

**CLEANER, GREENER COMMUNITIES PROGRAM**

Initiative Level Logic Model Report

Prepared for

**The New York State  
Energy Research and Development Authority**

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## INTRODUCTION

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This document presents an initiative-level logic model for the Cleaner, Greener Communities (CGC) Program. The *New York Regional Greenhouse Gas Initiative Investment Plan (2013 Operating Plan)* provides details on a number of NYSERDA initiatives funded through proceeds from the sale of Regional Greenhouse Gas Initiative (RGGI) CO<sub>2</sub> allowances.<sup>1</sup> These RGGI-funded initiatives are designed to complement existing programs by filling gaps from the State's System Benefit Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Renewable Portfolio Standard (RPS) and Weatherization Assistance programs, and various transportation programs funded by the federal Congestion Mitigation and Air Quality Improvement Program. They address all fuels and augment existing policies and programs with focus on creating synergies with existing efficiency and clean energy programs, advancing stated RGGI policies and intended outcomes, and enhancing other statewide goals in New York including: increased energy efficiency, increased renewable energy generation, reduced criteria pollution, low income weatherization, and reductions in greenhouse gas emissions (GHG) .

To realize both the immediate need for GHG emissions reductions and to create needed platforms for long-term, self-sustaining changes in New York's energy consumption patterns, the portfolio of RGGI initiatives are implemented to achieve the following outcomes:<sup>2</sup>

- Provide substantial benefits to consumers and the environment and associated GHG emission reductions from both electric and other energy sources through enhanced deployment of commercially available renewable energy and energy efficiency technologies
- Empower communities to make decisions about energy usage that lead to lower carbon emissions and economic/societal co-benefits
- Use funds to induce additional GHG reductions by establishing commitments and capacity to curtail GHGs by municipal, institutional, and other public and private sector participants
- Employ innovative approaches (including financing strategies) to increase adoption of clean energy alternatives in the state
- Encourage investment to stimulate new technology development and entrepreneurial growth of clean energy companies and a strong clean energy business environment
- Build New York's in-state workforce and industry capacity for long-term carbon reduction.

Over a three-year planning horizon (April 1, 2012 through March 31, 2015) over \$405M has been made available through RGGI proceeds to fund the initiatives detailed within NYSERDA's 2013 Operating Plan. The Plan groups these initiatives into three categories: Energy Efficiency and Other Deployment, Technology and Business Development, and Research. One of the initiatives within the Energy Efficiency and Other Deployment category, the Cleaner, Greener Communities Program, is the focus of this Initiative Level Logic Model Report.

This report is organized in sections as follows:

1. **Program Intent, Design, Context, and Stakeholders:** Describes the challenges addressed by the program for transitioning the state toward a Clean Energy Economy, as well as the regulatory and stakeholder context within which the CGC program operates.

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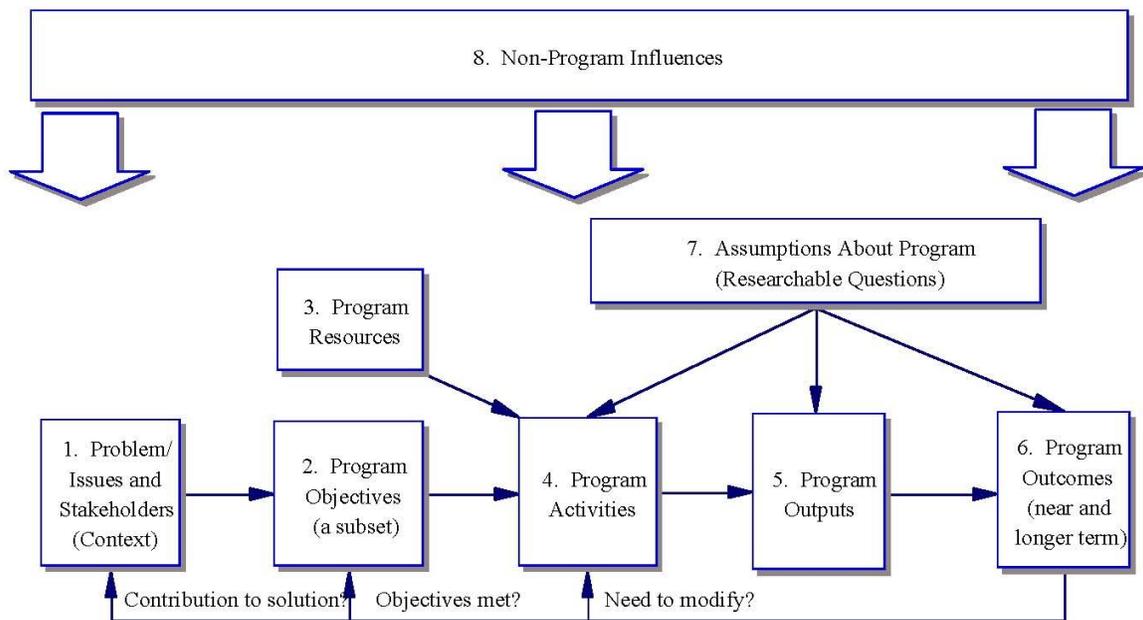
<sup>1</sup> – *New York's Regional Greenhouse Gas Initiative Investment Plan (2013 Operating Plan)* – October 16, 2013, NYSERDA.

<sup>2</sup> *ibid*

2. **Program Goals:** Describes, at a high level, the program’s goals and targets.
3. **Program Resources and Activities:** Program Resources identify NYSERDA funding and staff resources committed to the program, as well as external funding, technical, and intangible resources supporting the program. Program Activities describes the various community outreach, sustainability plan development and implementation support activities and strategies delivered through the program.
4. **Outputs, Outcomes and External Influences:** Outputs describe the anticipated immediate results associated with program activities. Outcomes describe what is expected to be achieved under this program in the near, intermediate, and longer term. These outcomes are linked to specific program activities and associated outputs and can be shown pictorially in a program logic model diagram. External Influences describe factors external to the program that may drive or constrain the achievement of outcomes.
5. **Program Logic Model and Assumptions about Program Strategy:** The logic model diagram shows activities, outputs, a series of outcomes, and the relationships among these. The diagram also includes Inputs and External Influences. The logic model suggests project outcomes that are expected achievements of the Program over different time periods. This section also presents information describing testable assumptions about how activities and outputs under this program will lead to desired outcomes, including spillovers.

Figure P-1 details the relationship between these five sections.

**Figure P-1: Program Design Template**



Section 1:

## **PROGRAM INTENT, CONTEXT, DESIGN & STAKEHOLDERS**

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Announced by Governor Cuomo in his 2011 State of the State address, the Cleaner, Greener Communities (CGC) Program builds on the State's Climate Smart Communities program<sup>3</sup> to provide enhanced support for development and implementation of regional sustainability plans. These plans will help identify and then support projects to lower greenhouse gas emissions in a manner that improves community, region and statewide climate change resiliency. In addition, through the program's allocation of Regional Greenhouse Gas Initiative (RGGI) funding over a three-year period (April 1, 2012 through March 31, 2015), the CGC Program implements activities to:

- Help ensure State's ongoing, substantial investments in infrastructure are made in a manner that moves communities and New York as a whole toward a more environmentally sustainable future
- Encourage communities to use public-private partnerships and develop regional sustainable growth strategies in areas such as emission control, energy efficiency, renewable energy, low-carbon transportation, and other carbon reductions
- Emphasize smart growth activities such as creating green jobs, building green infrastructure, investing in environmental justice communities, and strengthening environmental protection.

The CGC program is providing over \$100M in funding and outreach support to communities to empower regions to create more sustainable development and encourage smart growth practices (living, operating and growing more efficiently, while using fewer resources).<sup>4</sup> The program supports common interests for New York communities and the State to be healthier, safer, more efficient and more affordable. The program seeks to achieve these goals through activities that require a balancing of economic and natural assets to meet the needs of residents both today and in the future.

CGC is one of 11 programs administered by NYSERDA that receive funding through RGGI proceeds. These RGGI-funded initiatives will complement existing programs by filling gaps from the State's System Benefit Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Renewable Portfolio Standard (RPS) and other programs. Their overarching benefits and goals include:<sup>5</sup>

- Long and short-term job creation
- Economic development
- Efficiency improvements

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<sup>3</sup> The Climate Smart Communities (CSC) Program was established in 2009 by the Department of Environmental Conservation (DEC), Department of State (DOS), Public Service Commission (PSC), and NYSERDA. It was designed to strengthen and enhance participating agencies' outreach to local governments (counties, towns, villages and cities). The CSC has developed a network of local governments across New York that have committed, by voluntarily adopting the Climate Smart Communities Pledge, to reduce their GHG emissions and to prepare for unavoidable changes in climate.

<sup>4</sup> See <http://www.nyserderda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities.aspx>

<sup>5</sup> *New York's Regional Greenhouse Gas Initiative Investment Plan (2013 Operating Plan)* – October 16, 2013,, NYSERDA.

- Increased use of renewable energy
- Pollution prevention
- Abatement of fuel use
- Annual electric savings
- Associated emission reductions

Cleaner, Greener Communities is one of seven programs in the Energy Efficiency and Other Deployment category. The other six being Green Jobs/Green New York, Residential Efficiency Services, Competitive Greenhouse Gas Reduction Pilot, Regional Economic Development and Greenhouse Gas Reduction Program, New York Green Bank and LIPA PV/Efficiency. There are four programs in the Technology and Business Development category including Transportation Research, Industrial Innovations, Clean Energy Business Development, and Advanced Clean Power. The Research category provides RGGI funding under a single program called Climate Research and Analysis.

The CGC Program has two primary components, which NYSERDA designates as Phases I and II:

1. Phase I: Development of regional sustainable growth plans (approximately \$10M effort) – NYSERDA competitively selected ten region-specific planning teams to develop a plan for each of the State’s ten Regional Economic Development Council regions.
2. Phase II: Implementation of elements of the sustainability plans (approximately \$90M) – Funding to be distributed through a Consolidated Funding Application (CFA) process in 2 or 3 rounds. NYSERDA issued the first round of \$30M through a competitive solicitation (PON 2721) on June 17, 2013. There was a small Open Enrollment component to this solicitation as well. NYSERDA received proposals on August 12, 2013 and issued award announcements on December 11, 2013.

With Phase I complete and the Phase II process ongoing, NYSERDA is focusing on projects that address specific items within the Regions’ Sustainability Plans. In addition, NYSERDA prefers project that:

- Have garnered community acceptance and approval, and those that include public-private partnerships
- Result in implementation of projects in multiple types of communities (rural, suburban and urban)
- Have elements that fall within the scope of permissible use of RGGI proceeds (energy efficiency, renewable energy, and carbon reduction) not already eligible for funding through other SBC, EEPS and/or RPS initiatives.

The first and second rounds of the CGC Program’s Phase II effort issued \$60M to fund projects within the following three categories:

- |                              |  |
|------------------------------|--|
| Category 1 (Open Enrollment) | Up to \$1M is available to communities to adopt streamlined permitting processes for photovoltaic (PV) systems and/or Electric Vehicle Supply Equipment (EVSE) or zoning and parking ordinances that specifically accommodate EVSE. Total award amounts range from \$5,000 to \$10,000 per municipality and NYSERDA will accept applications until |
|------------------------------|--|

September 30, 2015, until funds are exhausted, or until NYSERDA revises the solicitation, whichever comes first.<sup>6</sup>

Category 2 (Competitive)

Up to \$9M (\$4M through Round 1 and another \$5M in Round 2) is available for communities to create or revise comprehensive plans, including updating zoning ordinances and addressing sustainability and resiliency. Round 1 of this category closed on August 12, 2013, with awards announced for 28 comprehensive planning and zoning projects ranging from \$50K to \$400K per project. Based on lessons learned through Round 1, the following enhancements were incorporated into the recently released second round of funding, with proposals due by June 16, 2014:

- A wider variety of “planning”-type projects are included as eligible project types – both community comprehensive planning AND planning on the project level (project level is new)
- Technical assistance was added as an eligible project type

Category 3 (Competitive)

Up to \$50M (\$25M through Round 1 and another \$25M in Round 2) is available for large-scale sustainability projects contributing to community resiliency and reducing greenhouse gas emissions. Round 1 of this category closed on August 12, 2013, with awards announced for 18 projects ranging from \$1M to \$5M per project. Under Round 2, Category 3 was broken out into two separate project types as follows, with proposals due by June 16, 2014:

- Showcase or anchor construction projects that deliver one or more key elements of a defined sustainable neighborhood development effort.
- Innovative projects or programs that either: (i) facilitate, develop, or expand a private-sector business model targeting delivery of community-wide clean energy services or sustainability projects; OR (ii) utilize innovative and well integrated community engagement or aggregation strategies to accelerate community-wide demand for clean energy projects or services.

NYSERDA will issue one additional round of Phase II implementation funding through the CFA and will incorporate lessons learned from the first two rounds of funding issued.

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<sup>6</sup> If funds are not fully exhausted by September 30, 2015, NYSERDA may extend the deadline to allow for more applications to be submitted.

**1.1 STAKEHOLDERS AND ASSOCIATED CHALLENGES**

Implementation of the CGC Program requires interactions with multiple stakeholders whom, for this report, are grouped into three categories: 1) policy/vision (i.e., state policy and overarching conceptual design), 2) program implementation (including administration and evaluation/reporting), and 3) participation. As shown in

Table 1-2, many of these stakeholders are common across both CGC Program Phase I and Phase II activities.

**Table 1-1: CGC Program Stakeholder Groups**

Phase I Stakeholders	Phase II Stakeholders
<b>1. Policy/Vision (i.e., State Policy and Overarching Conceptual Design)</b>	
<ul style="list-style-type: none"> <li>• NY Governor Cuomo</li> <li>• NYS Department of Environmental Conservation – Office of Climate Change</li> <li>• Regional Economic Development Councils (REDCs)</li> <li>• NYS Regions – defined by boundaries of REDCs</li> <li>• NY Greenhouse Gas (GHG) Working Group:                             <ul style="list-style-type: none"> <li>○ NYSERDA, state and local agencies, universities, communities, other consultants</li> </ul> </li> <li>• NYSERDA CGC Staff</li> <li>• Utilities, Metropolitan Planning Organizations (MPOs)</li> </ul>	<ul style="list-style-type: none"> <li>• NY Governor Cuomo</li> <li>• Regional Economic Development Councils (REDC)</li> <li>• NYSERDA Technical Evaluation Panel (TEP)</li> <li>• Climate Smart Communities – Inter-Agency effort: NYSERDA, NYS Department of Environmental Conservation (NYSDEC), NYS Department of State (DOS), NYS Department of Transportation (DOT), NYS Department of Health (DOH), NYS Public Service Commission (PSC), Local Governments</li> <li>• NYSERDA CGC Staff</li> </ul>
<b>2. Program Implementation (including Administration and Evaluation/Reporting)</b>	
<ul style="list-style-type: none"> <li>• NYSERDA CGC Staff</li> <li>• CGC Phase I Implementation Support Contractor (TRC) and associated subcontractors</li> </ul>	<ul style="list-style-type: none"> <li>• NYSERDA CGC Staff</li> <li>• CGC Phase II Implementation Support Contractor (E&amp;E) and associated subcontractors</li> <li>• CGC Phase II Marketing Services Contractor (Eric Mower and Associates)</li> <li>• Economic Development Growth Extension (EDGE) Program – Regional Outreach Contractors (ROCs)</li> <li>• Sustainable CUNY (City University of New York’s Sustainability arm)</li> </ul>

<b>3. Participation</b>	
<ul style="list-style-type: none"> <li>• Regional Sustainable Planning Grant Awardees                             <ul style="list-style-type: none"> <li>○ Municipalities, including Climate Smart Communities (CSCs)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Regional Sustainability Planning Consortia</li> <li>• Municipalities and other entities / planning commissions having jurisdiction for permitting, land-use planning, and zoning                             <ul style="list-style-type: none"> <li>○ Municipal leaders, town supervisors, etc.</li> </ul> </li> <li>• Private organizations, including non-governmental organizations and for-profit firms, in the energy efficiency, construction, and renewables fields</li> </ul>

Challenges associated with sustainable development are many and will vary depending on the stakeholder group involved. For this report, we grouped these challenges (or barriers) into three broad categories (Zeijl-Rozema, 2011). The first deals with understanding sustainable development by means of a vision, goals and policy. This category is about getting hold of the sustainability concept and making it manageable. The second category relates to the necessary conditions and structures needed for implementing sustainable development (referred to as the “enabling environment”). Category 3 refers to the capacity of people to absorb sustainable development and to act on it (referred to as the “sustainable development consciousness”). We should not view these categories as sequential barriers. All are interrelated, dependent on each other.<sup>7</sup> These challenges are described in more detail below, followed by

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<sup>7</sup> Page 200 - 202, Regional Sustainable Development: Barriers in Practice, Findings from Policy, Citizens, Practitioners and Monitoring, Annemarie van Zeijl-Rozema, 2011. See also, NY Center for Clean Air Policy, 2003; New Zealand Department of Urban Affairs, 2008; and Rocky Mountain Institute’s Framework for Community Sustainability – Ten Ingredients for Long-term Success.

Table 1-2, which also identifies impacted stakeholders.

### **1.1.1 Complexity of Vision – Understanding Sustainable Development (including its complexity, overarching vision, and the goals and policy drivers)**

Sustainable development is a complex process that requires an integrated approach. This, in itself, is a barrier to implementation. However, policymakers can make this complexity more manageable. For sustainable development, this would require a vision of the desired future. Linked to that vision, there is a need to identify goals for achievement. Although it is important, at all levels and for all stakeholders, to have a vision and goals, such a vision and goals are often lacking in policies at various levels. In addition, although breaking complex issues up into smaller areas for action can deal with complexity, policymakers do not typically merge the results of these smaller actions to see progress towards the desired overarching future. Ideally, as has become common practice at NYSERDA, policymakers should evaluate the results from activities against explicitly documented goals and vision to assess the progress made towards achieving them. However, such is not often the case, outside of NYSERDA, for sustainability activities.

Policymakers should reflect the integrated approach needed for sustainable development in policies on sustainable development. Although sustainable development policy exists to varying degrees at the federal, state, regional and local community level, and plants the seeds for potential integration, such policies are typically confined to environmental departments and have their own niches. Projects and proposed actions operate within these niches, where policymakers can forget that sustainable development is something that needs to happen everywhere. Finally, sustainable development policies at different scale levels (i.e., federal, state, regional, local) are not explicitly linked. Policymakers should view sustainable development more as a trans-boundary process, meaning that an isolated effort that is not well connected is simply not enough.

### **1.1.2 Enabling Environment**

An enabling environment requires ready access to resources including knowledgeable staff and contractors dedicated to achievement of sustainability goals and provision of related services in an effective/ profitable manner, and availability of funding to support implementation of sustainability activities. An enabling environment helps, instead of hinders, sustainable development by providing vision, coordination and access to funding where necessary. Such an environment would connect people, encourage action, and provide structure as well as space for innovation. Although New York's collective efforts in recent years have been working towards development of a more fully integrated enabling environment that facilitates implementation of sustainable development projects, there currently remain internal tensions (mixed priorities, limited resources, etc.) within New York at the state, regional and municipal government levels that often serve to obstruct sustainable development. In addition, there is a need for more skilled staff and contractor/consultant/service provider support (i.e., more people with experience in process management of sustainable development are in short supply or currently not available due to other projects/work priorities). Another enabling environment challenge has to do with uncertainty regarding stakeholder roles. Currently, there is a lack of clarity regarding responsibilities – which stakeholder will play which role. It is important to distinguish between the different roles of stakeholders. Often, experts, scientists and policy makers have different but complementary roles to play. This last issue relates to who should take the lead – some citizens want government to take the lead, while often government is waiting for citizens and the market to take action. This impasse needs to be breached (Annemarie van Zeijl-Rozema, 2011).

### **1.1.3 Motivation (Sustainable Development Consciousness)**

Although environmental consciousness is becoming more mainstream, awareness regarding the need for and benefits associated with sustainable development is less prevalent. If people are aware of sustainable

development, they behave more sustainably. However, when people are not aware of what sustainable development means concretely and what actions they can take, they will not be motivated to act in a sustainable development-conscious manner. An important barrier towards acting with sustainable development consciousness is the lack of knowledge about concrete actions that people can take. Although an information campaign could remedy this barrier, most people would only be willing to take action if they had a clear understanding of their individual benefits and if the changes they needed to make are easy to accomplish. In other words, they need to understand what is in it for them to become more sustainable and how difficult will it be for them to take appropriate action. The benefits of behaving in a sustainable manner are likely to yield only long-term returns, and probably at a collective rather than individual level. Therefore, implementing an information campaign alone will be unlikely to result in more sustainable action.

Many people understand that sustainable development is about a balance between the environmental, social and economic domain (Annemarie van Zeijl-Rozema, 2011). However, at a concrete level, few people see the economy as playing a role in sustainable development. This means that when people are asked about concrete examples of sustainable development, economic issues are not mentioned.<sup>8</sup> Since individual's actions are mainly driven by economic considerations (what is the cost) and quality, if economic prosperity is not seen as an integral part of sustainable development, the lack of motivation and urgency to work on sustainable development can be better understood. Therefore, as long as many costs are not internalized in prices, it will be difficult to change behavior. What is important to note in the field of an information or awareness campaign is that different groups in society have different understandings and behavior towards sustainable development. This means that a blanket approach will not work.

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<sup>8</sup> Page 200 - 202, *Regional Sustainable Development: Barriers in Practice, Findings from Policy, Citizens, Practitioners and Monitoring*, Annemarie van Zeijl-Rozema, 2011.

**Table 1-2: Targeted Challenges and Stakeholder Roles**

Challenges	Stakeholders Impacted and/or Involved
<b>1. Complexity of Vision – Understanding Sustainable Development (including its complexity, overarching vision, and the goals and policy drivers)</b>	
<ul style="list-style-type: none"> <li>• Complexity of process and technical barriers</li> <li>• Need for an integrated approach</li> <li>• Lack of broadly held vision of the desired future (statutes, law/regulatory changes) and corresponding goals and success indicators                             <ul style="list-style-type: none"> <li>○ Lack of consistent vision and common goals within and across all levels and for all stakeholders</li> <li>○ Lack of integrated sustainable development approach identified and incorporated into sustainable development policies</li> </ul> </li> <li>• Lack of a roll-up across governments and agencies of disparate goals and policies to assess linkages and impacts                             <ul style="list-style-type: none"> <li>○ Multitude of sustainable development niche policies and actions embedded within various environmental departments with limited opportunity for coordination/integration across local, regional, state and national boundaries</li> </ul> </li> </ul>	<p style="text-align: center;">NY Governor’s Office                      NYS Office of Climate Change                      REDCs                      Metropolitan Planning Organizations                      NY GHG Working Group                      NYSERDA CGC Staff                      Utilities                      CGC Technical Evaluation Panel                      Regional Sustainable Planning Grant Awardees                      Climate Smart Communities                      Other Community Awardees                      CGC Implementation and Marketing Contractor(s)                      EDGE Regional Outreach Contractors                      Sustainable CUNY                      Municipal leaders, town supervisors</p>
<b>2. Enabling Environments</b>	
<ul style="list-style-type: none"> <li>• Lack of a network or infrastructure of stakeholders (e.g., decision makers, contractors, and service providers) working in a coordinated manner toward common goals                             <ul style="list-style-type: none"> <li>○ Need for clear delineation of leadership roles (government vs. citizens, vs. the marketplace, etc.)</li> <li>○ Uncertainty regarding stakeholder roles and responsibilities</li> <li>○ Lack of available or qualified staff, contractors/consultants/service providers</li> </ul> </li> <li>• Lack of funding and other resources to facilitate implementation of sustainable development projects</li> <li>• Internal tensions within each of the various governments and agencies (state, regional, municipal), such as conflicting priorities</li> </ul>	<p style="text-align: center;">REDCs                      NYSERDA CGC Staff                      Regional Sustainable Planning Grant Awardees                      Climate Smart Communities                      Other Community Awardees                      CGC Implementation and Marketing Contractor(s)                      EDGE Regional Outreach Contractors                      Sustainable CUNY                      Regional Sustainable Planning Consortia                      Municipalities, planning commission                      Private organizations (including NGOs and for-profit firms)</p>

Challenges	Stakeholders Impacted and/or Involved
<b>3. Motivation (Sustainable Development Consciousness)</b>	
<ul style="list-style-type: none"> <li>• Lack of awareness of sustainable development benefits and implications</li> <li>• Lack of knowledge of actions to take and how easy or hard it might be to take them</li> <li>• Lack of motivation and sense of urgency to work on sustainable development (recognition/rewards, public relations)                             <ul style="list-style-type: none"> <li>○ Lack of short-term results apparent for the individual stakeholder to provide sufficient incentive to justify taking action</li> </ul> </li> <li>• Abundance of externalities (e.g., GHG emissions and vulnerability to extreme weather conditions) that are not explicitly included in decision criteria</li> </ul>	<p style="text-align: center;">REDCs                      NYSEDA CGC Staff                      Regional Sustainable Planning Grant Awardees                      Climate Smart Communities                      Other Community Awardees                      CGC Implementation and Marketing Contractor(s)                      EDGE Regional Outreach Contractors                      Sustainable CUNY                      Municipalities, planning commission                      Private organizations</p>

The Rocky Mountain Institute, New York Center for Clean Air Policy, and New Zealand Department of Urban Affairs have each published reports that identify sustainable community development barriers that align quite nicely with the above three categories. These barriers are presented in Appendix A, attached to this report, and are mapped to each of the three barrier categories.

Table 1-3 summarizes the information in Tables 1-1 (stakeholders) and 1-2 (challenges). Note that all acronyms used in Table 1-3 are spelled out in full in the preceding tables.

**Table 1-3: CGC Program Stakeholder Groups and Challenges**

Stakeholders	Arenas of Involvement			Challenges		
	Policy, Vision	Implementation	Participation	Complexity of Vision	Enabling Environments	Motivation
NY Governor’s Office (Phases 1 and 2)	Y			Y		
NYS Office of Climate Change (Phase 1)	Y			Y		
NYSERDA CGC Staff (Phases 1 and 2)		Y		Y	Y	Y
NY GHG Working Group (Phase 1)	Y			Y		
State and Local Agencies						
Other Entities (Communities, Universities, Consultants)						
Utilities (Phase 1)	Y			Y		
REDCs (Phases 1 and 2)	Y			Y	Y	Y
Regional Sustainable Planning Grant Awardees (Phase 1)			Y	Y	Y	Y
Climate Smart Communities Awardees						
Other Community Awardees						
Regional Sustainability Planning Consortiums (Phase 2)			Y		Y	
Metropolitan Planning Organizations (Phase 1)	Y			Y		
Municipal departments and leaders (Phase 2)			Y	Y	Y	Y
CGC Implementation/Marketing Contractors (Phase 1&2)		Y		Y	Y	Y
CGC Technical Evaluation Panel (Phase 2) (includes four NYS departments, PSC, local governments)	Y			Y		
Sustainable CUNY (Phase 2)		Y		Y	Y	Y
NYSERDA EDGE Regional Outreach Contractors (Phase 2)		Y		Y	Y	Y
EE, RE, and construction-related firms and NGOs (Phase 2)			Y		Y	Y



Section 2:

## **PROGRAM GOALS**

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The primary goal of the CGC Program is to encourage communities to create public-private partnerships and to develop and implement regional sustainable growth strategies in such areas as emission control, energy efficiency, renewable energy, low-carbon transportation, and other carbon reductions.<sup>9</sup> The Program recognizes the need to balance economic and natural assets to meet needs of residents both today and in the future and supports common interests for New York communities and the State to be healthier, safer, more efficient and affordable.

The program is accomplishing this goal by providing funding for the development of regional sustainability plans and for implementation of projects that will significantly improve the economic development and environmental well-being of New York communities.

Goals of the CGC Program include:<sup>10</sup>

- Encouraging sustainable, smart growth practices for every New York region;
- Working together to improve the state’s environmental and economic health;
- Finding innovative ways to help citizens and businesses use fewer natural resources and reduce environmental impacts, while maintaining quality of life;
- Supporting community-wide regional planning for a more vibrant future, including:
  - Funding sustainable development and smart growth practices at the regional level;
  - Tapping the experience of public and private experts across a wide range of fields, along with community residents, to remove barriers and create integrated, sustainability plans;
  - Using these plans to help guide statewide investments and regional decision-making on land use, housing, transportation, infrastructure, energy, and environmental practices;
  - Helping regions identify and implement projects that provide the greatest opportunity to reduce greenhouse gas emissions, save energy, and deploy renewable energy options; and
  - Aligning planning team strategies with the work of their Regional Economic Development Councils (REDCs), ensuring a collaborative effort to improve the quality of life in New York’s neighborhoods, making New York communities more prosperous, and the state more economically vibrant.

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<sup>9</sup> See <http://www.nyscrda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities.aspx>

<sup>10</sup> Ibid.



Section 3:

## PROGRAM RESOURCES & ACTIVITIES

Table 3-1 identifies the funding and staff resources committed to the CGC program, as well as any external resources (funding, technical) and intangible resources supporting the program

**Table 3-1: Program Resources**

Direct Funding
<ul style="list-style-type: none"> <li>▪ RGGI planned funding ~ \$118.7M over three-year period (April 2012 – March 2015)</li> <li>▪ Includes ~ \$107M for core planning and implementation grants and \$11.5M for community outreach and support</li> <li>▪ Approximately \$4M set aside for evaluation activities (all facets, all years)</li> </ul>
Supporting Program Funding
<ul style="list-style-type: none"> <li>▪ Projects can get funding through other sources (SBC, EEPS, RPS) but not for the same measure</li> <li>▪ NYSERDA encourages leveraging and supports being a small part of a much larger project</li> </ul>
NYSERDA and Associated Staff/Outreach Resources
<ul style="list-style-type: none"> <li>▪ NYSERDA Staff (full time equivalents)</li> <li>▪ CGC Phase I Implementation Contractor – TRC Engineers, Inc. (Contract completed)</li> <li>▪ CGC Phase II Implementation Contractor – Ecology and Environment Engineering, P.C. (E&amp;E - Active contract)</li> <li>▪ CGC Phase II Marketing Contractor – Eric Mower and Associates (Active contract)</li> <li>▪ NYSERDA PONs and RFPs used to identify/select projects, and provide information along with project management support</li> </ul>
External Resources
<ul style="list-style-type: none"> <li>▪ Regional Economic Development Councils</li> <li>▪ Climate Smart Communities (CSC) Program                             <ul style="list-style-type: none"> <li>– New York State Departments of Environmental Conservation (DEC), Transportation (DOH), Health (DOH), and State (DOS), the Public Service Commission (PSC), NYSERDA and the network of local governments participating in the CSC program</li> <li>– In addition, support is provided from NYSERDA’s six technical assistance service contractors available through CSC Regional Coordinators Pilot Program</li> </ul> </li> <li>▪ Economic Development Growth Extension (EDGE) Program and NYSERDA Regional Outreach Coordinators</li> <li>▪ Potential participant cost sharing</li> <li>▪ Expertise of and time donated by engaged community and regional stakeholders</li> </ul>
Intangible Resources
<ul style="list-style-type: none"> <li>▪ NYSERDA’s credibility and relationships with key market actors, stakeholders, and policy makers</li> <li>▪ NYSERDA’s and partners’ experience with community outreach and sustainability plan development, implementation, and information dissemination</li> <li>▪ Existing awareness of NYSERDA among market actors</li> </ul>

NYSERDA’s CGC Program provides support through funding and associated project administration, for development of regional sustainability plans (Phase I) and implementation of components of those plans (Phase II) through a competitive solicitation process. As shown in Table 3-2, we can group these activities into five major categories performed across the two CGC Program phases. This table also lists key stakeholders involved in implementation of these activities. The following section outlines more details on each activity.

**Table 3-2: CGC Program Activities**

Activity	Stakeholders Involved
<b>1. Enable Development of Regional Sustainability Plans (CGC Program Phase I)</b>	
a) Provide funding for development of sustainability plans (1 for each of State’s 10 Regions) b) Develop regional GHG and sustainability metric inventories to establish regional baselines	NYSERDA, CGC Phase I Implementation Contractor (TRC), collaborations with REDCs, CSCs, public and private experts, community residents and officials
<b>2. Enable Implementation of Planning Initiatives (CGC Program Phase II – Category 2)</b>	
a) Provide funding to support creation, or revision of comprehensive plans, zoning amendments, predevelopment technical assistance for projects, and other innovative planning initiatives that will prepare a community or region for a more sustainable and resilient future	NYSERDA, CGC Phase II Implementation Contractor (E&E), municipalities, planning commissions, private organizations (NGOs and for-profit firms)
<b>3. Enable Implementation of Streamlined Permitting (CGC Program Phase II – Category 1)</b>	
a) Provide funding to entities that demonstrate they have adopted a streamlined permitting process for installing PV systems and/or electric vehicle supply equipment (EVSE) or zoning and parking ordinances that accommodate EVSE	NYSERDA, CGC Phase II Implementation Contractor (E&E), municipalities, planning commissions
<b>4. Enable Implementation of Sustainability Projects (CGC Program Phase II – Category 3)</b>	
a) Provide funding for large-scale sustainability projects that support energy efficiency, renewable energy, or carbon mitigation	NYSERDA, CGC Phase II Contractor (E&E), municipalities, planning commissions, private organizations (NGOs and for-profit firms)
<b>5. Outreach, Media Relations and Related Project/Sustainability Tracking and Reporting (CGC Phase II)</b>	
a) Develop and issue press releases announcing the availability of grant funds, hold meetings and webinars in each region via the REDCs, issue press releases in each region to highlight major milestones, develop and distribute case studies to highlight completed project successes largely funded through the Program, regular web site updates to include all status updates and changes b) Measure and report on progress toward achievement of anticipated benefits associated with CGC-funded projects, with metrics tracked by sustainability indicators	NYSERDA, CGC Phase II Implementation Contractor (E&E), NYSERDA CGC Phase II Marketing Contractor (Eric Mower and Associates), local media, Sustainable CUNY, REDCs, municipalities, planning commissions, private organizations

### 3.1 ENABLE DEVELOPMENT OF REGIONAL SUSTAINABILITY PLANS<sup>11</sup>

This CGC Program Phase I activity has been completed. For this activity, NYSERDA worked with assistance from its CGC Phase I Implementation Contractor (TRC) to provide funding for development of sustainability plans (1 for each of State's 10 Regions). This funding also supported TRC's development of regional GHG inventories to establish regional baselines.

The focus of each regional sustainability plan has been on development of sustainable growth plans and strategies specifically designed to:

- Improve energy efficiency throughout the community
- Promote renewable energy
- Result in reduced emissions of carbon
- Aid in infrastructure investment decision-making
- Inform municipal land use policies
- Provide each region with a sustainability plan that will enable them to strategically identify and prioritize projects to be funded in the implementation phase of this program

While implementing this activity, NYSERDA and TRC worked with key stakeholders within each region to engage them in the planning process. Collectively, these planning teams collaborated with public and private experts across a wide range of fields, along with community residents and officials, to lead development of regional sustainability plans that:

- Allowed each region to develop its vision, goals and objectives for a sustainable future
- Identified the activities or types of projects needed to achieve that future
- Outlined specific and tangible actions to reduce GHG emissions consistent with NYS's goal of 80% carbon reduction below 1990 levels by 2050
- Informed municipal sustainability and land use policies
- Served as basis for local government infrastructure decision making
- Guided infrastructure investment of both public and private resources
- Identified strategies for adapting to effects of climate change

It is important to emphasize the substantial stakeholder engagement that took place throughout development of CGC's Phase I regional sustainability plans. More than 2,000 people from across the state actively worked on these plans as part of working groups and thousands of others were engaged through other means including websites and public forums.

Each plan included baseline inventories of both sustainability metrics and GHG emissions, goals, targets and strategies for each of eight areas of sustainability—energy, water, transportation, land use and livable communities, waste management, economic development, governance, and climate adaptation. . A big challenge for Phase I was finding ways, other than GHG emissions, to quantify sustainability within a region or municipality and the development and measurement of those metrics. Some of the sustainability metrics were created by NYSERDA and TRC, with input provided by working groups that were formed for each region. Other metrics were developed by the regional working groups themselves. All metrics

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<sup>11</sup> NYSERDA/TRC Cleaner, Greener Communities – Program Support Contractor Statement of Work – Contract Modification # 2 – Agreement #26208, July 2013.

developed in Phase I went through a robust stakeholder working group process and form the basis for many of those being used for Phase II assessment.

Another key component of this CGC Phase I activity was the development of greenhouse gas inventories for each region. When implementing this task, TRC develop Level 1 GHG inventories for each of the regions based on state level data to give them a solid starting point. Using these Level 1 results as a jumping off place, the regions developed Level 2 GHG inventories based on guidance developed by the GHG Working Group that they participated in. The Level 2 results relied on much more granular municipal and regional level data and were subsequently used to develop region-specific targets and goals for their sustainability plans.

### **3.2 ENABLE IMPLEMENTATION OF PLANNING INITIATIVES<sup>12</sup>**

This CGC Program Phase II activity entails providing funding to support creation, or revision of comprehensive plans, zoning amendments, predevelopment technical assistance for projects, and other innovative planning initiatives that will prepare a community or region for a more sustainable and resilient future.

These efforts are being administered through NYSEDA and their Phase II Implementation Support Contractor (E&E) (through a competitive selection process) and are intended to support projects that are designed to save energy, increase use of renewable energy, reduce GHG emissions, reduce carbon emissions, avoid future emissions, or reduce future energy use.

### **3.3 ENABLE IMPLEMENTATION OF STREAMLINED PERMITTING<sup>13</sup>**

This CGC Program Phase II activity entails providing funding (through an open solicitation process) to entities that demonstrate they have adopted a streamlined permitting process for installing PV systems and/or electric vehicle supply equipment (EVSE) or zoning and parking ordinances that accommodate EVSE. NYSEDA and their Phase II Implementation Support Contractor (E&E) administer this effort, which will allow municipalities to support the development of an EVSE and PV market by processing standard installations more efficiently.

For EVSEs, jurisdictions must demonstrate that fees for EVSE installations are in line with other similar procedures in the jurisdiction and incorporate a step into the permitting process by which the building owner must notify the local electric utility of the EVSE installation. Municipalities can demonstrate this through either:

- Labeling EVSE installations as a “Minor Work” process, where applicants demonstrate they have updated their permitting process to define EVSE installations as “minor work” and that the permitting process for EVSE installations now consists of a simplified application process and permitting fees consistent with similar “minor work.” OR
- Adopting a separate Permitting Template, specific to EVSE, where applicants demonstrate they have adopted a permitting procedure based on a model permitting template created by The

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<sup>12</sup> CGC Phase II Program Management Plan - 2013/2014 Program Year 1, and CGC Phase II Program Policy Manual Version 1.3 12/11/2013.

<sup>13</sup> CGC Phase II Program Management Plan - 2013/2014 Program Year 1, and CGC Phase II Program Policy Manual Version 1.3 12/11/2013.

Alternative Fuels Data Center at the U.S. Department of Energy. Applicants must also require installers to complete an EVSE load calculation worksheet. AND EITHER

- Easing the way for further installation of EVSE by clarifying zoning ordinances, where applicants submit documentation of zoning ordinance amendments that define “electric vehicle charging station” and what type of electric vehicle charging is permissible in each zoning category or define “electric vehicle charging” as an accessory use for appropriate zoning categories. OR
- Encouraging drivers to use EVs via parking ordinances, where applicants submit documentation of parking ordinance amendments that eliminate hourly parking fees at public lots for EVs (only eligible if there are hourly fees for parking in the municipality) and that bar cars that are not charging from parking in designated EVSE-adjacent parking spaces.

For PV market development, municipalities can streamline permitting through either:

- Demonstrated adoption of a permitting procedure based on the NYS Standard Solar Permitting Form, made available on July 1, 2013. Valid for applicants located outside of Nassau County and Suffolk County. OR
- Demonstrated adoption of a permitting procedure based on the Long Island Power Authority’s (LIPA) “Solar Energy System Fast Track Permit Application,” which was also made available on July 1, 2013. Valid for applicants located within Nassau or Suffolk Counties.

### **3.4 ENABLE IMPLEMENTATION OF SUSTAINABILITY PROJECTS<sup>14</sup>**

For this CGC Program Phase II activity, NYSERDA and their Phase II Implementation Support Contractor (E&E) are providing support (through a competitive selection process) for large-scale sustainability projects that support energy efficiency, renewable energy, or carbon mitigation. Funded projects must support the following objectives:

- Regional significance and alignment with the REDC Strategic Plans
- Alignment with goals of the respective Regional Sustainability Plan
- GHG emissions reductions, energy-efficiency savings, and/or renewable energy deployment
- Resulting sustained community improvement
- Economic development and resiliency benefits
- Cost effectiveness, including cost-sharing and leveraging of funds
- Support from the municipality in which the project is located.

NYSERDA anticipates awards to cover a variety of project types including, but not limited to, land use, transportation, energy efficiency, and buildings.

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<sup>14</sup> *ibid.*

### **3.5 OUTREACH, MEDIA RELATIONS AND RELATED PROJECT/SUSTAINABILITY TRACKING AND REPORTING<sup>15</sup>**

A critical component of the CGC Program requires carefully designed and strategically implemented outreach and media relations activities and related project/sustainability tracking and reporting. The CGC Marketing Contractor, Eric Mower and Associates, will perform the outreach and media relation components of these activities. E&E will support NYSERDA by performing the project/sustainability tracking and reporting components. NYSERDA will provide leadership and administrative oversight for all of these activities.

Program outreach and media relations activities will encourage technology transfer and openness, and include the following:

- Development and issuance of press releases announcing the availability of grant funds – where E&E is working with local media, including print, radio, and television, to educate the public as each round of funding becomes available and to direct potential applicants to the CFA and PON information available online.
- Coordination of meetings/webinars in each region via the REDCs – where E&E, in collaboration with Sustainable CUNY is helping to educate potential applicants about available funding for Category 1 PV and EV applications.
- Development and issuance of press releases in each region to highlight major milestones including announcement of first round of contracts awarded, sustainable benefits achieved and jobs created, as well as providing information on other Program successes (i.e., seeking out recognition opportunities for selected projects and making recommendations on specific projects for awards).
- Development and distribution of case studies to highlight completed project successes largely funded via the Program.
- Provide regular website updates on Program status and changes.

When performing these activities, Eric Mower and Associates, in coordination with NYSERDA's Marketing and Communications staff, will be conducting market research to help uncover target audience insights, motivators and drivers, opportunities and barriers that may be associated with achieving Program objectives. Based on this research, existing CGC Program messaging will be reviewed and refined to improve effectiveness with specific stakeholders and sectors, where needed. Ongoing research will also be conducted to confirm continued effectiveness or the identify need for additional enhancements.<sup>16</sup>

Without sufficient tracking and reporting of project specific activities and progress toward achievement of the CGC Program's overarching sustainability goals, the ability to document the impacts of program activities and encourage replication will be quite limited. Therefore, NYSERDA has made it a priority to measure anticipated benefits associated with all CGC funded projects using metrics tracked by

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<sup>15</sup> CGC Phase II Program Management Plan - 2013/2014 Program Year 1, and CGC Phase II Program Policy Manual Version 1.3 12/11/2013.

<sup>16</sup> Agreement No. 18608, Task Work Order No. 5 NYSERDA Integrated Marketing Communications Program for the Cleaner, Greener Communities Program, Exhibit A: Statement of Work, Task 2.

sustainability indicators. An important role for both E&E and Eric Mower and Associates in Phase II includes developing and gathering data for metrics used to measure and promote program success.

To encourage consistent quantification methodology and adherence to goals outlined in each Regional Sustainability Plan, these sustainability indicators will be clearly communicated to all CGC Program Phase II funding recipients (making them part of each recipients' contractual requirements) and are specifically targeting components of the sustainability plan applicable to the region in which the project is located. Although not all projects will positively influence all indicators outlined in their Regional Sustainability Plan, every project must positively influence at least one sustainability indicator in its region's sustainability plan. In addition, project applicants should use sustainability indicators identified in all the Regional Sustainability Plans if they are relevant to a specific project.

Program sustainability indicators fall into three main categories: universal metrics, category-specific metrics, and ad-hoc metrics. Each of these categories are tracked from a contracted (projected) state to a final (actual) state, and to identify direct (in-project only) and indirect (including spillover) impacts. In addition, E&E will track and report on a number of overarching CGC Program-wide performance metrics. Following is more information on each of these metrics categories:

**Universal Metrics** – These metrics must be universal to the CGC Program and address CGC Program goals. The CGC Program will report all required metrics for each project and roll up these metrics to provide program-wide data at the regional and state level. These required metrics shall include the following: implementation jobs (full-time employment), permanent jobs (full-time employment), cost savings/year (\$), NYSERDA CGC investment (\$), leveraged funds (\$), energy savings/year (MMBTU), and GHG savings/year (metric tons of carbon dioxide equivalent)

**Category-Specific Metrics** – Each project must provide data to address metrics that are specific to the category or categories of measures the project will include. Projects that include specific measures (i.e., PV installations) will be required to submit metric data specific to each measure (i.e., kW capacity installed and annual kWh generated). The CGC Program will report all category metrics for each project and roll up these metrics to provide program-wide data at the regional and state level. Examples of common category-specific metrics include:

- Energy: installed solar/wind/geothermal capacity (megawatts [MW]), bio-fuel created (MMBTU), renewable energy generation (megawatt hours [MWh]/MMBTU), fossil fuel displaced (MMBTU), number of new LEED-certified buildings
- Transportation/Mobility: VMT reduction (miles), mode share: non-motorized, transit/carpool, single occupancy vehicles (%), use of electric vehicles (MWh)
- Waste Management: municipal solid waste (MSW) and construction debris diverted (tons), organic MSW composted or digested (tons), landfill gas captured (MMBTU), solid waste diverted
- Water Management: sewage sludge composted or digested, methane gas reduced
- Agriculture: decrease in GHG emissions from farm activities, acres of farm land increased, sales of agricultural products increased
- Resilience / Adaptation: number of sanitary sewer overflows reduced / year, miles of transport routes, electric circuits, rail, and other critical infrastructure threatened by sea level rise in the next 50/100 years, economic value of property vulnerable to storm surges and flooding

- Other / Programmatic: number of new Climate Smart Communities.

**Ad Hoc Metrics** – Projects may choose to add additional metrics to gauge the specific success of their projects. Applicants will identify these ad hoc metrics, including the calculation, variables, and data sources, in a metrics addendum to ensure common understanding. Applicants will work with E&E to establish a baseline and provide final calculation. Since ad hoc metrics are specific to individual projects, the CGC Program will not include them within program-level calculations.

**CGC Program Performance Metrics** – In addition to collecting and accumulating the above metrics, E&E will conduct additional analysis of collected and summarized data to document regional and program-wide metrics, with supporting documentation for assumptions. These metrics cannot be defined on the project level but can be summarized at the regional or program level to track the impact of the program within the regions. These metrics shall include: energy consumption per capita, housing and transportation index, VMT per capita, per capita land consumption, GHG emissions (total REDC-wide), and percent of work commute made by transit and non-motorized modes. The benefits must be refined and documented in an interim report and finalized in a final report at conclusion of project using the calculation methodologies outlined in the Phase I Regional Sustainability Plans.

Similarly, throughout the development and implementation phases of the CGC Program’s Integrated Marketing and Communications Plan, Eric Mower and Associates will identify quantifiable measures of success (i.e. marketing effectiveness and targeted audience/sector responsiveness to integrated marketing communications program) and follow a process for measuring and reporting results.<sup>17</sup>

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<sup>17</sup> Agreement No. 18608, Task Work Order No. 5 NYSERDA Integrated Marketing Communications Program for the Cleaner, Greener Communities Program, Exhibit A: Statement of Work, Task 9.

## **PROGRAM OUTPUTS, OUTCOMES & EXTERNAL INFLUENCES**

### **4.1 PROGRAM OUTPUTS**

Program outputs, usually contracted deliverables, are the immediate results of program activities. CGC Program activities support development of regional sustainability plans and implementation of components of those plans, along with strategic outreach, tracking and reporting of results. Table 4-1 shows the outputs and indicators that are associated with each of the CGC Program’s five activity areas.

**Table 4-1: Outputs and Indicators Associated with CGC Program Activities**

<b>Outputs</b>	<b>Indicators</b>	<b>Data Sources and Potential Collection Approaches</b>
<b>1. Enable Development of Regional Sustainability Plans (CGC Program Phase I)</b>		
Sustainability Plans completed	Number of completed sustainability plans, key plan findings, project recommendations, measurement metrics by topic area and region aligned with REDC plans and CGC Program/project performance metric categories (i.e., implementation jobs, permanent jobs, cost savings, NYSERDA investment, leveraged investment, energy savings, GHG savings)	Program records Document review NYSERDA Program Manager / TRC contractor roll-up
Regional GHG inventories developed	Key findings from regional GHG inventories, by topic area and region	Program records Document review NYSERDA Program Manager / TRC contractor roll-up
Stakeholders engaged (including community residents and private/public expertise across a wide range of fields)	Number and types of stakeholders engaged and private/public expertise tapped (local, regional, state government agencies, policy makers, midstream market actors, general public, etc.), by type/field and region	Program records Document review NYSERDA program manager / TRC contractor roll-up

Outputs	Indicators	Data Sources and Potential Collection Approaches
<b>2. Enable Implementation of Planning Initiatives (CGC Program Phase II – Category 2)</b>		
Comprehensive plans created or revised	Number of plans created/revised, details regarding focus of specific components or areas being addressed (community resiliency, other sustainability or smart growth efforts) by location	Program records Document review NYSERDA Program Manager / E&E contractor roll-up
Zoning ordinances updated (amended)	Number of ordinances updated, details regarding focus of specific components or areas being addressed (community resiliency, other sustainability or smart growth efforts, etc.) by location	Program records Document review NYSERDA Program Manager / E&E contractor roll-up
Predevelopment technical assistance for projects provided	Number and types of projects supported through predevelopment technical assistance provided, details regarding focus of specific assistance or areas being addressed (community resiliency, other sustainability or smart growth efforts, etc.) by location	Program records Document review NYSERDA Program Manager / E&E contractor roll-up
Project-specific performance metrics achieved	Actual verified (“final direct” and “final indirect”) data on contractually agreed upon Required Performance Metrics (RPMs), Sector Common Metrics (SCMs), and Ad Hoc Metrics  For planning-type projects - Improved estimates of projected near, mid and long term impacts based on actual plans at the conclusion of grants	Program records Document review Proponent-provided (3 <sup>rd</sup> party verified) data NYSERDA Program Manager / E&E contractor roll-up
Stakeholders engaged	Number and types of stakeholders engaged (local, regional, state government agencies, policy makers, midstream market actors, general public, etc.), by type and location	Program records Document review NYSERDA Program Manager / Eric Mower and Associates roll-up

Outputs	Indicators	Data Sources and Potential Collection Approaches
<b>3. Enable Implementation of Streamlined Permitting (CGC Program Phase II – Category 1)</b>		
Streamlined permitting processes for installing PV systems developed	Number and types of permitting processes developed, by type and location	Program records Document review NYSERDA Program Manager / E&E contractor roll-up
Streamlined permitting processes for installing EVSE or zoning and parking ordinances developed	Number and types of permitting processes, zoning and parking ordinances developed, by type and location	Program records Document review Period survey of grantees, post project, requesting # of PV and EVSE permits issued NYSERDA Program Manager / E&E contractor roll-up
Stakeholders engaged	Number and types of stakeholders engaged (local, regional, state government agencies, policy makers, midstream market actors, general public, environmental justice communities, etc.), by type and location	Program records Document review NYSERDA Program Manager / Eric Mower and Associates roll-up
Communities apply to take advantage of NYSERDA’s PV and EVSE zoning and ordinance grants	Number of communities that apply, by type and location	Program records Document review NYSERDA Program Manager / Eric Mower and Associates roll-up

Outputs	Indicators	Data Sources and Potential Collection Approaches
<b>4. Enable Implementation of Sustainability Projects (CGC Program Phase II – Category 3)</b>		
Sustainability projects implemented	Number and types of projects implemented by category (energy efficiency, renewable energy, carbon mitigation, etc.), objectives supported by type and location	Program records Document review NYSERDA Program Manager / E&E contractor roll-up
Project-specific and Program-wide performance metrics achieved	For individual projects, actual verified (“final direct” and “final indirect”) data on contractually agreed upon Required Performance Metrics (RPMs), Sector Common Metrics (SCMs), and Ad Hoc Metrics  To demonstrate progress against RGGI requirements, rolled up and standardized estimates of RPMs and SCMs across all projects	Program records Document review Proponent-provided (3 <sup>rd</sup> party verified) data NYSERDA Program Manager / E&E contractor roll-up
Stakeholders engaged	Number and types of stakeholders engaged (local, regional, state government agencies, policy makers, midstream market actors, general public, etc.), by type and project	Program records Document review NYSERDA Program Manager / Eric Mower and Associates roll-up

Outputs	Indicators	Data Sources and Potential Collection Approaches
<b>5. Outreach, Media Relations and Related Project/Sustainability Tracking and Reporting (CGC Phase II)</b>		
Outreach and media relations events held	Number and types of events (press releases, meetings/webinars updates) by type, project and region Media reach and frequency, by audience segment Total impressions from all media and marketing	Program records Document review Individual outreach statistics NYSERDA Program Manager / Eric Mower and Associates roll-up
Program Reach	Number of Applications, by category, by REDC Amount of funding requested Program mapping of projects by type and REDC.	CFA Application Materials Awarded project information E&E metrics and progress reports
Case studies developed and distributed	Number of case studies developed, by type, project and region Number and types of distribution channels used and stakeholders reached	Program records Document review NYSERDA Program Manager / Eric Mower and Associates roll-up
Program progress reports and status updates completed with associated project benefits documented	Number and types of reports and status updates completed Project benefits achieved, by type and metric category, region and statewide Progress towards goal achievement based on results from tracked metrics	Program records Document review E&E metrics and progress reports
Website updates on program status and changes made	Number, type and frequency of updates made Number of hits/impressions achieved	Program records Document review NYSERDA Program Manager Program Manager / Eric Mower and Associates roll-up

## **4.2 PROGRAM OUTCOMES**

Table 4-2 identifies the short-term outcomes (1-5 years) resulting from the outputs achieved through the CGC's five different program activities.

Table 4-2 and

Table 4-3 detail the CGC Programs' expected achievements (outcomes), as well as observable indicators (metrics) that would signify the presence of these achievements. In addition, these tables show the data sources and potential collection approaches that an evaluation effort might undertake to determine the achievement of expected outcomes.

Through successful and strategic implementation of the combined CGC Program activities, it is anticipated that significant progress will be made in overcoming many of the Complexity of Vision, Enabling Environment, and Motivation barriers described in Section 1 above. Table 4-2 identifies the short-term outcomes (1-5 years) resulting from the outputs achieved through the CGC's five different program activities.

**Table 4-2: Short-Term Outcomes, Indicators, and Potential Data Sources by Activity Area**

Short Term Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Enable Development of Regional Sustainability Plans (CGC Program Phase I)</b>		
Complexity of Vision barriers overcome: - Process and technical barriers reduced - Shared vision of desired future more exists among stakeholders along with shared understanding of goals and success indicators - Disparate goals and policies across governments and agencies reduced	Change in number of policy stakeholders sharing common vision of desired sustainability future (statutes, law/regulatory changes) and corresponding goals and success indicators, by stakeholder type and geography (local, regional, state)  Change in the level of integration of sustainable development approaches identified and incorporated into sustainable development policies (by topic area and geography)  Change in the level of disparate goals and policies across governments and agencies	Program/project documents E&E metrics roll-up Process interviews with relevant participant & non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured

Short Term Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Enable Implementation of Planning Initiatives (CGC Program Phase II – Category 2)</b>		
Policies enacted that will contribute to helping regions impact regional sustainability indicators identified in their local plans	Change in the number of policies enacted, by type and location	Program/project documents E&E metrics roll-up
Complexity of Vision barriers overcome: - Process and technical barriers reduced - Shared vision of desired future more exists among stakeholders along with shared understanding of goals and success indicators - Disparate goals and policies across governments and agencies reduced	Change in number of policy stakeholders sharing common vision of desired sustainability future (statutes, law/regulatory changes) and corresponding goals and success indicators, by stakeholder type and geography (local, regional, state)  Change in the level of integration of sustainable development approaches identified and incorporated into sustainable development policies (by topic area and geography)  Change in the level of disparate goals and policies across governments and agencies	Program/project documents E&E metrics roll-up Process interviews with relevant participant & non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured
Enabling Environment barriers overcome: - Increased network and infrastructure of stakeholders working in coordinated manner toward common goals - Increased availability of funding and other resources to facilitate implementation of sustainable development projects - Internal tensions within various governments and agencies reduced	Change in number and effectiveness of stakeholder networks and infrastructure and associated coordinated activities, common goals – by topic area and geography  Change in levels of uncertainty regarding stakeholder roles and responsibilities – by topic area and geography  Change in availability of qualified staff, contractors/consultants/service providers – by topic area and geography  Change in availability of funding and other resources – by topic area and geography  Change in the level of internal tensions within local, regional and state governments and agencies – by government/agency type and geography	Program/project documents E&E metrics roll-up Process interviews with relevant participant & non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured

Short Term Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Enable Implementation of Streamlined Permitting (CGC Program Phase II – Category 1)</b>		
Enabling Environment barriers overcome: - Uncertainty regarding stakeholder roles and responsibilities reduced	Change in levels of uncertainty regarding stakeholder roles and responsibilities – by topic area and geography	Program/project documents E&E metrics roll-up Process interviews with relevant participant & non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured
PV Systems and EVSE installed	Change in number of PV systems and EVSE installed – by size, type and geography  Change in the amount of installed capacity from PV systems – by size, type and geography	Impact evaluation on installed PV systems and EVSE utilization – requires initial baseline assessments from which changes can be measured
Increased MW from PV and EVSE utilization	Change in utilization of EVSE – by size, type and geography	Impact evaluation on installed PV systems and EVSE utilization – requires initial baseline assessments from which changes can be measured

Short Term Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Enable Implementation of Sustainability Projects (CGC Program Phase II – Category 3)</b>		
Increased and comprehensive GHG emission reductions, energy efficiency savings and renewable energy deployment within and across communities and regions	<p>Change in the amount of GHG reductions, energy efficiency savings and renewable energy systems deployed</p> <p>Change in the comprehensiveness of benefits obtained within and across communities and regions, by benefit type per community and within/across communities and regions (e.t., sustainable development, smart growth practices, etc.)</p>	<p>Program/project documents</p> <p>E&amp;E metrics roll-up</p> <p>Impact evaluation</p>
Private/public partnerships created in a manner that aligns with REDC and Regional Sustainability Plan goals	<p>Number and types of partnerships, by location and region</p> <p>REDC and Regional Sustainability Plan goals in alignment with work being done by partnerships, by region and goal</p>	<p>Program/project documents</p> <p>E&amp;E metrics roll-up</p> <p>Process interviews with relevant participants</p>
Projects are advancing goals of the Regional Sustainability Plans in a manner that prioritizes and pursues projects with greatest opportunities for benefits	<p>Tangible changes in RSP indicators identified in each Regional Sustainability Plan, by type and geography</p> <p>Change in economic development, resiliency and sustainability benefits within individual communities and specific regions</p> <p>Change in focus on prioritizing and pursuing projects with greatest benefits</p>	<p>Program/project documents</p> <p>E&amp;E metrics roll-up</p> <p>Impact evaluation</p> <p>Process interviews with relevant participant &amp; non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured</p>
Motivation barriers overcome	<p>Change in level of support being observed within the municipalities where projects are located</p> <p>Change in awareness of sustainable development benefits and implications – within participating and non-participating communities and at regional/state levels</p> <p>Change in level of knowledge regarding actions to take and how to take them – by action area and geography</p> <p>Change in level of motivation (sense of urgency) to work on sustainable development objectives – by action area and geography</p>	<p>Program/project documents</p> <p>Eric Mower &amp; Associates metrics roll-up</p> <p>Process interviews with relevant participant &amp; non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured</p>

Short Term Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Outreach, Media Relations and Related Project/Sustainability Tracking and Reporting (CGC Phase II)</b>		
Motivation barriers overcome	<p>Change in level of support being observed within the municipalities where projects are located</p> <p>Change in awareness of sustainable development benefits and implications – within participating and non-participating communities and at regional/state levels</p> <p>Change in level of knowledge regarding actions to take and how to take them – by action area and geography</p> <p>Change in level of motivation (sense of urgency) to work on sustainable development objectives – by action area and geography</p>	<p>Program/project documents</p> <p>Eric Mower &amp; Associates metrics roll-up</p> <p>Process interviews with relevant participant &amp; non-participating policy stakeholders – requires initial baseline assessments from which changes can be measured</p>

Table 4-3 identifies the intermediate (6-10 years) and longer-term (11+ years) outcomes anticipated because of the CGC's program activities. Recommendations regarding measurement indicators and potential data collection sources/approaches are also be presented in this table. For many of these, measurement would look at cumulative annual growth, trends up or down, and trend lines for the relevant periods.

**Table 4-3: Intermediate/Long-Term Outcomes, Indicators and Potential Data Sources**

Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Intermediate Outcomes (6 - 10 years)</b>		
Innovative ways found to help citizens and businesses use fewer natural resources and reduce environmental impacts, while maintaining quality of life	Quantification of sustainable growth strategy innovations, by type (e.g., emission control, energy efficiency, renewable energy, low carbon transportation, etc.) and associated benefit, by community, region and state-wide	Program/project documents E&E metrics roll-up Impact evaluation, including spillover assessment
Projects being replicated in communities and within regions across the state without program intervention	Number and types of projects being implemented without program intervention, by type, town and region  Verification that program funded Plans had a causal effect on these broader investments and regional decision-making on land-use, housing, transportation, infrastructure, energy and environmental practices	Program/project documents E&E metrics roll-up Impact evaluation, including spillover assessment with added focus on attribution
Economic development, resiliency and sustainability benefits being achieved more broadly across the state, including within environmental justice communities	Change in economic development, resiliency and sustainability benefits within individual communities and specific regions, by community and regional/statewide benefit types (green jobs creation, infrastructure building, environmental protections, etc.)  Extent to which collaboration has played a role in these changes  Benefit/cost ratio greater than or equal to 1.0 (where upfront costs of short-term and intermediate program activities, and ongoing sustainability investments are equal to or less than cumulative present value of the benefits associated with those investments)	Program/project documents E&E metrics roll-up Impact evaluation, including spillover assessment Process evaluation to assess role of collaboration  Economic (cost/benefit) analyses of impacts from investment

Outcomes	Indicators	Data Sources and Potential Collection Approaches
<b>Longer-Term Outcomes (11+ years)</b>		
Sustainable, smart growth practices encouraged for every New York region	Change in awareness across all New York regions regarding the benefits of sustainable, smart growth practices	Market assessment, measuring changes from baseline
Communities and New York as a whole move toward more environmentally sustainable future	Change in the number of communities that have implemented projects and taken actions toward greater environmental sustainability, by community as percentage of total state, and combined impacts of associated actions	Market Assessment, measuring changes from baseline Impact evaluation, including both participant and non-participant spillover
Economic and natural assets balanced to meet needs of residents both today and in the future	Benefit/cost ratio greater than or equal to 1.0 (where upfront costs and ongoing sustainability investments are equal to or less than cumulative present value of the benefits associated with those investments)  New York citizen and business financial impacts (taxes, fees, etc.) are not overly burdensome	Economic (cost/benefit) analyses of impacts from investment  Customer/Business opinion surveys
Community, region and statewide climate resiliency improved – Healthier, safer, more efficient and affordable state (Greenhouse Gas Reductions, Energy, Economic and Environmental benefits)	Change in community, region and statewide climate resiliency, by topic area and geography	Impact and market assessments – measured as change from baseline values

### 4.3 EXTERNAL INFLUENCES

The remainder of this section identifies potential influences, external to the Program that may affect the CGC outcomes and over which NYSERDA programs have no direct control

Changes in political priorities

- Perceptions of energy and global climate change issues
- State and local action and requirements and associated local legislative and policy uncertainty
  - CGC projects may require local legislative or zoning approvals, adoption of proposals plans by public consent etc.
- State policy achievement
  - For example, impacts of CGC policy to encourage electric drive vehicles will directly depend on New York’s achievements under the renewable portfolio standard, as well as efforts to improve the grid and supply clean electricity downstate
- Federal energy policies including energy related tax credits and potential future climate action / carbon mitigation requirements

Weather and associated impacts on community, regional, state and national actions

Broad economic conditions that affect capital investment in energy, environmental and long-term sustainable infrastructure improvements

- Changing economic conditions

- Energy prices and regulations (changes in fuel and energy prices and rate structures)
- Sources of funding
- Activities of public and institutional purchasers and projects

Costs, performance and availability of more effective technologies

Competition

- Competition among target market actors and contractors that affect willingness to promote and pursue sustainability projects

Activities of non-NYSERDA funded public and institutional sustainability programs

- Other state, regional and national programs



Section 5:

## **LOGIC DIAGRAM**

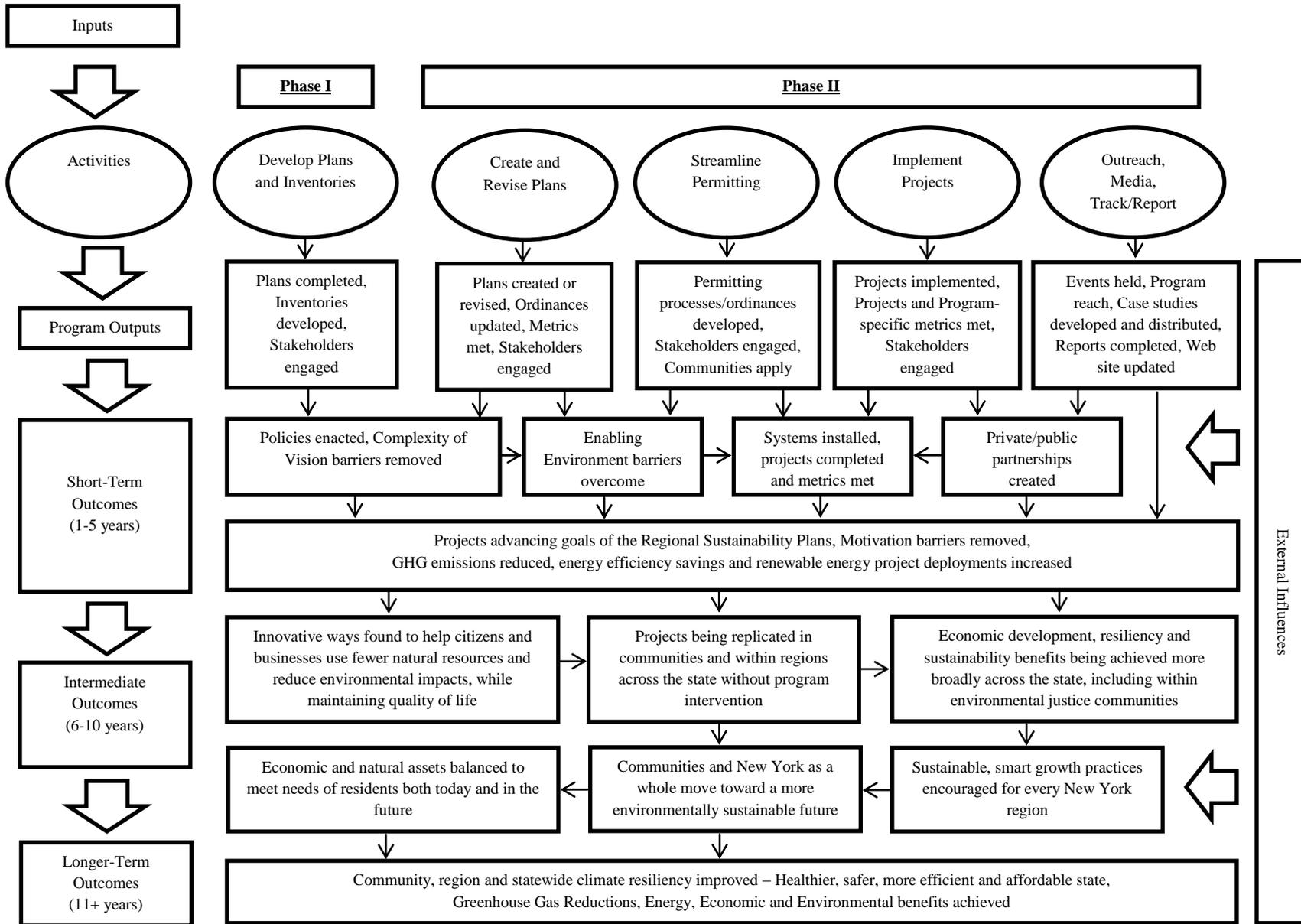
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### **5.1 LOGIC MODEL DIAGRAM**

This section presents NYSERDA's CGC Program logic model diagram (Figure 5-1) showing activities, outputs, a series of outcomes, and the relationships among these. The diagram also includes Inputs and External Influences with no detail, since that information is included in Section 4. The diagram presents information provided in Sections 2, 3 and 4 at a higher level of abstraction, aggregating in order to tell the Program's "performance story" in just one page.

The logic model suggests project outcomes that are expected achievements of the Program over different time periods. These are described in more detail in the tables in Section 4.

Figure 5-1: Cleaner, Greener Communities Program Logic Diagram



## 5.2 ASSUMPTIONS ABOUT STRATEGIES

The remainder of this section describes testable hypotheses (assumptions) about the Program to be explored in the evaluations. These are key evaluation questions about how program activities and outputs under this initiative will lead to desired near, intermediate, and longer-term outcomes.

### Short Term:

1. To what extent have the Sustainability Plans developed through this CGC Program resulted in the enactment of new enabling policies and procedures?
2. Have the regional Sustainability Plans and municipal-level comprehensive plan and zoning amendments led to the removal of Vision barriers and the overcoming of Environmental barriers?
3. Has the adoption of municipal-level streamlined permitting processes and ordinances led to installation of new PV systems and EVSEs?
4. Are combined CGC program activities leading to the advancement of key Regional Sustainability Plan goals?
5. To what extent are program activities leading to the creation and utilization of new private/public partnerships?
6. Has the installation of PV systems, EVSE and implementation of other program-supported projects led to new documentable GHG emission reductions, energy efficiency savings and renewable energy project deployments?
7. To what extent have the Outreach and Media-related activities assisted in overcoming key Vision, Environmental and Motivational barriers?

### Intermediate Term and Longer Term:

1. Are results from immediate CGC program-supported activities leading to replication of projects within communities and regions across the state without program intervention?
2. To what extent are results from program activities identifying new, innovative ways to use fewer natural resources and reduce environmental impacts while maintaining quality of life?
3. Have the benefits of program activities been promoted sufficiently to yield increased awareness and achievement more broadly across the state, including within environmental justice communities?
4. Are all regions in New York aware of and being encouraged to implement sustainable, smart growth practices, and to what extent are such practices helping move New York's communities to a more environmentally sustainable future?
5. Are the short and intermediate impacts from CGC Program activities keeping a balance between economic and natural assets for the State's residents?
6. To what extent have CGC Program activities, and their associated in-program and replicated outside-of-program impacts contributed to a more climate resilient and healthier, safer, more efficient and affordable state, with resulting greenhouse gas reductions and energy, economic and environmental benefits achieved?



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- Cleaner, Greener Communities Program – NYSERDA website
  - [www.nyserderda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communit.es.aspx](http://www.nyserderda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communit.es.aspx)
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- Regional Sustainability Plans – NYSERDA website (10 Separate Regional Plans)
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**Framework for Community Sustainability – Ten Ingredients for Long-term Success, Rocky Mountain Institute**

1. Lack of collaboration among leaders of all community sectors and people from all walks of life  
*(Category 2 – Enabling Environment)*
  - Lack of common understanding, skills and support for solutions
2. Lack of developed and publicized goals or vision statement setting forth economic, environmental and community goals  
*(Category 1 – Complexity of Vision)*
  - Allows eventual alignment among businesses and non-profits to mold their respective mission statements to make them compatible with the community’s vision and plan
3. Lack of developed and published indicators of progress toward each goal in the vision statement  
*(Category 1 – Complexity of Vision)*
  - lack of indicators/methods to measure performance and provide factual basis for decisions and means to uphold programs despite changes in leadership
4. Lack of developed and adopted decision-making tools and methods (workshops, matrices, criteria/indicators) to ensure consideration of all elements of the vision statement  
*(Category 1 – Complexity of Vision)*
  - Lack of understanding of complex issues and the basis upon which decisions will be made
5. Lack of community entrepreneurship  
*(Category 2 – Enabling Environment)*
6. Lack of organized business network to share information, ideas and techniques  
*(Category 2 – Enabling Environment)*
  - Lack of influence over local government to eliminate barriers and to educate the public
7. Lack of established community sustainability plan or better integration of sustainability into existing plans  
*(Category 3 – Motivation)*
  - Lack of adoption of specific objective, action items, policies, guidelines, and regulations that can take the form of a formal plan
8. Lack of availability and use of continuous learning community  
*(Category 3 – Motivation)*
  - Need to revisit major decisions and actions at predetermined dates following implementation, to determine if actions achieve intended objectives, or if new actions/adaptations are needed
9. Lack of leadership and civic capacity (training, events, organizations) where significant local resources are committed to help existing leaders ( and nurture new leaders) understand new ideas and create ways of making decisions  
*(Category 2 – Enabling Environment)*
  - Lack of creative advice and support from planners and managers who have experience with new ideas and rapid change
10. Lack of action being taken, even after planning has been completed and vision statements/projects have been identified for implementation.  
*(Category 3 – Motivation)*

**Recommendations to Governor Pataki for Reducing New York State Greenhouse Gas Emissions, by Center for Clean Air Policy in collaboration with the NY Greenhouse Gas Task Force, April 2003**

1. Lack of policy and economic incentives for CHP and other clean distributed generation resources  
(*Category 2 – Enabling Environment*)
2. High initial cost and implementation barriers (efficiency measures, renewables, etc.)  
(*Category 2 – Enabling Environment*)
3. Uncounted environmental benefits  
(*Category 2 – Enabling Environment*)
4. Interconnection problems, utility rate decoupling  
(*Category 2 – Enabling Environment*)
5. Lack of incentives to reduce GHG emissions  
(*Category 2 – Enabling Environment*)
  - Resources and assistance
  - Public relations
  - Stakeholder participation
  - Statutes and changes in federal laws
  - Recognition and awards
6. Regulatory barriers
7. (*Category 1 – Complexity of Vision*)
8. Lack of knowledge (education and training)\  
(*Category 3 – Motivation*)
9. Permitting barriers
10. (*Category 1 – Complexity of Vision*)
11. Technical barriers
12. (*Category 1 – Complexity of Vision*)
13. Administrative barriers  
(*Category 1 – Complexity of Vision*)

**Barriers and implementation difficulties in sustainable urban development in New Zealand, New Zealand Department of Urban Affairs – Building Sustainable Urban Communities, September 2008**

1. Capacity and capability issues in all levels of government and the development industry  
(*Category 2 – Enabling Environment*)
  - Lack of skills and experience
2. Limited coordination of national, regional and local planning and implementation  
(*Category 1 – Complexity of Vision*)
  - Central, regional and local government have different roles
  - Each form of government operates at a different scale
  - Complementary planning, programming (including budgeting) and implementation processes are needed to make sure these are aligned
3. Ineffective integration between land use and transport planning; and transport, utility and other service providers  
(*Category 1 – Complexity of Vision*)
  - Sustainable urban areas rely on effective infrastructure and access to services to support economic, environmental, social and cultural wellbeing
  - Infrastructure and service providers include: utility operators, local and/or central government

- Providers have their own priorities, asset management requirement, timing issues and investment decision points
  - All must be actively involved in planning and developing priorities and projects
4. Difficulties in funding projects  
**(Category 2 – Enabling Environment)**
- For design and payment for infrastructure
  - Start-up capital
  - Who pays, how & when
  - Ways to allocate costs of public good elements of development
5. Difficulties assembling useful parcels of land, or in buying and/or insuring appropriate development of strategic sites  
**(Category 3 – Motivation)**
- Acquiring sites or getting agreement of all owners to their redevelopment can be difficult
6. Length and nature of planning and development control processes  
**(Category 3 – Motivation)**
- Key factor in the economics of development projects is being unable to control costs due to planning uncertainties and process delays
  - Developer uncertainty is increased by the length of some processes and the number of chances for opponents to re-litigate decisions during the planning and development control process
7. Limits to achieving social outcomes and public benefits through market mechanisms  
**(Category 3 – Motivation)**
- Difficult for investors to profit from improvements and reinvest in further development that provides both public and private benefits
  - In other areas, existing development is largely piecemeal and too small to give enough leverage to achieve wider public benefits
8. Public resistance  
**(Category 3 – Motivation)**
9. Many of these barriers and difficulties are likely to be worse in complex or strategically important projects. Complexity may also occur where projects are next to another local authority area or span local authority boundaries  
**(Category 1 – Complexity of Vision)**