

## APPENDIX C: CLIMATE ACTION PLAN

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### Acknowledgements

The Village of Jordan would like to thank the following community members and staff for their contributions to developing this Climate Action Plan:

#### *Climate Action Plan Advisory Committee*

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## Executive Summary

A Climate Action Plan (CAP), often considered a blueprint for the future, evaluates how a community can reduce greenhouse emissions and adapt to climate change. The CAP also identifies the extent to which local actions support New York State's goal for a clean-energy economy. New York State's goal is to reduce greenhouse gas emissions by 80% (below the levels emitted in 1990) by the year 2050. To help reach this goal, local representatives have joined many other municipalities throughout the State to compile a CAP for Jordan.

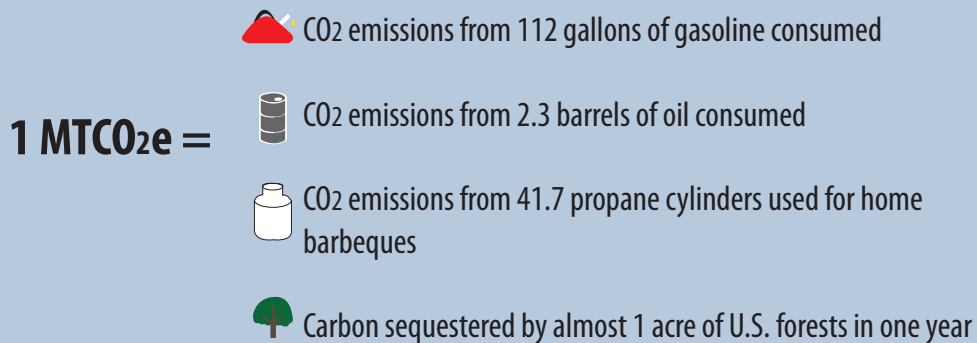
The CAP provides local goals for reducing energy use from municipal operations and from the Jordan community as a whole and includes specific recommendations for categories such as transportation, solid waste disposal, and building energy efficiency. The objectives of the Climate Action Plan are to:

- (1) Provide municipal elected officials, community leaders, and residents with information and support to advance sustainability programs throughout the community;
- (2) Identify opportunities for emission reduction programs and initiatives; and
- (3) Engage and encourage local participation in greenhouse gas emission reduction strategies.

A Climate Action Plan Advisory Committee comprised of municipal representatives and community leaders met during 2016 to discuss emission reduction goals and specific strategies for reaching them. The committee agreed on a goal to reduce municipal greenhouse gas emissions by 48.0% and reduce community emissions by 12.4% from the GHG inventory baseline year (2014) by 2030.

This CAP was prepared for Jordan with guidance from the Central New York Regional Planning and Development Board (CNY RPDB) through NYSEERDA's Cleaner, Greener Communities funding.

The CAP is not intended to provide precise information about the potential emission reductions that can be achieved by specific recommendations, and cannot be used as a substitute for thorough project or program planning. Instead, the document provides estimates of emission reductions for specific local recommendations. The report is designed to help public officials, community leaders, and residents decide which actions may be worthwhile for the community to pursue in the coming years and is intended to be a flexible framework for local climate protection.



## Climate Adaptation Vs. Mitigation

Unprecedented human intervention will be required in the coming decades to reduce the extent of climate change. International accords to limit overall carbon emissions, such as the 2015 Paris Agreement, will involve national governments. Setting carbon emission targets and standards by industry or sector, or setting fuel efficiency standards for vehicles falls within the traditional purview of federal and state governments. New York State, for example, has set aggressive energy and climate goals, including meeting 30% of the state's electric needs with renewable energy sources by 2030, and reducing greenhouse gas (GHG) emission by 80% (below 1990 levels) by 2050.

These targets and standards to reduce the extent of climate change can focus on avoiding the potential consequences (referred to as **mitigation**), or making changes to accommodate those effects that are unavoidable (referred to as **adaptation**).

A primary goal for Central New York, as presented in *Vision CNY: Central New York Regional Sustainability Plan*, is to reduce CO<sub>2</sub> emissions, maintain the amount of electric power production in the region that is derived from carbon-free sources such as solar, wind, and nuclear, and adapt to a changing climate by improving community resilience, protecting infrastructure, and protecting natural systems. A gradual increase in high and low temperature extremes, coinciding with an increase in the frequency and intensity of storm events are expected to impact transportation infrastructure, human health, agricultural practices, forest diversity, and migratory patterns of invasive species. Adapting to and mitigating the effects of climate change will provide opportunities for Jordan to improve the health and resilience of the community while providing long-term protection of natural resources. The local government is leading by example by reviewing options to reduce energy usage in municipal facilities through alternative fuels for transportation fleets and renewable energy sources.

Several recommendations for climate mitigation and adaptation strategies are presented in the pages that follow. They are designed to help Jordan prepare for current and anticipated changes in climate conditions and to assist decision-makers in identifying opportunities to improve community resilience. The recommendations provide actions that Jordan can take to protect people, homes, buildings and natural systems by reducing risks from environmental hazards such as extreme heat and storm events. They are designed to reduce community emissions, promote energy efficiency, vehicle fuel efficiency, alternative transportation, land use planning, and other strategies. The community is encouraged to update these recommendations each year as additional data becomes available.

## Transportation

According to the village's GHG Inventory Report, transportation accounted for 23% of government emissions and 21% of community emissions in 2014. Implementing the strategies suggested below would help the village to reduce energy use, emissions, and save money. Detailed calculations and sourcing information can be found in the *Village of Jordan Action Strategy Summary Document*, available under separate cover at the Jordan Village Hall or on the Village website.

## ***Goal 1: Utilize efficient methods of transportation***

### ***Municipal mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
2015 vehicle upgrades	Backhoe, Skidsteer, and Dump Truck upgrades made in 2015	4	\$1,177
Reduction in fleet mileage	1,000 annual diesel miles eliminated	0.2	\$61

### ***Community mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Telecommuting	5% of workers telecommute	66	\$14,922
Expand bicycling infrastructure	10% of trips less than 2 miles are converted to bicycling	37	\$8,313
Expand pedestrian infrastructure	5% of trips less than 1 mile are converted to walking	15	\$3,508

Utilizing efficient methods of transportation would reduce the amount of vehicle miles traveled (VMT) and the amount of gasoline and diesel use which would therefore reduce emissions, fuel costs, and reliance on foreign fossil fuels. Encouraging community members to walk or bike instead of driving will allow municipalities to reduce VMT. E-mail, video conferencing, and telephones can replace face-to-face meetings, eliminating the need to travel and saving valuable work time. Carpooling is another way community members can reduce emissions and save money.

High quality low-carbon forms of transportation provide multiple co-benefits besides energy savings and emission reductions, including congestion reductions, road and parking facility cost savings, consumer savings and affordability, improved mobility for non-drivers, support for strategic land development objectives (i.e. reducing sprawl), and improved public fitness and health.

### ***Adaptation strategies***

The village can encourage a reduction in the amount of transportation-related greenhouse gas emissions by bolstering existing local carpooling and ridesharing initiatives. Municipal leaders could also encourage local commercial businesses to designate a certain number of parking spaces in existing or future lots to carpooling. Municipal leaders can also encourage residents to buy smaller cars by providing a cost benefit analysis to show financial savings and emission reduction comparisons. Community members

can reduce the number of student drop-off and pick-up trips to and from school, and the village and school district can consider providing education and incentive programs to encourage carpooling and bus ridership.

## ***Goal 2: Increase use of alternative fuel vehicles***

### ***Municipal mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Conversion to hybrid vehicles	2009 Crown Victoria and 2008 Chevy Express Cargo Van converted	10	\$3,357

### ***Community mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Conversion to electric vehicles	5% of community vehicles convert	46	\$10,447
Conversion to hybrid vehicles	5% of community vehicles convert	22	\$5,044

Governor Cuomo announced on April 11, 2013 that more than 360 electric vehicle and plug-in hybrid charging stations will be installed across the state in support of his Charge NY initiative, which is an initiative to create a statewide network of up to 3,000 public and workplace charging stations over the next five years and to put up to 40,000 plug-in vehicles on the road during that period.

Hybrid and electric vehicles are less expensive to operate than regular vehicles, and while certain issues related to battery life still remain, maintenance and fuel cost savings are expected to outweigh the price of battery replacement.

Not only will using alternative fuels reduce greenhouse gas emissions, it will also reduce US dependence on imported fuels and reliance on fossil fuels in general. Increasing the use of alternative fuels would greatly reduce Richland and Pulaski's emissions and provide other benefits to community members as well.

Converting municipal vehicles to hybrid could prove to be a good option in the future when hybrid vans and/or police package vehicles become available.

## Energy Efficiency

According to the GHG Inventory Report, buildings and facilities accounted for 33% of total municipal emissions, wastewater facilities accounted for 32%, streetlights and traffic signals accounted for 7%, and water and sewer facilities accounted for 5%, while residential energy use accounted for 39% of the community's emissions, and commercial/industrial energy use accounted for 36% of the community's emissions of total GHG emissions in Jordan in 2014. Detailed calculations and sourcing information can be found in the *Village of Jordan Action Strategy Summary Document*, available under separate cover at the Jordan Village Hall or on the Village website.

### *Goal 1: Increase energy efficiency and reduce emissions from buildings*

#### **Municipal mitigation strategies**

Strategy	Assumptions	Possible GHG Reductions (MTCO <sub>2</sub> e)	Potential Annual Cost Savings
Lighting occupancy sensors	Installed at Village Hall, Wastewater Treatment Plant, Fire Hall, and DPW Garage	9	\$5,911
LED streetlights	All 183 cobra head and all 31 decorative fixtures with CFL bulbs are replaced with LED bulbs	7	\$10,236
Replace windows	All windows replaced at Village Hall, Fire House, and Wastewater Treatment Plant	4	\$2,856
LED lighting retrofits	All indoor lighting replaced with LED, saving approximately 30%	2	\$1,312

#### **Community mitigation strategies**

Strategy	Assumptions	Possible GHG Reductions (MTCO <sub>2</sub> e)	Potential Annual Cost Savings
Energy efficiency education: residents	10% of homes are reached	90	\$30,503
Home weatherization	10% of homes weatherize	57	\$18,069
Energy efficiency education: businesses	10 businesses participate	21	\$9,573
Home retrofits to HVAC	10% of homes retrofit HVAC	20	\$7,055

Strategy	Assumptions	Possible GHG Reductions (MTCO <sub>2</sub> e)	Potential Annual Cost Savings
Lighting occupancy sensors	Installed at 10,000 square feet of commercial space	4	\$2,997
Power down at night policy	Implemented at 10,000 square feet of commercial space	4	\$2,997
Residential LED light bulbs	1 bulb replaced per household	3	\$2,236
Commercial LED light bulbs	500 bulbs replaced	2	\$1,500

Energy efficiency education can be crucial in working to reduce emissions from buildings and facilities. Being familiar with actions that can be taken to increase building efficiency and reduce emissions, such as the ones listed, is the first step in carrying out those actions. Participating in the Classroom Energy Challenge can help educate community members on actions they can take at home and at school to reduce energy use and emissions. Businesses can be targeted in a similar educational program and/or energy challenge competition.

Jordan-Elbridge Middle School could be a prime location for implementation of some of the reduction strategies noted, such as lighting occupancy sensors and powering-down electronics at night.

Buildings in Jordan may also not be equipped with the most recent energy efficient technologies, causing the Village and community members to use more energy than is necessary. Retrofitting existing facilities through measures like replacing appliances and light bulbs with more efficient ones, increasing insulation, and upgrading HVAC systems can greatly improve energy efficiency and therefore reduce emissions from buildings and facilities.

Behavior changes such as turning down the heat and air conditioning or using programmable thermostats to reduce heating and cooling when buildings are not occupied can also significantly reduce energy use and emissions.

The initial cost of retrofitting heating units may seem daunting; however, the local government, NYSERDA, and the CNY RPDB can offer assistance and support to make retrofits easier by providing educational materials, low-interest loans, and guidance on where to find potential grants or incentives to help cover costs.

### ***Adaptation Strategies***

Jordan can modify local laws to incorporate measures for adaptation to climate change, such as reevaluating the use of PACE as a way for commercial property owners to pay for energy upgrades, on-site renewable projects, and water conservation measures, and establishing/maintaining strong building codes regarding energy use.

## ***Goal 2: Increase use of renewable energy***

### ***Municipal mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Municipal solar PV	335 kW installed (could cover approx. 100% of electric use)	68	*depends on power purchase agreement

### ***Community mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Commercial solar PV	2,275 kW (could cover almost 20% of commercial electric use)	463	\$311,391
Residential solar PV	322 kW (assumes about 13% of households go solar in one way or another)	66	\$44,074

By installing or investing in renewable energies like solar, Jordan can ensure that their energy is provided by clean and local renewable energy sources, therefore reducing greenhouse gas emissions, energy cost, and reliance on fossil fuels.

Many residents or businesses would like to use renewable energies, but the large up-front cost is an obstacle. The local government can help overcome this barrier by offering low-interest loans or organizing group buying programs to negotiate lower prices, such as the Solarize Madison program offered in Madison County in 2012-2013, the Solarize Syracuse program offered in Syracuse in 2014, and the Solarize CNY program offered in Cayuga, Cortland, Madison, Onondaga, and Oswego Counties in 2015. These programs are an effective way of combining public and private funds for renewable energy. The village could also consider community choice aggregation (CCA), whereby the entire community receives energy from an energy service company outside of their utility (i.e. energy is supplied from Blue Rock Energy and delivered by NYSEG). CCA often allows communities to specify the type of energy mix they prefer (i.e. higher percentage of renewables) and often reduces supply costs.

For those interested in installing solar PV, the New York State Energy Research and Development Authority (NYSERDA) provides incentives based on system size. Additionally, there are renewable energy tax credits for residential and commercial solar PV, wind, and geothermal installations. Educational and technical assistance programs can also promote renewable energies. Local governments can offer



information clearinghouses and connect consumers with renewable energy installers.

NYSERDA, New York Power Authority (NYPA) and City University of New York (CUNY) developed a NYS Unified Solar Permit that helps to reduce costs for solar projects by streamlining municipal permitting processes and supports the growth of clean energy jobs across the state. The unified solar permit is part of Governor Cuomo's NY-Sun initiative to quadruple in 2013 the amount of solar capacity in New York that was added during 2011.

Adoption of a standardized residential/small business solar permit is a key element to help New York municipalities remove barriers to local economic development in the growing solar industry. The standardized permit cuts costs by creating a uniform permitting process in municipalities across the state. Installers in New York State have had to work with different permits and permitting processes in each of the State's 1,550 municipalities, which increased the complexity of permitting and have caused project delays and added costs. It is recommended that the Village of Jordan adopt the unified solar permit to reduce soft costs associated with solar installations.

An increasingly popular way for a local government to overcome the financial hurdles of installing a photovoltaic system is through the "solar services model" also known as a Power Purchase Agreement (PPA). Through this type of arrangement, the owner of a property can provide the space for a power producer to install the system. The property owner then agrees to buy the power produced from that system at a set rate that is competitive with grid electricity. Since the power producer retains ownership of the equipment, there are no installation and maintenance costs to the consumer of the electricity produced. This is particularly attractive to government entities that are unable to take advantage of tax-based incentives for renewable energy.

The elementary school is a prime location for implementation of commercial solar PV. NYPA is currently offering school districts free, no-obligation site assessments to make it easier for schools to go solar.

One additional method of going solar is through a community solar farm. This opportunity is fairly new in New York State and has been faced with some challenges relating to interconnection of the solar systems to the electric grid, but this opportunity allows many individuals to go solar who otherwise would not have been able to. As this option becomes more readily available, Jordan community members may wish to consider buying into a community solar farm.

## Waste

In 2014, 344 MTCO<sub>2</sub>e (4%) of the community's GHG emissions came from waste. Waste from the town is disposed of at the Onondaga County Resource Recovery Agency's (OCRRA) Waste-to-Energy (WTE) Facility. Detailed calculations and sourcing information can be found in the *Village of Jordan Action Strategy Summary Document*, available under separate cover at the Jordan Village Hall or on the Village website.

## **Goal 1: Decrease the waste stream**

### **Community mitigation strategies**

Strategy	Assumptions	Possible GHG Reductions (MTCO <sub>2</sub> e)	Potential Annual Cost Savings
Kitchen composting	25% of food waste is composted (15 lbs. per person per year)	0.06	uncertain

The WTE facility processes 97% of OCRRA's total non-recyclable waste. Close to 100% of the incoming waste stream is processable by the WTE facility. This means that almost all of the waste brought to the WTE facility is combusted and turned into steam to be used for electricity generation. The electricity generated at the facility is then sold to National Grid, providing enough electricity to power approximately 25,000-30,000 households and the Facility itself. The combustion of this waste does, however, create GHG emissions and other pollutants that can be reduced by decreasing the waste stream through composting.

Composting produces fertilizer that can be used for farms or gardens, returning nutrients to the soil that were removed with food production and reducing the need for synthetic fertilizers. Composting also reduces the volume of material sent to the WTE facility, reducing disposal costs.

Composting is something that can be done at individual households or at the community scale. New York State's "Beyond Waste" Plan advances food scrap recycling as a key environmental strategy to help communities increase their waste diversion rates, and community composting sites, such as the Amboy Compost Site in Camillus, New York, have effectively composted yard and food waste for years.

The Village of Jordan has also already implemented a very successful community-wide recycling program that has helped decrease the waste stream.

## **Natural Resources**

Planting trees in strategic ways to shade buildings can reduce energy used to cool buildings. Trees that are properly planted with energy savings in mind can reduce the amount of energy (electricity, natural gas, or other fuel) used to cool and heat buildings. This not only reduces associated emissions, but also saves money. Detailed calculations and sourcing information can be found in the *Village of Jordan Action Strategy Summary Document*, available under separate cover at the Jordan Village Hall or on the Village website.

## ***Goal 1: Plant trees for carbon storage and energy savings***

### ***Community mitigation strategies***

<b>Strategy</b>	<b>Assumptions</b>	<b>Possible GHG Reductions (MTCO<sub>2</sub>e)</b>	<b>Potential Annual Cost Savings</b>
Tree planting	20% of households plant 1 tree	23	\$234

The shade from a single well-placed mature tree reduces annual air conditioning use from two to eight percent (in the range of 40-300 kWh), and peak cooling demand from two to ten percent (as much as 0.15-0.5 kW), therefore reducing GHG emissions. The Arbor Day Foundation provides information on its website explaining how to plant trees to conserve energy most effectively.

Tree planting can also reduce storm water runoff, decreasing the amount of water that needs to be treated at wastewater treatment facilities. Finally, tree planting increases the aesthetic appeal of homes, increasing property values.

New York State has a wealth of forest resources, including on public land in the Adirondack and Catskill Parks and on private land in the Tug Hill region. These forest resources help to sequester carbon and combat climate change, and additional trees planted throughout the state can contribute to the effort.

### ***Adaptation strategies***

To adapt to a changing environment, Jordan can work to remain a TreeCity USA. Planting living snow fences (evergreens planted at distances of at least 100 feet upwind of problem stretches of road) can reduce snow drifts and travel hazards for drivers. Jordan can also plant and maintain trees and other vegetative buffers along the Skaneateles Creek shoreline in order to reduce the flow rate of sediments and nutrients from entering the lake and tributaries, to reduce shoreline erosion, and to maintain cooler water temperatures through shading.

Jordan can also encourage the US Forest Service and Onondaga County Cooperative Extension to monitor changes in tree composition and health. The village can plant low pollen tree species in recreation areas in order to minimize human health issues, and manage tree density throughout the village to reduce overcrowding and susceptibility to stress and disease. The village can remove tree and vegetative growth along power lines and remove dead and dying trees and replace them with heat and invasive tolerant species.

Jordan can also ensure the resilience of natural systems and resources through open space conservation and smart growth strategies, such as maintaining hiking trails and protecting open space through conservation land grants, landowner incentives, regulation, fee acquisition, the purchase of conservation easements, and promotion of smart growth principals. Farmers can continue to implement agricultural practices that protect surface and ground water quality. Installation of agricultural Best Management Practices (BMPs) will reduce nutrient and sediment loading from agriculturally-rich watersheds. The SWCD, Cornell Cooperative Extension and the Natural Resources Conservation Service are available to provide assistance to Jordan farming community in developing and implementing BMPs.

The village should also participate in routine water quality sampling on Skaneateles Creek. Water quality is influenced by storm events, streambank erosion, and nutrient runoff from agricultural and other land uses within the watershed. Detailed sampling (called segment analysis) can help identify non-point sources of pollution.

Jordan can update local maps that display low elevation areas in the town and village that may be susceptible to flooding and display this information on the village website, along with preparedness guidelines. The village can remove branches, ice jams, and other debris from local tributaries to reduce the potential for flooding.

To overcome invasive species issues, Jordan can educate the public and elected officials on the value of prevention and early detection of invasive species. The village can work with the Onondaga County Soil and Water Conservation District and the Natural Resource Conservation Service to monitor the introduction and spread of invasive species. Jordan can also participate in Cornell Cooperative Extension's Emerald Ash Borer control strategy and in the New York State Invasive Species Task Force.

## **Additional Adaptation Strategies**

### ***Infrastructure***

Jordan should plan to protect and upgrade local infrastructure to achieve stormwater and flood control as well as cost savings. There are various actions the Village can take to address this goal, such as assessing the condition of local infrastructure and documenting climate vulnerabilities in the areas of energy, water, transportation, and telecommunications. Jordan can also reduce the threat of flooding by working with the Onondaga County Soil and Water Conservation District (SWCD) to improve the capacity of stormwater collection systems and maximize soil infiltration and groundwater recharge.

Jordan can inventory and prioritize road culvert and shoulder ditch repairs, install green infrastructure measures (i.e. rain gardens, porous pavement, and rain barrels), and encourage downspout disconnection, bioinfiltration, and rainwater harvesting in residential and business communities to reduce stormwater runoff.

The village can modify local laws to incorporate measure for adaptation to climate change, such as re-evaluating building and zoning codes to discourage/prevent new development in flood-prone and high hazard area.

### ***Public Health***

Jordan should also establish ways to reduce or eliminate the negative effects of climate change on public health. Adaptation strategies the village can pursue in this area include: working with the Onondaga County Health Department to document trends in asthma, Lyme disease, and heat-related illnesses that may be influenced by a warming climate; improving local capacity for health preparedness, response, and recovery programs, such as the development of an extreme-heat response plan and designation of a community location with air conditioning during heat events; and notifying the community regarding heat events, air quality, and other climate related health risks.

## ***Education***

Education is an important part of climate adaptation as well. Jordan should train local building officials, planning boards, and elected official on flood hazards, risk reduction strategies, implementation of floodplain development regulations, post-flood reconstruction, and how to address flood hazards during planning board reviews.

The Village can train local building officials and the construction industry on flood proofing techniques for retrofitting existing flood prone development, encourage homeowners to sign up for NYSEDA energy audits, and encourage local schools to develop and implement climate education programs or implement the CNY Classroom Energy Challenge. Schools can also partner with the community on educational opportunities related to local issues such as invasive species, littler, and dune and riverbank erosion.

The Village can also provide emergency preparedness guidelines on the Village website, including regional topographic maps and information about flood preparedness. The Village can also distribute brochures, fact sheets, and posters that show ways in which businesses and residents can prepare for and adapt to climate change.

The Village can also sponsor workshops to teach homeowners, local planning boards, elected officials, code enforcement officers, county agencies, businesses, citizen associations and real estate agents about Emerald Ash Borer and other invasives, storm preparedness, watershed land use influences, and floodplain management. Monitoring of invasive species should continue and be strengthened where necessary.

## ***Emergency Operations***

Ensuring that emergency operations are current and maintaining open lines of communications between local agencies is also a significant part of successfully adapting to climate change.

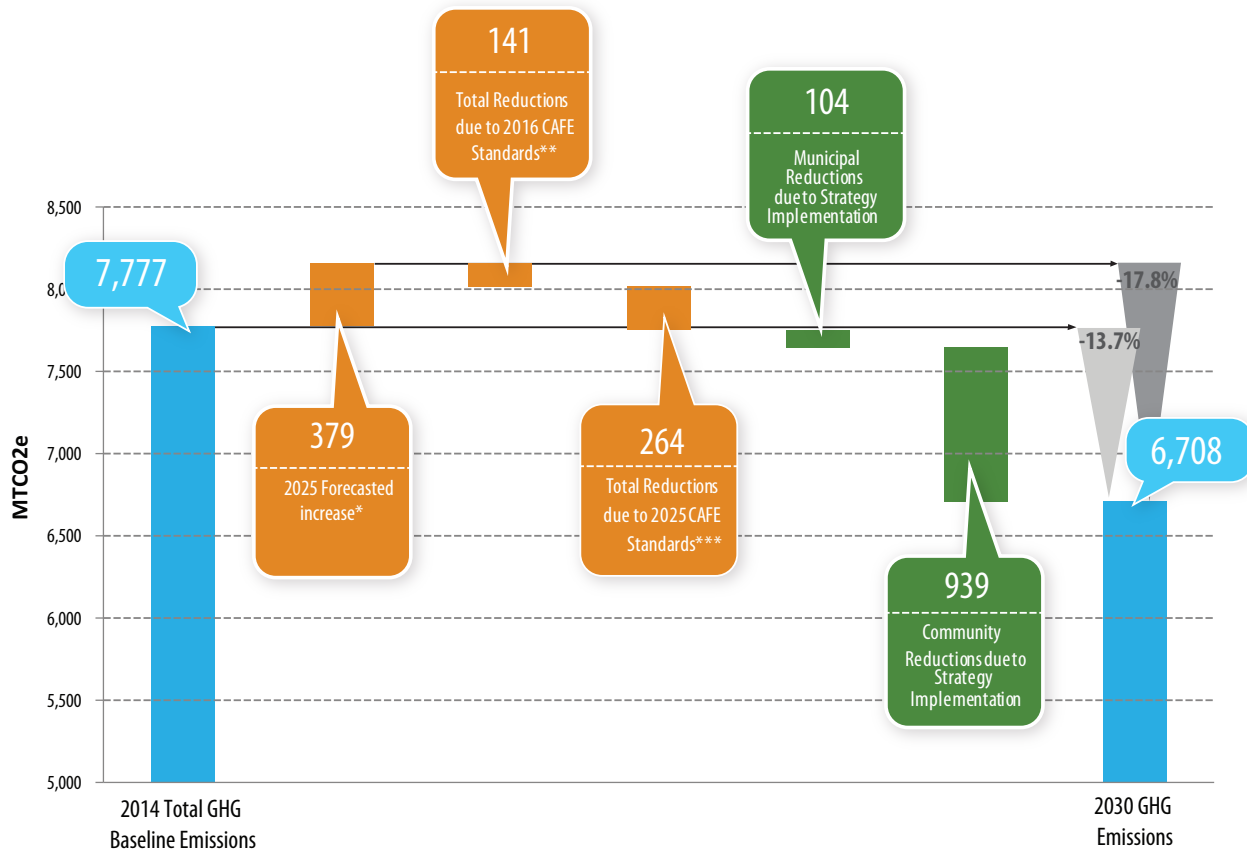
Jordan should also review and update the Village's inventory of emergency operations and public notification lists and collaborate with national, state, and local agencies to facilitate data collection, sharing, and synthesis of flood and storm event preparedness information. The Village can work with Onondaga County officials to update the County's Hazard Mitigation Plan every five years and provide public access to the Plan by adding it to municipal and agency websites.

Jordan should reconfirm channels of communication with local police and fire departments, the local power utility, and media outlets and re-establish local protocols for sharing equipment during emergencies. The Village should also update land hazard maps and inventories of infrastructure and at-risk communities and establish a road watch program to alert the public of flooded areas and tree damage during storm events.

Finally, Jordan should establish a road watch program to alert the public of flooded areas and tree damage during storm events.

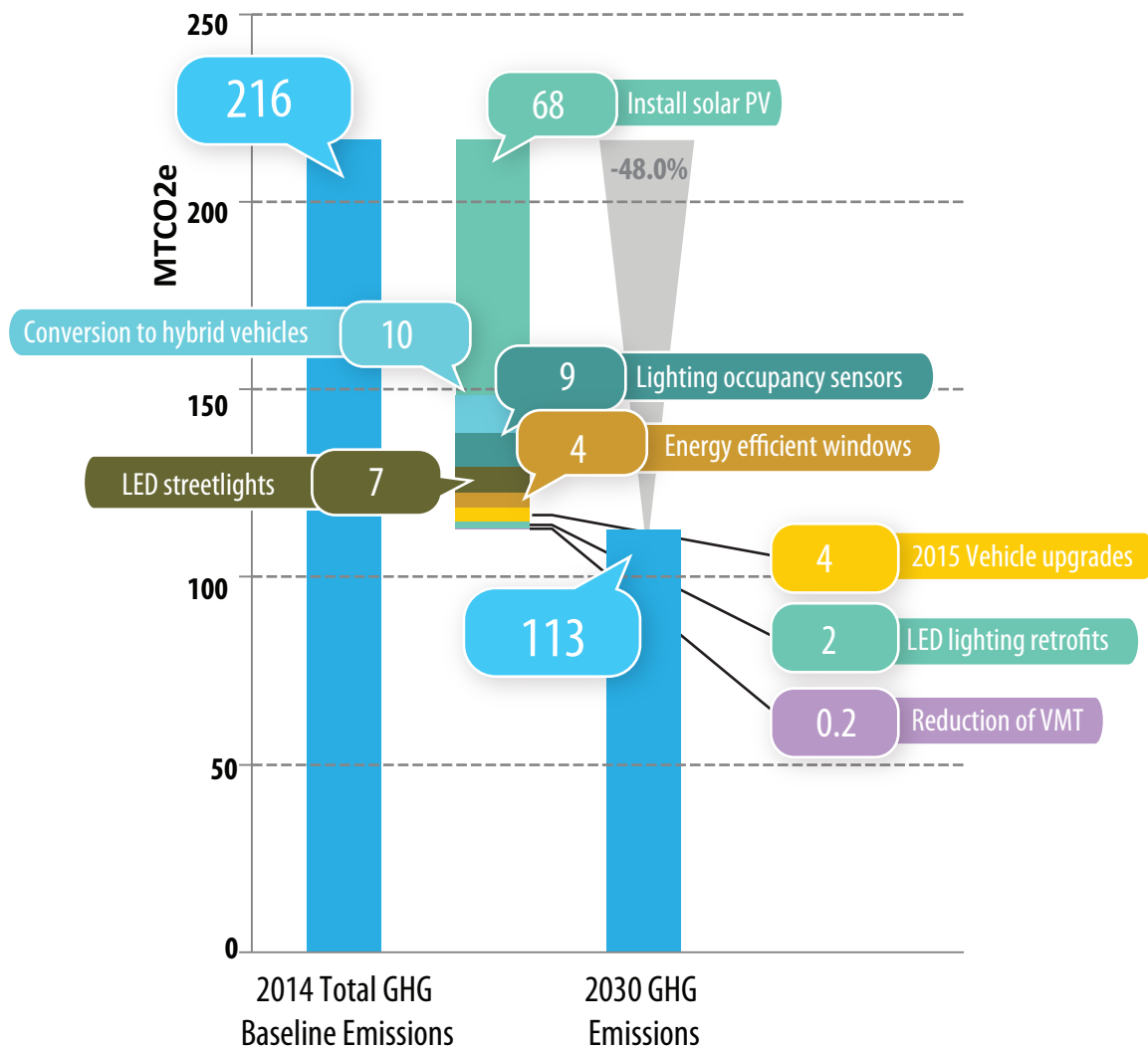
All of these additional adaptation strategies will allow Jordan to be a resilient and sustainable community in the long-term, despite the effects of climate change.

## Total possible emissions reductions in Jordan by 2030



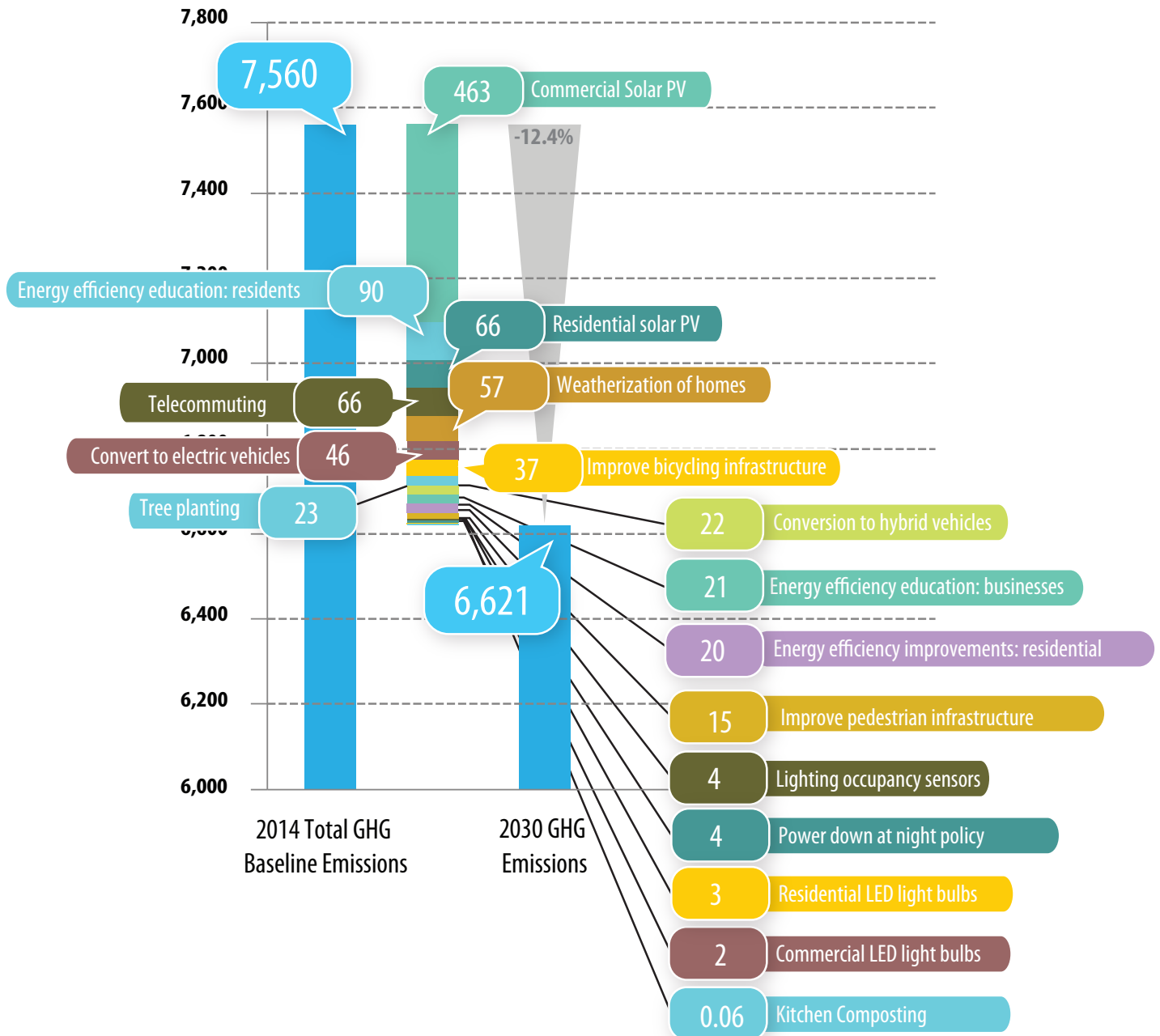
The graph above shows Jordan's 2014 GHG inventory baseline total, a 2025 emissions forecast based on current trends, impacts from the strengthening of Federal Corporate Average Fuel Economy (CAFE) standards, as well as the reductions associated with the mitigation strategies that were analyzed separated into community-wide measures and municipal operations measures. Reductions due to Jordan actions are shown in green, while changes in emissions that will occur regardless of this Plan are shown in orange. It is projected that total GHG emissions in 2030 could be reduced by 13.7% from the 2014 baseline emissions or 17.8% from forecasted emissions if the village implements all of the recommended community-wide and municipal operations measures.

## Potential municipal reductions from strategy implementation



The graph above shows Jordan's 2014 municipal baseline emissions, each of the reduction strategies included in this CAP and their associated emissions reduction potential, and possible municipal emissions in 2030. It is estimated that there will be a 48.0% reduction in municipal emissions if all strategies are implemented.

## Potential community reductions from strategy implementation



The graph above shows Jordan's 2014 community baseline emissions, each of the reduction strategies included in this CAP and their associated emissions reduction potential, and possible community emissions in 2030. It is estimated that there will be a 12.4% reduction in community emissions if all strategies are implemented.



## Concluding Remarks

The Jordan Greenhouse Gas Inventory and Climate Action Plan provided an opportunity for the village to develop energy efficiency and emission reduction strategies. This planning effort encouraged local participation and brought together representatives from local government, citizens, and other key stakeholders to evaluate regional strengths and goals. The process provided a chance to gather information on sustainable community and economic development projects, to give community leaders support to advance sustainable projects, and to identify goals for new sustainable programs and initiatives.

Participants in the planning process worked to identify goals and strategies to improve the environment and address climate change through energy management, infrastructure, land use, and transportation. As a blueprint for the future, the Climate Action Plan efficiently summarizes an action-oriented guide containing strategies to ensure that Jordan meets the needs of current and future generations. In addition, the document will now provide state and local officials with the information needed for long-term commitments and investments in economic, social, and environmental resilience.

Our thanks go to the local leaders and community members for a job well-done. Village officials are encouraged to now focus on implementation of these recommendations, to review the progress made on an annual basis, and to re-evaluate emission reduction goals. In this way, Jordan will continue to protect natural resources, reduce emissions, become more resilient to climate change, and serve as a prominent showcase for energy efficiency and environmental stewardship.