participation (LSAMP) program that has increased underrepresented STEM bachelor’s degrees by 425%.

The Exchange will bring together the most important elements of the climate challenge: air, water, food, and energy studies. It will spur solutions that address key climate-related challenges without causing others. It will establish a model for co-designing solutions, a process that involves collaboration and communication from the outset to align technical knowledge with a better understanding of real-world applications. The University’s research mission demands adherence to the highest international standards as we advance knowledge of immediate and long-range practical solutions. The development of Governors Island is a natural and critical next step for Stony Brook University as a public institution. We are eager to take on this exciting challenge.

New York City is the premier location for a public forum of this nature because of the city’s reputation as a world leader, and its high profile experience with the effects of climate change and extreme weather events. While climate change is a global problem, its impact is particularly acute across the five boroughs of New York City and nearby on Long Island, which Stony Brook University calls home. Many residents, businesses, and non-profit organizations have invested in exploring solutions to the effects they face.
The Exchange will bring together the most important elements of the climate challenge: air, water, food, and energy studies.
Introduction

NEW YORK CLIMATE EXCHANGE
The Exchange will define innovation and leadership in global climate change adaptation, mitigation and sustainability.

Brook University—a SUNY flagship university—is the ideal educational entity to launch this endeavor on behalf of New York City, New York State, and the world-at-large.

OUR PARTNERSHIP NETWORK INSPIRING A FUTURE OF INNOVATION

Leveraging the power of collaboration, Stony Brook University has a network of local and global partners capable of impactful problem solving at The Exchange. Our ecosystem of partners ranges from large research institutions to local workforce development organizations, environmental justice groups, labor unions, and other non-profits approaching sustainability from every angle, all of whom bring particular expertise, passion for collaboration, and dedication to advancing positive change. Together, we will advance solutions and inspire new innovations that none of us alone could achieve.

At present, efforts to achieve a sustainable future are too decentralized to effect large-scale change. Stony Brook University aims to remedy that problem by adapting and scaling existing activities and programs of our partners to reach broader audiences with a more profound impact as quickly as possible. In forming these connections, Stony Brook University will also create a vital link between Governors Island and the broader New York City community.
WE HAVE THE SUPPORT OF THESE ACADEMIC PARTNERS FOR THE EXCHANGE:

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* Founding Academic Partner

DR. FRIEDERIKE OTTO
UNIVERSITY OF OXFORD

Friederike Otto is an Honorary Research Associate of the Environmental Change Institute, University of Oxford, and an Associate Professor in the Global Climate Science Programme. Her main research interest is on extreme weather events such as droughts, heat waves and storms, and understanding whether and to what extent these are made more likely or intense due to climate change. She leads several projects understanding the impacts of man-made climate change on natural and social systems with a particular focus on Africa and India.

Dr. Otto is the co-lead of World Weather Attribution (WWA), an international effort to analyse and communicate the possible influence of climate change on extreme weather events, hosted at the Environmental Change Institute, University of Oxford. Through rapid attribution studies, which provide timely scientific evidence showing the extent to which climate change influenced a given event, WWA has helped to change the global conversation around climate change, influencing adaptation strategies and paving the way for new sustainability litigation. For this work, Dr. Otto was recently named to the 100 Most Influential People of 2021 by Time Magazine.

NORTHWEST CLIMATE RESILIENCE COLLABORATIVE
UNIVERSITY OF WASHINGTON

The University of Washington Climate Impacts Group, along with nine community, nonprofit, and university partners, is launching a program of community-led, justice-oriented climate adaptation work across Washington, Oregon, Idaho and Montana. The Northwest Climate Resilience Collaborative will be founded with a five-year, $5.6 million grant from the National Oceanic and Atmospheric Association (NOAA). The program will be one of eleven across the country funded through NOAA's Regional Integrated Sciences and Assessments program.

The Northwest Climate Resilience Collaborative will advance efforts to adapt to climate change in frontline communities—communities that have been excluded from spaces of power and who are disproportionately facing the impacts of climate change.
WE WILL LEVERAGE OUR POWERFUL NETWORK OF PARTNERS AT THE EXCHANGE:

NON-PROFIT PARTNERS

INDUSTRY PARTNERS

ENVIRONMENTAL JUSTICE & COMMUNITY PARTNERS

DEVELOPMENT PARTNERS

LABOR UNIONS

** We are in conversation with the noted partners.
STONY BROOK UNIVERSITY IS A POWERFUL CONVENER.
AT THE EXCHANGE, WE WILL:

1. Reach constituent groups throughout the five boroughs of the city and across the world using various avenues such as schools, businesses, government organizations, non-profits, and more.

2. Advance intergenerational equity and reach K-12 students to initiate lifelong learning of sustainability and climate solutions.

3. Build thoughtful and inclusive engagement strategies that position The Exchange as a sustainable educational resource for experts, novices, and skeptics alike.

4. Provide a platform for stakeholder groups to interact with researchers and decision makers through conversation and knowledge dissemination.

Our founding academic partners are global educational and research powerhouses — University of Oxford, University of Washington, and Brookhaven National Laboratory. Our collaborative relationship with them is deeply rooted in trust and mutual interest in a better future for the communities we serve. Each of these institutions brings a unique perspective to The Exchange that will drive progress and encourage Stony Brook University, as the anchor, to strive for continuous improvement.

A strong team of academic and research partners at The Exchange will accelerate collective progress toward climate solutions, improve knowledge sharing capabilities, and strengthen technical know-how. Our partners on the island will improve The Exchange’s reach by expanding access to the communities we will serve, and we will amplify key programs these partners already run to magnify their audiences and the ripple effects their efforts have. Moody’s, GE, IBM, and URBS Systems bring critical corporate lenses to The Exchange, creating new opportunities for creativity and commercialization outside the academic sphere. Environmental justice and community partners will provide invaluable perspectives based on the populations they serve while benefiting from the network effects of The Exchange.

Our network of partners are committed to the vision we have for The Exchange and are excited about the future of sustainable design and architecture. Finally, we are devoted to supporting labor unions in our pursuit of sustainability and equity at The Exchange. In the spirit of The Exchange’s ever-evolving nature, we will add and work with new partners over time.
COMMUNITY EMPOWERMENT
SPURRING CONNECTIONS
THROUGH ACTIVE ENGAGEMENT

As The Exchange's convener, Stony Brook University will be responsible for forging pathways that empower communities by using a central physical location on Governors Island and fostering international connections to accelerate sustainable solutions and spur connections that will give birth to extraordinary innovation. Stony Brook University is ideally suited for this role — we have proven ourselves to be effective conveners throughout our history, uniting leading minds from around the world to engage in interdisciplinary collaboration across multiple channels.

Community members who visit The Exchange will engage hands-on with the innovations unfolding on the Island in real time. Program participants and members of the New York workforce will develop new, cutting-edge skills while learning from a rotating group of the top climate solutions scientists and practitioners of our time. Students who come to live and learn at The Exchange will challenge each other while developing deep convictions to pursue a more sustainable future for generations to come and become key leaders for New York. Researchers will work together to accelerate necessary innovations that will be examples for the rest of the world. Visiting scholars will convene for critical conversations that will chart a more inclusive and climate-friendly path forward for the world. A constant spirit of change and innovation will not only drive solutions forward, but also it will encourage visitors to maintain a relationship with Governors Island and the issues explored there.
To ensure community empowerment, Stony Brook University will create a Citizens Advisory Council (CAC) composed of key stakeholders from agencies, educational institutions, businesses, civic associations, and other Governors Island tenants designed to amplify the voices of our partners and neighbors. The CAC will be an invaluable asset to The Exchange because it will connect us with the broader New York population as we create clear outcomes and goals that include reporting and accountability metrics. While Stony Brook University will act as the anchor institution for The Exchange, our partners and community members will play an integral role in driving its future, exemplifying our commitment to engaged collaborative problem solving.

With The Exchange, Stony Brook University can reach new communities to address sustainability. In fact, we’re doing this already.

At The Exchange, sustainability science and technical experts also deserve a collective voice to inform programming and uses of The Exchange. The Expert Advisory Council (EAC) will consist of professors, researchers, industry experts, and other climate-related practitioners who can direct Stony Brook University’s activities at The Exchange to cutting-edge discoveries and exciting new solutions. Members of the EAC will understand that because The Exchange is designed as a center for climate innovation, fresh and daring ideas that might not be considered in a traditional academic setting will be welcomed, studied, and rigorously tested. With Stony Brook University as the anchor, The Exchange will be both an open forum for ideas, and an exacting proving ground for climate solutions.
SOCIALLY JUSTICE AND MOBILITY ADVANCING CLIMATE EQUITY FOR THE NEW YORK COMMUNITY

Equity and justice will be guiding principles of The Exchange, because empowering diverse communities is paramount in addressing issues of sustainability. Stony Brook University understands that the scientific, technical, and business solutions we accelerate with our partners can only be as effective as the relationships we have shaped amongst the wide array of communities The Exchange will serve. We must seize every opportunity to capitalize on the diversity that makes New York City the capital of the world.

Stony Brook University has a deep-rooted commitment to equity and justice and is a leader in promoting intergenerational social mobility. More than one-third of our undergraduates receive Pell grants, and Stony Brook is the only public institution in the AAU at which Pell grant recipients graduate at higher rates than non-Pell students. After completing their degrees, Pell grant recipients earn wages comparable or even slightly above those who did not receive Pell grants. The resulting improvement in social mobility is so significant that Raj Chetty and his colleagues at the Stanford Center on Poverty and Equality ranked Stony Brook #3 in the United States for students moving from the lowest income quintile to the top income quintile. The University also encourages underrepresented students to pursue education through a range of high school outreach programs in the New York area, giving historically suppressed voices access to and influence over critical discussions around issues as pressing as sustainability. Our commitment to equity, inclusion, and justice will inform our development of The Exchange as we strive to listen and learn from our visitors and partners to meet the needs of the populations we serve.
The Exchange will impact both present and future in a phased development rollout.
PROGRAM DEVELOPMENT ROADMAP
ESTABLISHING A STRONG SOCIAL AND PHYSICAL PRESENCE

We will realize our vision for The Exchange through a series of rollout and development phases, which will have impact for both the present and the future. Designing the formation of The Exchange in this way allows us to create both a social and physical presence over time, thereby aligning with Stony Brook University’s research mission for immediate and lasting change as well as the Trust’s vision for the impact The Exchange will have on Governors Island and its surrounding communities.

IMMEDIATE
Workforce training programs, K-12 outreach, and collaboration with our many partners will all commence before The Exchange has a physical presence on Governors Island. We are not waiting to make an impact on the community while design and construction are underway. Rather, the network effects of our partnerships will allow us to integrate, amplify, and scale existing programs. Simultaneously, island cleanup and restoration will have commenced, and our research team will start soliciting proposals for the lab and demonstrations spaces to come.

OPENS 2026
Visitors, students, and researchers alike will flock to Governors Island to enjoy the visitors center, classrooms, labs, demonstration spaces, and green areas. With a focus on infrastructure for public use, research, and education, The Exchange’s physical presence will invite diverse communities to share and learn. As physical capacity increases, as will our program offerings.

OPENS 2031
A hotel and conference center will accompany the existing visitor, education, and research buildings on the island. This expansion will increase capacity for stakeholder interaction and expand The Exchange’s reach.

TBD
After completion of Phases 1A and 1B, Stony Brook University will reevaluate our needs based on the progression of activity on the island and new innovations that have come from our programs. We will look for successes and areas for improvement, and we will implement new innovations in real time.
Section 1

RESPONDENT DESCRIPTION

Why Stony Brook University?

- We are committed to New York.
- We are equipped to deliver on this opportunity.
- Our campus principles are visionary and sustainable.
- Our academic and research programs are top-tier.
- We are intrinsically connected to NYC.
A. TEAM MEMBERS AND STRUCTURE

Stony Brook University serves over 27,000 students in New York, and connects to 200,000 accomplished alumni from over 100 countries and all 50 states.

STONY BROOK UNIVERSITY
OUR MISSION OF ENGAGEMENT

Community engagement and equity and justice underpin Stony Brook University’s research and academic mission. We will extend these guiding principles to The Exchange on Governors Island. Development of and activities at The Exchange will combine quality education, intentional ground-breaking research, unparalleled leadership, accelerated innovation, and a sense of community toward collective and sustainable outcomes. As a leading institution in New York State, Stony Brook University will fervently advance the well-being of the communities affected by the issues we address in partnership with representatives of those communities. Guided by our mission, we will solidify The Exchange as a New York-based global leader in sustainability and climate science.
OUR RANKINGS AND ACCOLADES
EXPANDING EDUCATIONAL ACCESS

Stony Brook University’s global reputation as a force in education and research positions the University to successfully execute our programmatic vision for The Exchange. We are a premier public research university equally committed to ensuring and expanding educational access for New Yorkers and pursuing globally impactful, path-breaking research. U.S. News & World Report has named us one of the top 35 public universities in the nation. Stony Brook University’s membership in the AAU also places us among the top 66 research institutions in North America. We are the seventh most selective public AAU university in the United States, with more than 30,000 applicants for a freshman class of 2,700. As such, we are the ideal academic anchor to ensure that The New York Climate Exchange will be the international hub for climate solutions.

OUR HISTORY AND GROWTH
ELEVATING PUBLIC EDUCATION

As an AAU university in New York, Stony Brook University is one of the United States’ most dynamic public universities. We have fully realized the vision of our 1960 mandate from the Heald Commission for Stony Brook University to become a university that would “stand with the finest in the country” and “advance the technical and scientific industries.”

Since our founding in 1957—established as a college for the preparation of mathematics and sciences secondary school teachers—Stony Brook University has grown from 148 students and 14 faculty members into an internationally respected institution recognized for its merit in education and research. Over the past 60 years, we have relentlessly pursued innovation both institutionally and across the many academic and research disciplines. Today, Stony Brook

STONY BROOK UNIVERSITY’S FIVE-PART MISSION

1. Provide comprehensive undergraduate, graduate and professional education of the highest quality.
2. Carry out research and intellectual endeavors of the highest international standards that advance knowledge and have immediate or long-range practical significance.
3. Provide leadership for economic growth, technology and culture for neighboring and the wider geographic region.
4. Provide state-of-the-art innovative health care, while serving as a resource to a regional health care network and to the traditionally underserved.
5. Fulfill these objectives while celebrating diversity and positioning the University in the global community.
University is a powerful hub for interdisciplinary excellence that spans marine and atmospheric sciences, engineering, arts and sciences, communication and journalism, business, and public health. In addition to our many degree offerings, we also boast nearly 100 centers and initiatives for research excellence across these disciplines to drive innovation in every aspect of what we study.

Stony Brook University faculty have been instrumental in developing effective solutions to natural disaster recovery in New York.

For example, Donovan Finn, an assistant professor at SoMAS and faculty director for Environmental Design, Policy and Planning, conducts research focused on sustainability and resiliency planning in the New York region and the role of public participation in effective planning outcomes. He also works regularly with non-profit organizations and local governments in New York City and Long Island on issues of sustainability, resilience and public participation.

**CONNECTION TO NEW YORK**

**OUR COMMITMENT TO THE STATE**

Stony Brook University attracts more than 80 percent of our student body from the five boroughs of New York City and Long Island, over 115,000 of whom have returned to the region after graduation. In 1962, Stony Brook University made a fortuitous move to a North Shore campus in pursuit of our mission and vision for the future, thereby charting a dynamic new path forward for Long Island and the State of New York. Throughout this expansion, Stony Brook University has demonstrated a steadfast commitment to New York, while crafting an international presence for the University by building instrumental international partnerships. Stony Brook University has also invested in an additional campus at Southampton to increase our footprint in marine, atmospheric, and sustainability research.
Our greenhouse at the R&D Park cultivates most plants used on campus.

Our Advanced Energy Research and Technology Center is one of the first LEED platinum buildings on Long Island.
Stony Brook University’s emphasis on sustainability is woven into our commitment to New York. Stony Brook University has been dedicated to reducing the carbon footprint of our enterprise. We recognize our responsibility as a public research university to adapt to new means of operations and development. As our knowledge of climate impact mitigation strategies and sustainability expands and lawmakers implement policies to hold all institutions to necessary new standards that will reduce negative externalities, Stony Brook University is charting a new path forward to help reverse climate change and reduce the impact it has on the populations we hold dear.

Stony Brook University leads all SUNY schools in reducing energy consumption through a multi-faceted and iterative approach.

Currently, we are facilitating positive, climate-friendly change on our main campus, at Stony Brook Southampton and within the Research and Development Park. Across these locations, we are striving to transition all Stony Brook University campus operations, maintenance, campus planning, design and construction, university parking, and transportation to meet new standards for reducing our environmental impact. Stony Brook University has also implemented several projects to advance our use of green materials and reduce our carbon footprint. We are now host to 9 LEED Certified buildings: 1 platinum-ranked, 4 gold-ranked, and 6 silver-ranked, plus 7 buildings that are LEED registered.

Not only is Stony Brook University dedicated to building a green enterprise, but we are also constantly iterating our approach to sustainability on campus and analyzing the effectiveness of new innovations to help us reach our climate-related goals. On our campuses, we take a multi-faceted approach to improving climate outcomes rather than committing to one overarching goal. It is exactly this spirit that makes Stony Brook University an ideal anchor institution for climate mitigation, adaptation, and sustainability on Governors Island. The Exchange will incubate a variety of never-before-seen solutions for application across New York and around the world.

Our history provides a window into Stony Brook University’s willingness and ability to self-reflect and adapt, which allows us to be nimble and forward-thinking. As an institution, we are constantly evolving to produce the highest-quality education possible, a critical component of success in creating a space for climate solutions discovery on Governors Island. Invigorated by the opportunity to develop the New York Climate Exchange, we are eager to expand our reach and impact on the New York communities we have worked to prioritize since our inception. Through The Exchange, we will lead New York and the rest of the world toward a resilient future in the face of rising sea levels, extreme weather events, widening socioeconomic disparities, and other undiscovered consequences of climate change.
OUR RESEARCH PARTNERSHIPS
LEVERAGING ACADEMIC ASSETS

The network of organizations we’ve assembled—and continue to build—for The Exchange will be invaluable in our research efforts. These groups will encourage us to think critically and holistically about the issues we explore and the solutions we produce. Our interactions will model a co-designing structure in which collaboration will accelerate outcomes beyond what any single party could accomplish alone. Stony Brook University is confident in our ability to achieve this caliber of teamwork because of our history of managing large-scale partners.

Brookhaven National Laboratory
Since 1998, Stony Brook University has been part of the management team of BNL, a national laboratory owned and primarily funded by the U.S. Department of Energy (DOE). With BNL as a founding partner, The Exchange will benefit from the touchpoints and resources this relationship can bring to Governors Island. The lab features world-class research facilities that attract a large and active user community. BNL scientists, many of whom teach on the Stony Brook University campus, conduct research in areas such as structural biology, chemistry, environmental science, medical imaging, nuclear and high-energy physics, energy and photon science, and data and computational science, including artificial intelligence and machine learning.

One of 17 DOE national laboratories, BNL stands out among an even smaller subset of multipurpose research laboratories by housing large, advanced facilities and hosting more than 4,000 scientific users annually. In addition to an array of medical imaging technology, students may have opportunities to participate in research programs using a scanning transmission electron microscope, a cryo-electron microscope, the Relativistic Heavy Ion Collider, the Alternating Gradient Synchrotron, the Center for Functional Nanomaterials, and the National Synchrotron Light Source II.

BNL delivers discovery science and transformative technology to power and secure the nation’s future. BNL is a multidisciplinary laboratory with seven Nobel Prize-winning discoveries, 37 R&D 100 Awards, and more than 70 years of pioneering research. The Laboratory’s 2,500-plus staff members lead and support diverse research teams that address the DOE mission to ensure the nation’s security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. In addition to BNL’s research efforts, the Laboratory offers robust STEM education and workforce development programs that draw more than 30,000 participants annually (pre-pandemic). Together with Stony Brook, Brookhaven has the research, education, and workforce development expertise to make a lasting impact at The Exchange and on the communities of New York City.

The Climate Solutions Initiative and the Center in Applied Economics and Public Policy
The new Center in Applied Economics and Public Policy, housed in the Department of Economics at Stony Brook University, brings economic analysis to our most urgent policy challenges, especially climate change and its consequences. The role of human production and consumption in greenhouse gas emissions is now firmly established, and the extreme-weather events driven by global warming are recognized threats to human well-being and that of other

Stony Brook University has partnered with Brookhaven National Laboratory to make a lasting impact at The Exchange and on the communities of NYC.

Professor John B. Parise working with a student at BNL.
In 2005, we partnered with legendary paleontologist Richard Leakey to open the non-profit Turkana Basin Institute (TBI) as a permanent infrastructure to enable year-round research in this remote region of sub-Saharan Africa.

species. To address these threats, the Center in Applied Economics brings faculty expertise in the economics of regulation and incentive structures to help formulate the new market structures needed to reduce emissions and hasten transitions to low-carbon economies.

The Center coordinates faculty research and resources to identify the vast and disparate effects of climate change on the health and livelihoods of disadvantaged populations in the United States and abroad. The solutions require sustained multi-departmental, multi-disciplinary collaboration with allied social science fields and with vital partners on campus in SoMAS, the College of Engineering, and the School of Communication and Journalism. Dialogue and sustained impact require more than rigorous science—they also depend on compelling communication with policy makers and the public. The resources of the Center in Applied Economics, coupled with expertise in the sciences and communication of Stony Brook University, will prove invaluable to the climate solutions enterprise at The Exchange.

ADDITIONAL RESEARCH CENTERS
EXPANDING OUR AUDIENCE

Stony Brook University’s centers and institutes cover six key subject areas: education, arts, and culture; environmental sciences; social and behavioral sciences; medicine and biotechnology; mathematics, physical sciences, and engineering; and technology and business. In addition to these organizations, we also host a range of centers at our Research and Development Park. While the complete list of our centers can be found here, below are a few that are particularly pertinent to our goals for The Exchange due to their subject matter, interdisciplinary nature, and broad-reaching audiences.

- Center for Teaching and Learning in Community
- Geospatial Center
- Institute for Advanced Computational Science
- Institute for STEM Education
- Osher Lifelong Learning Institute
- Simons Center for Geometry and Physics
- Turkana Basin Institute
Stony Brook University brings additional expertise vital to The Exchange: convening, engagement, outreach, and stewardship.

**ADDITIONAL KEY STRENGTHS INSPIRING NEW WAYS OF THINKING**

The success of The Exchange will depend on the range of the anchor institution's strengths. While Stony Brook University brings a powerful climate-related background to Governors Island, we boast many other areas of expertise vital to the project. These assets include but are not limited to: K-12 outreach, convening thought leaders, engaging the community, environmental stewardship, economic impact, healthcare, and global reach. Countless programs across the disciplines position Stony Brook University as an effective communicator and powerful accelerator for all activities we plan to pursue at The Exchange, and position us to adapt to new ways of thinking as our breadth of knowledge is already so wide.
WE HAVE CREATED COUNTLESS PROGRAMS ACROSS DISCIPLINES THAT ILLUSTRATE OUR BROAD EXPERTISE:

K12 OUTREACH

The Simons Summer Research Program provides academically talented, and motivated high school students the opportunity to engage in hands-on research in science, math or engineering with our faculty and students.

Since 1994, the Institute for STEM Education has been providing programs for students in grades 5 through 12 interested in math and the biological sciences.

CONVENING THOUGHT LEADERS

For 32 years, the Stony Brook University Center for Game Theory has brought together prominent game theorists and many leading economists from around the world for its international summer conference. It has organized, in total, more than 85 conferences and workshops, and has hosted more than 2,700 scientists since its establishment.

COMMUNITY ENGAGEMENT

Through the Gelfond Fund for Mercury Research and Outreach, the University aims to improve the understanding of how mercury cycles in our environment and the health effects of methylmercury from fish consumption. Started in 2009, the initiative is focused on providing information to the public and health professionals about how mercury gets into seafood and what the health effects can be from too much mercury.

ENVIRONMENTAL STEWARDSHIP

Since 2002, Stony Brook University has held Earthstock, a weeklong event created to celebrate the planet and advocate for environmental health. The event includes lectures from marine and environmental faculty, and features experts who discuss how to improve our carbon footprint and lead guided walks in the 26-acre Ashley Schiff preserve.
OUR INSTITUTIONAL APPROACH TO CLIMATE ISSUES

PRIORITIZING STUDENT INVOLVEMENT

Stony Brook University students bring a vigorous spirit that will carry over onto Governors Island at The Exchange. Our students hail from diverse backgrounds but maintain a connection to New York that is unique to Stony Brook University, allowing them to see key issues like the ones we will tackle at The Exchange with fresh and critical eyes. Our students are eager to learn and excel in their fields of study, and will bring their quest for a better future to Governors Island.

As seen by our accolades, our faculty includes noted artists, musicians, writers, political consultants, economists, sociologists, and historians, among many others in more than 30 departments spanning the arts, humanities, and business endeavors. Our Vertically Integrated Projects Program unites undergraduates, graduate students, and faculty members from across disciplines on teams that work together on long-term, real-world projects in research, design, and entrepreneurship. More than 500 students serve on these teams, providing another dimension to their education outside their own area of interest.

Stony Brook University faculty attract research dollars to combat climate change through advanced battery technology.

Esther Takeuchi, a distinguished professor in the Department of Materials Science and Chemical Engineering at Stony Brook University and the William and Jane Knapp Endowed Chair in Energy and the Environment, is advancing battery technology through her research group, which recently received an award of more than $2.2 million, part of a Department of Energy initiative that will develop electrolytes for lithium-ion batteries that operate under extreme conditions of fast charge, wide temperature range and severe abuse.

FACULTY COMMITMENTS TO CLIMATE RESEARCH

Developing a well-rounded student body and faculty is key to Stony Brook University’s success in driving discovery through collaboration. Stony Brook University has an incredible faculty of world-renowned experts in their fields, including Nobel Laureate C.N. Yang, who helped build its physics department; noted paleontologist Richard Leakey, whose Turkana Basin Institute has made groundbreaking hominin discoveries that have formed much of the evidence we have for human evolution; and Patricia Wright, SUNY Distinguished Professor, an acclaimed expert on lemurs and a conservationist who spearheaded the establishment of Ranomafana National Park in Madagascar. Our distinguished faculty have earned esteemed awards such as the Nobel Prize, Pulitzer Prize, Indianapolis Prize for animal conservation, Abel Prize, Emmy, Grammy, and the inaugural Breakthrough Prize in Mathematics.
STONY BROOK UNIVERSITY STUDENTS WILL TAKE ON INNOVATIVE RESEARCH AT THE EXCHANGE SUCH AS:

ADVANCED HYDROPONIC/AQUACULTURAL TECHNOLOGIES TO SECURE FOOD SUPPLY AND SAFETY

Vision
Climate resilient food-water-energy systems (FEWS) based on advanced hydroponic and aquacultural technologies to produce food year-round in plant/fish native environments will be demonstrated to secure food supply and safety during climate changes. The technologies will include resilient power supply, intelligent sensing, harvesting robotics, AI-enabled crop/fishery management, eco-friendly nutrient recovery from nitrogen rich wastewater streams, smart system integration, and robust food safety monitoring.

Rationale
Climate change often affects food security at the local, regional and global levels. In specific, changes in extreme weather events in the short term, as well as projected increases in temperatures, changes in precipitation patterns and reductions in water availability in the long-term can all result in reduced food security (productivity and quality), which can cause national security concerns and humanitarian crises. On Governors Island, we aim to demonstrate robust and resilient food-water-energy systems based on advanced hydroponic and aquacultural technologies to prevent the disruption of food availability and secure food quality and safety due to negative climate changes.

Vertical farming using hydroponic technologies has been shown to be a great approach to enhance food safety as it can drastically reduce the possibility of introducing foodborne pathogens during the growing process. This approach is particularly suited to ensure vegetable productivity during extreme weather events in urban regions. Similarly, land-based aquaculture in recirculating aquaculture systems to produce seafood in a safe and robust environment is another approach to secure marine protein supply during these conditions. The two approaches can further be integrated into a close system with synergistic effects, e.g., nutrient recovery and reuse from nutrient rich wastewater.
The Exchange will be powered by Stony Brook University’s twelve dynamic schools and colleges.

SCHOOLS, COLLEGES, AND RELEVANT DEGREE PROGRAMS
SCHOOLS KEY TO CONDUCTING INNOVATIVE CLIMATE RESEARCH

The School of Marine and Atmospheric Sciences (SoMAS) is SUNY’s designated center for marine and atmospheric sciences and is a global leader in research, education, and public service, most recently ranked as having the fourth best atmospheric science department in the world. At SoMAS, more than 700 undergraduate and graduate students and 90 faculty and staff from 16 different nations currently work together to better understand how marine, terrestrial, and atmospheric domains operate and can persist into the future.

With its $13M annual research budget plus contributions from the Stony Brook Foundation and New York State, SoMAS conducts research that spans both local problems affecting Long Island and processes that impact the globe with a current focus on coastal environments both around Long Island and in general—issues like ocean acidification, sea level rise, hurricanes, storm surge, flooding, winter storms, ecology, disaster planning and recovery, and the effects of these environments on human health. SoMAS will be an indispensable presence at The Exchange for its unique research areas, impressive student and faculty populations, and specific emphasis on coastal systems like Governors Island. New York City needs a strong partner in SoMAS to drive innovation that can mitigate the many effects of climate change felt on a local level with ripple effects that reach the international community, too.
The College of Engineering and Applied Sciences (CEAS) is the number 1 producer of undergraduate bachelor’s degrees in engineering in New York State, and ranks 19th nationally. The 9 academic departments, 228 faculty and staff members, and 5,100 undergraduate and graduate students of CEAS come together to learn and conduct internationally recognized research with an annual research budget of more than $46M. Our faculty engage in a broad portfolio of cutting-edge research to address issues that traverse science, engineering, socio-economics, and green power and fuels production using strategies and focus areas like engineering-driven medicine, artificial intelligence and cybersecurity, clean and alternative energy, smart and resilient cities, and ecosystem health.

CEAS is critical to the success of The Exchange due to its breadth of research offerings and its leading status in the state, which will bring the top local engineering minds to Governors Island. CEAS is unique in its understanding of the intersectionality of engineering—with programs in both hard sciences and socio-economics, for example—which is a crucial perspective that aligns with the mission of The Exchange.

CEAS will leverage its strong industry ties to develop and implement sustainable solutions for global energy challenges.
The Exchange will examine climate change from all perspectives.
SCHOOLS, COLLEGES, AND RELEVANT DEGREE PROGRAMS TACKLING CLIMATE ISSUES ACROSS DISCIPLINES

The College of Arts and Sciences (CAS)
CAS is the largest college within Stony Brook University, boasting 26 departments that include anthropology, economics, political science, and sociology. The college is a source of interdisciplinary undergraduate, graduate, and faculty perspectives that will create important spaces for populations outside of traditional science disciplines at The Exchange. As New York is a hub for so many industries and disciplines, CAS will bring a similar, necessary breadth of expertise to Governors Island.

The College of Business (COB)
COB instills an entrepreneurial spirit in its students, giving them the tools to lead: critical thinking skills, integrity, and creativity. Our COB faculty conduct research across consumer behavior, operations analytics, finance, and accounting subject areas, with backgrounds in economics, psychology, and political science. With this well-rounded picture of business, COB students understand enterprise in a way that will have a direct, positive effect on the commercialization potential of The Exchange.

Bringing Focus to the Social and Economic Impacts of Climate Change
In 2020, CAS launched the Center for Changing Systems of Power (CCSP) providing a place on campus for discussion and research on activism, social justice and inequality. This center aims to illuminate interlocking relationships between inequality and multiple systems of oppression, axes of domination defined by class, gender, race, ethnicity, sexuality, ability, geography and other markers of constructed difference as embedded in contexts of wealth, poverty and power.

The School of Communications and Journalism (SoCJ)
SoCJ is home to a range of degree programs, houses the Alan Alda Center for Communicating Science, and retains a powerful network of media organizations. Thanks to SoCJ, Stony Brook University is the only university in the 64-campus SUNY system to be accredited by the Accrediting Council on Education in Journalism and Mass Communication. SoCJ will be an asset to The Exchange for its students’ and faculty’s ability to communicate complex, pressing issues effectively, meaningfully, and directly to various audiences.
The School of Professional Development (SPD)
SPD offers graduate and noncredit programs for working professionals seeking career advancement through part-time study. SPD enrolls approximately 1,700 students in its 24 master’s, certificate, and post-master’s programs, and the school serves as a leading resource for educators across the region by way of its teacher and leadership certification opportunities. SPD is a critical resource for the workforce development and continuing education training that will occur at The Exchange, and Stony Brook University plans to leverage these existing programs to empower the green workforce of the future on Governors Island.

The School of Health Technology and Management (SHTM)
SHTM offers undergraduate and graduate degrees in clinical and nonclinical areas ranging from applied health information to health care quality, patient safety, and health and rehabilitation sciences. Among its centers, SHTM hosts the Center for Community Engagement and Leadership Development and the Center for Public Health Education. As the effects of the climate crisis have a direct impact on human health, SHTM will provide a health-centric perspective that will ensure innovations at The Exchange take into account the effect they have on communities, on Governors Island, across New York, and around the world.

The School of Social Welfare (SSW)
SSW operates under the principles of human dignity, inclusiveness, diversity, equality, and economic, environmental, and social justice to offer various degrees that span social work and health studies. This broad approach creates pathways for students to pursue careers and further student interests across different sects of social welfare practice and policy. The Exchange will benefit from SSW’s broad definition of social welfare and the school's critical lens onto the connection between justice for humans and the environment.
These six schools will provide the following support to The Exchange:

1. CAS will create important spaces for populations outside of traditional science disciplines at The Exchange.

2. COB students will bring their understanding of enterprise in a way that will have a direct, positive effect on the commercialization potential of The Exchange.

3. SoCJ will be an asset to The Exchange for its students’ and faculty’s ability to communicate complex, pressing issues effectively, meaningfully, and directly to various audiences.

4. SPD will be a critical resource for the workforce development and continuing education training that will occur at The Exchange.

5. SHTM will provide a health-centric perspective that will ensure innovations at The Exchange take into account the effect they have on communities, on Governors Island, across New York, and around the world.

6. The Exchange will benefit from SSW’s broad definition of social welfare and the school’s critical lens onto the connection between justice for humans and the environment.
The Exchange will benefit from Stony Brook University’s sustainable business practices that prioritize supplier diversity and green initiatives.

As one of 64 public institutions in the SUNY system, the largest comprehensive university system in the United States, we are stewards of the state's resources, practices, and policies that shape our teaching, research and patient-care mission and support our efforts in diversity, equity, and inclusion, efficient use of state resources, and sustainable business practices.

Stony Brook University follows New York State finance law and SUNY procurement policy for all state-funded purchases, as well as uniform guidance and Research Foundation of New York policies for research-funded purchases. With this guidance, we aim to purchase responsibly and to support green initiatives across the enterprise.

UNIVERSITY OPERATIONS

Stony Brook University is dedicated to furthering its commitment to efficiency and sustainability. Notable recent achievements include:

- The 2020 Innovation Award from Smart Energy Decisions.
- Water conservation efforts have reduced 32 million gallons of water consumption annually on campus.
- Installation of hydration stations on campus that eliminated the use of 2 million single-use water bottles annually.
- Installation of electric vehicle charge stations across campus.
- Designation as a “Bicycle Friendly University” by the League of American Bicyclists annually since 2014.

INVESTMENT POLICIES

Established in 1965, the Stony Brook Foundation is a private 501(c)(3) nonprofit organization. It exists to advance the goals and strategic plan of Stony Brook University by raising and managing private funds on the University’s behalf.

The Investment Committee of the Stony Brook Foundation’s Board of Trustees is responsible for the oversight and management of the endowment, including the determination of investment policy, asset allocation and the selection of asset managers. The investment staff within the Foundation support the Board in monitoring the portfolio, researching prospective managers, and reviewing asset allocation.

The Foundation demonstrates careful fiduciary stewardship...
ship of all private funds, pursuing a balanced investment strategy that consistently pairs growth with the objective of protecting the endowment’s market value in order to provide steady funding for the initiatives to which donors have designated their support.

The master developer will be responsible for the development and oversight of a multi-year plan to establish and operate programs that drive delivery of The Exchange’s mission and achieve the shared goals of the City, the Trust, and the network of partners. Key terms of the master lease agreement envisioned are further described in Section 5.

Stony Brook University achieved its goal of a 20 percent reduction in energy use intensity (EUI), reaching its mark on April 1, 2019, a year in advance of the program’s April 1, 2020 target date. The energy reduction target was part of plans outlined in New York State Executive Order 88 that mandates a 20 percent improvement in the energy performance of state government buildings by April 2020, using the state fiscal year 2010-11 as a baseline.

Our commitment to investing in energy master plans to improve its energy performance has been vital to the university achieving a 20.84 percent reduction ahead of schedule. Results published by SUNY Energy and NYPA for fiscal year 2018-19 show Stony Brook University is currently leading SUNY’s four University Centers and Upstate Medical in energy performance improvement, and is currently the only SUNY to reach this target.

GOVERNANCE STRUCTURE
NECESSARY LEGAL AGREEMENTS

While Stony Brook University will act as the anchor institution, our network of partners and community members will play an integral role in driving the future of The Exchange, exemplifying our commitment to engaged collaborative problem solving. This approach to convening currently discrete program providers will allow us to quickly amplify and scale the important work of these organizations.

Stony Brook University will utilize a master developer/master lease structure and stand up a “special purpose vehicle” (SPV) to serve as the master developer to enter into a master lease agreement with the Trust for the Project. The master developer will govern the programs and core activities of The Exchange. If selected, the appropriate legal form and structure of the master developer will be determined at a later date based upon our assessment of specific developmental needs and operational requirements. The academic partners will participate in discussions and provide guidance in strategic directions and key decisions.

Under the master developer structure, there will be one or more subordinate entities. The master developer will enter into subleases with each of these subordinate entities for subsequent phases of the overall project. Some of these entities may take the form of nonprofit corporations (e.g., to conduct fundraising to support activities at The Exchange) while others may be formed as taxable limited liability companies or other type of taxable corporate entity to execute the development and operation of non-core activities (e.g., a hotel and conference center, food and beverage services, etc.). Considerations for the type of legal entity include: the use of tax-exempt debt, property tax exemption, 501(c)(3) eligibility for the type of project, the inclusion of equity in the capital stack, and so forth.
Local Ecosystems, Global Implications

Professor Chris Gobler inspects a colony of bivalves with his students in Southampton.

OUR PARTNERS
EXPANDING PROGRAMMING OUTPUT

The Exchange will convene our network of partners in an ecosystem of accelerated innovation, exploration, learning, and development. We will break down traditional silos and forge new pathways to make the seemingly impossible, ultimately possible. We will support and invest in the important work currently being done by our partners by working to integrate, amplify, and scale programming to the benefit of the city and everyone in the area, initially doubling existing programming output.
OUR PARTNERS FOR THE EXCHANGE WILL COLLABORATE IN THE FOLLOWING ARENAS:

- **A Public Forum** changing the way we talk to each other about climate change and climate justice.
- **Sustainable Design** where clean, sustainable systems of the future are on display as they power a self-sufficient community.
- **A Commitment to New York** ensuring that access to the benefits of green innovation is universal and equitable.
- **A Living Lab** that convenes the top minds on climate change to experiment, discover, and lead the way in the global response to climate change.
- **Empowering a Green Workforce** across industries through training, partnerships, and lifelong learning.

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The Exchange will thrive on teamwork and drive discovery in all areas of the enterprise.

In addition to our longstanding partnership and role in managing Brookhaven National Laboratory, Stony Brook University and its faculty collaborate on projects with other institutions, advisory boards, and centers across the country and the world.

Teamwork and fostering interdisciplinary interaction have been key to our mission to drive discovery in all areas of the enterprise, such as fostering the creation of new medical treatments or energy alternatives that can improve all our lives.

We work with many of our SUNY sisters toward common goals, such as through our recent partnership with Farmingdale State College to create the Offshore Wind Training Institute and as the lead institution for SUNY LSAMP (Louis Stokes Alliance for Minority Participation).

LSAMP, which includes 14 SUNY campuses, works to increase enrollment of underrepresented minority students to pursue degrees in science technology, engineering, and mathematics.

Around the world, Stony Brook University has collaborated to open several distinct facilities to foster research and education:

**In 1991**, SUNY Distinguished Professor Patricia Wright and Stony Brook University established the Institute for the Conservation of Tropical Environments (ICTE), which operates a number of research sites, study abroad programs and activities throughout the tropics, including Centre ValBio (CVB) on the edge of Madagascar’s Ranomafana National Park. CVB works to protect Madagascar’s unique diverse ecosystems through conservation science and projects.

**In 2005**, we partnered with legendary paleontologist Richard Leakey to open the non-profit Turkana Basin Institute (TBI) as a permanent infrastructure to enable year-round research in this remote region of sub-Saharan Africa. Stony Brook University co-manages TBI where some of the funding and research is focused on climate science both in the past and future.

**In 2012**, we partnered with SUNY to open its first campus in Songdo, South Korea providing international students with access to Stony Brook University's graduate programs in Technology & Society and Computer Science. Since then, SUNY Korea has opened three additional Stony Brook University departments; Mechanical Engineering, Applied Mathematics and Statistics, and Business Management. Programs are taught by a combination of faculty that reside in Korea and faculty from Stony Brook University.
Locally, we work together with institutions such as **New York University**, our co-lead in running the New York State Resiliency Institute for Storms and Emergencies (NYS RISE), which launched in 2013. This group addresses the vulnerabilities of the built and natural environments to extreme weather and acts as a hub for in-depth research, analysis, and education on disaster preparedness. It brings together academic thought leaders, as well as government officials, national experts and emergency response leaders to conduct research, and provide scientific information and intellectual resources that will lead to the development of comprehensive plans that policymakers and stakeholders can use to better protect communities.

In early 2021, as part of the largest public investment in offshore wind workforce development in the country, the State University of New York and NYSERDA launched New York’s **Offshore Wind Training Institute** (OWTI) to train 2,500 workers.

Through a partnership between Stony Brook and Farmingdale State College, a $20 million New York State investment in the new training institute advances offshore wind training programs and the educational infrastructure needed to establish a skilled workforce that can buttress the emerging national offshore wind industry. This supports New York’s nation-leading goal of developing 9,000 megawatts of offshore wind by 2035 as outlined in the Climate Leadership and Community Protection Act. In summer 2021, as part of OWTI, Stony Brook partnered with developers Orsted and Equinor to deliver its first training program in offshore wind.

Our faculty continue to share their expertise through participation on hundreds of advisory boards, such as Paul Shepson, Dean, School of Marine and Atmospheric Sciences, and his role on **New York State’s Climate Action Council**.

And we teach the importance of collaboration through our three-year old **Vertically Integrated Projects Program**, which unites undergraduates, graduate students and faculty members from across disciplines to work together on long-term, real-world projects in research, design, and entrepreneurship. More than 500 students are currently on teams, providing another opportunity to expand their knowledge and help solve challenging issues.
B. EXPERIENCE WITH SIMILAR PROJECTS

The Exchange must be unlike any other entity in the world: visionary and vocal.

EXPERIENCE OPERATING SIMILAR INSTITUTIONS AND CENTERS
ADVANCING NEW ACADEMIC MODELS

Traditional research and academic models have had limited success in the fight to save humans from themselves. That is why The Exchange at Governors Island must be unlike any other entity in the world. It must be a bold and visionary game-changer if it is to achieve its planet-saving ambitions.

We envision The Exchange as a foundation to create a new hybrid of education and outreach to help the Center achieve its goals. By engaging with a wider cross-section of researchers, educators, policymakers, and the public we will benefit from fresh perspectives and insights.

Stony Brook University has a reputation for looking at issues from different angles and finding pioneering paths to solve them. For example, we collaborated with Alan Alda to create the Center for Communicating Science to help researchers better explain their science. Since its inception in 2009, the Alda Center has worked with more than 18,000
scientists from around the world to communicate effectively and empathically.

In 2010, we opened the Simons Center for Geometry and Physics, a new concept in SUNY. The LEED Gold-certified energy-efficient, art-infused building provides physicists and mathematicians a unique space to encourage interdisciplinary thought. Lounge areas and chalkboards are sprinkled throughout the building for whenever inspiration strikes. All offices have windows, and each floor has showers and kitchenettes to provide researchers all they need for when they burn the midnight oil. Art and creativity are also essential parts of the Center’s philosophy, with a gallery featuring exhibits that tie in math and science, such as the work of M.C. Escher, a recent offering. A playwriting competition is held every year to bring science and theatre together. And in addition to weekly talks on math and phys-

Since opening in 2010, the Simons Center has held 49 visiting programs, over 150 workshops, and other events that have attracted more than 3,500 participants world-wide.

ics, the Center hosts multiple concerts and films through its art and outreach programs to help the public better understand these areas and their impact on our daily lives.

To further engage with our community, we also provide assistance to start-up companies through two incubators, in high-technology, where we have helped promote 44 companies to date, and for food, with nearly 40 successful new businesses launched. Our Research and Development Park and our satellite Calverton Incubator offer space and support to help businesses grow while also giving our students an opportunity to intern and gain valuable experience. This partnership between these start-ups and Stony Brook University not only enhances our academic mission but also has helped bring $4.6 billion to the economy of Long Island.
Stony Brook University has a long history of forming successful consortia. This type of collaboration and sharing of resources underscores Stony Brook University’s commitment to providing the highest quality education for its students. By working with a variety of partners and leaning into the respective strengths of each, Stony Brook University students are afforded the opportunity to receive a holistic, interdisciplinary education that fosters the exchange of ideas across boundaries and disciplines. This commitment provides access to the leading minds and highest-quality resources for students and faculty at Stony Brook University. This same philosophy will foster innovation and creativity in the climate solutions and mitigation strategies that will be developed on Governors Island. A look into Stony Brook University’s proven track record in forming consortia can be found below.

STRIDE (Science Training and Research to Inform Decisions) is an innovative training program based in the Institute for Advanced Computational Science that provides STEM graduate students with unique interdisciplinary skills to assist, create, and eventually lead in the translation of complex data-enabled research into informed decisions and sound policies. Research themes include: climate change and coastal resilience; powering the smart grid; marine resource management; and tracking and targeting deforestation, among others. In addition to the training program that brings together students from nine different departments, STRIDE holds special events to foster the exchange of ideas, including its annual STRIDE-Con, now in its fifth year. This day-long seminar showcases science communication, data visualization, policy and diversity. For 2021, the seminar featured topics focusing on important issues such as COVID-19, racial inequality, and science communication via social media.

Stony Brook University is now the host of the Peconic National Estuary Program (PEP), a National Estuary Program that acts as a backbone organization, bringing together partners from different sectors around common goals. PEP staff and their partners support monitoring, research, collaboration, and education to address priority issues within the Peconic Estuary Watershed. PEP acts as a bridge at the boundary between science and policy, and ensures that an informed citizenry, along with all other stakeholders, have a voice in the decision-making process. Monitoring is an integral part of PEP to understand the status of the system and to evaluate the impacts of management activities.

The Exchange will afford students the opportunity to receive a holistic, interdisciplinary education.
The new 76,000 square-foot Computer Science Building is practical, elegant, and essential to teaching and research for the Department of Computer Science at Stony Brook University.

The Environmental Protection Agency recently awarded Stony Brook University $522,527 in support of the Peconic Estuary Partnership, for the period July 1, 2021, to September 30, 2022. This represents the first award and start of Stony Brook University’s relationship as host of the PEP.

The Systems Biology Center of New York (SBCNY) is an NIH-supported consortium of researchers from the Mount Sinai School of Medicine, the Courant Institute of Mathematical Sciences at NYU, Stony Brook University, Columbia University, IBM T.J. Watson Research Center, the National Centre for Biological Sciences (India), and CUNY. The goals of the center are to develop and disseminate approaches that provide a mechanistic understanding of how molecular interactions within regulatory networks in cells lead to the physiological function of tissues and organs, and how therapeutic agents affect cellular regulatory networks to alter pathophysiological states.

EXPERIENCE WITH HISTORIC AND GROUND-UP BUILDINGS TRANSFORMING OUR CAMPUS

Over the past 60 years, we have successfully transformed a plot of farming land into a historic campus with a vibrant community that continues to grow and evolve to meet the educational needs of a rapidly changing world. We have recent, tangible experience in creating a unique, adaptable, sustainable, and innovative campus that is seamlessly integrated into the natural environment. We will draw on that experience as we build out The Exchange on Governors Island. With Stony Brook University’s guidance, a picturesque island in New York Harbor can become a global powerhouse and the gold standard in climate change mitigation.
WHERE WE OPERATE

PHYSICAL LOCATIONS

In 1962, our university moved to a 480-acre campus near the historic village of Stony Brook University, a fortuitous location that would impact the trajectory of Stony Brook University’s course to become a leading, public research institution it is today. We have now grown to 1,452 acres with three campuses, more than 213 buildings (nine of which are LEED-Certified projects), and 13 million sq. ft of space.

Part of that acreage includes our health sciences and hospital facilities; our Flax Pond Marine Science Laboratory in nearby Old Field, New York; the 26-acre Ashley Schiff Nature Preserve (one of only 15 protected areas on a SUNY campus); a 246-acre Research and Development Park; and the 84-acre Southampton campus.

The two most recent additions—Stony Brook Southampton and the R&D Park—posed very different approaches. In 2006, when Stony Brook University acquired Southampton from Long Island University, much work was needed to upgrade older buildings and bring the campus infrastructure up to speed. But for the R&D Park, Stony Brook University had a clean slate as it first built, from the ground up, two new energy-efficient facilities designed to provide our researchers and their collaborators with the space and technology needed to drive discovery. The original two buildings—the New York State Center of Excellence in Wireless and Information Technology (CEWIT), which opened in 2008, and the Advanced Energy Center (AEC), which opened in 2010—anchor the growing park. Two more buildings have been added, the most recent, the Innovation and Discovery Building, opening in late 2019. A fifth building, the Institute for Engineering-Driven Medicine, is scheduled to begin construction this fall.

PRESENCE IN NEW YORK CITY

CENTERS, PROGRAMS AND AFFILIATIONS

Stony Brook University’s ties to New York City are deep and strong. In addition to the thousands of students from the five boroughs who attend the institution, many faculty and
Stony Brook University is intrinsically connected to NYC through its students, faculty and staff who live there, and alumni—more than 50 percent of whom live and work in the metropolitan area.

staff live within the city’s borders and more than 50 percent of our 203,000-plus alumni live and work in the Long Island and New York City metropolitan areas. Taking advantage of its location only 60 miles east of Manhattan, Stony Brook University has created affiliations with several programs in New York City. These include:

**Flatiron Institute’s Center for Computational Astronomy**
The University’s gravitational wave astronomy group at the Flatiron Institute’s Center for Computational Astronomy in Manhattan is led by Stony Brook University professor and astrophysicist Will Farr. The Center for Computational Astrophysics executes research programs on systems ranging in scale from planets to cosmology, creating and using computational tools for data analysis and theory. It also supports, trains, and equips diverse members of the global astrophysics community and convenes events and workshops in New York City.

**Additional Programs and Research Initiatives**
Stony Brook University faculty have conducted research projects in the New York City area focused on climate-related matters. Faculty engaged in detailed studies in the New York Harbor area after Hurricane Sandy to engineer responses to future disasters.

The Stony Brook University Advanced Energy Conference, hosted in New York City, connects energy industry professionals, researchers, and policymakers from over 700 national and international organizations.

Faculty, such as Margaret Schedel, Chair of the Department of Art, have also been pursuing connections. She recently performed at Nolan Park on Governors Island as part of the Embedded Iron installation. Her composition, Housework Lock (her) Down (2021), highlighted the unequal burden of housework and expectations on women during the COVID-19 pandemic.

**Stony Brook University in Manhattan**
Our location on Eighth Avenue gives students in the graduate programs in film, TV writing, and creative writing and literature an opportunity to take classes in New York City.

Stony Brook University’s Online Biology program provides quality, rigorous biology courses to students worldwide. Courses are designed for ease of navigation, peer-to-peer learning, and the integration of content knowledge with critical scientific thought. For students from the New York City region, exams for the following courses, offered each summer, are given at the SUNY School of Optometry with no exam fee.

Students in the School of Social Welfare can pursue a master’s degree in the city, thanks to a partnership with the SUNY College of Optometry. Students enrolled in Manhattan can also take classes on the Stony Brook University campus.

Students can earn their School District and School Building Leader certifications at the Manhattan location. The Educational Leadership (EDL) program prepares K-12 educators for advancement into positions at both the school district (SDL) and school building (SBL) levels. Established in 2007, this was the first program of its kind in New York State to serve as a pathway for certification at both the district and building levels.
Everyone needs to understand climate change and contribute to its mitigation. In partnership with the Long Island Latino Teachers Association (LILTA), we host four annual events for hundreds of K12 students from underrepresented school districts.
involvement in this program will be a unique asset as we bring the same entrepreneurial mindset to Governors Island. The full scope of our experience collaborating with strategic partners is listed below, which also highlights the outstanding enterprises that Stony Brook University has been instrumental in promoting their creation.

**Advanced Energy Center (AEC)** is an energy-focused facility that has extensive research laboratories, user-facilities, and start-up incubator labs, and conducts formal programs for energy-business assistance, technology advisement, and support. As New York State’s designated Center of Excellence in Energy, AEC facilitates cross collaboration of researchers, industry, and energy subject-matter experts throughout the state. Housed in New York’s first LEED platinum research facility and located at the Stony Brook Research and Development Park, the AEC currently supports over 150 energy projects and ten major research and training centers. The AEC has attracted well over $150M in funding and has affiliations with three U.S. Department of Energy EFRC’s (Energy Frontier Research Centers), which together account for roughly $50M in federal funding to New York State.

**The Center for Integrated Electric Energy Systems (CIEES)** is leveraging the technical capabilities and intellectual assets of Stony Brook University and Brookhaven National Laboratory in order to provide competitive advantages to established, and to-be-established, energy-related industries and services on Long Island and in New York State. The Center strives to make New York State a global leader in the technologies that accelerate the progress of renewable energy as one of the mainstream resources displacing fossil fuel-based electric power worldwide. We promote industry growth in New York by supporting industry collaborations with university experts in the areas of grid technologies, energy storage, and energy-related materials. In the past five years of the Center’s operation, it engaged New York companies in 29 projects, which delivered $18M of economic impact, created 62 high-tech jobs, and retained 48 additional jobs.

**High-tech incubation is a core activity. Stony Brook University has launched 44 companies in partnership with the State of New York.**

**Battelle Memorial Institute**
Stony Brook University co-manages Brookhaven National Laboratory with Battelle, which is the largest, private, non-profit research and development organization in the world. It began managing national laboratories for the Department of Energy (DOE) in 1965 and now has a role in managing six DOE labs and one for the Department of Homeland Security.

**Empire State Development Division of Science, Technology and Innovation (NYSTAR)**
ESD is NY State’s economic development agency. NYSTAR runs programs and centers emphasizing the importance of working with industry as a way to leverage New York State’s technology strengths to produce new products. Stony Brook University has five major and many smaller programs with NYSTAR.
Stony Brook University has the capacity to raise the necessary funds to fulfill this proposal’s goals. Across New York City’s five boroughs, Nassau County, and Suffolk County, the University has a powerful network of more than 200,000 alumni, many of whom work within the fields of climate and sustainability. Our proximate community of alumni will be invaluable assets to the programmatic development and financial support of Governors Island.

Stony Brook University has secured an initial commitment from a private foundation that will match up to $100M in philanthropic support from other donors. This anchor gift ($20M annually over the first five years) will provide the core support to inspire other foundations, corporations, and individuals to invest in Governors Island’s future. Thus, within the initial five years, we forecast a minimum of $200M in philanthropic support to drive our early capital investments, strategic research agenda, and broader programmatic needs.

The Trustees of Stony Brook University’s Foundation are deeply invested in Stony Brook University’s leadership of the New York Climate Exchange. They have already offered their counsel, advocacy, and philanthropic support, and they will continue to do so in the years ahead. We anticipate additional transformational gifts for Governors Island from our existing philanthropic leaders.

While Stony Brook University already has a base of donor support within the New York City region, Governors Island will allow us to advance those relationships and develop new ones across key foundations, corporations, and individuals. In partnership with our other founding universities, we are prepared to hire a team of local major gift and principal gift officers who are dedicated to increasing the annual level of philanthropic support.

Further, Stony Brook University’s Advancement team has deep experience developing aggressive fundraising plans for critical capital projects, as well as through public-private partnerships. Recent examples include the world-class Simons Center for Geometry and Physics, the New York State Center of Excellence in Wireless and Information Technology, and the Advanced Energy Center. We are confident that we will secure the philanthropic funds necessary to support the long-term vision for Governors Island.
C. OUTSTANDING PARTNER NEEDS

ADDITIONAL PARTNERS OPEN TENT CONCEPT

The New York Climate Exchange Powered by Stony Brook University welcomes partners of all types to join the work of The Exchange. The concept for our program is an open and inclusive community of collaborators committed to addressing the challenges we face. We have had numerous conversations with many potential partners over the past several months as we developed our proposal, and look forward to continuing to build a network of partnerships committed to participating in this important work.
Section 2

CONCEPT NARRATIVE
A. ACADEMIC AND RESEARCH PROGRAM

ACCELERATED CLIMATE ACTION
THE MISSION OF THE EXCHANGE

Climate change is here. Any comprehensive solution will require an understanding of how to minimize current changes, modify our practices and living patterns to accommodate them, and develop the means to reverse the warming trajectory. The New York Climate Exchange on Governors Island will be a public, living laboratory to inform, learn about, develop, and share climate change solutions along these three main branches—mitigation, adaptation, and sustainability. For the solutions developed to be effective, they need to be both informed and adopted by the communities they are meant to benefit, while being widely and justly implemented.

OUR MISSION HAS FOUR GUIDING PRINCIPLES:

1. Facilitate collaboration, dialogue, and co-design among interested (and sometimes conflicting) parties, especially the most vulnerable communities.

2. Prepare our students and existing workforce for careers in emergent fields related to climate change solutions, and for the on-going work of making those solutions sustainable.

3. Develop and demonstrate research solutions while raising awareness of their broader impacts on society.

4. Keep Governors Island as a vibrant part of NYC with public climate and arts programs.

We are now undeniably in a global emergency. Many of the predicted consequences of climate change have arrived. New York City is already seeing disastrous weather events driven by anthropogenic global warming, and time is running out to avoid climate catastrophe. The United Nations Intergovernmental Panel on Climate Change (IPCC) report released in August 2021 confirmed that immediate and accelerated action by groups of all sizes is urgently needed. “Unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades,” the report stresses, “global warming of 1.5 °C and 2.0 °C will be exceeded during the 21st century.” Communities around New York City and the world are struggling to adapt to climate changes that have already occurred. Furthermore, the effects of climate change on our society exacerbate existing inequities.
Climate solutions are not only technological. The Exchange will take a multi-valent approach to climate change solutions.

The Exchange will position New York City as a global leader in disaster preparedness, the creation of novel climate solutions, and the adoption of critical behaviors that will help curb climate change.

Though the city stands as a global beacon for urban energy, innovation, and financial leadership, it needs to build capacity for resilience and to lead in ushering in the new green economy. The Exchange will position New York City as a global leader in disaster preparedness, the creation of novel climate solutions, and the adoption of critical behaviors that will help curb climate change. With hundreds of industry experts, skilled researchers, graduate students, and activists working through this center each year, we are confident that the Island will have an amplifier effect, educating the global community at a scale and rate not previously thought possible.

Climate change mitigation is a clear short-term priority. New York City and New York State have set ambitious mitigation goals to reduce their dependencies on carbon-intensive energy and technologies and to adjust to the new realities of rising sea levels. While New York's
leadership has demonstrated the scale of the challenge that lies ahead—not just for the city or the state but for the nation too—it also highlights the pressing need to move faster, with more urgency and determination, toward these goals. The Exchange's immediate priority is to accelerate technological, economic, and policy projects, together with workforce training, in the areas of alternative energy, emissions reductions, green construction, and regulatory and legal frameworks.

The Exchange will develop technologies of adaptation to help New York City and New York State cope with the inevitability of climate change effects. New York City, as a coastal and island city, as well as a center of global business and trade, is particularly vulnerable to many climate change impacts. The community frameworks and technologies developed to help New York City adapt to these changes will range from directly engaging the public on local impacts, developing warning systems, and implementing resilient coastlines, to environmentally-sound building construction techniques and formulating new zoning. These frameworks and technologies will allow us to imagine future scenarios for the flourishing of the city and its residents under those climate change conditions that are already, irreversibly, here, such as stronger and more frequent weather events.

Sustainability is a longer-term priority. It emerges from mitigation and adaptation strategies that have been thoughtfully and thoroughly designed and implemented. The “living laboratory” aspect of The Exchange will make its most lasting contribution in this area. Bringing together the strategies and technologies developed here with those constituents whose behaviors and practices will have to change, The Exchange will honestly confront the injustice of climate catastrophe, while addressing what it means to live with climate change. The Exchange will bring practical solutions and testing to Governors Island and will demonstrate that—through our unique collaboration across educational disciplines, industries, and communities—we can move beyond raising awareness and into actionable solutions.

Identifying Solutions to the Growing Problem of Fabric Waste

Fabric waste has become an escalating problem that stems from the ever-shortening clothing lifecycle. Stony Brook University students have conducted research with Fashion Institute of Technology (FIT) to understand fabric waste and the lifestyle of textiles. Their hypothesis is that the waste cotton fabric materials could be deweaved under controlled chemical concentrations and temperatures. The deweaved cotton fabric waste could be used directly to produce a yarn, followed by fabric production.

Climate solutions are not only technological. The Exchange takes a multivalent approach to climate change solutions, integrating the cultivation of community networks, the development of technologies and policies, and a commitment to climate justice. Governors Island will become a living laboratory for one of the largest cities in the world and will help ensure that the solutions developed here can be responsive to a changing environment and adapted to meet the varying needs of the global community.
The Exchange will challenge the traditional model by creating a campus that is deeply woven into the educational experience itself.
INSTITUTIONAL STRUCTURE
THE EXCHANGE AS PUBLIC FORUM

The Exchange will incorporate a forum for public outreach with collaborative meeting spaces, organized into public, education and research forums, credit-bearing undergraduate courses, and a research laboratory. It will be the intersection of an array of academics, skilled researchers, industry leaders, and activists, creating a global hub for climate change education and mitigation efforts. The Exchange will challenge the traditional model by creating a campus that is deeply woven into the educational experience itself. Researchers, students, and visitors to the Island will constantly be immersed in the research being conducted at The Exchange as they walk through campus and the demonstration spaces being actively used to test new technologies. The Exchange will be committed to moving outside of the siloed nature of traditional academic programs and will incorporate technological, economic, workforce development, and policy projects together in a single hub. Every solution that is developed on Governors Island will consider its broader impact on each of those elements.

We are going to make a space that has the physical infrastructure and network to advance the global fight against climate change, while simultaneously increasing the number of voices at the table. Climate change is a global problem that needs a unified set of solutions. At Stony Brook University, we understand that our success in this realm is dependent on our ability to work across boundaries, and at The Exchange, we will do just that.

THE EXCHANGE IS AT THE HEART OF A RICH ECOSYSTEM OF DISCIPLINES:
As the global leader in climate change solutions, the New York Climate Exchange will incubate cutting-edge research and demonstrate its viability on the island, while developing its solutions and workforce from—and deploying its solutions to—New York City, New York State, and the globe. The Exchange will do so quickly, with short-term projects chosen for how close they are to their application stage. Short-term residences for researchers, students, and professionals on the Island will help accelerate innovation and collaboration across disciplines. With the support of our academic partners such as Oxford University, the University of Washington, Yale University, Stanford University, Columbia University, and others, we will create an academic powerhouse that draws on the unique, interdisciplinary strengths of each institution to create a first-of-its-kind hub in the fight against climate change. Such a network will be exceptionally equipped to lead this critical effort.

The Exchange will promote public and stakeholder engagement to co-produce global climate solutions.

Based on our three interdisciplinary themes, The Exchange will forge specific connections to all the relevant communities and stakeholders in the New York City region and beyond. As a result, The Exchange’s programming will rely on public and stakeholder engagement for the co-production of climate solutions for New York City. The three themes map directly onto the Sustainability Principles outlined in the Physical Plan.

As we begin this project, Stony Brook University’s commitment to environmental justice informs the work that we will do on Governors Island. The Lenape people, and other indigenous peoples who have called the Northeastern United States and Canada home for many centuries, still consider the land on and around Governors Island as part of their home. We intend to partner with indigenous and other environmental justice organizations in our planning and decision-making process.
The Exchange will initially focus on three interdisciplinary research and educational themes, in a manner that is unique to coastal and urban environments:

**SUSTAINABLE URBAN ENVIRONMENTS**

Because of its location in the heart of New York Harbor, The Exchange is especially well-suited for generating sustainability and affordable solutions for coastal and island urban environments. The renovation of existing, and construction of new, buildings on Governors Island will constitute a living laboratory for sustainable urban development, while Governors Island’s coastline can produce data points applicable to the shores throughout New York City’s five boroughs and those of other coastal cities.

**THE WATER-FOOD-ENERGY NEXUS**

Following the United Nations’ emphasis on the interdependence of the critical ecosystem domains of air, water, food, and energy, The Exchange will adopt the “nexus” approach to sustainable climate change solutions. This means carefully weighing the effects of shifts in one nexus domain, whether accidental or intentional, on the others. For example, when we experiment with alternative energy sources, we must question how our actions might impact water reserves, agricultural outputs, food security, and so on.

**INTEGRATING WAYS TO SHARE BURDENS**

The impacts of climate change are uneven and contribute to growing global inequalities. The work at The Exchange will be dedicated to climate change solutions that ameliorate such inequalities, integrating ways to share out burdens and benefits more equitably. The Exchange’s scientific research and its educational curricula will be guided by the recognition that climate justice is a human right. Our offerings in the fields of environmental humanities and environmental art practice will deepen our commitment to that principle and help continually to rethink and revise the criteria for how we fulfill it. The Alda Center’s communication training will help build better capacity to listen, learn, and communicate across differences.
Brookhaven National Laboratory will serve as a key partner in our approach to education and research. They will support our three themes in the following ways:

**SUSTAINABLE URBAN ENVIRONMENTS**

BNL can contribute to an understanding of the dynamics of the urban heat island effect, how it will change as regional temperatures increase, and what strategies within cities may help to reduce the urban heat island effect. BNL can contribute to challenges of integration of renewables through our expertise and capabilities in energy storage (already a very strong collaboration with Stony Brook University) and electric grid modeling.

**THE WATER-FOOD-ENERGY NEXUS**

Development of biofuel strategies that do not compete with food production is an area that requires the development of crops that can grow on marginal lands. That is the key driver for BNL’s Quantitative Plant Science Institute (QPSI) and aligns with BNL efforts in the DOE-Biological and Environmental Research-funded Bioenergy centers. In addition, BNL has expertise in understanding how climate change could impact the Water-Food-Energy Nexus through impact on agricultural zones, precipitation trends, extreme weather, and droughts.

**INTEGRATING WAYS TO SHARE BURDENS**

BNL can contribute to measuring, modeling, and understanding urban climate change impacts. This includes a broad range of research, from heat impacts in urban environments to distribution system modeling in dense electric grids, and models of the potential of energy storage to mitigate impacts.
The Exchange will prioritize the following programs that further mitigation, adaptation, and sustainability solutions:

**Engage** diverse groups of educational and research institutions, communities, stakeholders, industry, and governments within The Exchange to observe, debate, propose, demonstrate, and facilitate climate solutions.

**Grow** a living laboratory that integrates citizen science approaches and itself becomes a subject for study, to accelerate the research of the impacts of climate change on urban and coastal environments and to develop technical climate solutions for rapid deployment.

**Provide** additional training to an interdisciplinary community of professionals as Climate Solution Fellows, so that they may quickly become leaders in the development, implementation, and communication of climate solutions.

**Commit** to the education and immersive experiences of undergraduates, community members, and working professionals through inclusive educational and internship programs in climate change science and impacts, climate solutions, and environmental justice.

The future of the green energy sector will undoubtedly shift and evolve in response to the changing needs of society and emerging technologies. The Exchange will become a valuable resource in a rapidly changing job market by preparing undergraduates, community members, and working professionals to be leaders in careers focused on climate change solutions and environmental justice. More than ever, there is a need to create a resilient and adaptable workforce that is prepared for the changes that may come, particularly in the green energy space, and work towards a more sustainable future. Our central location in and commitment to New York City will provide a home to amplify the novel climate solutions being developed on the Island. It will empower non-profits, advocacy groups, and unions that are already working in the climate change space to serve a larger constituency and will create a central hub of information that will be accessible to all. Through our partnerships with the New York City Employment & Training Coalition, Good Old Lower East Side, and others, we will cultivate the expertise and experience necessary to support job readiness in our communities.
THE EXCHANGE WILL APPROACH MITIGATION, ADAPTATION AND SUSTAINABLE SOLUTIONS WITH A 4-C APPROACH:

**CONVENE**
local-to-global communities, governments, universities, decision-makers, and industry to identify climate challenges and ideate solutions.

**CULTIVATE**
solutions through research support for three months to two years, cycling through existing strengths and recruiting new research partnerships.

**CREATE**
demonstrations of climate solutions for individuals and communities at the building to Island scale, using the finite and manageable nature of Governors Island.

**CONTRIBUTE**
strategies for equitable climate solutions, such as training a diverse green economy workforce.
The vibrant public venue at The Exchange will enhance the ability of groups and individuals to work across differences and craft solutions collaboratively.

A central component of The Exchange’s programming is dedicated to public outreach, both to the general public and to more specific publics understood as a widely inclusive spectrum of communities and partners. As Governors Island is already a destination for recreation and learning, The Exchange will immediately offer an engaging atmosphere to greet visitors stepping off the ferry. As The Exchange evolves to meet stated sustainability goals, the island itself will offer visitors the experience of a sustainable urban environment.

Drawing from the expertise of the Alda Center, The Exchange’s Public Forum programming will facilitate engagement across diverse stakeholder groups and communities and train experts (both experts in residence and those presenting in public forums) to communicate clearly and vividly with different audiences. The vibrant public venue at The Exchange will enhance the ability of groups and individuals to work across differences and craft solutions collaboratively for New York City, New York State, and the world through the programs described on the next page.
The Exchange will support:

1. **Hands-on learning** about climate change, environmental justice, and the challenges society faces through a climate museum.

2. **Opportunities for citizens to contribute to scientific research** through citizen science projects and to propose climate solutions that can be developed and demonstrated through The Exchange.

3. **Discussions and debates** about climate, energy, and equity related policies and implementation in the region through public meeting and collaborative spaces.

4. **Opportunities for various government, university, industry, and non-profit groups to engage directly with communities** to discuss local, national, and international issues.

5. **Inviting NYC Government and non-profits to host events related to climate solutions**, particularly as it relates to climate and environmental justice and societal issues.

6. **Gathering experts and practitioners for focused workshops and annual meetings** on climate solutions topics through meeting and conference facilities.

7. **Cultural programs**, such as openings, film screenings and talkbacks, and author readings given by Climate Solutions Fellows in the Creative Arts that will attract new members of the public to join the conversation.

8. **Opportunities for stakeholders to observe The Exchange** as a living laboratory for climate solutions.
The Exchange will build a new research and technology accelerator so that ideas become prototypes and products faster.

Stony Brook University has extensive innovation and commercialization ability and experience. Currently, we run six startup incubators that support and nurture 120 new ventures with roughly 500 employees. The primary focus is science and engineering-based invention. We also run five New York State sponsored centers of excellence and advanced technology in energy, energy systems, biotechnology, wireless and IT, and advanced manufacturing. These centers are charged with accelerating the adoption of critical new innovation in partnership with industry for the benefit of New York State residents through company growth, job creation, and innovation that improves quality of life. Stony Brook University’s faculty are also prolific inventors, and we have seen great success in patenting, partnering with industry, and seeing those ideas go to market. We run extensive entrepreneurial programs, including an NSF iCorps node, bootcamps, and business plan competitions.

The Exchange’s Commercialization Office will leverage Stony Brook University’s expertise and resources to build a Research and Technology Accelerator. Ideas, projects, and new ventures will be sourced globally and nurtured through the development cycle at an accelerated pace through a full set of resources. We will provide startup and development space for projects and companies, both new and established. A formal accelerator program will bring a network of climate and energy experts to shape and refine ideas and advance projects. We will partner with New York-based venture capital firms, as well as others both nationally and globally, to bring necessary funding to the most promising ventures; to prototype and test them; to further refine them; and to deploy demonstration units on site and in the surrounding New York area. At The Exchange, ideas will become prototypes, and become products, faster and with greater efficacy.

Stony Brook University will bring its long-standing commitment to educational innovation to The Exchange. Stony Brook University’s academic expertise and extensive resources will fuel our ability to turn our educational output at The Exchange into scalable, commercial opportunities. Visitors to the Island will have the opportunity to engage with a variety of resources, including coaching and business pitching workshops through The Alda Center that will support the implementation of novel solutions developed on campus. Stony Brook University has already invested heavily in New York City’s research institutions and commercialization efforts through our involvement in Accelerate NY, but we are excited to use The Exchange to expand...
The Exchange will fuel Stony Brook University’s ability to leverage educational output into scalable, commercial opportunities.

our efforts in this critical space. Through partnerships with Moody’s, General Electric (GE), IBM, and others, The Exchange will have the ability and reach to make a lasting impact and drive commercialization both at home in New York and on a global scale.

PROPOSED BUSINESS MODEL
SELF-SUSTAINING OPERATIONS

Stony Brook University and its academic partners will adopt a self-sustaining model of operation for the core components of the academic and research program. Varied sources of funding will underwrite the operating costs of The Exchange, including, but not limited to, the following:

- Income from endowments that support The Exchange
- Annual gift donations
- Research grants (restricted as to use)
- Indirect cost recovery (related to research awards)
- Program fees
- User fees (including rental/revocable permits fees)
- Rebates (i.e., related to utility and energy savings programs)
- Concession fees
- Royalty income from the commercialization of intellectual property

These sources will be sized to exceed anticipated uses (operating expenses) of the Center such that, over the course of time, we meet the expectation of the Trust to provide a revenue flow to meet self-sufficiency goals and common expenses and also to establish modest levels of operating reserves to handle depreciation and/or unforeseen events.

PROPOSED PLANS FOR COLLABORATION
NEW YORK CITY PROGRAMS

At The Exchange, we will convene thought leaders and key stakeholders in issues of sustainability, cultivate an engaging and interactive community-oriented experience, create meaningful connections, and contribute innovative technical and social solutions to the climate crisis. As the anchor institution at The Exchange, Stony Brook University will coordinate a network of partners that will help position The Exchange as a world leader in climate science and connectivity.

We intend to link scientific knowledge with action across our educational and research disciplines, so the resulting solutions align with societal needs, and are viable and equitable for the planet, society, and the economy. The Exchange will serve as a destination for idea generation, knowledge sharing, intentional listening, and essential learning across issues of sustainability to facilitate an understanding of the intersectionality of air, water, food, and energy studies. Our intentional approach will spur solutions that address key climate-related issues without causing others. We will model how co-designing solutions, a process that involves collaboration and communication from the outset, can bridge technical knowledge with a better understanding of real-world applications.
Achieving the Trust’s Institutional Goals

We will create a clear pathway to a green economy by establishing forums at The Exchange for education and research.
B. NARRATIVE RESPONSE TO GOALS

The Exchange is an ambitious idea. In addition to the public forum, we will translate this idea into specific, actionable programming with investments in forums for education and research:

The Education Forum
Climate Solutions Workforce Training
Climate Solutions Semester
Climate Solutions Internship Program
K12 Climate Solutions Experience

The Research Forum
Research and Technology Accelerator Program
Climate Solutions Fellows Program
Through continuing education, The Exchange will cultivate and disseminate the expert knowledge needed to create a skilled green workforce.

Phase 0 of The Exchange includes immediate activation and collaboration with our network of partners to establish Community First Initiatives aimed at integrating, amplifying, and scaling existing workforce training programs. The goal will be to double the impact and reach of these programs in communities facing the greatest challenges and shouldering the largest burdens of climate change—especially low-income communities of color. We know that climate action, climate justice and restorative justice are entwined, and that success will mean addressing climate challenges and creating new opportunities for advancement in Green Jobs starts with frontline communities. This work will be done through our partnerships with the city’s labor community (32BJ, the Building & Construction Trades Council), non-profits (New York City Employment & Training Coalition and SolarOne) and universities (SUNY Maritime).
User Profile:

JOB TRAINEE

Local 20 Construction Worker

A lifelong metal-worker from Local 20, she is spending her evenings at The Exchange training in advanced construction methods for off-shore wind installations, which are being prototyped in the basin. This training will allow her to match her skills with her life-long interest in improving coastal communities. After class, she heads home on the ferry with her daughter, who has an intership on the island.

“This training has allowed me to match my skills with my life-long interest in improving coastal communities like my own.”

“After a long day of work and classes, it’s nice to be able to unwind over a family dinner, right here on the island.”
The Exchange will empower students to develop and enable solutions to climate change through coursework and internships.

CLIMATE SOLUTIONS SEMESTER

Another primary component of the educational programming at The Exchange is a credit-bearing, semester-long, interdisciplinary climate solutions curriculum for 100 upper-level undergraduates currently enrolled at Stony Brook University or elsewhere. An immersive experience, with students living on the Island in “study abroad” fashion, the project-based curriculum will have tracks for Research & Technology, Entrepreneurship, Policy & Justice, and Creative Arts & Humanities. Residency at The Exchange allows students to interact with residential Fellows, who will act as advisors on projects and prospective employers in their field. Courses, taught by the scholars and researchers in residence, will span STEM, business, the social sciences, communication, policy, and the humanities. By semester’s end, students will have a working knowledge of the challenges of climate change, along with specialized skills they can use to build climate solutions at their home institutions, and in their post-graduate careers through the immersive experience at The Exchange.

Admission to the Climate Solutions Semester will be selective and initially limited to Exchange partner universities, before expanding to accept visiting undergraduates from any university later in the growth of The Exchange during Phase 2.

“Living in Liggett Hall is such a unique connection to our city’s past and its sustainable future.”
**User Profile:**

**Marine Biology and Sustainability Major with an Emphasis on Urban Farming**

An undergraduate living on the island, she is involved in research on urban farming along the coast and waterfront, looking at how to create urban farms that can survive flooding and utilize the “unusable” space along the island’s edge – all while reducing carbon emissions from construction, operation, and deconstruction. She is taking an interactive lab class with a Stony Brook University Professor of Urban Farming and Sustainable Food Practices, which is located along the Esplanade – utilizing this unique connection to the water every day. After classes, she participates in a work-study program researching coastal preservation and flood mitigation.

“The living labs are an incredible trial ground for our coastline research.”

**CLIMATE SOLUTIONS INTERNSHIP PROGRAM**

Continuing the undergraduate experience, The Exchange will coordinate internships in engineering, business, government, science, media, and policy sectors throughout New York City and New York State related to climate solutions. Students will participate in a one-week long training program at the beginning of the program at The Exchange to gain a working knowledge of different approaches to climate solutions and the basics of climate change, as well as network with contemporaries. Internships would be funded and supported by business and government partners in the region. At the conclusion of their experience, the interns will return to The Exchange for a retreat to continue relationship building with their contemporaries and leaders in the different sectors and share their experiences, offering an opportunity for The Exchange to gain insights into climate solutions work in the broader region and foster new partnerships. This retreat will coincide with an annual Climate Solutions career fair at The Exchange.
K12 CLIMATE SOLUTIONS EXPERIENCE

We will offer summer research experiences (both day or week-long camps) on climate solutions to high school students and their teachers with the goal of conveying to young students the excitement of climate change research, suggesting possible career options, and using this to enhance the regular science teaching curriculum. This will be an intensive seven-week summer research program, which gives high school students the opportunity to engage in hands-on research on climate solution projects ongoing at The Exchange. We envision high school students being part of multi-disciplinary teams that work alongside faculty, high school teachers, and graduate and undergraduate mentors; learn laboratory techniques; become part of active research teams; and experience life at a research campus. We will offer professional and curriculum development for New York City teachers on climate solution topics, including guidance for teachers to establish independent citizen science research programs that can be continued on a long-term basis at their home institutions related to climate solutions.

We will partner with the Climate Museum and Beam Center to develop hands-on activities and materials for interactive presentations for elementary school age children. We will target diverse and disadvantaged school districts. Climate Solutions Fellows, undergraduate students, and faculty will work with Museum staff to develop curriculum and learning materials for grades K-3 and 4-6 students. The content of these materials will draw upon the research foci and will include topics such as: new climate solutions, the air-food-energy-water nexus, water purification, the nitrogen cycle and its perturbation, and life cycle analysis. Some of the learning materials and activities will also be used in the rotating collection at the Museum’s physical site.

We will leverage our media connections through The Alda Center to educate on the importance of communication in large scale mitigation efforts. Strong and expansive communication about climate change mitigation and sustainability enhances the impact and adoption of critical behaviors in our communities. Students and visitors who come to Governors Island will be educated on the positive effect that strong communication strategies can have on both research and commercialization efforts happening at The Exchange. As we prepare and excite future generations of leaders in the climate science space, media, data visualization, and communication will be an important element of the educational experience on Governors Island. Effective communication that leads to lasting adoption and, as a result, more security in a sustainable future, is just one of the ways that The Exchange will contribute back to the community.

We will develop an Exchange Climate Change Open House event and invite all students from the greater New York City metro area. Students will be divided into groups of 20 to 30 and guided through a full day individualized program of hands-on experiments, lectures by leading climate scientists, and demonstrations performed by the staff of our partners (e.g., Brookhaven National Laboratory, the American Museum of Natural History, and the Climate Museum). Special workshops will be conducted for the accompanying research teams; and experience life at a research campus. We will offer professional and curriculum development for New York City teachers on climate solution topics, including guidance for teachers to establish independent citizen science research programs that can be continued on a long-term basis at their home institutions related to climate solutions.

The Exchange will provide opportunities for K12 students to engage with sustainability through hands-on activities.
User Profile:

**K-12 STUDENT**

**10th Grade Harbor School Student**

A Brooklynite and student at the Harbor School who is interested in renewable energy, he has been working on a research project focused on solar, wind, and tidal energy. He, along with his classmates, will be presenting their research projects to the public at the 2035 Exchange Climate Change Open House and Science Fair. This is his first time attending a global climate summit, and he is super excited to learn from leading experts in the field of renewable energy, as well as present his research and gain meaningful insights and connections to fuel his passion for renewable energy.

“The weekly climate lecture series is fascinating. There’s no other school like this in the City!”

teachers on preparing students for regional science competitions, initiating research courses, scholarship opportunities for underrepresented groups, and research programs within The Exchange. These experiences will be the initialization of opportunities for teachers to continue curriculum discussion and reengage with The Exchange in future years. We will work to recruit a diverse group of students and educators from all five New York City boroughs and Long Island.

With lessons from the Urban Assembly New York Harbor School, we will export educational programming from Governors Island to identified and interested New York City public schools in frontline communities on the shores of the five boroughs, and expanding inland with the aim of reaching all New York City school students to prepare them for a spectrum of career opportunities to tackle the climate crisis. This initiative, starting in Phase 0, will bring climate science, sustainability, and resiliency lessons to students wherever they are. Through our partnerships with the Harbor School, Billion Oyster Project, We ACT for Environmental Justice, Museum of the City of New York, the Climate Museum, and others, we can enhance the New York City’s educational programming with to ensure that the next generation not only has ample career opportunities, but also the educational tools they will need to address the challenges of tomorrow.
THE RESEARCH FORUM
RESEARCH AND TECHNOLOGY ACCELERATOR PROGRAM

The Exchange will serve as a hub for research and innovation on topics that uniquely leverage their execution on the island. Research-oriented projects would need to demonstrate how the coastal and/or urban aspects of Governors Island make it ideal to be developed or managed at The Exchange's research facilities. Demonstration-oriented projects will need to indicate how the technology's full development and/or the urban or island environment is ideal for demonstration or testing in order to resolve the last technical hurdles and achieve full deployment. Access to The Exchange's research laboratory and demonstration spaces will be through a competitive peer-reviewed process. Funding for the proposed activities will be possible via The Exchange through peer-reviewed competitive solicitations. The Exchange will also provide, when necessary, support for engagement with the community and partners, as well as communication and visualization training for the research team. Performance periods, or residence periods, at The Exchange's facilities are expected to be from 3 months to 2 years. In Phases 0 and 1, the proposal teams will initially be internal to Stony Brook University and our partners. Phase 2 of The Exchange's activity will scale up to an open international competition as a way to bring new innovations and grow partnerships. In addition to the scholarly aims of the work conducted at The Exchange, graduate students and early career scientists involved in The Exchange's activities will join an interdisciplinary network of Climate Solutions Fellows that will serve as career guidance and growth support.
THE FOLLOWING RESEARCH PROJECTS WILL GAIN MOMENTUM THROUGH THE EXCHANGE’S ACCELERATOR PROGRAM:

WAVE INTERACTION WITH NATURAL ENVIRONMENTS

Stony Brook University students have researched the effects of constituent material properties on erosion and recession of steep beaches and bluffs. They have used experimental and numerical methods to study the interactions of storm surge and wave with both natural and built environments. Research has been focused on lakes morphodynamics, overland wave propagation, scouring around and loading on structures, as well as steep beaches and bluffs erosion and recession.

BLUE CARBON CAPTURE VIA REGENERATIVE AQUACULTURE

In marine ecosystems, climate change is layered on top of several other serious environmental threats that also include overfishing and pollution, often in the form of nitrogen overload in coastal zones. While these stressors represent an existential threat to coastal oceans, fisheries, and organisms, they also provide the opportunity to design climate change mitigation approaches that concurrently address multiple environmental problems. Blue carbon capture from regenerative aquaculture is one such solution.

ECO-FRIENDLY BIOPOLYMERS FOR COASTAL RESILIENCE

Stony Brook University researchers are working with microbically produced biopolymers to develop alternatives to cement use in shoring up earthen dams and levees. These biopolymers encourage vegetation growth and strengthen the earthen structures by increasing root density and density of the vegetation.
Coastal Preservation and Flood Mitigation Specialist

A visiting researcher from the University of Washington, he accepted a year long professorship on the island to help develop a coastal flood mitigation system in an attempt to combat major flooding around the city. This initiative has already led to breakthroughs in sustainable construction methods rapidly produce and deploy coastal management systems. He is involved in Stony Brook University’s education and public programs to collaborate with students and community during his tenure at Governors Island.

“This lecture on urban farming fits perfectly into my sustainable coastline mitigation research. I should collaborate with the presenter.”

“Biking along the Island’s edge is my favorite way to start the day. I feel so connected to the research around me.”
“It is truly amazing to see the food we grow in our labs on the plates of students, professors, and visitors.”

User Profile:

SBU PROFESSOR

Professor of Urban Farming and Sustainable Food Practices

In charge of the hydroponic labs at the food hub, she is researching sustainable and resilient frameworks for at risk locations in collaboration with GrowNYC. This research explores ways to implement renewable energy sources within this infrastructure to create a closed loop of energy and food production. She collaborates regularly with other professors at Stony Brook University’s Long Island Campus to curate the 2035 Global Climate Summit, planned to showcase research and innovation in the region.
CLIMATE SOLUTIONS FELLOWS PROGRAM

Individuals seeking advanced degrees, experience, and/or training will be critical to the implementation of climate solutions. The Climate Solutions Fellows Program will bring together various disciplines to help provide climate solutions training and leadership programming for the next generation of professionals who will lead on climate solutions.

THE CLIMATE SOLUTIONS FELLOWS PROGRAM WILL BE ORGANIZED INTO FOUR TRACKS:

Research and Technology Track

1. Provides additional training for students working on research related to climate solutions at The Exchange's partner institutions, including all students doing research at The Exchange.

2. Provides training on team building, networking, business applications, communication, and community engagement.

3. Leverages leading science and technology experts from industry, university, and national laboratories to serve as mentors to advance the development of innovative solutions.

Entrepreneurship Track

1. Fosters the acceleration of business opportunities and launching of new companies in the climate solutions industry and supports networking opportunities with The Exchange partners, New York City and New York State business and government, and climate solution researchers right on Governors Island.

2. Supports graduate and post-graduate MBA students who want to launch startup companies to commercialize innovative climate solutions.

3. Provides programmatic support and funding to advance solutions from invention/demonstration to the marketplace.

4. Leverages community and global business leaders to serve as mentors, investors, and entrepreneurship supporters.
Stony Brook University faculty are on the cutting edge of research about the environmental impacts of cryptocurrency. On the Entrepreneurship Track, our students may build on this research to determine the future of cryptocurrency relative to our global sustainability goals.

Policy and Justice Track

1. Promotes the well-being of humanity through innovative and effective climate solutions, particularly those addressing issues that have a direct impact on the lives of vulnerable populations including economic underclasses, indigenous peoples, migrants, and refugees in New York City and around the world.

2. Partners with EJ non-profit organizations in the region to work directly at The Exchange with ongoing educational and research programs.

3. Draws on early career professionals and graduate students in the areas of law, social work, and public health.

4. Enables policymakers, nonprofit workers, journalists and other communication specialists, private sector practitioners, and public advocates a residency at The Exchange.

Creative Arts and Humanities Track

1. Enables artists to interact with the living laboratory and the diversity of climate solutions programming to help inspire their work and explore central questions of how to live with climate change.

2. Partners with local organizations (e.g., the Museum of the City of New York) to allow writers, filmmakers, musicians, and visual artists a post-degree residency on Governors Island.
C. ANCILLARY USES

COMMUNITY LEARNING PROGRAM
FOSTERING A CLIMATE DIALOGUE

Building on The Exchange’s graduate and undergraduate educational opportunities, we will host dynamic weekly sessions in which an interdisciplinary panel of experts digs into a particular subject area of climate change solutions and community engagement. These sessions will build on a group of three to five experts drawn from university faculty, government offices, private enterprise, practitioners, and climate activism engaged with The Exchange. These sessions will help set a public stage to introduce and debate climate solutions issues specific to New York City and New York State. These sessions would also be combined into semester long credit-bearing courses for undergraduate students. Making use of state-of-the-art facilities at The Exchange, these debate sessions will be broadcast virtually to our partners and other locations in the area. We will utilize social media channels and leverage our connections to different media outlets to brand and circulate the Exchange’s public facing activities as a way to share what is happening and attract new visitors and collaborators.

The opportunities to leverage our network of partners (e.g., Aspen Global Change Institute) for future international meetings and conferences at the cutting edge of climate solutions at the New York Climate Exchange on Governors Island is immense. For additional ancillary uses, please refer to Section 3.
User Profile:

United Nations Delegate Attending the 2035 Global Climate Summit

A United Nations Delegate who is visiting the island for the 2035 Global Climate Summit, she is a fierce advocate for social and environmental justice, and is coming to the summit ready to engage with and learn about the most cutting edge strategies begin developed on the island and within The Exchange. She is staying at the hotel and conference center, where the views of the city energize her for the conference ahead.

“The view from the island makes it clear how important this all really is to our collective future.”

“Seeing how the research happens and then gets immediately deployed — it’s a global model for change.”
Section 3

PHYSICAL PLAN
The Exchange will be a living laboratory that convenes the top minds on climate change to experiment, discover, and lead the way in the global response to climate change.

The physical plan for Governors Island enables the entire island itself to activate a dialogue around our collective human effort to combat climate change, in addition to an experiential laboratory that explores different pillars of research, innovation, and community partnership.

To address the existential crisis of climate change, we will need to restructure the world in fundamental ways (to name just a few):

- Change the way we build, to become more efficient and less carbon intensive.
- Change the way we generate energy.
- Change the way we grow and eat food.
- Change the way we get around.
- Rediscover our relationship to nature.
- Learn to live with the water.
- Change the way we interact with our city.
- Change the way we build community.
- Change the way we talk to each other.

Our proposal is to create a generationally sustainable, self-sufficient research and education community that tackles these problems and serves as a platform for solving and communicating them to the broader city, state, and world. The island will be the curriculum—and the curriculum will constantly reshape the island.

**THE EXCHANGE WILL BE:**

- **A Public Forum** changing the way we talk to each other about climate change and climate justice.
- **A Living Lab** that convenes the top minds on climate change to experiment, discover, and lead the way in the global response to climate change.
- **Sustainable Design** where clean, sustainable systems of the future are on display as they power a self-sufficient community.
- **Empowering a Green Workforce** across industries through training, partnerships, and lifelong learning.
- **A Commitment to New York**, ensuring that access to the benefits of green innovation is universal.
At The Exchange:

The island will be the curriculum — and the curriculum will constantly reshape the island.
The Exchange will:

Go “beyond zero” and lead the world into net positive sustainability.

The Exchange will be an opportunity to create a climate response that is clearly green, sustainable, and has a recognizable identity in New York City. This project has the potential to craft a new generation of energy positive, low carbon architecture that is smart and contributes positively to the city.

This is an opportunity to set the benchmark for a new generation of research that will propel sustainable systems of the future to go beyond zero and help heal the environment. To provide an opportunity to engage with the users and neighborhood, The Exchange is positioned to enhance knowledge of smart and sustainable systems with potential shared and private amenity spaces. It will be a living lab for unique experiences.
BEYOND ZERO CARBON
MATERIAL SCIENCE &
HI-TECH CARBON SEQUESTRATION

The unique combination of programs and the semi-conditioned nature of The Exchange not only allows for a low carbon design approach, but also provides an opportunity to take the Island one step further to capture carbon. Our design will incorporate a series of low-tech (natural) and high tech (engineered) carbon capturing technologies such as carbon sinking materials, direct air capture technologies, mechanical trees, and many others. In essence, The Exchange has the potential to become the first active carbon sink in New York City.

BEYOND ZERO WASTE
BIO-MATERIALS, MATERIAL RECYCLING

Looking at whole life cycle in the life of The Exchange, a pilot use of bio materials, and low carbon materials, such as timber, will significantly contribute towards reducing carbon footprint and waste as a new paradigm for building construction. Stony Brook University has a Waste Management Institute that will be utilized to assist with waste management programming, outreach, and innovation for future technologies. The Exchange will aim for 95% waste diversion during construction and demolition, with an emphasis on reuse. Demolition and deconstruction professionals will assess the reuse value of materials and provide the design team with an inventory of available materials.

BEYOND ZERO WATER
WASTEWATER & POTABLE WATER REUSE

In accordance with Stony Brook University’s project targets, we believe 100% off island potable water demand reduction is theoretically achievable by 2040 for the Governors Island campus. Buildings and landscapes will be designed to incorporate a “One Water” system which utilizes rainwater supply, water recycling, and reduced potable water consumption in order to support a goal of zero (potable) water demand from outside sources and zero untreated stormwater discharge into New York Harbor. This holistic approach considers the entire water cycle.

BEYOND ZERO ENERGY
URBAN BATTERY & RENEWABLE ENERGY

The project is a unique opportunity to generate renewable energy on site, including photovoltaics on all roofs and a central geoechange facility to heat and cool the campus and store energy. There is also an opportunity to link various building systems, energy grid, and electric batteries together to create one large urban battery. This system will not only help reduce the peak load demand and store excess energy in smart batteries, but also feed it back to the Island, and potentially the city. As this technology evolves, The Exchange could take advantage of the fluctuating energy demand and become a large-scale distributed network which could benefit the city and become a pilot for the smart urban environment.
The Exchange will:

**Empower a Green Workforce across industries through training, partnerships, and lifelong learning.**

The Exchange will be equitable and inclusive by empowering diverse communities to address the issues of sustainability in their neighborhoods and New York City at large. The Exchange will provide a home to amplify the novel climate solutions being developed on the Island.

In this regard, Stony Brook University understands the science, technical, and business solutions can only be as effective as the relationships we have shaped between the many populations The Exchange will serve. Therefore, we envision The Exchange exerting influence beyond the island and empowering NYC non-profits, philanthropic institutions, advocacy groups, and unions that are already working in the climate change space. This will serve a larger constituency and will create a central hub of information that will be accessible to all.
“My daughter goes to school here...It’s great to see that what she’s doing has meaning.”

The Exchange will:

Be a commitment to New York, ensuring that access to the benefits of green innovation is universal.

“The Island itself is effectively my lab space...no walls, no silos.”
THE FORUM AT YANKEE PIER PLAZA

STONY BROOK UNIVERSITY
The Exchange will be:

A public forum, changing the way we talk to each other about climate change and climate justice.
The Exchange will feature:

Clean, sustainable systems of the future on display as they power a self-sufficient community.
EASTERN ESPLANADE: INFRASTRUCTURE AND RESEARCH ON DISPLAY
The Exchange will be:

A climate solutions accelerator, leveraging research and innovation to respond to the urgency of the moment with science that matters to decision-makers.
The true work of the island will be education and research that builds towards a more sustainable and resilient climate future. Lab spaces will be flexible, multi-functional, and modular, constantly reinvented as technology evolves and innovation happens.

This will create a circular feedback loop – research here will lead to new technologies that are deployed, studied, refined, and redeployed on the island.
The Exchange will be:

A true public space, where recreation, research, and demonstration come together.
The Exchange will build on what already makes Governors Island so special: history, ecology, water, education, discovery, food, culture, and more.

Governors Island has held a unique place in the broader ethos of the New York region for nearly 500 years, dating back to the Lenape people and still boasting considerable historic resources from its time as a Coast Guard installation at the gateway to New York Harbor.

Since the transfer of the island to the people of the City and State of New York almost 20 years ago, the Trust for Governors Island (previously GIPEC) has worked tirelessly to redevelop, plant, connect, program, and otherwise open up the island to the public. In this relatively short time, the work of the Trust has put Governors Island back on the map as a hub for art, culture, recreation, and education - a place to visit and to come back to time and time again.

The physical plan for The Exchange, in other words, does not start from a blank slate. It must emanate from the rich tapestry of existing programs, smart planning, and careful preservation that has come before it. It must leverage what already makes Governors Island so special. And it must grow alongside the island, with phases that follow a simple development framework and build on these existing assets to establish a distinctive identity.
THE LONG-TERM FRAMEWORK

The island today has two distinct characters, split north to south by the "central belt" of Liggett Hall.

We propose to extend the formal connections from the north into the new development zones as linear anchors – or "Innovation Alleys" – of the highly public research and demonstration areas.

At the same time, we propose to extend the organic nature of the park through these zones and to the waterfront – including to the three existing piers.

The result is an armature that defines development zones using three primary layers, each of them stemming from the place itself, and ultimately establishes a framework for long-term campus development.
GUIDING PRINCIPLES FOR DEVELOPMENT
(TRUST FROM GOVERNORS ISLAND)

The proposed developments will respond to each of the Trust's design guidelines, which are all in alignment with Stony Brook University's long-term plans on the site, as listed below. The long-term development shown also has the capacity and flexibility to reach the maximum allowable gross floor area of 3.7 million SF if conditions warrant. Stony Brook University intends to work with the Trust on the appropriate density as the island grows over time.

- Complement and enhance the park and public spaces and respond to environmental conditions.
- Connect to and establish a harmonious relationship with the Park, Esplanade, and Historic District.
- Retain, enhance, and frame key views within the island, as well as towards and from New York Harbor, Lower Manhattan, and the Brooklyn waterfront.
- Activate building edges along public spaces.
- Promote innovative design approaches to achieve a high level of resiliency and environmental sustainability.
- Encourage flexibility to accommodate a wide range of building types and a mix of uses.

The Exchange will grow in phases over time and will build on and enhance the existing assets of Governors Island.
We want to design this with you!
Phase 0 will give The Exchange a presence on Governors Island long before the initial phase buildings begin to open.

**PHASE 0**

This initial programming will take a number of forms to allow us to hit the ground running on Day 1. A $5M initial capital investment will be used to jump start programs on the island, including the following:

- **A public design lab**, occupying a lower level of Liggett Hall, that telegraphs the ongoing design and construction process and invites the public to design with us. It will constantly tell the story of “what’s going on here” - and why.

- **Water-based learning initiatives** in partnership with the Harbor School and the Billion Oyster Project.

- **Island cleanup**, including demolition of existing buildings in the development area and the creation of habitat space and improvement of ecosystem services, particularly at the southern end of the island.

- **Demonstration spaces** that bring the climate- and energy-based research activities of Stony Brook University to the island. As part of this process, we will solicit research proposals for these demonstration spaces and commit funding to bring them to Governors Island.

- **An online presence (including a mobile app)** that allows anyone interested in this work to begin to understand the planning, development, and evolution of The Exchange as it materializes – and to see it for themselves, in real time.
Phase 1 will begin a flexible framework and a development partnership with the Trust.

PHASE 1 DEVELOPMENT PLAN

Stony Brook University is committed to developing an initial project (Phase 1) that establishes The Exchange as a permanent presence on Governors Island. This project consists of program elements as identified on the following pages, including both new and existing buildings, infrastructure, and outdoor spaces.

Early in the development of the campus, much of the long-term development zones of the island will take on temporary forms. In some areas, current tenants will remain and be integrated with the campus. In others, sites will be used for materials storage, staging, and equipment to facilitate early construction.
The ground floor of this cluster of buildings will be open, accessible, and fully integrated into the larger hierarchy of the island’s public spaces.

The two piers and a new basin between them will be the lifeblood of this cluster of development, delivering students, staff, and visitors to the island via a first-of-its-kind solar ferry. Outdoor programs will be critical to the mission, including water-based initiatives like the Billion Oyster Project, restoration of wetland ecosystems, outdoor learning spaces, and demonstration pavilions.

We expect Phase 1A will open in stages beginning in 2026.
PHASE 1B

To the west, Phase 1B will be a forum for discussion and partnership around climate change, including a 500-person conference facility, a 300-key hotel, and additional housing for visiting faculty and researchers.

The hotel will be split into two separate product types: a modern conference hotel as well as the adaptive reuse of a portion of Liggett Hall that will host semester away programs for SUNY schools or collaborative partnerships with other universities to increase students studying on the island. The western cluster will be physically and programmatically connected to the Harbor School.

We expect Phase 1B will be delivered jointly with a private development partner, and will open by 2031.

Over time, Stony Brook University imagines growing to occupy the full east and west development zones of the island. To that end, the long-term plan is flexible and will necessarily respond to the changing needs of our collective response to climate change. There is a scenario where early-phase demonstration areas are slowly replaced by more of the living-learning-lab community, adding floor area ratio (FAR) to the site to the density permitted by current zoning. There is also a scenario where the climate mission of the island becomes more important, and the land is more valuable as this flexible space for innovation and research. The framework will support a variety of scenarios that emerge over time and will adapt in response to the missions of both The Exchange and the Trust.
We plan to renovate four existing buildings to breathe new life into the central part of the island and create an anchor for new development.

LIGGETT HALL

Historic Liggett Hall is the defining presence of this portion of Governors Island, and a revitalized building will become the heart of the new community.

We propose to adapt Sections H, I, J, and K (the portion east of the Arch) into housing for 100 Stony Brook University students to live on the island. The existing building layout lends itself well to 4-BR suite layouts with shared kitchen and bathroom areas. On the opposite side of the building, we propose to adapt Sections D, E, F, and G (the portion west of the Arch) into rooms for 100 hotel guests, with a mix of suite-style and single rooms for longer-term visitors. At the center, within the Arch itself, we propose a “co-design lab” to put the ongoing planning and design of The Exchange fully on display and encourage community participation.

The existing structure will remain unchanged, but the interior will be demolished and fully refurbished. New building systems serving the renovated portions will be added, along with new elevators. The facade will be repaired and improved in accordance with historic guidelines.
LIGGETT HALL – SECTION O

Section O of Liggett Hall (the portion that is not landmarked), we propose a rethinking of the building as a center for student services - including a food hall and health center - and a showcase of urban farming. A new glass facade will put these activities on display from Liggett Terrace.

BUILDING 330 (THEATER)

We propose to renovate the existing theater for use as a lecture hall and near-term home for climate-based discussion, research presentations, and large classes.

As the campus grows, additional historic buildings will be renovated and occupied as needed.

BUILDINGS 315 AND 555

We propose to fully renovate both existing apartment buildings (essentially mirror images of each other) as units for visiting researchers and faculty to stay on Governors Island.

FUTURE ADAPTIVE REUSE

As The Exchange grows, additional historic buildings - including the remaining sections of Liggett Hall, Building 333, and Building 324 (YMCA) - will be renovated and occupied as needed.
PHASE 1 PARCEL PLAN

PHASE 1 PROGRAM AREA OVERVIEW

<table>
<thead>
<tr>
<th>ID</th>
<th>PHASE 1A PROGRAM AREA</th>
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<tbody>
<tr>
<td>01</td>
<td>Student Housing - Liggett Hall Sections H, I, J, K</td>
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<td>Faculty Housing - Building 315</td>
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<td>03</td>
<td>Faculty Housing - Building 555</td>
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<td>04</td>
<td>Theater</td>
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<td>06</td>
<td>New Lab Building - New</td>
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<td>07</td>
<td>Campus Services</td>
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<td>08</td>
<td>Central Utility Plant</td>
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<td></td>
<td><strong>PHASE 1A SUBTOTAL GSF</strong></td>
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<td>University Hotel - Liggett Hall Sections D, E, F, G</td>
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<td>Conference Center</td>
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<tr>
<td>12</td>
<td>Demonstration Pavilions</td>
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**PHASE 1 TOTAL GSF** 622,000

*See appendix for full program details*
The location and size of uses proposed in the initial phase are shown in the diagram and table, including buildings identified for adaptive reuse.

Areas marked as “future” are interesting to Stony Brook University as part of a longer-term vision for the island (and depending on the growth trajectory of the first phase), but would not be developed - apart from minor cosmetic work or site remediation - in this phase of work.
The Exchange will focus on changing the way we live and evolving our global response to climate change.

**SUSTAINABILITY DESIGN PRINCIPLES NET ZERO & BEYOND**

The design principles for The Exchange will guide our collective human effort to address the existential crisis of climate change. As we shift to restructure the world in fundamental ways, The Exchange will focus on changing the way we live and evolving our global response to climate change.

These principles will look to achieve solutions through a series of sustainability principles incorporated throughout the development zones of the island, both within buildings and throughout the exterior open spaces. The Exchange will follow the Trust’s Design Guidelines, as listed in the following sections.
1.1 PRIORITIZE CARBON REDUCTION AND RESILIENCE

- Eliminate the use of fossil fuels: all buildings will be fully electric through the use of solar PV cells, a geothermal plant, and other renewable forms of electric generation.
- Reduce emissions and energy consumption: strategies such as green and/or solar roofs, passive design, enhanced building envelopes, thermal and battery storage, and wastewater heat recovery will be incorporated.
- Create a comfortable and safe micro-climate: buildings and landscapes will incorporate strategies such as solar shade structures and building overhangs, cool materials for hardscapes such as timber instead of concrete, increased tree canopy and maximization of blue-green infrastructure.
- Reduce the risk of flooding both in current and future climate conditions: rainfall and sea levels, both current and predicted, inform the design of public spaces and the waterfront. Strategies will be multifunctional and flexible to ensure reliability across a range of future conditions, as well as continuous provision of co-benefits, such as enhanced micro-climates and added recreational value. Strategies could include the use of areas designed for stormwater infiltration and storage, reduction in reliance upon tunneled utilities from Brooklyn, and reduction in the use of the stormwater outfall.
- Create a more resilient community: the campus will incorporate the use of redundant systems which utilize multiple power sources, include multiple sources for potable water, and include back up systems for the cases of fire or flood.

1.2 MINIMIZE WASTE

1.2.1 Zero Waste Strategies

- To support the Island’s zero-waste goals, the following strategies will be incorporated into the physical plan for The Exchange:

Waste management

- The design team will evaluate the potential for integrating waste management concepts that aim to reduce, reuse, re-purpose, repair or recycle waste exported from Governors Island and maximize onsite treatment and conversion or reuse of waste streams.
- Stony Brook University has a Waste Management Institute that could be utilized to assist with waste management programming.
The Exchange will:

Break siloed problems and convene multi-disciplinary action

Building design, construction and demolition waste
- Emphasize design for adaptability and reuse. Buildings will be constructed so that they can be reconfigured as uses change over time, and materials can be removed and reused at the end of life of the building.
- Prefer construction materials that are durable, reusable or recyclable. Consider material use over the life cycle of the building; reducing or eliminating the need for replacement of construction elements.
- Aim for 95% waste diversion during construction and demolition, with an emphasis on reuse, then recycling. If any buildings are planned to be demolished, deconstruction professionals will assess the reuse value of materials and provide the design team with an inventory of available materials.
- Use materials with low embodied carbon to reduce emissions associated with building materials.
- Cut and fill soil volumes will be balanced on site as much as possible to limit the import of soil.

Balancing the earthworks will need to go hand-in-hand with land use, stormwater management, and mobility considerations. This will also depend on the existing soil type present in the development zones.

Operational waste management
- Develop capacity for onsite processing of 100% of food and organic waste, including biogas recovery to be used as a heat or fuel source, and processed solid waste to be used onsite as compost for food production in greenhouses or landscaping. No organic waste will be exported from the island.
- Plan for streamlined waste conveyance using state-of-the-art sorting and separation techniques.
- When considering site and campus programming, take an industrial ecology approach where a ‘waste’ product from one operation will be feedstock to another. Consider onsite recycling capacity for specific materials that may be valuable inputs for campus operations or academic applications.
1.2.2 Material Reuse and Sustainable Purchasing and Procurement
As mentioned in Section 1.2.1, a goal for the project will be to reuse existing materials as much as possible. If materials do need to be purchased, the goal will be to utilize recycled materials as much as possible. The project will have a goal of 100% procurement from sustainable sources, whether that be reused, recycled, or from a manufacturer with sustainable policies and programs.

1.2.3 Reduced Potable Water, Water Recycling and Reuse, Zero Stormwater Discharge
Buildings and landscapes will be designed to incorporate a “One Water” system which utilizes rainwater supply, water recycling, and reduced potable water consumption in order to support a goal of zero (potable) water demand from outside sources and zero untreated stormwater discharge into New York Harbor. This holistic approach considers the entire water cycle.

Potable Water
- In accordance with Stony Brook University’s project targets, we believe 100% Potable Water reduction is theoretically achievable by 2040 for the Governors Island campus.
- Rainwater harvesting and “purple pipe” networks will be explored for uses where non-potable water is suitable, such as irrigation and toilet flushing. This will also save energy by treating non-potable water to less stringent standards than if it were potable.
- Low-flow water fixtures will be used to reduce potable water consumption.
- Consumption and demand management strategies, including Smart Water Meter technology, will assist with tracking and better understanding water use/consumption. This smart water-use approach encourages conscious consumption of water and reduces flows/volumes of water to the sanitary system and to downstream treatment plant facilities. This would also be an opportunity to educate and bring awareness to the public, through visualizations of water consumption throughout the island.

Wastewater
- A sustainable water management approach considers wastewater as a resource and an opportunity that will be utilized for multiple purposes including heating, energy and biosolids. On-site treatment/reuse will be considered for wastewater.
- Similar projects exist in New York City – there are currently six residential water reuse systems in buildings in Battery Park city in Lower Manhattan featuring membrane bioreactors, Ultraviolet and Ozone Disinfection.
- All reuse systems receive reduced comprehensive water reuse program rates from NYCDEP which represents additional cost-savings potential for the project.
- On-site treatment will require land-use allocation for utilities and infrastructure and will impact the spatial design of the site. On-site infrastructure considerations will be included in the very early design stages to ensure land-use requirements are integrated in the OSP.

Stormwater
- The vision for stormwater management at Governors Island is viewed through a lens of inherent sustainability, where terrain- and nature-based solutions are connected throughout the site to mimic a pre-development natural system.
- The aim is to retain and treat all stormwater on site (before discharging any excess water that cannot be put to use) through utilization of a connected network of blue-green infrastructure, supported by traditional grey infrastructure where there are significant con-
straits on surface-based infrastructure, or where existing infrastructure is already in place.

- Solutions will be designed to be multifunctional with water as a visible feature on site and integrated with the strategy for open space, adding value to the public realm and bringing about lasting socio-economic co-benefits.
- Blue-green infrastructure practices will be tailored to ensure seamless integration with the community and maximized for added value. A brief list of relevant practices include: Cloudburst Road, Detention Street, Green Street, Cloudburst Pipe, “Cloudburst Plaza” or “Water Squares”.
- Stormwater will be treated to non-potable or potable standards to assist in meeting the water demands.
  - Treating stormwater to potable standards would require much greater space, materials, and energy for treatment.
  - While treating stormwater to non-potable standards would require significantly fewer resources.

However, bringing stormwater to potable standards requires much fewer resources than treating wastewater to non-potable or potable standards. Therefore, it is recommended to include a detailed analysis on the water demands throughout The Exchange, as well as accurate, recent rainfall data in order to determine the balance of water resources.
1.2.4 Support Ecosystems

- One of the important factors in water-sensitive urban design is the use of multi-edge treatment. Edge refers to the perimeter of the water, such that a water’s edge is the intersection between people, water, and aquatic wildlife. It is critical to create a diverse sectional profile along the edge of the water to have added social (people connecting with water) and ecological (habitat and water quality) values.

- Biodiverse roofs: NYCDEP currently administers a Green Infrastructure Grant Program which provides reimbursements to project developers for green roofs. Stony Brook University will seek funding support through this program for any green roof solutions selected for buildings in the overall site plan.

- Living Levees around the outside of the island will combine traditional flood protection with the goal of restoring tidal marsh and tidal flat habitat is called “living levees.” Living levees provide better protection against sea level rise, since the gradual slopes and tidal marsh vegetation act to slow storm surges and absorb floodwaters. The design team will evaluate the potential for integrating living levees around the outside of the island.
1.2.5 Serve as a Living Laboratory

Sustainability and resiliency interventions will be identified by the Community Design Lab established by The Exchange. This will set clear benchmarks for measuring performance and will constantly be communicated with the public via community outreach and digital platforms. In addition, the following strategies will be conducted to achieve The Exchange’s sustainability goals:

- The Exchange would qualify as a ‘Major Project’ (capital projects with total design and construction cost of $50M or more), as defined by the NYC Climate Resiliency Design Guidelines (CRDGs). In accordance with the guidelines, the design team will perform a climate risk assessment and full cost-benefit analysis to identify all risks and ensure socio-economic feasibility of designed mitigation measures. The design team will liaise with the Mayor’s Office of Resilience to coordinate application of the CRDGs to the project site and submit the CRDG Resilient Design Submittal checklist when the time requires.

- The Exchange Site Plan will address the core climate hazards of the CRDGs in its design, scale, layout, and overall performance:
  - Increased heat includes the following strategies:
    - Minimum of 50% of the project’s site area will be shaded, vegetated and/or high solar reflectance surfaces.
    - Evaluation for reduction and/or capture of heat pollution.
    - Buildings will be designed for resilience to increased/extreme heat.
    - Buildings will ensure thermal safety of occupants.
  - Drought:
    - Land cover design will encourage infiltration of precipitation to recharge groundwater levels.
    - On-site stormwater systems will delay and retain water to allow infiltration.
    - Vegetation will be drought resistant and low in water demand.
  - Increased precipitation:
    - On-site stormwater systems will account for intense and more frequent precipitation levels, differentiating between areas based on exposure and vulnerability of assets, and allowing space for adaptive measures.
    - Drainage planning based on climate change projections, in accordance with NYCDEP’s procedures.
• Sea Level Rise and Storm surge:
  • Determine how the project is affected by tidal inundation.
  • Risk assessment for future sea levels and adaptive pathways to mitigate risks.
• The design team is also aware that there are several Climate Hazard Mitigation projects in-progress on the Island (funded by FEMA, FEMA HMGP and FTA), for which risk from current natural hazards were developed. The design team will assess the studies associated with those projects to inform The Exchange’s climate risk assessment study.
  • The design team will perform a criticality analysis during future project scoping phases of all proposed facilities and components associated with the Physical Plan and protection measures assigned accordingly depending on level of criticality.
  • The design team will propose and scope future adaptation measures (pathways) and flood defenses against the CRDG guidelines for sea-level rise (SLR) and extreme heat and precipitation (i.e., middle of 25th and 75th percentile range projections for SLR and 90th percentile projections for heat/extreme precipitation).
• Any recommendations and guidance found in the NYC CRDGs will be met in all feasible instances and exceeded where BCA results indicate value and cost-efficiencies.
• Sustainability and resiliency interventions will identify clear benchmarks for measuring their performance (including potential use of third-party rating and certification programs such as LEED, WEDG, SITES, TRUE, Passive House, and others) and are strongly encouraged to be designed to monitor performance over time, particularly where new and innovative approaches are utilized.
• A site-wide sustainability and resilience strategy that is relevant to current level and timing of the planning and design will be developed for Governors Island. The strategy will include definitions, targets, and guidelines for long-term sustainability and resilience within each urban system. Systems could include Community/Social Infrastructure, Energy, Water Cycle, Stormwater & Blue-Green Infrastructure (BGI), Mobility, Micro-climate, and Urban/City Nature.
• Buildings will be designed to include state-of-the-art controls and management systems to enable performance tracking and continuous commissioning and will incorporate systems that enable and encourage tenants and sub-tenants, as applicable, to meet individual sustainability goals (e.g., electrical sub-metering, waste stream tracking, etc.).
• Developments will be mindful of their role in educating and informing the public about resiliency and sustainability issues, and incorporate features that engage the public and provide information on these issues.
  • The design team will advise Stony Brook University on crafting a tailored education and community engagement program around resiliency & sustainability issues. In the vast majority of the design team’s resilience and sustainability planning and development projects, there is a community engagement and public education component that is almost always mission critical.
  • Stony Brook University will leverage relationships with strategic partners (Billion Oyster Project, The Climate Museum, NY Harbor School, Beam Center, broader SUNY system, culture/arts partners) on the Island, and with a careful and deliberate selection of Community Outreach and Job Training partners. Education and Engagement will be two of the primary pillars that shape and influence the design of The Exchange.
Proposed developments will create a unique sense of place, while complementing, respecting, and enhancing the historic context.

**BUILDING GUIDELINES**

**CONTEXT CONSIDERATIONS**

- Governors Island is among the most treasured places in the city, owing to its location within the Harbor, the Governors Island Historic District, the scenic waterfront esplanade, and the 43-acre Central Park. Proposed new developments will create a unique sense of place while simultaneously complementing, respecting, and enhancing this existing context. New development will also be mindful of its relation to future phases of development and the continued evolution of the park landscape and amenities.

- Waterfront development will reinforce the experience of the extensive waterfront esplanade as a grand public space and respond to the different conditions that exist along it. Particular attention will be paid to providing an environment/space that will be adapted to unforeseen/unpredictable circumstances such as excessive SLR—e.g., a buffer park around the edge of the island. The concept of living shoreline builds on natural elements and natural habitat, focuses on biodiversity, and integrates the shoreline. The living shoreline brings multiple social and environmental benefits beyond the direct adaptation functions.
**GROUND LEVEL CONSIDERATIONS**

- The building’s ground level will be adjacent to a series of “innovation alleys” that will be a public space to showcase sustainable research to pedestrians. New development will thoughtfully approach the way in which the ground level shapes this experience and consider how space and scale is defined to key destinations, how connections are made, and how and where activity is encouraged.
- Flood resiliency measures fronting on public spaces will be designed to promote active ground floors, transparency, engaging landscape features, and other innovative techniques that enhance the public realm, particularly when dry floodproofing, significant grade changes or elevated building strategies are employed. The materialization and layout of the area is determined by its flood risk so assets will be restored to their main function with least amount of effort.
- Elevated and flood proof structures: Vulnerable and/or critical assets whose failure has potential knock-on effects (e.g. power failure, emergency response) will be assessed and their risk of failure mitigated appropriately by raising their level or providing additional floodproofing.

**MASSING & FORM CONSIDERATIONS**

- Research is being done on the application of Building-Integrated Carbon Capture (BICC), as part of carbon capture and storage, which will take the form of building facades that capture carbon from the air/atmosphere (Direct Air Capture) using sorbent material and stored in deep geological formations or used in production of various materials/substances. In effect, functioning like ‘giant leaves’ in the act of extracting atmospheric carbon. These integrated facades will also provide shading and other ancillary benefits. The design team would determine viability of this technology for the Governors Island project, but it will certainly be proposed as this The Exchange and development site will be an opportunity to showcase leading edge decarbonization technologies.
- Building facades will incorporate vegetation and plantings. Building roofs will also utilize PV panels and systems for stormwater capturing.
- Modular design and timber and other sustainable building materials will be implemented to reduce embodied carbon during construction.
- All buildings and open spaces will be designed in accordance to the Special Governors Island District zoning regulations.
PUBLIC SPACE GUIDELINES

A network of multifunctional blue-green solutions for stormwater management will be integrated in the landscape and the open space. The existing park and pedestrian flow paths guide the placement of buildings and infrastructure to promote a natural and sustainable landscape. Along the waterfront, a raised green water edge incorporates multifunctional floodable areas for people and nature. Runoff, design storage volumes, and maximum flows will be determined based on hydraulic design parameters. As a summary this will include:

- Floodable landscapes within the landscape and open space designs will be included.
- Water guided development of a connected system of nature-based solutions to integrate where ‘water wants to go’ with where ‘we want the water to go’.
- Major opportunities for temporarily floodable landscapes and passive flooding zones both in the current iteration of the development plan, and in spaces adjacent to existing buildings. Depending on the physical location on site (i.e., upstream to downstream) solutions will differ in size and type of practice.
- At the open space scale, solutions will be linked together as a network of Blue-Green Infrastructure (BGI) practices, which creates spaces for excess water during wet weather or other flooding events, as well as available park areas. A three-tiered strategy is recommended for stormwater management at Governors
Island where BGI practices will serve as first, second, and third levels of protection.

- Sitewide features such as green roofs and permeable surfaces with the purpose of absorbing small ‘everyday’ rain events (first level of protection).
- Pocket parks and amenity features, such as sport fields, utilized to temporarily store rainwater from larger rain events (second level of protection).
- Larger park features which may be temporarily inundated during extreme rain events to protect infrastructure and other assets (third level of protection).
- Permanent water bodies may be included as part of the BGI network and will provide additional co-benefits such as recreational value, biodiversity and habitats, and cooler surfaces for reduced urban heat. Standards for water quality and public health issues (e.g., mosquitoes) will provide necessary requirements for treatment and retention times.
- Efforts will be made, in every feasible instance, to allow landscaped/vegetated spaces woven into the fabric of the site plan and surrounding areas (i.e., park and spaces surrounding Liggett Hall), to be spaces for water (retention zones) during heavy rainfalls/cloudburst and/or coastal inundation/flood events. These retention zones will be permeable to the extent possible with the requisite subsurface detention and drainage infrastructure to support proper direction of flows/drying of areas.
This has never been more urgent. Let’s get to work together.
Section 4

PRELIMINARY SOURCES AND USES
Stony Brook University plans to use the full 99-year ground lease and $150M (of which $50M has been designated for infrastructure) the Trust for Governors Island has offered. With these resources, the University will begin Phase 1 of the proposed multi-step development plan by constructing academic, research, convening, and housing facilities. This initial buildout will occupy approximately 334,325 square feet and will lay the foundation for future expansion along the east side of the Island. It will also attract thousands of people to the site, increasing foot traffic and visibility of the Island.

Stony Brook University is committed to additional capital outlays of approximately $355 million for Governors Island with the understanding that flexibility will be critical to future success. Stony Brook University currently expects to occupy 334,325 square feet and bring hundreds of students, faculty, and research staff to Governors Island over the first ten years in addition to the visitors these activities will attract. After the first phase of construction, Stony Brook University will reevaluate the needs of the island and surrounding communities to adjust future capital expenditures and operating costs accordingly. During this process, Stony Brook University will continue to conduct groundbreaking climate research for future implementation on the island that could also affect these projections.

To support the continued success of Governors Island and maintain a strong relationship between school and city, Stony Brook University is willing to discuss meaningful ways to support the Trust financially. Based on present modeling, these contributions are expected to commence in FY2026/27 and...
may amount to several hundred thousand dollars annually. These assumptions are subject to change as conversations unfold. Most importantly, Stony Brook University is committed to strategically evaluating pricing strategies for various activities on the Island to ensure that no one is priced out of the educational and workforce development services offered through the Exchange on Governors Island, as diversity, equity and inclusion is foundational to this work.

The proposed investment on Governors Island will generate tremendous returns for New York, the nation, and the world. It will center New York as a hub for sustainability and will encourage the international community to see the United States as an important member of the fight against climate change. In addition, Stony Brook University’s programming and development will create jobs and spin-off new businesses, bolstering the local economy.

The proposed investment on Governors Island will generate tremendous returns for New York, the nation, and the world.

Stony Brook University is well-equipped to achieve these goals. With over 115,000 alumni across New York City and Long Island, experience with renovation and development, and a powerful network of partners and supporters, the University has positioned itself for success on Governors Island. As this project unfolds, Stony Brook University will continue to update projections of the costs and returns of this exciting endeavor.

**CAPITAL BUDGET**

Stony Brook University has prepared separate capital budgets to reflect the differences between Phase 1 and future phases of the Governors Island development. In Phase 1, the University assumes construction will commence during the 2023-2024 fiscal year using the Trust’s $150 million investment, funds from philanthropic donors, and contributions from strategic partners for design and construction. The primary sources during Phase 1 will be from Trust funds and philanthropic sources, while the primary uses will be design, construction, and fit-out of Phase 1A projects. In total, Stony Brook expects the Phase 1A buildout to cost an estimated $500 million over 6.5 years. This roughly 334,325 square foot endeavor will cover the removal of miscellaneous structures, adaptive reuse of approximately 191,675 square feet, and construction of an estimated 142,650 square feet for the purpose of academic, research, demonstration, convening, and housing facilities.

This proposal assumes transportation to and from the Island under the purview of the Trust. Additional considerations may be given in the way of improvements to the ferry service, such as increased times and frequencies to support the academic and research of the campus and future growth, and transportation that supports daily campus operations, such as golf carts and facilities vehicles that would be needed to provide service to the Island. Additional discussions will need to occur regarding potential cost escalations, bargeing of materials and equipment for demolition and construction activities.

Stony Brook University is aware of the City’s recent announcement that outlined additional ferry services that will be providing service to and from Governors Island. We believe that this year-round access and daily service from points in Brooklyn and Lower Manhattan will be a significant asset to the Island and will promote the accessibility of The Exchange to the local communities. Stony Brook University is committed to regular evaluation of ferry demand and operating schedules to ensure we are making it easy for the public to access the research and interactive displays on the Island. Should a need arise, we will work with the City and the Trust to adjust points of service as necessary.

Typically, Capital Funding assumes 70% hard costs, such as construction and materials, and 30% soft costs, such as design fees, equipment, permits, tests, and construction management services. Stony Brook University has used this rough estimate to inform our approximations of capital costs at this stage. This information is subject to change based on differing needs that may be uncovered throughout the project’s progression.
Governors Island Proposal: New York Climate Exchange
Stony Brook University
Sources and Uses - Capital Budget
$ in 000s

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Net Operating Results 180,000 (180,000) -

Following the completion of Phase 1A, Stony Brook University is committed to iterating its projections based on the updated needs of the Island at that time, new discoveries that may require implementation, and the expansion of additional partnerships. At present, Stony Brook University projects a full buildout of roughly 621,000 square feet by the end of fiscal year 2031, which will include a hotel and conference center.

**FUNDRAISING**

Stony Brook University has the capacity to raise the necessary funds to fulfill this proposal's goals. Across New York City's five boroughs, Nassau County, and Suffolk County, the University has a powerful network of more than 115,000 alumni, many of whom work within the fields of climate and sustainability. Our proximate community of alumni will be invaluable assets to the programmatic development and financial support of Governors Island.

Stony Brook University has secured an initial commitment from a private foundation that will match up to $100M in philanthropic support from other donors. This anchor gift ($20M annually over the first five years) will provide the core support to inspire other foundations, corporations, and individuals to invest in Governors Island's future. Thus, within the initial five years, we forecast a minimum of $200M in philanthropic support to drive our early capital investments, strategic research agenda, and broader programmatic needs.

The Trustees of Stony Brook's Foundation are deeply invested in Stony Brook University's leadership of the New York Climate Exchange. They have already offered their counsel, advocacy, and philanthropic support, and they will continue to do so in the years ahead. We anticipate additional transformational gifts for Governors Island from our existing philanthropic leaders.

While Stony Brook University already has a base of donor support within the New York City region, Governors Island will allow us to advance those relationships and develop new ones across key foundations, corporations, and individuals. In partnership with our other founding universities, we are prepared to hire a team of local major gift and principal gift officers who are dedicated to increasing the annual level of philanthropic support.

Further, Stony Brook University’s Advancement team has deep experience developing aggressive fundraising plans for critical capital projects, as well as through public-private partnerships. Recent examples include the world-class Simons Center for Geometry and Physics, the New York State Center of Excellence in Wireless and Information Technology, and the Advanced Research and Development Center.

We are confident that we will secure the philanthropic funds necessary to support the long-term vision for Governors Island.
Section 5

KEY TERMS
Overview of Proposed Master Lease and Development Agreement Structure

The University and its partners propose a Master Lease and Development Agreement (the “Master Lease”) structure to efficiently and successfully further develop and implement The Exchange at Governors Island project. The University proposes a 99-year lease term under the Master Lease to be executed between the Trust and a special purpose entity (the “Master Developer”) created by the University.

The Master Lease will grant the Master Developer a lease for the entire 33 acres that is considered under the RFEI plus additional space as described below and will be the primary agreement entered into for the development and implementation of The Exchange. A critical term of the Master Lease will be provisions allowing the Master Developer to sublease different phases of the overall development to other special purpose entities and third parties, which may be created by the University, its partners, or a third-party entity (each a “Phase Developer”). Each sublease agreement will be executed between the Master Developer and Phase Developer for implementation of the phase/phase component (each, a “Phase Lease”).

LOCATION AND BUILDINGS DESIRED

KEY PHYSICAL COMPONENTS

The projected location of the Center’s buildings has been outlined in Section 3 of this RFEI. Please refer to that section for complete details on Stony Brook University’s proposed locations of land area and re-development of existing buildings and construction of new spaces that we anticipate in Phase 1. We envision a campus that is centered around a central belt, with clusters of new and renovated buildings on both the east and west sides of the Island. The focal point of The Exchange will be an adaptive reuse of Liggett Hall and the adjacent historic buildings, such as the theatre, Building 315, and Building 333. This cluster will serve as the foundation for the initial phase of development on Governors Island.

Longer-term development on the Island will take on temporary forms to allow the spaces to remain flexible and responsive to the changing needs of our collective responses to climate change. As we expand the campus on Governors Island, conduct groundbreaking research on climate change, develop novel climate solutions, and work with local communities to inform critical mitigation
and adoption efforts, we expect that we will uncover certain modifications to our initial plan that will be more advantageous in the fight against climate change. For this reason, our phases of development on the Island will be adaptable and fluid enough to allow for appropriate adjustments along the way. As needed, we will be poised to adjust the quantity and format of spaces that contribute to the research being conducted on the Island and the living-learning-lab community that we will create.

Refer to Section 3 of this response for details regarding proposed locations of the land area and buildings to be utilized for The Exchange and additional developments proposed for Governors Island.

This section discusses the University’s plan for development and implementation. Refer to Section 3 for an overview of the proposed phasing for the overall buildout at Governors Island extending beyond 2031.

**Phase 0:** The University plans to establish a presence on Governors Island through robust Phase 0 programming that will lay the foundation for basic infrastructure and development on the island during the Phase 1 design process. It is currently anticipated that Phase 0 programming will commence upon execution of the Master Lease between the Trust and the Master Developer.

**Phase 1A:** Phase 1A is an approximately 334,325 square foot endeavor that will cover removal of existing structures, workforce training programs, K-12 outreach, and collaboration with our many partners will all commence before The Exchange has a physical presence on Governors Island. We are not waiting to make an impact on the community while design and construction are underway. Rather, the network effects of our partnerships will allow us to integrate, amplify, and scale existing programs. Simultaneously, island cleanup and restoration will have commenced, and our research team will start soliciting proposals for the lab and demonstrations spaces to come.

**Phase 1B:** A hotel and conference center will accompany the existing visitor, education, and research buildings on the island. This expansion will increase capacity for stakeholder interaction and expand The Exchange’s reach.

**Future Phases:** After completion of Phases 1A and 1B, Stony Brook University will reevaluate our needs based on the progression of activity on the island and new innovations that have come from our programs. We will look for successes and areas for improvement, and we will implement new innovations in real time.

**PROPOSED STRUCTURE**

**PHASING OF DEVELOPMENT**

The University anticipates the various Project components will be implemented under one or more Phase Leases executed between the Master Developer and the applicable Phase Developer.
adaptive reuse of roughly 191,675 square feet, and construction of an estimated 142,650 square feet for the purpose of academic, research and housing facilities. In addition to the building construction identified, Phase 1A will include the site storm mitigation and resiliency measures.

**Phase 1B:** After Phase 1A, the University is committed to iterating its current projections based on the updated needs of the Island in addition to new discoveries to be implemented and additional partnerships. At present, however, the University currently projects a full buildout of approximately 612,000 square feet by 2031, which will include buildings dedicated to the hotel and conference center.

**TIMELINE OF PROPOSED LEASE**

The University’s Expression of Interest anticipates a 99-year lease term under the Master Lease.

**TIMELINE FOR CONSTRUCTION**

The Master Developer plans to partner with a private infrastructure developer to collaborate on the development and finalization of the Project design, construction, private financing, and long-term operations and maintenance ("the P3 Developer"). Given the proposed phasing structure, there will be varying construction timelines specific to each Phase Lease.

Refer to Section 3 of this response for the University’s overall anticipated phasing timeline. As noted above, Phase 0 will commence upon execution of the Master Lease and continue for approximately 3 years, overlapping with Phase 1 design. The University currently anticipates a 7-year construction period for Phase 1A and Phase 1B, with an additional 10 years for development of additional phases. The University currently projects a full buildout of Phase 1A and Phase 1B by 2031.

**REQUIRED CAPITAL PROPOSED FUNDING NEEDS**

Based on the estimated capital construction investment described in Section 4 of this response, the University and its partners are requesting the full $150M of capital funding available under the RFEI. $50M will be dedicated to infrastructure improvements to the island as outlined in the City’s plan for water, sanitary, gas and electric improvements, and tie-ins to The Exchange’s buildings and infrastructure. $100M will be utilized to pay for the majority of the approximately $116.2M of The Exchange’s site costs, including waterfront improvements, pier renovations, storm surge barriers, and site enhancement above the floodplain, infrastructure specific to The Exchange, and site clean-up and preparation.

In addition to the above, the University plans to invest an estimated additional $435M in Phase 1A constructing The Exchange’s academic building, utilizing the existing theater, Building 315, Building 555, and a portion of Liggett Hall.

As part of Phase 1B, University partners will design, build, finance, operate and maintain a Conference Center and Hotel including building construction, waterfront improvements to the western parcels, additional infrastructure build-outs, site clean-up and site preparation. The University currently approximates the capital costs for Phase 1B to be $373M.

**OTHER REQUIRED COMMITMENTS ITEMS FOR CONSIDERATION FROM NEW YORK CITY**

This response assumes transportation to and from Governors Island will remain under the purview of the Trust with improvements implemented to the ferry service, including increased operating times and frequency to support the academic and research of the campus and future growth. Golf carts and operation vehicles would be needed to provide service to the Island.

Stony Brook will ask for favorable consideration by the city of requests for property tax exemption, access to tax-exempted debt, and provision of standard municipal services (ex: police and fire protection) for the duration of the relationship.
OTHER KEY ISSUES

As we prepare for the future development of the structures and spaces on Governors Island, we have identified a series of items that we will keep in mind as we move through our planned phasing. The following items will evolve and be finalized as we move through each step of the project:

- Lease/Sublease structuring; subcontracting provisions under Master Lease.
- Design and Construction of the Project under the Master Lease, including:
  - Procedures for design submittals.
  - Commencement of work/NTPs.
  - Trust right to oversee work/ whether there is expected compensation for oversight services performed by Trust.
  - Limitations on Master Developer’s right to rely.
  - Trust Approvals.
  - Coordination with key stakeholders, utilities and other third parties.
- Payment Structure under Master Lease (particularly how aligned with subsequent Phases), including any anticipated revenue sharing under Master Lease (limited to revenue generating components of the Project).
- Branding/Marketing of the facilities to be developed as part of the Project on Governors Island, whether the selected entity will retain sole rights.
- Environmental Conditions, Hazardous Materials, Generator Status, Remediation.
- Master Developer Defaults/Trust Remedies.
- Trust Defaults/Master Developer Remedies.
- Representations and Warranties of the Parties.
- Termination (circumstances thereof).
- Dispute Resolution Procedures under Master Lease.
- Property Tax.

Ancillary uses in Phase 1 will include infrastructure, waterfront, and island improvements. For location of areas, please refer to Section 3.
Climate change. The most pressing issue of our time. Without decisive action, we will lose this fight, and everything we hold dear along with it. Fortunately, for us, New York City has picked up the baton. But New York can’t do it alone.

The city needs a partner who shares its bold vision and its passionate commitment to finding solutions. Stony Brook University is ready to partner with New York City to create the Center for Climate Solutions on Governors Island and help transform ourselves, our region and our planet, for the better.

Alan Alda
Visiting Professor, Founding Member
Alan Alda Center for Communicating Science
Stony Brook University
Section 6

APPENDIX
October 5, 2021

President Maurie McInnis  
Stony Brook University  
310 Administration Building  
Stony Brook NY 11794-0701

Dear President McInnis:

As Chairman of the New York State Assembly Environmental Conservation Committee, author of the state’s Climate Leadership and Community Protection Act (CLCPA) and Assembly representative for Stony Brook University, I am writing to wholeheartedly support SBU’s proposal to create a Climate Solutions Center on Governors Island. I commend the City of New York and the Trust for Governors Island for recognizing the value of utilizing the Island for this purpose.

The CLCPA includes far-reaching goals with tough deadlines because of an unquestionable need to set New York on a course that will transition our state to clean renewable energy. I knew that without the CLCPA, we would continue on a path of irreversible damage to our environment.

Once a small teaching college, SBU quickly rose to the global stage now attracting the best and brightest faculty, researchers and students, while becoming prominent members of the prestigious Association of American Universities (AAU) and co-manager of Brookhaven National Laboratory (BNL).

Stony Brook University’s School of Marine and Atmospheric Sciences (SoMAS) is globally recognized as a leader in sustainability, atmospheric research, education and public service. I have worked closely with SoMAS students and faculty who explore and study a variety of habitats ranging from the open ocean to the largest metropolitan area in the United States enhanced by resources at the nearby National Weather Service, BNL, and Cold Spring Harbor Laboratory. This expertise will enable SBU to successfully develop their vision for a living laboratory that will encourage cross-
industry collaboration in the quest for creative solutions and mitigation strategies that will combat the climate crisis. Furthermore, it will train a workforce of new jobs and experts to take the fight for sustainability into the next generations.

Sincerely,

Steve Englebright
Member of Assembly
September 17, 2021

President Maurie McInnis  
Office of the President  
Stony Brook University  
310 Administration Building  
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of Brookhaven Science Associates, LLC, manager of Brookhaven National Laboratory, to express our firm support of Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

Not only is this project of utmost importance, but it will also drive lasting change by creating innovative solutions to climate change and engaging NYC and the global community in the adoption of important mitigation efforts. We believe that the Climate Solutions Center can be a world leader in research and education and that, through collaboration across a variety of industries, can be at the forefront of global mitigation, adaptation, and sustainability efforts.

Brookhaven National Laboratory delivers discovery science and transformative technology to power and secure the nation’s future. Primarily supported by the U.S. Department of Energy’s (DOE) Office of Science, Brookhaven Lab is a multidisciplinary laboratory with seven Nobel Prize-winning discoveries, 37 R&D 100 Awards, and more than 70 years of pioneering research. The Laboratory's 2,500-plus staff members lead and support diverse research teams that address the DOE mission to ensure the nation's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. Among Brookhaven Lab’s current initiatives are nuclear physics: the electron-ion collider, clean energy and climate science, quantum information science and technology, science-driven human artificial intelligence-facilities, building for discovery in high energy physics, and accelerating isotope production: securing the nation’s supply. In addition to our research efforts, the Laboratory offers robust STEM education
and workforce development programs that drew more than 30,000 participants annually (pre-pandemic).

We are proud of our existing partnership with Stony Brook University in the management of Brookhaven National Lab, and we look forward to the opportunity to expand our work with them on this critical project from energy storage to grid-modernization to energy efficiency. Moreover, our world-class facilities at the National Synchrotron Light Source II, the Center for Functional Nanomaterials, and through the Computational Science Initiative are available for users to address issues in clean energy and climate science from solving fundamental questions to developing and deploying new technologies.

We are confident in Stony Brook’s ability to lead this effort on Governors Island to combat one of the most defining challenges of our time. We are excited by the opportunity that lies ahead and look forward to supporting such an important endeavor.

Sincerely,

Doon Gibbs
Director
Dear President McInnis:

I am writing on behalf of the University of Oxford to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City. We are pleased to state our intention to serve as a Founding Partner at Stony Brook’s Climate Solutions Center on Governors Island.

We understand that Stony Brook intends to establish the Climate Solutions Center as a living laboratory for mitigation, adaptation, and sustainability. We share Stony Brook’s vision that this Center can be developed as a leading model for collaborative solutions to the global climate crisis. Through partnerships across public entities, universities, businesses, local communities, and non-profit organizations, we intend to collectively identify and implement novel climate solutions. Our collaboration has the potential to yield an ecosystem of academics, activists, citizens, public officials, start-ups, and legacy businesses who all have important roles to play. We are also excited by the prospect of collaborating with Stony Brook (and potentially other academic partners) to deliver academic programs. Our educational efforts will extend beyond the classroom, as we will aim to reach the New York City and global public about climate innovations developed through the Center.

Oxford has significant assets and capabilities that we can bring to this partnership. We are a leader in climate science education and research. Our efforts in this area have become an institutional focus, as our Environmental Change Institute (ECI) has gained global prominence. For example, our researchers have developed the Global Warming Index, a core metric used around the world to track the human impact on our climate. The ECI’s MSc programme in environmental change and management is Oxford’s most popular graduate science course.

We are convinced that Stony Brook will be an ideal partner for this unique opportunity to create a global hub in New York City at this critical moment. Our universities, at the forefront of a network of additional, impressive institutions, organizations, and businesses, will have a unique impact on Governors Island, New York City, and the world.

Sincerely,

(Michael Obersteiner, Director, Environmental Change Institute)
September 23, 2021

President Maurie McInnis
Office of the President
Stony Brook University

Dear President McInnis:

I am writing on behalf of the University of Washington to express our strong support for Stony Brook University’s vision for New York Climate Exchange on Governors Island in New York City. We are pleased to commit to serving as a Founding Partner in this effort.

We have thoroughly reviewed Stony Brook’s vision for the New York Climate Exchange and believe that it has the potential to be a global leader in sustainability, adaptability, and creativity in the climate solutions space. We are excited by Stony Brook’s intent to create a living laboratory to serve as a leading model for cross-industry collaboration that can create comprehensive and lasting change. We are also excited by the prospect of working with Stony Brook (and other academic partners) to produce and deliver industry-leading research, academic programs, and educational immersion opportunities for students, practitioners, and the global community alike. The University of Washington is committed to advancing sustainability and is excited by the unique solutions that will arise from partnering with leaders from a variety of industries and sectors, each working to combat climate change in their respective fields.

The University of Washington has substantial expertise and experience that we are excited to contribute to this partnership. We are confident that our strengths, paired with the unique competitive advantages of Stony Brook, will set the stage for a strong bi-coastal partnership that can further expand the reach of the Climate Solutions Center on Governors Island. The University of Washington is one of the world’s preeminent public research universities with a diverse set of academic offerings. Educating more than 54,000 students annually, UW is consistently ranked as one of the leading universities in the United States and in the world. We boast a variety of climate-focused programs and our work extends beyond the university to local, regional and global partners in climate mitigation and adaptation with an eye toward climate equity and environmental justice. The UW College of the Environment is the home of numerous world-leading experts in fundamental Earth science of the atmosphere, oceans and land, as well as in the conservation and sustainable utilization of natural resources in a changing climate. The College of Built Environments holds renown expertise in climate-resilient and sustainable design, planning, and building, rooted in disciplinary excellence, environmental justice goals and community-engagement best practices. The Evans School of Public Policy and Governance has excellent research and teaching programs in environmental policy, governance, financing of solutions in the public area, and the role of place and
inequality in our understanding of climate change. Our College of Engineering, in particular our Departments of Civil and Environmental Engineering, Mechanical Engineering and Clean Energy Institute, brings a breadth of expertise in developing viable and impactful engineering solutions that will slow climate change and mitigate the impacts of climate change on diverse communities around the world. The Foster School of Business supports innovation for environmental sustainability through the Alaska Airlines Environmental Innovation Challenge. EarthLab works with partners to accelerate and focus UW expertise to address environmental challenges, making a positive impact on peoples’ lives and livelihoods.

Importantly, these Colleges and Schools bring a strong culture of collaboration and demonstrated success is bringing scientists, engineers, and planning and policy experts together to accomplish research that produces real change. The University of Washington has a number of centers that address the interdisciplinary aspects of the challenge of climate change including the Climate Impacts Group, the Integrated Design Lab, the Clean Energy Institute, EarthLab, the Center for Environmental Politics, the Center for Health and the Global Environment and the Center for Studies of Demography and Ecology.

Our impact stretches far beyond our local community and our three Washington campuses. We are proud to have over 400,000 alumni in our worldwide network and a number of global partnerships that have provided relevant experience for a climate solutions center. UW is actively engaged in critical advances in the climate science space. Faculty members helped author the assessment reports by the United Nation’s Intergovernmental Panel on Climate Change, including the most recent. UW researchers from our Applied Physics Lab lead a study on the Arctic’s “Last Ice Area” to understand the impact of climate change on these unique environments and the residual effects on the species that depend on the preservation of such ecosystems. UW researchers work with communities and governments across the region, nation and world to develop sustainable and justice-oriented climate mitigation and adaptation strategies in urban systems and other human habitats.

The University of Washington has exceptional capabilities in climate science, impacts, adaptation, mitigation and policy, and we believe we can add to the global perspective of the consortium of institutions in the New York Climate Exchange.

We believe that Stony Brook will be an exceptional partner for this unique opportunity to make New York City and Governors Island the leading national and global hub for climate science scholarship and education. We are excited to be involved in such an important endeavor and look forward to the creative and exciting developments ahead.

Sincerely,

Ana Mari Cauce
President
Professor of Psychology
October 6, 2021

President Maurie McInnis, PhD
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis,

The Columbia Climate School is delighted to collaborate on Stony Brook University's Expression of Interest to be The Trust for Governors Island's Anchor Educational & Research Institution. This opportunity on Governors Island promises an invigorating collaboration model that addresses and ameliorates our shared climate crisis; this further positions New York City as a global leader in interdisciplinary research, environmental responsibility, sustainable economic development, and urban resilience.

This is a deeply meaningful opportunity, and one which excites and motivates the Climate School and Columbia University. We applaud the Trust for Governors Island and the City of New York for spurring this initiative, and we commit to being a major contributor to the emerging discussion, including contributing a broad range of resources spanning research, education, convening, and programmatic impact. This Letter of Collaboration defines these interests and capacities in general detail, with more specific commitments emerging over time as the collaborative discussion progresses.

THE FIRST CLIMATE SCHOOL

Launched in 2020, the Columbia Climate School unites innovative research, student-centered education, and high-impact societal programming into the science, consequences, and human dimensions of climate change, including the methods of achieving a more sustainable and just world. Columbia University bridges ~1,000 faculty, researchers, trainees, and staff leading climate and sustainability scholarship, 24 degree-granting undergraduate and graduate education programs, and a dynamic suite of non-degree and executive education programs.

But the Climate School is something entirely new under the sun: Beyond its critical roles in new knowledge creation and education, we are a highly-visible and nimble platform for local, national, and global partnerships to drive real-world and evidence-based action across the public and private sectors, with the goal of designing and implementing solutions to the most complicated and urgent challenges posed by climate change. We are a magnet for cross-sectoral engagement, for new faculty, postdocs, and students leading interdisciplinary methods, for K-12 outreach and education, and for broadening participation to ensure equity, justice, and anti-bias.

Columbia has pioneered these capabilities for over 70 years, represented by the Earth Institute, the Lamont-Doherty Earth Observatory, and its 20+ constituent research centers, plus Columbia World Projects and the Columbia Global Centers networks. Each unit provides a distinctly valuable perspective on leveraging innovative research and education for societal benefit; each is a potential driver and resource for your Anchor Institution's immediate and sustained success.

RESEARCH FOR SOCIETY: OUR FOUR NEW ACCELERATORS

We are tremendously excited to soon launch four “Climate Research-to-Action Accelerators,” garrisoning our academic muscle for direct societal benefit:

1. **Coastal Viability:** Predicting and adapting to sea-level change;
2. **Decarbonization**: Methods and policies for removing atmospheric carbon;  
3. **Disaster Resilience**: Predicting, preventing, preparing for, and responding to disasters; and,  
4. **Food for Humanity**: Analyzing and promoting sustainable food systems.

Each Accelerator will stimulate groundbreaking research collaborations, strategic and cross-sectoral partnerships, undergraduate and graduate education, and professional workforce development. They represent the Climate School’s strategic priorities and motivations for future institutional growth; they also serve as a “North Star” for how we wish to partner with Governors Island and the New York City Mayor’s Office.

**TESTAMENTS OF EARLY LEADERSHIP: TWO CRITICAL NSF CENTERS**

A representative example of the Climate School’s leadership is captured by our September 2021 win of the National Science Foundation’s Science & Technology Centers competition, one of the federal government’s most prestigious, competitive, and high-cost research funding mechanisms. The **Center for Learning the Earth with Artificial Intelligence and Physics (LEAP)** converges climate science and data science to develop data-driven, next-generation climate predictions. In close collaboration with the Trust for Governors Island, the New York City Mayor’s Office, the National Center for Atmospheric Research, the NASA Goddard Institute for Space Studies, and 20+ additional academic and non-academic institutional partners, LEAP unifies research, education, broadening participation, and knowledge transfer to achieve greater climate prediction accuracy. This 50-faculty, 10-year project is already receiving national visibility in addition to the substantial federal financial support, and captures the range of intellectual and programmatic contributions that our Climate School can provide to Governors Island.

Importantly, LEAP will annually host a hack-a-thon on Governors Island, and Clare Newman, President & CEO of the Trust for Governors Island, has agreed to serve on the Center’s Knowledge Transfer Subcommittee. Thus, the Governors Island-Columbia relationship is already being built, and can be leveraged for success in developing your new Anchor Institution.

Second, the Climate School is a key partner on the recent National Science Foundation-funded **Megapolitan Coastal Transformation Hub (MACH)**. Linking climate and sea level scientists, civil engineers, urban planners, economists, emergency management specialists, environmental anthropologists, and decision analysts, MACH research will support climate-resilient decision-making frameworks to equitably support coastal communities, and will link researchers with coastal stakeholders and decision-makers to facilitate the co-development of dynamic adaptation policy pathways for equitably navigating our uncertain future. MACH will also investigate the behavior of the housing markets, mortgages, and insurance companies, and the effects on municipal budgets.

**MOVING FORWARD: CONVENING, EDUCATION, RESEARCH & IMPACT ON GOVERNORS ISLAND**

The Climate School is eager to stay fervently engaged in forthcoming conversations about Governors Island’s Anchor Institution, and more generally about New York City’s climate solutions. We can collaborate with your project in these four ways:

1. **Convening**: The Climate School will convene heterogeneous stakeholders - industry, NGOs, governments, K-12 schools, and others - to harness academic and non-academic knowledge necessary to address our shared climate crisis. Through small and large events – lectures, conferences, seminars, workshops, and more - we convene the broader public and the local community around climate change, taking particular advantage of Columbia University’s powerful location in New York City and adjacent to the financial services, international diplomacy, media, and cultural sectors. Hosting such events and convenings on Governors Island, or in partnership at the Climate School’s planned flagship building on the new Manhattanville campus, would position the new Anchor Institution as a powerful host of cross-sectoral collaboration. We can readily leverage the Climate School’s brand, intellectual rigor, and programmatic innovation to bring climate stakeholders to Governors Island.
2. **Education:** With 24 undergraduate and graduate education programs in climate, plus many more executive and non-degree educational programs, Columbia can deploy a diverse and highly-motivated student community to conduct theoretical and applied research on Governors Island, positioning students as teachers and trainers, and supporting the facilitation of your emerging programs. In parallel, Governors Island stakeholders and leaders can serve as guest lecturers, short- and long-term fellows, adjunct professors, and "Executives in Residence," further and meaningfully dissolving the traditional boundaries that have historically separated higher education from society.

3. **Research:** The Climate School will unify and advance Columbia’s existing expertise through the development of new interdisciplinary and society-inspired research. Recognizing that key issues are likely to evolve with the developing climate crisis and accompanying socio-political situation, the research questions are expected to change, perhaps dramatically, over the coming decades. The changing nature of sets of projects over time enables a nimbleness, adapting to problems that are yet to be articulated, while still operating under a larger strategic framework. Governors Island must at once be a research site, a sample, a testing ground, and a direct beneficiary of Climate School research.

4. **Solutions, Technology & Impact:** The Climate School brings together the capacity for world-leading research and actionable solutions. Its mission will be to support large-scale, evidence-based climate programs that improve and facilitate efforts to curb and cope with climate change. It will work at every level of the climate problem, collaborating with governments, civil society, financial institutions, industry, and educational institutions to strengthen and support efforts to achieve climate action. This will include leveraging Columbia’s expertise in technology transfer and commercialization of solutions in order to bring action out of the laboratory and into the marketplace. The collaboration promised on Governors Island will be a natural fit in order to advance the solutions to our climate crisis.

A sampling of projects across these four areas is provided below in Appendix A.

In addition to the interests captured in this Letter of Collaboration, the Columbia Climate School will also establish its own partnerships with institutions that have already expressed interest in collaborating with your Anchor Institution, including Barnard College (detailed below in Appendix B), the Woods Institute at Stanford University, Duke University, the University of Tokyo, Microsoft Corporation, and C40 Cities. Additionally, our membership in the Global Alliance of Universities on Climate provides additional opportunities for global collaboration.

I look forward to the many powerful research, education, and practice opportunities that your Anchor Institution will enable. On behalf of the Columbia Climate School, we look forward to continuing this urgent and meaningful discussion about climate in New York City, and thank you for the opportunity to contribute to your goals for broad societal impact.

Sincerely,

Sir Alexander N. Halliday, PhD
Founding Dean, Columbia Climate School
Professor, Department of Earth & Environmental Sciences
Columbia University in the City of New York
https://climate.columbia.edu
APPENDIX A – POTENTIAL PROJECTS CONNECTING COLUMBIA & GOVERNORS ISLAND

The Columbia Climate School unites 30+ academic units spanning climate scholarship and practice. Each unit stands behind this Letter of Collaboration, and can support Governors Island in the following ways:

- **Hudson River Field Station:** For 20 years, the Lamont-Doherty Earth Observatory’s Hudson River Field Station in Piermont, NY has introduced thousands of local students to the Hudson River ecosystem, recently enhancing educational programming and public outreach with child-friendly microscopes, teaching resources, science exhibits, and lab equipment for student field trips and activities. Additionally, data collected annually at this location contributes to a wider dataset used by students throughout the Hudson River Valley in classroom lessons, student research projects, and other special programs. Such datasets, curricula, and Field Station staff can be immediately leveraged for comparable K-12 outreach initiatives on Governors Island, united by a common bond with the Hudson River.

- **Marine Operations:** We operate the research vessel *Marcus G. Langseth* that serves as the national seismic research facility for the United States academic research community. The Langseth’s unique seismic capability allows it to provide both 2D and 3D maps of the earth’s structure miles below the seafloor. Utilizing the vessel’s other capabilities, expeditions have collected sediment cores for understanding climate variations throughout the Earth’s history, sampled seawater for determining physical and chemical properties of the oceans, and deployed remotely operated vehicles (ROVs) for studying submarine volcanoes. Though in high and constant demand, we can dock this world-class research vessel on Governors Island to facilitate regional research, K-12 educational programming, and more.

- **River & Estuary Education:** The Lamont-Doherty Earth Observatory offers K-12 students opportunities to engage in hands-on learning experiences on and off campus throughout the school year and during the summers. Programs that Governors Island can immediately leverage include addressing real world problems through our Secondary School Field Research Program, Day in the Life of the Hudson River, or the Rockland Planning Land Use with Students programs. We also offer a range of open-source digital applications, curricular guides, and comprehensive training materials to facilitate teachers’ integration of river and estuary content into K-12 classrooms.

- **Engineering:** Columbia’s engineering scholars can play a vital role in understanding, designing, modelling, creating, constructing and operating cost-effective solutions that drive innovations in electricity, water, wastewater, telecommunications, transportation infrastructure towards the well-being of people and the ecosystems they rely upon. Governors Island offers a venue for collaborative co-creation with other stakeholders to understand the value propositions (in its broadest sense and not just financial) of several Columbia engineering activities: buildings of the future: designs for efficiency, environment, resilience; new techniques for 3D and robotic manufacturing, construction; incubating the integration of micro- and macro-electronics; intelligent bidirectional electric power transfer, electric storage and smart micro-grids; system architecture, control and information management for individual devices and subsystems, living spaces and transportation; water recycling and reuse, for managing the flows and quality within and outside the water distribution infrastructure; optimal coastline protective strategies; research to support a new thriving off-shore wind power industry that both enhances the economy and the local ecology.

- **Computational Modeling:** Governors Island is the most vulnerable to sea-level rise, and the Climate School’s quantitative and computational modeling experts can help to better understand and anticipate this emerging risk. Our geophysicists can derive physical rules about your Island’s current exposure to sea-level rise, which our statisticians can deploy to predict and project future scenarios; our policy experts, civil engineers, and urban planners can forge applied recommendations for protecting your Island’s emerging infrastructure from flooding. Thus, your Island provides a powerful and unique testing ground and use-case for innovative research. The Columbia Climate School can begin doing this immediately.

- **Sabin Center for Climate Change Law:** The Sabin Center develops legal techniques to fight climate change, trains students and lawyers in those techniques’ uses, and provides resources on climate law and regulation to achieve a sustainable future.
● **Center on Global Energy Policy:** Approaching energy as an economic, security, geopolitical, and climate issue, CGEP combines academic research with the experience of senior energy experts from government, industry and non-governmental organizations to produce independent, balanced and actionable analysis, which the Center disseminates through public forums, research, roundtable discussions, conferences and the media - in the US and other key energy countries, including Brazil, Turkey, India, and China.

● **Food for Humanity:** The Project charts pathways to resilient food systems at global, national, regional, and local scales, which will enhance health, achieve food security, improve urban nutrition, and promote sustainable agricultural production systems under extreme climate events. The Project builds robust and scientifically and socioeconomically-integrated frameworks of scenarios, pathways, and narratives to enable vulnerability assessments and the development of food system policies, management strategies, and investments.

● **Climate School Non-Degree Programs:** Our Pre-College program is for high-school students (Grades 9-12) who want to sharpen their knowledge and skills in the areas of climate change and sustainability. The programs will help participants build important skills, advance their learning outside of school, and prepare for the college experience. These workshops are excellent supplements to classroom learning and will help students develop important skills needed in the 21st century workforce. All offerings are structured around real-time conversations, hands-on activities, and project-based learning in order to provide participants with an introduction to real-world research, ideas, and solutions.

● **Program in Climate & Health:** The National Institute of Environmental Health Sciences established the first formal PhD training program for Climate & Health through a T32 Training Grant in Climate & Health awarded several years ago to Columbia University. In 2019, this Climate & Health Program was merged with two others, thus unifying to create one of the country’s largest training grants; all PhD and postdoctoral trainees receive training in how the climate and environment impact health, and can be deployed for life-relevant learning, research, and/or teaching on Governors Island.

● **Billion Oyster Project:** Governors Island provides direct marine access through a network of piers and boat launches, making it an extraordinary opportunity for a living, learning hands-on laboratory for climate adaptive strategies that iterate built edge design. These new blue-green infrastructure edges, combined with the Billion Oyster Project’s local oyster seeding work, can show how our region could be a leader in both climate adaptation and the biological restoration of a living harbor. Columbia & partner institutions could host a rotating group of Research Fellows to test and monitor these experimental landscapes, working directly with a cohort of Harbor School students in afterschool programs and special events.

● **Technology Transfer:** Columbia's Lab-to-Market (L2M) accelerators have led to 1,125 applications received, 408 teams run through educational boot camps on product development and entrepreneurship, 248+ cash awards issued totaling more than $16.3M, 40+ commercial launches by accelerator teams, and $218M+ in external follow-on funding raised by those teams.

● **National Center for Disaster Preparedness:** The NCDP conducts research that helps communities prepare for, respond to, and recover from large-scale disasters — including hurricanes, earthquakes, nuclear accidents, pandemic flu, and terrorist attacks. NCDP’s approach combines research, policy work, education, and high-level advocacy to ensure best practices. NCDP training programs provide both web-based and in-person training for public health workers, local and regional governments, and public health, hospital, and community partners. Such training can be easily and immediately leveraged for and on Governors Island.

● **Center for Sustainable Futures:** With the New York City Department of Education, the Center commits to improving sustainability education across all public schools. The Center is a hub for social research on climate education and communication, including hosting various extramurally-funded research projects and forging novel partnerships with K-12 leaders, teachers, students, parents, and communities.
Appendix B: Barnard College Prospectus: Governors Island Center for Climate Solutions

Barnard College is a private women's liberal arts college located in New York City, and is one of the most selective academic institutions in the nation; our world-class faculty educate 3,000 inspired and intrepid undergraduate women. Barnard is also a leader in recognizing and developing top women in STEM. More than ever before in the College's history, young women interested in the sciences are choosing Barnard — **34% of the Class of 2021 were math and science majors, compared with about 22% nationally.** Barnard’s partnership with Columbia University remains an exemplary shared commitment; Barnard is largely autonomous, with its own leadership, curriculum, admission, and administration, though students can attend classes, clubs, and events on both campuses and the two administrations work closely together. Given the close relationship between Barnard and Columbia, Barnard is submitting a memorandum regarding potential Governors Island partnerships in collaboration with the Columbia Climate School.

Academics: Climate Research & Teaching at Barnard

Barnard’s Environmental Science Department has long been a leader in the field, and offers a major in environment and sustainability. The Urban Studies Program offers a specialization in environment and sustainability, while the History Department also offers a minor in environmental history. The Anthropology and Architecture Departments offer significant coursework that engages with human relationships to the environment. An Environmental Humanities minor was recently launched, bringing together students in both the humanities and STEM to focus on environmentalism, global warming, land- and water-rights activism, and non-human rights intersecting with race, ethnicity, gender, and class. Departments including Economics, Art History, Women’s Gender & Sexuality Studies, Spanish, Religion, and Theatre offer additional climate-related coursework. Barnard students have the opportunity to grapple with human interactions with the natural world from a variety of perspectives, ranging from the hard sciences to the fine arts.

Potential Barnard Contributions to the Governors Island Center for Climate Solutions

Below are just a few examples of potential courses, research programs, and community partnerships that intersect with Barnard’s academic and operational strengths, faculty research, and student leadership.

Climate Science and Interdisciplinary Research:

- Urban ecology hub or mini-Long Term Ecological Research (LTER) site for ecological monitoring of green infrastructure or nature-based solutions (e.g., water infiltration, temperature, and other ecosystem services), including a long-term social assessment of individual interactions with or changing perceptions of green infrastructure or climate resilience in cities.
- Green infrastructure, for example stormwater management through bioswales.
- Tank experiments to study bivalve growth & measure urban pollution impact on bivalves.
- Urban Oceanography class with long term monitoring stations to understand seasonal variability in the properties of urban waters.
- Material forms of racism: toxicity’s movement through soil and bodies, landfills, and waste infrastructure

**Key Campus Partners & Areas of Focus:**

- **Environmental Science:** carbon capture and sequestration, urban hydrology, paleoclimatology, urban ecology;
- **Women's, Gender and Sexuality Studies:** environmental racism, waste, and soil
- Biology: cellular biology and honeybees;
- Neuroscience and Behavior; and,

Environmental Justice & Community Engagement:

- Stakeholder convenings to envision sustainable urban systems (participatory methods & workshops)
- Tree growth, water quality, and ecosystem health assessment training for scientists and students.
- Partnerships (students & community organizations) for environmental justice advocacy & activism.

**Key Campus Partners & Areas of Focus:**
- Environmental Science: future cities workshops, citizen science;
- Anthropology: indigeneity;
- Education & Urban Studies: STEM education, urban planning;
- Consortium for Critical Interdisciplinary Studies: intersectionality of climate, race, and gender;
- Office of Community Engagement and Inclusion; and,
- Barnard Sustainability & Climate Action.

Circular Campus/Circular Island:

- Circular operational systems using Barnard’s Circular Campus framework, including our innovative approach to measure and track Scope 3 emissions: Design Construction & Deconstruction, Internal Reuse & Sustainable Purchasing, Food, Green Spaces, and Waste.
- Visualizations of sustainable circular systems by convening artists, architects, and urban planners.

**Key Campus Partners & Areas of Focus:**
- Architecture: climate justice visualizations, green architecture;
- History: economics and history;
- Barnard Sustainability & Climate Action: consumption and circularity;
- Access Barnard;
- Digital Humanities Center, Barnard Design Center;
- Student Groups; and,
- Facilities & Capital Planning.

Barnard’s approach to sustainability and climate action will offer distinct and significant contributions through our cross-disciplinary approach to climate research and teaching, emissions reduction across all three scopes and circularity, and environmental justice.

For inquiries, please contact Sandra Goldmark, Associate Professor of Professional Practice and Director of Campus Sustainability & Climate Action, at sgoldmar@barnard.edu.
September 23, 2021

RE: Request for Expressions of Interest: Anchor Educational & Research Institution

We applaud New York City and the Trust for Governors Island for their plan to establish a climate-focused research and education hub on Governors Island. Supporting equitable climate solutions through research and commercialization is something we feel is vitally important and something which RIT is firmly committed to.

We would like to commit our support to the coalition that has been mobilized under Stony Brook University to lead this effort. We believe they are the perfect university to anchor this once-in-a-lifetime opportunity to help make New York City and Governors Island an international hub for convening climate science research and solutions. Using the synergies that exist between the island and the surrounding communities, coupled with Stony Brook’s research capabilities, we have no doubt they will be successful in establishing a hub that will quickly become the place where local, national, and international change agents will meet to confront the challenges posed by climate change and to create change through collaboration, research and commercialization.

This opportunity aligns very well our institutional programs associated with our Golisano Institute for Sustainability, New York State Center of Excellence in Advanced and Sustainable Manufacturing, New York State Pollution Prevention Institute, and REMADE Institute. We hope to use these to support and complement the research and education in this area at Stony Brook and other partnering institutions. We are confident that Stony Brook University led team is well suited to enter this competition and that this initiative would help position Governors Island as a global convener for addressing one of the world's greatest challenges — climate change.

Sincerely,

Dr. Ryne P. Raffaelle
Vice President for Research and Associate Provost
October 8, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis,

Stanford University is pleased to submit this letter of support for the Stony Brook Governors Island Climate Center response to develop a Center for Climate Solutions on Governors Island. Governors Island is situated as the ideal site to prototype the resilient and just climate future that all New Yorkers deserve, and Stony Brook is an excellent convener of the many sector leaders and community stakeholders required to realize the Center’s full potential. We strongly support the Stony Brook vision.

As a collaborator with Stony Brook, and its consortia partners, Stanford University is well-suited to contribute our talents and capacity to this proposal. A global university with depth and excellence across all seven of its schools, Stanford is committed to the vision of a purposeful university. Stanford’s new school focused on climate and sustainability, the university’s first new school in more than 70 years, will combine outstanding scholarship, a strong commitment to solutions at scale, and recognition of the importance of vibrant partnerships. Stanford’s commitment to interdisciplinary scholarship and cutting-edge research on climate science, impacts, solutions, and justice makes it a strong partner for classes, conferences, exhibits and ongoing dialogues, as well as jointly managed and taught educational programs for students and other constituencies.

Stanford University looks forward to helping to secure the success of the proposed collaboration in support of the following shared goals:

Collaborative Convening – Gather cross-sector stakeholders who will co-create pathways for Governors Island and New York communities to strengthen one another by exchanging people and ideas and embracing best practices of climate justice and resilient design.

Research Innovation Ecosystem and Resilient Design – Cultivate a convergent research and innovation ecosystem that accelerates equitable solutions and re-imagines the toolbox for mitigation and adapting our society to the ecological, economic, and social consequences of climate change.

Transformative Education and Careers – Build a green workforce pipeline of diverse employees ready to contribute to the work in support of a just, climate-resilient New York City.

Working alongside all the partners of this consortium, Stanford University will help fulfill the vision of a more just and sustainable New York metropolitan area that can serve as a model for other urban communities worldwide.

Sincerely,

Marc Tessier-Lavigne
October 1, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the State University of New York system—the largest comprehensive system of higher education in the United States—to express my strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City. We are proud to offer our backing for this endeavor and are excited by the unique opportunity for Stony Brook to lead such an important project. Stony Brook has rapidly grown in prominence and impact over the last several decades. Stony Brook is now the preeminent public research university in the New York metro area, a member of the highly selective American Association of Universities (AAU), a flagship of the SUNY System, and one of the United States’ most dynamic public research institutions.

In the 64 years since its founding, Stony Brook has relentlessly and successfully pursued innovation both institutionally and across the many academic and research disciplines the University now houses. Today, Stony Brook is a powerful hub for interdisciplinary excellence that spans marine and atmospheric sciences, engineering, arts and sciences, communications and journalism, business, and health. It is a premier public research university equally committed to ensuring and expanding educational access for New Yorkers and pursuing globally impactful, groundbreaking research. Stony Brook has been ranked in the top 1% of the world’s higher education institutions.

As Chancellor of the SUNY system, it is with immense pride that I provide my full recommendation for Stony Brook to lead the fight against climate change on Governors Island. They are the ideal academic anchor to create and lead an international hub for climate solutions, prioritizing community needs as well as academic discovery and learning. As one of only 62 AAU member institutions in the US, and a history for leading accessibility and social mobility, Stony Brook has the scale and reach to achieve the City’s goals for Governors Island. The SUNY system
educates over 460,000 students in 7,500 degree and certificate programs, and nearly 2 million in workforce and professional development programs. We believe that Stony Brook can effectively leverage this mission and impact in confronting climate change through its presence on Governor’s Island.

I have reviewed Stony Brook’s plans to establish a living laboratory for mitigation, adaptation, and sustainability, and I have full confidence that they are well-equipped for an undertaking of this magnitude. In addition, given SUNY is the largest comprehensive system of higher education in the nation—with 64 colleges and universities with different strengths and expertise—Stony Brook will be able to easily partner with other colleges within SUNY to further the project. For example, another system school, SUNY Maritime, has generously offered their support of this endeavor. We anticipate that additional SUNY schools, including University at Albany with their internationally recognized research in atmospheric sciences, remote sensing of the environment, climate change and high-performance computing, and SUNY Environmental Science and Forestry (SUNY ESF) will contribute to the workforce development, academic programming, and research activities that Stony Brook convenes on Governor’s Island. Together, the resources of the SUNY system will provide educational and research expertise that is directly relevant to the fight against climate change. Beyond our system partners, cross-industry collaboration and the perspectives of a broad set of academic disciplines will enable the Center to discover novel climate solutions and mitigation strategies that will have a lasting impact on the global community. Stony Brook’s efforts will extend beyond the classroom, educating the New York City and global public about climate innovations developed through the Climate Solutions Center.

Like New York City, Stony Brook has a reputation for being bold and unwavering in its commitment to innovative solutions to problems like climate change. Stony Brook has the reach and resources to foster new, necessary collaboration among the many stakeholders that climate change affects. I have no doubt that Stony Brook will be an ideal partner for this unique opportunity to create a global hub in New York City at this critical moment. I look forward to seeing the creativity and progress that is driven by the efforts on Governors Island.

Sincerely,

Jim Malatras
Chancellor

SUNY
Dear President McInnis:

I am writing on behalf of SUNY Maritime College to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We have reviewed Stony Brook’s plans to establish a living laboratory for mitigation, adaptation, and sustainability efforts on Governors Island. We believe that Stony Brook and its other partners are poised to establish a globally-leading example of what is possible with respect to the development and implementation of novel solutions to the climate crisis. We are excited by the prospect of collaborating with Stony Brook and other entities on this important project. Collectively, our educational efforts will extend beyond the classroom into the larger New York City community and global public, as we aim to encourage meaningful adoption of the new and creative solutions developed on Governors Island.

SUNY Maritime College educates dynamic leaders for the global marine transportation industry, the business of shipping, engineering, energy, facilities management, finance, the armed forces, and public service. Located on the East River in the Bronx, SUNY Maritime is the first and largest of the six state maritime academies, and our 1500+ students have access to a diverse set of academic programs, including the merchant mariner license program, which prepares students to navigate, power, and operate marine vessels. SUNY Maritime is also home to the only NROTC unit in the New York City region. Across all the College’s programs and activities, the hallmark of a SUNY Maritime education is applied learning. Furthermore, SUNY Maritime has shown commitment to environmental stewardship; as one example, our Center of Excellence for Offshore Energy is currently focused on building a clean energy workforce and advancing research in this area. We are in the process of establishing the first GWO (Global Wind Organization) certified training program that is required for all personnel working on offshore wind platforms. We believe that this commitment to immersive education, in tandem with our well-aligned academic portfolio and dedication to environmental responsibility will enable us to be a strong partner to Stony Brook in this endeavor. We also have strong partnerships with the maritime industry, which are essential for supporting a sustainable community on Governor’s Island.

We are convinced that Stony Brook will be an ideal partner for this unique opportunity to be a global leader in climate solutions at this critical moment. We are confident that this collaboration will have a unique impact on Governors Island, New York City, and the world.

Sincerely,

Jennifer K. Waters, Ph.D., P.E.
Provost and Vice President for Academic Affairs
September 30, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

Yale University supports Stony Brook’s bid to become the anchor institution for the Climate Solutions Center on Governors Island in New York City. Throughout our history, Yale has remained dedicated to expanding and sharing knowledge, inspiring innovation, and proliferating cultural and scientific understanding for future generations. Collaborating to solve climate change is now a major university priority.

We have reviewed Stony Brook’s plans to establish a living laboratory, including its focus on community and workforce development and public engagement alongside academic discovery, green business development, and other activities. We believe that a community-first approach is critical to successfully confront the complex impacts of climate change. We also believe that Stony Brook is well-positioned to lead this charge. Stony Brook’s history of educating students from racially and socio-economically diverse communities in and around New York City—in addition to its academic strength across many fields relevant to climate change—will enable the university to lead this effort in a way that invites and inspires high quality collaboration.

Yale has significant capabilities to offer in support of Stony Brook’s efforts on Governors Island. Yale faculty, staff, and students are working on climate change in our School of the Environment and our schools of Public Health, Law, Architecture, Engineering and Applied Sciences, Divinity, and Management, and across over 60 departments, institutes, centers and other organizations. Several Yale faculty projects lend themselves to opportunities on Governors Island, such as Peter Raymond’s work to understand carbon transport and storage in estuaries, Bill Nordhaus’s work on climate change economics and incentives to spur green innovation, work at the Yale School of Architecture on inclusive sustainable design strategies and implementation, and Dan Esty’s work convening thought leaders across traditional divides to develop pathways to a sustainable future.

We are excited by the opportunity to support a first-of-its-kind research and education center just 90 minutes from our campus in New Haven, Connecticut. The work Stony
Brook plans to pursue on Governors Island is aligned with Yale’s institutional goals. Our recently launched Planetary Solutions Project is working to bring Yale’s full weight to bear on the challenges of climate change, clean energy, and biodiversity loss, as well as environmental health and justice. The project’s priorities include discovering scalable energy alternatives, stemming the destruction of vulnerable ecosystems, designing adaptation strategies, developing natural methods of capturing carbon, improving environmental impacts on human health, advancing public understanding of environmental threats, and promoting environmental justice. Our academic expertise and wide network of alumni in relevant fields and industries will enable us to be a productive partner for Stony Brook in this effort.

Stony Brook’s plans to establish the Climate Solutions Center as a living laboratory for mitigation, adaptation, and sustainability are impressive. We share their belief that such a center can be a leading model for collaborative solutions to the global climate crisis. Through partnerships across universities, businesses, local communities, and non-profit organizations, we have the potential to identify and implement novel climate solutions. We are excited by the prospect of collaborating with Stony Brook and other academic partners on this critical endeavor.

We are convinced that Stony Brook will be a strong partner for this special opportunity at this critical moment. We are inspired by the work that lies ahead and look forward to advancing the solutions for climate change with colleagues on Governors Island.

Sincerely,

Scott A. Strobel, Ph.D.
Henry Ford II Professor and Provost
Yale University
October 8, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

We write on behalf of the American Museum of Natural History (AMNH) to express firm support of your vision for a Climate Solutions Center on Governors Island. Your plans for a living laboratory will drive cross-industry collaboration in the search for innovative solutions and mitigation strategies to support the global fight against climate change. We believe this project will propel lasting change in New York City, New York State, and global communities, while encouraging the sustained adoption of critical mitigation efforts.

The American Museum of Natural History is one of the world’s preeminent scientific, educational, and cultural institutions. Since its founding in 1869, the Museum has advanced its global mission to discover, interpret, and disseminate information about human cultures, the natural world, and the universe through an extensive program of scientific research, education, and exhibition. With a rich history of interdisciplinary and global collaborations, AMNH has been at the forefront of scientific research since its inception. Today, AMNH pursues an ambitious scientific research agenda guided by more than 200 scientists across disciplines. In addition to making major contributions in research, discovery, innovation, and technology to national and global scientific communities, AMNH’s researchers directly inform the content of AMNH’s broad educational initiatives, including AMNH’s Richard Gilder Graduate School (RGGS). As the only museum in the Western Hemisphere that awards Ph.D. degrees in Comparative Biology and Master of Arts in Teaching degrees in Earth science, AMNH is committed to preparing the next generation of STEM professionals for the future of STEM careers, STEM education, and our planet.

Located next to Central Park, AMNH immerses visitors in the natural sciences through innovative exhibition and public programming that supports students and their teachers, from PreK through college. Historically, AMNH saw over five million local, national, and international visitors annually, including 400,000 students and teachers who visited as part of organized school and camp field trips. Next year, AMNH will celebrate the opening of our new Gilder Center for Science, Education, and Innovation—a brand new facility that will include new exhibition and learning spaces with state-of-the-art technology and access to our world-class collections. With a research and education focus on local biodiversity and ecosystems, and including a Vivarium and an Insectarium within the building, the Gilder Center will provide new and enhanced opportunities for visitors to be immersed in discovery, innovation, and exploration about our planet, its inhabitants, and its climate.

With a critical focus on understanding and mitigating climate change and its effects, there is robust overlap between AMNH’s work and your vision for the Climate Solutions Center on Governors Island. Specifically, AMNH can support four major areas of focus through an interdisciplinary program that addresses climate change science, prevention, and mitigation strategies: 1) Exhibition, Installations, and Public Engagement Experiences that that will immerse the public in climate science; 2) Educational Engagements with Teachers and Students that are aligned with State standards and provide opportunities to engage with authentic science research experiences; 3) Research Opportunities that support pure
scientific research as well as the translation of findings to diverse audiences; and 4) Convenings that span local and global topics and audiences, including youth, and that bring together experts across academic, public, research, and creative disciplines to interact, learn from each other and identify obstacles to action and innovation. As an institution with extensive expertise in leading cutting-edge research; developing effective and accessible learning experiences with teachers, students, and families; and convening the public with experts, AMNH believes that your plans will be far-reaching and impactful.

We are pleased to offer our support for your plan for the Climate Solutions Center on Governors Island in order to combat one of the most pressing challenges of our time. We are encouraged by the opportunity that lies ahead and look forward to contributing to such a critical endeavor.

Sincerely,

Lisa J. Gugenheim  
Director  
American Museum of Natural History

Cheryl Hayashi  
Provost  
American Museum of Natural History
September 27, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the Aspen Global Change Institute to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We are excited by Stony Brook’s plans to bring educators, researchers, private industry, and non-profits together to establish a Climate Solutions Center and we are confident that it has the potential to drive innovation and lasting change in the climate solutions space. We believe that such a collaboration can result in global leadership in sustainability and can encourage the adoption of unique mitigation solutions in the fight against climate change.

The Aspen Global Change Institute is an independent non-profit dedicated to advancing global change science and solutions to help society meet the challenges at the intersection of human and natural systems. For over 30 years, AGCI has centered interdisciplinary understanding and nurtured inclusive communities to catalyze science-informed action at local, regional, and global scales. AGCI engages diverse solutions-seekers — including researchers, practitioners, boundary-spanners, citizens, and learners of all ages — through interdisciplinary convening, collaborative research, education, and communications. Our workshop series facilitates discussions that connect science and practice on topics of energy decarbonization, food security, and climate change adaptation to name a few. We are proud to work with partners from research institutions, academia, practice, government agencies, and the private sector — for example, we worked closely with water utilities across the nation, including the New York City Department of Environmental Protection, to elevate leading practices in climate adaptation. We are also home to a series of flourishing sponsorships aimed at rapidly scaling up implementation of clean energy policy to actualize a more sustainable climate-energy nexus.

We believe that Stony Brook is an ideal leader for this unique project, and we are thrilled to be supporting this important work. We look forward to being a part of an effort that will have a lasting impact on global climate change mitigation efforts.

Sincerely,

James C. Arnott, PhD
Executive Director, Aspen Global Change Institute

104 Midland Avenue, Unit 205          Basalt Colorado 81621
telephone 970 925 7376      email info@agci.org   website www.agci.org
September 3, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of Beam Center to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

Beam Center works to bring together youth, artists, engineers, and educators to produce ambitious, collaborative projects that support youth to take bold steps towards meaningful futures and foster conditions for educational equity. We create an environment that allows young people to learn to collaborate and create while learning skills in fabrication, prototyping, metalwork, physical computing, construction, and design. We use traditional and advanced tools, technologies, and craft to honor the individual voice, celebrate the joy of producing something larger than ourselves, and inspire lasting sense of wonder and accomplishment. Our programs, aimed at students and educators, take place in public school classrooms throughout NYC, in Brooklyn (at Beam Center), on Governors Island at Beam Camp City and in Strafford, New Hampshire at Beam Camp. With mentorship, job placement and career/college guidance, we aim to connect youth to New York City's creative and technical economies. This year, we are proud to have worked with more than 7,000 middle and high school students across 25 NYC public schools, primarily in low-income, under-resourced, or newly immigrated communities. We engage 300+ public educators from around NYC in our programs that focus on leadership development and professional learning.

We are excited by Stony Brook’s vision for a Climate Solutions Center that will serve as a living laboratory, aimed at advancing sustainability and developing creative mitigation efforts in the climate change space. We are confident that this Center has the potential to be a global leader in finding innovative solutions to this issue and that it can make a lasting impact in both NYC and around the world. We look forward to seeing the development of such a unique cross-industry collaboration that can drive critical change and adoption of fresh solutions for generations to come.

We believe that Stony Brook is well positioned to lead an effort of this unique nature on Governors Island, and we are excited by the possibility of collaborating with them in the future on this particularly important project.

Sincerely,

Brian Cohen
Executive Director

brian@beamcenter.org • (718) 855-7600
Dear President McInnis:

I am writing on behalf of the Billion Oyster Project to express our support of Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

Not only is this project of critical priority, but it will also drive lasting change by engaging NYC and the global community in the adoption of important mitigation efforts. We believe that Stony Brook’s goal of creating a living laboratory, focused on cross-industry collaboration, can help produce innovative and effective solutions to the climate crisis.

The Billion Oyster Project is working to restore New York Harbor’s oyster reefs through public education initiatives. We envision a future in which New York Harbor is the center of a rich, diverse, and abundant estuary. Founded in 2014, we have worked towards this goal by centering our efforts around the belief that restoration of a biodiverse and healthy harbor ecosystem is only temporary without the support of meaningful education. We are proud to collaborate with more than 10,000 volunteers, 6,000+ students, 100 NYC area schools, and 75 restaurants in pursuit of our goals. It took less than 100 years for New York City residents to wipe out the oyster population in our harbor. Now, we are focused on rebuilding such an important natural resource and habitat. Oyster reefs not only provide habitat for hundreds of ocean species, but also can protect our city from storm damage by softening the blow of large waves, reducing flooding, and preventing shoreline erosion. Since our founding, we have restored 75 million live oysters, collected 1.8 million pounds of shell, managed 4 oyster nurseries for future reef installations and scientific experiments, and engaged thousands of students in NYC in related STEM education programs. Additionally, we are proud to partner with the New York Harbor School, a public high school on Governors Island focused on preparation for maritime careers. We hope to restore 100 million oysters to New York Harbor in the next five years, and 1 billion oysters by 2035.

We are confident in Stony Brook’s ability to take the lead in combating one of the most defining challenges of our time and we endorse their vision for the Island. We are excited by the opportunity that lies ahead and look forward to supporting such a critical endeavor.

Sincerely,

Peter Malinowski
Executive Director
Billion Oyster Project
pmalinowski@nyharbor.org
www.bop.nyc
October 1, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the Climate Museum to express our support of Stony Brook University's vision for a Climate Solutions Center on Governors Island in New York City. We are confident in Stony Brook’s vision and excited about their plans to create a living laboratory that will encourage cross-industry collaboration and creative solutions to combat the climate crisis, drive lasting change, and encourage community responsiveness.

The Climate Museum is joining Stony Brook’s living laboratory as a collaborator to further our mission to inspire action on the climate crisis with programming across the arts and sciences that deepens understanding, builds connections and advances just solutions.

In our public programming to date, we have created an activist cultural approach to community engagement with climate. The Climate Museum is proud to have an ongoing relationship with the Trust for Governors Island and believe our experience on the Island puts us in a strong position to be able to support Stony Brook's vision. Our exhibitions, art installations, public education events, youth programs, and more have touched tens of thousands of New Yorkers and tourists and received extensive recognition, broadening the climate movement with an emphasis on justice, equity, and inclusion. With the opportunity to collaborate in this proposal, we look forward to expanding our impact, programming, and workforce, with a dedicated space that affords community members and visitors alike opportunities to experience climate arts, science, and dialogue in a hub that nurtures learning, community, and climate action.

The climate crisis demands cultural interventions, and the cultural sector must engage with climate to remain relevant and trusted. Stony Brook's approach to the Climate Solutions Center is consonant with our emphasis on building community, addressing climate justice issues, and engaging the public through interdisciplinary, educational programming. We share a commitment to foster solutions-focused dialogue among a diverse group of industry, policy, and community
experts. Working with a trusted research institution whose strengths span the arts and sciences will allow us to advance our shared goal of catalyzing the cultural shift necessary for climate progress.

In addition, we are confident in Stony Brook’s ability to take the lead in combating one of the most defining challenges of our time. We are excited by the opportunity that lies ahead and look forward to supporting such a critical endeavor.

Sincerely,

Miranda Massie
Director
Climate Museum
630 Ninth Ave, Suite 1010, New York, NY 10036
September 1, 2021

President Maurie McInnis  
Office of the President  
Stony Brook University  
310 Administration Building  
Stony Brook, NY 11794  

Dear President McInnis:

I am writing on behalf of Earth Matter NY to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We are excited by Stony Brook’s vision of bringing educators, researchers, private industry, and non-profits together to establish a Climate Solutions Center and we believe a living laboratory of this nature has the potential to drive innovation and lasting change in the climate solutions space. We are confident that such a collaboration can result in global leadership in sustainability and can engage the larger NYC community in the adoption of unique solutions to this challenge.

Earth Matter NY is a non-profit organization that is focused on resource recovery and healthy soils. To achieve this goal, we are dedicated to promoting local composting of organic waste to achieve three intersecting goals:

1. Divert organic waste from landfills, where it produces methane, a greenhouse gas that is much more powerful than carbon dioxide.
2. Use the composting process as a means of carbon banking, which reduces carbon dioxide in the atmosphere.
3. Improve urban soils to promote healthier parks, gardens, and street trees.

Our mission is centered around educating and encouraging communities to engage in collaborative composting efforts. Earth Matter is proud of our existing partnership with the Trust for Governors Island, in which we process all landscape and food waste generated by tenants and visitors of the Island. This collaboration, known as the Zero Waste Island Initiative, processes all organic waste on the Island into a compost that is used as rich, pesticide-free soil amendment to support and nurture the public green spaces across the Island and NYC. This project has resulted in lower contamination rates and increased volume of organic materials collected and processed.

Earth Matter’s 1.2 acre campus on the island includes a medium scale composting facility that is registered with the New York State Department of Environmental Conservation; a working urban farm;
the Compost Learning Center; and the celebrated Lavender Field. This facility is used to prepare a growing cohort of neighborhood leaders and career professionals to take on the 21st century challenges of local composting, zero waste management, sustainable urban farming, and environmental education. Composting builds community; over the past 12 years, we have interacted with more than 50,000 New Yorkers and created a loyal following of program participants, volunteers, and advocates with a deep understanding of environmental issues and the commitment to embrace and promote systemic change.

We believe that Stony Brook is well positioned to lead this initiative and we are excited to continue our relationship with Governors Island by supporting this important work. We look forward to being a part of an effort that will have a lasting impact on NYC and the global community.

Sincerely,

Marisa DeDominicis
Executive Director
September 30, 2021

President Maurie McInnis  
Office of the President  
Stony Brook University  
310 Administration Building  
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of Educational Alliance to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City. We are excited by Stony Brook’s intention to bring educators, non-profits, researchers, and private industry together to establish a Climate Solutions Center and we are confident that a living laboratory of this nature will be a valuable and innovative tool in advancing the global fight against climate change. We believe that such a collaboration can be a powerful leader in sustainability and can engage the NYC and global communities in critical education and mitigation efforts in the face of one of the biggest challenges of our time.

Educational Alliance has been advancing the well-being of diverse communities and serving as a beacon of hope in New York City for over 130 years. A non-profit organization located in Lower Manhattan, we offer high-quality, affordable health services, education programs, and diverse cultural enrichment in the heart of the communities we serve. Educational Alliance believes in the power of communities to lift up people of all ages and to turn strangers into neighbors. We are committed to bringing together and partnering with diverse communities in Lower Manhattan, offering individuals and families multi-generational programs and services that enhance their well-being and socioeconomic opportunities. Our Jewish identity is at the core of the work we do each day. We strive to align our work around our belief that every person is born with a divine spark of dignity and creativity, that we are an open community where everyone is welcome, and that universal education is necessary for equal citizenship. Our pioneering educational programs—which have an emphasis on arts and culture, civic engagement, and health and wellness—are carefully curated and developed with the unique needs of our city’s residents in mind. Educational Alliance believes that strong communities can transform lives for the better, and we are proud to offer education centers and programming that work to advance our mission in the communities of Lower Manhattan today.

We believe we are uniquely positioned to partner with Stony Brook on this important and exciting initiative for several reasons:

- Our education programs serve learners of all ages, from preschool to older adults. Over 2,000 school-aged children are currently enrolled in our programs and we are embedded in five public schools in Lower Manhattan. Our teen center draws young people from across the five boroughs and thousands of adults engage with our educational offerings each year.
- We have extensive experience in workforce development programs, from job search training, to continuing education. In fact, we founded the Breadwinner’s College, which later became CUNY’s night school, and have always been committed to helping low-income families and immigrants find their footing through stable work.
- We share Stony Brook’s commitment to be a “learning” community and have our very own in-house Research and Evaluation department. We believe in data-driven innovation and ongoing analysis of our impact and effectiveness.
• We have a longstanding commitment to social justice, driven by our Jewish values. We also have never shifted our commitment to serve the Lower East Side and East Village, communities that have long suffered the effects of environmental racism and are particularly vulnerable to climate change.

• Finally, we sit at the intersection of New York’s public, private, business, and philanthropic communities. We have demonstrated our ability to activate each of these sectors around important issues, amplifying our own impact and forging partnerships that might not otherwise exist.

We believe that Stony Brook is the ideal institution to lead such an important project and we are excited to offer our support for this critical work. We look forward to being a part of an effort that will have a positive and lasting impact on NYC and the global community as we work collectively to combat climate change.

Sincerely,

Alan van Capelle
President & CEO
October 3, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the Museum of the City of New York to express our firm support of Stony Brook University’s vision for a Climate Solutions Center on Governors Island.

We have reviewed Stony Brook’s vision for the Island and are confident in their plan to create a living laboratory that encourages cross-industry collaboration in the quest for creative solutions and mitigation strategies that will help combat the climate crisis.

We believe that this project will drive lasting change in the NYC and global communities and help ensure the adoption of critical mitigation efforts.

Founded in 1923, the Museum of the City of New York works to foster understanding of the distinctive nature of urban life in one of the world’s most influential metropolises. We engage our visitors by celebrating, documenting, and interpreting the city’s past, present, and future. Today, the Museum’s collection contains approximately 750,000 objects, including prints, photographs, costumes, decorative arts, sculptures, paintings, toys, and theatrical memorabilia. We are proud to house exhibitions on a variety of subjects that explore the vast and diverse elements that make up daily life in New York City. Currently, one of our most prominent exhibitions explores the effects of rising sea levels. In Rising Tide: Visualizing the Human Costs of the Climate Crisis, Dutch documentary photographer Kadir van Lohuizen illustrates the dramatic consequences of climate change across the world through photographs, video, drone images, and sound. Visitors can experience the effects of rising sea levels in a variety of locations around the world, including our own neighborhoods here in New York City. We believe that our experience in interactive displays and impactful visualization can be a strong asset in supporting Stony Brook’s vision for Governors Island, which is set to include a variety of interactive and demonstration exhibits on the campus.

We believe that Stony Brook is the right institution to lead the Climate Solutions Center on Governors Island and we endorse their vision for creating lasting change in the climate solutions space. We are excited by the potential for this project to meaningfully engage the NYC and global communities in the adoption of critical mitigation efforts.

We are confident in Stony Brook’s vision for this important project and lend our strong support. We are encouraged by the opportunity that lies ahead and look forward to contributing to such a critical endeavor.

Sincerely,

Whitney W. Donhauser
Ronay Menschel Director and President

1220 Fifth Avenue • New York, NY 10029 • 212.534.1672 • fax 212.534.0687 • www.mcny.org
Dear President McInnis:

I am writing on behalf of the Urban Assembly New York Harbor School to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We are excited by Stony Brook’s plans to bring educators, researchers, private industry, and non-profits together to establish a Climate Solutions Center and we are confident that a living laboratory of this nature will be a valuable tool for innovation and lasting change in the climate solutions space. We believe that such a collaboration can be a powerful example of leadership in sustainability and can engage the NYC and global communities in pertinent education on one of the most defining challenges of our time.

The Urban Assembly New York Harbor School on Governors Island is a public high school that provides a college and career preparatory education focused on maritime and environmental careers. Founded in 2003 and relocated to Governors Island in 2010, we serve a diverse group of 550 students who come from neighborhoods across the city. Throughout their time at Harbor School, each of our students participates in a Career and Technical Education (CTE) program of study, leading to a diploma endorsement and/or industry certification in marine science, technology, or policy. We are proud to partner with a number of local organizations focused on environmental sustainability and preservation, such as the Billion Oyster Project, which was born on our campus and is still actively supported by our students and staff. Through both academics and extracurricular activities, students at the Harbor School have the unique opportunity to engage in active learning experiences on the water and make thoughtful connections that prepare them for meaningful and passionate careers. We are proud of our unique curriculum that allows for hands-on educational experiences for our students and, as a result, makes a positive impact on our local community through initiatives like the restoration of New York Harbor.

We believe that Stony Brook is well positioned to lead this important project and we are excited to continue our connection to and relationship with Governors Island by...
supporting this critical work. We welcome the opportunity to be a part of an effort that will bring Stony Brook and its other collaborators onto Governors Island, so that we can enhance our lasting impact on NYC and the global community as we work collectively to combat climate change.

Sincerely,

Jeffrey Chetirko, Ed.D.
Principal
Urban Assembly New York Harbor School
10 South St., Slip 7
New York, NY 10004
www.newyorkharborschool.org
August 27, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of Solar One to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City. If SBU’s proposal is selected, we would be pleased to support the project through education, workforce training, or solar development programming at the Stony Brook-led Climate Solutions Center on Governors Island.

We are excited by Stony Brook’s vision of connecting researchers, private industry, and non-profits together to find innovative solutions to the global climate crisis. We are confident that such a collaboration has the potential to drive creativity and lasting change, while engaging the broader NYC community in the adoption of such solutions and education on climate solutions.

Solar One has significant connections and capabilities that we can bring to this project, should Stony Brook’s proposal be selected. We are a leader in designing innovative education, training, and technical assistance that fosters sustainability and resiliency in diverse urban environments. Solar One is New York City’s Green Energy Education Center and has quickly grown into an award-winning organization with a thriving array of programs and extensive partnerships across a variety of industries. Solar One’s programs reach all five boroughs and over 600 public schools in NYC and beyond. In addition, our Green Workforce training program has been educating under- and unemployed individuals from all over NYC on sustainable construction and building operations for more than a decade. Our Here Comes Solar program has developed more than 20MW of solar on low and moderate income buildings throughout the city including several large projects on NYCHA housing.

We think that Stony Brook is perfectly positioned to lead a group of partners on Governors Island and we are excited by the possibility of collaborating with them in the future on this unique and important project.

Sincerely,

Christopher J. Collins
Executive Director
September 23, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of General Electric (GE) to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

For more than 125 years, GE has pioneered technologies that have spurred world-transforming changes and improved the lives of billions. GE is proud to be a world leader in the power, renewable energy, aviation, and healthcare industries, with additional expertise in delivering solutions across materials science, data analytics, and additive manufacturing. Currently, GE is responsible for the production of 1/3 of the world’s energy, and we have equipped 90% of the world’s power transmission utilities with our technology. Our reach and quality of technology makes us the gold standard for the power and renewable energy industries. Each year, GE brings to market innovative solutions that deliver essential energy, healthcare, and transportation infrastructure. We work with the highest integrity, compliance culture, and respect for human rights, while also reducing the impact of our technology and environmental footprint. We have made a bold commitment to tackling climate change by working towards carbon neutrality by 2030.

We are excited by the opportunity to support the Governors Island project and climate change mitigation efforts with our industry experience and expertise. Specifically, we see opportunities to leverage our Renewable Energy and Global Research teams and research labs in the Capital Region and connect Governor’s Island to the emerging offshore wind industry network of GE facilities, suppliers and service providers in New York City, Albany and throughout the Northeast US.

We are confident that Stony Brook’s proposed model for a living laboratory can advance sustainability and mitigation efforts, while bringing innovative solutions to the climate change space. We believe this Center has the potential to be a global leader in the fight against climate change and that it can make a lasting impact both at home in New York City and in the global community. Through research, education, and cross-industry collaboration, the Climate Solutions Center can create a unique and innovative hub that drives critical change to combat one of the most pressing challenges of our time.

We think that Stony Brook is perfectly positioned to lead a collaborative effort of this nature on Governors Island, and we are excited by this unique opportunity to be involved in such an important endeavor.

Sincerely,

Ryan Legg
Technology Partnerships
GE Renewable Energy
Dear President McInnis:

I am writing on behalf of IBM Research to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We are confident in Stony Brook’s proposed model for a Climate Solutions Center to advance sustainability, adaptability, and mitigation solutions to the problems of climate change. We believe this Center has the potential to be a global leader in the fight against climate change and that it can make a lasting impact not only in the NYC community, but also in other urban areas around the world. Through research, education, and cross-industry collaborations, the Climate Solutions Center can create a unique and innovative hub that drives critical change and encourages adoption of solutions to one of the most pressing challenges of our time.

IBM has extensive capabilities, expertise, and commitment to climate change mitigation, adaptation, and sustainability efforts that we can bring to this partnership. Our organization is based in New York State; we have a vested interest in the long-term prosperity of the state and a long history of energy saving and reduction of carbon emissions. In the last three decades, we have conserved 9.8M megawatt-hours of energy and avoided 4.6M metric tons of CO₂ emissions. We are actively working toward our goals of using 90% renewable electricity across IBM worldwide by 2030, reducing greenhouse gas emissions 65% from 2010 levels by 2025, and achieving net-zero greenhouse gas emissions by 2030.

IBM has a Future of Climate research program with many components, including new methods of Accelerated Discovery to design better materials and processes for CO₂ capture, use and sequestration (CCUS). Some of this research involves computer simulations and experimentation with carbon capture sorbents, membranes, and subterranean rock storage. A Knowledge Hub is under development for computer curation, synthesis and presentation of vast information in the CCUS literature. There are also programs for climate prediction and risk on a variety of time and spatial scales, natural carbon sequestration, carbon accounting for supply chains, and the creation of carbon-aware and sustainable cloud computing. These programs involve the most modern tools,
such as Artificial Intelligence, autonomous laboratories, and Flow pipelines for computation using OpenShift on Hybrid Cloud.

We are planning to support Stony Brook’s vision for its Governors Island Center through several channels. These include research, education, and application of the most modern technology tools with collaboration, co-development and licensing in fields such as Artificial Intelligence, visualization, platforms for environmental information and risk management, and materials research for CCUS. We are a global leader in industry adoption and fundamental research in these areas. We look forward to bringing this expertise to the academic consortium on Governors Island while also benefiting from collaborations with faculty and students at Stony Brook University and its academic partners.

We think Stony Brook is uniquely and perfectly positioned to lead a global collaboration of this magnitude on Governors Island. We are excited by the opportunity to be involved and look forward to working with you.

Sincerely,

Dr. Hendrik F. Hamann
IBM Chief Scientist
Future of Climate
Strategic Initiatives
Office of the President
Stony Brook University

Governors Island Center for Climate Solutions

To whom it may concern:

It is our understanding that Stony Brook University is planning to submit a proposal in response to the request by the City of New York and Trust for Governors Island to establish a Center of Climate Solutions.

We believe this is one of the key initiatives much needed globally and will create opportunities for stakeholders to intentionally collaborate for a more equitable and just society. Our company’s goals are directly aligned with the intentions of SBU team and of the City of New York and Trust for Governors Island.

It is with great enthusiasm that we support SBUs Expression of Interest to become the anchor establishment for a climate science related development project.

urbs is the commercial arm of Urban Tech Sweden (UTS), a platform initiated by the Association of Swedish Engineering Industries. The association is the best-connected Swedish export organization to the international market representing more than 4000 technology companies and one of the largest urban tech portfolio in the world.

urbs and UTS will use the pre-existing networks to aid the fast-tracked integration of sustainable solutions and development of project with SBU. urbs is a system integrator that delivers sustainable solutions for real estate and infrastructure in cities. urbs draws its strength from proven Nordic technologies and expertise to execute projects that focus on; profitable return on investment, significantly reducing greenhouse gas emissions, promoting circular economy principles & inclusive growth. Thus, making the built environment climate-resilient, adaptive, and sustainable holistically.

We offer our fullest support to this approach and look forward to its success.

Sincerely,

Will Sibia
Founder & CEO
will.sibia@urbs.systems
+46 70 346 87 55
urbs.systems

Urban systems urbs AB
Box 16231, 103 24 Stockholm Sweden
October 8, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the New York City Employment & Training Coalition to express our firm support for Stony Brook University’s vision for establishing a Climate Solutions Center on Governors Island.

Founded in 1997, the NYC Employment & Training Coalition (NYCETC) is the voice of New York’s workforce development community. We are the largest city-based workforce development association in the country with over 180 members, providing jobs for half a million New Yorkers. The primary communities we serve include New Yorkers of color, New Yorkers with low- or moderate-incomes, New Yorkers with multiple barriers to employment, and New Yorkers who have been left out of the growing economy due to systemic and historic marginalization. Our members create jobs and connect these underserved New Yorkers to employment opportunities that allow them to support their families and give back to their communities. Our mission is to ensure that every New Yorker has access to the skills, training, and education needed to thrive in the local economy, and that every business can maintain a highly skilled workforce. NYCETC convenes stakeholders across the system, discovers and develops innovative solutions to create an interconnected and effective workforce, and advocates for equitable workforce development policies and investments at all levels of government that support people, communities, and systems.

We are excited by Stony Brook’s vision for a Climate Solutions Center and are particularly invigorated by the positive impact that such a project can have on the communities of New York City and State. We are confident that this Center has the potential to be a global leader in finding innovative solutions to the climate crisis. We look forward to seeing the results of such a unique collaboration that will bring together the expertise of educators, researchers, non-profit leaders, community activists, and policy makers to drive critical change for future generations.

We believe that Stony Brook is an ideal leader for this unique project on Governors Island, and we are excited to collaborate with them on this important endeavor. We look forward to seeing the positive impact it will undoubtedly have on the communities we serve.

Sincerely,

Jose Ortiz, Jr.
Chief Executive Officer
New York City Employment and Training Coalition
September 27, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of Hines—a global real estate investment, development and management firm—to express our strong support for Stony Brook University’s vision for a Climate Solutions Center on Governors Island in New York City.

We have reviewed Stony Brook’s plans to establish a Climate Solutions Center and their vision for creating a living laboratory that is focused on sustainable and innovative solutions to climate change, and we are confident that such a space has the potential to create lasting change for the global community. We believe that the Climate Solutions Center can be a world leader in research and education and that, through collaboration across a variety of industries, can be at the forefront of global mitigation, adaptation, and sustainability efforts. We recognize, as does Stony Brook, that a significant, complex redevelopment of Governors Island will be required to bring this vision to reality in a successful, sustainable manner.

Hines has significant assets and industry expertise that we can bring to this partnership, along with significant experience working with universities in campus real estate development. We are one of the world’s largest and most respected real estate firms with a foundational commitment to ESG, and we have an extensive history of optimizing energy efficiency, reducing carbon emissions, and minimizing waste and water impacts in real estate development.

Earlier this year, we unveiled an ambitious new ESG strategy to elevate our commitments to environmental, social and governance issues, with a particular focus on the climate emergency, by accelerating our efforts to lead
the industry in decarbonization of the built environment. The strategy underscores that our work, which should benefit both planet and people and that making a positive impact in the communities we serve, is an important part of our mission.

Our portfolio includes more than 90M square feet of LEED* certified development and 72M square feet of real estate in the ENERGY STAR* program. Hines is proud to be the first real estate firm to be recognized with the EPA's ENERGY STAR Sustained Excellence Award and is committed to protecting the future of our planet through this important project.

We are well-prepared to support a project of this scale as we have properties in 27 countries and a strong presence in our U.S. East Region, headquartered in NYC. Over four decades, Hines’ New York office has developed or acquired 60 projects including signature skyscrapers and architecturally significant residential buildings. Our diversified portfolio also includes multifamily, senior living and industrial projects.

One of our projects that will provide a roadmap for sustainable development practices is 555 Greenwich, a 270,000square-foot, 16-story office tower in the heart of the burgeoning Hudson Square neighborhood of New York City. The building was designed with leading-edge clean energy technology and the most advanced building systems available to create a healthy environment for tenants and minimize the environmental impact of the project. 555 Greenwich is targeted to achieve the highest LEED rating, with state-of-the-art sustainable mechanical, engineering and plumbing systems, including geothermal piles, and is the first new office building to utilize its concrete superstructure for thermal energy storage. All of this will create an expected 45% overall carbon reduction and a 25% reduction in electrical consumption. The team collaborated with global sustainability design experts in the Nordic countries and Academia here in the US to ensure this office tower will be one of the most efficient buildings in New York City.

Another project transforming the modern workplace and reaffirming the future of New York City is One Vanderbilt. One Vanderbilt represents a new model for how the private sector and government can work together to deliver crucial public infrastructure benefits, created in partnership with the City of New York and the Metropolitan Transportation Authority as part of the historic rezoning of East Midtown. Some highlights of One Vanderbilt’s
sustainable design features are its rainwater collection, and high-performance glazing. Also, its integration with New York City’s transit network is one of the building’s most forward-looking attributes.

We believe that Stony Brook will be an ideal leader of the academic consortium at the fore of this unique opportunity to lead global change efforts in the climate solutions space. We are excited by the opportunity to be involved in such a critical endeavor and look forward to the creative and innovative collaboration that lies ahead.

Sincerely,

[Signature]

Sunny Craig
Senior Managing Director
September 15, 2021

President Maurie McInnis  
Office of the President  
Stony Brook University  
310 Administration Building  
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of MAG Partners— an urban real estate company with decades of experience developing impactful, iconic, large-scale projects throughout New York City—to express our strong support for Stony Brook University's vision for a Climate Solutions Center on Governors Island in New York City.

Since our founding, the MAG Partners team has successfully designed, built, and operated over seven million square feet of office, residential and mixed-use project space, including over 2,000 units of housing, with a total value of over $4.5 billion. We have a long track record of executing public-private partnerships and delivering tangible benefits for the communities we build in. The MAG Partners current multi-million square foot development portfolio includes three mixed-income, multi-family projects and a boutique office building development in Manhattan.

Most relevant to this Governors Island initiative, while leading Forest City Ratner Companies, our team was selected by Cornell University to develop the Tata Innovation Center, a first-of-its-kind office space for tech innovation. Designed by acclaimed architects Weiss/Manfredi and located on the cutting-edge Cornell Tech campus on Roosevelt Island, the building brings together industry and academia to spur innovation in the digital economy. We also served as the master developer for the Bloomberg Center and the first phase of the campus infrastructure. This campus development experience, coupled with our industry expertise, will position us well to be a supportive partner to Stony Brook in their vision for Governors Island.

We believe that Stony Brook’s plans to establish a Climate Solutions Center can create lasting change in the global fight against climate change. We are confident that a cross-industry collaboration of this nature—that brings together the strengths of a diverse group of organizations across key industries—can be a world leader in research, education, sustainability, and mitigation efforts. We understand that a complex redevelopment of the physical spaces on Governors Island will be required to bring this vision to reality in a
successful and sustainable manner, and we know that Stony Brook acknowledges this and is prepared for the undertaking.

We feel that Stony Brook is an ideal leader for this unique and important opportunity to lead global mitigation efforts. We are excited by the opportunity to be involved in this project and look forward to the innovative results that lie ahead.

Sincerely,

MaryAnne Gilmartin
Founder and CEO
October 12, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

Re: Plenary Letter of Support

Founded in 2005, Plenary Americas ("Plenary") is the leading North American developer of public-private partnership ("P3") and Design-Build-Finance-Operate-Maintain ("DBFOM") projects. We have developed, invested in, and are currently providing active oversight and asset management for 54 P3 projects across the United States and Canada. Depending on the lease agreement with the Trust for Governor’s Island ("Trust") and the City of New York ("City"), Plenary can structure and arrange non-recourse third party debt, leveraging its experience and relationships gained from having raised over $8B in private debt financing for its projects. Plenary has significant global experience with P3 projects and can generate value for the Trust and the City through its expertise in structuring, financing and managing successful P3 projects, providing certainty of execution and the best value-for-money financing.

At Plenary, we are focused on building strong relationships with our clients and partners, and we strive to be a world leader in developing and managing public infrastructure with a distinctive approach that delivers outstanding results for our clients and the environment. The need to be environmentally, socially, and corporately responsible is at the core of our organization and we are proud to be a part of projects that offer long-term economic, social, and environmental dividends to the communities in which they exist. We are strongly supported in this mission by our parent company, the Caisse de dépôt et placement du Québec ("CDPQ"), a AAA-rated global investor, which has recently announced its commitment to maintain a net-zero portfolio by 2050.

We are supportive of Stony Brook University’s vision for a Climate Solutions Center ("Institution") on Governor’s Island in New York City. We believe Stony Brook’s plan to establish the Institute can create innovative and lasting change in the global fight against climate change. We are excited by a cross-industry collaboration of this nature—one that brings together the strengths of a variety of organizations across key industries—and are confident that it can be a world leader in research, education, sustainability, and mitigation efforts. We have reviewed Stony Brook University’s vision for developing a living laboratory for sustainable development and a showcase for renewable energy serving on Governors Island. Based on a high-level understanding of the project, we can confirm Plenary is very interested in working with Stony Brook University to structure and arrange financing for the Institution (subject to the completion of standard due diligence investigation and Plenary’s internal approvals).

Stony Brook University and its partners are well positioned to be an ideal leader for this critically important task. We are excited by the opportunity to be involved in this project and look forward to the creative solutions that lie ahead.
Yours truly,
PLENARY AMERICAS US HOLDINGS INC.

Name: Brian Budden
Title: Director

Name: Paul Martin
Title: Director
October 6, 2021

President Maurie McInnis
Office of the President
Stony Brook University
310 Administration Building
Stony Brook, NY 11794

Dear President McInnis:

I am writing on behalf of the Building and Construction Trades Council of Greater New York & Vicinity (“BCTC”) to express our firm support for Stony Brook University’s vision for establishing a Climate Solutions Center on Governors Island.

The BCTC is an organization of local building and construction trade unions that are affiliated with 15 International Unions in the North American Building Trades Union. Our local union affiliates represent approximately 100,000 union construction workers. The Building Trades mission is to raise the standard of living for all workers, to advocate for safe work conditions and to collectively advance working conditions for our affiliates’ members, as well as all workers in New York City. We are committed to advocating for the advancement of workers’ rights, economic security, and middle-class employment opportunities for our members and all working people. Additionally, we work to ensure safe working conditions across New York City’s robust construction, development, and real estate communities. In recent years, the BCTC is proud to have made significant efforts to build and grow diversity among the city’s construction industry. BCTC-sponsored pre-apprenticeship and direct-entry programs have led to the creation of thousands of middle-class careers for the city’s minority and historically underserved communities. We work around-the-clock with industry stakeholders, private developers, non-profit organizations, workers’ rights advocates, city agencies, and elected officials to advance worker’s rights and safety in the communities we serve. In addition to our commitment to workforce advocacy, we are dedicated to addressing climate change and advancing sustainability in our communities.

We have reviewed Stony Brook’s plans to establish a Climate Solutions Center on Governors Island and we are invigorated by the positive impact that that such a project can have on the communities of New York City and State. We believe that, together with Stony Brook, we will have a unique set of strengths that can support the construction of the physical campus on Governors Island. Additionally, the Climate Solutions Center has the potential to become a critically valuable resource for workforce development in a rapidly changing job market. While it is difficult to predict the exact nature of future green jobs, we are confident that we can work with Stony Brook to explore the best ways to prepare a resilient and adaptable workforce that is prepared for the coming changes we will undoubtedly face. Both the Building and...
The details of this initial phase program are included below. These are meant as a starting point for discussion with the Trust and refinement as the design progresses.

### PHASE 1A PROGRAM

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<tr>
<th>ID</th>
<th>Description</th>
<th>No. of People</th>
<th>No. of Rooms</th>
<th>Avg. SF</th>
<th>Total NASF</th>
<th>Notes</th>
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<td>Student Housing - Liggett Hall Sections H, I, J, K</td>
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<td>1,100</td>
<td>27,500</td>
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<td>Staff Apartments</td>
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<td>850</td>
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<td>Office Space (Res. Life Staff)</td>
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<tr>
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<td>Exercise Room</td>
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<td></td>
<td>2,000</td>
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<td>Student Support</td>
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<td>Building Details</td>
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<td>3 floors, adaptive reuse of existing building; upgrade to Passive House standards</td>
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<tr>
<td>02</td>
<td>Faculty Housing - Building 315</td>
<td>25</td>
<td>25</td>
<td>850</td>
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<td>Building Details</td>
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<td></td>
<td>3 floors, adaptive reuse of existing building; Passive House standards</td>
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<tr>
<td>03</td>
<td>Faculty Housing - Building 555</td>
<td>25</td>
<td>25</td>
<td>850</td>
<td>21,250</td>
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<td>4 floors at 10,000 GSF/floor; structural timber; Living Building Certified</td>
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<td>07</td>
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<td>Food Service</td>
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<td>8,000 Central marketplace, includes seating and kitchen</td>
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<td><strong>3 floors, adaptive reuse of existing building - including new facade</strong></td>
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<tr>
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<td><strong>Central Utility Plant - Outdoor Components</strong></td>
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<td>TES Tanks</td>
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<td>Two tanks (HW, CW), 50' tall each, metal facade</td>
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<td>340</td>
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<td>Bar / Restaurant</td>
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<td>Public Areas (20%)</td>
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<td>Longer stay, student visitors, etc; add new elevators</td>
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<td>Suite-style; could be converted to student housing</td>
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<td>Public Areas (20%)</td>
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<td>Back of House (15%)</td>
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<td>3 floors, adaptive reuse of existing building; upgrade to Passive House standards</td>
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<td>Public Lobbies and Entrances</td>
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**Total Phase 1B GSF**: 277,500
## INFRASTRUCTURE

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<td>A</td>
<td>Tango Pier Rehab</td>
<td>8</td>
<td>50 LF</td>
<td>400 LF</td>
<td>Concrete floating docks, 12’ wide, 50-60’ long</td>
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<tr>
<td>B</td>
<td>Floating Wave Attenuator</td>
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<td>50 LF</td>
<td>400 LF</td>
<td>Concrete floating docks, 12’ wide, 50-60’ long</td>
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<tr>
<td>C</td>
<td>Demonstration Areas</td>
<td>6</td>
<td>5,000</td>
<td>30,000</td>
<td>4 Phase 1A / 2 Phase 1B</td>
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<tr>
<td>D</td>
<td>Geobores</td>
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<td>Assume 650’ deep (exact depth TBD)</td>
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<tr>
<td>E</td>
<td>New Rip-rap Wall</td>
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<tr>
<td>F</td>
<td>New Planted Wetlands</td>
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### New York Climate Exchange

- **Thermal**: A new thermal system will connect the geoexchange facility to borefields and to all campus buildings. No system exists on the island today.
  - There are existing ConEd feeds on the island, but additional electrical infrastructure is required to generate renewable energy, store it in a campus battery, and distribute to buildings. The intent is to be effectively “off-grid” except in emergencies.

- **Electrical**: There is existing Fiber IT that will support the campus. Additional feeds are required from the main loop.
  - There are existing ConEd feeds on the island, but additional electrical infrastructure is required to generate renewable energy, store it in a campus battery, and distribute to buildings. The intent is to be effectively “off-grid” except in emergencies.

- **Fiber**: There is existing potable water service, which will be extended to all new buildings and supplemented by water purified on-site. All potable water will be cleaned and reused.
  - Stormwater will be captured and stored on site (biofiltration gardens, working landscapes, mechanical filtration) as part of a larger water re-use system feeding landscape, food production areas, and non-potable building uses. No discharge to the NY Harbor.

- **Potable Water**: The project will tie into the existing sanitary system, which has mains running through the proposed development.
  - The project will tie into the existing sanitary system, which has mains running through the proposed development.

- **Sanitary**: There is existing gas service, which will connect only to the Central Utility Plant for the backup generator. No additional gas service is contemplated.
Contact
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Office of the President
Stony Brook University
Office: 631.632.6833
Cell: 631.219.1767
Email: rosemaria.martinelli@stonybrook.edu