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Proposal for Services

Beacon, New York

ICLEI - Local Governments for Sustainability USA

April 23, 2018

Introduction

The City of Beacon, New York, is committed to addressing climate change to ensure a healthy, resilient community for its 14,289 residents. The City's 2017 Comprehensive Plan Update incorporated sustainability considerations, particularly to encourage smart growth development practices that support a walkable, bikeable downtown and usher in community solar and increased solid waste diversion. During the 2012 – 2018 time period, Beacon prioritized upgrades to improve resilience and efficiency of City-owned facilities and infrastructure. Improvements recently completed include the conversion of all street lights in the city to LED and a project with BQ Energy to construct and install a solar farm on the former landfill south of the sanitation facility. The City is now striving to fulfill commitments to achieve designation under New York Department of Environmental Conservation's Climate Smart Communities program.

Beacon's commitment to community engagement led to the formation of the Conservation Action Committee (CAC). The CAC is charged with advising the Planning Board and the City Council on matters affecting the preservation, development and use of the natural and man-made features in the City. The Committee advises on major environmental threats and maintains an inventory of natural resources and an index of all open spaces. The Committee consists of nine members appointed for a two-year term.

Beacon desires to create the City's first greenhouse gas (GHG) emissions inventory in order to advance its Climate Smart Communities goals while establishing a baseline of emissions necessary to establishing data-driven reduction targets and track progress over time. The City recognizes the importance of quantifying the GHG reduction potential and feasibility of the actions recommended by the CAC and to quantify the many steps toward climate action to date.

To support its climate action vision and help solidify Beacon as a sustainability leader in the Hudson Valley the City is joining the ICLEI USA network. Through ICLEI membership, the City will gain access to ICLEI's GHG and climate action methodologies, resources, and technical support. To supplement CAC volunteer and staff capacity building activities available via membership, the City has requested a proposal of options for ICLEI to provide deep-dive technical services, particular to complete a local government operations GHG inventory and community-scale GHG inventory during 2019.

Task 1: ICLEI completes the Community-scale GHG inventory

Task 2: ICLEI completes the local government operations GHG inventory

Task 3: ICLEI produces final GHG inventory report and presents results to Beacon City Council and additional stakeholder groups, such as the CAC, as requested (optional)

Task 4: ICLEI provides reporting services to global climate reporting platform, such as CDP (*optional*)

These tasks will be delivered at a discounted service rate following Beacon joining ICLEI as a full member.

Task 1: Community-scale GHG Inventory

~~Greenhouse gas (GHG) inventories provide the foundation for performance management of climate~~ disrupting gases that result from the activities of both the operations of municipal government as well as the wider community. While an important goal on its own, a comprehensive GHG management strategy should take advantage of the opportunity to address other performance indicators for a community. Inefficient buildings and transportation systems, waste generation, and other sources of emissions also represent unnecessary expenditures by both the government and from community stakeholders, undermining the economic resilience of the community as a whole.

Often GHG inventories are created in isolation with a goal of simply gathering data and executing calculations. While this approach will provide a total emissions footprint, it will not position a community in the best way to develop a climate action plan and subsequently monitor progress towards an emissions reduction target. ICLEI USA is pleased to provide a proposal to develop a local-government operations and a community-scale inventory for Beacon and equip the community with the lessons we have developed in nearly 30 years of leadership on local climate action and sustainability.

Scoping

The U.S. Community Protocol for Emissions Inventories (USCP) recommends that an inventory begin with a scoping exercise. This may be as simple as an interview with key staff and may also include engagement with community stakeholders to place the effort in the larger context of related sustainability and resilience goals. ICLEI will use input from the scoping exercise to guide the approach to data collection in order to best inform policy and action decisions that may be included in a subsequent climate action plan. For example, in order to address equity in a climate action plan, it may be useful to gather information of the cost of energy use for members of the community so that future actions can prioritize those actions that would provide the most relief for low-income community members.

This is one example of the kind of approach that ICLEI would take, depending on the results of the scoping exercise. Connections to urban forestry, waste reduction goals, or encouraging active transportation are other examples.

ICLEI USA is the architect and sole provider of the ClearPath software and developed both the USCP, the Local Government Operations Protocol and co-developed the Global Protocol for Community Scale GHG emissions accounting (GPC), on which the software is built. GHG protocols provide authoritative guidance for communities to account for carbon pollution accurately and consistently.

Data Collection

The most time-intensive task in developing a GHG inventory is the data collection phase. This is also a critical component to ensuring a reliable base for long-term performance management through subsequent re-inventories and analysis. ICLEI has performed some initial research to scope this effort and understand the local context and possible sources of data.

Data collection for the community will rely partially on past data-collection efforts, including City of Beacon energy audit or scoping activities associated with Climate Smart Communities applications. ICLEI has reviewed activities that are probable to include in the inventory and likely sources for that data.

Inventory Sector	Anticipated Data Source
Residential and Commercial Energy	Central Hudson
On-road Transportation	Dutchess County Public Transit; New York State DOT
Rail	Metro North Railroad
Solid Waste	Royal Carting Service Company
Water & Wastewater Treatment	City of Beacon Water Department

Data Entry and Documentation

All calculations will be performed in ICLEI's ClearPath Software. ClearPath features are designed to facilitate long-term management of emissions data and periodic re-inventory. As a cloud-based software, all data from this inventory is stored safely with daily backups made. Without spreadsheets to lose, future inventory efforts will be able to move seamlessly into re-inventory.

Each calculation in ClearPath contains a field to record the data source or other qualifying information. ICLEI shall diligently use this feature to document the source of each piece of input data such that future updates can be easily obtained. Each record also allows for file attachments which ICLEI will use to include documents directly. These features of the tool will allow Beacon staff to easily repeat the inventory in the future. (See Figure 1 below)

Figure 1: Example of an outputs table in ClearPath

Name	Value
Electricity Energy Equivalent (MMBtu) ?	15529
Energy Cost (\$)	0
CO2 (MT)	881.26
CH4 (MT)	0.059852
N2O (MT)	0.020638
CO2e (MT) ?	888.91
MMBtu per Household ?	1.3503
CO2e per Household (MT) ?	0.077296
MMBtu per Person ?	0.62116
CO2e per Person (MT) ?	0.035556
GPC Scope ?	Scope 2
GPC Reference Number ?	I.1.2
US-CP Reporting Category	Activity

Notes

Data Source: Jane Doe, Analyst - Local Utility
By Email: Date - July 1, 2018. Subject: "Residential Accounts"

Attach a new document

Choose File data (8).csv

Save Save A Copy

Protocol Compliance

ICLEI will use ClearPath to complete a community-wide GHG emissions inventory using both the USCP and the GPC. The GPC is the standard reporting format now adopted by CDP (formerly Carbon Disclosure Project) and other registries. It is the required standard for participation in initiatives such as the Global Covenant of Mayors for Climate & Energy and is designed to allow for maximum comparability across cities over the globe. Even if Beacon determines the City will not participate in a leadership campaign such as the Global Covenant of Mayors, organizing the inventory results according to the GPC will allow for greater integration with other communities in the region.

Timeline

The timeline for data collection, entry and initial findings shall be completed within six months of the start date (anticipated start date to occur during Summer 2019). To accommodate timing and availability of Beacon leadership and other stakeholders, final presentations may occur after this time, but within the calendar year 2019. This timeline is primarily dependent on the availability of reliable, quality data. The City is responsible for data requests, as privacy rules limit providers' ability to release information to third parties. Access to reliable, complete, and accurate data is the step in the process that is most likely to cause delays in developing the final inventory product.

Proposed Costs

Task 1: ICLEI Member Pricing	\$ 6,100
Steps / Outputs included in base price	
Review existing conditions: documents, reports, plans related to community-wide climate action	
Assist City with data gathering, including data request letters, identifying the data needed	
Complete Master Data Workbook and document data sources for clarity and ease of replication in future years	
Receive, evaluate, refine data and input data into ClearPath Community GHG inventory track	
Review local emissions factors for applicability and accuracy	
Quality control / manager review of data and ClearPath input	
Refine data input, ClearPath results as needed via review	
Draft final narrative report, including charts and tables exported from ClearPath	
Review results with City stakeholders. Refine draft report as needed for clarity, ease of use.	
Provide City with final Draft Narrative report, ClearPath inventory, completed Master Data Workbook	
Price includes up to three in-person meetings attend by ICLEI expert, Kale Roberts and phone calls as needed with ICLEI Quality Control team.	

Task 2: Local Government Operations GHG Inventory

Beacon's municipal operations appear straightforward in the services it directly provides as there is no significant transit operations operated directly by the municipal government. This will make the government operations portion of the inventory relatively straightforward as well, but ICLEI will take consideration to account for special facilities in a way that best guides future action planning. ICLEI will Review existing conditions, for example it is our understanding that will include a 2012 audit and an overview of major updates to facilities and street lights made prior to 2014.

Data Collection

Inventory Sector	Anticipated Source
Buildings and Facilities	Finance, Facilities
Streetlights and Traffic Signals	Finance, Facilities
Fleet	GasBoy Fuel System,
Waste Generation	Facilities Management
Water & Wastewater Treatment	City of Beacon Water Treatment City of Beacon Water Department
Employee Commute (if desired)	Custom Employee Survey developed by ICLEI

Proposed Costs

Task 2: ICLEI Member Pricing	\$ 3,500
Steps / Outputs included in base price	
Review existing conditions: documents, reports, plans related to municipal operations climate action	
Assist City with data gathering, including identifying the data needed	
Complete Master Data Workbook and document data sources for clarity and ease of replication in future years	
Receive, evaluate, refine data and input data into ClearPath Government GHG inventory track	
Review local emissions factors for applicability and accuracy (completed under Community inventory)	
Quality control / manager review of data and ClearPath input	
Refine data input, ClearPath results as needed via review	
Draft final narrative report, including charts and tables exported from ClearPath	
Review results with City stakeholders. Refine draft report as needed for clarity, ease of use	
Provide City with final Draft Narrative report, ClearPath inventory, completed Master Data Workbook	
Price includes up to three in-person meetings attend by ICLEI expert, Kale Roberts and phone calls as needed with ICLEI Quality Control team.	

Task 3: Publications and Presentation

Reports

As an optional task, ICLEI will create final narrative reports and slide presentations to communicate the results of the Community and Local Government Operations inventories. The presentations will include interpretation of broad findings and establish direction for GHG reduction target setting and climate action planning.

Charts and other data outputs from these work products can be made available to post on the city website, social media, or other publications.

Travel

In addition to meetings with internal stakeholders as described in the base member price, ICLEI Staff will be available for up to three in-person presentations to stakeholders in Beacon. Travel meetings can be planned such that formal evening presentations to city leadership can be accompanied by presentations and working meetings with city departments.

Task 3:	
OPTIONAL: ICLEI will prepare a Final Narrative Report for Publication, with high-quality graphics and in a format available for web and print publication. Reusable Slide Deck for Council, Internal and External Stakeholder Presentations.	\$2,500

Task 4: Reporting Climate Data

Once Beacons has completed GHG inventories, the City may desire to demonstrate its leaderships by reporting results in international public platforms. ICLEI will complete questionnaires or other documents required by reporting platforms such as CDP. This service is priced at \$120 per hour, with an estimated minimum / maximum time to complete of 12 hours.

About ICLEI USA

ICLEI-Local Governments for Sustainability USA is a 28-year-old, U.S.-based nonprofit organization serving cities, counties, and regional governments across the nation. ICLEI is recognized for its expertise in areas of sustainability planning, greenhouse gas emissions accounting and management, urban resilience, low-emission development, and integrated resource management.

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