

# SUSTAINABILITY AT PRINCIPIA: 2015-2020

Goal: Principia successfully educates, promotes, and inspires its students, faculty and staff to become more responsible local and global environmental citizens, thereby putting into practice the Golden Rule on an intergenerational scale<sup>1</sup>

Students are skilled and empowered as Change Agents for a sustainable world

- 20% of students participate in the Sustainability Minor and/or experience a Sustainability Abroad
  - "Sustainability minors join a community of students, faculty and staff committed to seeking solutions to some of the world's most pressing problems in ways that 'meet the needs of the present without compromising the ability of future generations to meet their own needs' (UN World Commission on Environment and Development, 1987)" ~ Principia College Catalog
- 50% of all academic Departments participate in the Sustainability Minor
- Core courses (SUS 151, 250, 260) within the Sustainability Minor are taught on a regular basis
- 80% of students are enrolled, at some point during their college experience, in at least one course that requires an explicit Sustainability project
- 100% of students are exposed to campus sustainability goals (e.g., composting, recycling, wise energy/water use, dorm-based initiatives, academic options) during New Student Orientation
- A Change Agent Fund supports off-campus internships and apprenticeships for Principia students
- Faculty are inspired and supported in their efforts to learn more about sustainability as it applies to their academic discipline(s); similarly, staff are inspired and supported in seeking to deepen their understanding of campus sustainability issues, including efforts to incorporate sustainability into planning and implementation processes
  - A Sustainability Fellows program offers competitive Enrichment Grants to faculty and staff to advance their skills in "infusing sustainable concepts and content into courses" and "incorporating sustainability into planning and implementation processes" ~ Center for Sustainability Charter
- 100% of students are aware based on student-led education and awareness campaigns of the importance of sustainable living and the steps they can take to pursue sustainability on a daily basis
- 100% of student dorms design/implement/adopt a sustainability project associated with the dorm (e.g., native garden, vermicomposting, energy audit, campus event)
- A vibrant Center for Sustainability fosters and coordinates interdisciplinary experiential learning, and opportunities for applied community-based problem solving

<sup>&</sup>lt;sup>1</sup> This outline is the result of a year-long (2013-14) consultation, led by the Principia Center for Sustainability, with 22 Principia offices and departments (both campuses) as a contribution to the Principia Strategic Plan. It represents the consensus "2020 vision" of the Champion Working Group and is an informal, dynamic document. ~ K.L. Eckert (x 5491)

- An energetic Sustainability Club nurtures service, leadership, and courageous thinking within the student body through:
  - Leadership in hands-on campus sustainability projects (e.g., food, energy, lands)
  - Fundraising (e.g., *Better World Books* campus book recycling program)
  - Professional certifications (e.g., LEED, Permaculture, Beekeeping, Home Energy Auditing)
  - Community, especially peer, awareness (e.g., Annual Arbor Day and Earth Day events)
  - Campus and community service
- Opportunities exist for a Master's Degree in Sustainability (internally or through partnerships)

## "How Shall we Live?"

#### Sustainable Operations community

- "Wisdom, economy and brotherly love" characterize all operational decisions
  - Sustainability is incorporated into planning and implementation phases
- Campus buildings are assessed for potential *LEED for Existing Buildings* certifications
- A *LEED Gold* certified building is in an active planning (building?!) stage
  Building renovations incorporate sustainability best practices
- Gold status is achieved under the Illinois Governor's Campus Sustainability Compact
- Environmental performance monitoring is made transparent using AASHE's 'STARS' tool
- A self-managed Green Revolving Fund is created to finance energy (and other) efficiency improvements as part of the national *Billion Dollar Green Challenge*
- A Green Purchasing Guideline is adopted
  - Appliances are Energy Star-rated; Toilets/faucets are 'low flow'
  - Housekeeping/flex/dining services chemicals are Green Seal or equivalent
  - Furnishings meet high environmental standards
- Plastic water bottles disappear from campus
  - $\circ$   $\;$  Every student residence has a water bottle filling station
- Printers use 100% post-consumer recycled paper

#### Zero Waste community

- 100% of food waste (pre- and post-consumer) is composted by Dining Services
- 100% of students/faculty/staff recycle "as much as possible"
- 90% of our waste is diverted from the landfill (*via* compost, recapture/reuse/repurpose, recycle)
  - Technologies/partnerships adopted to responsibly dispose of items not currently recyclable (e.g., polystyrene, hand towels/napkins, candy/chip wrappers, film plastic)
- Access to 'Single Stream' (comingled) recycling campus-wide
- Access to composting campus-wide, with compost transformed on site (e.g., energy, soil)
- An electric dump truck services our ever-more-efficient recycling program
- Cardboard recycling bins are replaced with more attractive/durable options campus-wide

# Sustainable Food community

• 20% of our food is derived from local sources (i.e., grown within 50 miles of campus)

- Students are actively engaged in sustainable food production on campus: Food Forest, Apple Orchard, Organic Maple Syrup/ Honey/ Eggs/ Mushrooms/ Fish
  - Host a 40-acre organic vegetable farm on campus
  - Plant/maintain a 14-acre Food Forest on campus
  - $\circ$   $\;$  Design an Aquaponics demonstration project in the Greenhouse
  - Principia Beekeepers Association maintains a campus apiary
- 50% of student residence buildings maintain pollinator-friendly native gardens
- Principia hosts an organic, community supported agriculture operation on campus
  - Students are actively involved

## Carbon Neutral community

- Principia College achieves a net zero carbon footprint
- Principia College operates on 100% renewable energy
- Principia College sources 30% of energy from (or planned from) on-campus sources
- Principia College is welcoming to zero emission vehicles
  - Electric fleet vehicles are used on campus by Facilities/Flex staff
  - Personal electric and plug-optional vehicles can be accommodated on campus
  - Level 2 EV Charge Stations are installed and available to faculty/staff/students/visitors
- Students design/install/maintain a solar power demonstration project
  - An assessment is conducted of the potential for solar power generation campus-wide
  - Demo: Gate House, Cross-Country Track viewing platform, e-vehicle charging stations...?
- Energy use data are programmed for real-time electronic display to a campus audience
  - Dataloggers are installed for monitoring building-level energy use
- Principia joins the US Fossil Fuel Divestment movement

# Sustainable Ecological community

- 10% of students are actively engaged in biodiversity monitoring and/or conservation programs
- Maybeck's vision for campus landscaping is rekindled
  - $\circ$   $\;$  Native plantings installed at least 5 major campus buildings
  - o Grateful Hearts Campus Garden Club
- Professional management of the Principia Forest maintains Forest Stewardship Certification
- Annual *Tree Campus USA* recognition is achieved from the National Arbor Day Foundation for our commitment to a professional Tree Care Policy toward our campus trees
- A plan is adopted to significantly reduce, if not eradicate, invasive, non-native plant species
- Native prairie acreage is actively protected and managed
- Erosion and other topsoil degradation issues are identified and mitigated
  - Parking lot/roadway erosion is mitigated at least one site through the installation of permeable pavement surfaces
- Conservation Reserve Program (CRP) campus lands continue to be managed in partnership with the USDA Farm Service Agency
- All rare and endangered species are identified and adequately protected