



ENVIRONMENTAL
SUSTAINABILITY
ROADMAP
A TOOLKIT FOR
LOCAL GOVERNMENTS

Regional Environmental Internship Program (REIP) Energy Efficiency and Carbon Pollution Internship Job Description

Updated March 25, 2016

OVERVIEW

USGBC-Missouri Gateway inherited the Regional Environmental Internship Program (REIP) Climate Action Internship program from FOCUS St. Louis in summer 2012. This internship was developed by the FOCUS St. Louis Environmental Sustainability Implementation Committee, which was tasked with implementing the Environmental Sustainability Roadmap: A Toolkit for Local Governments published by Focus St. Louis in 2009. More recently, local governments have begun to participate in the Compact of Mayors. This effort requires a commitment to reduce greenhouse gas (GHG) emissions and to address risks associated with climate change. This aligns well with REIP. Therefore, if the local government is participating in the Compact of Mayors, the intern can assist with its requirements. The *Energy Efficiency and Carbon Pollution Internship* is an opportunity for local governments, universities, and non-profits to work together in a cost-effective way to achieve common goals: goals important to each individually and to the St. Louis region as a whole. These include having a meaningful impact on the environment, especially climate change; maximizing energy efficiency, thereby reducing energy costs and extending the life of our energy supplies; building the capabilities of local governments throughout the region; and supporting local educational institutions.

The Energy Efficiency and Carbon Pollution Internship consists of two modules – a Greenhouse Gas Inventory Module and a Climate Action Plan Module. ***USGBC-Missouri Gateway Chapter is currently seeking one full-time intern for Summer 2016 (approximately June through August) to work with one municipality on an updated Greenhouse Gas Inventory.***

The Greenhouse Gas Inventory Module involves conducting a GHG inventory, estimating future GHG emission trends. If the local government is participating in the Compact of Mayors, it will also include an inventory of current and future climate hazards. It is primarily a technical internship. It involves studying energy use in the major sectors of the local government's operations and the major sectors of the community as a whole. Using this data, the intern is able to construct an estimate of the amount of energy used, its cost, and the amount of GHG emitted. In addition, using estimates of future economic, population, and energy intensity trends, the intern is able to construct an estimate of future energy use, energy costs, and GHG emissions. Because this is a second inventory for the local government, there will work required to align the two inventories in order to make comparisons.

The Climate Action Plan Module involves working with the local government to set a GHG emissions reduction goal (for both the operations of the local government and for the community as a whole) and to begin development of a plan to achieve the goal. Since GHG emissions primarily result from energy use, identification of GHG abatement opportunities also typically involves identification of opportunities to reduce costs associated with inefficient energy use. The Climate Action Plan Module is primarily administrative. It will involve helping to establish and lead a process to identify and evaluate abatement



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measures, including those already in place. It will also involve helping to educate municipal staff and officials and conducting community outreach.

INTERN QUALIFICATIONS

This internship opportunity is a 12 week experience during the summer of 2016 It will be of interest to students in urban planning and environmental programs, as well as students in technical, engineering, or scientific programs. A graduate level student is ideal, but not required.

The following qualifications are desired:

- Prior experience working for and knowledge of government, particularly local/city government;
- Experience, training, or interest in policy program analysis;
- Experience working in and leading meetings and work groups;
- Experience or training with issues surrounding climate change, energy use, transportation, utilities, and/or solid waste;
- Self-motivated, persistence, and strong people skills critical for working with a variety of city departments and personalities;
- General understanding of the causes, science, and impacts of climate change;
- Basic data manipulation skills; and
- Basic computer skills.

INTERN WORK ACTIVITIES

The internship is expected to be a full-time 12-week commitment of 30-40 hours per week.

Every local government is different and may want to develop custom activities for the internship; however, the following is a model list of activities involved in the two modules of the internship. More detailed information is available in protocols available through the ICLEI website. Interested parties may also review a "Sample Work Plan" in ICLEI's "Greenhouse Gas Inventory Internship Toolkit," however it is for a Phase 1 internship and may not include activities that are likely be a part of this internship experience.

Greenhouse Gas Inventory Module:

Training on greenhouse gas inventories from ICLEI

What greenhouse gases are and how they relate to climate change

The major sources of GHG emissions

The process of conducting a GHG inventory



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How to use ClearPath GHG Inventory Tool

Protocols for conducting and reporting a GHG inventory

Previous greenhouse gas emissions inventory:

Obtain and review previous greenhouse gas inventory

Familiarize yourself with the major results of the previous greenhouse gas inventory

Familiarize yourself with the methods of the previous inventory

Identify any methods that need to be changed or updated for the current inventory

Identify faults with the previous inventory that should be corrected in this one

Familiarize yourself with the obstacles encountered in conducting the previous inventory

Greenhouse gas emissions inventory and forecast for local government operations

Identify major emission sources – general energy use and non-energy sources

Identify data needed to calculate emissions

Identify where needed data may be obtained in local government

Interact with various departments to obtain data

Work with supervisor to take the 25 x 20 Voluntary Energy Benchmarking Pledge. Benchmark and report energy and water use of local government buildings using ENERGY STAR Portfolio Manager.

Maintain comparability to the previous inventory - it may be necessary to translate previous inventory data into the updated ClearPath tool in order to conduct an accurate assessment for the local government

Community greenhouse gas emissions

Identify major emission sources from energy and non-energy sources

Identify data needed to calculate emissions

Identify where community data is available

Interact with utilities, community agencies, and private organizations to obtain information

Develop strategy for obtaining necessary information

Maintain comparability to the previous inventory

Develop report.

Enter data into ClearPath computer program

Work with supervisor to analyze results, develop recommendations

Analyze the major sources of emissions within major emitting sectors

Analyze differences between this inventory and the previous one

Analyze the causes of any differences that may exist

Analyze the relation of differences between inventories and municipal policies

Work with supervisor to include inventory of current and future climate hazards using tools provided by the Compact of Mayors (CRAFT – Climate Risk and Adaptation Framework Tool or ADAPT) <http://www.compactofmayors.org/content/uploads/sites/14/2016/01/CRAFT-2-page-brochure.pdf> and <http://icleiusa.org/tools/adapt/>

Write report, communicate results to city and USGBC-Missouri Gateway staff



Missouri
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CHAPTER



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Develop presentation and present to relevant body (e.g. City Council)

Work with supervisor to report GHG Inventory and climate hazards as required by the Compact of Mayors

COMPENSATION

Interns will be paid a total stipend of \$ 5,300 over a 12-week period (approximately June through August 2016). The stipend will be paid on a monthly basis. It is the expectation that the intern will work full time, between 30 – 40 hours / week.

TO APPLY

Please send cover letter, resume, and 2 references (just contact information, not letters please) by Monday, April 18, 2016 to USGBC-Missouri Gateway staff, Emily Andrews at emily.andrews@mobot.org. Only electronic applications will be accepted.