

# University of Minnesota Sustainability Goals and Outcomes Committee Initial Summary Report Proposed Goals, Measures and Strategies

---

## Introduction:

The University of Minnesota Sustainability Goals and Outcomes Committee (USGOC), was charged by President Bruininks to propose goals to advance the sustainability efforts for the university system. The committee was co-chaired by Deborah Swackhamer (Professor, Environmental Health Sciences and Co-Director Water Resource Center) and Vice President Kathleen O'Brien (University Services) and consisted of a group of faculty, staff and students, with representation from all campuses. Work teams formed in the Fall 2008 were aligned with the Guiding Principles of the Board of Regents policy on Sustainability and Energy Efficiency (2004): **Leadership, Modeling, Operational Improvements, Energy Efficiency, Research, and Education and Outreach**. The structure of committee and work teams is shown in Figure 1.

This initial summary draft report was prepared to communicate the work of the committee and work teams so far. This information is provided to ensure a thorough consultative discourse throughout the university.

The proposed transformational goals are consistent with University strategic planning and will renew our land grant mission. The work incorporates existing commitments such as the American College and University Presidents Climate Commitment.

Sustainability programs at the University of Minnesota already form a uniquely linked community that crosses typical organizational boundaries. There are numerous successful collaborations among students, faculty, staff, across our campuses, our research outreach centers and beyond, in our community partnerships. University system goals are intended to focus efforts; realistic performance measures are intended to help communicate progress and the unique challenges of each campus. Transformation to a Sustainable University system requires leadership, commitment to organizational culture change and an actively engaged university community.

We welcome your viewpoint!

## I. Leadership Modeling Goals

- A. Be a **national leader** in pursuit of sustainability and energy efficient operations and a **pioneering model among large, public research, land grant institutions**.
1. Graduate the most number of “green leaders” from our institution.
    - a. Students have community or experiential learning experience related to sustainability.
    - b. **Measure** outcome performance measures
      - i. **Awareness changes of students** over time while at the University
      - ii. **Behavior changes** during course of education at the University
  2. Pull sustainability into the existing celebrations and events. Conduct consciousness raising days. (Example: “Paper free day”) Measure involvement.
  3. Assess our progress by peer review, recognitions and rankings.
  4. Renew and **expand the University’s land grant mission** with regard to sustainability.
- B. Actively **advance the transition to a sustainable world economy** through research, teaching, outreach and operations.
1. Financial, academic and operational planning and decisions will utilize social, economic, environmental concepts and integrate a long term life cycle view.
  2. Green game and events help model transformative activities – measure involvement
  3. Align with Minnesota Green Jobs Investment Initiative and the new federal energy economy and green jobs programs.
  4. Track how research and education support the development of a green economy, did shifts occur?
- C. **Inspire and influence the community, nation and world** through innovative sustainable research and practices. Note: Reduce redundancy with Research goal?
1. Institutional efforts need to improve community, social ethic and economics in transition to a sustainable “community”.
  2. The University is a model that demonstrates is recognized for demonstrating that sustainable practices work, save money and improve the community.
  3. What is measure of innovation? What recognition received for sustainability?
- D. Make **significant continuous achievements** toward sustainability goals and commitments. Work team goals and performance measures
1. Annual review of goals and progress assessment & report to campus somehow = outreach?

2. External Assessments (SEI, Princeton etc)
- E. Embrace an organizational culture and individual decisions that support an **inclusive, engaged, active and sustainable healthy community**.
1. Milestone: communication tools developed to make data available to ensure transparency.
  2. Measure social shifts, not just as incentives.
- F. Meet all regulatory requirements and **advance future regulations and policies** through technical review, academic study and practical experience.
1. Track environmental regulatory requirements
  2. Adopt and enforce energy related financial policies to be socially, environmentally and fiscally informed.

## II. Operational Improvements Goals

- A. Building Planning, Construction, and Operations: Plan, program, design, construct and operate University facilities throughout their life cycle to provide **restorative impacts to natural environment** and a **healthy indoor environment** for the university community.
1. *BPCO Performance Metrics*
    - a. Predicted energy use during design and actual energy use during operation (can be measured per square foot, per person, per hour of operation or a combination of these).
    - b. Predicted total greenhouse gas emissions during design and actual greenhouse gas emissions during operation (can be measured per square foot, per person, per hour of operation or a combination of these). This is necessary in addition to energy use since it addresses the pollution of the energy source.
    - c. Predicted potable water use during design and actual potable water use during operation (includes building and landscape).
    - d. Predicted wastewater during design and actual wastewater during operation (includes building and landscape).
    - e. Percent of construction waste recycled.
    - f. Embodied life cycle impacts of construction materials (includes primary energy, global warming potential, etc.)
    - g. Occupant health, satisfaction and productivity measured by specified standards during design and through post occupancy evaluations.
    - h. Predicted storm water management of volume and quality during design.
    - i. Biodiversity on site measured by methods to be determined.
    - j. Contribution to urban heat island measured by methods to be determined.
    - k. Contribution to night sky radiation measured by methods to be determined.
    - l. Percentage of campus land covered with impervious surface
  2. *Initial BPCO Targets*
    - a. Meet energy targets specified in Minnesota 2030 program for new and substantially reconstructed buildings (to be required for State buildings through B3 Guidelines):
      - i. 60% reduction by 2010 (compared to benchmark to be determined)
      - ii. 70% reduction by 2015
      - iii. 80% reduction by 2020
      - iv. 90% reduction by 2025
    3. Meet greenhouse gas emission targets specified in Minnesota 2030 program (to be required for State buildings through B3 Guidelines).
    4. Predicted potable water use must be 30% below standards established by the Energy Policy Act of 1992.
    5. Predicted water use for landscaping must be at least 50% less than a traditionally irrigated site.

- a. 75% of construction waste must be recycled.
- B. Purchasing: Integrate environmental with economic and social priorities in **purchasing and contracting** decisions.
1. *Objectives*
    - a. Develop and implement an environmentally preferable purchasing (EPP) policy with criteria that align with existing social and economic criteria used by University buyers.
    - b. Reduce the total amount of goods and services purchased.
    - c. Include sustainability into the University vendor code of conduct.
    - d. Communicate these policies throughout the University to maximize success.
    - e. Establish a tracking system to monitor success.
  2. *Purchasing Performance Metrics*
    - a. Total amount of goods and services purchased
    - b. Annual spending on “environmentally preferable” products and services (per EPP policy and approved third party certifications)
    - c. For products and services with high environmental impact the percentage purchased that meet the University’s ‘environmentally preferable’ criteria
    - d. Carbon footprint reduction from green purchases
- C. Transportation: - Use **lower impact alternatives** that increase fuel efficiency, provide more sustainable fuel options and help reduce the miles traveled on campus, to campus, and as part of the University enterprise.
1. *Transportation Objectives*
    - a. Provide alternative transportation methods and encourage the use of mass transit
    - b. Provide a wide array of transportation options for everyone at the university
    - c. Increase campus fleet efficiency (miles per gallon) through proper maintenance of fleet and operations vehicles, purchasing fuel efficient or alternatively-fueled vehicles, and providing access to technology to reduce unnecessary travel
    - d. Improve safety and convenience for all modes of travel, including pedestrians and bicyclists
    - e. Encourage housing alternatives for students, faculty, and staff nearer to campus.
    - f. Support meeting and distance learning technologies
    - g. Support systems for tracking University travel
  2. *Transportation Performance Metrics*
    - a. Human and Vehicle miles traveled on campus and from commuting to campus

- b. Greenhouse gas emission contributions from University transportation, including on-campus transportation, commuting to and from campus, and air travel
- c. Alternative transportation ridership (U-Pass and Metro pass bus programs, biking, carpooling, etc.)
- d. Size of fleet per capita
- e. Percent of university-owned fleet or operations vehicles that are high efficiency and/or alternatively-fueled vehicles.
- f. Percent of employees/students driving alone to campus
- g. Reduced number of parking spaces per capita
- h. Percent of employees/students living near campus
- i. Percentage of campus land used for parking (ramps, lots, garages, streets)
- j. Number of bike racks and length of bike paths or marked bike routes on campuses
- k. Campus fleet efficiency (miles per gallon), including both pool and maintenance/operation vehicles
- l. Total commuting distance of faculty, staff, students
- m. Total number of air miles traveled for university business

3. *Transportation Targets*

- a. Continue financial support for existing bus programs
- b. Increase percentage of commuters utilizing mass transit, carpooling, walking, biking, and other alternatives
- c. Maintain or decrease the percent of single-occupancy vehicle drivers per capita
- d. Increase campus fleet fuel efficiency to 0.5 or fewer pounds of carbon dioxide equivalent (CO<sub>2</sub>e) per passenger mile traveled (AASHE Sustainability Tracking, Assessment & Rating System program standard)
- e. Develop incentives and remove barriers for carpooling
- f. Develop a robust tracking system for both fleet and air miles traveled

D. Waste: Manage resources for their highest end use by **reducing consumption, minimizing waste**, and strongly supporting the **reuse** and highest value recycling of unwanted materials.

1. *Waste Objectives*

- a. Reduce consumption of materials by informed purchasing and resource use decisions
- b. Reduce waste by rethinking the processes producing waste
- c. Support reuse of existing resources by individuals and through institutional reuse programs
- d. Support recycling of a wide range of materials
- e. Communicate these priorities throughout the University to maximize success

- f. Establish a tracking system to monitor success and provide feedback to waste producers
- 2. Propose that the University adapts these metrics and targets from the Association for the Advancement in Sustainability in Higher Education, Sustainability Tracking, Assessment & Rating System (STARS):
  - a. **Criteria:** Campus provides a means for recycling bottles, cans, paper, and cardboard. There are designated and clearly labeled recycling receptacles for all occupied buildings or building clusters.
  - b. **Criteria:** Campus demonstrates a three-year downward trend in waste generated per capita. Total waste generation is measured by weight, and includes all materials recycled, composted, and disposed of as trash except construction, demolition, hazardous, universal and non-regulated chemical waste. 'Materials diverted from the landfill or incinerator' includes any solid waste that was destined for disposal in a municipal waste landfill or incinerator but was diverted by recycling, composting, donating, re selling, or reusing. 'Materials sent to landfill or incinerator' includes any solid waste that was sent for disposal in a municipal waste landfill or incinerator.

**i. Solid Waste Diversion**

- a. **Criteria:** Campus achieves a specified solid waste diversion rate.
  - i. Achieves a 20 percent diversion rate by 2010.
  - ii. Achieves a 40 percent diversion rate by 2012.
  - iii. Achieves a 50 percent diversion rate by 2015.
  - iv. Achieves a 75 percent diversion rate by 2020.
- b. Diversion rate is calculated by dividing the weight of materials diverted from the landfill or incinerator by the sum of the weight of materials sent to a landfill or incinerator and the weight of the materials diverted from the landfill or incinerator.

**ii. Construction and Demolition Waste Diversion**

- a. **Criteria:** Campus diverts at least 75 percent of its non hazardous construction and demolition waste from the landfill and/or incinerator. Soil and organic debris from excavating or clearing the site do not count for this credit. The diversion rate is calculated by dividing the weight or volume of materials recycled, donated, or otherwise recovered by the sum of the weight or volume of materials landfilled or incinerated and the weight of materials recycled, donated, or otherwise recovered.

iii. **Electronic Waste Recycling Program**

- a. **Criteria:** Campus has a comprehensive electronic waste (e waste) recycling and/or reuse program. The program includes collecting all institution owned electronic products and, at least annually, electronic materials from students. All of the e waste collected is refurbished, donated, or recycled domestically.

iv. **Hazardous Waste Minimization**

- a. **Criteria:** Campus tracks and safely disposes of all hazardous, universal, and non regulated chemical waste.

3. Tier Two Credits (Each campus will document 3 or more of these or their equivalent by 2010, 5 by 2013, 7 by 2015)
- a. Materials, Recycling, and Waste Minimization:
- i. Institution has a pre consumer food waste composting program.
  - ii. Institution has a post consumer food waste composting.
  - iii. Institution composts yard waste.
  - iv. Institution has a surplus department or materials exchange that facilitates reuse of materials.
  - v. Campus dining operations offer discounts for reusable mugs.
  - vi. Institution has replaced paper materials, such as course catalogs, registration, and directories, with online alternatives.
  - vii. Institution limits free printing in computer labs and libraries.
  - viii. Campus dining operations use bulk condiment dispensers and decreased packaging for to go food service purchases.
  - ix. Institution has a program to minimize chemical use and reuse chemicals.

E. Sustainability Informatics: Develop and maintain **transparent data management information systems** to enable decisions utilizing environmental, economic, and social factors.

1. *Sustainability Objectives*

- a. Measure and report on an annual basis for each campus the results of select performance metrics discussed in this report.
- b. Measure and report on an annual basis for each Resource Responsibility Center (RRC) the results of select performance metrics discussed in this report.
- c. Incorporate the information generated by the sustainability information system into annual performance and budget decision making processes.

2. *Sustainability Performance Metrics*

- a. Campus Level – Total energy consumption, total water consumption, total waste production, total storm water discharge,

total space under management, estimated total daily commuting miles, and total carbon output.

- b. RRC Level – Total energy consumption, energy consumption per capita, total assigned space, total assigned space per capita, total green purchases, total percent of green purchases, total travel expenditures, total water consumption, total water consumption per capita, percentage of employees with parking contracts, estimated total miles commuted daily.

### III. Energy Efficiency Goals – from Draft report

- A. **Proposed overarching goal:** Our overarching goal is to be recognized as a national leader in pursuit of sustainability, climate neutrality and the energy efficient operations of our campuses. Integrate energy efficient operations, conduct innovative renewable energy research, contribute to the development of progressive energy policy and actively engage our campus communities in energy conservation. Invest resources and make significant achievements to **save energy, reduce carbon footprint and increase energy efficiency.**
- B. Pursue **climate neutrality and the energy efficient operations** across the University. The recognition will take the form of one or more of the following tangible criteria. Measurement will be through leadership recognition through external assessments and tracking against program milestones. We will also track our own performance for meeting institutional commitments.
1. **Meet American College and University Presidents Climate Commitment (ACUPCC).**
    - a. ACUPCC actions:
      - i. Initiate the development of a comprehensive plan to achieve climate neutrality.
      - ii. Complete a comprehensive inventory of all greenhouse gas emissions (including emissions from electricity, heating, commuting, and air travel) and update the inventory every other year thereafter.
      - iii. Develop an institutional action plan by 2010 for becoming climate neutral, which includes:
        - a. A target date for achieving climate neutrality for each campus.
        - b. Also, Interim targets for goals and actions that will lead to climate neutrality in each bonding cycle. (2010, 2012, 2014, 2016).
        - c. Consider public institution needs in addressing appropriate use of off-campus “offsets.”
    - b. ACUPCC also requires each campus to choose two tangible actions: Directly related to Energy:
      - i. Establish a policy that all new campus construction will be built to at least the U.S. Green Building Council’s LEED Silver (MN B3) standard or equivalent.
      - ii. Adopt an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist.
      - iii. Establish a policy of offsetting all greenhouse gas emissions generated by air travel for each campus.
      - iv. By 2010 begin purchasing or producing at least 15% of each campuses electricity consumption from renewable sourcesIndirectly related to energy:

- v. Encourage use of and provide access to public transportation for all faculty, staff, students.
  - vi. Establish a policy or committee that supports climate and sustainability shareholder proposal at companies where our institution’s endowment is invested.
  - vii. Participate in Waste Minimization component of the national Recyclemania competition, and adopt 3 or more associate measures to reduce waste.
2. Meet **Chicago Climate Exchange (CCX) member requirements** for CO2 reductions:

2003	1% below baseline	
2004	2% below baseline	
2005	3% below baseline	
2006	4% below baseline	
2007	4.25% below baseline	1/5% below baseline
2008	4.5% below baseline	3% below baseline
2009	5% below baseline	4.5% below baseline
2010	6% below baseline	6% below baseline

- 3. Meet State and Federal leadership programs. (voluntary or regulated) State of Minnesota 25% by 2025 renewable energy standards. (RPS)
- 4. Achieve a top ten ranking in green reports on campuses. Example: US News and World Report “Greenest Campus” category.
- 5. Establish auditable measures (metrics) for energy consumption (with clearly defined measurement basis) commonly applied across all campuses.  
Energy Standards – Certain energy data is not readily available for each campus. This is an identified gap in obtaining the data needed to set long term goals in the energy area. Standards and data measures must be established for each campus □
  - a. Establish a system wide accounting and reporting procedure.
    - i. All buildings to be metered by 2012
  - b. Establish degree day/GSF/per capita norms for each campus.
  - c. Create data warehouse for all energy data.
- 6. Create a University–wide “Energy Master Plan” by the end of FY2010 which identifies the most effective approach and strategy towards improving the energy efficiency of the campuses’ buildings and infrastructure and reducing the campus carbon footprint. And that will lead us to realization of Goals
  - a. Strategies:
    - i. Establish an Energy Working Committee to review current master plans and develop recommendations on how to migrate to a more comprehensive Energy Master Plan.
      - a. Incorporate carbon neutral goals with timelines in master plans.

- b. Develop energy balance matrix that establishes plans for incorporation of onsite renewable or low carbon fuel sources for each campus by 2012.
      - c. Ensure the work aligns with the climate action plan under the Presents Climate Commitment
    - ii. Review existing Facilities Condition Assessments (FCA's) and add new sections to improve the energy performance of these buildings by 2012. Work with CPPM/Codes to establish energy standards that use a cost of energy matrix to help drive energy investment strategies. (Different RIOs based on different energy costs and efficiencies.)
- C. Adopt **energy-related financial policies** which enable the U to be socially, environmentally and fiscally informed.
  - 1. Measure CO2 values in cost benefit analysis. Assign a value for CO2 tied to an aggressive world CO2 index.
  - 2. Adopt and measure minimum energy efficiency return on investment payback period at which energy initiatives must be incorporated in capital projects.  
[Goal 1 and 2 integrate into Leadership section]
- D. Engage the University Community in **Energy Conservation**.
  - 1. Measure energy use at building and provide consumer information kiosks to inform and guide building occupants in reducing energy consumption.
  - 2. Measure Credit Hour Generation / carbon outputs matrix. to evaluate low carbon instructional delivery programs.
- E. Contribute to the development of progressive **Energy Policy** at state and federal level.
  - 1. Strategies:
    - a. Develop a legislative briefing group to meet with University legislative relations staff to discuss pending or future State or Federal legislative initiatives relating to energy management
    - b. Work with legislature to include a category for Carbon reduction projects in HEAPR.
- F. Adopt **University Energy Use Reduction Goals [discuss at campuses]:**
  - 1. Reduce energy use 5% by end 2010 (compare 2008 fiscal year).
  - 2. Develop long term Energy goals and Energy Plan unique to each campus by 2010 in pursuit of climate neutrality and state & federal energy standards.
- G. **Consolidated Measures:**
  - 1. Energy inputs and outputs – reduce energy use, increase renewable and low carbon footprint energy inputs
  - 2. Measure carbon footprint
  - 3. Meet ACUPCC (Presidents Commitment) Milestones
  - 4. Meet Chicago Climate Exchange requirements

## IV. Research Work goals

To advance sustainability:

- A. **Nurture cross-disciplinary collaboration** and share of ideas and perspectives within and beyond the University.
  1. Proposed Targets/Outcomes:
    - a. Track the number of **peer-reviewed** research publications addressing interdisciplinary sustainability issues and involving faculty and researchers from multiple colleges, departments and units.
    - b. Host the inaugural (and subsequent annual?) **premier sustainability research symposium** to convene **leading scholars and researchers** across fields all grappling with the challenges of addressing interdisciplinary sustainability problems.
    - c. Refine the inventory of people and projects related to sustainability research and create an online “knowledge map” of ongoing research and collaborations
    - d. Establish new and more rigorous research in partnership with University Services (and with Sustainability Education efforts) to use the University campus, buildings and facilities as a case study for energy efficiency, waste reduction, land care and other sustainability issues.
  
- B. Promote civically engaged, socially informed, and community responsive research and scholarship.
  1. Proposed Targets/Outcomes:
    - a. Increase the sustainability focus and support ongoing sustainability efforts of the University Research and Outreach centers, University of Minnesota Extension offices, Regional Sustainable Development Partnerships and numerous other outreach and public engagement arms of the University of Minnesota.  
The University should track the number of **community-engaged research** efforts to address the critical energy, food, environmental and regional economic issues of greater Minnesota. Extension and outreach entities should use their regional affiliations and relationships to solicit input and participation from citizens and stakeholders about critical sustainability research needs.
    - b. Create an Urban Sustainability research and outreach center in the Twin Cities focused on the interlinked economic, health, social, and environmental issues of the greater metropolitan area.
    - c. Increase and enhance engagement around sustainability issues with diverse cultures and socio-economic groups within Twin Cities and across Minnesota.
    - d. In coordination with other University efforts, increase the connection and partnering between the University Office of Public Engagement and Office of Research

- C. [ Integrate into Leadership Section] **Instill sustainability principles in the research culture** of the University.  
All levels of University leadership should embrace sustainability as a core pillar of the University's mission. Sustainability research should become a key component of the intellectual identity of the University of Minnesota (through creation of a faculty committee and/or upper-level administrative office) and of the University's research "brand" (through communications, marketing and public relations materials).
1. Proposed Targets/Outcomes:
    - a. Establish, and provide significant support for, a long-term Sustainability Research Committee to guide, define, revise and implement efforts to enhance sustainability research.
    - b. Create a new upper-level administration office for sustainability, i.e. Vice President for Sustainability
    - c. Track the number and profile of research projects, research symposia, **peer-reviewed** publications, graduate theses, external grants received etc. addressing sustainability issues
- D. **Eliminate institutional barriers and disincentives** to interdisciplinary and collaborative sustainability research.
1. Proposed Targets/Outcomes:
    - a. Recognize sustainability contributions as significant criteria for **hiring** faculty and recognize sustainability research and teaching as criteria for **performance evaluation in tenure review**.
    - b. Measure and evaluate research projects through new institutional **research standards** for sustainability.
    - c. Create new programs to train the next generation of sustainability researchers. Measure **funding** for undergraduate and graduate research and discussion focused on sustainability
- Note:** Vice President for Research Tim Mulcahy is leading an effort to identify and decrease institutional barriers to interdisciplinary research, and attempts to enhance interdisciplinary collaboration for sustainability research should be informed by and explicitly linked with this ongoing work.
- E. Transform the University of Minnesota into a **learning laboratory** for sustainability. [Consolidate education and leadership goals around learning laboratory]
1. Track the number of publication of **peer-reviewed collaborative research** related to sustainability issues in urban, ex-urban, rural, terrestrial and aquatic socio-ecological systems across the state of Minnesota and around the world.
  2. Coordinate the use of University land, buildings, and space for sustainability research and education through standing committee(s) at all major University campuses and centers

## V. Education and Outreach goals

- A. Sustainability is **part of the education of each and every** University of Minnesota **student**.
1. Create **system-wide sustainability initiatives** that should include: a) **undergraduate and graduate sustainability internships** ( for academic credit and/or pay); b) an **annual system-wide summit** that includes undergraduate and graduate students, faculty, extension, community partners, etc., c) **graduate and undergraduate minors that address sustainability problems are offered on multiple campuses;** d) **First (Freshman) year and graduate seminars on sustainability**.
    - a. A minimum of 8 academic/operational internships are established (two for each campus) by 2009 academic year.
    - b. First system-wide summit held by 2010
    - c. Academic plan to develop minors and seminars by 2010
    - d. Measures:
      - i. Track number of **students who complete sustainability course, internships** or sustainability **service-learning** projects.
      - ii. Track number of students who **graduate** with sustainability minor or major.
- B. **Integrate service-learning** into the student experience at the University. Link undergraduate and graduate students, faculty, extension, and community partners the University serves.
1. Develop **service-learning** and individual projects that **link undergraduate and graduate students, faculty, extension, and community partners** to address community defined sustainability challenges, such as energy efficiency, local food production and procurement, community design, transportation, etc. We consider **community at multiple scales**, namely, building-level, campus-level, town or city-level, regional-level, etc.; and in MN, USA or abroad.
    - a. Seek to extend service learning and undergraduate research projects which are fully focused, partially focused, or related to sustainability by 2012. Link the student assignments to operational needs of the University (i.e., as being currently done in Sustainable Communities Course.)
    - b. Increase of 5% of service learning projects on each campus focus on sustainability challenges by 2012, and increasing annually to reach 25% by 2020. Utilize Research and Outreach Center (ROC).
    - c. Recognizing that specific high-quality learning takes place when working on undergraduate research projects, increase the number of undergraduate research projects and applied research projects that address sustainability challenges. Goal is 10% by 2012, with growth each year to reach 25% by 2020.
    - d. Identify and formalize service learning relationships with organizations, building especially on the experience of the Regional Sustainable Development Partnerships, Service Learning

coordinators, and faculty by 2012.

- C. Create and implement **curricula and educational programs** that address the interface of environmental, social and economic domains.
1. Develop **capacity** for creating and implementing sustainability-focused curricula and educational programs (addressing interface of environmental, social and economic domains). This not only means assistance to develop **specific courses** on sustainability, but also provide interested faculty, graduate students and teaching assistants, continuing education staff, outreach and extension staff with assistance in how to include a **sustainability component** into their existing education programs.
  2. Establish academic sustainability coordinators on each campus who will develop a **plan** for implementing the stated sustainability education and outreach recommendations that:
    - a. identifies the unique strengths of each campus (including outreach programs and centers) and potential contributions to a system-wide approach;
    - b. identifies resource needs to enact these initiatives;
    - c. provides a timeline for implementation; and
    - d. provides coordination and monitoring capacity (to complement sustainability operations coordinators), and establish networks across the campuses; these individuals would also collaborate with community partners, especially the Regional Sustainable Development Partnerships, etc., and seek input from students.
  3. Measure:
    - a. Identify **unique strengths of each campus** and measure their success in implementing sustainability – focused curricula and educational programs.
- D. Provide sustainability **education to all people of the state (working professional, trades, farmers, etc.) through outreach programs.**
1. By 2010, catalogue existing sustainability-related training programs within the University, and conduct a needs assessment to determine what training and certificate programs would be most effective, and prioritize programs. Assessment should take into account:
    - a. The public/private need for such training
    - b. The social, environmental, and economic benefits the training would provide
    - c. The ability of the University to provide the training
  2. Establish first education programs for working professionals with program completion by first cohorts (e.g., certificates) by 2011.
  3. Create a mechanism for fostering interaction among past participants and connecting them with current University students interested in internship opportunities.

- E. Develop outreach programs for **sustainability education of working professionals in the public and private sector**. Target audiences may include University of Minnesota employees, senior management of companies, technical experts (e.g., energy/appliance, natural resource management, and public health), elected officials, community planners, trades people, farmers, etc. Create an “alum’ network that can provide future projects, internships for students.
  - 1. Measure:
    - a. Catalogue and measure number of **training and certificate programs** for professionals, trades, etc., “working people” and the number successfully completed.

b.

## VI. Themes that Surfaced across Work teams

When work team proposed goals were reviewed by the USGOC, several similar themes emerged. They included:

- A. **Leadership** - Distinguish University of Minnesota as a leader
- B. **Activism and engagement** is needed across University
- C. **Communication**, marketing and transparency via many media are important to talk about our work.
- D. **Policies** are needed to drive best practices across departments (energy, purchasing etc)
- E. **Culture change** with sustainability as driver and focus is critical to our commitment to sustainable practices.
- F. Define ways to **Measure Community impacts** (How does our work change the world?)
- G. **Integrate sustainability** elements (social, economical and environmental) into **operation and financial decisions, teaching and research**. This is key to each area of our policy
- H. **Proposed Communication Goal:**
  - 1. Communicate and **create opportunity for dialogue** to discuss global and local sustainability challenges, the opportunities available and the work of the university to advance sustainability.