

2012-2014

Sustainable Operations Plan FY12-FY14 (October 2012)



Facilities, Real Estate and Administration

10/3/2012


































NATURAL RESOURCES DEFENSE COUNCIL
THE EARTH'S BEST DEFENSE

Table of Contents

Introduction	4
Scope of Work	5
Planning and Methodology	6
Our Progress	6
What’s New in the October 2012 Update?	7
FY12 Activities - Foundation and Quick Wins	7
 Project 1 – Supporting the Sustainable Operations Plan (Completed)	7
 Project 2 – Re-organize Facilities and Administration Team to Allow Focus on Sustainable Operations (Completed)	8
 Project 3 – Implement Enterprise-Wide Environmental Performance Monitoring and Verification (Underway)	10
 Project 4 – Server Virtualization (Underway)	11
 Project 5 – Xerox Energy Efficiency Rollout (Completed)	12
 Project 6 – E-Waste (Reassigned to FY13)	12
 Project 7 – IT Procurement Policy – Computers and Servers (Reassigned to FY13)	12
 Project 8 – Collaboration Central (Completed)	12
 Project 18 [NEW] – Summer Capstone – Select Environmental Reporting Standard (Completed)	13
FY13 Activities – Reduce and Report	14
 Project 9 – Fall Capstone – Develop Net Zero Energy Site Plan for NY Headquarters (Underway)	14
 Project 10 – Reduce Travel by Upgrading Conference Call Capabilities and AV Equipment (Not Started)	15
 Project 11 – Environmentally Responsible Vendor Requirements (Underway) ...	16
 Project 12 – Materials and Services Procurement (Underway)	17
 Project 13 – Green Accounting (Not Started)	17
 Project 6 – E-Waste (Reassigned from FY12) (Underway)	18

Sustainable Operations Plan FY12-FY14 (October 2012)

 	Project 7 – IT Procurement Policy – Computers & Servers (Reassigned from FY12) (Not Started)	19
    	Project 19 [NEW] – Environmental Responsibility Requirements for Building Management (Not Started)	19
      	Project 20 [NEW] – Environmental Performance Target Setting and GRI Reporting (Underway)	20
 	Project 21 [NEW] – Waste Tracking and Reduction (Not Started)	21
    	Project 22 [NEW] – Green Lease Agreements With Tenants (Underway)	22
FY14 Activities – Transform and Communicate		23
 	Project 14 – Alternative Workplace Environment (Underway)	23
     	Project 15A-Y – Regional Sustainability Initiatives (Underway)	24
	<i>New York:</i>	24
	<i>Santa Monica:</i>	25
	<i>DC:</i>	26
	<i>Beijing:</i>	26
	<i>Chicago:</i>	26
	<i>San Francisco:</i>	27
	Project 16 - Communicate Sustainable Operations Plan Results (Underway)	27
	Project 17 - Review Resource-Intense Processes Managed Outside Facilities & Administration (Not Started)	28

Introduction

Sustainability is a journey, not a destination. Since founding, NRDC staff members have run this organization in a way that matched the convictions of its advocacy. While the sustainability of our operations has been an important focus, symbolized by LEED certified buildings and office initiatives such as composting, becoming truly sustainable requires us to continually improve how we impact the Earth. Our FY12-FY14 Sustainable Operations Plan covers all of NRDC's operations to propels us further along this same path we've followed since founding, of practicing what we preach.

The philosophy behind the plan aligns our operations with the organization's approach to sustainability. Fully conscious of our accountability to donors and a careful use of their funds, our focus is on pursuing cost-effective sustainability solutions. While cost-effectiveness is a key factor in our planning, we continually seek additional funding from grants, incentives, and any other sources that allow us to implement the most advanced solutions available.

In addition to fitting within NRDC's environmental mission, the plan will reduce operating costs over time and benefit NRDC employees through improved work environments and greater engagement on everyday sustainability issues. Aspects of the plan will also engage the communities where we operate. For example, in April 2012 we were awarded a grant to install a green roof on the New York office. Not only will we install this roof at low cost, but we will also work with Sustainable South Bronx, a green collar jobs partner that trains unemployed and disadvantaged New Yorkers.

By implementing this plan we expect further reductions in our already efficient operations. We will make cuts to energy, greenhouse gas emissions (GHGEs), water, and waste. To match NRDC's program priorities, we will place extra scrutiny on our energy and GHGE reductions. The plan touches all processes managed by Facilities and Administration, along with operations managed by other groups such as IT. High priority projects that began in the first year, such as establishing environmental performance baselines and implementing an enterprise-wide sustainability system, will allow us to set the most challenging yet achievable reduction targets.

Projects in the plan will affect broad areas of administrative responsibility encompassing: the operations of all six offices; environmental standards for purchasing; vendor and contractor management; institutional policies such as travel reduction; and our real estate decisions including transactions, construction practices, alternative workplace environment, and facilities management. A focus has been placed on IT projects to expand online collaboration tools, reduce power consumption of all equipment (e.g. servers, printers, computers), and apply environmental performance standards to IT procurement policies. Finally, the Facilities team intends to partner with other departments to review resource-intensive processes, like paper use by the Membership and Communications departments, and collaborate on process improvements.

Establishing consistent baseline measurements is a central element of the plan. Only by fully measuring and analyzing all of our consumption patterns at a more detailed level than we do today, can we effectively manage our progress towards more sustainable operations. A key priority to be completed in the first half of FY13 is implementing enterprise-wide sustainability software to help us achieve this goal. Improved measurement and analysis will permit us to scrutinize our reduction targets to make sure they are challenging, specific, and measurable.

Plan projects are being staged over the three years and prioritized based on cost, resources, potential impact, availability of skill-sets, opportunities, and timing in relation to other projects. Some projects will require no capital investment, others will result in immediate and substantial savings, and some may not yield savings but have worthwhile environmental impact. Taken as a whole, these projects will create long-term operational changes that increase efficiency and reduce operating costs.

Because we've crafted an ambitious plan, we face certain risks in executing it effectively. We seek to accomplish many objectives simultaneously and run the risk of budget and resource constraints. Along with careful budgeting, we will pursue as many grant opportunities and incentive programs as we can find. In addition, some initiatives will require either re-training certain staff members or a change management plan for the entire organization. Adequate time must be freed up for involved staff members to lead these changes. More pertinent NRDC-wide priorities and budget constraints may delay region-specific action. Some projects, such as real-estate containment will require clear, effective communication across the organization, backed by leadership. Since we are aware of these potential risks, we are prepared to manage through them if they occur.

Our results will demonstrate that planning and implementing sustainable operations is good management that increases efficiency, reduces and avoids operational costs, and engages staff. By the end of FY14, we believe we will be a leader in sustainable operations among mid-sized organizations. By sharing the lessons we've learned, we can influence others to operate more sustainably. At that time progress will be measured in a comprehensive annual report of environmental performance that will be communicated to NRDC staff and the public. A carefully thought-out communications plan will be put in place that will share best practices, successes, and lessons learned through case studies, posts to our website, social media, and possibly OnEarth or external publications.

With the support of senior management, input from key colleagues, and cooperation from all staff, we have the opportunity to substantially improve the environmental impact of our operations. By applying our collective expertise and passion, we can ensure that NRDC continues to set the example it asks others to achieve.

Scope of Work

The Sustainable Operations Plan affects broad areas of administrative responsibility to reduce energy and water consumption, and waste generation: purchasing; vendor and contractor management; institutional policies such as travel reduction; and the operations of all NRDC offices including real estate transactions, construction practices, and facilities management. This initiative also encompasses Information Technology projects to expand online collaboration tools, reduce power consumption of all technology equipment (e.g. servers, printers, copiers, computers), and apply environmental performance standards to IT procurement policies. By collaborating with the accounting department to explore green accounting practices we will seek highly detailed insights into consumption patterns, which could allow fine-tuning of operational efficiency. Finally, as part of the Sustainable Operations Plan, the Facilities team will review resource-intensive processes managed outside the Finance & Administration department – such as paper use by the Membership and Communications departments – and advise on process improvements.

Planning and Methodology

As described above and detailed under FY12 activities below, a key activity of the first year of this initiative was a planning process to gather data and devise reduction strategies. These data will enable us to set aggressive, achievable and measurable goals for the remainder of the 3-year period and beyond.

Plan projects are being staged over three fiscal years. Our methodology for prioritizing projects was based on a combination of factors:

- Cost
- Staffing and available skill-sets
- Potential savings of both resource consumption and budget over the life of the project
- Required resources
- Opportunities
- Timing in relation to other projects

Our Progress

We accomplished a number of substantial projects we set out to complete in FY12, pushed some to FY13, and achieved others that either presented themselves as opportunities or were reprioritized. See our accomplishments below.

- Oct 2011 – Reorg of F&A team to expand sustainable operations responsibilities across team members
- Nov 2011 –NY data center updated with virtual servers and hot/cold aisle containment
- Feb 2012 – Sustainable Operations plan expanded and updated
- Feb 2012 – Sustainable operations site went live on Collaboration Central and users began adopting
- Mar 2012 – NY Solar panels go live (see its performance - <https://www.sunnyportal.com/Login>; email – msuarez@nrdc.org; password - qatevixi)
- Apr 2012 – Awarded grant from NYC DEP for green roof
- Jun 2012 – Sustainability software vendor selected following 3 month RFQ/RFP, project planning began
- Aug 2012 – Columbia University Capstone team submitted its report on GRI reporting for NRDC
- Aug 2012 – AWE pilot commenced
- Sep 2012 – Chicago lease decision & initiation of LEED Platinum/Living Building Petal Challenge

What's New in the October 2012 Update?

Any new projects added since the last Sustainable Operations Plan Update in February has **[NEW]** after the project number.

We added the following iconography to help staff quickly identify the areas each project will address:



Monitoring impact



Energy and greenhouse gas emissions



Water



Recycling and waste



Building efficiency, systems, & utilization



Material intensity



Management

FY12 Activities - Foundation and Quick Wins

The first year of the plan was front-loaded to set up maximum reductions and to lay the groundwork for projects expected to span multiple years. In addition to the initial data gathering and planning, the first year of the initiative covered several specific sustainability efforts, starting with foundational objectives of producing a fully-executable Sustainable Operations Plan and choosing the appropriate reporting standard to disclose our environmental performance. Further projects ranged from selecting and beginning implementation of an enterprise-wide Sustainable Operations tool, to reorganizing the Facilities and Administration team to all them to take on sustainable operations responsibilities.

Each project below has a note on project status (completed, underway or postponed) and an explanation if a project scope was revised. In addition, new projects undertaken for the fiscal year have been added at the end of planned projects.



Project 1 – Supporting the Sustainable Operations Plan (Completed)

To prepare for implementing our plan and sharing the results of our projects, we need to research several areas. Additional information we need includes benchmark environmental performance data, best practices to influence our projects, and a reporting standard to allow transparent disclosure of our own environmental performance. We will seek the benchmarking data and certain best practices through our participation in the Sustainability Manager's Roundtable, a forum where environmental organizations share their experiences with sustainability management initiatives.

Scope of Work:

- Develop survey for Sustainability Manager's Roundtable to solicit benchmark environmental performance data (explored and decided against a survey, postponed pursuit of data)

Sustainable Operations Plan FY12-FY14 (October 2012)

- Aggregate baseline data and compare with benchmark data (Collecting benchmark data was explored and assigned its own project – 20 – for FY13)
- Create a library and maintain a knowledge base of sustainability best practices (Assigned to Project 8)
 - Propose effective resource-use reduction strategies
 - Inform reduction goals (FY13)
- Compare major reporting systems such as GRI, ISO 14001, ISO 50001, etc. and recommend the best fit for NRDC (Assigned to capstone team of grad students – see Project 18)
 - Consult with NRDC internal leadership on the recommendation
- Draft a plan for phased reporting of environmental performance (See Project 18)
 - Year 1 may be for internal distribution
 - Recommend level of detail for external disclosure, with steps to full-disclosure and timeline (recognizing negative impacts if full reporting is done too soon)

Project Responsibility: Anthony

Schedule: Project completion by end of FY12 4th quarter; Analysis of reporting systems and draft plan for reporting strategy will be completed by mid-May

Estimated Cost: \$20K

Operational Responsibility: Annual environmental performance reporting will be completed by Closed Loop Advisors Sustainability Management best practices and benchmark data will be reviewed and updated annually by the Facilities & Administration team

Ongoing Challenges: Continual research and evaluation of best practices will be a time intensive yet necessary task.

Project 2 – Re-organize Facilities and Administration Team to Allow Focus on Sustainable Operations (Completed)

To enable members of the Facilities and Administration team to dedicate sufficient time to execute the Sustainable Operations Plan and to manage ongoing improvements, we will reorganize the department as described below. Gaining additional staff time to focus on Sustainable Operations is essential to moving the agenda forward. In addition, a focused review of environmental performance, along with actions to improve efficiency will certainly reap reductions in both consumption and costs.

Scope of Work:

- Outsource New York mailroom staffing/oversight; This change will free up approximately 2 to 3 hours of Matthew Cohen’s time each day; Outsourcing mailroom staffing will also include relief coverage for reception, which will free up Robyn Spencer for 3 hours per day
- Assign institutional sustainability responsibilities to Matthew Cohen; Matt is the de-facto manager for sourcing telephone equipment and other leased equipment; Within this role he will now focus on energy conservation and on identifying services that need to be “greened”; Additionally, in coordination with Rene Leni in the Santa Monica office he will focus on plug

load-related issues – i.e. watt stoppers, power and standby modes, and elimination of excess equipment

- Assign institutional sustainability responsibilities to Robyn Spencer; With time gained as a result of outsourcing reception coverage, Robyn will assume oversight of energy management tools such as Portfolio Manager or another institutional monitoring dashboard; She will also co-manage travel with Jennifer Daly and implement a system of accounting for travel-related GHGE
- Place responsibility for managing routine monitoring with Office Administrators; NRDC Office Administrators will take responsibility for supervising day-to-day monitoring efforts in their respective offices, with each administrator identifying a staff member or intern to serve as Coordinator for Environmental Performance Reporting; Reporting to the Office Administrators, these coordinators will input and review consumption and performance data; The Office Administrators will be charged with adhering to specific consumption 'budgets' once the Sustainability Plan has been completed and targets determined
- Merge office committee and eco committee; oversee committee activities. These two committees – in some offices both exist, in others one or the other is defunct – overlap in purpose and may engage in both duplicative and conflicting activities; in addition they compete for logistical help from administration; As the issues these two committees address are so closely linked, the committees should be combined; More effective oversight of these committees by the office administrators is also needed
- Address these two needs (internally or externally):
 - A person to investigate and apply for 'greening' incentives and grants
 - An energy management consultant to assist with the selection process for large-scale equipment purchases

Project Responsibility: Anthony and Office Administrators

Schedule: Fully instituted in March 2012.

Estimated Cost: The cost is associated with outsourcing the mailroom at \$58K/year. This cost is prorated to \$29K for FY12

Operational Responsibility: Ongoing responsibility for evaluating progress will be led by Anthony Guerrero

Ongoing Challenges: *If these organizational changes do not free enough staff time to accomplish the new Sustainable Operations work, we may have to scale down the initiatives. Defining the role of 'Coordinator for Environmental Performance Reporting,' prioritization of these tasks among their other responsibilities, creating training materials, and training the coordinators will require a time investment from office administrators and institutional facilities staff. Additional risk relates to the time Office Administrators must spend managing the Coordinators. The responsibilities outlined above are critical for the success of the plan and ongoing efficient operations. If these responsibilities are not being met due to workload constraints, an additional headcount may be needed to be the overall Coordinator for all offices.*



Project 3 – Implement Enterprise-Wide Environmental Performance Monitoring and Verification (Underway)

Monitoring and verifying our energy and water consumption is essential to our performance improvement efforts. A system that tracks such consumption will also allow us to track and analyze our GHG emissions. By installing a system that allows for detailed measurement of the performance of our offices, we can institute continuous commissioning of building systems when possible. Continuous commissioning makes sure building systems run at peak efficiency. While we currently use ENERGY STAR's Portfolio Manager to analyze our energy and water use data, it is too limited for our purposes, especially within tenant spaces. Only an enterprise system will provide what we need – an integrated dashboard that enables automated monitoring and notification across all offices, with data collected at the sub-metering level as necessary, such as for server rooms. To facilitate this change, in FY12 we have begun to assess monitoring and verification needs, will send out an RFP to evaluate systems, then will complete the installation of a single system or compatible sub-systems in New York, Santa Monica and D.C. Monitoring for the San Francisco and Chicago offices will come online after NRDC determines what we will do for these expiring leases. At the writing of this update, implementation is nearing completion.

Scope of Work:

- Survey Santa Monica and New York buildings to understand existing systems, upgrade possibilities, limitations and compatibilities (Completed)
 - Energy: (Underway)
 - Monitor instantaneous power usage of major loads, set expected ranges for energy consumption to set automated alerts
 - Analyze high consumption periods in each office to plan further efficiency measures
 - Set up measurements for energy use by category (e.g. data center, lighting, plug-load, heating/cooling, etc.)
 - Water: (Underway)
 - Add infrastructure to monitor potable and non-potable water usage in the building, in HVAC and for irrigation
 - Waste and other operations: (Planned)
 - Evaluate what level of measurement can be adopted for landfill, recycling, and compost
 - Research additional operational areas that could be input into an enterprise system (e.g. procurement, travel, etc.) (Not Started)
- Research the capability for a software system to communicate with our Building Management Systems (BMS) to enable continuous commissioning at the building and tenant space levels; Discuss findings this with in-house teams/experts to pick the best vendors (Completed)
 - Review possibilities for automated demand response (ADR) via BMS platforms, and sustainability management enterprise systems and vendors (Completed – not feasible – energy consumption too low)

- Explore the possibility of energy savings through monitoring-based commissioning (MBCx); Review equipment and sensors required for plan implementation
- Draft RFP based on research and discuss needs with in-house teams/experts to attract the best vendors in terms of capabilities and cost
- Discuss needs with in-house teams/experts to evaluate applicants and select the best vendor; Match NRDC needs to above products, considering real estate portfolio size, office locations, compatibilities with existing building systems for leased office spaces, and costs, and vendors' own environmental performance (Completed)
- If possible, seek a monitoring tool that allows annotation of upgrades (Considered)
- Arrange team structure and assign reporting responsibilities (See Project 2 for details)
- Design suite of metrics to track (Negotiated with vendor)
- Prepare implementation and rollout plan; Set up training for all system users (Planned)

Project Responsibility: Milly Suarez, Rene Leni, Sasha Alleyne and Closed Loop Advisors

Schedule: Evaluation of needs was completed in March; RFQ was sent in March; RFP was sent in April; Vendor evaluation started in March and stretched into late May; Noveda Technologies was the company selected, with negotiations taking place in June FY12; Implementation commenced in July FY12

Estimated Cost: \$50K with \$25K in overhead in FY12 and in FY13

Operational Responsibility: Ongoing responsibilities include checking the acceptable ranges, performing quality control measures to check the system is working properly; Office Administrators will be responsible for these tasks.

Potential Risk – Medium: *Going into this project budgeting was uncertain, but worked out. Effective oversight of the system is dependent on accomplishment of Project 2 (Re-organizing Facilities and Administration team).*

Potential Return – High: *System monitoring is an extremely effective way to manage energy and water consumption in real time. Additionally, it will enable NRDC to verify that capital and energy efficiency investments are performing as originally anticipated and provide notifications when equipment is not functioning at optimum levels.*



Project 4 – Server Virtualization (Underway)

The IT department has begun a two-year server virtualization initiative and estimates that upon completion, the central IT operations in New York will run with just 25 percent of the number of physical servers used at the start of the project. This will be accomplished by shifting from a system where each technology operation requires its own server to one where a single piece of physical equipment can run multiple operations by means of multiple 'virtual servers.'

Scope of Work:

- Install new server racks (Completed)
- Install high-end servers with the capacity to run 10 to 20 virtual servers (Completed)
- Run test protocols before putting virtual servers into full production (Completed)
- Decommission and recycle old servers (Some servers that are not ready for virtualization will continue to run as standalones) (Underway)

- Determine budget and timeframe for replicating this process in all offices (Planned)
- Monitor server utilization (i.e. actual server use relative to capacity) of data center (Not Started)

Project Responsibility: Rodrigo Jaramillo

Schedule: Considered an FY12 expense in IT

Estimated Cost: TBD

Operational Responsibility: Ongoing responsibility for evaluating energy efficient data storage will rest with Rodrigo.

Potential Risk – Low: Old equipment must be decommissioned eventually and this project will be implemented while running legacy systems in tandem, circumventing the risk of service interruption.

Potential Return – High: Data centers are large consumers of energy, particularly when it comes to cooling them. The designed solution is targeted to reduce our data center energy expenditure by more than 20%.



Project 5 – Xerox Energy Efficiency Rollout (Completed)

This year we will complete the strategic rollout of switching outgoing fax functionality from stand-alone machines to our Xerox copiers. Incoming faxes will be switched to electronic processing in a separate project that is currently in progress. It will allow us to institute passcode printing and default double-sided printing to reduce paper use.

Scope of Work:

- Ensure that all Xerox copiers switch to power saver mode when idle and to deep sleep after business hours
- Reduce number of additional printers
- Remove all fax machines

Project Responsibility: Matt Cohen

Schedule: Printer reduction and fax machine removal complete; Monitoring and programming all copiers to operate on the most efficient settings will be completed in FY12

Estimated Cost: \$0

Operational Responsibility: Ongoing responsibility for evaluating copier energy performance will be led by Matt Cohen



Project 6 – E-Waste (Reassigned to FY13)



Project 7 – IT Procurement Policy – Computers and Servers (Reassigned to FY13)



Project 8 – Collaboration Central (Completed)

Use IT's new Collaboration Central as a collaborative data aggregation and communication tool: post regular status reports, benchmarks and data from the Sustainable Operations Plan; work with

stakeholders across the organization to review and assess this information and the progress of the initiative.

Scope of Work:

- Work with IT (Brad Wells and Ketsia Elie) to become early adopters
- Set up site; input data
- Invite key NRDC staff to participate, engage stakeholders
- Establish a library and maintain a knowledge base of sustainability best practices (Assigned from Project 1)
 - Propose effective resource-use reduction strategies
 - Inform reduction goals (FY13)

Project Responsibility: Anthony to champion its use for sustainability management throughout the organization.

Schedule: Fully institute this protocol in FY12.

Estimated Cost: \$0

Operational Responsibility: OAs to ensure all sustainability management data is posted to the site and that NRDC sustainability management news is communicated with all colleagues using the site

Ongoing Challenges: Ensuring that site is updated systematically given existing workload and engaging stakeholders to use Collaboration Central to keep up with plan progress may require a consistent time investment



Project 18 [NEW] – Summer Capstone – Select Environmental Reporting Standard (Completed)

As a capstone in its masters program in Sustainability Management (SUMA), Columbia University sends out groups of students to consult with public and not-for profit organizations on sustainability management issues. We aim to secure such services for the summer 2012 semester and have them develop the detail-oriented, time intensive project of reviewing, comparing, and recommending an environmental reporting standard for public disclosure.

Scope of Work:

- Submit proposal to participate in the SUMA capstone program at Columbia University
- Capstone group to investigate:
 - Environmental reporting standards such as Carbon Disclosure Project, ISO, GRI, etc.)
 - Which makes most sense for NRDC as a non-profit and given its operations?
 - Which could most comprehensively represent NRDC’s sustainability initiatives?
 - Flexibility for NRDC to use this as a management tool
 - Approach to phased reporting, building to full external disclosure (time-permitting)

Project Responsibility: Anthony Guerrero, day-to-day management by Closed Loop Advisors

Schedule: The capstone team delivered all tasks by mid-Aug 2012

Estimated Cost: Small amount of consulting fees to assist with knowledge transfer

Operational Responsibility: SUMA Capstone project manager and students and Closed Loop Advisors providing day-to day guidance and management

Ongoing Challenges: Not applicable

FY13 Activities – Reduce and Report

Following up on the foundational projects completed in year one, a key outcome of the second year will be setting aggressive yet attainable reduction targets. Given our progress in FY12, we would like to compare GRI C, B and A-level reporting, choose a path forward to report internally with the goal of external reporting the following year. Projects in FY13 will include revising and creating protocols and standards, as well as completing the travel reduction project. Along with the completion of the aforementioned projects, progress will continue towards the FY14 projects.



Project 9 – Fall Capstone – Develop Net Zero Energy Site Plan for NY Headquarters (Underway)

As a capstone in its masters program in Sustainability Management (SUMA), Columbia University sends out groups of students to consult with public and not-for profit organizations on sustainability management issues. We have secured such services for the fall 2012 semester. Students are tackling the detail-oriented, time intensive project of developing a net zero energy site plan for our NY headquarters. The aim of the project is to determine how, over 10 years, NRDC can produce as much energy as we consume in the space we own in NY (floors 6-12).

Scope of Work:

- Submit proposal to participate in the SUMA capstone program at Columbia University (Completed & Accepted)
- Capstone group to investigate: (Underway)
 - Net Zero Energy Site Plan for NY
 - Non-fossil fuel sources for power generation (heating and electricity)
 - Energy efficiencies that can be gained from operations and the building systems
 - Financing options
- Capstone team to submit a 10-year net zero energy site plan starting in FY14 (Not started)

Project Responsibility: Anthony Guerrero, day-to-day management by Closed Loop Advisors

Schedule: The capstone team should deliver all tasks by mid-Dec 2012. Progress reports will be due by mid-Oct and mid-Nov.

Estimated Cost: Small amount of consulting fees to assist with knowledge transfer

Operational Responsibility: SUMA Capstone project manager and students and Closed Loop Advisors providing day-to day guidance and management

Potential Risk – Low: *This is non-binding in terms of implementation. We've assigned a stretch goal (to say the least) and it is likely the team will not be able to get 100% of the way to net zero. Part of their planning depends on technological developments over the next 10 years.*

Potential Return – High: *Gaining additional help from students focused on Sustainability Management would increase our ability to move the organization's energy efficiency forward in a very cost effective way. In addition, the project holds the potential to place us at the forefront of leadership in building efficiency, which would serve as a great example for program staff.*



Project 10 – Reduce Travel by Upgrading Conference Call Capabilities and AV Equipment (Not Started)

Curbing staff travel would reap both environmental benefits and cost savings. Reduced travel also has the potential to raise staff productivity as time otherwise spent on travel and travel planning is regained. The Facilities and IT teams will collaborate on efforts to reduce travel. To bring about a significant reduction in travel, NRDC must provide a sufficient level of quality and reliability in audio, video and web conferencing services that makes virtual meetings rival face-to-face meetings in their ability to foster collegiality, aid effective collaboration, and produce results. Even with these tools in place, we will face a significant challenge in changing staff attitudes and behavior about travel. Yet another challenge will be to integrate planning for these improvements with office space planning. The Facilities and IT teams will collaborate on this effort and will engage Human Resources and others as needed.

Scope of Work:

- Provide training to staff members on how to use AV equipment
- Develop and execute internal communication plan to convince staff of the benefits of this change
- Evaluate whether sufficient conference call and AV equipment are available to staff
 - Work with HR and IT to engage employees via survey or other methods to solicit feedback
 - If necessary, plan additional equipment purchase and installation in available collaboration spaces
- Use evaluation results to influence office renovation or redesign under the real estate containment effort
- Integrate online travel system into expense reporting to better track travel reductions and track GHGs

Project Responsibility: Rodrigo Jaramillo and IT

Schedule: Fully institute this protocol in FY13

Estimated Cost: TBD

Operational Responsibility: Annual evaluations of travel reduction and capabilities of online travel systems - Anthony Guerrero; Annual evaluation of quality of A/V/web conferencing capabilities - HR

Potential Risk – Low: Overcoming the perception that in-person meetings are required for many types

of interactions.

Potential Return – Medium: Will reduce GHG emissions, costs, and time lost associated with travel.



Project 11 – Environmentally Responsible Vendor

Requirements (Underway)

The construction, renovation and retrofit of our facilities have a large impact on NRDC's operations both financially and in terms of environmental practices. Other vendors offer products and services that have environmental impacts and we will begin asking them to comply with certain environmental requirements. The first stage in FY13 is to ask them to fill out a survey of their practices. We will notify them that this is something we will begin considering with greater rigor when it comes to contract decisions in the following year. We will also offer guidance if they express concern over meeting our expectations. These requirements will cover most vendors with the exception of those selling IT equipment (See Project 7 under FY13).

Scope of Work:

- Identify requirements for the sustainable building construction and operations to be included in contracts (Completed)
 - Specific to Building Management
 - Specific to construction, renovation, and retrofits
 - Research best-practices for this type of contract requirement
- Develop a questionnaire for vendors to complete about the sustainability of their own operations during the RFP process and contract renewals (Completed – awaiting final approval)
 - Evaluate if one umbrella questionnaire can be used, or if specific questionnaires need to be developed for the different types of vendors covered by other plan projects (Building Management, IT Procurement, and general procurement)
- Decide how vendor performance will be measured against these standards (criteria, metrics, reports, etc.) (Scoring system developed, awaiting approval)
- Prepare guidance document(s) to help vendors understand what we expect from them (Not Started)

Project Responsibility: Matt Cohen, Rene Leni, and Milly Suarez

Schedule: Address all vendors in FY13

Estimated Cost: \$30

Operational Responsibility: Ongoing responsibility for evaluating progress will be led by OAs.

Potential Risk – High: *In NY the building is co-owned with the NY Public Library, therefore we cannot act alone. Also, we have a long-standing relationship with the George Comfort Company and with our Super, Mitch Lappin, who is a dedicated and effective worker. In Santa Monica we have also built a relationship with the management company and with our Super, Dean. We want to be sensitive to these important business relationships while also making appropriate sustainability improvements.*

Potential Return – High: *By partnering with vendors that adhere to our standard of sustainable*

practices, especially building managers, we expect to achieve the Sustainable Operations Plan objectives of reduced energy and water consumption faster and with greater ease.



Project 12 – Materials and Services Procurement (Underway)

All procurement of services and materials, with the exception of IT and Building Management / construction, which are covered in stand-alone projects, will be subject to sustainability guidelines.

Items covered will include materials such as office supplies, kitchen supplies, promotional materials, and services such as janitorial and waste management.

Scope of Work:

- Compile sustainability best practices for sourcing, RFPs, etc. (Partial)
- Establish standards for materials purchased by environmental category: (Not started)
 - Content - % Recycled (overall & post-consumer) / hazardous chemicals (BPA, formaldehyde, etc.) / reduced material use
 - Recyclability / Compostable - what %
 - Certifications - Organic / Fair Trade / Local / GMO-free / FSC / Green Seal / Cradle to Cradle
 - Need - how necessary is the item? Is there a less material way to fulfill the need?
 - Communicate guidelines to staff
- Establish standards for services such as (Partial)
 - E-waste
 - Janitorial/Cleaning
 - Waste services provider

Project Responsibility: Matt Cohen, FSO

Schedule: Fully institute this protocol in FY13

Estimated Cost: \$0

Operational Responsibility: Annual review and edit of guidelines – OAs

Potential Risk – Low: Much of procurement already considers environmental impact, so the change should require little effort to change behavior.

Potential Return – Low: Will support NRDC mission and overall sustainability plan by choosing products with less environmental impact.



Project 13 – Green Accounting (Not Started)

Instituting green accounting practices will require coordination with the accounting department to determine which practices to adopt. We can begin by evaluating the enabling of adjustments in depreciation reporting, benefit-cost analysis, and activity-based costing. Activity-based costing frequently allows organizations to implement the costing tools for highly effective sustainability management.

Scope of Work:

- Survey staff expertise in green accounting, leverage existing knowledge, and seek additional sources of expertise if necessary

- Accounting to identify current procedures and models to adjust and/or adopt new procedures and models to enable green accounting practices such as those listed above
- Analyze the output of new green accounting reports to assess the new data and potential changes for how different teams operate

Project Responsibility: Sarah Gillman and Anthony Guerrero

Schedule: Implement in FY13

Estimated Cost: TBD - up-front costs depend on the need for additional software and/or expertise

Operational Responsibility: Sarah Gillman and Anthony Guerrero

Potential Risk – High: Potential to temporarily disrupt NRDC Accounting staff in the transition to new procedures and models. Green accounting methodology can be criticized, requiring careful decision-making on practices to adopt and methods of integration into NRDC accounting.

Potential Return – High: Increased visibility in attributing our environmental costs and possibly accounting for our environmental benefits would elevate the sophistication of how we measure our impact as an organization. Depending on the reach of green accounting practices we implement, we have the opportunity to become thought leaders in this area. By wielding influence in this emerging field, we could position ourselves to influence how stakeholders approach their own accounting practices, further enhancing our reputation.



Project 6 – E-Waste (Reassigned from FY12) (Underway)

As a signatory of the Basel Action Network (BAN), we already have thorough electronic-waste (e-waste) recycling protocols. We are now making sure all offices follow BAN/e-Steward guidelines. For example, some of our leased offices include an e-waste service, however, those vendors may not be e-Steward certified. Or, one of our California offices has a vendor that is not e-Steward certified, but as haulers they commit to contracting exclusively with e-Steward certified processors. If we want to be an e-Steward Enterprise, then we will have We will ensure that we contract only with recyclers certified under the E-Stewards Standard for Responsible Recycling and Reuse of Electronic Equipment, the leading certification program in this country.

Scope of Work:

- Encourage our current electronic waste recyclers to become Certified E-Steward Recyclers; replace any such company that has not made material progress toward becoming a Certified E-Stewards Recycler within 90 days of receipt of formal letter (Some already are, this is more complicated when we lease through a building management company)
- Link the e-waste policy to IT procurement to achieve the highest level of recyclability (Not started)
- Implement an internal institutional policy regarding the disposal of e-waste (Underway)
- Create and distribute contact information and e-waste removal order forms (Not Started)
- Designate e-waste collection area in each office and communicate policy internally so everyone knows what's covered and how to properly dispose of their e-waste (Completed)

Project Responsibility: OAs will oversee implementation and contracting in their respective offices

Schedule: Fully institute this protocol in Q4FY12

Estimated Cost: \$0

Operational Responsibility: OAs in each office will manage contracts and review vendors during contract renewal to ensure continued compliance with BAN guidelines

Potential Risk – Medium: *E-Steward Recyclers are somewhat new so it may be difficult to identify reputable vendors; removal cost may increase when using certified recyclers; lease provisions may limit e-waste contractors.*

Potential Return – Medium: *This effort would put us in compliance with our E-BAN agreement.*



Project 7 – IT Procurement Policy – Computers & Servers (Reassigned from FY12) (Not Started)

In FY12, the IT department will work to supplement its existing hardware purchasing protocols with written requirements for minimum efficiency ratings and other performance specifications and recyclability. Facilities and administration are in agreement that a policy for purchasing high efficiency computers, servers, and other IT equipment is an important project, as is the integration of power management best-practices into standard computer setup and commissioning protocols.

Scope of Work:

- Evaluate options in terms of relevant hardware and computer environmental performance including, but not limited to: efficiency ratings, laptop battery life, recyclability, and other environmental characteristics such as hazardous material content
- Set protocols for standard computer set-up at the highest level of efficiency
- Upon procurement of each machine, set up a maintenance schedule to run scripts intended to verify the operating efficiency of the machine at relevant intervals (e.g. every 6 months for computers)

Project Responsibility: Rodrigo Jaramillo

Schedule: Set protocols during FY12

Estimated Cost: \$0

Operational Responsibility: Ongoing responsibility for verification and maintenance will rest with Rodrigo

Potential Risk – Low: *There is little to risk here.*

Potential Return – Low: *In aggregate, by purchasing energy efficient equipment for the entire organization, combined with monitoring and adjusting performance over the equipment's life, small energy savings will be realized.*



Project 19 [NEW] – Environmental Responsibility Requirements for Building Management (Not Started)

The management of buildings has a large impact on our operations both financially and in terms of environmental practices. Because of the significance of these contracts, we will focus our efforts to green vendor relationships in the building management contracts for our offices. We decided to break this out from Project 11 as it deserves enough attention to stand alone.

Scope of Work:

Sustainable Operations Plan FY12-FY14 (October 2012)

- Identify requirements for the sustainable building operations to be included in contracts
 - Specific to Building Management
 - Research best-practices for this type of contract requirement
- Research potential building management companies
- Send RFIs to select companies; get an understanding of the market; identify any gaps in proposed plans
- Solicit proposals from 3 to 4 new companies as well as current managers
- Integrate these requirements into the RFI/RFP process
- Decide how vendor performance will be measured against these requirements (criteria, metrics, reports, etc.)
- Select management company, negotiate contract
- Manage transition if necessary

Project Responsibility: Anthony Guerrero, Matt Cohen, Rene Leni, and Milly Suarez

Schedule: Assess all contracts in FY13 and begin the RFI process in relevant offices

Estimated Cost: \$30

Operational Responsibility: Ongoing responsibility for evaluating adherence to the requirements will be led by OAs.

Potential Risk – High: *In NY the building is co-owned with the NY Public Library, therefore we cannot act alone. Also, we have a long-standing relationship with the George Comfort Company and with our Super, Mitch Lappin, who is a dedicated and effective worker. In Santa Monica we have also built a relationship with the management company and with our Super, Dean. We want to be sensitive to these important business relationships while also making appropriate sustainability improvements.*

Potential Return – High: *By partnering with vendors that adhere to our standard of sustainable practices, especially building managers, we expect to achieve the Sustainable Operations Plan objectives of reduced energy and water consumption faster and with greater ease.*



Project 20 [NEW] – Environmental Performance

Target Setting and GRI Reporting (Underway)

Set environmental performance targets for our operations. Begin internal reporting of our performance within the Global Reporting Initiative framework in FY13 (with the expectation to report the environmental performance of our own operations publicly in FY14). This will be a management tool to keep track of our overall performance compared to goals.

Scope of Work:

- Leverage the Noveda sustainability software system to set environmental performance reduction targets (Not Started)
- Evaluate the level of GRI reporting we should pursue under the NGO sector supplement (Underway)
- Identify and partner with program staff and Communications (Underway)
- Establish timeline for project planning (Underway)

- Compile performance information (Not Started)
- Determine relevant information about what NRDC does that would satisfy the “social” component of reporting (Not Started)
- Place information within GRI framework (Not Started)
- Work with CMI and Energy Program staff to compare real time use with projected modeling (Not Started)

Project Responsibility: Judy Keefer, Phil Gutis, Sarah Gillman

Schedule: First year of internal reporting completed June 30, 2013

Estimated Cost: Small amount of consulting fees to assist project management

Operational Responsibility: Anthony Guerrero, Alex Kennaugh, program staff (TBD) and Janie Chen with assistance from a Closed Loop Advisors’ GRI-trained consultant

Potential Risk – Medium: We need to ensure we’ve adequately captured all requisite data (waste is one area we may be lacking due to operational complexity – see Project 21) to cover all environmental reporting sections. We must decide what level of external reporting is appropriate and how that may be perceived.

Potential Return – High: Proving that NRDC walks the talk. Developing a centralized, high-level process to manage the ecological progress of our own operations.



Project 21 [NEW] – Waste Tracking and Reduction (Not Started)

Over the years NRDC has strived to reduce the waste it generates, especially the waste that ends up in a landfill. We have instituted composting of food scraps and recycling in every office. However, we do not keep track of our production and therefore reduction of waste. This is probably our weakest point of data collection when it comes to preparing for GRI reporting (Project 20). Certain waste haulers offer two-week reports on collection on a quarterly basis, but we’ve questioned the data integrity in these reports and the ability to project any given two-week period to estimate a quarter of waste production. It’s important to note this is a new project for us because tracking waste in the shared building environments we typically occupy is very complex operationally. We will seek to identify the most cost-effective and operationally feasible solutions.

Scope of Work:

- Understand current waste collection practices in each office
- Determine who is best positioned to measure waste & recyclables; consider the janitorial staff – this may require a review of the vendor’s capability and confidence in their willingness and ability to accurately follow a new process
- Map out a process for waste collection and measurement in each office
- Purchase any necessary equipment and train relevant personnel (NRDC and/or vendors)
- Develop a method to input measurements into the a spreadsheet or database, ideally the Noveda sustainability software system; minimize the amount of manual work
- Feed information to staff preparing GRI reporting
- Work with CMI and Energy Program staff to compare real time use with projected modeling

Project Responsibility: Anthony Guerrero and the OAs for each office

Schedule: Begin measuring all waste during the 4th quarter of FY13

Estimated Cost: \$10,000

Operational Responsibility: Milly Suarez, Rene Leni, Jen Daly, Sasha Alleyne, and Matt Cohen; assistance from a Closed Loop Advisors

Potential Risk – Medium: We will have to get creative to make this operational. If approaching the janitorial staff makes most sense, then a vendor that doesn't offer "green" services may have more of a challenge operationalizing our suggested process.

Potential Return – Medium: By filling in this blank of environmental measurement, we will bolster our GRI reporting and complete the picture of our sustainability performance.



Project 22 [NEW] – Green Lease Agreements With Tenants

(Underway)

We lease the 6th and 7th floors of our New York office. We currently have transitioned from one tenant on each floor to a single tenant occupying both floors. Utility bills show that over the past two years our tenants have consumed significantly more energy per floor than NRDC. We believe the same holds true for other resources. We consider our tenant floors an extension of our own operations and would like to encourage the improvement of their environmental performance. Our lawyers have indicated that requiring environmental performance improvements is a challenge; therefore we are including incentives for the tenant to change.

Scope of Work:

- Identify performance tenant can improve
- Engage tenant about cost and resource reduction opportunities
- Align on areas to improve, targets and metrics, measurement process and incentives if the targets are reached
- Have Facilities team work with CMI to provide guidance to tenant on improvements they can make (lighting, plug load, HVAC set points, etc.)
- Monitor tenant performance and meet with tenant to discuss one year after the agreement was signed
- Re-evaluate targets going forward

Project Responsibility: Milly Suarez and Matt Cohen

Schedule: When?

Estimated Cost: \$?

Operational Responsibility: Ongoing responsibility will be assigned to Milly Suarez and Matt Cohen

Potential Risk – Low: So long as the contract doesn't require any improvements the risk is low. If the tenant achieves the agreed upon goals, then we may give a small concession (e.g. small rent rebate, etc.).

Potential Return – Medium: Convincing our current NY tenant to operate more sustainably sets a

precedent for future tenants. The tenant's environmental performance reflects on our performance in our owned space. Additionally, given our accomplishments as an organization, we should be able to motivate our tenant to improve their environmental performance! Lastly, involving CMI allows them to use this as an example for other organizations, which is important, as green lease terms are not yet common.

FY14 Activities – Transform and Communicate

Targeted implementation for the remainder of projects, particularly the bigger projects, will be the close of the third year. Regional initiatives that were not funded or considered lower priority compared with institutional-level projects will also be a focus for FY14. Lastly, we want to make sure we clearly and consistently communicate our successes and setbacks as learning opportunities for others and for program staff to reference.



Project 14 – Alternative Workplace Environment (Underway)

Containing the amount of office space we occupy and using our office space as efficiently as possible will have several important benefits. One is that we will avoid some or all of a potential increase of up to \$13M total cost (\$9M NPV) that we could see over the next 10 years if space expansion continues at the current pace. On the environmental side, this effort would result in significant avoided energy consumption and embodied energy associated with both build-out and occupancy of physical space.

Scope of Work:

- Conduct a benchmark study of how other environmental advocacy groups are handling their office space issues **(Completed)**
- Create 'Alternative Workplace Strategies' policy to govern space assignments for staff members who work partially outside of the office **(Completed)**
- Launch a telecommuting pilot at the end of FY12 3rd quarter involving 5-10 people per office over a six-month period to begin the cultural shift **(Completed)**
- Initiate telecommute program by the FY13 3rd quarter **(Planned)**
- Develop and roll out shared space approaches as well as virtual office tools such as Citrix, efax, e-archiving, and the new 'Collaboration Central' expanded intranet **(Completed)**
- Renovate floors 10 and 12 of the NY office with a focus on densification – having fewer offices, more workspaces, and more support spaces such as conference rooms and team rooms **(Planned)**

Project Responsibility: Anthony Guerrero with the help of expert John Reid

Schedule: Implementation of alternative workplace strategies is expected in 2014

Estimated Cost: \$60K

Operational Responsibility: Ongoing responsibility for evaluating progress will be led by Anthony Guerrero

Potential Risk – High: This project will be resource intensive this year, requiring dedicated time commitments from Facilities, HR and IT. And because multiple trigger dates (expansions and extensions) in the real estate portfolio are approaching, we must act quickly. This project also entails high upfront costs.

Potential Return – High: Based on real estate build out avoidance calculations this initiative has the highest potential for energy and cost savings; increased productivity as a result of efficient office design also holds high potential.



Project 15A-Y – Regional Sustainability Initiatives

(Underway)

The potential exists for each office to address additional activities relevant to their unique opportunities and challenges for sustainable operations. These activities are not redundant of the ‘umbrella’ institutional initiatives described in the other projects, but some feed into and support those initiatives. These activities address geography- or office-specific needs or take advantage of regional incentives and other opportunities. In conjunction with the sustainability planning process described in Project 1, OAs will identify priorities among these projects and implement based on impacts, budget, timing, staffing, and relation to projects in the institutional-level Plan.

Scope of Work (by Regional Office):

New York:

- Project 15A – Relax set points to 77 degrees (FY13)
- Project 15B – Report Power Usage Effectiveness (PUE) of data center and other improvements in a case study (Completed)
- Project 15C – Require building energy audit – To decrease energy consumption cost effectively, there needs to be a road map; To begin the mapping, NRDC will require the building to do a comprehensive energy audit (level 3) (Completed)
- Project 15D – Review and implement energy audit recommendations (Planned FY13)
- Project 15E – Improve staircases to encourage use of stairs instead of elevators (lighting, paint, cleaning) (Underway)
- Project 15F – Improve window operability and cross ventilation – Research building codes and upgrade windows with either screens or iron rails accordingly; Plan sequence of operations for using operable windows as a passive cooling and ventilation strategy (Design for air velocity should be no lower than 40 fpm and no more than 80 fpm) (Planned FY13)
- Project 15G – Investigate Demand Side Management incentives – Look into ConEd incentives to reduce energy during peak demand periods (Completed – NY does not consume enough electricity to participate)
- Project 15H – Clean HVAC coils

Sustainable Operations Plan FY12-FY14 (October 2012)

- Project 15I – Prepare designs for a living roof – Designs to provide passive cooling (insulation value vs. white roof?); slow flow rate of storm water run-off; incorporate space for composting, gardening, staff gatherings; and integrate the existing solar panels and bee-keeping equipment (Completed)
- Project 15J – Waste Management – Replace waste management company; Current waste management company (Jem @ \$1,007/month) is not meeting requirements for composting or recycling plastics and metals; Evaluate other vendors and select an option that provides comprehensive, economical services (Completed – transitioned to Mr. T for trash, recycling and compost carting)
- Project 15K – Retrofit bathrooms on floors 10 through 12 (including 10th floor shower) as well as kitchen faucets to reduce water consumption (Completed)
 - Bathroom faucet 1: 0.5 gallons per minute with automated controls and premixed temperatures; A metered-valve at 10-second minimum on-cycle time. Product will be SLOAN Solis or better, solar powered hand-washing system
 - Kitchen faucets will be installed with 0.5 GPM aerators; This product will be the SLOAN Optima Gooseneck faucet or better
 - High quality showerheads that deliver 1.0 to 2.5 gallons per minute; Each showerhead will have a flow regulator and temporary cutoff buttons to stop water flow when the individual is soaping or shampooing; Product will be SLOAN Acto-Matic Shower head
 - Dual flush valves for toilets for 0.3 gallon for ½ flush and 1.6 gallon for full flush; Two Piece Floor Mounted Dual Flush Elongated Toilet Tank System; Product will be SLOAN – Model, WETS 9002.9012-1.6/1.1 DF
 - Urinals: Continue to review waterless vs. ¼ gpf
- Project 15L – Update tenant lease for best practices according to NRDC’s green lease document 6th and 7th floor (Underway)

Santa Monica:

- Project 15M – With assistance from Pierre Delforge, monitor and reduce plug-load and data center power use following approach used in San Francisco (Underway)
- Project 15N – Audit data center energy use – Review power consumption of the data center and report Power Usage Effectiveness (PUE) (???)
- Project 15O – Measure plug load of the Communications department’s video editing equipment (Not Started)
- Project 15P – Require comprehensive energy Audit (Completed)
- Project 15Q – Research possible upgrades and operational efficiencies in the graywater system; In a very preliminary review it looks like the graywater system consumes 2,000 watts per minute for the process of cleaning storm water and graywater and then to pump this water up to recharge the toilets; This is a lot of energy consumption for the little amount of stormwater and graywater captured; We will look into better strategies for waste water management, such as: (Underway)

Sustainable Operations Plan FY12-FY14 (October 2012)

- Work with consultant to review Santa Monica building codes and report back to SM water program or litigation (current graywater consultant indicates SM code requires the current operations) (Completed)
- Study the efficiency of the current gray water process (Underway)
 - Consider eco-roof as alternative to collecting storm water in basement and investigate other uses for storm water
 - Find a more energy efficient pump and cleaning process
- Project 15R – Upgrade existing solar panels and add additional panels (Delayed by construction next door)
- Project 15S – Look into improving the efficiency of the elevator and reducing usage (Not Started)
- Project 15T – Living Roof – Review concept of living roof: (Not Started)
 - Obtain structural engineer’s recommendations for load limits of the roof and condition of existing membranes, etc. on the roof
 - Determine specific programmatic goals and budgetary constraints
 - Prepare design development documents
 - Preliminary pricing per General Contractor (based off DD’s)
 - Present findings and cost analysis
- Project 15U – Review opportunities for passive cooling strategies – i.e. the light well, adding operable windows at top to create thermal chimneys (Not Started)
 - Typically associated with stack effect ventilation (thermal chimneys); If the indoor temperature is higher than the outdoor, the indoor air pressure is higher at the upper opening and lower at the floor opening than the air pressure outdoor at the same levels; This pressure head generates an inward flow of air at the lower opening and an outward flow of air at the upper

DC:

- Project 15V – Begin commissioning and calibrating systems for energy efficiency: (Underway)
 - Dashboard for DC
 - Calibrate Lutron system
 - Calibrate BMS for air conditioning
 - Relax set points

Beijing:

- Project 15W – Begin commissioning and calibrating systems for energy efficiency: (Underway)
 - Lighting
 - LEED Submission

Chicago:

- Project 15X – Contain real estate requirements: (Underway)
 - Sublease expires May 2014
 - Make green lease adjustments and right size space

San Francisco:

- Project 15Y – Contain real estate requirements: (Planned)
 - Lease expires, July 2014
 - Make green lease adjustments and right size space

Project Responsibility: Office Administrators

Schedule: Identified projects will be implemented in FY14

Estimated Cost: \$300K

Operational Responsibility: Office Administrators, unless delegated to energy coordinators or other staff

Potential Risk – Low: This group of projects might demand additional resources since the same staff will work on both the institution-wide initiatives as well as the regional initiatives. If those resources are scarce or unavailable, certain projects will be delayed.

Potential Return – Medium: There is a potential for additional environmental sustainability activities in individual offices. These activities have the benefit of feeding into and supporting the institutional initiatives. Some of these activities also address location-specific issues and should seek regional incentives and other opportunities.



Project 16 - Communicate Sustainable Operations Plan Results (Underway)

We want to communicate the results of the initiatives in our plan once they are in motion. We will begin with internal communications of successes and lessons learned. Working with Communications, we will also communicate our results to external stakeholders, particularly members and supporters.

Scope of Work:

- Construct internal communications via Collaboration Central, email, and other media to share successes and lessons learned (Underway)
- Communicate successes with building projects to the public by working with a ghostwriter on Honest Buildings (Planned)
- Leverage social media to communicate aspects of plan successes and best practices (Not Started)
- Write case studies for our website; Make the business case for sustainability management and leverage those findings in other communications; Work with CMI (Underway)
- Consider dedicating a small space in OnEarth for updates on our various projects (Not Started)

Project Responsibility: Anthony Guerrero and Communications

Schedule: Begin in 2012; Complete in FY14

Estimated Cost: \$0

Operational Responsibility: Once the Sustainability Plan has been fully implemented at the end of FY14, decide if further communications of the plan are warranted; Anthony Guerrero and Communications

Potential Risk – Low: Since NRDC already operates in a sustainable manner compared with the status quo, communicating improvements to already high performance should be a low risk. Still, care must be taken in how successes, lessons, and best practices are communicated. Internal peer review by the OA team, Communications, and at times CMI may be warranted. Workload constraints may be an issue, as communications must be issued in a timely manner to be relevant.

Potential Return – Medium: By transparently illustrating our own sustainability journey, we will enhance our credibility. By sharing best practices and lessons learned, we increase our ability to influence projects others are undertaking.



Project 17 - Review Resource-Intense Processes Managed Outside Facilities & Administration (Not Started)

Rounding out the Sustainable Operations Plan includes reviewing resource-intense processes managed outside the Facilities and Administration department such as paper use by the Membership and Communications departments. F&A staff will then make recommendations on how to reduce resource use in such areas, and offer assistance to the respective departments to implement changes. This could become another SUMA Capstone project.

Scope of Work:

- Engage with department leaders to understand needs and current practices
- Brainstorm reduction strategies with department and other internal stakeholders utilizing CMI and external case studies and any other helpful resources
- Assess proposed changes and plan the rollout of a pilot project that includes a test and control; Decide how to track both resource reductions and affected practices (e.g. membership response rates)
- Review results of the pilot and decide to adopt or abandon

Project Responsibility: Anthony Guerrero

Schedule: Review in 2013. Implement in FY14

Estimated Cost: \$0

Operational Responsibility: Tracking resource reduction will be assigned to Matt Cohen; Anthony Guerrero will conduct annual evaluations of results and additional changes with relevant department leaders

Potential Risk – Low: Changes to departments such as Membership must be carefully considered prior to implementation. We wouldn't want to reduce resource use only to sacrifice member response. To mitigate this risk, we would begin any initiatives with pilot projects to evaluate results.

Potential Return – Low: As Communications and Membership adjust how they interact with stakeholders due to evolving social trends, there may be room to change our approaches enough to have a measurable reduction in resource use with the accompanying reduction in environmental impact. By using pilot projects, progress will be slow, but worth the mitigation of risk.

