

Ecocampus is currently considering what set of indicators it can measure, and what indicators it would want to measure. Below is a set of indicators used by other campuses.

Sustainability Indicators Tally (University and Other):

P: Penn State

F: U of Florida

G: Good Company (U of Oregon and Vassar)

V: U of Vermont

S: Michigan State University

C: University of North Carolina, Chapel Hill

M: University of Michigan

A: Alberta Forum (Canadian Community Colleges)

L: Campus Sustainability Assessment Framework –CSAF- developed by Lindsay Cole (used at Concordia, Waterloo, U. Toronto at Mississauga, and Acadia Universities)

E: Environmental Sustainability Index (where applicable)

U: United States Experimental Set of Sustainability Indicators (where applicable)

N: UN Division of Sustainable Development Indicators (where applicable)

Energy

| | |
|--|-----------------------|
| Total Energy Consumption | P, F, V, M |
| Total Energy Use for Heating | V |
| Total Energy Use for Electricity | V, S, M |
| % Electric Energy Used that is Renewable | M |
| Total Utility Bill in Dollars | C |
| Total Natural Gas Consumption | P, S |
| Total Energy Consumption per Capita (or scaled user) | P, F*, G, M*, A, E, N |
| Total Energy Consumption per Square Foot | F* |
| Energy Use by Type, % Renewable | F,G,V,M*,A,E,L,N |
| % Local Energy (within 500 kilometers) | L |
| Energy Use monitoring (% of buildings, area / monitor) | G, L |
| Reduction in Energy Consumption year to year | L |

Air

Emissions

| | |
|---|------------------|
| Carbon Dioxide / GHG Emissions (total, per capita) | P,F,G,M*,A,E,L,N |
| Total SOx release (stationary + mobile) | V, S, M, A, E |
| Total NOx release (stationary + mobile) | V, S, M, A, E |
| Total CO release (stationary + mobile) | V, M |
| Total Particulates (stationary + mobile) | V, S, M, N |
| Total VOCs (stationary + mobile) | S, E |
| Total Ozone (stationary + mobile) | M |
| Pb emission (stationary + mobile) | M |
| Monitoring of Exterior Vents (%) (GHG and particulates) | L |

Water

Water In

| | |
|---|--------------------|
| Total Water Consumption | P, F*, V, S, M |
| Total Water Consumption per Capita (or scaled user) | P, F*, G, M*, A, L |
| Total Purchased Water | M |
| Purchased Water per Capita | M |
| Water use for irrigation, ground maintenance | G, S, M |
| Potable Water Use monitoring (% buildings metered) | G, L |

Water Out

| | |
|---|---------|
| Ground water quality | P, E |
| Total Waste water disposal | P, F, M |
| Waster water disposal to sewers per Capita | M, L |
| Peak Storm Flows (storm water management) | V |
| % Storm and Gray Water Reuse | L |
| Waste Water Produced monitoring (% buildings metered) | L |
| % Stormwater Contaminant Separation/Collection | L |
| Efficiency of Waste Water Treatment (% treated) | A, L |

Waste

Total Waste

| | |
|---|----------------|
| Total Waste Production (can break down) | P, F*, V, M, N |
| Total Waste per Capita | C, M*, L |

Solid Waste

| | |
|---|------|
| % Solid Waste Reduction from year to year | L |
| Hospital Waste (total, per capita) | M |
| Campus Building Waste (total, per capita) | M |
| Auxiliary Building Waste (total, per capita) | M |
| Total Waste Landfilled | S |
| Total Area of Contaminated Sites (from waste discharge) | A |
| Total Landfilled Waste per Capita | C, A |
| Efficiency of non-renewable resource use and recovery | A |
| Salt Use (Total, per Capita) | M |
| Sand Use (Total, per Capita) | M |

Hazardous Waste

| | |
|--|---------------|
| Total Hazardous Waste Production (Lab Wastes) | P, F, V, S, N |
| Total Hazardous Waste per Capita | F, L |
| Hazardous Waste Reused (% of total) | L |
| Hazardous Waste Recycled (% of total) | L |
| Reduction in Hazardous Waste from year to year | L |
| Hazardous Waste Disposal Rate | G |
| Total hours spent in hazardous waste training | S |
| Total Chemical Waste per Capita | F |
| Total Custodial Chemicals Used by type | G |
| Total Radioactive Waste Produced | V, E, N |

Recycling

| | |
|---|---------------------|
| Recycling Bins per unit area | G |
| Recycled solid waste (% or total, can break down) | P,F*,G,V,S,C,M*,A,N |
| Recyclable waste being landfilled (% of landfilled waste) | L |
| Number of People involved in recycling activities | A |
| Total Recycled Waste per Capita | C |
| Construction Waste Recycled (total, % of waste) | M |

Procurement

| | |
|---|---------------|
| % of purchases based on Life-Cycle Costs | A, L |
| Efficiency of Computers Purchased | G |
| Energy Efficient Equipment (% of all dollars spent on equ.) | L |
| % Computers reused or recycled at disposal | G |
| Paper consumption (total, per capita) | P, L |
| % Paper Purchased that is Recycled | G, S, C, M, L |
| % Paper Purchased that is Chlorine-Free | G, M, L |
| % Paper Purchased that is Tree-Free | L |
| True cost print charging (cost charged per page printed) | G |
| Labor Policy for Campus Licensing (sweat shop policy) | G |

Food

| | |
|--|---------|
| Dining hall diet (total consumption, can break down) | P, S |
| Dining hall waste | P |
| Total manure/yard waste composted | S, M, L |
| Food purchasing policies (% organic, % local) | P, G, L |
| Diet Types (% of diet types provided (vegan, kosher, etc.) | L |
| Nutritional Information (% of meals reported) | L, N |
| Total gallons of bottled water purchased | S |

Land

Impervious Area

| | |
|---|-------------------|
| Impervious surfaces (% of land or total) | P,F,V,C,M*,E, L,N |
| Building Area (total, per capita, all area per ground area) | M, L |
| Green Space (% of land or total) | M, A, E |
| Accessible Green Space 1km radius on+off (area per capita) | L |
| Maintained/Managed Green Space (% of land or total) | M, L |
| Unmaintained Green Space (% of land or total) | M |
| % of asphalt/concrete area covered with porous asphalt | C |
| Green space converted to parking/building space | P, E |

Plants

| | |
|--|---------|
| Native vs. exotic plants on campus | P |
| Newly planted plants that are native (% of all plantings) | L |
| Healthy Natural Area (% of total area) | L |
| Restoration of Degraded Areas (% restored over 3 yrs past) | L |
| Tree Population (# of trees, # per area, % forested land) | M, L, N |

Management

| | |
|---|---------------------|
| Total cultivated Acres | S, N |
| Pesticide/Herbicide use (Total, per Capita, per area) | P, G, V, M, E, L, N |

| | |
|--|---------------|
| Inorganic Fertilizer Use (K,N,Ph) (per Capita, per area) | M, E, L, N |
| <i>Policy</i> | |
| Amount of Protected Land (% of land or total) | F, M, E, L, N |
| Unresolved Land Claims (% unresolved) | L |
| Land accumulation and policies | P |

Transportation

Bike Use

| | |
|-------------------------------|---|
| Number of registered bicycles | S |
| Number of bike racks | M |

Public Transportation Use

| | |
|--|---------|
| Car dependence (% of campus users driving) | P, S, A |
| Total Number of Public Transport Trips (On/Off campus) | F, S, M |
| Total Public Transport Passenger Miles | M |
| Affordability of Public Transport (% subsidized) | L |

Air Transportation Use

| | |
|--|---|
| Air Travel (# of trips) – International and Domestic | S |
| Air Travel Total Passenger Miles | M |
| Air Travel Total energy Used | M |

Safety

| | |
|---|------|
| Number of vehicle accidents (personal injury/\$ damage) | S, L |
| Number/ratio of Non traffic to traffic accidents | S |
| Transport-related safety | P |

Spatial Distribution

| | |
|---|---------|
| Average Commuting Distance (distance per Capita) | P, A, N |
| Total Commuting Miles (vehicle, passenger, total energy) | P, V, M |
| Distribution of campus users for transport (% off campus) | G, S |

University Fleet

| | |
|---|------|
| Total number of University Vehicles | S |
| Average Distance Traveled by University Vehicles (# trips) | S |
| Average Fuel Efficiency of University Vehicle Fleet | S, M |
| % Vehicles Purchased that are alternate fuel / low emission | C |
| Total gallons of fuel pumped from service garage | S |

Energy

| | |
|---|------|
| Transportation Energy Consumption (Total, per Capita) | M |
| Bus Energy Consumption (Total, per passenger mile) | M |
| U. Fleet Energy Consumption (Total) | M |
| % Transportation Energy that is Renewable | M, L |

Emissions

| | |
|---|---|
| Commuting GHG emissions (tonnes per capita) | L |
| U. Fleet GHG emissions (tonnes per capita) | L |
| Travel GHG emissions (tonnes per capita) | L |

Parking

| | |
|--|------|
| Decals Sold for Parking / space available | F, S |
| Parking Space by user | C |
| Deck Parking (% of all parking spaces that are in decks) | M |

| | |
|--|------------|
| Parking Density (stalls per parking lot ground area) | L |
| <u>Built Environment</u> | |
| <i>Indoor Air</i> | |
| Indoor Air Quality | G, A |
| Indoor Air Quality Complaints (per Capita) | L |
| Asbestos and Mold (% of buildings space containing) | L |
| Scent-Free Indoor Spaces (% of building space scent-free) | L |
| Opening Windows (% of regularly occupied area with) | L |
| Air Change Effectiveness (% of zones >.9) | L |
| Carbon Dioxide Monitoring (% zones monitored) | L |
| Smoke-Free Indoor Spaces (% of total space) | L |
| Smoke-Free Outdoor Spaces (% of total space) | L |
| Air Handling Units Cleaned (% over last year) | L |
| Living Plants Indoors (# plants per building space area) | L |
| <i>Indoor Pollution</i> | |
| Building space cleaned with non-chemical means (%) | L |
| Pesticide Use Indoors (amount per unit area) | L |
| Light Pollution - % contribution to uplight levels | L |
| Noise Pollution - % of unused classrooms/offices <35 dcB | L |
| % Paint used that is low-VOC | G |
| <i>Space Use</i> | |
| Recreation Space (Indoor and Outdoor total) | L |
| Indoor Community Space (% of total building space) | L |
| Building space per Capita | M*, N |
| On Campus Housing (% of beds need for total population) | L |
| On Campus Residences Occupancy Rate (% used for year) | L |
| Classroom Occupancy Rate (% used 8AM-8PM for year) | L |
| <i>Efficiency</i> | |
| Building water use (Total, per Capita) | M |
| Building Energy Consumption (Total, per Capita or Area) | M |
| Efficiency of Fixtures (% new fixtures that are high eff.) | L |
| HVAC&R System Control (digital) (% of total HVAC sys) | L |
| % sinks, toilets, urinals with occupancy sensors | L |
| % of water free urinals | C |
| % Light Switches with occupancy sensors | C, L |
| <i>Construction</i> | |
| Building decision process, stakeholder involvement | P, G |
| Building priorities | P, M |
| Aesthetics (# of awards received) | M |
| % Green Certified Wood used in construction | G |
| Ecological design in buildings (#, % LEED certified) | P, C, M, L |
| % new interior renovations that are LEED certified | L |
| <i>Maintenance</i> | |
| Deferred Maintenance (ratio of \$ maintain to \$ to replace) | L |
| Leaking Fixtures (Hours between report and repair) | L |

| | |
|---|---|
| Pressure Testing for Leaks (% tested in last 3 years) | L |
| Number of environmental regulations in compliance | A |

Education

Students

| | |
|---|---------|
| Ecological literacy of graduating seniors | P |
| Students participating in enviro/sust curriculum (total or %) | G, A, L |
| Green Chemistry Curriculum (# of courses) | G |
| Courses addressing sustainability (total #, or % of total) | C, A, L |
| Courses with substantial sustainability content (%) | L |
| Quality of Sustainability Courses (% good external review) | L |
| Courses with Applied Learning (% of total courses) | L |
| Collaborative Course Development (% more than 1 person) | L |
| For-Profit Course Development (% of courses affected) | L |
| Number of environmental/sustainability graduates | V |
| Number of Credit Hours spent abroad | S |

Faculty/Staff

| | |
|---|------|
| Sustainable Development Literacy (Staff/Faculty/Students) | A, L |
| Faculty Sustainability Training (hours per person) | L |
| Staff Sustainability Training (hours per person) | L |

Financial

Income

| | |
|--|------|
| Total University Income | F, S |
| Investment Income | F |
| Ethically and Environmentally Sound Investments (%) | L |
| Local Investments (%) | L |
| Income From Student Fees (difference from national ave.) | L |
| Income From Government (difference from national ave.) | L |
| Income From Private Sources (diff from national ave.) | L |
| Private Money Donations/Contributions by Source (\$, %) | F, S |

Budget

| | |
|---|---|
| % Increase of total budget (expenses) | S |
| Department Expenditures per student (departments equal) | L |
| Breakdown of Budget by service | S |
| Locally Purchased Goods and Services (% \$ spent) | L |
| On Campus Housing: Affordability (% of student costs) | L |
| On Campus Employment Services (jobs per student) | L |
| On Campus Media Expenditures (% from students/admin) | L |
| University per capita Debt | A |
| Amount of Volunteerism related Funding (per group) | L |
| University Financing of Sustainability (% total budget) | L |
| Student Gov. Financing of Sustainability (% total budget) | L |

Student Finances

| | |
|---|------|
| % Increase in student cost of attendance | S |
| Total hours a week of student work to pay for studies | S |
| Financial Aid Awarded (Total \$, % increase, per student) | S, L |
| Number of Financial Awards (per student) | L |
| Allocation of Financial Awards (% awards dispersed) | L |

| | |
|---|---|
| Students with Loans (% of graduating students) | L |
| Students Debt Load (ave. graduating debt – national ave.) | L |
| Student Fees (difference from national average) | L |

Research

| | |
|--|----------|
| Total Research Awards (#, Total \$, % change) | F, S |
| For Profit Research Contributions (% of total \$) | L |
| Technology Transfer Income (Royalties, etc.) | F, E |
| Research priorities | P |
| Ethical treatment of research subjects | P |
| Sustainability Research Funding (% of total research \$) | P, F*, L |
| Research focused on Sustainability (% of faculty #) | L |
| Research Collaboration: On Campus (% projects 2+ deps.) | L |
| Research Collaboration: Non-Profit (% projects) | L |
| Research Collaboration: For Profit (% projects) | L |

Governance

University

| | |
|---|------|
| # of people participating in sustainability campus body | G |
| University Staffing for Sustainability (# per operation area) | L |
| Sustainability Compatible Policies (University/Student gov.) | A, L |
| University Gov. Working Groups (% policies with groups) | L |
| Diversity of U. Gov. Working Groups (% with >5 stakers) | L |
| Reporting of U. Gov. Working Groups (% directly reporting) | L |
| Reporting of U. Sustainability Staff (% directly reporting) | L |
| U. Gov.: Reporting (% policies/operations annually report) | L |
| U.: Info Management (% policies with data collect systems) | L |
| % of Departments/Divisions adopting Sustainable Develop. | A |
| Length of Campus Long-term plan | G |
| Rate of update of Campus long-term plan | G |
| U. Gov.: Implementation Plan (% targets updated annually) | L |

Students

| | |
|---|---|
| Student Gov. Staffing for Sustainability (# per op. area) | L |
| Student Gov. Working Groups (% of policies with groups) | L |
| Diversity of Stdnt Gov. Working Grps (% with >5 stakers) | L |
| Reporting of Stdnt Gov. Workng Grps (% directly reporting) | L |
| Reporting of Stdnt. Gov. Sust. Staff (% directly reporting) | L |
| S. Gov.: Reporting (% policies/operations annually report) | L |
| S.: Info Management (% policies with data collect systems) | L |
| S. Gov.: Implementation Plan (% targets updated annually) | L |

Community

Charity

| | |
|---|------|
| Sustainability Pledge (% students pledging at graduation) | L |
| Total Student Hours of Community Service | F |
| % of Students and/or Staff involved in volunteer activities | A, L |
| Alumni Volunteerism (total hours per alumni per year) | L |
| Number of Students participating in service learning | S |
| Number of People participating in recreation | L |

| | |
|---|---------|
| Voter Turnout (% eligible students voting) | L |
| Total Student \$ Collected and Donated to Charity | F |
| Indigent Care by Shands ??? | F |
| Community Library Cards (% library cards to community) | L |
| Community Outreach Programs by Person and Hours | F |
| Sense of Community (% survey respondents saying yes) | L |
| <i>Diversity</i> | |
| Freshman GPA and SAT scores | F, S |
| % Student Ethnicity/Diversity (difference from regional rate) | F, L |
| Equity of Indigenous People: Students (difference f.r.rate) | L |
| Students with Disabilities (difference from regional rate) | L |
| Diversity Trends (% ethnicity breakdown by year) | F, S |
| Student Gender (% female by year, difference from region) | F, S, L |
| Enrollment by Family Income* | F |
| New Students Orientation (% receiving at least 1 hr) | L |
| Graduation/Retention Rate (students or all campus users) | F, S, L |
| Job Placement (% employed/continuing education) | S |
| Graduates in the Community (% locally after 1 year) | L |
| Total Number of Applicants | F, S |
| Total Student Enrollment | F, S |
| Total Minority Enrollment | F |
| Total Female Enrollment | F |
| <i>Safety</i> | |
| Total Campus Crimes Reported (can break down by type) | F, S, N |
| Incidents of Assault (per Capita, # of reported incidents) | L |
| Student crime | P |
| crime prevention* | F |
| | |
| <u>Health</u> | |
| Workplace Injuries Reported (Total or per Capita) | F, S, L |
| Amount of training/information about Ergonomic Safety | G |
| New Staff Orientation (% receiving at least 1hr) | L |
| Student alcohol consumption (# of reported incidents) | P, S |
| Student drug use (# of reported incidents) | S |
| Student Suicide Rate (per Capita) | L |
| Student/All depression/mental illness(total or per Capita) | P, L |
| Total Lost Workdays/Total Hours of sick leave | F, S, L |
| Smoking (Daily Smokers per Capita) | L |
| Investment per Benefit Employee | F |
| Mental Health Care Practitioners (per Capita) | L |
| Physical Health Care Practitioners (per Capita) | L |
| Total Health Care Costs (% increase) | S |
| Spiritual Services (% of spiritual serviced) | L |
| | |
| <u>Labor</u> | |
| <i>Equality</i> | |
| Ratio of lowest wage to national legal minimum | F |

| | |
|---|------------|
| Wage Gap (ratio of highest to lowest wage of faculty/staff) | L, N |
| Gender Pay Equity – by job type (\$ difference) | L, N |
| Ethnic Minority/Caucasian Pay Equity -by job type (\$ diff) | L |
| Indigenous People/Caucasian Pay Equity – job type (\$ diff) | L |
| Staff with Disabilities (difference from regional rate) | L |
| Staff of Ethnic Minorities (difference from regional rate) | L |
| Staff Gender (difference from regional rate) | L |
| Equity of Indigenous People: Staff (difference f.r. rate) | L |
| % Women in Executive/Management Positions | F |
| Discrimination Litigation (Frequency and Type)* | F |
| Minority Mentoring Programs (in \$, hours, # of part ???)* | F |
| % Faculty Ethnicity/Diversity (difference from regional rate) | F, S, L |
| % Faculty Gender (difference from regional rate) | F, S, L |
| Faculty with disabilities (difference from regional rate) | L |
| Equity of Indigenous People: Faculty (difference f.r.rate) | L |
| <i>Satisfaction</i> | |
| Job Satisfaction (Index) ?? * | F, A |
| Total Wages and Salary Expenses | F |
| Campus Jobs by Type | F |
| Average Wage of Employees | S |
| Minimum Wage of Employees | S |
| Ratio of lowest wage to local cost of living* | F |
| Health Benefits to Employees* (non) permanent | F, G |
| Pension Benefits to Employees* | F |
| Extended Benefits and Employee Assistance Programs | G |
| % Employee Retention | F |
| Programs for Worker Participation in decision-making* | F |
| <i>Quality</i> | |
| Percent of Job Descriptions incorporating Sustainability | A, L |
| Ratio of Training Budget to Annual Operating Costs | F |
| Average years of education of workforce* | F, A, E, N |
| Average age of workforce | S |
| Anti-union practices? * | F |
| New Faculty Orientation (% receiving at least 1hr) | L |
| % Faculty with Terminal Degree (Quality of Faculty) | F |