

FY2019-FY2021 Sustainability Plan: **Growing a Resilient Western**

Talking the talk, walking the walk

In 2007, Western became an inaugural signer of the American College and University President's Climate Commitment, setting in motion a district-wide effort to become a leader in the effort to address global warming and the associated impacts of climate change. All levels of the college embraced this commitment and work began to turn the vision of a sustainable Western into reality. In 2011 Western developed a sustainable culture policy to continue to

drive this work forward.

Many of our campuses underwent major construction and updating to create nine LEED-certified buildings, nine rain gardens, grey water systems for irrigation on two of our campuses, and permeable courtyards and parking lots that divert five million gallons of storm water from the sewers. Western owns and operates four separate photovoltaic systems, a hydroelectric power station, two geothermal systems, and a passive certified house. Western's carbon footprint is 21% lower than our baseline year in 2010, despite gaining about 300,000 square feet of building space. As of July 1, 2018, the institution has avoided over 2.5 million dollars in energy costs since 2010.

Some of our recent regional and national awards and recognition include:

- 2018 Campus Sustainability Index Top Performer
- 2017 STARS Silver rating, AASHE
- 2017 US Green Building Council Local Leader Award of Excellence (Wisconsin)
- 2017 Tree Campus, USA (since 2010)
- 2015 Winner, Second Nature Climate Leadership Award
- 2015 US Department of Education Green Ribbon School

In 2016, Western reaffirmed our commitment to sustainability by signing the Second Nature Climate Commitment, the successor to the original 2007 President's Climate Commitment. In addition to aggressively pursuing carbon neutrality, the Second Nature Climate Commitment requires Western to assess, plan for, and enact resilience initiatives.

For more information about sustainability at Western, visit www.westerntc.edu/sustainability.

D0114 SUSTAINABLE CULTURE POLICY

Western Technical College is committed to the development of a sustainable culture that meets the needs of the present without compromising the needs of future generations. We recognize that a sustainable culture embraces environmental stewardship, social responsibility, and economic viability. Western Technical College will enable a sustainable culture by:

- Developing scientific and social literacy in students, faculty, staff, and the regional community concerning environmental, social, and economic issues;
- Leading regional efforts to advance a sustainable culture;
- Promoting and modeling environmental stewardship in personal and institutional choices and behaviors; and
- Inspiring innovative environmental solutions, behavioral changes, and ethical stewardship of the natural world.

Adopted March 15, 2011

Sustainability AND resilience

A common definition of sustainability embraces the notion of meeting our present needs without compromising the ability of future generations to meet their needs. It's no wonder that this definition of sustainability, with its focus on trade-offs between the needs of current and future generations leads people to regard the concept with apprehension. But what if, instead of thinking of sustainability as a series of sacrifices we must make, we focus on the abundances sustainability will create in our lives? Sustainable choices lead to abundances of clean air and water, avoided energy costs, green jobs, healthy food choices, rich community connections, robust transportation options, biodiversity, and human health and well-being.

With this in mind, in 2016 the Western Environmental and Sustainability Team (WEST) met with an outside facilitator over the course of two afternoons to create a definition of sustainability for the college:

WESTERN'S DEFINITION OF SUSTAINABILITY

Sustainability is the act of **building** – through our daily practices and educational programming—a **thriving**, **resilient**, **and just community** now and in the future.

Western's definition calls attention to the compelling concepts of *resilience* and *thriving*, terms that move us beyond the typical definitions of sustainability and the scarcity it often connotes.

Resilience focuses on ensuring that all people have what they need to thrive, and recognizes that strong, healthy ecosystems are inseparable from that goal. Resilience refers to the capacity of individuals, communities and systems to anticipate, adapt, and grow in the face of natural and manmade shocks due to climate change, environmental degradation, and globalization. The current state of the world forces all of us to (re)consider how we protect water quality, secure energy generation and distribution, address income inequality, build and maintain reliable transportation and housing infrastructure, ensure food security, address new public health epidemics, diversify local economies, plan for the relocation of millions of climate refugees, and preserve Earth's rich biodiversity.

While the list above is daunting, resilience need not be the story of decline. Rather, resilience invites us to reimagine how society operates in a new normal so that *all* have the opportunity to thrive. At its best, resilience inspires us to design our economic and social systems to be regenerative. This means our buildings, land-use patterns, production, consumption, systems of transportation, food networks, healthcare, etc., become net *producers*, as opposed to *plunderers*, of clean water, clean air, energy, and genuine well-being. Said differently, resilience focuses on ensuring that all people have what they need to thrive, and recognizes that strong, healthy ecosystems are inseparable from that goal.

Connecting Western's work to the world

Western's mission and Experience 2025

At its core Western's mission "to provide relevant, high quality education in a collaborative and sustainable environment that changes the lives of students and grows our communities," is about increasing opportunity for our students. It turns out that increasing opportunities—to earn a living wage, to find affordable housing, to benefit from quality education—is a key ingredient of community resilience to disruptive change.

Western's connection to sustainability and resilience moves from words to action via *Experience 2025*, Western's strategic plan. *Experience 2025* outlines four strategic directions meant to help the organization focus and align resources:

- 1. First Choice Service
- 2. Equity, Inclusion, and Support
- 3. Workforce and Community Engagement
- 4. Employee Engagement

The strategic directions are reinforced by **four personal and organizational commitments**: 1. to act with clarity and consistency; 2. to demonstrate resiliency; 3. to drive action through data intelligence; and 4. to practice sound fiscal stewardship.

The Global Goals for sustainable development

Western's sustainability and resilience efforts do not exist in isolation: individuals, businesses, governments, and organizations locally, nationally, and globally are also heavily engaged in this work. In an effort to help societies worldwide coordinate sustainability work, the United Nations Development Programme (UNDP) officially unveiled 17 Sustainable Development Goals (SDGs), also known as the Global Goals, in January, 2016.

This set of aspirational (though attainable) goals focus on a wide-range of interconnected problems including hunger, economic inequality, quality education, innovation, sustainable consumption, and climate change among other priorities.

THE GLOBAL GOALS

For Sustainable Development



For more information on the SDGs, including specific targets, visit http://www.undp.org/content/undp/en/home/sustainable-development-goals.html.

As noted by the UNDP:

... All 17 Goals interconnect, meaning success in one affects success for others. Dealing with the threat of climate change impacts how we manage our fragile natural resources, achieving gender equality or better health helps eradicate poverty, and fostering peace and inclusive societies will reduce inequalities and help economies prosper.

-United Nations Development Programme (undp.org)

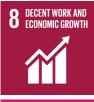
Each Global Goal provides clear guidelines and targets for all countries and organizations to adopt in accordance with their own priorities and the environmental challenges of the world at large. Connecting Western's work to the Global Goals makes explicit the link between a vibrant environment, economy, and society.

The **SDGs** are unique in that they cover issues that affect us all. ... They are ambitious in making sure no one is left behind. More importantly, they involve us all to build a more sustainable, safer, more prosperous planet for all humanity.

By virtue of Western's mission, strategic plan, and ongoing sustainability work, Western is already positioned to support the Global Goals. For instance, Western's mission and *Experience 2025* directly align with specific targets in at least five different SDG areas:



Target 4.3
Equal access to affordable technical, vocational, and higher education



Target 8.1
Sustainable economic growth





Target 9.4
Upgrade all industries and infrastructures for sustainability



Target 17.17 Encourage effective partnerships

In addition, our ongoing work in sustainability and resilience particularly supports the following SDGs:













Sustainability plan organization

As a public educational institution that has anchored our region for over 100 years, Western adds value and voice to the greater sustainability and resilience discussion through modeling practices, developing a green workforce, and convening and educating the community.¹ Western's specific sustainability goals are situated within these three broad categories. Furthermore, each goal is aligned with one or more of the 17 SDGs as indicated with the relevant icons.

¹ White & Cohen. (2014). A Guide to Climate Resiliency and the Community College. Sustainability Education and Economic Development (SEED) Center. Retrieved 7/10/2018 from http://theseedcenter.org/ClimateResiliencyGuide

Modeling sustainability and resilience practice and planning

- Energy and Emissions Western is striving to achieve carbon neutrality by 2035.
 - **Goal:** Reduce by 35% the total Scope 1 & 2 GHG emissions relative to FY2010 levels by the end of FY2021.
 - **Goal:** Increase opportunities for students and employees to commute to and around Western in ways that reduce Scope 3 GHG emissions.

➤ Nature and Ecosystems

- **Goal:** Create, advocate, and support institutional policies, programs, and efforts that foster landscapes that regenerate biodiversity.
- **Goal**: Reduce the total gallons of water used on Western's La Crosse campus by 15% as compared to FY2017 by the end of FY2021.

Waste Minimization

• Goal: At La Crosse campus, reduce the annual amount of waste sent to the landfill by 10% (22.8 tons) and the total amount of waste generated by 10% (34.5 tons) compared to 2017 measurements by June 30, 2021.

> Resilience and Sustainability Planning

• **Goal:** By 2021, Western will establish and manage a permanent, revolving "green" fund in order to spur innovative, cost-effective employee and student sustainability projects that help Western advance its sustainability goals.

Curriculum and culture

- Sustainability and Resilience in the Curriculum
 - **Goal:** Increase from 2.2% to 20% the number of documented sustainability-focused or sustainability-related courses Western offers by the end of FY2021.

> Workforce Development

• **Goal:** Establish one additional sustainability certificate and/or other credential that increase students' opportunities to participate in the green-collar economy by FY2021.

> Campus Engagement

• **Goal:** Increase the number of opportunities for students and employees to explore and engage in sustainability and resilience in their professional and personal lives.

Community and communications

- > Telling Our Story
 - **Goal:** Raise the visibility of Western's sustainability commitment and actions internally, locally, and nationally.

Engaging the Community

• **Goal:** Western will serve as a catalyst for local action in resilience and sustainability education as demonstrated by earning a minimum of 80% of available STARS points in public engagement.

Modeling

As a public institution and anchor organization in the 7 Rivers Region, Western Technical College is a model for our community regarding both the practice of and planning for sustainability and resilience.

- Energy and Emissions Climate Action Plan (CAP)
- > Nature and Ecosystems
- > Waste Minimization
- > Resilience and Sustainability Planning

Goal: Reduce by 35% the total Scope 1 & 2 GHG emissions relative to FY2010 levels by the end of FY2021.

Assessed via: annual GHG Scope 1 & 2 emissions reporting













Rationale: Western Technical College is striving to achieve carbon neutrality by 2035. Becoming carbon neutral means that our organization neutralizes the amount of greenhouse gasses we are responsible for emitting through a combination of energy efficiency, using renewable energy, and carbon offsets.

Irrefutable scientific evidence demonstrates that human-caused carbon dioxide emissions are adversely affecting human well-being, environmental health, and global and local economies. Reducing greenhouse gas emissions to levels that keep the global average temperature well below the 2°C threshold is imperative if we hope to alleviate the worst-case scenarios. From a business perspective, a key benefit of striving for carbon neutrality is reducing future risk of liability related to carbon taxes and hedging against spikes in the prices of fossil-fuel derived energy.

This goal stands in accordance with Western's Climate Commitment pledge and aligns with the Paris Climate Accord which Western has pledged adherence.

Strategies

- Immediate consideration (1 year)...
 - o refine coordination between Infosilem and Automated Logic
 - o pursue aggregate PPA by leveraging Midwest Higher Education Compact
 - o deploy energy conservation measures and updated air handling equipment in ARC remodel
 - o inspect and replace weather sealing on all exterior doors and bays
 - o replace light fixtures at Tomah regional campus with LEDs
 - o purchase certified renewable energy for Coleman LEED Gold project as a bridge
- Within three years...
 - o improve efficiency at the Health Science Center
 - o replacement of all outdoor lighting in parking lots with LEDs
 - o replace light fixtures at all remaining regional campuses with LEDs
 - o replace all bay door hinges with spring-loaded hinges
 - o increase our portfolio of renewable energy purchases through Xcel
- Future consideration (5 years and beyond...)
 - o build additional photovoltaic array on land at Sparta training center
 - o pursue partnership with city and county for development of micro-grid among Western's La Crosse campus, La Crosse City Hall, and La Crosse County buildings

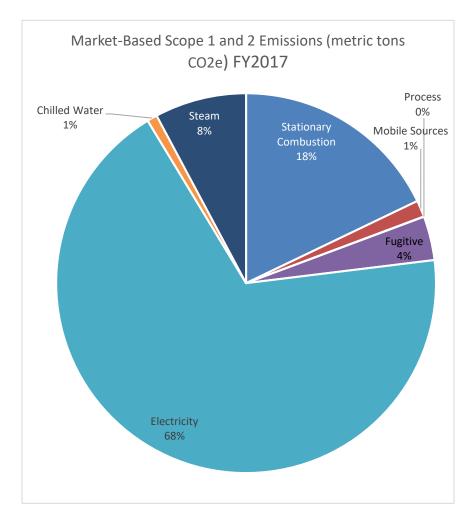
Indicators of Success

Reduced scope 1 & 2 GHG emissions

| Base year - FY2010 | Most current- FY2017 | <u>Goal – FY2021</u> |
|--------------------|--|-------------------------------|
| 7,716 mtCO₂e | 6,123 mtCO ₂ e (-21% from 2010) | 5,015 mtCO₂e (-35% from 2010) |

Sources of Scope 1 & 2 emissions for FY2010 - FY2017.

| | | | Em | issions (met | ric tons CO2 | e) | | | | |
|--|-------|-------|-------|--------------|--------------|-------|-------|-------|--------------------------------|----------------------|
| Emissions Source | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | % Change from Prior Year | %Change from 2010 |
| Direct Emissions | | _ | _ | | | | | | | |
| Stationary combustion | 1,495 | 1,435 | 1,106 | 1,328 | 1,854 | 1,902 | 1,339 | 1,095 | -18% | |
| Mobile sources | 95 | 85 | 76 | 86 | 90 | 88 | 86 | 86 | 1% | |
| Process | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0% | |
| Fugitive | 217 | 217 | 217 | 218 | 220 | 220 | 229 | 229 | 0% | |
| Subtotal | 1,809 | 1,739 | 1,401 | 1,633 | 2,165 | 2,211 | 1,655 | 1,412 | -15% | -22% |
| Location-Based Scope 2 Emiss | ions | _ | _ | _ | | | _ | | | |
| Electricity | 5,734 | 5,211 | 4,986 | 4,592 | 4,790 | 4,753 | 4,561 | 4,618 | 1% | |
| Chilled water | 74 | 86 | 92 | 70 | 66 | 51 | 50 | 53 | 5% | |
| Steam | 321 | 350 | 358 | 592 | 649 | 456 | 462 | 478 | 4% | |
| Subtotal | 6,128 | 5,648 | 5,437 | 5,253 | 5,506 | 5,260 | 5,073 | 5,149 | 2% | -16% |
| Market-Based Scope 2 Emission | ons | | | | | | | | | |
| Electricity | 5,514 | 3,923 | 3,131 | 2,894 | 4,108 | 4,257 | 4,027 | 4,181 | 4% | |
| Chilled water | 73 | 86 | 92 | 69 | 66 | 51 | 50 | 53 | 5% | |
| Steam | 321 | 350 | 358 | 592 | 649 | 456 | 462 | 478 | 4% | |
| Subtotal | 5,908 | 4,359 | 3,581 | 3,554 | 4,823 | 4,763 | 4,539 | 4,711 | 4% | -20% |
| Total Scope 1 and Location- Based Scope 2 Emissions | 7,937 | 7,386 | 6,838 | 6,887 | 7,671 | 7,471 | 6,727 | 6,561 | -2% | -17% |
| Total Scope 1 and Market- Based Scope 2 Emissions | 7,716 | 6,098 | 4,982 | 5,188 | 6,987 | 6,974 | 6,194 | 6,123 | -1% | |



Goal: Increase opportunities for students and employees to commute to and around Western in ways that reduce Scope 3 GHG emissions.

Assessed via: GHG Scope 3 emissions reporting, commuter survey, bicycle friendly university status











Rationale: Scope 3 emissions make up 69% of Western's GHG emissions, by far the largest portion of our carbon footprint. Scope 3 GHG emissions are those produced by sources not directly owned or controlled by Western. For instance, employee business travel, student and employee commuting, and solid waste disposal are activities that contribute to our scope 3 emissions.

Not unlike the rest of the nation, Western's commuters overwhelmingly travel to and from campus via single-occupancy vehicles, powered by fossil fuels. Increasing our stakeholders' opportunities to bike, walk, and take public transportation to Western will reduce GHG emissions. Moreover, when people commute using alternate forms of transportation they save money and, in the case of walking and biking, realize health benefits. Finally, encouraging a robust network of commuting options increases resilience to disruptions due to weather-related infrastructure damage and spikes in gasoline prices.

Strategies

- Immediate consideration (1 year)...
 - Convene employee/student team to study and implement strategies towards bicycle friendly university and apply for designation
 - o Launch 3rd party bike share in coordination with campus and community stakeholders
- Within three years...
 - o Develop Guaranteed Return Trip (GRT) policy for employees who participate in ride-sharing
 - o Use smart-phone technology to create ride-share network
 - Work with HR and finance and operations to develop ways of incentivizing ride-sharing
 - o Work with business department to develop carbon-offset strategy for business travel
- Future consideration (5 years and beyond...)
 - o Continue procuring low/no emissions vehicles for Western's fleet
 - Work with MTU and regional transit to identify potential public transportation routes within and outside of the City of La Crosse that would expand ridership to and from Western
 - o Explore carbon-offset opportunities that can reduce Scope 3 emissions

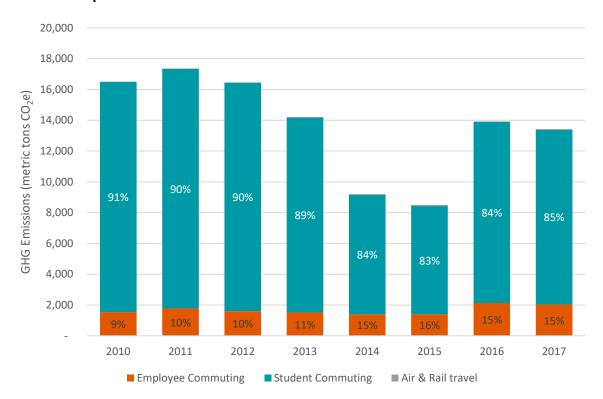
Indicators of Success

- Decreased scope 3 emissions
- Decreased rates of commuting via single occupancy vehicle
- Increased rates of commuting via carpooling, using public transit, biking, and walking
- Bicycle friendly university designation

Western Commuter Survey, fall 2017

| | ALL THE TIME | MOST OF THE TIME | SOMETIMES | RARELY | NEVER |
|-------------------------------|-----------------|------------------|-----------|------------|---------------|
| Driving by your self | 66.15% | 11.99% | 7.35% | 5.22% | 9.28% |
| | 342 | 62 | 38 | 27 | 48 |
| Carpooling (with you DRIVING) | 0.93% | 3.50% | 8.41% | 10.75% | 76.40% |
| | 4 | 15 | 36 | 46 | 327 |
| Carpooling (with you RIDING) | 2.09% | 2.55% | 8.82% | 11.83% | 74.71% |
| | 9 | 11 | 38 | 51 | 322 |
| Taking the bus | 0.93% | 2.08% | 5.56% | 4.63% | 86.81% |
| | 4 | 9 | 24 | 20 | 375 |
| Motorcycle or moped | 0.47% | 0.71% | 3.55% | 1.90% | 93.36% |
| | 2 | 3 | 15 | 8 | 394 |
| Biking | 1.62% | 1.86% | 9.98% | 6.26% | 80.28% |
| | 7 | 8 | 43 | 27 | 346 |
| Walking | 9.38% | 3.89% | 8.70% | 6.64% | 71.40% |
| | 41 | 17 | 38 | 29 | 312 |
| Other | 0.52% 2 | 0.52% 2 | 2.09% | 1.83% 7 | 95.03% 363 |

Western's Scope 3 Emissions Over Time



Nature and Ecosystems - biodiversity

Goal: Create, advocate, and support institutional policies, programs, and efforts that foster landscapes that regenerate biodiversity.

Assessed via: Amount of acreage subject to a sustainable landscape management, acreage set aside for pollinators and/or carbon sequestration.













Rationale: According to the U.N. supported Millennium Ecosystem Assessment, biodiversity is defined as "the variability among living organisms from all sources...and the ecological complexes of which they are part." The assessment notes that, "human actions are depleting Earth's natural capital, putting such strain on the environment that the ability of the planet' ecosystems to sustain future generations can no longer be taken for granted." Fortunately, with appropriate actions it is possible to reverse the degradation of many of these ecosystem services.

Regenerating ecosystems benefits our community. For instance, creating habitat for pollinators like bees and butterflies is necessary to the local food system. Using native plants that have deep root systems increases the health of our soil in addition to soaking up excess rainwater from heavy downpours, mitigating potential flooding of our streets and homes. Increasing the number and health of the trees in our communities reduces the "heat island" effect, removes CO₂ from the atmosphere, and reduces air pollution associated with respiratory health issues.

Strategies

- Immediate consideration (1 year)...
 - o Formalize Integrated Pest Management plan
 - Continue supporting Tree Campus USA activities
 - o Conduct a pollinator assessment on La Crosse campus
 - Study snow and ice removal procedures in an effort to reduce environmental impact
- Within three years...
 - Formalize Western's landscape management plan to be in accordance with a sustainable landscape management program
 - o Implement environmentally friendly snow and ice removal procedures
 - Partner with Landscape Horticulture program to develop sustainability-focused demonstration site on the NE corner of 6th and Vine Street
- Future consideration (5 years and beyond...)
 - o Replace sod with drought resistant native vegetation
 - Replace mulch beds with compost material
 - o Develop acreage at regional campuses dedicated to carbon sequestration or pollinator areas

Indicators of Success

- Increased acreage subject to sustainable landscape management program
- Increased acreage planned for carbon sequestration efforts and/or pollinator friendly landscaping

Most current – FY2018

0% acres subject to sustainable management plan

Nature and Ecosystems – water stewardship

Goal: Reduce the total gallons of water used on Western's La Crosse campus by 15% as compared to FY2017 by the end of FY2021.

Assessed via: Water utility bills (number of gallons consumed)













Rationale: Only 2.5% of the world's water is fresh, and most of that is locked away in glaciers. International policy experts at the UN and elsewhere believe that access—or lack thereof—to fresh water may be a contributing factor to armed conflict in the 21st century.

In the 7 Rivers Region we are fortunate to have access to a seemingly limitless supply of freshwater; however, prudence dictates we adopt at attitude of scarcity. Scientists looking at how climate change will effect Wisconsin suggest that, based on current emissions scenarios, our state can expect a 145% increase in widespread severe drought by 2050.

Being effective water stewards helps maintain aquifers at a level necessary for a healthy ecosystem, allows for irrigation of the crops we eat, ensures that everyone in our community has access to potable water, and saves Western money on utility bills.

Strategies

- Immediate consideration (1 year)...
 - o Install low-flow showerheads in the residence hall
 - o Check and adjust the automatic flush sensors on all bathroom toilet and urinal sensors
 - o Use utility bill data to guide investigation into areas of high water use on campus
- Within three years...
 - Review and adjust campus irrigation policies
 - o Install aerators in the residence hall sinks
 - o Explore options for further water reclamation and conservation projects on campus
- Future consideration (5 years and beyond...)
 - Replace sod with drought resistant native vegetation

Indicators of Success

- Decreased number of gallons of water used on the La Crosse campus
- Lower water bills

| Baseline year – 2009 | Most current – 2017 | <u> Goal – end FY2021</u> | |
|-----------------------|------------------------|---------------------------|--|
| 15.23 million gallons | 10.935 million gallons | 9.294 million gallons | |

Waste Minimization

Goal: At La Crosse campus, reduce the annual amount of waste sent to the landfill by 10% (22.8 tons) and the total amount of waste generated by 10% (34.5 tons) compared to 2017 measurements by June 30, 2021.

Assessed via: Pounds of waste reported through waste hauling provider(s), Union Market/catering staff













Rationale: The U.S. has 5% of the world's population, yet creates 30% of the world's waste. Our addiction to stuff and our careless attitude about disposing it is unsustainable. Not only does the production of this stuff consume resources (sometimes obtained via unjust labor practices), but it pollutes our environment for hundreds (or thousands) of years after the end of its useful life. Western pays for each dumpster that gets "tipped" by our waste haulers (and it costs more to tip trash than recycling). Being more mindful of what and how much we throw out is prudent for our health, the health of our environment, and the health of Western's finances.

Strategies

- Immediate consideration (1 year)...
 - o Launch recycling education campaign for Union Market diners
 - o Procure a food dehydrator for pre-consumer food waste in Union Market and Lunda Center
 - Conduct waste audit to identify problem areas
 - Encourage proper recycling and waste disposal at residence hall through more direct education and possible incentives program
 - o Introduce junk-mail audits to departments college-wide
- Within three years...
 - Create a campus-wide office supply swap/reuse program
 - Explore feasibility of post-consumer food waste collection
 - Develop purchasing policies directed at minimizing waste in coordination with Business Office
 - Work with facilities and business office to develop more stringent waste disposal policies for contracted construction companies
 - Require contracted waste hauling company to provide Western with data on weight of waste and recycled materials collected as a condition of the contract
- Future consideration (5 years and beyond...)
 - Explore specific policies that can lead to waste minimization (i.e. banning plastic bags/bottles)

Indicators of Success

- decrease in number of waste dumpsters "tipped" each week
- positive results from waste audits to determine recycling compliance
- amount of pre-consumer food waste dehydrated

 FY2017
 Goal – FY2021

 228.14 tons to landfill
 205.3 tons to landfill

344.98 tons of total waste generated 310.48 tons of total waste generated

Sustainability and Resilience Planning

Goal: By 2021, Western will establish and manage a permanent, revolving "green" fund in order to spur innovative, cost-effective employee and student sustainability projects that help Western advance its sustainability goals.

Assessed via: Existence of revolving green fund and process for managing it.













Rationale: The concept of a green revolving loan fund (RLF) is simple. The college creates a fund with sufficient capital to fund sustainability projects that would create financial savings for the college. Students, staff, and faculty can submit proposals to an RFL administrative body for review. Projects funded by the RLF must be projected to generate savings equivalent to the capital needed to implement the project within 3-7 years via reduced energy use, avoided procurement or disposal costs, etc. The savings accrued by the project are paid back to the fund and are then used to fund future projects and support college operations.

Currently, Western does not have a green revolving loan fund; however, creating one could harness the creativity inherent in the Western community and allow for those not typically involved in day-to-day sustainability planning to create, pitch, and implement sustainability projects. Ideally, this fund would include strong student participation and leadership into the management of the program in order to increase student ownership of the college's sustainability strategies.

Strategies

- Immediate consideration (1 year)...
 - Work with VP Finance, SLT, Grants, Student Government, and Western Foundation to seed initial fund with a goal of \$50,000
 - o Establish green RLF administrative team and procedures for accessing the fund
- Within three years...
 - Open green RLF for initial proposals
 - o Review and revise RLF process as needed
 - Investigate other options to grow RLF account
- Future consideration (5 years and beyond...)

Indicators of Success

• Dollars invested in revolving green loan fund

| Most current - FY2018 | <u>Goal - FY2021</u> |
|-----------------------|--|
| \$0.00 in green RLF | \$50,000 in green RLF (including balance and in circulation) |

Sustainability and Resilience Planning (Cont.)

Goal: Western will incorporate a resilience plan into college-wide strategic that aligns with city and county efforts by the end of FY2021.

Assessed via: Existence of resilience plan, amount of cooperation with city and county on resilience















Rationale: Sustainability and resilience are complementary concepts. Resilience refers to the capacity of individuals, communities and systems to survive, adapt, and grow in the face of natural and manmade shocks due to changes in the climate, economy, and society. While resilience is in part about emergency response, it is also about adjusting to the new normal of frequent disruption. Institutions with foresight are reconsidering the status quo and reinventing how they plan and operate due to current and imminent challenges due to climate change, energy uncertainty, and economic shifts.

Resilience at Western represents a vision of hope and reinvention. Resilience is not about bouncing back from disaster; rather, it is about leaping forward creatively and intentionally so that *all* have the opportunity to thrive. Moreover, developing a college resilience plan is in accordance with Western's signed Climate Commitment.

Strategies

- Immediate consideration (1 year)...
 - o Conduct baseline college resilience assessment
 - Engage with City and County of La Crosse governments for initial resilience planning
 - Continue leveraging Sustainability Institute programming to engage community in resilience discussions
- Within three years...
 - o Develop ongoing resilience strategies aligned with sustainability plan
 - o Align local government initiatives with college strategic plan
 - Conduct second college resilience assessment for college
- Future consideration (5 years and beyond...)
 - Explore development of resilience district with City and County of La Crosse in downtown La Crosse

Indicators of Success

- Completion of college resilience assessment, increase in assessment scores from baseline
- Ongoing and regular (biannual) communication with local government on resilience coordination

Culture and Curriculum

As a higher education institution that emphasizes practical, hands-on education, Western Technical College educates the nurses, architects, HVACR technicians, solar installers, emergency response personnel, electromechanical technicians, landscape designers, and others who make up front-line resilience workers.

- > Sustainability and Resilience in the Curriculum
- ➤ Workforce Development
- > Campus Engagement

Sustainability and Resilience in the Curriculum

Goal: Increase from 2.2% to 20% the number of documented sustainability-focused or sustainability-related courses Western offers by the end of FY2021.

Assessed via: Proportion of total courses that are sustainability-focused or sustainability-related









Rationale: The impacts of climate and inevitable transition to renewable energy, along with continued globalization, will force a new set of skills across the economy of the 7 Rivers Region, will create new jobs, and will make others obsolete. Every one of the occupations for which Western already educates will be impacted by environmental and related economic challenges soon, if not already..

In the latter half of FY2018, Western rolled out a new iteration of college-wide core abilities, called "SuccessAbilities." The cross-college work committee that developed the SuccessAbilities recognized the importance of sustainability and resilience to the professional and personal lives of every Western student if they are to be fully informed and competent employees and citizens. Therefore, the committee included a competency involving sustainability and another invovling resilience.

Strategies

- Immediate consideration (1 year)...
 - o Establish Sustainability in the Curriculum Consortium with local IHEs in order to support multiday, cross-institutional sustainability in the curriculum workshop
 - o Deliver sustainability curriculum professional development for faculty at least twice per year
 - o Create Western faculty learning team on sustainability in curriculum
 - Seek faculty and programs that have students engage in projects that could further sustainability on campus and beyond
- Within three years...
 - o Expand scope and membership of Sustainability Curriculum Consortium
 - o Work with academics and registrar to create "S" designation in course catalog
 - Continue year one strategies
- Future consideration (5 years and beyond...)

Indicators of Success

- Growing number of faculty at sustainability PD events
- Increase each term in the number of courses that are sustainability focused or related

 Baseline year: academic 2016-2017
 Goal - academic year 2020-2021

 19/847 courses
 approx. 170/847 courses

 (2017 STARS report)
 40.00

Sustainability and Resilience in the Curriculum

Possible frameworks and designations for sustainability curricula:

Figure 2.0: Student Learning Objectives in Sustainability

| After successful course completion, student has t | he ability to | • |
|---|---------------|---|
|---|---------------|---|

Demonstrate technical skills that are necessary to pursue a career in a sustainability

Discuss concepts and applications of sustainability

Demonstrate understanding of environmental issues that have resulted from mismanaged practices in the past and the opportunities to address those issues with sustainable techniques

Develop and implement an ethical perspective of our interconnected world

Identify connections between sustainability and their chosen field of study

Identify how sustainability can inform decision-making to create solutions for current and emerging social-economic-environmental issues

Analyze real-world challenges to environmental systems from a holistic perspective and formulate practical sustainable solutions

Figure 2.1: Course Definitions

If a course meets at least <u>one</u> of the Student Learning Objectives above it can be identified as a Sustainability-Related course. If <u>five or more</u> of the learning objectives are accomplished in a course, it can be identified as a Sustainability-Focused course.

| Sustainability-Focused courses: | Concentrate on the concept of sustainability, including its social, economic, and environmental dimensions, or examine an issue or topic using sustainability as a lens. |
|---------------------------------|--|
| Sustainability-Related courses: | Incorporate sustainability as a distinct course component or module, or concentrate on a single sustainability principle or issue. |

Core Concepts of Sustainability* (to use as a point of discussion)

*created at the University of Hawai'i

- <u>Sustainable Economics</u>: Quadruple Bottom Line, alternatives to GDP, circular economy
- Ecosystem Services: biodiversity, conservation, ecological restoration, invasive species
- <u>Ecological Footprint</u>: carbon footprint
- Sustainable Materials Management: cradle to cradle, zero waste, life cycle assessment
- Climate Change: mitigation, adaptation, resilience, local/regional impacts
- <u>Local First</u>: sustainable food systems, food sovereignty, food security, food miles, local value chain
- <u>Equity</u>: indigenous wisdom, indigenous rights, traditional ecological knowledge (TEK), environmental justice, social justice

Workforce Development

Goal: Establish one additional sustainability certificate and/or other credential that increase students' opportunities to participate in the green-collar economy by FY2021.

Assessed via: Number of sustainability certificates and pathways recognized by Western and/or WTCS











Rationale: The impacts of climate and inevitable transition to renewable energy, along with continued globalization, will force a new set of skills across the economy of the 7 Rivers Region, will create new jobs, and will make others obsolete. Every one of the occupations for which Western already educates will be impacted by environmental and related economic challenges soon, if not already.

Western will play an important role in training our frontline resilience workers. These are the workers we will rely on to not only rebuild infrastructure, but to reinvent how our region operates through greener transportation, greener housing, greener landscaping, better water and waste management, and more efficient and effective systems for delivering healthcare, food production, and emergency response.

Strategies

- Immediate consideration (1 year)...
 - o Investigate creation of internal sustainability certificates or pathway in food production, sustainable energy systems, sustainable design, or other areas
 - o Begin process of creating a WTCS recognized sustainability certificate
- Within three years...
 - Have a sustainability credential on Western transcripts recognizing successful completion of sustainability related or focused courses
 - o Establish at least one WTCS recognized sustainability certificate
 - Streamline process for creating more sustainability-related certificates
- Future consideration (5 years and beyond...)
 - o Create programs that align with front-line resilience jobs

Indicators of Success:

Policy movement forward on green pathways/certificates

Baseline year - Academic year 2017-2018

1 pathway – Solar Installation Technician

Campus Engagement

Goal: Increase the number of opportunities for students and employees to explore and engage in sustainability and resilience in their professional and personal lives.

Assessed via: STARS points earned in Campus Engagement category; campus sustainability culture survey









Rationale: Learning is not isolated to classroom settings, nor must it occur only within our defined job descriptions. For our community to develop into one that is sustainable and resilient, all stakeholders must regularly engage with difficult questions and hard truths about our policies, assumptions, actions, as they currently exist. The end goal of this engagement is to foster sustainable thinking and action. Moreover, expanding the dialogue to include all voices—particularly those voices who are systematically marginalized—serves to build social capital, an essential ingredient for resilience.

Strategies

- Immediate consideration (1 year)...
 - Implement at least one campus-wide sustainability awareness building event each month of the traditional academic year
 - o Debug and distribute building energy dashboard displays in ITC and other strategic locations
 - o Work with HR to create a brief sustainability module for new employee orientation
 - Reconfigure "Campus Energy Leaders" group to include more aspects of sustainability and include more formal communication and training
 - o Train RAs to be sustainability stewards for the Residence Hall and campus
 - o Engage with multicultural center to align events with social justice and equity
 - o Conduct a College-wide survey on sustainability culture
- Within three years...
 - o Create and recruit for a student government sanctioned sustainability club
 - Develop a more robust menu of events and activities during April to commemorate Earth Day and Arbor Day
 - o Find a permanent, centrally located office able to host students, faculty, and house all sustainability department staff
 - Using graphic design infographics project as a model, work with students to create and place across campus engaging signage about Western's sustainability efforts
 - o Grow sustainability department so that we have the capacity to take on more work
- Future consideration (5 years and beyond...)

Indicators of Success:

- At least one campus-wide sustainability event per academic-year month
- Increase in headcounts participating in or attending sustainability events
- Increase in the number of student clubs participating in sustainability events
- Creation of a student sustainability club

| Baseline year: 2017 | Goal: STARS submission – Aug. 2020 |
|----------------------|------------------------------------|
| 9.26/20 STARS points | 17/21 STARS points |

Community and Communications

Western Technical College, by virtue the respectful relationships it has developed among local business, governments, and the community, has a unique power to convene a variety of often disparate actors to the table in order to drive regional sustainability and resilience work forward.

- > Telling Our Story
- > Engaging the Community

Telling Our Story

Goal: Raise the visibility of Western's sustainability commitment and actions internally, locally, and nationally.

Assessed via: Campus sustainability culture survey; press coverage; conferences presentations









Rationale: Pragmatically, marketing research suggests that those in the millennial generation in particular seek to associate with organizations that make a social or environmental difference in the world. Telling our story has the added benefit of bringing positive attention to Western, potentially increasing enrollment, and helping Western attract and retain employees.

From the standpoint of motivation, we frame too much of the story about the environment as a narrative of decline. Stories of hope, not fear, also motivate people to act. Sharing our sustainability story widely sheds light on opportunities for those in the Western community and beyond to get involved with, and be inspired by, sustainability and resilience work.

Strategies

- Immediate consideration (1 year)...
 - o Create and distribute Sustainability newsletter to faculty and staff once per term
 - o Share new sustainability plan with faculty, staff, and public
 - Develop and implement a plan to maintain an active presence on Western sustainability social media sites
 - o Update westerntc.edu/sustainability as needed
 - o Include GHG emissions report on sustainability website for public consumption
 - Create an updated brochure about sustainability at Western for distribution at on and offcampus events
 - Submit proposals for AASHE and other relevant national and regional conferences
 - Continue working with marketing to engage local media outlets in our story
- Within three years...
 - o Explore creating a digital media presence (podcast, YouTube series) for Western sustainability
 - o Continue creating and updating marketing and online materials from year 1 as needed
 - Develop a "green" layer to campus interactive map
- Future consideration (5 years and beyond...)

Indicators of Success:

- Increasing number of facebook followers/likes
- Media attention for sustainability events and announcements
- Number of Western sustainability handouts distributed
- Westerntc.edu/sustainability analytics?
- Accepted proposals for conferences

Engaging the Community beyond Western

Goal: Western will serve as a catalyst for local action in resilience and sustainability education as demonstrated by earning a minimum of 80% of available STARS points in public engagement.

Assessed via: STARS points earned in Public Engagement category















Rationale: Western Techincal College serves as a vital anchor organization in La Crosse and the 7 Rivers Region, and has for over 100 years. Engaging our community to make it a better place is central to what we do at Western. Indeed, "[growing] our communities" is part of the mission of the college.

At it's core, Western's mission is about providing opportunity. Communities become more resilient by increasing opportunities that lead to higher levels of income, health, education, social capital, and equity. Western plays—and will continue to play—a role in this by creating continuing education opportunities, becoming more involved with regional resilience planning, enusring our trademark licensed products are responsibily sourced, and developing/maintaning strong partnerships with sustainability-minded organizations in the region.

Strategies

- Immediate consideration (1 year)...
 - Continue support for Sustainability Institute initiatives
 - Engage with City and County of La Crosse governments for initial resilience planning
 - Continue collaboration with the Coulee Region Sustainability in Education Project (CRSEP) alongside UW-L and Winona State University
 - Continue collaboration with Community Engagement department to encourage community service and service learning opportunities
 - Work with Get Growing to increase the amount of food grown in planting containers
- Within three years...
 - o Work with BIS and Academics to build sustainability-related continuing education workshops
 - o Align local government initiatives with college strategic plan
 - o Coordinate with Get Growing representatives to help the partnership thrive
 - o Work with college to enroll in Fair Labor Association or Workers' Rights Consortium
 - o Explore partnership with City of La Crosse on Goosetown neighborhood redevelopment
- Future consideration (5 years and beyond...)
 - Explore development of resilience district with City and County of La Crosse in downtown La Crosse

Indicators of Success:

- Membership in Fair Labor Association or Workers' Rights Consortium
- Existence of sustainability focused continuing education programming
- Stable or thriving collaborations with existing partnerships
- Increased number of faculty, staff and students involved in community engagement work
- Regular communication with local government on resilience coordination

Baseline: 2017Goal: STARS submission – Aug. 202012.26/20 STARS points16/20 STARS points