

City of Eau Claire Sustainability Advisory Committee (SAC) 2022 Work Plan DRAFT



Theme: Low-Carbon Development

What	Anticipated Outcome, Product or Result	Idea Source	Specific Actions	Target Dates	Identified Partners	Point Person
Integrate REAP goals into Low-Carbon Development & Review	Develop awareness and mitigation of new carbon contributions by development	Renewable Energy Action Plan (REAP) Plan, Strategic Plan #2, COWs' Infill/density Study	Use piloted carbon/energy calculators, net zero energy guide, biodiversity design, etc. in an integrated low-carbon/clean energy policy/ordinance strategy. Provide recommendations on City-funded projects. Seek grant.	2022	Plan Commission, Staff/Green Team, home builders, consultant, DNR, NGOs, others	Ned Noel
Naturally Occurring Affordable Housing Energy Efficiency / Renewable Program	Improve living conditions and reduce carbon by lowering cost on energy efficiencies & renewables at affordable housing	Sustainability Chp. 15-6 #7 Incentives, 15-20 #3, and various REAP pathways/policies recommendations	Phase 1: Stakeholder interviews, design program, secure City funding/other Fed./State funds/grant for program incentives. Phase 2: implement program	Phase 1 2022, Phase 2 late 2022 or 2023	Elevate, Xcel, Focus on Energy, Western Dairyland, NGO funders, neighborhoods, contractors, others	Ned Noel
Construct Net Zero Energy Buildings & Subdivision	Increase buildings and subdivisions that seek to achieve net zero energy and low carbon output	Net Zero Energy Guide & REAP plan goals of 30 homes and 10 commercial bldgs. Strategic Plan #2	Master planning process for Gateway/N.W. section and other place-based opportunities. Seek partnerships, pilots and grants to assist on costs, etc.	2022-2024	Xcel Energy, EC Energy Cooperative, builders, developers, trades, DOE Connected Communities team, consultants, etc.	Ned Noel
Implement Electric Vehicle (EV) Roadmap	Increase registered EVs, partnerships on EV implementation, promotions and charging solutions	EV Roadmap, REAP, Strategic Plan #2	Consider an EV parking ordinance, install EV stations, hold events, spread awareness and on-line resources. Provide education on permitting process, leverage TIF/City funding to add/require EV charging.	2022-2023	Xcel, EC Energy Cooperative, ZEF, DOE, WI Clean Cities, auto dealers, fleet, residential, workplace and hotel, retail charging opportunities	Ned Noel, Billie Hufford

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Cities with Nature	Improve/protect biodiversity ecosystem services and coverage by developing policies, natural asset indexing tool and related education and policies.	Renewable Energy Action Plan, Waterways Plan, Strategic Plan #2	Assemble partners, seek funding, determine assets to protect/enhance like water, native vegetation, tree canopy (preservation) and bird habitat. Consider policy and ordinance changes. Consider a natural asset map/plan.	2022-2024	ICLEI's Cities with Nature , Parks Dept., County, Land Conservation, Beaver Creek, Gaylord Nelson Audubon Society NW chapter, Sierra Club chapter, DNR, UWEC geography and biology depts, grant funders	Ned Noel
Native Landscaping & Trail Plantings	Increase native plantings in the city and along trails	Sustainability Chp. 15-10 #6 and REAP policy	Add more plantings on appropriate lands. Eliminate permit for alternative lawns. Investigate alternative weed control methods.	2022	Parks/Forestry, DNR, JONAH to help edu., Master Gardeners, others	Ned Noel, Parks
Organic Waste Stream Diversion	Increase organic and composting recovery rates	Sustainability Chp. pg. 15-10 #5,6. and pg. 15-32 #5.18 & REAP plan 50% organics diversion	Work with residents, businesses, and haulers to educate, research, transition, and divert more organics from landfill.	2022-2023	Health Department, County, haulers, DNR, SC Johnson, JONAH Environmental Task Force, others	Ned Noel
REAP Community Outreach	Increase education, skill training, public knowledge, public participation, public access to information, and cooperation and collaboration for action	Renewable Energy Action Plan's (REAP) six sectors and City's Strategic Plan (SP) #2, 4-7.	Develop REAP outreach video series, resources, partnerships. Tie in relevant item in this work plan.	Ongoing	Beaver Creek Reserve, DECI, Focus on Energy, Xcel Energy, EC-Coop, UWEC, Schools, intern, neighborhoods, Farm Tech Days, others	Ned Noel
Support Energy Future Collaborative with Xcel Energy	Implement City+Xcel's mutual work plan that achieves shared objectives of REAP	REAP & Energy Future Collaborative MOU and 2021-2023 City and Xcel Energy work plan	REAP videos, education, data sharing, electric vehicles/chargers, joint solar project, biodiversity, etc.	2022-2023	City & Xcel Energy	Ned Noel
Joint Solar Project	Increase renewable energy and decrease costs by participating in a solar community array for larger institutions and customers	REAP, Xcel collaborative, Strategic Plan #2	Consider supporting Xcel on renewable rider, work with local partners, determine if City should participate and secure funding	2022-2023	Xcel, City, County, UWEC, Sch Dist., Altoona, CVTC, etc.	Ned Noel

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Advocate for Climate and Clean Energy at Local, State & Federal Levels	Assist groups to advance similar goals the City has. Assist the State on its Clean Energy Plan and policy rollouts	REAP, invitations from UWEC, School District, State Office of Clean Energy and Sustainability	Attend stakeholder advisory meetings and provide comments, ideas or recommendations as needed	Ongoing	State, League of WI Municipalities, Xcel, WI Local Government Climate Coalition, EC School Dist., UWEC	Ned Noel
Sustainability Annual Awards	Recognize their accomplishments and stir others to action	Sustainability Chp. & REAP	Issue application, determine winners, hold celebration	Ongoing	VIPs, Media, award winners	Ned Noel
Energy & Emission Inventories	Track progress on city & municipal 2030-2050 goals	REAP and 100% renewable energy and carbon neutral goals	Obtain source data, use ICLEI ClearPath, adjust modeling, and consider re-evaluating goals based on IPCC's 6 th Assessment and science-based targeting	Ongoing	ICLEI, Xcel, Utility, waste, transportation, building sectors, etc.	Ned Noel
Annual Reporting	Communicate success publicly	Green Tier Legacy Community & Covenant of Mayors for Climate & Energy	DNR and Carbon Disclosure Project (CDP) reports	Ongoing	City Depts., utilities, fuel companies, waste haulers, intern, etc.	Ned Noel

CRITICAL PATHWAY BACKGROUND TO REDUCE CARBON 30% BY 2030 (30x30)

How Will This Be Done?

Critical Action Pathways to 2030		Total Savings in 2030
Residential	<ul style="list-style-type: none"> • 2% electricity energy efficiency goal per year • 1.4% natural gas efficiency goal per year • 200 households to 100% renewable electricity per year • 20 new renewable thermal heating systems per year 	<ul style="list-style-type: none"> • 46,000,000 kWh • 1,800,000 Therms • 17,000,000 kWh • 50,000 Therms
Commercial & Industrial	<ul style="list-style-type: none"> • 3% electricity energy efficiency goal per year • 1.5% natural gas goal per year • 15 new renewable electric customers per year • 5 new renewable thermal heating systems per year 	<ul style="list-style-type: none"> • 170,000,000 kWh • 3,800,000 Therms • 24,000,000 kWh • 200,000 Therms
Transport	<ul style="list-style-type: none"> • 2 person occupancy vehicle increase from 1.63 Midwest average • 8,000 registered electric vehicles (EV) by 2030 or 10% of vehicle miles traveled by EVs 	<ul style="list-style-type: none"> • 143,000,000 Vehicle Miles Traveled • 30,000 Metric Tons CO₂
Grid Decarbonization	<ul style="list-style-type: none"> • Grid electricity will become 75% more carbon free in 2030 compared to 2019, according to Xcel Energy's current Upper Midwest resource plan 	<ul style="list-style-type: none"> • 220,000 Metric Tons CO₂

RESIDENTIAL

Energy Efficiency

Critical Pathway

2030 Targets: 2% electricity savings (4.55 million kWh/year) and 1.4% natural gas savings annually (176,000 therms/year).

Baseline Activity in 2018: 1.5% electricity savings and 0.9% natural gas savings annually.

Renewable Energy

Critical Pathway

2030 Target: Convert 200 residential households per year to all renewable electricity (1.7 million kWh/year), and 20 households per year to renewable thermal, including geothermal HVAC and solar thermal (5,000 therms/year).

Baseline Activity in 2018: There were 1,301 total renewable subscribers in 2018 (from Windsorce® and community solar gardens) and 12 new renewable sign-ups in 2018 through Focus on Energy.

COMMERCIAL & INDUSTRIAL

Energy Efficiency

Critical Pathway

2030 Target: Achieve 3% (17.1 million kWh/year) energy savings per year in electricity and 1.5% savings per year in natural gas (380,000 therms/year).

Baseline Activity in 2018: Annual savings of 2.3% for electricity, and 1% for natural gas.

Renewable Energy

Critical Pathway

Proposed 2030 Targets: 15 new renewable electric customers per year by 2030 (2.4 million kWh/year); 5 new renewable thermal customers per year (20,000 therms/year).

Baseline Activity in 2018: There were 14 total renewable subscribers in Eau Claire in 2018 (Windsorce® + community solar gardens), and two new renewable sign-ups in 2018 through Focus on Energy.

TRANSPORTATION

Critical Pathway

2030 Targets: Electric vehicles increase to 10% of VMT (8,000 EV's by 2030) and an increase in vehicle occupancy from the Midwest average of 1.63 persons per vehicle to 2 (14.3 million VMT/year) (39,213 VMT/day) (Reduce 3,900 trips a day).

Baseline Activity in 2018: Total community VMT totaled 728,824,567 with about 92% of those miles coming from gasoline-fueled vehicles.

BIODIVERSITY

Ecosystem Services

Critical Pathway

2030 Target: Protect and enhance the urban forest by increasing tree carbon sequestration by 10% or 1% per year (636 MTCO₂e) over the 2013 baseline.

Baseline Activity in 2018: The tree canopy within the city limits covers 24% of land (2013) and sequesters 12,725 MTCO₂e or 1.4% of total emissions.¹⁴

WASTE

Critical Pathway

Proposed 2030 Targets: Divert 50% organic and 50% of construction and demolition waste streams.

Baseline Activity in 2018: Baseline from 2009 DNR state waste characterization study: Organics (23%) and Construction & Demolition (21%).