

NEMSN Profile: Burlington, VT

Community Profile¹

<i>Area (sq. Miles):</i>	10.3
<i>Population:</i>	42,570
<i>Population Density:</i>	4,130.40
<i>Households:</i>	16,153
<i>Median Age:</i>	26.8
<i>Median Household Income:</i>	\$44,671
<i>Poverty Rate:</i>	24.80%

City Department:

Title: Burlington Electric Department

Staff: Jennifer Green: Sustainability Coordinator, Community and Economic Development.

Responsibilities: Provide guidance to department leaders, the Mayor and City Council in implementing policies and initiatives included in the Climate Action Plan or any other plans ensuring the coordination and continuity between the goals of the Climate Action Plan and other municipal plans. Continue working to achieve goal of transitioning to Net Zero Energy.

Programs/Policies: Legacy Action Plan, the Climate Action Plan, Net Zero Energy and other related initiatives.

Frameworks: Compact of Mayors, STAR Communities

Interview:

What have been your biggest successes in the past 2-3 years?

Getting closer to implementing district heating. Town has made multiple proposals and is selecting an engineering firm that is analyzing the models using Biomass plant.

Top proposal: is a downtown development with high-rise including hospitals, schools and mall. (Now or Never) because there is a new mall about to go under construction. The Mayor has said we are either committing to the project for the near future or not doing it at all.

Move to 100% renewable energy sources (wind, solar thermal, etc.).

Given the range of your priorities, which do you consider to be your top priorities?

Transition to more energy efficient buildings. Because the majority of the buildings use gas (difficult to implement thermal, gas is cheap). Right now B.E. is working with VT Gas Company to develop new methods of implementing building efficiency that is economical.

Transportation is a top priority for decreasing GHG emissions. It is difficult to transition to alternative methods of transportation (gas is cheap, little infrastructure to support

technology such as electric vehicles).

Housing, increase available housing within the city to decrease need for commutes.

Challenges, low vacancy need to increase options while providing equal opportunity to low-income families.

Please explain why you have chosen these priorities?

The strategies are chosen/synched with mayor to be the most obtainable and effective for reaching targets and goals.

How important are the metrics to projecting the progress of programs and policies?

The metrics were developed in a way that are understandable and can clearly mark progression towards goals.

What resources are needed to complete your strategies and priorities? Are they currently available to you? If not, do you know where/how to obtain them?

Finances, utilities are given funds from the state to help in the transition to renewable technology (esp. in transportation). Funding is not enough to make a significant impact.

Staffing constraints (80 people in B.E.) work closely with Public Works (bike master plan).

How has the local community promoted its sustainability efforts to members in the community?

EnergyChamp- city program that allows users to see gas electric usage (entire home picture), can see how they rank in efficiency along with other rates and incentives.

Synch program with gas and electric departments.

B.E. has own marketing, along with other educational programs available to public.

EnergyEngage, helps user understand their energy consumption and how to become more sustainable.

What are your top 3 barriers that you consider to be beyond the control of the municipality, which have limited your ability to implement sustainability initiatives?

Finances

Market Forces (fossil fuel subsidies and where the price are compared to renewable tech., increase renewable energy incentives)

Staffing

Data- being able to effectively synthesize the massive amounts of data to appropriately target funding, consumer behavior, marketing etc.

Sustainable Profile²

Overview

- Solid Waste Reduction & Recycling
- Food & Agriculture
- Transportation
- Storm Water
- Energy
- Development
- Greenhouse Gas Reduction
- Climate Preparedness
- Equity & Economics
- Community Engagement

Solid Waste Reduction & Recycling

Top Priorities

- Reduce the amount of waste sent to landfills.

Strategies

- Implement a residential organics collection program.
- Explore a residential Pay As You Throw (PAYT) program.
- Require recycling bins at all public facilities and events.
- Increase the use of reusable shopping bags.
- Work to consolidate trash haulers by neighborhood or district.
- Require all major construction and demolition projects to submit waste management plans.

Food & Agriculture

Top Priorities

- Develop zoning, planning and economic development policies that support local food production.
- Develop public-private partnerships and infrastructure to support processing, preserving and storage of locally produced foods.

Strategies

- Create and implement a policy for raising non-domesticated animals.
- Create a more consistent supply of local products and enhance the local food supply chain.
- More development of a public-private infrastructure to support additional processing, preserving and storage.

Transportation

Top Priorities

- Reduce community-wide vehicle miles traveled (VMT) by 10% per capita by 2025.
- Reduce the amount of municipal vehicle miles traveled by 10% by 2025

Strategies

- Improve bicycle and pedestrian infrastructure.
- Integrated transportation system improvements.
- Create a downtown Transportation Management Association.
- Price parking to maintain 85% utilization.
- Develop a government alternative employee-commuting program.
- Develop a government vehicle retirement and replacement program.
- Develop a government vehicle sharing/fleet management program.

Storm Water

Top Priorities

- Expand the comprehensive storm water management system to incentivize low impact development technologies.
- Develop methane gas capture and CHP potential at City's wastewater treatment plants.

Strategies

- Improve the management of storm water using, "grey streets to green streets". Encourage more trees and plantings, which will play an important role in sequestration of CO₂.
- Increase Green roofs and walls on buildings to help with storm water management.

Energy

Top Priorities

- Increase energy efficiency in buildings.
- Increase the use of cleaner and renewable energy sources.

Strategies

- Require new residential construction to be Vermont Energy Star for Homes (VESH) qualified.
- Fully implement BED Advanced Metered Infrastructure (AMI) program.
- Require new commercial construction to follow Core Performance guidelines.
- Implement the "PACE" (Property Assessed Clean Energy) Program for residential properties and explore expansion to commercial properties.
- Replace existing streetlights with LEDs.
- Create a green roof policy and incentive program.
- Revise and implement the Time of Sale ordinance.
- Study feasibility of McNeil district heating project.
- Implement additional "Solar on Schools" project.
- Implement BED "Renewable Energy Resource Rider" program.

Development

Top Priorities

- Promote compact mixed-use development.

Strategies

- Incentivize urban infill development in the city core and dense activity centers through zoning.
- Incentivize energy efficient building siting, design and operation through zoning.
- Create a more predictable development process.

Greenhouse Gas Reduction

Top Priorities

- By 2030, Burlington has reduced its greenhouse gas emissions by 20% of 2007 levels, and is on its way to reducing emissions by 80% by 2050.
- Stop the increase of emissions and bring 2016 emissions down to 2010 levels for all three sectors (Municipal, Airport and Community-Wide operations).
- Municipal Operations- 20% reduction from 2010 levels by 2025.
- Airport Operations- 10% reduction from 2010 levels by 2025.
- Community-Wide- 10% reduction from 2010 levels by 2025.
- Increase carbon storage and sequestration with additional forest and tree coverage.

Strategies

- By continuing to monitor and record GHG emissions.
- Monitor the implementation of actions proposed in the Climate Action Plan.
- Increase the Urban Tree canopy (UTC).

Climate Preparedness

Top Priorities

- Transitioning to Net Zero.

Strategies

- Reducing the GHG emissions of the transportation sector.
- Improving city infrastructure to provide more housing within the city.

Equity & Economics

Top Priorities

- Build a more diverse and multi-disciplinary climate action stakeholder group.

Strategies

- Expand housing choices and grow the housing supply to create more live/work opportunities.
- Evaluating emissions mitigation strategies with attention to issues of equity.
- Develop methods of ensuring the safety and health of all of Burlington's citizens against climate change.

Community Engagement

Top Priorities

- Ensure the implementation of the Climate Action Plan (CAP) through constant coordination with stakeholders and regular annual assessment of the City's progress.

Strategies

- Develop a progress assessment structure that would include: annual progress report format, GHG emissions inventory 3-year update and periodical revisit of all strategies' relevance.
- Create a Sustainability Coordinator position responsible for the management and implementation of Burlington's Climate Action Plan. This position will involve assessing progress as well as overseeing the involvement of partner agencies such as the City's Green Team.
- Empower the City's Green Team to take on the implementation of the Climate Action Plan in Conjunction with the Sustainability Coordinator.

Sources:

- 1.) "Climate Action Plan; Burlington, VT", *City of Burlington Sustainability*. 2014.
<https://www.burlingtonvt.gov/sites/default/files/CEDO/Sustainability/Climate%20Action%20Plan.pdf>
- 2.) "Census Profile: Burlington, VT" *Census Reporter*. N.p., n.d. Web 21 March. 2017
<https://censusreporter.org/profiles/16000US5010675-burlington-vt/>