

Seattle City Light

Request for Greenhouse Gas Mitigation (“Offset”) Project Proposals Requesting Project Summary Information (Phase 1)

Notice Issue Date: November 15, 2002

Background on Seattle City Light’s Request

The Seattle Mayor and City Council adopted a resolution (Resolution #30359) directing its municipal electric utility, Seattle City Light ("Seattle"), to fully mitigate the greenhouse gas (GHG) emissions resulting from its operations. For information regarding our current and previous solicitation, visit our web site at www.cityofseattle.net/light/climatechange.

Bidders' Conference on Monday, December 2, 2002, 1:00-3:00 pm, Seattle

For more information about this Request for Proposals (RFP), attend the Bidders' Conference on Monday, December 2, 2002 in Key Tower, 40th Floor, Room 4080 located at 700 Fifth Avenue in downtown Seattle. The room is limited to 50 people. If you plan on attending, send notification no later than Monday, November 25, 2002 to Denise Sanders at denise.sanders@seattle.gov, or call (206) 684-3270, or write to Denise Sanders, Seattle City Light, Environment and Safety, 700 5th Avenue, Suite 3300, Seattle, WA, 98104. State your name, organization, phone, email address and how many from your organization will be attending.

Make sure you clarify if you will attend the conference or join by phone (see next paragraph).

If you cannot attend in person, you can call into the meeting through a conference line to join the Bidders' Conference. Callers will have to pay for their own long-distance charges and the call-in number is outside of Washington State. Callers must register to participate in the call by contacting Denise Sanders no later than Monday, November 25, 2002. Denise will contact all registered callers by email with the call-in number. If email is not available, Denise will contact you by phone. Follow the notification instructions above to register for the conference call.

What is Seattle soliciting?

Cost-effective proposals for GHG mitigation “offset” projects. An "offset" project directly avoids, displaces, or sequesters GHG emissions; will be implemented in the future; will only occur because of the Seattle funding; and will clearly quantify the GHG emissions reduction. Proposals are due on Thursday, January 30, 2003.

How many "offsets" is Seattle looking for?

Seattle estimates that it will be mitigating 386,000 metric tons of carbon dioxide equivalent (MgCO₂e) annually. This RFP is intended to solicit project proposals to offset the Utility's GHG emissions in 2003 and 2004, for a total of 772,000 MgCO₂e.

Which Greenhouse Gases (GHGs) Qualify?

Carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Seattle uses the International Panel on Climate Change's (IPCC) "global warming potential" to evaluate the carbon dioxide equivalent for the GHG gases other than carbon dioxide. See the Appendix.

How many proposals will Seattle eventually select?

Seattle intends to contract for three to 10 offset projects totaling 772,000 metric tons of carbon dioxide equivalent (MgCO₂e).

How many tons should the projects offer?

The sizes of the projects are expected to range from 50,000 to 350,000 MgCO₂e. Local projects* will be allowed to offer fewer tons than 50,000 MgCO₂e.

How much will Seattle pay per ton?

Seattle expects to pay a total average of \$4.00/MgCO₂e or less for all projects combined. Projects that are most competitive will have costs per ton that are below \$4.00/ton. Projects with costs per ton that are greater than \$10/ton are discouraged. However, local projects* will be given considerable flexibility on the cost per ton, especially for local projects with strong co-benefits (additional benefits beyond the GHG reductions).

***What defines the preference for Local Projects?**

Local project preferences are for Seattle, King County, the Puget Sound region, Washington State, and the Northwest. Proximity to Seattle is preferred.

What is the Selection Process?

There are two phases. This Request for Proposals (RFP) is for the Phase 1, 10-page proposal plus a coversheet, a budget spreadsheet and a spreadsheet showing the calculations of GHG emission reductions. For projects selected for Phase 2, additional instructions will be provided.

What is the Schedule?

Bidders' Conference: Monday, December 2, 2002, 1:00-3:00pm, Seattle, WA

PROPOSAL DEADLINE: MUST BE RECEIVED BY THURSDAY, JANUARY 30, 2003, 5:00PM (PACIFIC TIME)

Anticipated Schedule Thereafter:

February 7, 2003	Seattle will acknowledge receipt of Phase 1 Proposals
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April 2, 2003	Seattle will notify projects selected for Phase 2
June 2, 2003 (5 pm, Pacific Time)	Phase 2 Proposals due
August 1, 2003	Seattle will notify projects selected to enter negotiations for contracts
Fall 2003 and Winter 2004.	Seattle goal for signing contracts

Seattle will make every effort to meet this schedule yet reserves the right to modify the process and schedule.

DISCLAIMER: This RFP is not an offer by Seattle to purchase any rights, goods or services, and submission of project proposals does not create any rights whatsoever. Seattle is free to accept or reject any project proposal, and is not bound to accept the economically most favorable proposal, or any proposal at all. Seattle, and its directors, officers, public officials, agents, employees or assigns are not liable at law or at equity to any project or participant or any other party for any decision by any of them regarding submission, acceptance, rejection or modification of a proposal, or in any other connection with this RFP. All costs directly or indirectly related to preparation of a proposal or submission shall be the sole responsibility of, and shall be borne by, the developer of the project proposal.

What are the proposal requirements?

Timing of Project Implementation: Seattle will consider only projects where mitigation measures will be implemented in the future, subsequent to contract execution. Seattle will not consider projects where mitigation measures have been implemented prior to contract execution.

Additionality: Seattle will only fund projects where mitigation measures occur because of funding from this RFP. Projects for which the applicant or other party derives benefits, including financial benefits, other than those relating to GHG reduction benefits, are eligible.

Regulatory Surplus: Seattle will only consider projects where the GHG reduction benefit is over and above what is required by law. An emission reduction is surplus if it is not otherwise required by current regulations. In addition, GHG reduction credits from projects that are selected cannot be applied to future regulatory obligations.

Voluntary Programs: Seattle will only consider projects where the GHG reduction benefit is over and above what is provided for voluntary programs such as the U.S. Department of Energy's 1605(b) program or the California Climate Action Registry. Seattle will consider

exceptions to this requirement as long as projects can guarantee that project-related credits are attributed to Seattle alone.

Baselines: Proposals must describe a “Baseline” projection that does not include the proposed project and a “Project Case” projection. Proposals must describe the assumptions and methodologies used to quantify each. The difference between the two is the project’s GHG reduction benefit. Proposals must show how the Baseline projection changes over time if changes from business-as-usual could be reasonably anticipated during the project life. Seattle will review the proposed Baseline and Project Case projections, and may use its own judgment to modify them for the purposes of evaluating projects.

Leakage: This occurs when a project’s GHG reduction benefit is lessened because the project has led to other GHG emission increases. An energy example includes reduction in use of power for a facility that then uses that saved power for other on-site activities. A transportation example includes reduction of congestion that increases efficiency and therefore reduces emissions but is counteracted by an increase of traffic that fills up the less-congested road system. A vehicle efficiency example includes incentives for more fuel efficient vehicles counteracted by an increase in driving because of the increased miles per gallon. A forest sequestration example is when proposed acres of trees are set aside for sequestration, but other acres of trees are cut down instead.

Proposals must describe how leakage is addressed by the project, both in terms of project activities to minimize leakage and in terms of adjustments to the project’s GHG reduction benefit. Seattle will review and may use our own leakage factors when evaluating projects.

Range of Uncertainty: Proposals must describe important risks and risk mitigation strategies, and provide an estimate of the range of uncertainty around the expected carbon dioxide benefit. Seattle may use adjustment factors other than those proposed by the developer’s emissions reduction estimates.

Units of Measurement: All GHG reduction benefits are to be presented in metric tons (Mg) of carbon dioxide equivalent (CO₂e): MgCO₂e. See the Appendix for conversion factors to be used for MgCO₂e, fossil fuel, U.S.-based electricity grid factors, 100-year Global Warming Potentials, and weights, volumes and densities. Proposals must justify any variation from these figures. Seattle reserves the right to apply its own conversion factors for the purpose of proposal evaluation.

More than One Proposal: Entities may submit more than one proposal but must submit them individually following the criteria of this RFP.

International Projects: Seattle requires an international project to have both a strong U.S. partner and a strong international partner in the host country. The U.S. partner must co-sign the proposal and any offset contract. The U.S. partner will be liable for all costs related to

breach of contract and contract delays. Host country approval for international projects is strongly encouraged.

Retirement of Credits: Seattle plans to “retire” the offsets they acquire, holding them in perpetuity for the benefit of Seattle. Seattle may use these credits in any manner allowed under any future greenhouse gas regulatory or voluntary system that may be put into place. The project will not be eligible to receive allocation or credit in the future in another regulatory or voluntary setting for the offsets acquired by Seattle. Seattle will not consider offsets that have already been allocated or awarded credit for carbon dioxide or greenhouse gas emissions benefits in another regulatory or voluntary setting such as the U.S. Department of Energy's 1605(b) program or the California Climate Action Registry.

Monitoring and Verification Plans: The purpose of the Monitoring and Verification (M&V) Plan is to define how the carbon dioxide benefit will be quantified during the life of the project. The quality of the proposed M&V Plan is a component of project evaluation. Monitoring and verification are the responsibility of the project, not Seattle. The use of mutually-agreed upon third party verification is required.

All projects that are chosen for contracting will be required to include an M&V Plan. These plans may be developed with Seattle during the contracting phase of the RFP. M&V Plans do not need to be submitted as part of this Phase 1 Proposal, but a description of the M&V process must be included. Please describe 1) procedures to be employed, 2) how the ongoing monitoring and verification will be funded, and 3) the time frame and frequency over which the monitoring and verification will occur.

Project Finances Other than Seattle: If the project anticipates having funding sources in addition to Seattle, then the sources of those funds must be identified to the greatest possible extent. Either specific or expected additional funding sources must be identified.

What other additional information or guidance is available?

Co-Benefits: Seattle prefers projects with environmental, health, and socioeconomic co-benefits, and will request information on co-benefits from projects. Special consideration may be given to projects with excellent co-benefits.

Permanence: Seattle prefers projects that permanently avoid or displace GHG emissions, such as energy-related projects, over projects that temporarily sequester GHG emissions.

Guarantees: Seattle prefers projects that provide guarantees, especially carbon benefit guarantees. Guarantees are especially important for sequestration projects, and would provide important support for any project proposal.

Replicability and Expandability: Projects that can be replicated in or expanded to other sites or areas are encouraged.

Options, Alternatives: To supplement specific project proposals, projects may offer unspecified alternative sites or approaches to the project. For example, if a proposal identifies a specific site for a project and the projects know that other sites may become available, then the proposal may leave open the possibility that other, unidentified sites, may become the focus of specific contract negotiations.

Types of Projects: Seattle will consider a broad range of offsets projects. The types of projects include, *but are not limited to*, energy efficiency, renewable energy (solar, wind, geothermal, biomass, other), fuel switching, CO₂ sequestration, flue gas sequestration, materials substitution, recycle/composting programs, coal mine methane, landfill methane, biogas methane (animal waste and waste water), alternative transportation fuels, vehicle emissions reductions and transportation initiatives.

Portfolio Diversity: Seattle considers it important to acquire a portfolio of diverse project types.

Eligible Projects: Seattle will accept proposals from non-profit and for-profit corporations, government agencies, national laboratories, individuals, and combinations of these parties. Multiple project partners are encouraged.

Discounted Value for Projects with Long Implementation Time: Seattle places a priority on projects that deliver the GHG emissions reduction as close in time to 2003 and 2004 as possible. For projects that take decades to deliver the GHG emissions reduction or sequestration, Seattle expects to discount the value of the GHG offset. Phase 1 proposals do not need to include this calculation in their GHG reduction calculation. This will be addressed in Phase 2 or during contract negotiations.

Projects as Programs: Seattle will accept proposals that administer a program or package of GHG reduction benefits. Specific sites, facilities, units or operations may not be necessary as long as specific performance milestones guarantee the GHG reduction benefit. An energy example includes the installation of a set amount of compact fluorescent light bulbs in locations to-be-determined. A transportation example includes a guarantee of reduced vehicle miles traveled (VMT) within a transportation corridor without identifying the specific drivers who have reduced their VMT. A materials substitution example includes a guarantee of reduced use of virgin materials in commercial products but without specified end users. Programs must have a plan for clearly documenting their GHG reductions.

Assignment and Sale: While the primary goal is to “retire” credits, Seattle reserves the right to assign or sell GHG reduction benefit acquired as a result of this RFP.

Partnering: A project may have multiple potential funders but only one (Seattle) funder who seeks to claim the carbon credit. Since many offset projects have multiple benefits -- such as reduction of criteria pollutants, lower energy costs, additional environmental benefits -- the carbon reduction benefit can be isolated and paid for by Seattle. This partnering approach can be used to lower the total cost per ton of carbon offset.

For example: an energy efficiency project may reduce criteria pollutants and energy costs. Some funding partners want the pollution credit (sulfur oxides or nitrogen oxides), the project host gets the reduced energy costs, and Seattle gets the carbon dioxide reduction. The project costs \$300,000. Each partner pays \$100,000. Seattle funds 33 percent of the project but gets 100 percent of the carbon reduction, thus substantially reducing the cost per ton for the project.

Restrictions on Use of Seattle Funds: Seattle will not provide loans or long-term escrow accounts. Seattle will only pay on proof of delivery of services, activities, or products that result in reductions in GHG. Delivery can include construction or purchases where the GHG reduction subsequently follows, staff time for the administration of a program, or other activities or products that are clearly defined and acceptable to Seattle.

Public Disclosure: Seattle is bound by the Washington Disclosure Act. Specific projects will be notified about any public disclosure requests related to their project before information is released.

Indemnification Coverage: Projects that are selected for contracting will be required to provide Seattle with indemnification coverage.

What is the format for the Phase 1 proposals?

Proposals are to be limited to a one-page cover sheet (described below) and a 10-page proposal of text. The 10-page proposal must have one inch margins and a twelve-point font. In addition, two appendices are required, one to display the project budget and one to display the project carbon dioxide emissions benefit calculations. **It is strongly preferred that the cover sheet and the 10-page proposal are transmitted in Microsoft Word 97 or compatible format, while the appendices are to be transmitted in Microsoft Excel 97 or compatible format. Responses must be in English:** We will not accept proposals in other languages.

One-page Coversheet:

Present the following 17 items in this order and following this format:

1. Type of Project. Choose one or more of the following: energy efficiency, renewable energy (solar, wind, geothermal, biomass, other), fuel switching, CO₂ sequestration, flue gas sequestration, materials substitution, recycle/composting programs, coal mine methane, landfill methane, biogas methane (animal waste and waste water), alternative transportation fuels, vehicle emissions reductions and transportation initiatives. Or other and describe.

2. Type of Greenhouse Gas. Choose one or more of the following: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

3. Location of Project

4. Proposing Organization(s) Name

5. Proposing Organization(s) Address

6. Proposing Organization(s) Web Site

7. Contact Person Name

8. Contact Person Phone Number

9. Contact Person Fax Number

10. Contact Person E-Mail Address

11. Total Project Cost (U.S.\$)

12. Amount of Money Requested (U.S.\$)

13. Amount of Carbon Dioxide Emission Benefit Proposed (MgCO₂e)

14. Price of Carbon Dioxide Emissions Benefit Proposed (U.S.\$/MgCO₂e)

15. Project Implementation Starting Date

16. Project Implementation Completion Date

17. Project Summary (No more than 50 words)

10-Page Project Proposal and Appendices:

The 10-page (or less) proposal must include the following. No specific formatting is required except for a minimum of one-inch margins and 12-point font.

1. A description of the project.
2. Identify known or expected sources of funding.
3. Define the role(s) of each funder and organization involved.
4. Include qualifications for participating organizations and/or individuals.
5. Address or adhere to all items listed in the "What are the proposal requirements?" section above.
6. Address Co-Benefits, Permanence, Guarantees, and Replicability/Expandability listed in the "What other additional information or guidance is available?" section above.

In addition to the 10-page document above, proposals must include:

7. Appendix A: Present the project budget, specifying specific sources and uses of funding, identifying the capital and operating costs. Include costs for monitoring and verification throughout the project life.
8. Appendix B: Present the project MgCO₂e benefit calculations, including the Baseline projection and the Project Case projection. (See "Baselines" above.) Address

leakage and the range of uncertainty in the calculation of the MgCO₂e benefit. Include a breakdown of the accrual of the MgCO₂e benefit on an annual basis.

Where are the proposals submitted?

Proposals are to be transmitted to Doug Howell and Corinne Grande at Seattle City Light in two formats, email and hard copies, to:

1. By e-mail to doug.howell@seattle.gov and corinne.grande@seattle.gov
2. Three hard copies by mail to Climate Change RFP, Seattle City Light, Strategic Planning Office, 700 Fifth Avenue, Suite 3300, Seattle, WA 98104.

What if we have questions during this solicitation period?

Questions and answers will be posted on our website at www.cityofseattle.net/light/climatechange. It is the responsibility of the project developer to keep informed regarding clarifications by visiting this Web site. Questions and answers about this offset solicitation are posted there. Please review these Q & A prior to contacting Seattle. If your question is not addressed on the website, you may contact Corinne Grande by email at corinne.grande@seattle.gov, or by phone at (206) 386-4517, or by letter at Corinne Grande, Seattle City Light, Environment & Safety, 700 Fifth Avenue, Suite 3300, Seattle, WA 98104.

Appendix

Fossil Fuel Conversion Factors -

(US Department of Energy, Energy Information Agency, <http://www.eia.doe.gov/oiaf/1605/factors.html>)

Fuel Type	CO₂ Content (Pounds CO ₂ per Unit Volume or Mass)	CO₂ Coefficient (Pounds CO ₂ per Million Btu)
Natural Gas	120.593 lb/10 ³ cf	117.080
Gasoline (conventional)	19.564 lb/gal.	156.425
Distillate Oil/Diesel	22.384 lb/gal.	161.386
Residual Oil	26.033 lb/gal.	173.906
LPG/Propane**	12.669 lb/gal.	139.178
Kerosene/Jet fuel	21.537 lb/gal.	159.535
Anthracite Coal	3852.16 lb/short ton	227.4
Bituminous Coal	4,931.3 lb/short ton	205.3
Sub-bituminous Coal	3,715.9 lb/short ton	212.7
Lignite Coal	2,791.6 lb/short ton	215.4
1 pound of carbon in carbon dioxide = 3.6667 pounds carbon dioxide, measured at full molecular weight (CO ₂)		

Electricity Carbon Dioxide Conversion Factors

CO₂ Intensity Factors for Marginal Electricity Generation for US Regions

EPA Region	Pounds of CO₂ per kWh
Region 10: OR, WA, ID	1.202
Region 9: CA, AZ, NV	1.240
Region 8: CO, UT, MT, WY, ND, SD	1.244
Region 7: MO, IA, KS, NE	1.404
Region 6: TX, LA, OK, AR, NM	1.186
Region 5: OH, IL, MI, IN, WI, MN	1.988
Region 4: FL, NC, GA, TN, AL, SC, KY, MS	2.215
Region 3: PA, VA, MD, WV, DC, DE	2.096
Region 2: NY, NJ	1.679
Region 1: MA, CT, ME, NH, RI, VT	1.726

CO₂ Intensity Factor for New Natural Gas Fired Electricity Generation

Combined cycle combustion turbine: 0.81 Pounds of CO₂ per kWh

Other Conversion Factors

Weight

1 kilogram = 2.205 pounds
1 short ton = 0.9072 metric tons
1 metric ton = 1.1023 short tons = 2,205 pounds

Volume

Liquid Fuels

1 barrel	42 US gallons
1 barrel	159 liters
1 cubic meter	6.289 gallons

Gaseous Fuels

1 cubic meter	35.315 cubic feet
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Energy

Natural Gas

1 cubic foot (cf) = 1,030 Btu
1 therm = 100 cf = 103,000 Btu
1 Mcf = 1,000 cf = 1.03 million Btu

Density

1 thousand cubic feet of methane/natural gas = 42.28 pounds
1 thousand cubic feet carbon dioxide = 115.97 pounds
1 metric ton natural gas liquids = 11.6 barrels
1 metric ton alcohol = 7.94 barrels
1 metric ton liquefied petroleum gas/propane = 11.6 barrels
1 metric ton aviation gasoline = 8.9 barrels
1 metric ton motor gasoline = 8.53 barrels
1 metric ton kerosene = 7.73 barrels
1 metric ton distillate oil = 7.46 barrels

For other conversion factors, please see the Environmental Protection Agency Web site:
www.epa.gov/ttn/chief/eiip/eiip_ghg.htm Vol. VIII link, Tables 1.4

Sources: www.epa.gov/ttn/chief/eiip/eiip_ghg.htm. For CO₂ Intensity Factors: *Regional Electricity Factors Final Report*, US Environmental Protection Agency, Atmospheric Pollution Prevention Division (APPD), November 16, 1998, contract no. 68-W6-0050. For Other Conversion Factors: <http://www.eia.doe.gov/oiaf/1605/ggrpt/appendixf.html>.