

SCHEDULE A

Scope of Work
Greenhouse Gas Emissions Reduction Inventory and Action Plan
June , 2005

1.1 Project Approach

The proposed approach for the completion of a joint Greenhouse Gas (GHG) Emissions Inventory and Reduction Local Action Plan for Carrboro, Chapel Hill and Orange County will fall into six phases. Each phase is described in detail below.

Phase 1 – Project Start-Up

Key staff from each local governmental entity will be brought together to form the Joint Staff Committee. These staff will be key data providers for the inventory and measures quantification. The joint staff committee representatives would be augmented with persons engaged in residential, commercial and industrial energy consumption, transportation patterns and waste disposal, i.e. public utilities, grassroots organisations, and public transit.

Additionally, an Air Quality Advisory Committee will be formed with representatives from local elected boards, the University of North Carolina and other representatives of the energy and utility field. Once the Joint Staff Committee is established, preliminary data collection will begin. Upon establishment of the AQAC, a kick-off meeting will be held to review and confirm the project details and continue the data collection phase of the project.

IES may work with the Joint Staff Committee to hold forums to reach a broader range of staff and representatives from institutional, commercial and industrial energy consumption to enhance and augment the data collection.

Phase 2 – Inventory Data Collection

IES will work with members of the Joint Staff Committee to collect GHG inventory data for the baseline year 2000 and the target year 2025. The inventory will be based on energy consumption and solid waste generation for the following community and local government sectors:

Community

- Residential
- Commercial
- Industrial
- Transportation

Waste

Local Government

- Buildings
- Vehicle Fleets



Streetlights
Water & Sewage Operations

Waste (from local government
operations)

IES will follow the internationally recognised methods for collecting data, calculating GHG emissions, and projecting future GHG emissions outlined in the CCP Protocol. If pieces of data are unavailable, IES will use established methods of data simulation to ensure the project is not delayed.

At this point in the project the AQAC will receive an interim report outlining the GHG inventory and forecasting results and analysis. A period of at least 30 days will be allotted to provide participants time to review this interim report. All transportation-related tasks and components will be reported separately to satisfy the requirements of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization funding.

Phase 3 – Determine and Quantify Historic and Existing Measures

This phase of the project will involve reviewing the historic and existing GHG reduction measures the local governments have already put in place. Information about each of the projects (i.e. municipal building retrofit or community home audits) will be gathered and compiled by IES via the Joint Staff Committee members. With this information, IES will utilize the CCP software and Protocol to quantify the GHG reduction impact of the measures. Once the review is complete IES will report the findings back to the Joint Staff Committee and AQAC members. Again, transportation-related reports will be tracked separately to satisfy funding requirements.

Phase 4 – Identify Potential New Measures

Phase four of the project will identify potential new measures to be included in the Local Action Plan. The inventory and forecast completed in phase two will provide a basis from which to identify target GHG emission reduction areas/sectors. Additionally, the analysis of historic and current measures will reveal the GHG emission reductions accrued in each area/sector. With this information at hand, the AQAC (and Joint Staff Committee) will be gathered to brainstorm a list of potential new measures (or expansion of current measures) that could be implemented to help reduce GHG emissions. IES will feed this process by providing information about best practices within the ICLEI and CCP network.

IES will then take this list of potential new measures (including strategies outlined in the 2025 LRTP) and determine the potential GHG reductions, energy savings and cost savings of each measure utilising the CCP Software and Protocol (transportation measures will be reported independently).

Phase 5 – Identify a GHG Emission Target

The previous phases will lead to the development of recommended GHG emission reduction targets for both the community and local government operations. The historic, current and potential future measures will be analysed and compiled to create future GHG emission scenarios based on differing levels of investment on behalf of the local

governments. For instance, conservative and optimistic scenarios could be created to illustrate the level of future GHG emissions given different packages of potential measures. The scenario definitions and composition will be agreed upon by the AQAC.

By comparing the scenarios against the baseline inventory and Business as Usual (BAU) Forecast completed in phase 2, future GHG emissions targets can be established. At this stage in the project the AQAC Groups can consider the results of the measures quantification process and agree upon a recommended GHG emissions target.

Phase 6 – Formulate and Approve Local Action Plan

The last phase in the project will entail drafting and finalising the Local Action Plan. The report will be drafted by IES and then circulated to the AQAC for comment within a specified timeframe. The AQAC will be presented with the Draft Report by IES. Comments will then be incorporated into the report and a final report will be produced. Should the report require approval by other staff, it will occur at this phase. The Final Report will be presented to the AQAC, the Transportation Advisory Committee of the DCHC MPO and the governing boards of Carrboro, Chapel Hill and Orange Country for adoption.

The local governments will be provided with multiple copies of the final report as well as .pdf versions and copies of the CCP GHG software files.

Coordination with Carbon Reduction Project

Should the Chapel Hill Town Council decide to join the Carolina Environmental Program (CEP) at UNC-Chapel Hill as a participant in the Carbon Reduction Project, IES will coordinate the development of the GHG Emissions Inventory and Reduction Local Action Plan with the Chapel Hill-CEP Carbon Reduction Project.

1.2 Potential Interaction Points

The following table presents the eight possible interaction points with the Air Quality Advisory Group. The second column in the table indicates which local meeting will be used to address the subject area, and the final column elaborates on how the subject area will be addressed in preparation for the local meetings. A fifth meeting of the AQAC may use teleconferencing with IES, as needed.

Table 1 - Potential Interaction Points with Air Quality Advisory Group

Air Quality Advisory Group Interaction Points	Local Meeting	Comments
Kick-off meeting	Local meeting 1	Email and telephone will be used to prepare for the meeting and brief participants of the action items they can expect at the first local meeting. This will ensure that the first local meeting addresses not only preliminary introductions to the process, but also prepares members for the steps-ahead and explains data collection performed to date.
Report on data	Local meeting 2	Data will be collected via email, telephone, fax and mail. Conference calls will be used on an as-need basis to report on data and make decisions as a group. The second local meeting will be used to report on the data analysis.
Report on forecasts	Local meeting 2	Forecasting data will be collected via email, telephone, fax and mail. Conference calls will be used on an as-need basis to report on forecasting data and make decisions as a group. The second local meeting will be used to report on the forecasting data analysis.
Report on measures to reduce emissions / Identify GHG Target	Local meeting 3	Measures information will be collected via email, telephone, fax and mail. Conference calls will be used on an as-need basis to report on data and make decisions as a group. The third local meeting will be used to report on the measures analysis.
Presentation of draft report	Local meeting 3	Each of the group members will be asked to review and comment on the draft report before the 3rd local meeting (via phone, email or conference call as necessary). This will ensure the third local meeting focus' on major issues and considerations.
Presentation of final draft report to Advisory Group	Local meeting 4	We will attempt to coordinate the presentation of the final draft reports to the Advisory Group, MPO and elected boards during the same trip to make the most effective use of time and money.
Presentation of final draft report to MPO	Local meeting 4	We will attempt to coordinate the presentation of the final draft reports to the Advisory Group, MPO and elected boards during the same trip to make the most effective use of time and money.
Presentation of final draft report to elected boards	Local meeting 4	We will attempt to coordinate the presentation of the final draft reports to the Advisory Group, MPO and elected boards during the same trip to make the most effective use of time and money.

1.3 Proposed Timeline

The table below presents the proposed timeline for the project. It is anticipated that the project will run over a four-month timeframe, with July as the updated start month. IES will review the timeline with the project participants during the Project Start-Up phase and will update it as needed.

Table 2 - Timeline

Task Category & Name	Sept. & Oct. & Nov.	Dec. & Jan. & Feb.	Feb. Mar. & Apr.	May. Jun.	July
Project Start-Up					
Select team					
Assign project duties					
Project launch meeting					
Formation of Air Quality Advisory Group					
Meeting with key data providers					
Establish project team list serve					
Data & Information Gathering					
Prepare letter of authorization					
Obtain community inventory & documentation					
Collect 2000 community inventory data & info					
Collect 2000 corporate inventory data & info					
Collect historic measures data & info.					
Simulation of unavailable data					
Report to Advisory Group on data & info					
Receive & Vet Data Information					
Transpose paper records					
Categorize & cumulate data					
Confirm & clarify data					
Enter data into ICLEI software					
Identify & Model Future Measures					
Examine potential to expand historic measures					
Identify best practices through ICLEI network					
Example public awareness opportunities					
Brainstorming session with Advisory Group					
Model Reduction Target					
Create scenarios based on measures					
Report to Advisory Group potential measures & reductions					
Report Preparation					
Write draft					
Submit draft to Advisory Group, committees, governing boards for comments					
Obtain comments from reviewers					
Revise draft into final					
Project Completion					
Present draft final report to Advisory Group					
Present draft final report to Transportation Advisory Committee					
Present draft final report to governing boards					
Submit final report.					