Region 2's Policy on Greening Assistance Agreements
EPA Region 2

EPA Region 2 is implementing this Policy on Greening Assistance Agreements to incorporate sustainability practices into projects funded under EPA assistance agreements, which include both cooperative agreements and grants.

This policy furthers the objectives of Region 2's Climate Change Action Plan as well as EPA's Strategic Plan, which includes the Agency's integration of climate change considerations (e.g., impacts and adaptive measures) and sustainability into grant, loan, contract, or technical assistance programs. It is also responsive to the EPA Memorandum entitled *Incorporating Climate Change Adaptation Considerations into Applicable Assistance Agreement Competitive Funding Opportunity Announcements* (October 18, 2011) which strongly encourages EPA offices to include climate change adaptation evaluation criteria in competitive assistance agreement funding announcements.

EPA Region 2 will strive to include sustainability criteria in all assistance agreement solicitations and integrate sustainability practices into work plans for all competitive and non-competitive assistance agreements awarded. Where climate change adaptation is relevant to a project being solicited in a competitive funding opportunity announcement issued by Region 2, a climate change adaptation evaluation criterion for evaluating the proposals shall be included in the Request for Proposal/Application. Furthermore, to the extent practicable and relevant to the project being solicited in a competitive solicitation issued by Region 2, evaluation criteria that support the livability principles of the Partnerships for Sustainable Communities described in the Office of Policy Associate Administrator's January 9th, 2013 memorandum shall be included in the Request for Proposal/Application.

During the work plan negotiation stage, Project Officers will work with applicants to determine the feasibility of including sustainability practices, such as those listed below, in assistance agreement work plans. While EPA recognizes that not all sustainability measures can or will be implemented by awardees, we will require Project Officers to inform applicants of sustainability measures and programs, and to recommend and explain sustainable practices. The Project Officer is required to document this discussion, which should cover the following points:

- Environmentally Preferable Purchasing
- Green Building and Construction Practices
- Green Remediation Practices
- Materials Management: Resource Conservation and Green Disposal
- Energy Efficiency/Clean Energy
- Fuel Efficient Vehicles
- Sustainable Water Infrastructure and Water Efficiency
- Green Conferences/Meetings and Alternatives to Traditional Travel

These green practices are more fully described in the attached Greening Assistance Agreements Measures and Practices (Attachments A & B) and should be evaluated in light of the specific statutory and regulatory requirements under each program area, as well as the goals and activities of each assistance agreement. These practices will be updated as emerging strategies and technologies are identified and as other innovative practices are successfully implemented by other Region 2 awardees.

EPA Region 2 will issue annual implementation guidance for sustainability practices and measures for Project Officers to assist them in negotiating work plans. Awardees will report on their success in achieving these goals in their quarterly, biannual or annual performance reports. Project Officers and award applicants are strongly encouraged to add sustainability practices to their work plans and progress reports wherever practicable.

Issued on:

Judith A. Enck 5-6-13

Judith A. Enck, Regional Administrator
U.S. Environmental Protection Agency, Region 2

Attachment A
Greening Assistance Agreements Measures and Practices
EPA Region 2

The EPA Region 2 Policy on Greening Assistance Agreements establishes the Region's commitment to encourage and assist awardees to integrate sustainability practices into assistance agreement work plans. During the work plan negotiation stage, Project Officers (POs) will work with awardees to determine whether it is feasible to include one or more sustainability measures and practices, such as those described below, into applicant work plans. With respect to projects selected through a competitive process, Project Officers will ensure that such negotiations comply with the requirements described in EPA's Policy for Competition of Assistance Agreements, EPA Order No. 5700.5A1, as amended and applicable guidance issued by the Grants Competition Advocate. We anticipate these specific measures and practices will be updated as emerging practices are identified. The last two pages of this document include a sample work plan which incorporates many of the sustainability measures and practices identified below.

Environmentally Preferable Purchasing

Through Environmentally Preferable Purchasing (EPP), the grantee would purchase "greener" products (e.g. equipment and supplies) for the purposes of reducing the use of toxic chemicals and hazardous materials. To the extent feasible, awardees will examine the full life cycle impact of products in order to determine the environmental impacts (e.g. raw material inputs, production methods, packaging, distribution methods, energy and water use, and disposal options). For more on EPP, see: http://www.epa.gov/epp/. Products that have received EPA's Design for the Environment (DfE) can be found at http://www.epa.gov/dfe/index.htm.

The U.S. General Services Administration (GSA) has a useful website (GSA Advantage) containing a variety of environmental products and services: https://www.gsaadvantage.gov/advgsa/advantage/main/start_page.do. While GSA does not assist grantees in procuring supplies or services, the website is useful for learning about the latest environmentally-beneficial products and services.

Purchasing supplies and products with recycled content; or those comparatively low in volatile organic compounds (VOCs) such as ink, paints, carpets; and purchasing used and recycled items are good examples of environmentally preferable purchasing, as are the following programs:

- EPA's WaterSense Program certifies and labels water-efficient products in a variety of areas. For more information see: http://www.epa.gov/watersense/
- The EPEAT (Electronic Product Environmental Assessment Tool) system evaluates, compares, and recommends desktop computers, notebooks, and monitors based on their environmental attributes. For more information see: http://www.epa.gov/epp/pubs/products/epeat.htm
- EPA's ENERGY STAR Program certifies and labels energy efficient products. For more information see: http://www.energystar.gov/

Suggested measures of accomplishment include but are not limited to:

- % of recycled paper purchased and % post consumer content
- % of EPEAT, WaterSense, or ENERGY STAR products purchased
- % refurbished products purchased or put into reuse

Green Building and Construction Practices

Green building is the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition. Buildings represent an underestimated source of greenhouse gas emissions, and opportunities to address the challenge of climate change. EPA's Green Building website contains helpful information: http://www.epa.gov/greenbuilding/index.htm

Most EPA assistance programs do not comprise building and construction activities. Those assistance programs that do involve building and construction will be considered the highest priority by EPA POs, and POs will emphasize the importance of sustainability measures to these applicants. Green construction information is available at EPA's Smart Growth website at http://www.epa.gov/dced/. Examples include:

- Using construction materials:
  - with recycled content (ex. recycled concrete or asphalt, pre or post-consumer recycled content, agricultural waste material, salvaged material)
  - which are easily and safely re-usable, recyclable or biodegradable
  - which are environmentally preferable products with no or reduced toxic or other emissions (e.g. low or no VOCs, limited use of polyvinyl chloride (PVC))
  - which conserve natural resources (e.g. certified wood products, rapidly renewable products, products which reduce virgin material use or are unusually durable)
- Using products, equipment, and practices during construction, demolition and renovation that reduce environmental impacts and implement principles of waste minimization and reuse
- Using designs which incorporate energy (e.g., solar, Combined Heat and Power, fuel cell) and water conservation (e.g. environmentally sensitive landscaping, compact design, access to public transportation) that maximize the use of local resources
- Green roofs, porous pavements, rain gardens and other storm water management measures

Suggested measures of accomplishment include but are not limited to:

- % of environmentally preferable construction materials used (e.g. lower carbon concrete); % of materials reused or recycled from demolition
- % of diesel powered equipment with EPA-verified diesel technology used in construction (e.g. diesel particulate filters and diesel oxidation catalysts installed on equipment)
- Implementation and/or enforcement of idle-reduction policies. At the very minimum, during periods of inactivity, idling of diesel on-road vehicles and non-road equipment shall be minimized and shall not exceed the time allowed under state and local laws.
- % of building space which is Leadership in Energy and Environmental Design (LEED) certified and/or description of green design practices incorporated (i.e. dual plumbing, passive solar, xeriscaping)
- % of water pipes inspected for leaks; % of water pipe leaks fixed
- reduction in green house gases estimated because of alternative power technologies employed instead of fossil fuel driven technology
- % reduction of water use estimated through integrating water efficient technology

Green Remediation

Green remediation is defined as the practice of considering the environmental impacts of remediation activities at every stage of the remedial process, in order to maximize the net environmental benefit of a cleanup. Considerations include selection of a remedy, energy requirements, efficiency of on-site activities, and reduction of environmental impacts on surrounding areas.

"Clean & Green" is a policy established by EPA Region 2 to enhance the environmental benefits of Superfund and RCRA cleanups by promoting technologies and practices that are sustainable. The policy applies to all Superfund and RCRA cleanups. Under this policy, certain green remediation practices will serve as touchstones for Region 2 response actions.

For more on Green Remediation, see: http://www.epa.gov/region2/superfund/green_remediation/

Materials Management: Resource Conservation and Green Disposal

Waste prevention and recycling reduces Greenhouse Gas (GHG) emissions from landfills, saves energy, and protects forest carbon sequestration. Waste prevention and recycling have tremendous beneficial impacts to the environment, with zero waste being the ultimate goal. To better understand the connection between materials management and climate change, visit EPA's Climate Change - Waste webpage at http://epa.gov/climatechange/wycd/waste/index.html. EPA's Waste Reduction Model (WARM) enables waste managers to track and report greenhouse gas reductions from different waste management practices. More information can be found at http://epa.gov/climatechange/wycd/waste/calculators/Warm_home.html.

EPA's Sustainable Materials Management (SMM) Program is a national effort to promote more efficient materials management through resource conservation, recycling, and other sustainable initiatives such as electronics stewardship and industrial materials recycling. For more information visit: http://www.epa.gov/wastes/conserve/smm/. Examples of materials management can also be found at http://www.epa.gov/epawaste/index.htm, and include practices such as:

- Reusing materials instead of using manufacturing goods produced from virgin materials, especially paper products, carpeting products, building materials, and plastics
- Incorporating industrial materials into construction projects as substitutions for raw materials, such as coal ash, foundry sand, demolition materials, slags, and gypsum
- Using environmentally sound disposal practices for materials and equipment that cannot be reused or salvaged. Such disposal practices may include recycling or composting
- The Food Recovery Challenge (www.epa.gov/foodrecoverychallenge) is a voluntary and no-cost partnership program in which participants set their own goals to reduce food waste through source reduction, donation to the hungry, and composting, as well as select industrial uses.

Suggested measures of accomplishment include but are not limited to:

- Tons of paper and trash reduced, composted, recycled or amount of decreased tons to landfill
- Tons of organic (e.g., food and yard) composted
- Tons of electronics recycled, donated or reused (e.g. computers recycled)
- Tons of office supplies recycled (excluding computers and electronics) such as toner cartridges and batteries.

Participation in EPA's WasteWise (www.epa.gov/wastewise) and Food Recovery Challenge (www.epa.gov/foodrecoverychallenge) voluntary partnership programs are an easy way to reach these metrics, with the support and technical expertise of the Agency.

Energy Efficiency/Clean Energy

The use of clean energy can improve air quality, increase energy security, and reduce greenhouse gas emissions.

Renewable sources of energy include solar photovoltaic, thermal, wind, geothermal, biogas, biomass, and low impact hydroelectric. Combined heat and power (CHP), also known as Co-generation, is an efficient, clean, and reliable approach to generating power and thermal energy from a single fuel source (coal, natural gas, biogas, or biomass). EPA's "Green Power Locator" includes a map of the U.S. to show you the green power options that exist for you: http://epa.gov/greenpower/pubs/gplocator.htm. Examples of clean energy practices include:

- Using clean and sustainable fuels (e.g. biofuels or renewable natural gas or other forms of clean energy (e.g. solar/wind) in operating equipment, machinery or vehicles
- Applying verified diesel emission control technology (VDEC) for all on-road and non-road equipment used for transportation or soil movement and reducing unnecessary idling. Awardees may calculate diesel emission reductions based on diesel equipment calculator using the retrofit calculator which can be found at http://www.epa.gov/oms/stateresources/tools.htm
- Installing combined heat and power system
- Using renewable sources of energy for lighting, heating, and transportation

Suggested measures of accomplishment include but are not limited to:

- % of kWh reduced through efficiency or conservation (e.g. automatic shut down for office equipment, lighting, or computer power; number of energy efficient lights-- CFLs, LEDs in place)
- % of gallons, cubic feet, or BTU of alternative fuels used in lieu of conventional fuels
- % of kWh-renewable energy purchased or produced on-site
- % of natural gas reduced (cubic feet) or % fuel oil reduced (gallons)

Fuel Efficient Vehicles

Transportation accounts for about 30 percent of U.S. greenhouse gas emissions. It is the fastest-growing source of greenhouse gases in the U.S., increasing 1.5 percent per year. These estimates do not include the additional lifecycle emissions from such things as the extraction and refining of fuel, and the manufacture of vehicles. Visit EPA's Green Vehicles Guide at http://www.epa.gov/greenvehicles/Index.do to find clean and fuel-efficient vehicles. In addition, EPA's SmartWay[SM] (http://www.epa.gov/smartway/index.htm) is an innovative brand that represents

environmentally cleaner, more fuel efficient transportation options. It includes products and services that reduce transportation-related emissions.

There are a limited number of EPA grants in which EPA assistance agreement awardees may purchase or lease vehicles. When the purchase or lease of vehicles is authorized under an assistance agreement, awardees should consider purchasing, leasing, or renting fuel efficient vehicles.

Suggested measures of accomplishment include but are not limited to:

- Number and type of electric, alternative fuel, and/or hybrid vehicles rented, leased, or purchased under the grant vs. the conventional fuel vehicle alternative.

Sustainable Water Infrastructure and Water Efficiency

The use of sustainable water infrastructure practices can help reduce the growing gap that exists between investment needs and available funding at the local and national level. Such practices can serve to reduce greenhouse emissions, and adapt to the climate variability that is threatening our water resources.

EPA's WaterSense Program certifies and labels water-efficient products in a variety of areas. For more information see: http://www.epa.gov/watersense/

More information on sustainable water infrastructure practices can be found at http://water.epa.gov/infrastructure/sustain/ and include but are not limited to:

- Full-cost pricing of water services to accurately reflect the true costs of services, including the treatment and delivery of water, as well as the construction, operation and maintenance of the system
- Efficient use of water in the residential and commercial sectors to reduce the strain on water and wastewater utilities, eliminate the need for system expansions, and save energy; this may include water re-use projects, water conservation programs, and projects that correct water loss/leak issues
- Efficient use of energy, which may include capturing methane emissions from wastewater treatment facilities, use of alternative energy sources and/or co-generation to power water utility operations, energy benchmarking, energy audits, and establishing a plan to implement the recommendations of an energy audit
- Incorporating sustainable water infrastructure considerations into all engineering design documents, including a description of the energy efficiency features considered for the project, as well as a present value savings analysis of all design alternatives considered.
- Implementing green building practices during construction
- Utilize water efficient landscaping (xeriscaping) with native species to reduce the need for water sprinkling.

Suggested measures of accomplishment include but are not limited to:

- % of gallons of potable and/or reclaimed water used;
- % of gallons of potable water saved or recycled
- % xeriscape (water efficient) landscape installed;
- % of linear feet of dual plumbing installed in the reuse of grey waters
- % of linear feet of water pipes inspected for leaks; % of water pipes leaks fixed

Green Conferences/Meetings and Alternatives to Traditional Travel

Transportation accounts for about 30 percent of U.S. greenhouse gas emissions. This figure does not include the additional lifecycle emissions from the manufacture of vehicles and airplanes.

Since the greenest trip is the one that is not taken, awardees should consider holding teleconferences, videoconferences, and web conferences. Such conferences would dramatically reduce the need to travel to meetings. If travel is required, awardees should consider taking public transportation, participating in carpool programs, or using fuel efficient vehicles.

When feasible, awardees should hold green conferences/meetings using environmentally preferable measures to minimize negative impacts on the environment (e.g. paper handouts and use of binders should be avoided or minimized). For more examples, see EPA's Green Meetings Policy at http://www.epa.gov/oppt/epp/pubs/meet/greenmeetings.htm

Suggested measures of accomplishment include but are not limited to:

- % of trips offset by conference calls, videoconferences, and web conferences
- % of trips where public transportation, carpools, fuel efficient vehicles, or bicycles were used to attend off-site meetings
- % of meetings held in which green practices were instituted (e.g. no paper handouts or bottled water provided, etc.)
- % of conferences that achieved zero waste
- of meetings held in locations accessible to mass transit

Sample Work Plan Containing Green Measures

I. Green Practices/Measures

A. Overall Objective: _____ (*fill in the blank*) B.

Specific Tasks/Activities and Outputs

- Environmentally Preferable Purchasing
  - Recipient will commit to purchasing only EPEAT or equivalent energy savings computers. Recipient will report the % of EPEAT (or equivalent) computers purchased in each reporting period.
- Materials Management: Resource Conservation and Green Disposal
  - Recipient will utilize material collection in the office for all recyclables used in the office including paper, plastics, glass, and metals. Recipient will provide % of recyclables collected in pounds of material in each reporting period.
  - Recipient will recycle all printer cartridges and purchase only re-fillable printer cartridges. Recipient will set duplex printing (two-sided) as defaults on all capable printers. Recipient will report the number % of printer cartridges recycled and purchased in each reporting period.
- Green Conferences/Meetings and Alternatives to Traditional Travel
  - Recipient will strive to hold teleconferences and webinars in lieu of travelling out of the area for conferences. Recipient will report the % of teleconferences or webinars held in lieu of traditional travel.
- Energy Efficiency/Clean Energy
  - Recipient will strive to reduce kWh for the project by ___% by using automatic shut-down for office equipment and lighting, and using energy efficient lights.
  - Recipient will strive to reduce the amount of fuel from utilities or suppliers used for the project by __%
- Green Building, Construction and Remediation Practices
  - ___% of the equipment used by Recipient to clean-up/remediate _____site will have either diesel particulate filters or diesel oxidation catalysts installed and a “no idling” policy in place. # Of Green Remediation projects begun.

- Fuel Efficient Vehicles

  - If approved and determined by the Project Officer to be cost effective, Recipient will rent _____hybrid vehicles.

- Sustainable Water Infrastructure and Water Efficiency

  - Recipient will inspect _____% of linear feet of water pipes for leaks, plus all fixtures.
  - Recipient will recycle _____ % of gallons of potable water in carrying out the project.

Attachment B
Greening Assistance Agreements Goals
For Competitive and Non-Competitive Work plans

Below is a table of metrics which EPA awardees should use to report on their success in carrying out green practices in their approved work plan tasks and activities. The metrics are flexible, easy to apply, and are consistent with metrics commonly used today.

EPA Region 2 will issue annual implementation guidance for sustainability practices and measures for Project Officers to assist them in negotiating work plans.

Awardees are encouraged to incorporate sustainability practices into subgrants/subawards and contracts awarded under their EPA assistance agreements.

Environmentally Preferable Purchasing	Green Building, Construction and Remediation Practices	Resource Conservation and Green Disposal	Energy Efficiency/Clean Energy	Fuel Efficient Vehicles*	Sustainable Water Infrastructure and Water Efficiency	Green Meetings and Alternatives to Traditional Travel
% of recycled/ refurbished products purchased (excluding items counted under EPEAT, ENERGY STAR, WaterSense) such as computers, monitors, laptops, copiers, lighting fixtures or LED lights, water fixtures, etc.	% of diesel powered equipment with EPA-verified diesel technology used in construction (e.g. diesel particulate filters and diesel oxidation catalysts installed on equipment)	Tons of paper and trash reduced, composted or recycled or amount of decreased tons to landfill (e.g. office recycling)	% of kWh reduced through efficiency or conservation (e.g. automatic shut down for office equipment, lighting, or computer power; number of energy efficient lights- CFLs, LEDs in place)	Number and type of electric, alternative fuel, and/or hybrid vehicles rented, leased, or purchased under the grant	% of gallons of potable and/or reclaimed water used; % of gallons of potable water saved or recycled	% of meetings held in which green practices were used (e.g. no paper handouts or bottled water provided-- for more examples, see EPA's Green Meetings Policy at http://www.epa.gov/oppt/epp/pubs/meet/greenmeetings.htm

% of ENERGY STAR, Water Sense or EPEAT items Purchased	% of building space which is LEED certified and/or description of green design practices incorporated (i.e., dual plumbing, passive solar, xeriscaping)	Tons of electronics recycled, donated or reused (e.g. computers recycled)	% of gallons of alternative fuels used in lieu of conventional fuels	Program in place to monitor implementation of selected practices	% xeriscape landscape installed	% of trips offset by conference calls, webinars, or videoconferences
% of recycled paper purchased (reams or sheets)	% of environmentally preferable construction materials used (e.g. lower carbon concrete)	Tons of office supplies recycled (excluding computers and electronics) such as toner cartridges or batteries	Establish building baseline using ENERGY STAR Portfolio Manager	*Note: most grants do not allow the purchase or lease of vehicles	% of linear feet of dual plumbing installed	% of trips where public transportation, carpools, fuel efficient vehicles, or bicycles were used to attend off-site meetings
% of post consumer content	% of water pipes inspected for leaks; % of water pipe leaks fixed	Gallons of water saved; Tons of organic (e.g., food and yard) composted	% of natural gas reduced (cubic feet); % of fuel oil reduced (gallons)		% of linear feet of water pipes inspected for leaks; % of water pipe leaks fixed	% of conferences that achieved zero waste
% of products purchased that can be reused, recycled or Composted	% of materials reused or recycled from demolition	Participation in EPA WasteWise, Food Recovery Challenge, or Electronics Challenge Programs or Zero Waste	% of kWh renewable energy purchased or installed on-site		See other applicable columns for energy and construction practices/metrics	