Click here to return to TOC

Section 09
Climate Economy

Climate Economy

Why Climate Economy Is Important

Climate change and the economy are inexorably linked. Left unabated, the impacts of man-made climate change through the end of this century will cost the United States billions of dollars. According to a 2019 study by two EPA scientists, the difference in economic impact between the mid-range climate model and the high range climate model may account for as much as $224 billion in economic impact annually by 2090. According to a 2019 World Bank report on trends in carbon pricing, a carbon price range of $40-$80 per ton is necessary by 2020 to reach the goals set by the 2015 Paris Agreement, while other studies have placed the full cost of carbon at $200-$400 per ton.

Climate Action and Economic Development

Rather than weakening the economy, climate action can support economic development. Transitioning away from fossil fuel use, improvements to public transit systems, and growth of local food industries are all, in part, a transition to local energy and labor sources. These transitions represent opportunities for communities to reduce the community wealth that is being exported and increase the percentage of community wealth that remains in the community in the form of local jobs. Additionally, many of the jobs potentials in Climate Action redirect funds away from less labor intensive (but more material resource intensive) sectors of the economy to support greater overall employment combined with less resource utilization. In general, economic opportunities include:

Energy Efficiency Jobs

Public Transit Jobs

Renewable Energy Jobs

Economic Savings

Climate Change Considerations

Climate Hazards

In many sectors, climate change will impact water and energy consumption and costs. Extreme weather and increasing variability in temperatures and precipitation may stress transportation systems and fleets. Increasing extreme weather hazards may threaten supply material and product supply chains.

Opportunities

Climate mitigation strategies like transformation of Albert Lea's energy system, improvements to the energy efficiency of the City's building stock, enhancement of transportation alternatives, and the implementation of goals like tree canopy increases and reduction to impervious surfaces represent opportunities for the development of new businesses and job creation.

Climate Economy

Equity Considerations

- Low income individuals in our communities are especially prone to the impacts of climate change and bear a greatly disproportionate share of the costs—including vulnerability to job instability that can be brought about by extreme weather events and other climate change impacts.
- Income inequality is rising in the US, with September 2019 levels being the highest in 50 years—and the impacts of the COVID-19 pandemic have only increased these inequities. High inequality leads to lower life spans, increased instances of mental health issues, and increased obesity rates among other social impacts. Because the impacts and the costs of climate change are disproportionately felt by vulnerable populations and low-income individuals, climate change impacts will exacerbate income inequality in our communities.

Strategies Supporting Sector Goals

As indicated in the introduction, the Climate Action Plan is intended to be a 9 year plan to be updated at the completion of that time. Consequently, the goals and strategies outlined in this section are intended to be achieved by 2030 (or earlier) unless otherwise noted.

Implementation of actions are anticipated to be initiated over 3 phases: phase 1 within 1-2 years, phase 2 within 2-7 years, and phase 3 within 4-8 years of CAP approval.

1. **Strategy CE-1:** Capture local economic potential of climate action.
2. **Strategy CE-2:** Increase workforce development for the climate economy.
3. **Strategy CE-3**: Build marketplace climate resilience.
4. **Strategy CE-4:** Establish sustainable financing for the City's climate action implementation.

1 Strategy CE 1:
Capture local economic potential of climate action

	Actions	Implementation Phase
CE-1-1	Conduct a Climate Economy Economic Development Assessment to identify economic development potential of climate adaptation, climate mitigation, and energy action planning.	1
CE-1-2	Establish a Clean Energy business incubator to support the establishment of innovative energy efficiency and renewable energy business models within the community.	1
CE-1-3	Leverage Community Development Block Grants from the Department of Housing and Urban Development, or HUD, to invest in resilient and equitable communities	2
CE-1-4	Focus the City's business development efforts on businesses that have lower impacts on natural resources, that are non-polluting, offer or support environmentally sustainable goods or services, and/or actively promote telecommuting, alternative work schedules, and alternative transportation modes.	2
CE-1-5	With community stakeholders and partners, conduct a study and host a community conversation to identify threats to current industries, opportunities for new businesses and industries, and areas that need support.	3

2 Strategy CE 2:
Increase workforce development for the climate economy.

	Actions	Implementation Phase
CE-2-1	Develop job training programs focused on building resiliency, solar construction, weatherization, etc. Potential example program: Colorado solar training program.	1
CE-2-2	Work with local union hall and Riverland College to ensure that apprenticeship program includes solar and energy efficiency training.	1
CE-2-3	Explore the development of a job training and entrepreneurial development program similar to Operation Fresh Start. Program to focus on developing green jobs skills within vulnerable and underserved populations in local sustainable agriculture, energy efficiency audits and upgrades, renewable energy, and other skills that support the goals of the CAP. (http://www.operationfreshstart.org/)	2
CE-2-4	Promote alternatives to traditional building demolition such as relocation, deconstruction and salvage. Establish a jobs training program focused on building workforce with deconstruction skills and capacities. Job training program should focus on establishing job skills and placement for low income individuals. See Better Futures Program (https://betterfuturesminnesota.com/services/building-deconstruction/)	2
CE-2-5	Create an intern program similar to the Minnesota GreenCorps internship. Task interns with finding resiliency solutions and cost savings. Intern development should focus on increasing community equity (https://www.pca.state.mn.us/waste/minnesota-greencorps)	2

3 Strategy CE 3:
Build marketplace climate resilience.

	Actions	Implementation Phase
CE-3-1	Conduct a planning effort focused on identifying economic vulnerabilities and opportunities, especially those affecting the city's vulnerable populations. Identify economic resilience strategies and strengthen public-private economic communications, especially with targeted group businesses (minority-owned, veteran owned, economically disadvantaged, etc.). Planning effort could be implemented in conjunction with Climate Economy Economic Development Assessment. Possible example process: https://www.eda.gov/ceds/	1
CE-3-2	Make sure key business infrastructure is recognized in the City and County's general hazard mitigation plan and emergency response plan	1
CE-3-3	Create an online assessment of business' vulnerability/resiliency, including the following topics and content: Potential Climate Impacts and Risks— Climate Resiliency—Energy: efficiency and renewables—Emergency Response—Zero Waste improvements—Potential Incentives or Tax breaks available.	2

Strategy CE 4:
Establish sustainable financing for the City's climate action implementation.

	Actions	Implementation Phase
CE-4-1	Establish a policy that savings generated by energy efficiency measures and renewable energy installations/agreements for City facilities and operations shall be used as a fund to support future energy efficiency and renewable energy projects in support of the CAP goals.	1
CE-4-2	Explore opportunities to utilize Tax increment Financing (TIF) to incentivize Mitigation and Adaptation actions. Options include the establishment of a Renewable Energy TIF district incentivizing on-site renewable energy utilization or a Net Zero TIF funding mechanism incentivizing high energy efficiency and Net Zero buildings.	1
CE-4-3	Explore the "green marketplace" utilization potential of the city's urban forest with all revenue being invested in Climate Action Plan strategies. Strategies may include sale of downed and select removed trees through marketplaces such as the Urban Wood Network (http://urbanwoodnetwork.org/members), as well as exploring lease of benefits of select city owned tree stock such as "sugaring" rights of maple trees. Utilization should be prioritized to maintain quality of the city's urban forest and quality of life benefits.	1
CE-4-4	Establish a policy that designates City Electric and Natural Gas Franchise Fee Income as funding source for Climate Initiatives. https://ilsr.org/energy/utility-franchise-fees/	2
CE-4-5	Explore Issuing "resilience bonds" that generate risk-reduction rebates from a city's catastrophe insurance premiums to pay for resilience projects, prioritizing projects with high resilience, GHG mitigation, and climate adaptation potential.	2
CE-4-6	Explore the potential of developing a "Carbon Impact Fee" similar to the City of Watsonville CA. Additional funds raised to be used for Climate Mitigation and Adaptation implementation. Increased revenue to be used to fund Climate Mitigation and Adaptation implementation with a focus on the actions and strategies which increase the community's equity. https://www.cityofwatsonville.org/DocumentCenter/View/198/Frequently-Asked-Questions-About-the-Carbon-Fund-Ordinance-PDF https://www.cityofwatsonville.org/DocumentCenter/View/3944/Carbon-Fund-Voluntary-Compliance-Worksheet?bidId=	2