



## Campus Consortium for Environmental Excellence

### **DRAFT LIST OF ENVIRONMENTAL PERFORMANCE INDICATORS**

Effective Environmental Performance Indicators (EPIs) are needed to help guide internal efforts to build Environmental Management Systems (EMSs), develop enhanced compliance systems and build effective bridges with other constituencies on campus, such as campus greening groups and financial personnel.

The following list represents a first attempt by the Campus Consortium for Environmental Excellence at exploring some useful EPIs. Some of the EPIs are clearly articulated, while some need further refinement. Some indicators are presented as absolute (e.g., total waste generation or the existence of an environmental performance report) while others are expressed as a relationship between data.

The purpose of this draft list is to get colleges and universities thinking about EPIs and starting to measure something that is meaningful to the program's success. Your feedback is welcome.

### **DRAFT ENVIRONMENTAL PERFORMANCE INDICATORS**

#### **ENVIRONMENTAL OR PHYSICAL IMPACTS**

##### *Energy*

- Total and per capita (faculty, staff, student) energy consumption in kWh/yr. or equivalent
- Consumption of natural gas vs. coal on campus (or as provided by energy provider)
- Emissions from consumption of fuel (see above)
- Energy conservation initiatives
- Percentage of energy coming from renewable resources
- Percentage of buildings with lighting efficiency upgrades
- Total tons per year of CO<sub>2</sub> emissions per year, or equivalent
- Energy expense per years

##### *Water*

- Water consumption per capita (faculty, staff, students) in gallons/yr. or equivalent
- Water expense per year
- Percentage of buildings with water efficiency upgrades
- Groundwater quality
- Waste water disposal (volume) per capita
- Waste water disposal (wt of certain pollutants) per capita

### *Material Resources and Waste Disposal*

- Paper consumption per capita (faculty, staff, students) in tons/yr. or equivalent
- Total paper purchase expense per year
- Percent of recycled materials in product acquired in a given year
- Percent of selected products leased rather than purchased in a given year
- Total tons of materials purchased per year in tons, or equivalent
- Total solid waste generation per capita per year in tons, or equivalent
- Recycled solid waste (e.g., recycle, reused, composted) as total or per category (e.g., plastics, paper, cardboard, aluminum, composted)
- Hazardous wastes (e.g., total, per capita) per year as total or per category (e.g., solvents, oil, labpack)
- Total non-hazardous solid waste expense per year (and/or per capita)
- Total hazardous waste expense per year (and/or per capita)
- Total quantity of electronics equipment recycled per year
- Amount of cleaning agent used per square meter per year

### *Food*

- Dining hall waste per capita (faculty, staff, students)
- Dining hall purchasing policies

### *Land*

- Land per capita (faculty, staff and students)
- Land management policies and procedures
- Impervious surfaces in sq. ft or sq. meters
- Planting of native vs. exotic species
- Pesticide usage in land care in pounds per year or per capita
- Fertilizer use in pounds per year or per capita
- Percentage of university land designated and treated as natural areas

### *Transportation*

- Car dependence (e.g., percentage of faculty, staff or students using public transportation, car pooling or using non-motorized form of transportation)
- Green space converted to parking space
- Average fuel consumption of vehicle fleet

### *The Built Environment*

- Percentage of buildings meeting a LEED category (not certified)
- Percentage of buildings with HVAC upgrades

### *Community*

- Percentage of graduating students that have taken an environmental course
- Percentage of laboratory workers receiving environmental training (can be part of lab safety)

### *Research*

- Total generation of laboratory wastes (e.g., hazardous, biomedical)
- Total generation of laboratory wastes that are reused or made available for reuse

- Percentage of laboratories conducting annual inventory or risk assessment for improper storage of chemicals on shelves

### ENVIRONMENTAL MANAGEMENT SYSTEMS

- Percent completion of EH&S objectives and targets within allotted timeframes (Note: could also track completion of objectives of targets set by administration, green campus groups, etc)
- Number of levels of management with specific environmental responsibilities
- Percentage of applicable statutes covered by university's regulatory compliance database
- Percentage of applicable statutes covered by university's regulatory compliance calendar
- Percentage of applicable statutes covered by formal EH&S compliance audit program and protocol
- Percent completion of audit versus plan (e.g., say you will do a comprehensive audit of the Medical School – was it done? Partially done?)
- Numbers of resolved and unresolved corrective actions
- Number of audit findings per period
- Existence of cross-functional, multidisciplinary or multi-stakeholder teams
- Frequency of EH&S or environmental updates (e.g., newsletters, web page updates)
- Internal web hits on EH&S web page
- External web hits on EH&S web page
- Emergency Preparedness drills
- Environmental training time per university worker category (e.g., lab worker, mechanic)
- Number of faculty, staff and students trained vs. the number that need or were targeted for training
- Number of contract individuals trained or provided with written information regarding policies and procedures
- Training scores in selected program areas
- Environmental Performance Report
- Number of pollution prevention suggestions
- Number of pollution prevention assessments
- Number of pollution prevention initiatives
- Fund for supporting pollution prevention initiatives (e.g., revolving grants)