Transportation

CBL recently sold several of its campus vehicles. The laboratory is currently looking into purchasing an electric vehicle for on-campus transportation needs.

4.3 Sustainable Actions

Planned courses of action to reduce CBL's greenhouse gas footprint will focus on all areas of existing and new facilities. Related to Capital Projects the following actions should be taken related to future planned projects and Facility Renewal Projects as well as ongoing operations of facilities. These are defined in greater detail in the Climate Action Plan with strategies and suggested policies to implement them.

Capital Projects

R.V. Truitt Laboratory Addition

- Set higher than conventional LEED certification goals, (LEED Gold target).
- Set ambitious energy efficiency targets, (35 -45% savings over a similar energy code compliant building).
- Seek all passive and renewable energy savings through the design and configuration of the building envelope itself.

Seek to make sustainable systems "transparent" and visible to the day to day users of the facility. Use them as an opportunity to teach occupants and users about the energy efficient strategies at work in the facility.

Information and Communication Services Building

- Set aggressive LEED certification goals; LEED Platinum minimum since this will be a completely new building and will become the new "front door" to the CBL campus.

- Provide renewable energy systems as an integral part of the building. Some possible renewable energy systems to help achieve this include photovoltaic panels, solar hot water, larger scale geothermal and small scale wind power. Providing a pitched roof to integrate the building into the existing residential architecture of the surrounding buildings would provides a good surface for the installation of either PV or solar hot water panels.

Facilities Operations

- By addressing air-flow problems in the Bernie Fowler Laboratory (BFL), CBL has significantly reduced its operating costs and GGE. These units were converted to re-circulating units, thereby reducing heating costs for those sections of the building.
  CBL has modified fume hoods at BFL, that now supply room with dedicated exhaust hoods that run at a constant volume 24/7, by installing variable speed controls. The hoods were fitted with occupancy sensors so air-flow can be adjusted based on the current utilization of the lab. A heat recovery loop was installed on the systems, and the warm exhaust air produced by the fume hood is captured and used to heat the circulating glycol loop which heats the air in the building.

- Heating and cooling thermostats are programmed to have a maximum threshold of 68° in the winter and a minimum threshold of 76° in the summer for all buildings (this does not include research labs which must be set to their required research temperature). During long breaks (i.e. winter and spring), all thermostats in offices are reduced further.

- Solomons House Improvements:
  - Switched to LED lighting throughout the building.
  - Replaced worn carpeting with “green” flooring - a vinyl product 65% recycled content.
  - Installed rain barrels and additional rain garden.
  - Replaced restroom fixtures to low-flow.

- Power-down policy for Computers and Lab Equipment.

- Increased video conferences to reduce carbon emissions due to business travel.

- Light colored paint is used for exterior painting jobs in order to reflect light and keep buildings cool in the summer.

- Landscaping has been simplified to minimize maintenance, with an emphasis on the use of native plants. Seventy five native trees and shrubs were planted throughout the campus since FY 2009 and a rain garden was created in front of the Fisheries Research Complex.

Facility Renewal Projects

- Installation of renewable energy sources; photovoltaic, solar hot water, geothermal, small scale wind power. There is an opportunity to integrate these into the new capital projects in the next ten years as well as provide these as part of facility renewal projects on existing buildings.

- Renewal Energy Certificates (REC) related to any new renewable energy sources added to the CBL site.

- Increased building insulation and air tightness through re-caulking and sealing of building exteriors, windows and doorways to increase overall energy efficiency all year round.

- Window replacements to increase energy efficiency through thermal break frames, higher insulation values on glass and special coatings to further reduce energy use.

- Landscape improvements related to creating a green street on Williams Street.

- Expand gray water and/or barrel collection systems for rainwater.