

Buildings and Energy

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Objectives

1. Reduce energy use in existing buildings by at least 25%
2. Reduce energy use in new construction and major renovations of existing buildings by at least 30%
3. Promote the use of renewable energy in place fossil fuels

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Action

- 1.1 Promote programs that offer incentives for residential and commercial building energy efficiency improvements
- 1.2 Develop additional financial programs to help building owners undertake energy efficiency improvements
- 1.3 Improve the energy efficiency of properties that are participating in City programs
- 1.4 Encourage the disclosure of building energy performance to prospective tenants and buyers
- 1.5 Develop “Greener is Greater Binghamton Challenges” for homes and for businesses
- 1.6 Create incentives for adaptive reuse of residential and commercial buildings
- 1.7 Develop green building incentives for Projects Receiving Payment In Lieu of Taxes (PILOT) Agreements
- 2.1 Adopt green building incentives for high performance new construction
- 2.2 Support adoption of the 2012 International Energy Conservation Code in New York State
- 3.1 Encourage residents and businesses to purchase electricity from renewable supply sources
- 3.2 Encourage homeowners and businesses to install onsite renewable energy generation systems

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What happened and/or what to do next.

- 1.1 The City has had a number of energy efficiency programs and funded a program for the replacement of outdated appliances and mechanical systems in low income households.
- 1.2 Clean Energy Community program funded with a NYSERDA award as well as the HUD funded LMI home rehab program uses only Energy Star rated upgrades .
- 1.3 See 1.1 & 1.2.
- 1.4 City will contact NYSEG about the feasibility of this kind of disclosure.
- 1.5 Program in development will include the following Challenges - Rain Gardens, Tree Planting, Green Energy, Pollinator Gardens, Edible Landscapes, and a Reuse-it Challenge.
- 1.6 Parking requirement waivers, modifications to zoning codes, and updates to zoning maps have encouraged and created opportunities for the repurposing of low tenant (or vacant) commercial buildings to residential.
- 1.7 City is currently reviewing this action.
- 2.1 In any nonresidential zoning district, the area of any structure or building covered with a vegetated greenroof, as defined in Chapter 410, shall not count towards the calculation of the total lot coverage.
- 2.2 The New York State Energy Code adopted in 2020 incorporates the 2018 International Energy Conservation Code, and includes a “Stretch Code” that is 10% above code.
- 3.1 Climate Action Plan website will have links to the various state and utility programs that are incentivising renewable energy purchases, and information sites regarding clean energy providers such as NY Power to Choose.
- 3.2 City did this as part of the Clean Energy Communities program, as well as through the creation of a Unified Solar Permit.

■ Completed

■ In progress

Government Action

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Objectives

1. Cut City electricity and natural gas use by 30% by 2025.
2. Obtain 30% of electricity from renewable sources by 2025.
3. Reduce consumption of fuel for transportation with City government operations.
4. Use alternative fuels for City fleet.
5. Open Space and Urban Forestry.
6. Reduce waste and increase the use of recycled materials within City operations.

2

Action

- 1.1 Develop a Plan for Retrofitting City-owned Buildings to Significantly Reduce Energy Consumption
- 1.2 Require LEED Silver Certification for All New and Renovated City-Owned Structures Over 1500 Square Feet
- 1.3 Replace All Streetlights with Energy Efficient Bulbs and Fixtures by 2020
- 1.4 Replace All Exit Signs in City Government Buildings with LED Bulbs
- 1.5 Purchase Only Energy Star Appliances for City Use and Require All New Computers to Have Minimum of EPEAT Bronze Rating
- 1.6 Install Vending Misers on All Vending Machines in City Government Buildings
- 2.1 Source 35% of Electricity for City Operations from Renewable Sources by 2020
- 2.2 Advance Energy Independence of the Binghamton-Johnson City Joint Sewage Treatment Plant
- 3.1 Increase Fuel Efficiency of City Fleet by Purchasing Vehicles with a Higher MPG Rating
- 3.2 Reduce Vehicle Trips Taken with Municipal Vehicles
- 3.3 Enforce an Anti-Idling Policy for Municipal Vehicles
- 3.4 Encourage City Government Employees to Utilize Alternative Forms of Transportation in Their Daily Commute
- 4.1 Purchase Biodiesel for Use in City Vehicles
- 4.2 Buy Electric and Plug-In Vehicles for the City Fleet as They Become Commercially Available and Cost Effective
- 5.1 Develop an Open Space & Parks Plan
- 5.2 Continue to Improve Urban Forestry Management Practices
- 6.1 Reduce Paper Use in City Operations
- 6.2 Require the Use of Environmentally Preferable Products within City Operations

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What happened and/or what to do next.

- 1.1 City is looking into using the NYSEERDA Flex-Tech program to do an energy audit of City buildings.
- 1.2 LEED Certification is an expensive process this expense is instead converted into energy conservation measures in the new development and renovations of city structures.
- 1.3 Street lights and traffic lights are now all LED.
- 1.4 Exit signs in City Government buildings are now all LED.
- 1.5 Required for any City project.
- 1.6 Vending machines were reduced to 4 in City Hall and all have been replaced with Energy Star Certified machines.
- 2.1 The City buys renewable energy certificates that covers 100% of its electricity consumption.
- 2.2 The Water Treatment Facility and new Joint Sewage Treatment Plant have rooftop solar.
- 3.1 GHG emissions have decreased 27% in the City fleet since 2006 which corresponds directly to greater fuel efficiency as well as less driving. Electric vehicles replaced older fossil fuel based vehicles on the city fleet.
- 3.2 Reduced trips have been utilized.
- 3.3 See 1.2 above
- 3.4 The city is a walkable community with bus stops located outside of City Hall, a concentrated urban core with residences located in the downtown district as well as within less than half mile, bike lanes, sidewalks and marked crossing areas in most neighborhoods.
- 4.1 Not conducive in northern climates; GHG emissions reductions are greater with electric vehicles.
- 4.2 The City currently has electric vehicles in the fleet and is reviewing a fleet conversion plan to cost-effectively increase that percentage.
- 5.1 The City has a Master Plan for the Parks and is reviewing a draft Open Space Plan.
- 5.2 The City has a tree management plan based on a complete street tree inventory.
- 6.1 City moved to centralized printing. Departments have to buy their own paper. Many administrative functions that were previously paper-dependent (submission of plans, proposals, and so forth) have moved on-line.
- 6.2 Purchases are made where available through OGS contracts.

■ Completed

■ In progress

Outreach and Education

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Objectives

1. Create an informed and motivated public that is engaged in combating climate change.

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Action

- 1.1 Establish an Energy and Climate Action Task Force
- 1.2 Mobilize the Media
- 1.3 Mobilize the Community
- 1.4 Develop a Centralized Website for Climate Action in Binghamton

■ Completed

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What happened and/or what to do next.

- 1.1 Climate Action Plan advisory committee.
- 1.2 The city uses press releases, social media and the City webpage to make the public aware of our green initiatives and successes.
- 1.3 See 1.2
- 1.4 See 1.2

Transportation and Land Use

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Objectives

1. Reduce transportation emissions through greater fuel conservation and efficiency.
2. Reduce transportation emissions by encouraging the use of alternative fuel sources.
3. Reduce energy consumed and emissions produced as a consequence of how land is used and developed.

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Action

- 1.1 Promote and facilitate commuting by walking, biking, carpooling, and public transit instead of private cars
- 1.2 Reduce idling by commercial and private vehicles
- 1.3 Provide education for vehicle owners on how to improve vehicle fuel economy
- 2.1 Provide information to the public on alternative fuel sources in our area
- 2.2 Accelerate the transition to plug-in hybrids and electric vehicles by supporting the installation of a network of electric car charging stations
- 3.1 Adopt land use strategies which reduce emissions and encourage smart growth
- 3.2 Expand waterfront development
- 3.3 Consider greenhouse gas emissions in environmental evaluations of planning scenarios and individual land use decisions
- 3.4 Partner with other municipalities and regional planning agencies to encourage smart growth and sustainable development throughout the region

■ Completed

■ In progress

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What happened and/or what to do next.

- 1.1 State and Washington Street have been re-designed as complete streets with wider sidewalks, bike lanes, benches and landscaping. Henry Street has been redesigned "street diet" i.e. made narrower to promote slower, safer driving and give more room for bikes and people: the plan is complete and out to bid.
- 1.2 No Idling signs are being developed and will be posted at municipal buildings, parking lots, and parking garages.
- 1.3 Information regarding fuel economy and electric vehicles will be added to the Climate Action Plan website, understanding that the move to vehicle electrification will have a more profound impact on emissions.
- 2.1 See 3.1
- 2.2 12 regular and 3 DC fast chargers in the Binghamton metropolitan area. There are also significant State-level incentives for commercial entities to install charging stations including <https://www.nysderda.ny.gov/All-Programs/ChargeNY/Charge-Electric/Charging-Station-Programs>
- 3.1 See Actions 1.3., 1.6, 2.1, 3.1, See the City's complete streets efforts above. In addition, the City is promoting "no-mow" areas which support carbon sequestration, biodiversity, and reduce stormwater runoff. Chapter 410 Zoning requires shade trees for parking lots.
- 3.2 Waterfront properties in most cases are located in the adopted and preliminary Flood Map Special Flood Hazard Areas and have specific requirements regarding new construction and substantial renovations projects. These requirements are located in Chapter 240 of the City Charter and Code of Ordinances. The City promotes returning flood-prone areas to green space by supporting urban farming, expanding public parks, developing "No-Mow" protected areas, and creating pocket parks and community gardens in neighborhoods from FEMA buyout demolition sites.
- 3.3 Proposed development is reviewed by the Planning Commission and CAUD (as needed) and this review includes an Environmental Assessment for Type 1 and Unlisted Actions including potential increases in traffic, available public transportation and bike routes, and if the project meets or exceeds the NYS energy code requirements. * If greenhouse gas emissions per individual land use development project is not available in a standardized format and as such is not used in the evaluation of land use decisions.
- 3.4 The City is partnering with BMTS, Broome County, and Johnson City (shared services) in a range of areas and projects to increase efficiency, promote smart and sustainable economic development.

Waste Management, Reduction, and Recycling

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Objectives

1. Increase Binghamton's municipal solid waste recycling rate to 45% by 2015 and 50% by 2020
2. Divert other types of wastes from the landfill of how land is used and developed.

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Action

- 1.1 Increase household recycling
- 1.2 Require recycling at events on City property
- 2.1 Divert organic wastes from the landfill
- 2.2 Reduce and Reuse construction and demolition material waste

■ Completed

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What happened and/or what to do next.

- 1.1 The City has a pay-as-you-throw program featuring free municipal recycling collection and the mandatory purchase of City Bags for garbage collection - this encourages residential recycling.
- 1.2 Recycling is required and bins are provided if requested.
- 2.1 Yard waste is picked up every week and composted for free residential use.
- 2.2 Broome County Landfill has a "take back" program aimed at recycling/re-using building materials such as lumber, drywall, metal piping and windows and doors.

Local Food, Agriculture, and Urban Forestry

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Objectives

1. Support the development of a sustainable, locally- based, low carbon food system
2. Increase tree canopy coverage and open space creation

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Action

- 1.1 Increase the amount of food produced inside City limits through community based initiatives
- 1.2 Encourage gardening and edible landscaping on residential, commercial and industrial properties
- 1.3 Support the development of commercial agricultural and food processing enterprises within the City
- 1.4 Encourage the consumption of locally produced foods
- 2.1 Promote Tree Planting, Landscaping, and the Creation of Green and Open Space that Helps to Restore Natural Processes

■ Completed

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What happened and/or what to do next.

- 1.1 The VINES partnership was established for just this purpose.
- 1.2 The City won a grant from the Chesapeake Bay Program and implemented a campaign to promote rain gardens on residential properties to reduce the direct discharge of stormwater into the sewer system. The City then developed a walking tour of these residential rain gardens.
- 1.3 Community and Neighborhood gardens are allowed by right in all residential and commercial land use areas C4-C6; Greenhouses and Nurseries (indoor agriculture) are allowed by right in C1-C2; C4-C6; and Light and Heavy Industrial Districts.
- 1.4 Broome County Regional Farmers Market + Binghamton Farmers Market and also VINES.
- 2.1 Chapter 410 of the Zoning Code: Erosion Control and Flood Mitigation, is intended to promote the restoration and preservation of green space and resilient landscaping. In addition, the City has a Shade Tree Commission and a program to restore the urban tree canopy, reduce the urban heat island, reduce stormwater, and improve the aesthetics of Binghamton's streets.