

Town+Gown Request for Proposals NYC Carbon Trading Study

I. General Items

A. Invitation to Submit Proposals in Response

The New York City Department of Environmental Protection (“DEP”), with the Mayor’s Office of Sustainability (“MOS”), invites the Consultants under the Town+Gown Master Academic Consortium Contract (the “Consortium Contract”), to submit Proposals in Response for the New York City Carbon Trading Study (“Carbon Trading Study” or “Research Project”) pursuant to the terms and provisions of the Consortium Contract and this Town+Gown Request for Proposals (“T+G RFP”). All defined terms used herein but not defined have the meanings assigned to them in the Consortium Contract.

B. Due Date for Receipt of Proposals in Response

Consultants shall submit their Proposals in Response ONLY via email, no later 5:00 pm, October 11, 2019, to Joseph Vaicels, Deputy Agency Chief Contracting Officer at DEP, at JVaicels@dep.nyc.gov. Please note that there is a 5 MB file size limit. If a Consultant chooses not to submit a Proposal in Response, such Consultant shall submit a No Bid Response form, (which is attached to this document as Attachment A for the purpose of convenience and is downloadable from the Town+Gown website at (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>) no later than 5 P.M., October 11, 2019, to Joseph Vaicels, Deputy Agency Chief Contracting Officer at DEP, at JVaicels@dep.nyc.gov.

C. Inquiries and Requests from Consultants for Clarification or Explanation

If a Consultant wishes to make an inquiry or request a clarification or explanation with respect to this T+G RFP, such Consultant must make such inquiry or request in writing sent via email ONLY to Joseph Vaicels, Deputy Agency Chief Contracting Officer at DEP, at JVaicels@dep.nyc.gov, no later than 5 P.M., September 27, 2019. In the event DEP, in consultation with MOS, determines that it is necessary to respond to such inquiry or request in writing, such response will be furnished as an addendum to this T+G RFP (an “Addendum”) and will be sent to all Consultants as described below. If DEP, in consultation with MOS, deems it necessary, it may arrange a meeting or conference call with all interested parties prior to the submission date to address questions or concerns.

D. Addenda to Town+Gown RFP

If DEP determines that it is necessary to respond to an inquiry or request for clarification or explanation from a single or several Consultants in writing, such writing will be in the form of an Addendum to this T+G RFP, which will become part of the requirements for such T+G RFP, and sent by Town+Gown/DDC to all Consultants to which the T+G RFP was issued. In addition, it will be necessary for such Consultants to acknowledge receipt of an Addendum to a T+G RFP by attaching an original signed copy of the Addendum to its Proposal in Response.

E. The Name and Contact Information of the City Agency Procurement Process Contact

All Proposals in Response, Inquiries or Requests for Clarification or Explanation, and receipts of any Addenda, shall be sent ONLY via email to: Joseph Vaicels, Deputy Agency Chief Contracting Officer, DEP at JVaicels@dep.nyc.gov.

II. Scope of Work

A. General Research Project Description

New York City (“NYC” or the “City”) has a long-term greenhouse gas (“GHG”) goal of net zero emissions by 2050 (“carbon neutrality”). Achieving carbon neutrality will require transformational change at all levels of the City’s energy, buildings, transportation, and waste systems.

NYC buildings are responsible for roughly two-thirds of NYC’s GHG emissions. With this understanding, NYC passed Local Law 97 of 2018 (“LL97”) which sets GHG emissions limits, beginning in 2024, for buildings larger than 25,000 square feet that will cut GHG emissions at least 40% by 2030 and over 80% by 2050 in affected buildings. LL97 imposes penalties of \$268 per metric ton of carbon dioxide-equivalent in excess of an individual building’s emissions limit in a given year. By 2030, LL97 is projected to reduce NYC’s GHG emissions by 6 million tons, create 26,700 jobs, and prevent up to 130 premature deaths each year from air quality improvements.

NYC’s *Technical Working Group Report* (“TWG”) and subsequent analyses, including the *NYC Roadmap to 80x50* (“Roadmap to 80x50”), identified pathways for deep decarbonization across NYC’s building stock and assessed the costs, energy, and emissions benefits of these pathways for a subset of the most common building typologies in the City.

LL97 requires MOS to study the potential for carbon trading as an alternate compliance pathway to the carbon emissions limits set out by the law. Building on the findings of the TWG, the Roadmap to 80x50 analyses, and the analyses conducted to develop LL97, this Research Project will study the feasibility of a citywide trading scheme for greenhouse gas emissions from buildings in the context of LL97, assess the merits of several carbon trading scheme scenarios, and develop recommendations and an implementation plan. The Carbon Trading Study will include methods to ensure equitable investment in Environmental Justice Communities that preserve a minimum level of benefits for all covered buildings

and do not result in localized increases in pollution. The Carbon Trading Study will also include an approach to a marketplace for carbon credit trading, pricing mechanisms, carbon credit verification, and mechanisms for the monitoring and regular improvement of the scheme.

It will be critical that any carbon trading scheme that is ultimately recommended for implementation meet the following core objectives:

1. Provides additional flexibility to the market, including by providing an additional option for building owners to comply with LL97
2. Incentivizes additional emissions reductions and is designed to ensure at minimum the realization of projected emissions reductions under LL97 for affected buildings (i.e. not dilute projected emissions reductions under LL97 or those needed to meet the City's climate goals)
3. Encourages owners to invest in deeper emissions reductions sooner than they otherwise would have without a trading scheme in place
4. Is simple enough for owners to use and is streamlined to keep transaction costs low
5. Is designed to ensure equitable investment in Environmental Justice Communities that preserves a minimum level of benefits for all covered buildings and does not result in localized increases in air pollution or inequitable diversion of investments and resources
6. Where additional building sectors or sub-sectors are included on a voluntary basis, rules must be established to ensure emissions reductions are aligned with the City's climate goals

This Research Project will engage the disciplines of economics, law, public policy, and data science. Specific tasks will require skillsets in data analysis, economic and financial modeling, legal analysis, policy analysis, and program design.

In view of the several disciplines required by this Research Project, Consultants may choose to partner with other Consultants to collaborate with each other, merging their research strengths to address interdisciplinary nature of this Research Project, and submit a joint Proposal in Response as permitted by Article 1 and Section 3.3 (B) of the Consortium Contract, copied below for the purpose of convenience:

“Consultant” shall mean each academic institution participating in Town+Gown and entering into this Consortium Contract at any time pursuant to the open-ended solicitation authorized in the Innovative Procurement Approval. “Consultant” shall also mean more than one Consultant joining together to prepare a Proposal in Response to a Mini-RFP as permitted by Section 3.2 hereof. A Consultant becomes an Academic Partner from the point of negotiating the terms of and award of the Task Order.”

*3.3 Proposal in Response. * * **

(b) While it is a general requirement of this Consortium Contract that the work force to be utilized by the Consultant shall, wherever possible, consist of and be

drawn from the faculty and students of the Consultant, a Consultant may join with one or more Consultants in preparing a Proposal in Response pursuant to Section 3.2 hereof, as well as provide for sub-contracts with Subcontractors as provided in Section 3.3 (e) (8) hereof. Consultants wishing to sub-contract with a Subcontractor as part of its Proposal in Response must disclose its intention to use the services of a Subcontractor in its Proposal in Response as provided in Section 3.3 (e) (8) of this Consortium Contract and Appendix C.

Materials developed for the Carbon Trading Study will be reviewed by MOS, and where applicable, other City agencies, including DEP, the Mayor’s Office of Management and Budget, the Department of Buildings, and the Department of Housing Preservation and Development.

This Research Project effort will leverage prior relevant work and studies conducted by or for the City.

B. Definitions that Apply to this RFP and the Research Project

1. Affordable Housing shall mean Rent Regulated Accommodation and certain income restricted housing as described in LL97.
2. Small Buildings shall mean properties measuring less than 25,000 square feet.
3. Environmental Justice shall mean the fair treatment and meaningful involvement of all persons, regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations, policies and activities and with respect to the distribution of environmental benefits. Fair treatment means that no group of people, including a racial, ethnic or socioeconomic group, should (i) bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state or local programs and policies or (ii) receive an inequitably low share of environmental benefits.¹
4. Environmental Justice Community shall mean a low-income community located in the city or a minority community located in the city. The term “low-income community” means a census block group, or contiguous area with multiple census block groups, having a low-income population equal to or greater than 23.59 percent of the total population of such block group or groups, or such other percentage as may be determined by the New York State Department of Environmental Conservation in the course of setting parameters for the location of potential Environmental Justice Communities within the state of New York and made publicly available on the website of such department. The term “minority community” means a census block group, or contiguous area with multiple census block groups, having a minority population equal to or greater than 51.1 percent of the total population of such block group or groups, or such other

¹ Definitions for environmental justice and environmental justice community are consistent with Local Law 64 of 2018.

percentage as may be determined by the New York State Department of Environmental Conservation in the course of setting parameters for the location of potential Environmental Justice Communities within the state of New York and made publicly available on the website of such department.

C. Research Project Objectives

1. **Conduct legal analysis** to assess the City’s legal authority to implement various carbon trading schemes and provide legal recommendations for consideration in the implementation of a carbon trading program.
2. Leveraging existing work conducted by the City, around the United States and globally, **develop an economic model** that can be used to predict building owners’ decision-making based on LL97 requirements, cost of compliance strategies, associated emissions reductions and benefits, and the cost of non-compliance.
 - a. Additional factors to consider in the model include: the banking of tradable carbon credits, the carbon intensity of the electric grid, any potential double counting of renewable energy and/or greenhouse gas offsets, options for properties that are not required to meet an emissions standard but stand to benefit from participation in the marketplace, specifically Affordable Housing (as defined above in B) and Environmental Justice (as defined above in B) incentives and impacts
3. **Model four (4) carbon trading scheme design scenarios** to integrate into the economic model. Conduct economic analysis of these carbon trading scheme design scenarios to understand the impact of each scheme on various stakeholder groups, including costs and benefits to Environmental Justice Communities, expected geographic distribution of investments, and to assess projected emissions reductions, price of tradable carbon credits, volume of carbon credits traded, and likely market participants under each scenario. The scenarios will incorporate energy cost, technology, and macroeconomic assumptions and projections, determined in consultation with MOS. The scenarios will be evaluated under different parameterizations of major assumptions.
4. Based on the models’ outcomes, **generate recommendations for a carbon trading scheme** that would best meet the following core program objectives:
 - a. Provides additional flexibility to the market, including by providing an additional option for building owners to comply with LL97.
 - b. Incentivizes additional emissions reductions and is designed to ensure at minimum the realization of projected emissions reductions under LL97 for affected buildings (i.e. not dilute projected emissions reductions under LL97 or those needed to meet the City’s climate goals).
 - c. Encourages owners to invest in deeper emissions reductions sooner than they otherwise would have without a trading scheme in place.
 - d. Is simple enough for owners to use and is streamlined to keep transaction costs low.
 - e. Is designed to ensure equitable investment in Environmental Justice Communities that preserve a minimum level of benefits for all covered buildings and do not result in

localized increases in air pollution or inequitable diversion of investments and resources.

- f. Where additional building sectors or sub-sectors are included on a voluntary basis, rules must be established to ensure emissions reductions are aligned with the City's climate goals.
5. **Develop an implementation plan for the recommended carbon trading scheme** that includes:
 - a. A detailed implementation schedule with a timeline and key implementation steps, including plans for any trading simulations and for the initial phase rollout
 - b. Identification of necessary resources, administrative costs, and levels of effort for the City to implement the trading scheme recommended from the modeling portion of the Carbon Trading Study
 - c. Specification of marketplace design, including but not limited to rules for transactions, measurement, carbon credit generation, certification, and pricing of carbon credits, monitoring, reporting, verification, registry establishment, tracking, taxation, regulatory authority, and engagement with enforcement agencies (Department of Buildings, Department of Finance)
 - d. An outline of the City's strategy and approach to providing education on the carbon trading program to the public that ensures all participants are trained before carbon trading commences
 - e. Identification of requirements by lenders to finance projects and the impact on the financeability of carbon credits
6. The Research Project must be completed no later than December 15, 2020.

D. Key Tasks

1.1. Project management

- The Consultant shall identify a Project Manager who will perform project management activities throughout the entire duration of the Research Project in the deliverable discussed below.
- The Consultant shall prepare a project management plan and schedule that includes progress meetings/calls, preparation of associated monthly progress reports, and the facilitation of internal meetings. This project management plan must articulate a clear understanding and allocation of roles, responsibilities, time dedicated to the Research Project, and clear lines of communication and hierarchy among the Consultant members.
- The Consultant shall also prepare all meeting agendas, materials, presentations, and summaries for bi-weekly calls or in person meetings with MOS. Meetings and/or calls may be more or less frequent depending on the specific task, and where the Consultant is in the overall Research Project.
- For materials and analysis presented at each meeting, as well as for draft and final deliverables, the Consultant is expected to clearly explain inputs and assumptions, and

provide opportunities for MOS to review key inputs and assumptions (e.g., in written form, as an Excel, or as a PowerPoint).

- The Carbon Trading Study should consider, on an ongoing basis, the recommendations of MOS and feedback collected by MOS from stakeholders including the LL97 advisory board, other City agencies, including the Mayor’s Office of Management and Budget, the Department of Buildings, and the Department of Housing Preservation and Development, and from technical experts and other stakeholders.

Deliverables:

1. Project management plan, as described above, including detailed methodology and schedule, two (2) weeks after the Notice to Proceed is issued
2. Regular meetings and preparation of meeting materials and reporting documentation as described above

2.1 Review existing reports, models and other resources (to be provided to the Consultant by MOS electronically), including, but not limited to the list below. **Also, please refer to Section II(E), Key Inputs/Data to be provided by MOS, below.**

- MOS data and analysis used in the development of LL97
- The City’s Roadmap to 80x50
- The City’s Buildings Technical Working Group report, *One City Built to Last*
- NYC’s 1.5°C: Aligning NYC with the Paris Agreement Climate Action Plan
- Local Law 97 of 2018
- “Programs for Comparison” research document
- *Tokyo: An Emissions Trading Case Study*. CDC Climate Research, EDF, IETA
- “California Cap and Trade.” *Center for Climate and Energy Solutions*, available at www.c2es.org/content/california-cap-and-trade
- *California’s Cap-and-Trade Program Step by Step*. EDF available at www.edf.org/sites/default/files/californias-cap-and-trade-program-step-by-step.pdf
- *Stormwater Markets: Concepts and Applications*. International Institute for Sustainable Development
- *RGGI: lessons learned and Issues for Congress*. Congressional Research Initiative, available at <https://fas.org/sgp/crs/misc/R41836.pdf>
- *An Overview of the SCAQMD’s RECLAIM Program (Southern California)*. Envera Consulting, available at www.enveraconsulting.com/aqmd-reclaim-program/
- “Pollution trading and environmental injustice: Los Angeles’ failed experiment in air quality policy.” *Duke Environmental Law & Policy Forum* available at www.scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf

- “Over a Dozen Years of RECLAIM Implementation: Key Lessons Learned in California’s First Air Pollution Cap-and-Trade Program.” available at: www.aqmd.gov/docs/default-source/reclaim/policy-paper/policy-paper-part-1.pdf
- IETA Memo on Emissions Trading for NYC Buildings
- Reports on trading schemes from other localities in the US or globally that MOS deems relevant
- *A blockchain-based marketplace for removing carbon dioxide from the atmosphere.* Nori. available at: <https://nori.com/white-paper>
- Climate Action Reserve Carbon Trading Manual and Training Modules
- “Carbon trading, co-pollutants, and environmental equity: Evidence from CA’s cap-and-trade program (2011-2015)” available at: <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002604>
- Environmental Health Tracking Portal, available at http://a816-dohbesp.nyc.gov/IndicatorPublic/Subtopic.aspx?theme_code=2,3&subtopic_id=103
- Schmalensee, Richard and Robert N. Stavins. Lessons from Three Decades of Experiences with Cap and Trade. Review of Environmental Economics and Policy, volume 11, issue 1, Winter 2017, pp. 59-79
- Emissions trading in the U.S.: Experience, lessons, and considerations. *Pew Center on Global Climate Change*
- Kaswan, Alice, Reconciling Justice and Efficiency: Integrating Environmental Justice into Domestic Cap-and-Trade Programs for Controlling Greenhouse Gases (2011). ETHICS AND GLOBAL CLIMATE CHANGE, p. 232, Denis G. Arnold, ed., Cambridge University Press, 2011; Univ. of San Francisco Law Research Paper No. 2011-23. Available at SSRN: <https://ssrn.com/abstract=1442165>
- Pastor M., Morello-Frosch R., Sadd J., Scoggins J. (2013) Risky Business: Cap-and-Trade, Public Health, and Environmental Justice. In: Boone C., Fragkias M. (eds) Urbanization and Sustainability. Human-Environment Interactions, vol 3. Springer, Dordrecht

2.2 Data to be collected by the Consultant

- Costs of on-site renewables, storage, fuel cells, RECs, and GHG offsets as defined by and for the purpose of compliance with LL97. Costs of energy efficiency measures will be provided by MOS, but may need to be refined.
- Additional data collection identified by the Consultant may be required. Also, please refer to Section E, Key Inputs/Data to be provided by MOS.

2.3 Document underlying inputs, assumptions and methodologies

- Identify sources of key inputs, e.g. compliance option costs and cost change rates, energy pricing and change rates, etc.

- Identify key modeling frameworks and/or approaches to be used (e.g., NYC measures the carbon intensity of its energy supply by calculating the average GHG intensity of electricity physically delivered to Zone J).

Deliverables:

1. Based upon the review of the studies and assumptions, a memo that summarizes key insights, inputs, methodologies and approaches that could be relevant to and should inform the approach of the Research Project, as well as areas that require further investigation and a priority list of specific items that will be evaluated for Tasks 3 and 4.
 2. If needed, the Consultant should update the project management plan required by Task 1.1 above, including any revisions to methodology and approach based upon their review of these studies.
- 3.1. Conduct a legal analysis to assess the City’s legal authority to implement various carbon trading schemes, ensure the viability of the recommended scheme, and provide legal considerations and recommendations for implementation

The legal analysis should consider legal topics including but not limited to the following issues:

- Interactions with existing programs and/or existing legislation
- Potential preemption risks and requirements for state authorization
- Potential federal, state, and local tax issues within a trading scheme
- Legal implications of the City administering a carbon trading program versus a third party
- Legal considerations for the accounting and trading of carbon credits and tax treatment
- Legal options for valuing emissions reductions from certain classes of buildings differently, e.g. in affordable properties or in buildings located in Environmental Justice Communities
- Considerations under CEQR and SEQR
- Potential antitrust issues and strategies to protect market integrity
- Legal challenges associated with derivatives markets
- Analysis to identify additional legal challenges and recommendations
- Additional topics of import may be identified by the Consultant or MOS

Deliverables:

1. An initial written document that describes the findings of the legal analysis described in Task 3.1 and discusses the potential legal risks associated with the establishment of a carbon trading scheme for buildings by the City of New York, including but not limited to the items specified above, which must be made available to the researchers conducting Tasks 4, 5 and 6.

2. An addendum to the written document that discusses the potential legal risks associated with implementing the recommended carbon trading scheme, including but not limited to the items specified above. The document should also include specific recommendations, which can include legislation or agency rules, for implementing the carbon trading scheme design that mitigates identified legal risks and should be integrated into the Implementation Plan Report outlined in Task 5, which must be made available to the researchers conducting Tasks 5 and 6.

4.1. Develop a baseline model that forecasts buildings owners' decision-making to comply with LL97

The baseline model will be used to project building owners' decision-making in order to comply with LL97 over time. The level of analysis should be at least as granular as the TWG typologies and additional typologies based on the buildings' ownership model and leasing structure may need to be developed. All NYC buildings should be included in the baseline model, regardless of whether they are subject to requirements under LL97. The model should include assumptions for different growth scenarios for the building stock.

The baseline model should include, but is not limited to, the following levers. Additional levers may be identified by the Consultant or MOS.

- Options for compliance with LL97 requirements dependent upon the year, the building typology, the building's ownership model, scopes that can be implemented by the owner, tenant, or operator with consideration for lease structure and turnover rate, the building's status as Affordable Housing and/or within an Environmental Justice Community as defined below, and the distance from the GHG emissions limit, including but not limited to:
 - Energy Conservation Measures and/or Deep Energy Retrofit Pathways as identified in the Technical Working Group and subsequent MOS analyses
 - Clean Distributed Energy Resources as applicable and as defined in LL97
 - Renewable Energy Credits as applicable and as defined in LL97
 - GHG offsets as applicable and as defined in LL97
 - Carbon trading credits, where applicable
- Estimated total costs of the options for compliance with LL97, including ranges where appropriate. Energy prices should be estimated over time. Price ranges for carbon credits should be estimated given the various carbon trading scenarios determined by the Consultant and MOS. All cost estimates should consider the time value of money as well as inflation and labor cost estimates. Capital structure of owners may affect discount rate.
- Estimated benefits of the options including but not limited to energy cost savings, GHG reductions, the ability of the option to meet compliance requirements of LL97, the potential revenue from selling carbon credits, and localized air quality benefits, as applicable

- Estimated preferred timing of investments based on useful life of equipment, ownership model, LL97 requirements, leasing structure, and tenant turnover rate.
- Feasibility of implementing options
- Sensitivities including shifts in costs of compliance options, energy prices, technology efficiencies, and the impact of variabilities in weather and macroeconomic events, such as a recession

Buildings in the model located in Environmental Justice Communities should be identified, mapped, and assessable as a group of buildings.

Deliverables:

1. Develop and assign costs and benefits, including energy cost savings and emissions reductions, associated with each option for compliance to reduce a standard unit of (annual and cumulative) carbon dioxide equivalent (e.g. ton) to support comparison of cost-effectiveness among the different levers.
 2. A model that incorporates and analyzes the items described in Task 4.1. The model should generate a business-as-usual projection for all NYC buildings based on LL97 requirements for the present period through 2050, in increments of at most five years, that projects emissions reductions over time, quantifies the types of compliance measures pursued, and the costs and benefits of compliance over time. The business-as-usual projection should quantify outcomes by building typology, and by sectors, including Affordable Housing and Environmental Justice communities. Where possible, the model should allow MOS to tweak assumptions and update outcomes for future use.
 3. A map that identifies Environmental Justice Communities according to the criteria outlined in Task 4.1.
- 4.2. Develop, model, and assess four (4) carbon trading scheme design scenarios, optimizing for flexibility and for cumulative emissions reductions

The baseline model developed in Task 4.1 will be expanded to test carbon trading scenarios and to understand the outcomes of those scenarios.

Carbon trading design scenarios should be developed by the Consultant in partnership with MOS. MOS will sign off on design scenarios and sensitivity inputs prior to the modeling task.

Potential carbon trading scenarios for consideration could include:

1. LL97 Limits as Trading Caps:

- a. GHG budgets for individual buildings as prescribed in LL97 are used as trading caps.

- b. Buildings that exceed their GHG budget could comply with LL97 by reducing their emissions or by purchasing carbon credits from other owners.
- c. Buildings that emit below their GHG budget would be allocated carbon credits that could be sold to out-of-compliance owners.

2. More Stringent Trading Caps:

- a. New GHG-intensity eligibility thresholds are established for trading that are more stringent than LL97 GHG budgets for individual buildings.
- b. Buildings that exceed their GHG budget could comply with LL97 by reducing their emissions or by purchasing carbon credits from other owners.
- c. Buildings that emit below their GHGI trading caps would be allocated carbon credits that could be sold to out-of-compliance owners.

3. Additional Emissions Reductions Required:

- a. In order to generate tradable carbon credits, owners must both:
 - i. Be operating their buildings below their LL97 budgets, and
 - ii. Have reduced GHG emissions beyond the building's individually prescribed baseline.
- b. Tradable carbon credits would be generated only for emissions reductions beyond both the LL97 budgets and each building's actual baseline emissions.
- c. Buildings that exceed their GHG budget could comply with LL97 by reducing their emissions or by purchasing carbon credits from other owners.
- d. Buildings that generate carbon credits could sell them to out-of-compliance owners.

The Consultant must model and test each of the four (4) scenarios, assessing the present period through the year 2050, using the baseline model as a reference. Each scenario should be further tested for sensitivity to certain variable inputs, including but not limited to, the below variables. Additional variables may be identified by the Consultant or by MOS.

- The carbon intensity of the electric grid over time, with at least two long-term projections tested for each scenario
- The allowance or disallowance of banking carbon credits over time
- Various methodologies for accounting for renewable energy, storage, GHG offsets, and other non-efficiency LL97 compliance mechanisms
- The extent to which transaction costs might limit the number of trades or restrict transactions to high volume trades
- Variability in weather patterns and unplanned energy supply disruptions

- Voluntary participation of buildings not subject to emissions limits under LL97, including but not limited to, Affordable Housing, and buildings under 25,000 square feet
- Multiplier(s) for carbon credits from certain subsets of buildings, including Affordable Housing, buildings located in Environmental Justice Communities, and/or incentives/restrictions for carbon credit purchases by neighborhood

Scenarios must be assessed for their cost, impact, and feasibility of implementation, and a methodology must be developed and applied to determine at minimum, for each scenario the projected:

- GHG reductions (cumulative and annual) over time
- Supply and demand of carbon credits over time
- Volume of carbon credits traded over time
- Price of carbon credits traded over time
- Number of properties participating over time, by typology
- Windfall profits for participating building owners, if any
- Air quality impacts and distribution of any negative impacts and benefits over time
- Distribution of greenhouse gas emissions reductions and building investments over time
- Impact on Environmental Justice Communities, including air quality impacts, greenhouse gas emissions reductions, building investments, and job creation
- Total cost to building owners
- Expected cost of transacting carbon credits, including brokerage fees
- Stakeholder decision-making under each scenario, e.g. renewables developer, Affordable Housing, commercial tower, co-op
- Quantity and type of compliance measures pursued over time

Perform a case study analysis to understand the ownership concentration across buildings subject to LL97 and assess the impact of intra-portfolio trading.

- Determine what portion of buildings subject to LL97 belong to a portfolio
- Identify a representative portfolio to test the impact of trading exclusively among buildings within the portfolio on:
 - The distribution of building investments
 - Local air quality and impacts on Environmental Justice Communities
- Recommend measures to mitigate any inequitable distribution of benefits and negative impacts

After completing the modeling sub-tasks in Tasks 4.1 and 4.2, conduct a comparative analysis of Environmental Justice-specific findings and findings for the broader population of buildings

- Update proposed trading scheme to reflect feedback from MOS' engagement with Environmental Justice Communities

Deliverables:

1. A model that builds on the baseline model that assesses the technical and economic feasibility of at minimum, the different scenarios discussed in Task 4.2. Where possible, the model should allow MOS to tweak assumptions and update outcomes for future use.
2. Development of at least four (4) distinctive scenarios, of which at least one (1) to two (2) achieve the aforementioned stated program objectives (see Section B). Scenarios should be shared with MOS as a presentation with technical documentation and explanation in a written document supplemented by Excel spreadsheets as necessary. Details for each scenario should include:
 - Estimated projections of the following from the present through 2050, in increments of at most five years:
 - Quantification of GHG reductions, including cumulative GHG emissions and annual GHG emissions
 - Supply and demand of carbon credits
 - Volume of carbon credits traded
 - Price of carbon credits traded
 - Number of properties participating, by typology
 - Windfall profits for participating building owners, if any
 - Air quality impacts and distribution of any negative impacts and benefits
 - Distribution of greenhouse gas emissions reductions and building investments
 - Impact on Environmental Justice Communities, including air quality impacts, greenhouse gas emissions reductions, building investments, and job creation
 - Total cost to building owners
 - Expected cost of transacting carbon credits, including brokerage fees
 - Stakeholder decision-making under each scenario, e.g. renewables developer, Affordable Housing, commercial tower, co-op
 - Quantity and type of compliance measures pursued over time
 - Quantification of benefits and cost trade-offs associated with various cost-containment design options including banking and price ceilings/floors (soft or hard), reserves etc.
 - Quantification of the impact of carbon intensity of the electric grid over time, with at least two long-term projections tested for each scenario
 - Assessment of the impact of various methodologies for accounting for renewable energy, storage, GHG offsets, and other non-efficiency LL97 compliance mechanisms
 - Quantification of the impact of permitting non-covered entities to participate in the market, including large buildings not subject to GHG emissions limits under LL97, and buildings less than 25,000 square feet
 - Quantification of the impact of manipulating the value of carbon credits from certain subsets of buildings, including Affordable Housing and buildings located in

Environmental Justice Communities, and/or providing incentives/restrictions for purchasing carbon credits in certain neighborhoods.

- Assessment of the impact of expected growth in the sector
 - Consideration for how to allow or limit market participation based on low occupancy, low density, low hours of operation
 - Quantification of the extent to which transaction costs are expected to limit the volume of trades or limit trades to high volume trades as well as a quantification of transaction costs versus the cost of carbon credits
 - Consideration for how to align opportunities for trading with market cycles to bolster demand
 - Assessment of NPV or costs of trading to ensure viability of trading
 - Quantification of the economic opportunity for building owners
 - Assessment of how carbon credit revenues could drive the case for deep energy reductions and beneficial electrification of heating, cooling and domestic hot water systems in buildings
 - A description of the timing of credit generation, the duration of carbon credits, credit issuance frequency (i.e. if carbon credits will be issued once or on a recurring basis), etc.
 - High-level assessment of each scenario's key risks/obstacles (and options to mitigate these risks)
 - Identify any general key insights for each scenario
3. A PowerPoint presentation of comparative analysis on Environmental Justice findings and the broader building population.
 4. A written document containing results and recommendations from the case study analysis on ownership concentration across buildings subject to LL97 and the impact of intra-portfolio trading.

4.3. Assess key insights and tradeoffs among scenarios and make carbon trading scheme design recommendation

- Out of all of the scenarios modeled and analyzed, compare trade-offs across scenarios, and after consultation with MOS, recommend a scenario that meets the Carbon Trading Study's stated objectives, which should include specific recommendations for all sensitivities outlined in Task 4.2.
- Identify key insights for all of the scenarios.

Deliverables:

1. A presentation and a written document that discusses the key tradeoffs among the four (4) identified scenarios, including fulfillment of stated objectives and quantified differences in terms of GHG emission reductions, cost, timing, implementation challenges, impacts to Affordable Housing tenants and Environmental Justice Communities, and uncertainties,

among other characteristics. The presentation and/or written document should also present specific recommendations for the carbon trading scheme design to be implemented based on program objectives.

5.1. Develop an Implementation Plan for the recommended carbon trading scheme

The implementation plan should include, but is not limited to, the items listed below. Additional items may be identified by the Consultant or MOS.

- A description of the recommended carbon trading scheme and associated benefits
- Identification of potential legal challenges specific to the trading scheme and recommended strategies to mitigate any potential legal risks and to implement the carbon trading scheme, which can include legislation or agency rules, to be included in the addendum in Task 3.1
- Strategies for market administration and oversight, including recommendations for whether the City should directly administer the program or should identify a third-party to administer the program
- Detailed rules for implementation of the recommended trading scheme, including but not limited to, the following:
 - Design of a marketplace
 - Trading mechanics including eligible participants and how participants will make trades, e.g. one-on-one or through a sanctioned marketplace
 - An online carbon credit exchange for interested buyers and sellers
 - Trading within a portfolio versus trading between owners
 - Timing of compliance and trading, including but not limited to:
 - When in the calendar and/or fiscal year participants will be eligible to trade
 - If/when compliance adjustment periods should occur
 - When participants should demonstrate compliance with LL97
 - The definition of banking periods, if allowed
 - A framework to ensure market transparency, liquidity, and confidence, including but not limited to:
 - Credit verification, validation, and tracking
 - Pre-qualifications for credit brokers, verifiers, and others
 - Methods and technologies that ensure the accuracy of reporting
 - Investigate use of technologies such as blockchain, smart meters, automated data transfers, and other technologies
 - Explore existing registries and tracking systems that could be leveraged, and how they could be implemented and governed
 - Determine how the City would establish accounting practices for verification, trading, and compliance accounts

- Use of any systems to ensure the credibility of carbon credits and recommendations for accreditation standards for any third-party verifiers
 - Rules for how participants should disclose carbon emissions and credit balances to the City
 - Management of public-facing disclosure of the creation of carbon credits, the quantity of carbon credits in the marketplace, and other items such as:
 - The history of trades
 - Historical pricing
 - Summary statistics of carbon credits and trades
 - Active participants in the marketplace
 - Trading accounts for market participants
 - Other necessary functions as determined by the Consultant and MOS
 - Rules for secondary markets
 - Prevention of double counting of carbon credits
 - Review mechanisms for additional oversight
- Eligibility of and rules for non-covered entities to transact carbon credits, including:
 - Owners of Small Buildings and building owners that are not subject to GHG emissions limits under LL97
 - Financial intermediaries
- Special considerations for Affordable Housing and buildings in Environmental Justice Communities
- Market mechanisms to stabilize carbon credit price, e.g. price floors and/or price ceilings, and other items such as:
 - The purchase and retirement of carbon credits to protect prices
 - Mechanisms that prevent low credit prices in initial years
- Timeline for implementation of the carbon trading scheme, including recommendations for an initial phase of the carbon trading program to test and scale the scheme
 - The initial phase may include a subset of the building stock with the goal of testing implementation of the recommended trading scheme, building market and regulatory capacity, and fostering market confidence
- Recommendations for periodic evaluation and adjustment of the trading scheme by the oversight body in the interest of all participants
- Identification of target audiences for outreach and training as well as training recommendations to ensure all potential participants are trained before trading commences and to address local concerns
- A template contract for market participants to transact carbon credits
- A detailed budget outlining the necessary resources to implement the trading scheme, including but not limited to:
 - Staff needed to run the program, including a breakdown of specializations

- Any external consultant(s) or parties necessary for implementation
- Development of an online system for the purpose of:
 - Tracking carbon credits
 - Monitoring trading
 - Recording credit retirement
 - Verifying carbon credits and carbon credit balances
- Public-facing platform, which could include:
 - Documenting the history of trades
 - Monitoring pricing
 - Providing an online carbon credit exchange for interested buyers and sellers
 - Providing summary statistics of carbon credits and trades
 - Listing trading scheme participants
 - Allowing market participants to keep trading accounts
 - Other necessary functions as determined by the Consultant and MOS
- Marketing, education, and training
- Rollout of the initial phases of carbon trading program
- Considerations regarding the type and extent of public funding

Additional considerations may include:

- Lenders' requirements to finance carbon reduction projects and recommendations to enhance the role of carbon credits
- Mechanisms to ensure cyber security and prevent cyber attacks
- Strategies to prevent weakening of the cap established under Regional Greenhouse Gas Initiative (RGGI)

Deliverables:

1. Final Implementation Plan Report, including a report at 50% completion of Task 5.1, a report at 90% completion of Task 5.1 (each with opportunity for MOS review and feedback), and final report. The Report must be provided in Microsoft Word document format in both paper and digital formats. The Report must summarize the general implementation approach and key findings of the items described in Task 5.1 including discussion of the resources needed for implementation, a detailed plan outlining all necessary steps for implementing the recommended trading scheme with an accompanying timeline, and an outlined approach for outreach and education for the carbon trading program. It must be provided in paper and digital format, for a general audience. Any Confidential Data used in the Report must be aggregated and anonymized as required by the Non-Disclosure Agreement attached to this T+G RFP as Attachment B, execution of which shall be a condition of being awarded a Task Order for this Research Project as discussed in II(E) below.

2. A presentation (in PowerPoint) version of the Report that highlights key findings, key implementation approach, and recommendations for implementation.

6.1. Prepare final deliverables, including report, detailed technical memorandum, presentation and supporting worksheets

Deliverables should explain in detail the inputs, assumptions, methodologies, findings, and recommendations associated with this Research Project, including and building off of the analysis and deliverables from Tasks 3, 4, and 5. Documents must be provided in both paper and digital format.

Deliverables:

1. Final Carbon Trading Study report, including a report at 50% completion of the Research Project, report at 90% completion of the Research Project (with opportunity for MOS review and feedback), and final report. The Report must be provided in Microsoft Word document format in both paper and digital formats. The Report must summarize the general approach and key findings for this Research Project, including discussion of the developed scenarios and recommendations for implementation. It must be provided in paper and digital format, for a general audience. Any Confidential Data used in the Report must be aggregated and anonymized.
2. A presentation (in PowerPoint) version of the Report that highlights the key approach, key findings, and recommendations for implementation.
3. A detailed technical memo that explains the assumptions, key inputs, methodology used to complete this Research Project and the key findings. Memo should specifically address how scenarios were developed and evaluated and any other considerations or constraints associated with the key findings. A draft of the memo at 90% completion (with opportunity for MOS review and feedback) should be provided.
4. A presentation (in PowerPoint) version of the technical memo.
5. Back up data and analysis, including, models, summary Excel spreadsheets and supplementary technical memos that clearly identify inputs, assumptions, and equations that led to the analytical outcomes associated with each scenario and main outputs associated with the Research Project (e.g., cost, timing, sequence, cumulative GHG emissions, key risks, etc.).

E. Key Inputs/Data to be provided by MOS

All data from the list below that has not already been made publicly available should be treated as confidential and will be subject to the Non-Disclosure Agreement attached to this T+G RFP as

Attachment B, execution of which shall be a condition of being awarded a Task Order for this Research Project.

- MOS to provide:
 - Inputs and outputs to the City’s Buildings Technical Working Group, as discussed in the report, *One City Built to Last*, including:
 - Development of 21 building typologies based on building use, height, and age assigned by Borough, Block, and Lot to all properties in NYC as of 2015. These typologies indicate a higher likelihood of certain building systems.
 - Assumptions of energy use by type and end use for each building typology using the 2014 GHG Inventory and Local Law 87 energy audit data.
 - Energy savings, costs, and GHG savings for nearly 100 low to medium Energy Conservation Measures (“ECMs”) as developed by a team of engineers, architects and industry experts.
 - Deep energy retrofit paths that achieve 40% to 60% energy reductions in eight (8) typologies representing about 65% of the building area. Four (4) paths for each typology were developed with industry experts that emphasized optimizing existing systems, converting to hydronic distribution, electrifying heating, and recladding.
 - Assumptions for population and building area growth by building typology by 2050.
 - Outputs from the *Deep Energy Retrofit Analysis Tool* Study
 - City datasets, including:
 - Local Law 84 Benchmarking Data (2010-2018) - energy use by type for all properties required to benchmark, which generally includes all properties over 50,000 square feet and City buildings over 10,000 square feet.
 - Local Law 87 Energy Audit Data (2013-2018) - data collected for all properties that have been required to complete energy audits. Properties, generally over 50,000 square feet, are required to complete energy audits once every ten (10) years. This data includes building systems, energy use by end use, and recommended energy conservation measures.
 - Department of Citywide Planning PLUTO dataset with Borough Block and Lot, Building Classification, Building Area, etc. for NYC properties.
 - Outputs from the City’s Roadmap to 80x50 study including:
 - Building Energy Model: An Excel-based model that scales the deep energy retrofit paths identified in the Buildings Technical Working Group across all buildings citywide and allows users to change the percentage of buildings that pursue different paths, as well as the number of buildings that convert to biofuel, impact of energy code updates to reduce energy use in new construction, adoption of

distributed solar PV, and district thermal systems to calculate the 2050 emissions and energy use by building sector.

- 2050 Decision Model: An Excel-based model that scales the 80x50 strategies across Buildings, Energy Supply, Transportation and Waste sectors, and allows for users to change the adoption rate of those strategies to understand the GHG impact through 2050.
 - Community Energy Planning Model: A geospatial assessment of the technical potential of a range of energy resources (e.g., combined heat and power (“CHP”), combined cooling, heating and power (“CCHP”), solar, wind, water source heat pumps, geothermal) and incorporates a prioritization methodology that considers electricity, heating and cooling density at the block level in addition to social risk and vulnerability factors.
 - Energy supply outputs, generated from a least-cost economic dispatch model, including fuel mix and carbon intensity of the New York Independent System Operator (“NYISO”) and the energy supply for NYC every five (5) years between 2016 to 2050 across eight (8) scenarios.
- Ownership data for the NYC building sector via CoStar
 - Data on energy cost projections
 - Data related to growth assumptions in NYC buildings
 - Data to support the definition of Affordable Housing and/or Environmental Justice Communities
 - Data related to future forecasts of the carbon-intensity of NYC's electricity
 - Data related to EV adoption and projected utilization
 - U.S. Census American Community Survey
 - Data for consultant to calculate energy cost burdens
 - Data on race and socioeconomic status in NYC
 - New York State threshold for household utility bill expenditure
 - New York City Department of Health and Mental Hygiene
 - Data on asthma hospitalizations
 - Data on heat vulnerability
 - EPA’s Environmental Justice Screening and Mapping Tool (Version 2018)
 - Other data as determined by Research Project needs

III. Format and Contents of the Proposal in Response

The Proposal in Response must be in a form that conforms to Appendix C to the Consortium Contract, which template form is attached to this document as Attachment C for the purpose of convenience. That template form is also downloadable from the Town+Gown website at

(<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>). The Consultants shall not make changes to the Proposal in Response template form since Appendix C anticipates the accepted Proposal in Response will form the basis of the Task Order.

IV. Evaluation Criteria and Evaluation Procedures

A. Criteria

The Proposals in Response will be evaluated on the basis of the criteria set forth below:

Criteria	Weight	Description
<i>Experience</i>	30%	<p><i>Balanced experience, including prior relevant work/projects focused on large cities, and individual team member capabilities (e.g., projects, publications, etc.) with respect to the range of disciplines and issues covered in the Research Project. Expertise in economics, law, real property management, accounting and financial transaction.</i></p> <p><i>Skills and expertise relevant to the NYC market are preferable, including familiarity with existing MOS buildings and energy initiatives, e.g., the Roadmap to 80x50, 1.5°C: Aligning New York City with the Paris Climate Agreement, and the Buildings Technical Working Group.</i></p>
<i>Approach and Methodology</i>	45%	<p><i>Approach to the Research Project, including quantitative modeling capabilities (e.g., specific platforms and ability to integrate required inputs), proposed methodologies and ability to meet the Research Project completion deadline.</i></p> <p><i>Plan that articulates a clear understanding and allocation of roles, responsibilities, and time dedicated to the Research Project, and clear lines of communication and hierarchy among the Consultant team members.</i></p>
<i>Cost</i>	25%	<p><i>As discussed above in III, the Proposal in Response must include an itemized cost estimate that accounts for each major component/task. It is estimated that this project will cost between \$1,400,000 and \$2,000,000. Cost proposals will be evaluated competitively.</i></p>

B. Basis of Award

DEP, in consultation with MOS, will award the Research Project to the responsive and responsible Consultant whose Proposal in Response is determined to be the most advantageous to, and in the best interest of the City, taking into consideration all the criteria and considerations which are set forth above in this T+G RFP. Award of the resulting Task Order is subject to successful negotiation of terms of the Task Order as provided in the Consortium Contract and the PPB Rules. As noted above, award of the resulting Task Order will be subject to the Consultant agreeing to the limitation of use of data to an anonymized or aggregated form as set forth in Section II.D of this RFP, and executing the attached Non-Disclosure Agreement.

C. Anticipated Payment Structure

DEP and MOS anticipate lump sum payments for all services and deliverables associated with the Task Order resulting from this T+G RFP. MOS, DEP, and the Consultant will negotiate the exact amount the Consultant will be paid for each deliverable listed in Section II(D) above (Key Tasks). The Consultant will be paid the agreed upon amount as each deliverable is considered complete by MOS. MOS and DEP will consider suggestions by the Consultants for incremental payment milestones within each deliverable. MOS and DEP reserves the right to select any alternative payment structure that is in the City's best interest.

D. Other Considerations

The Requestor may request the Consultant(s) to provide answers to additional questions and/or written clarifications, presentations and/or demonstrations related to their Proposal in Response within 30 calendar days of receipt of the Proposal in Response by the Requestor. Consultant(s) shall respond within 8 business days to the Requestor's additional questions and requests.

1. Insurance

If awarded the Task Order resulting from this T+G RFP, the Consultant and all of its subconsultants must not commence performing any services under the resulting Task Order, until all insurance required by this T+G RFP, and the resulting Task Order, is in effect and provided satisfactorily to DEP. The Consultant must ensure uninterrupted and continuous insurance coverage in the manner, form, and limits required by this T+G RFP, and the resulting Task Order, throughout the entire duration of the Task Order.

The Consultant must provide the insurance as indicated by the filled boxes in the chart below:

Article 7 – Insurance	
Types of Insurance	Minimum Limits and Special Conditions
<ul style="list-style-type: none"> ■ Workers’ Compensation ■ Disability Benefits Insurance ■ Employers’ Liability 	Statutory amounts
<input type="checkbox"/> Commercial General Liability	\$_____ per occurrence \$_____ personal & advertising injury \$_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Commercial Auto Liability	\$_____ per accident combined single limit If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90
<input type="checkbox"/> Professional Liability/Errors & Omissions	\$ <u>1,000,000.00</u> per claim

If awarded the Task Order under this T+G RFP, the Consultant must maintain, and ensure that all of its subcontractors maintain, Workers’ Compensation Insurance, Disability Benefits, and Employer’s Liability Insurance in accordance with the Laws of New York State on behalf of, or with regard to, all employees providing services under the Task Order resulting from this T+G RFP. All subcontractors to the Consultant are subject to all of the terms and conditions of the Consortium Contract, including Appendix A.

2. Subcontracting

The Consortium Contract, under which this T+G RFP has been issued, permits Consultants to join with one or more other Consultants to prepare a Proposal in Response (see Section 3.3 (b)) as well as to utilize Subcontractors (as defined in the Master Contract) as part of a Proposal in Response (see Sections 3.3(b) and 3.3(e)(8)). Consultants should refer to the Consortium Contract if they wish to consider joint proposals with researchers at other Academic Consortium institutions or include Subcontractors as part of their Proposal in Response. Individual researchers developing Proposals in Response should contact the Gown Advisory Council representative for the respective Academic Consortium institution to obtain a copy of the Consortium Contract, the form of which is also downloadable from the Town+Gown website (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>).

Please note that Consultants wishing to subcontract with a Subcontractor as part of its Proposal in Response must disclose its intention to use the services of a Subcontractor in its Proposal in Response as provided in Section 3.3 (e) (8) of the Consortium Contract and Appendix C to the Consortium Contract.

3. The Research Project must be completed no later than December 15, 2020.

* * * *

Form of No Bid Response

NO BID RESPONSE

SUBMIT BY RFP RESPONSE DUE DATE

RFP NAME	REQUESTOR	PROPOSAL IN RESPONSE DUE DATE

To: [Requestor Agency]
 Secretary, Gown Advisory Council
 Town+Gown/DDC, as Master Contract Administrator

This is to certify that _____, a Consultant academic institution under the city-wide Town+Gown Master Academic Consortium Contract, will not be submitting a Proposal in Response to the above referenced solicitation document prepared by the listed Requestor.

REASON(S) FOR NO SUBMISSION:

UNAVAILABILITY OF REQUIRED RESOURCES

PRIOR COMMITMENTS

INADEQUATE ANTICIPATED FUNDING LEVEL

PROJECT DURATION

POTENTIAL CONFLICT OF INTEREST

DUPLICATION OF ONGOING EFFORT

OTHER (PLEASE EXPLAIN)

AUTHORIZED REPRESENTATIVE:

NAME: _____

TITLE: _____

SIGNATURE: _____

DATE: ___/___/20__

FORM OF NON-DISCLOSURE AGREEMENT

THIS NON-DISCLOSURE AGREEMENT (“Agreement”) is made as of this ____ day of _____ 2019, by and between **The City of New York**, acting by and through the **New York City Department of Environmental Protection** (DEP), with its principal offices at 59-17 Junction Blvd., 17th Floor, Flushing, NY 11373 (the City), and _____ with offices at _____ (the Academic Partner), including each of their subsidiaries, successors and assigns, which Agreement shall be subject to all terms and conditions of the Consortium Contract to which the Academic Partner is a party to (Contract Registration Number inserted here). All defined terms used and not defined herein shall have the meaning ascribed to them in the Consortium Contract.

WHEREAS, the City intends to disclose to the Academic Partner confidential materials identified in Section II, D of the Town+Gown RFP for NYC Carbon Trading Study (Town+Gown DEP RFP) issued by DEP and released by Town+Gown to all Consultants under the Consortium Contract on September 3, 2019 (the Confidential Materials), and wants to ensure the protection and preservation of such Confidential Materials consistent with the provisions of a revised Section 5.08 of Appendix A to the Consortium Contract that is not yet effective and Section 6.01 A of Appendix A to the Consortium Contract;

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the City and the Academic Partner agree as follows:

1. The Academic Partner agrees to hold confidential, both during and after the completion or termination of the Consortium Contract and applicable Task Order, all of the Confidential Materials furnished to the Academic Partner, and, consistent with the provisions of Section 6.01A of Appendix A to the Consortium Contract, those portions of the Research Project prepared, assembled or used by the Academic Partner under the Consortium Contract and applicable Task Order with respect to the Confidential Materials. The Academic Partner agrees to maintain the confidentiality of such Confidential Materials by using a reasonable degree of care and using at least the same degree of care that the Academic Partner uses to preserve the confidentiality of its own confidential information and the Academic Partner must use pursuant to its protocols for faculty-led research using confidential data. In the event that the data contains personally identifiable, confidential, proprietary or protected health information including social security numbers or other personal identifying information (“Personal Identifying Information”), the Academic Partner shall utilize best practice methods (e.g., encryption of electronic records) to protect the confidentiality of such data. The obligation under this Agreement with respect to Confidential Materials to hold such Confidential Materials confidential shall not apply where the City would be required to disclose such Confidential Materials, under FOIL, provided that the

Academic Partner provides advance notice to the Practitioner Partner, in writing or by e-mail, that it intends to disclose such Confidential Materials and the Practitioner Partner does not inform the Academic Partner, in writing or by e-mail, that such Confidential Materials are not subject to disclosure under FOIL.

In view of the fact that the Law applies to both the City and the Academic Partner with respect to the Confidential Data, including Personal Identifying Information therein, no later than three (3) months prior to the anticipated publication date, as permitted by Section 6.01A of Appendix A of the Consortium Contract, the Academic Partner shall provide, to the Practitioner Partner, (a) a certificate signed by an Authorized Representative of the Academic Partner that the Confidential Materials used in such publication have been sufficiently aggregated or anonymized to protect Personal Identifying Information pursuant to the Academic Institution's protocols and Law for faculty-led research using confidential data and (b) a draft of the article. No later than one (1) month before the anticipated publication date, the Practitioner Partner shall provide a response either consenting to the publication, which consent shall not be unreasonably withheld, or identifying any Confidential Information contained therein to which consent for publication is not given. If the Practitioner Partner identifies any Confidential Information in the publication to which consent is not given, the Academic Partner shall have the right to publish the proposed publication, excluding any Confidential Information that is identified by the Practitioner Partner. Compliance with this requirement is a pre-condition to an Academic Partner's ability to publish pursuant to Section 6.01A of Appendix A to the Consortium Contract to the extent that Confidential Materials are used in such publication.

2. The Academic Partner shall provide notice to the Practitioner Partner within three (3) Days of the discovery by the Academic Partner of any breach of security, as defined in Administrative Code § 10-501(b), of any data, encrypted or otherwise, in use by the Academic Partner that contains Personal Identifying Information, where such breach of security arises out of the acts or omissions of the Academic Partner or its employees, Subcontractors, or agents. Upon the discovery of such security breach, the Academic Partner shall take reasonable steps to remediate the cause or causes of such breach, and shall provide notice to the Practitioner Partner of such steps. In the event of such breach of security, without limiting any other right of the City, the Practitioner Partner shall have the right to withhold further payments under the Consortium Contract and applicable Task Order for the purpose of set-off in sufficient sums to cover the costs of notifications and/or other actions mandated by any Law, or administrative or judicial order, to address the breach, and including any fines or disallowances imposed by the State or federal government as a result of the disclosure. The City shall also have the right to withhold further payments hereunder and the applicable Task Order for the purpose of set-off in sufficient sums to cover the costs of credit monitoring services for the victims of such a breach of security by a national credit reporting agency, and/or any other commercially reasonable preventive measure. The Practitioner Partner shall provide the Academic Partner with written notice and an opportunity to comment on such measures prior to implementation. Alternatively, at the discretion of the Practitioner Partner, or if monies remaining to be earned or paid under the applicable Task Order

are insufficient to cover the costs detailed above, the Academic Partner shall pay directly for the costs, detailed above, if any.

3. The Academic Partner shall restrict access to Confidential Materials to persons who have a legitimate work-related purpose to access such information. The Academic Partner agrees that it will instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by the Consortium Contract and the applicable Task Order.

4. The Academic Partner, and its officers, employees, and agents shall notify the Practitioner Partner, at any time either during or after completion or termination of the Consortium Contract and applicable Task Order, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, Internet, etc.) regarding the services provided or the data collected pursuant to the Consortium Contract and applicable Task Order at least twenty-four (24) hours prior to any statement to the press or at least five (5) Days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Academic Partner may not issue any statement or submit any material for publication that includes Confidential Materials covered by this Agreement, as further subject to the provisions of Section 6.01A of Appendix A to the Consortium Contract, which apply to the Mini-RFP.

5. At the request of the Practitioner Partner, the Academic Partner shall return to the Practitioner Partner any and all Confidential Materials in the possession of the Academic Partner or its Subcontractors. If the Academic Partner or its Subcontractors are legally required to retain any Confidential Materials, the Academic Partner shall notify the Practitioner Partner in writing and set forth the Confidential Materials that it intends to retain and the reasons why it is legally required to retain such information. The Academic Partner shall confer, in good faith, with the Practitioner Partner regarding any issues that arise from the Academic Partner retaining such Confidential Materials. If the Practitioner Partner does not request such information, or the Law does not require otherwise, such information shall be maintained in accordance with the requirements set Section 5.02 of Appendix A to the Consortium Contract.

6. A breach of this Agreement shall constitute a material breach of the Consortium Contract for which DDC and the Practitioner Partner may terminate the Consortium Contract and applicable Task Order pursuant to Article 10. The Practitioner Partner reserves any and all other rights and remedies in the event of unauthorized disclosure.

7. This Agreement is subject to all terms and provisions of the Consortium Contract and the Task Order awarded to the Academic Partner related to the Town+Gown DEP RFP.

8. This Agreement may be executed in counterparts, each of which shall constitute an original and both of which, when taken together, shall constitute one agreement.

ACCEPTED AND AGREED:

For DEP:

Name: _____

Title: _____

New York City Department of Environmental Protection

59-17 Junction Blvd., 17th Floor

Flushing, NY 11373

[Phone number]

For Academic Partner: Name: _____

Title: _____

Address: _____

Phone: _____

Form of Proposal in Response Template with Instructions Memo



Template for Town+Gown Proposal in Response. June 2018 As of June 2018

To: Researchers at Academic Consortium Institutions
 From: Terri Matthews, Director, Town+Gown @ New York City Department of Design and Construction (DDC)
 Re: Instructions for Use of Town+Gown Proposal in Response Template Form

If you are a researcher at one of the 15 academic institutions listed below that comprise the consortium (vendor) pool (the **Academic Consortium**) and are contemplating responding or responding to a Town+Gown RFP released to your Academic Consortium institution pursuant to Town+Gown/DDC's city-wide Town+Gown Master Academic Consortium Contract, for which Town+Gown/DDC acts as administrator (the **Consortium Contract**), you should use the following template form of the Town+Gown Proposal in Response for your Research Project proposal. All defined terms used but not defined have the meanings given them by the Consortium Contract.

- Brooklyn Law School
- City University of New York
- Columbia University
- Cornell University
- Drexel University
- Fordham University
- Manhattan College
- New York Institute of Technology
- New York University
- Pace University
- Pratt Institute
- State University of New York
- The Cooper Union
- The New School
- Tufts University

What follows is the template form of the Town+Gown Proposal in Response under the Consortium Contract, which contains instructions after the ***IMPORTANT NOTE!** icon. These instructions should be removed in the Town+Gown Proposal in Response you submit to the Requestor.

This memo and template form, which is downloadable at the Town+Gown website <https://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>, is intended to provide all of the information you need to prepare a Town+Gown Proposal in Response to a Town+Gown RFP you have received. If you have any questions about the Town+Gown RFP to which you are responding or if you have any questions related to this template Town+Gown Proposal in Response form, please contact the Requestor’s procurement contact listed in the Town+Gown RFP. If you have questions related to the Consortium Contract, please contact your institution’s Academic Consortium representative, who should be the first person who initially disseminated the Town+Gown RFP you are considering at your institution. See also the Gown Advisory Council section of the Town+Gown website (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>). The  icon instructions should be removed in the Proposal in Response you submit to the Requestor.

In general, please be aware of the following issues, which are also noted as an  icon in the following template.

- You must not change the form of the Town+Gown Proposal in Response template. The Proposal in Response accepted by the Requestor will form the basis of the Task Order, and it is important that this template *form* be unchanged. The Proposal in Response and the resulting Task Order must be in the form of Appendix C to the Master Contract to which the template form Task Order conforms. Appendix C is a combined Proposal in Response and Task Order form, which Town+Gown/DDC has turned into separate forms available at the Gown Advisory Council section of the Town+Gown website (<http://www1.nyc.gov/site/ddc/about/town-gown-advisory-council.page>).
- This is a Proposal in Response to a New York City procurement, not a grant program. The terms of the Proposal in Response that the Requestor selects for an award become the terms of the resulting Task Order, subject to further negotiation only as permitted by the city’s Procurement Policy Board rules.
- You will need to insert the FMS registration number for your institution’s Consortium Contract from the chart below:

Vendor	MMA1
Brooklyn Law School	20156201502
The Cooper Union	20166200107
Drexel University	20156201606
Fordham University	20146201444
Manhattan College	20146201441
The New School	20166200106
New York Institute of Technology	20146201445

Pratt Institute	20156201501
Tufts University	20156201503
State University of New York	20166200091
New York University	20146201446
Pace University	20146201443
City University of New York	20146201442
Trustees of Columbia University	20176200751
Cornell University	20176200781

[Consultant logo/letterhead here]

**Proposal in Response to [Name of Town+Gown RFP]
under the Consortium Contract**

*** IMPORTANT NOTE! *** CONSULTANTS MUST NOT CHANGE THE FORM OF THE PROPOSAL IN RESPONSE. The Proposal in Response accepted by the Requestor will form the basis of the Task Order, and it is important that this template form be unchanged. If you have questions, please contact the Requestor contact on the Town+Gown RFP or your institution's Gown Advisory Council representative.

*** IMPORTANT NOTE! *** This Proposal in Response form is related to a public procurement and not a grant program, and the terms of the Proposal in Response that the Requestor selects for an award become the terms of the resulting Task Order, subject to further negotiation only as permitted by the Consortium Contract and the City's Procurement Policy Board rules.

Prepared by [Consultant Name]
[Date]

Article 1. Agreement.

This Proposal in Response has been prepared and submitted pursuant to the provisions of the Town+Gown Master Academic Consortium Contract, by and between [*** IMPORTANT NOTE! *** Insert your institution's name) (the Consultant), and the New York City Department of Design and Construction, registered with the Comptroller's Office [*** IMPORTANT NOTE! *** Insert registration number for Consortium Contract for your institution from chart on preceding memo] (the Consortium Contract). All capitalized terms used, but not defined, herein shall have the meanings ascribed to them in Article 1 of the Consortium Contract.

If this Proposal in Response is accepted by the Requestor, the awarded Research Project will be governed by a Task Order, negotiated and executed, pursuant to Section 3.4 of the Consortium Contract and the PPB rules, by the Consultant and the Requestor, which Task Order will define the contractual relationship between the Consultant (to become the Academic Partner) and the Requestor (to become the Practitioner Partner) for the duration of the Research Project. The provision of services under the Task Order will be further governed by the terms and conditions of the Consortium Contract, including but not limited to those in the Town+Gown RFP, complying with the provisions of Section 3.2 of the Consortium Contract, and those in the Consortium Contract as required and provided therein.

If this Proposal in Response is accepted by the Requestor, the Consultant agrees to accomplish the Project for which a Task Order will be executed and registered, on time and within budget. The nature of academic research requires some flexibility in the timing of performance, with unforeseeable obstacles and delays. Section 4.03(a) of the PPB Rules is analogous to the National Science Foundation's practice with respect to delays in academic research and is available as a method of providing extensions of time on Task Orders for performance due to the typical delays in academic research. The Academic Partner shall not perform services under the Consortium Contract until a Task Order has been executed and registered with the Comptroller.

Article 2. Proposal in Response to Town+Gown RFP.

*** IMPORTANT NOTE! *** Subject to the requirements of the Consortium Contract and the Town+Gown RFP issued by the Requestor, this Proposal in Response shall be organized in a manner so as to provide the types of information as described below. Due to the standard of evaluation set forth in Section 4.3 of the Consortium Contract with respect to payment and the certification in Section 4.2 of this Proposal in Response, which will be repeated in the related Task Order, it is especially important that the Consultant be as detailed, as specific and as clear as possible with respect to the elements set forth below. After an award is made based on a particular Town+Gown RFP, these Article 2 elements of the Town+Gown RFP become the Academic Practitioner’s obligations under the resulting Task Order.

2.1 Research Project Objectives

*** IMPORTANT NOTE! *** Describe the overall objectives and goals.

*** IMPORTANT NOTE! *** Describe the scope, listing and describing the research approaches, work to be performed and the phases of the work.

*** IMPORTANT NOTE! *** Describe the nature of the collaboration between staffs of the Requestor, as practitioner, and the Consultant, identifying the elements of practitioner experience that would be useful for the research, as well as any other research needs with which the Requestor could provide assistance.

2.2. Work Products and Deliverables

Describe the anticipated work products and deliverables for the Research Project, including interim reports if appropriate, with a sufficient level of detail, including the form and the nature of the content.

2.3. Project Plan and Estimated Duration of Project, including Schedule

*** IMPORTANT NOTE! *** Describe the plan for the Research Project, assigning time values for elements of the scope as a schedule for the Project. City agencies must use expense funds in the City fiscal year they are appropriated; they are not permitted to roll unexpended expense funds into the following City fiscal year, but must appropriate expense funds anew in each succeeding City fiscal year. Thus, for Research Project funded with City tax levy funds, it is important to demonstrate an alignment between the proposed schedule in the Project Plan and the Requestor’s expressed expectation for the Project duration in the Town+Gown RFP. Payment requisitions pursuant to Article 4 of the Consortium Contract require, among other things, a status report to indicate the relation of the payment requisition to the Project Plan.

2.4. Project Staffing and Organization.

*** IMPORTANT NOTE! *** List the members of the Academic Team, the costs of whose work will be estimated in the chart in Section 2.5 below, and provide an organizational chart showing the Academic Team’s organization for the Project.

*** IMPORTANT NOTE! *** One of the elements of Town+Gown’s Organizational Character is supporting academic-practitioner collaborations by highlighting the importance of practice as a source of knowledge, with Academics and Practitioners as equal partners in knowledge creation. Thus, it is important to describe how the Academic Team members will interact with the Requestor’s staff and other entities, including a narrative describing the organization and interactions as they support the nature of the academic-practitioner collaboration in Section 2.1 above which will become part of the Project Plan. In such Project Plan, it will be important to anticipate how the Academic Partner will work with the Practitioner Partner on a Research Project as the equivalent of a peer reviewer on any Task Order-generated work product as contemplated by Section 6.01 of Appendix A.

*** IMPORTANT NOTE! *** The Consultant will estimate costs associated with the Academic Team pursuant to the provisions of Section 3.3 (d) and (e) of the Consortium Contract and show them on the chart in Section 2.5 below. The Consultant shall include a curriculum vitae or resume of no more than three (3) pages for each Senior Personnel member of the Academic Team, including any Subcontractors.

*** IMPORTANT NOTE! *** As provided in Section 3.3 (e) (8) of the Consortium Contract, the Consultant may include, in the Academic Team, entities providing services as Subcontractors. To the extent a Task Order includes the services of Subcontractors, the Consultant shall be responsible for the performance of Subcontract services. For the convenience of reference only, the Consultant should know that subcontracts shall comply with the requirements of Section 2.07, 3.02, 4.07, 7.03, 7.08, 7.09 and 13.06 of Appendix A. Further, expenses incurred by the Consultant in connection with furnishing Subcontractors for the performance of required services under a Task Order are deemed included in the payments to the Consultant as set forth in Article 4 of this Consortium Contract. While the Consultant may pay its Subcontractors first and then seek reimbursement pursuant to the applicable provisions of this Consortium Contract, in the event the Consultant does not pay its Subcontractors prior to seeking reimbursement, the Consultant shall pay its Subcontractors the full amount due them from their proportionate share of the requisition, as paid by the City. The Consultant shall make such payment not later than five Days after receipt of payment by the City.

2.5. Proposed Project Budget and Not to Exceed Amount

*** IMPORTANT NOTE! *** Using this chart as a template, provide a proposed Project budget, estimating the costs of each component of the Project as provided in Section 3.3(e) of this Consortium Contract, and providing any require additional justification. Please provide a copy of an effective negotiated indirect cost rate with federal agency bound by the provisions of OMB Circular A-21 or a proposed indirect cost calculation methodology pursuant to Section 3.3(e)(xi) of the Consortium Contract.

Principal Investigator/Project Director:		

Headings under Section 3.3 (e)	[columns for calculations]			Costs
<u>Not to Exceed Amount</u>				\$_____.

Article 3. Consultant’s Billing and Invoicing.

*** IMPORTANT NOTE! *** The general requirements of the Consortium Contract, including Article 4, and any specific requirements of the Town+Gown RFP will govern the billing and invoicing process from the Requestor’s perspective.

*** IMPORTANT NOTE! *** The Consultant should list the personnel responsible for billing and invoicing functions at the Consultant organization and related contact information.

Article 4. Representations and Warranties.

4.1. Accuracy and Completeness of Statements.

The Consultant certifies that statements, representations and warranties contained in the Proposal in Response and the Consortium Contract, including Appendix A thereto, were true and complete as of the date they were made and are true and complete as of the date of this Proposal in Response.

*** IMPORTANT NOTE! *** For convenience of reference only, the Consultants should know that Sections 2.01 (procurement of contract/task orders), 2.03 (fair practices), 2.04 (VENDEX, now Passport), 2.07 (unlawful discriminatory practices), 3.02 (e) (subcontractor performance); 4.01 (independent contractor status), 4.02 (employees), 4.07 (E.O. 50), 6.01 (copyrights) and 7.08 (insurance certificate) contain specific representations and warranties.

4.2. The Project.

The Consultant certifies that all elements of the work and costs necessary to perform the Project in a professional and competent manner according to the standards of the relevant field(s) and/or discipline(s), and to meet the requirements set forth in the Town+Gown RFP and in Section 4.3 of the Consortium Contract have been included in this Proposal in Response.

4.3. Academic Team Members.

The Consultant represents and warrants that the members of the Academic Team possess the experience, knowledge and character necessary to qualify them individually for the particular services they will perform on the Project in a professional and competent manner pursuant to Section 4.3 of the Consortium Contract.

The submission of curriculum vitae and resumes for the Senior Personnel members of the Academic Team, whether they are the Consultant's direct employees or Subcontractors, with the Proposal in Response, implies that such individuals will be available to perform the services on the Project. For the Consultant who is awarded the Task Order, it is expected that such members of the Academic Team will perform the services under the Task Order; provided, however, that such Consultant may replace members of the Academic Team on the Project during the term of the Task Order with personnel who possess qualifications substantially similar to those being replaced, with prior notice to the Practitioner Partner.

To the extent the Requestor believes a member of the Academic Team is unable to perform services in a professional and competent manner according to the standards of the relevant field(s) and/or discipline(s), it shall have the right to raise such concerns with the Consultant so that both parties have the opportunity to resolve such concerns in good faith, subject to the provisions of Section 10.02 of Appendix A.

4.4. Agreement to Comply with Terms of Task Order.

The Consultant agrees to comply with the terms and conditions of the Task Order and the Consortium Contract under which it was issued.

4.5. Conflicts of Interest—Gown.

The Consultant certifies that it has implemented and is enforcing a written policy on conflicts of interest, consistent with the provisions of the National Science Foundation's AAG Chapter IV.A.; further, that, to the best of the undersigned Authorized Party's knowledge, all financial disclosures required by the conflict of interest policy were made; and that conflicts of interest, if any, were, or prior to the institution's expenditure of any funds under the award, will be, satisfactorily managed, reduced or eliminated in accordance with the Consultant's conflict of interest policy.

4.6. Training and Oversight.

To the extent the Academic Team includes any postdoctoral researchers, graduate students or undergraduate students, the Consultant certifies that it has a plan to provide appropriate

training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers.

4.7. Affirmation.

The Consultant affirms and declares that it is [*** IMPORTANT NOTE!** Insert description of status under State corporation law and federal income tax law], and, further, that it is not in arrears to the City upon debt, contract or taxes, it is not a defaulter, as surety or otherwise, upon obligation to the City, it has not been declared “not responsible” or disqualified, by any agency of the City, and that, to its knowledge, there is no proceeding pending relating to its responsibility or qualification to receive public contract except as indicated in the space below:

Article 5. Task Order Execution.

Execution of a resulting Task Order by the Requestor shall be evidence of its approval of the following items, as explicitly noted above in this Proposal in Response:

- (1) subcontractors pursuant to Sections 3.3 (b) and (e)(8) of the Consortium Contract, subject to final compliance with PPB Rule requirements and Sections 2.07, 3.02 and 4.07 of Appendix A,
- (2) compensation beyond three months and/or utilizing a percentage equivalent of academic contract effort pursuant to Section 3.3(e)(1) of the Consortium Contract,
- (3) treating components of an Academic Partner’s facilities and administration as a direct cost pursuant to Section 3.3 (e)(2) of the Consortium Contract,
- (4) the purchase of equipment and post-Project ownership of such equipment pursuant to Section 3.3 (e)(6) of the Consortium Contract,
- (5) the incurrence of expenses related to long-distance travel pursuant to Section 3.3 (e)(7) of the Consortium Contract, to be reimbursed, in the case of City Agency Requestors, pursuant to the provisions of Article 4 of the Consortium Contract,
- (6) the incurrence of expenses related to computer services pursuant to Section 3.3 (e)(9) of the Consortium Contract, and
- (7) the application of the formula to determine indirect costs pursuant to Section 3.3(e)(10) of the Consortium Contract.

Article 6. Relation of Task Order to Consortium Contract.

6.1 Task Order Incorporates Terms of Consortium Contract.

If the Requestor accepts this Proposal in Response, the resulting Task Order shall be deemed to incorporate all the terms and conditions of the Consortium Contract, including Appendix A thereto, even if such terms and conditions are not expressly reiterated in the Task Order.

6.2 Task Order Not an Amendment of Consortium Contract.

Neither a Proposal in Response nor a Task Order may alter the terms and conditions of the Consortium Contract. The terms and conditions of the Consortium Contract Agreement can only be modified by the parties in an amendment pursuant to Section 6.4 of the Consortium Contract, and any provision of a Task Order that would have the effect of amending a term or condition of the Consortium Contract shall be null and void.

Any amendments, changes or modifications of this Task Order must comply with the provisions of Section 9.01 of Appendix A.

6.3 Conflict between Task Order and Consortium Contract.

In the event of any conflict between any provision in a resulting Task Order and any provision of the Consortium Contract, including Appendix A thereto, the provision in the Consortium Contract shall control.

SUBMITTED BY:

By: _____

Name: _____

Title: _____

Date: _____