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Agenda

New Castle Climate Action Advisory Commission VIRTUAL Work Session Thursday, April 30, 2020, 6:30 PM

Due to concerns related to COVID-19, this meeting will be held as a virtual meeting only. The public is invited to attend by telephone.

Please call: 1-346-248-7799 Meeting ID: 709-658-8400

Follow the prompts as directed. Be sure to set your phone to mute until called on.

- 1. Development of a List of Priorities for 2020
- 2. Continue Review of the New Castle Climate Action Plan
- 3. Consider Items for the May 21, 2020 Agenda

Memo

TOWN OF NEW CASTLE Town Clerk

To: Climate Action Advisory Commission

From: Melody Harrison

Date: April 27, 2020

Re: CAAC Priorities List

Purpose:

The purpose of this memo is to memorialize discussions of the commission regarding a list of priorities. At the February 20, 2020 meeting the following were placed on a potential list of actions:

- An educational/environmental project between CAAC, the New Castle Garden Club and Elk Creek Elementary School
- Review & Revise the Town's Climate Action Plan
- Consult with Carbondale and Garfield Clean Energy
- Bee Garden
- Water Bottle Campaign
- Recycling Education (?)



Town of New Castle Climate Action Plan

The New Castle Climate Action Advisory Commission gives its deep appreciation to the Town of Carbondale for its leadership and administrative assistance in the preparation of this document.

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Executive Summary

On April 3, 2007, Mayor Frank Breslin signed the U.S. Mayors Climate Protection Agreement as the Town Council fully committed to developing and implementing strategies to reduce greenhouse gas emissions. The Climate Action Advisory Commission was created to help the town pursue the goals of this agreement:

- 1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
- 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.
- 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.
- 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, and recovering landfill methane for energy production.
- 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money.
- 6. Purchase only Energy Star equipment and appliances for Town use.
- 7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or similar system.
- 8. Increase the average fuel efficiency of municipal fleet vehicles: reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to biodiesel.
- 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems, recover wastewater treatment methane for energy production.
- 10. Increase recycling rates in Town operations and in the community.
- 11.Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO2.
- 12.Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

The energy plan to achieve these goals must be flexible. As more data are accrued, more assets become available and more citizens participate, changes are to be expected.

The broad plan has 5 key strategies:

- 1. Lead by example. Municipal government will make its buildings and operations a model of energy efficiency and renewable energy while reducing energy costs.
- 2. Change the rules that influence energy use. Energy use is greatly affected by the municipal code. The Town will upgrade ordinances and

regulations to achieve more efficient energy use. Where appropriate, it will join with others to address issues beyond town boundaries.

- **3. Create programs to remove barriers to wiser energy use.** The Town will work with Xcel Energy, Holy Cross Energy, CORE, CLEER, the GEO and others to accelerate the transition to a clean energy future, offering programs to households and businesses that combine financing, technical assistance, and education.
- **4. Increase local renewable energy supplies.** The Town, will use its ability to access funding to act as a local energy producer and investor.
- **5. Cultivate clean energy jobs and businesses.** New Castle will pursue implementation of this energy plan in ways that strengthen the community's reputation for being green to attract green and sustainable energy enterprises.

Why a New Castle Energy Plan?

New Castle has a rich coal mining history marked by multiple explosions and front line participation in the labor movement. The Burning Mountain and the Coal Seam Fire are legacies of a century and more of our fossil fuel past. With new national and global challenges, opportunities, and priorities, New Castle is now making its first steps into the New Energy Economy of the 21st Century, featuring efficiency, conservation, and renewable energy. Despite the abundance of, indeed, in spite of the abundance of, fossil fuel supplies in our area, there are a number of reasons to pursue a low-carbon future:

1. Jobs and Economic Benefits

The vast majority of money spent on energy related bills immediately leaves the local economy. Finding ways for each household, business, and government operation to spend less on energy means funds can be used on other priorities, generating economic benefits. In addition, implementing clean energy alternatives is the new growth economy, and can be a significant source of jobs.

2. Energy Independence and Energy Security

The majority of the oil used in the United States is imported. Europe is dependent upon Russian energy supplies. OPEC oil profits support international terrorism. Energy independence is increasingly seen as one of the key components of a more peaceful world. Requiring less energy from far away places will insulate New Castle and the U.S. from inevitable energy price increases as finite fossil fuel supplies decline.

3. Local Solutions to Global warming

We will become an active part of the solution to global warming. Despite vocal naysayers, there is broad scientific consensus that anthropogenic global warming must be reversed to prevent disastrous climate change. It will be less costly to prevent greenhouse gases from reaching a tipping point than to pay for the economic and social upheavals which will occur after that tipping point.

4. Enhanced quality of life and livability

Implementing clean energy improvements also has near-term benefits on the quality of life in our community. Less pollution means fewer toxic chemicals entering our air, soils, and water, and thus fewer health risks. Our surrounding forests, lakes and streams will retain their esthetic beauty, and wildlife will benefit.

5. Solutions to the impacts of energy development

New Castle residents have long expressed concern for the impacts of resource development in our region; this plan backs up our words with action. However, that will not be enough to stop the coming environmental disaster brought by unlimited fossil fuel development in the West. Nationwide commitment to renewables and efficiency might be required to prevent the destruction of our region. We will need to engage in coordinated action with other stakeholders to be sure that energy development in the region is conducted responsibly, with maintenance of a strong regional economy and prevention of excessive environmental damage and public health problems.

6. Tapping unique local resources and success to date

Our region has a wealth of expertise and experience to draw from. People come from across the globe to take classes at Solar Energy International. Rocky Mountain Institute is world-renowned. Rising Sun employs some of the nation's best lighting efficiency experts. CORE has pioneered renewable energy funding mechanisms. Holy Cross Energy and Xcel Energy have exciting programs for efficiency and renewable energy. The Governor's Energy Office and Garfield County have programs for energy efficiency and renewable energy. CLEER, a recently formed regional non-profit, is taking the lead on energy issues in the valley. Many local architects and builders specialize in green design. There are several suppliers of solar photovoltaic systems. There are many new green businesses beginning operations in Garfield County. The Federal government is becoming more supportive of green initiatives. In short, our community is well positioned to make rapid progress on the clean energy initiative described below.

New Castle's Energy, Economic and Climate Protection Goals

Emissions reductions goals are an evolving science. We have based our emissions goals on those of other active climate protection cities. Goals will be refined as implementation of the plan moves forward. In addition to emissions goals our plan includes more qualitative goals. Our baseline year will be 2007, the first year for which data has been kept.

- Reduce emissions directly attributable to Town facilities and Town operations by at least 20% by 2010 through increasing energy efficiency in all buildings and operation, and increasing the percentage of renewables.
- Reduce community-wide (estimated) per capita CO2 emissions by 25% by 2012.
- Turn emissions reduction efforts into an economic advantage by reducing household, business, and local government energy bills; keeping money currently spent on energy within the local economy; and investing in existing jobs/creating new jobs tied to sustainable energy.
- Obtain at least 30% of our energy for heating & electricity from renewable sources by 2030.
- Develop a resource-efficient building ethic in New Castle modeled on the visionary plans developed by our neighbors, Carbondale and Pitkin County.

Energy Plan Actions

1. Town Government Actions: Lead by Example

Action Item 1.1: Create the organizational, human resource, and financing framework for ensuring this plan is turned into action over a 5-year timeframe. **Action Item 1.2:** Establish a Program for Energy Efficiency Retrofits in Municipal Buildings.

- Town will conduct energy audits of municipal operations to identify opportunities for saving energy and money.
- Town will invest in energy efficiency improvements on municipal facilities, prioritizing them based on audit recommendations.

Action Item 1.3: The Town commits to using best practices in energy efficiency and renewable energy in building all new buildings and operations, e.g. LEEDS or similar standard.

Action Item 1.4: The Town will measure and track annual energy consumption in facilities and track annual progress toward lower emissions. Energy costs and trends will be very transparent and reported on annually during the annual budget cycle. Town staff will see the energy bills associated with their department.

Action Item 1.5: The Town will increase the percentage of renewable energy by 50% by 2010, either through on-site renewable generation, or through purchasing more power from renewable sources.

Action Item 1.6: All new town vehicle purchases strive for most fuel efficient models; use biodiesel where practical.

Action Item 1.7: The Town will make bus passes available to those Town employees who can commute by bus.

Action Item 1.8: Town facilities and operations will be sited based on access by transit, walking, biking, and evaluated for encouraging more compact land uses. Action Item 1.9: The Town will support efforts to create affordable in-town housing for employees to reduce the need to commute.

Action I tem 1.10: The Town will continue to encourage Town employees to make intown trips on bicycle when practical.

Action Item 1.11: The Town will strive to use locally grown food for Town sponsored functions when practical.

2. Change the rules that influence how we use energy

Action Item 2.1: Adopt and implement public policies to increase energy efficiency, use of renewable energy, and reduce dependence on oil.

- Enforce existing codes to address energy efficiency and resource efficient practices.
- Upgrade the building code to encourage greater energy efficiency and use of renewable energy in all new buildings constructed in town. At a minimum, to adopt the current IECC.
- Continue to support mixed use developments on commercial projects to reduce transportation energy.
- Promote a leadership position for the Town and advocate our positions on renewable energy supply and efficiency issues.
- Actively work with other communities and any statewide efforts to improve regional, statewide, and national policies and laws influencing energy use.
- Review Town codes to ensure they do not conflict with the ethic to become more sustainable.

Action Item 2.2: Expand, adopt, and implement policies to encourage less oildependent, more climate friendly approaches to mobility and access.

- Reward compact land use patterns and development proposals that encourage less dependence on the automobile.
- Require all new development to provide convenient bike and walking access.
- Increase transit mode share by working regionally to upgrade transit: New Castle RFTA representative will encourage RFTA to develop a timeline, target dates, and implementation plan for expanded service on the Hogback Route.
- New Castle will work with RFTA, Garfield County, and the State of Colorado to develop a timeline and implementation strategy for creating an accompanying feeder transit system for in-town transit to increase local transit mode share. This should include a Park and Ride garage and improved pedestrian or bike access from south of the Colorado River. The pedestrian /bike access should receive maximum attention because of extreme danger to the public.

- Work with other communities and any statewide efforts to improve state policies to encourage a more climate friendly transportation system.
- Conduct ongoing publicity campaigns to promote sustainable transportation, including the promotion of biking and walking as major transportation modes within New Castle; make New Castle known for respecting and encouraging biking and walking.

3. Create programs to overcome barriers: Partner with utilities and others to remove barriers, encourage alternatives, increase access to resources and increase energy awareness:

There are numerous ways households and businesses can reduce energy use or tap renewable energy. But currently, better practices are not always implemented due to a variety of barriers:

- Lack of awareness
- Lack of technical know-how
- Lack of upfront financing to cover initial cost
- > Lack of motivation: issue does not rise to the top of the "to-do" list

Creating organized programs to package technical know-how and financing can make it much easier for households and businesses to implement improvements. A community campaign can also play a major role in increasing awareness and motivation to act on the information.

Action Item 3.1: Partner with Xcel, Holy Cross, CORE, NWCCOG, CLEER and other entities to provide a convenient source of financing and rebates information and technical information for residential and commercial customers.

- The Town will partner with these entities to encourage a household by household campaign to increase efficiency and tap renewables. Through this program every household in New Castle will be encouraged to implement improvements with the goal of 25% of all households in New Castle participating within the first two years. This action item may require staffing and/or support of local citizen environmental groups.
- The Town will partner with these entities to encourage a business by business campaign to increase efficiency and tap renewables. Through this program every business and commercial energy user in New Castle will be encouraged to implement improvements with the goal of 25% of all businesses and organizations in New Castle participating within the first two years. This action item may require staffing, and/or support of local citizen groups.

4. Increase local renewable energy supplies

Action Item 4.1: Pursue additional installations of PV's on public buildings. Action Item 4.2: Pursue Clean Renewable Energy Bonds or a privately funded venture to build a local renewable power station. Action Item 4.3: Actively encourage installation of renewable energy systems on private property through financing mechanisms and community campaign. Action Item 4.4: Consider purchases of green power to reduce GHG. Action Item 4.5: Pursue development of other local renewable supplies such as microhydroelectric or methane capture at the sewer plant.

Action Item 4.6: Support efforts to turn waste cooking oil into biodiesel.

5. Cultivate clean energy jobs and businesses focused on sustainable technologies, expertise, and education

Action Item 5.1: Work with the Chamber of Commerce to encourage the preservation of existing renewable energy jobs and encourage the creation of additional jobs tied into a sustainable energy economy:

- Create a supportive environment for businesses to build green and support green businesses.
- Develop informational materials to promote New Castle as a center of sustainable energy.
- Conduct outreach to state and national audiences of the resources New Castle offers for sustainable energy education; promote New Castle as an example of sustainable energy technologies.

Implementation and Financing

Plans get implemented when it is someone's responsibility to ensure the plan is implemented, when there are financial rewards for ensuring implementation, when the plan is backed up with support from organizations and policy makers, but ONLY when there is adequate financing. To ensure this document turns into action we need to answer "Who will do the work, who is responsible for moving items forward, and where does the funding come from?"

Possible organizational/staffing arrangements:

- In-house energy manager within Town Government, full time salary completely covered by Town government.
- Staffing is part of regional non-profit energy office, Town funds part of salary joining with other entities in a regional effort.
- Energy Services Company: Town contracts with a for-profit company.
- Individual contractors on a project by project basis.

It will take a team of resources to implement the plan, and it may require using a combination of several above-listed approaches.

> CAAC will provide volunteer guidance and recommendations.

Possible financing sources

Financing is required for staffing, management, and upfront costs of efficiency upgrades and installation of renewable energy systems. Here are potential sources of financing:

- **Franchise fees:** The Town received more than \$100,000 in franchise fees from energy utilities in 2008. The Town could choose to dedicate some or all these franchise fees toward creating a more energy-wise community.
- **Bonds:** In 2001 San Francisco voters overwhelmingly approved a landmark \$100 million bond initiative that paid for solar panels, energy efficiency and wind turbines for public facilities. The measure paid for itself entirely from energy savings at no cost to taxpayers. Visit www.votesolar.org to learn more.
- **Grants:** CORE has raised significant grant funds to date for energy improvements throughout the valley, and grants can be a valuable part of the funding mix.
- **Revenue-generating mechanisms:** It is possible to pursue a revenue generating mechanism such as Pitkin County's Renewable Energy Mitigation Program.
 - > Occupation tax: E.g., Qwest pays about \$7500 annually to New Castle.
- **Utilities:** Fully utilizing existing or emerging utility efficiency and renewable energy programs can also add to the pool of financial resources available.
 - > Severance tax: Could be applied to renewable projects.