



# Sustainability Committee

## Regular Meeting

### ~ Agenda ~

<http://www.townofboone.net/>

Jane Shook  
828-268-6960

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Thursday, June 11, 2020

5:30 PM

WebEx

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**This meeting will be held using WebEx, a video conferencing software. Information is provided below on how to either watch or participate in the meeting.**

**Watch the Meeting:** Anyone can view the Sustainability Committee meeting live at: <https://townofboone.viebit.com/?folder=ALL>

**Participate in Meeting:** Individuals who wish to speak during public comment can do so through WebEx either online or by phone. To do so, please email Jane Shook, Director of Planning & Inspections at [jane.shook@townofboone.net](mailto:jane.shook@townofboone.net) or call in at 828-268-6989 by the start of the meeting and you will be provided with an invite.

**Staff will moderate the WebEx session to ensure all participants have an opportunity to speak. Individuals who require user assistance registering or joining the WebEx event on the day of the meeting can call 828-268-6960 for support. Note: to preserve bandwidth and to ensure an orderly meeting, only individuals who wish to speak should use the WebEx link. Anyone who wants to watch the meeting, but not speak, should view the livestream at the link above.**

**I. Adoption of Agenda**

**II. Approval of Minutes**

February 13, 2020 Meeting Minutes

**III. Toolkit Discussion**

March 12, 2020 Draft Toolkit

**IV. Informal Discussion/Other Matters**

*Presentation on a Resolution of Plastics Proposal*

**V. Public Comment**

**VI. Adjournment**

**TOWN OF BOONE  
SUSTAINABILITY COMMITTEE  
MEETING MINUTES  
THURSDAY, FEBRUARY 13, 2020  
5:30 P.M.**

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**Members Present:** Vice-Chairperson Ben Scarboro, Quint David, John Prickett, Joan Brook and Lee Ball

**Town Council Liaisons Present:** Dustin Hicks, Nancy LaPlaca

**Staff Members Present:** Marty Little- Senior Planner and Marlene Crosby-Committee Secretary

**Others Present:**

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**Call to Order**

Vice-Chairperson Ben Scarboro called to order the Boone Sustainability Committee, held in the Planning and Inspections Department – Upstairs Conference Room located at 680 W. King Street at 5:42 p.m.

**Adoption of Agenda**

Member David made a motion, seconded by Member Prickett to adopt the agenda as written.

**Vote:**

Aye – All

Nay – None

**The motion passed.**

**Approval of Minutes**

Member Ball made a motion, seconded by Member Prickett to approve the January 9, 2020 meeting minutes as written.

**Vote:**

Aye – All

Nay – None

**The motion passed.**

**Old Business:**

**Toolkit Discussion**

Vice-Chairperson Scarboro began discussion on the proposed recommendations for the Toolkit to address the climate neutrality goal for Town of Boone municipal operations by 2030. Mr. Marty Little, Senior Planner, explained that he understood that at the last Sustainability Committee meeting, the decision was made that each individual member would work on their

Communication: February 13, 2020 Meeting Minutes (Approval of Minutes)

individual recommendations for the Town Departments which would capture the expertise of all of the various backgrounds of the Sustainability Committee members.

Member David reviewed the section of the Toolkit that outlined the Town goals and the background, municipal operations, process and intended results for each of the nine Town Departments.

Member David suggested focusing on proposed recommendations that relate to the toolkit on the current town goals which are climate neutrality and renewable energy within the timeline of the Town budget decisions that are made by the Council. He added that other recommendations could be made later for other Town goals.

Discussion ensued on Town-wide recommendations. Member David talked about the Boone Energy Summary and reviewed the toolkit information in the meeting packet. He talked about establishing an official Boone greenhouse gas (GHG) inventory to include which energy provider serves each building. The Sustainability Committee agreed that this work could possibly be outsourced to a professional company. The Sustainability Committee discussed recommending assigning a staff person in each department to serve as a Sustainability liaison to track the efforts of each department. Member Ball indicated that the Town already has enough information to create a proposed “climate neutrality” document to create a roadmap for the Town departments to follow. Member Ball said that we need to track more data for the Sustainability Committee to review and make proposed recommendations. Through discussion, the committee members suggested the following: using the energy star rating system; switching to electric vehicles or a minimum 40-plus mile per gallon hybrid wherever possible; tracking employee commuting miles in GHG calculations; introducing a work from home day or alternate employee four ten-hour work days per week; investigating housing and vehicle vouchers; retrofitting existing buildings to be at least fifty-percent more efficient; purchasing new appliances which have an energy star rating; establishing transportation plan for fleet; establishing a building plan for new buildings or maintenance of existing buildings; establishing an energy plan for the purchase of electricity; and creating a goal for coal reduction between now and 2030. Council Liaison LaPlaca noted that the current use of coal is at 30 percent. Member David suggested sending these proposed recommendations listed above along with the Town Department Head proposed recommendations to Council for their review.

Mr. Little suggested that the Sustainability Committee members read through all of the Town Departments listed in the draft toolkit and make a list of proposed recommendations. He said that the proposed recommendations can be emailed to the board secretary or himself.

Discussion ensued on prioritizing the proposed goals. Mr. Little said that all of the proposed recommendations can be compiled in the order that the Sustainability Committee prioritizes for committee work.

Discussion ensued on quantifying, reducing and offsetting the carbon footprint. The Sustainability Committee agreed that all Town Departments should reduce or offset the carbon footprint, wherever possible.

The Sustainability Committee agreed on creating short-, middle-, and long-term recommendations.

Council Liaison LaPlaca talked about reviewing emissions for each Town Department. She noted that she doesn't know how much work this would create but wanted to bring it to the table for discussion. She said the North Carolina Governor's office has information on emissions that would show the big picture of what is going on with emissions. Mr. Little explained that he thought that the Council's direction was to look at recommendations that each Town Department can do now.

Member David talked about possibly doing another survey that talks about the Town's sustainability goals such as recycling. He said if the Town does not have a goal for recycling, the Sustainability Committee could propose goals for recycling.

Discussion ensued on making recommendations for broader goals. Member Prickett talked about researching the overall energy usage for all the Town Departments as well as trying to get solar-powered energy into the Town. He also talked about looking for ways to reduce the use of gas consumption in the Town vehicles. Mr. Little said that it is his understanding that the Council wants the Sustainability Committee to look at low-hanging fruit types of things that can be improved now rather than looking at the broader picture.

Member Ball asked Mr. Little about the next assignment for the Sustainability Committee, after they submit the proposed toolkit recommendations for the Town Departments. Mr. Little said the Sustainability Committee has been directed to submit to Council their three top priorities that they want to work on as a committee.

#### **New Business:**

##### **Spring Speaker Series Focusing on Community Energy Planning**

Council Liaison Nancy LaPlaca informed the Sustainability Committee members of some upcoming events called the "Sustainable Energy Speaker Series" included in the meeting packet. The events are: "Promoting Clean Energy Through Community-Based Solutions" to be held on February 3, 2020 and "The Blue Horizons Project: Community Energy Planning in Action" to be held on Monday, March 16, 2020, both to be held in the Plemmons Student Union Room 420 Parkway Ballroom.

##### **Town of Boone Sustainability Forum ("Earth First Friday")**

Mr. Little informed the Sustainability Committee members of the upcoming "Earth First Friday" event, which is also the 50<sup>th</sup> anniversary of Earth Day. He asked them for their input on what date and location that they would like to see this event occur on.

Discussion ensued on the “Earth First Friday” event date. Member David and Member Brooks suggested to have it on first Friday, April 3, 2020 to reach the casual and non-sustainability type people. Member Ball suggested possibly having it on April 24, 2020, which is Appalachian State University’s Earth Day event. The Sustainability Committee suggested three dates to have the Town’s “Earth Day” event. The dates are, in order of most preferable: April 3, April 22, or April 24, 2020.

Discussion ensued on the location of the “Earth First Friday” event. Member David suggested having the event at a town parking lot or at the Jones House. The Sustainability Committee agreed that they preferred to have the event at the Jones House to avoid conflict with the Downtown business owners. Vice-Chairperson Scarboro suggested that the Town invest in a large tent to have for various Town events.

**Other Matters by Committee Members or Staff**

There were no other matters discussed at this meeting.

**Adjournment**

Member David made a motion, seconded by Member Brooks, to adjourn the meeting at 7:15 p.m.

**Vote:**

Aye – All

Nay – None

**The motion passed.**

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**Ben Scarboro, Vice-Chairperson**

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**Marlene Crosby, Board Secretary**

# Draft Toolkit

## Town of Boone

### Sustainability Committee

February 13, 2020

#### Stated Town Goals

- Climate neutrality for Town of Boone municipal operations by 2030
- 100% renewable energy for municipal operations by 2040
- 100% renewable energy for the Town of Boone community by 2050

#### Background

At the April 18, 2019 Boone Town Council meeting, the Town Council adopted the sustainability goals listed above in an effort to address climate change at the local level. The three goals are focused on two tiers of scope: municipal operations, which includes day-to-day functions of the Town of Boone as an organization and its employees, and the community as a whole. In order to address the first goal, climate neutrality for municipal operations by 2030, the Town Council charged the Boone Sustainability Committee with learning about the Town's daily tasks and recommending steps each department could take in order to move closer to achieving climate neutrality in the specified timeframe. These recommendations, as Council directed, should take the form of a toolkit, where each department could access a menu of opportunities in pursuit of neutrality.

#### Town of Boone Municipal Operations

The Town of Boone is comprised of nine departments, which serve in a wide range of capacities. These departments are made up of Administration, Finance, Fire, GIS, Human Resources, Planning & Inspections, Police, Public Works, and Cultural Resources. The energy needs of the Town of Boone vary greatly between several departments, as they perform unique functions for the community (for example: Public Works, which includes streets/sidewalk maintenance crews and the Wastewater Treatment Plant, has different needs than the Police Department, just as the Fire Department differs in needs from Planning & Inspections, and so on). While some recommendations apply to a broad range of municipal services, the Sustainability Committee recognized that others must be tailored to certain departments specifically.

## Process

In learning about the functions of each department, the Sustainability Committee hosted several meetings with the Town Manager and each department head individually over the course of 2019. The departments housed in Town Hall were combined, as their energy needs are very similar. The framework for each meeting consisted of a presentation by the Town Manager and/or department head, discussion and questions from the Sustainability Committee, and finally a discussion of potential recommendations for the presented department as well as Town operations on a larger scale.

## Intended Results

This toolkit aims to address, at least partly, Town Council's goals of climate neutrality for municipal operations by 2030 by presenting the Council with a list of recommendations for implementation through Town-wide and department-specific policy. This toolkit is not intended to be a cure-all for Boone's climate needs, but may serve as a first step towards policy and behavioral changes that increase the Town and its employees' awareness of climate change, and how daily tasks impact the bigger picture. This toolkit is meant to be a catalyst for greater sustainability practices in the Town of Boone.

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Executive Summary

Town Wide Recommendations

Planning & Inspections

Town Hall (Administration, Finance, Utility Billing, Human Resources, Downtown Coordinator, Downtown Police, & Parking)

Cultural Resources

Public Works

Police

Fire

Conclusions

Appendix

## Executive Summary

To be completed at the end of the draft.

## Town-wide Recommendations

### Summary

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Discussion

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Staff Recommendations

- Explore incentive programs for employees who
- Explore alternative work hours for employees (four 10-hour days vs. five 8-hour days)
- Analyze energy bills for each Town-maintained building; ask about viewing demand charges
- Prioritize non-gasoline or hybrid alternatives when purchasing new vehicles
- Convert interior lights to LED wherever possible
- Explore incentives for employees who live in city limits for within a certain distance to town
- Track employees' miles traveled and include in overall gas mileage inventory
- Purchase local food and beverages for Town events
- Ensure all supplies for Town events are recyclable or compostable and limit/remove plastic/Styrofoam

## Planning & Inspections

### Summary

#### **Built Environment:**

#### **Climate and energy:**

#### **Economy and Jobs:**

#### **Education/Arts/Community:**

#### **Equity and Empowerment:**

#### **Health and Safety:**

#### **Natural Systems:**

### Discussion

#### **Built Environment:**

#### **Climate and energy:**

#### **Economy and Jobs:**

#### **Education/Arts/Community:**

#### **Equity and Empowerment:**

#### **Health and Safety:**

#### **Natural Systems:**

### Staff Recommendations

- Evaluate department mailings that are not required by law and determine other means of notifications beside mailings
- Explore digital alternatives to printing meeting agenda packets

Town Hall (Administration, Finance, Utility Billing, Human Resources, Downtown Coordinator, Downtown Police, & Parking)

## Summary

### **Built Environment:**

### **Climate and energy:**

### **Economy and Jobs:**

### **Education/Arts/Community:**

### **Equity and Empowerment:**

### **Health and Safety:**

### **Natural Systems:**

## Discussion

### **Built Environment:**

### **Climate and energy:**

### **Economy and Jobs:**

### **Education/Arts/Community:**

### **Equity and Empowerment:**

### **Health and Safety:**

### **Natural Systems:**

## Staff Recommendations

- Explore possibility of cloud data storage
- Explore digital alternatives to printing Council agenda packets
- Combine other town notifications in utility bills
- Allow residents to opt out of mailings and receive notifications electronically

## Cultural Resources

### Summary

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Discussion

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Staff Recommendations

- Upgrade toilets
- Replace windows with double-pane windows (within historic designation)
- Upgrade refrigerator to a more energy efficient model
- Continue to look for alternatives for dog waste disposal bags
- Continue to look for ways to reduce packaging and waste for event giveaways

## Public Works

### Summary

#### **Built Environment:**

#### **Climate and energy:**

#### **Economy and Jobs:**

#### **Education/Arts/Community:**

#### **Equity and Empowerment:**

#### **Health and Safety:**

#### **Natural Systems:**

### Discussion

#### **Built Environment:**

#### **Climate and energy:**

#### **Economy and Jobs:**

#### **Education/Arts/Community:**

#### **Equity and Empowerment:**

#### **Health and Safety:**

#### **Natural Systems:**

### Staff Recommendations

- Monitor when non-gasoline alternatives become available for specialized vehicles
- Explore alternative methods for drying solids at the wastewater treatment plant as expansion becomes necessary
- Explore other ways to advertise and provide education on toilet rebate program
- Consult engineer on developing technologies for raw water system

## Police

### Summary

**Built Environment:** Getting a new net-zero building so n/a for now

**Climate and energy:** Add actual employee miles to GHG inventory. What emissions from the GHG inventory can't be offset due to safety issues, so we can address those separately, i.e. police cruisers etc. If electric bikes work well, we should get more.

**Economy and Jobs:** Job retention strategy and living wage update.

**Education/Arts/Community:** Updated community event budget and free tickets for employees/families to town events.

**Equity and Empowerment:** Ensure poverty/civil rights/human services training avail for officers.

**Health and Safety:** Big one for this dept. Resilience plan issues- top 10 issues department notes i.e. dangerous intersection needs improvement, drug use going up, elderly & accessibility around town etc. etc.

**Natural Systems:** Any storm-water or other issues the town needs to address, since this dept sees them first?

### Discussion

#### **Built Environment:**

Looks like they have done some energy efficiency upgrades, and the new building will be net zero. New heat pumps are much better than older ones, so I always advise folks to price that out. In a building they may not be in soon likely not worth worrying too much over.

#### **Climate and energy:**

Already going paperless where possible, not sure what other 'waste' the dept might make. I will always recommend more digital when possible. Have some data on greenhouse emissions, most cities also keep up with employee travel emissions separately. Maybe come up with a mitigation plan for the emissions we can't get rid of, i.e. extra renewable or trees, offsets etc. Frankly the current police office is a great place to showcase some solar, but if we are leaving the building hopefully the new one will have some as well. If they are excited about electric bikes, then get them all one. For many departments their largest emissions source might actually be their employees driving into work- recording this even if just a guesstimate in miles driven each day would be a good start as part of reporting. We see it for the PD because they let folks take cars home, but every department likely has this same issue.

#### **Economy and Jobs:**

We did seem to have some employee retention issues. Maybe looking at workload, pay scale/studies, and exit interviews of why folks leave. For example, if they can't find affordable family housing nearby, we need to look into it and do something about it. If they are underpaid and always leave for a pay bump we

need to look into it. Having a reliable and sustainable police dept needs reliable and sustainable employees as well.

#### **Education/Arts/Community:**

Diversity, Community cohesion, historic preservation. Officers are present at many local events, so maybe a program to not only allow them to attend for work but also tickets/passes for them and their families as well. Coffee with a cop events are going well but maybe some extra budget for more community-cohesion type events for them to attend?

#### **Equity and Empowerment:**

Not sure what poverty and civil rights training our officers go through, but they are the front lines for a lot of this stuff on the street so it is extremely important they are trained and know what they represent when dealing with these issues every day. We sort of glanced off this but poverty and inequality issues are a big deal in this community.

#### **Health and Safety:**

This is a big one for this dept as well as the fire dept. Safe communities, emergency management, hazard mitigation, and preparedness for weather are issues our community needs to have a plan for in order to be resilient and sustainable. What might be interesting here is a yearly review of issues the dept is noticing increasing or decreasing in the community, and making sure the council is aware of it. Years back we had a town/gown committee talk about suicide and drug use and it was very eye-opening, but what changes did we actually make to deal with those changing issues? What is the #1 safety issue in Boone? Traffic? Heroin? High blood pressure? This department has the ability to make a big impact in this category of community sustainability, if we give them the chance. What are the top 5 intersections that could use safety improvement?

#### **Natural Systems:**

Green infrastructure and water come up here in relation to public safety. I know some of our folks are swift-water certified due to the flooding that happens in our area. Focusing on safety issues since this is the police dept, what areas would they recommend improvements being made if there is a spot where folks are getting flooded too often? An ounce of prevention is worth a pound of cure etc. etc.

#### **Staff Recommendations**

- Continue purchasing electric assist bicycles when available
- Investigate and test non-gasoline patrol cars

## Fire

### Summary

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Discussion

**Built Environment:**

**Climate and energy:**

**Economy and Jobs:**

**Education/Arts/Community:**

**Equity and Empowerment:**

**Health and Safety:**

**Natural Systems:**

### Staff Recommendations

- Electric vehicle to conduct non-emergency uses, such as fire inspections and travel
- Increase preparedness and planning
- Video conference for stations to allow training to be conducted without movement of apparatus between stations
- Solar water heater for station #1 and #3
- Continue the upgrade of lighting to LED in apparatus storage areas
- Network recommendations:
  - Virtualization of servers
  - Improved connectivity between facilities
  - Centralized locations

## Conclusion

To be completed at the end of the draft.

## Appendix

Department summary materials and minutes of department meetings

# SUSTAINABLE ENERGY SPEAKER SERIES

Communities Leading the Way Toward Clean Energy



## ***Dionne Delli-Gatti***

*Director of Regulatory and Legislative Affairs and Southeast Climate and Clean Energy initiatives at the Environmental Defense Fund*

## ***Promoting Clean Energy Through Community-Based Solutions***

**Monday, February 3 | 4:00-5:00pm**

PSU Room 420 Parkway Ballroom



## ***Sophie Mullinax***

*Project Coordinator for the Blue Horizons Project*

## ***The Blue Horizons Project: Community Energy Planning in Action***

**Monday, March 16 | 4:00-5:00pm**

PSU Room 420 Parkway Ballroom



Communication: February 13, 2020 Meeting Minutes (Approval of Minutes)

More information at **[energy.appstate.edu](http://energy.appstate.edu)**

# Draft Departmental Sustainability Toolkit

Town of Boone

Sustainability Committee

March 12, 2020

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## Intended Results

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## Executive Summary

This document addresses each Town Department through the lens of the STAR Communal Rating System framework. This framework -which provides evaluation measures for community-scale sustainability- can be found noted under the heading of each department. While these recommendations are largely geared toward the Built Environment and Climate and Energy categories in order to address the specific goal of municipal climate neutrality, the Sustainability Committee feels it is important to keep the other aspects of sustainability available as a reference. Each recommendation included in this document, like any and all other sustainability policies the Town Council should investigate, affects more than one subdiscipline of the topic of sustainability. That said, the recommendations included herein are tailored so as to provide either a first- or second-order impact on municipal climate neutrality.

To be completed to include key findings at the end of the draft.

# Town-wide Recommendations

|                   |                      |                  |                 |                |                 |                              |
|-------------------|----------------------|------------------|-----------------|----------------|-----------------|------------------------------|
| Built Environment | Equity & Empowerment | Climate & Energy | Health & Safety | Economy & Jobs | Natural Systems | Education, Arts, & Community |
|-------------------|----------------------|------------------|-----------------|----------------|-----------------|------------------------------|

## Sustainability Committee Recommendations

- Establish official Boone greenhouse gas inventory (not completed by committee or staff)
  - Include which energy provider serves each building
- Assign staff person in each department to serve as sustainability liaison to keep track of department efforts
- Have staff participate in energy star rating system to determine how their department building scores
- Switch to electric vehicles or minimum 40+ miles per gallon (MPG) wherever possible
- Track employee commuting miles in greenhouse gas (GHG) calculations
- Research benefits of a work from home day, or alternate employee four 10-hour work days per week
- Investigate housing and vehicle vouchers
- Establish official Boone GHG inventory (not completed by committee or staff)
- Retrofit existing buildings to at least 50% more efficient (energy star rating)
- Every new appliance should be energy star certified
- Quantify, reduce, offset:
  - Quantify emissions and address through reduction
  - Reduce wherever possible
  - Offset the rest
- Establish transportation plan for fleet
- Establish building plan for new buildings/maintenance of existing buildings
- Establish energy plan for purchase of electricity
- Have a goal of coal reduction between now and 2030; currently use 30%

## Staff Recommendations

- Explore incentive programs for employees who live in town limits
- Analyze energy bills for each Town-maintained building; ask about viewing demand charges
- Prioritize non-gasoline or hybrid alternatives when purchasing new vehicles
- Convert interior lights to LED wherever possible
- Explore incentives for employees who live in city limits for within a certain distance to town
- Track employees' miles traveled and include in overall gas mileage inventory
- Purchase local food and beverages for Town events
- Ensure all supplies for Town events are recyclable or compostable and limit/remove plastic/Styrofoam

## Planning & Inspections

Built  
Environment

Equity &  
Empowerment

Climate &  
Energy

Health &  
Safety

Economy &  
Jobs

Natural  
Systems

Education, Arts, &  
Community

### Sustainability Committee Recommendations

- Replace paperwork (forms, records, etc) with electronic copies after having established proper cyber security. May require lobbying with state
- Use geothermal heating/cooling for all new buildings
- Use ambient lighting as feasible
- Advocate/encourage the construction of townhomes to provide affordable housing for local families and town workers in particular
- Require sufficient drainage for all new construction to prevent local flooding. Advocate the use of water gardens for landscaping
- Require adequate parking for all new construction
- Install car charging stations
- Consider the possibility of solar farms in flood areas, around the water treatment plant and other restricted use land
- Promote walking and biking opportunities and safety as a way to reduce traffic
- Do an energy audit of town buildings to identify leak, gaps in insulation

### Staff Recommendations

- Evaluate department mailings that are not required by law and determine other means of notifications beside mailings
- Explore digital alternatives to printing meeting agenda packets

## Town Hall (Administration, Finance, Utility Billing, Human Resources, Downtown Coordinator, Downtown Police, & Parking)

|                      |                         |                     |                    |                   |                    |                                 |
|----------------------|-------------------------|---------------------|--------------------|-------------------|--------------------|---------------------------------|
| Built<br>Environment | Equity &<br>Empowerment | Climate &<br>Energy | Health &<br>Safety | Economy &<br>Jobs | Natural<br>Systems | Education, Arts, &<br>Community |
|----------------------|-------------------------|---------------------|--------------------|-------------------|--------------------|---------------------------------|

### Sustainability Committee Recommendations

- Support the use of electric buses as soon as the technology becomes cost effective
- ace paperwork (forms, records, etc) with electronic copies after having established proper cyber security.
- Establish a bonus program for all town workers for providing actionable energy saving ideas
- Establish a yearly energy reduction goal for each department
- Restrict use of plastic and non-reusable bags in town, and initiate a program to give suitable reusable bags to public
- Establish a best practices committee in town/each department to collect ideas form departments, town, county, and surrounding areas
- Convert to all LED lighting in buildings
- Explore “work tax”, or other incentive program for getting employees to live in town limits
- Consider costs of replacing and training new employees, as well as cost of loss of institutional knowledge, when considering job retention strategies
- Explore work-from-home options
- Put instant-on hot water heater in town building in place of traditional tank systems
- Consider closing a street downtown during the summer to encourage walkability
- Replace town vehicles as needed first with hybrids and ultimately electric vehicles when the technology and maintenance records prove feasible
- Establish a Boone Safety Committee to inspect town buildings and practices on a regular basis to reduce the cost of unsafe practices
- Use heat exchangers in town buildings for air exchange to conserve energy
- Install “solar” shade window coatings to block excess radiant heat and/or to provide insulation

### Staff Recommendations

- Explore possibility of cloud data storage
- Explore digital alternatives to printing Council agenda packets
- Combine other town notifications in utility bills
- Allow residents to opt out of mailings and receive notifications electronically

## Cultural Resources

Built  
Environment

Equity &  
Empowerment

Climate &  
Energy

Health &  
Safety

Economy &  
Jobs

Natural  
Systems

Education, Arts, &  
Community

### Sustainability Committee Recommendations

- Preserve the traditional appearance of downtown in order to maintain tourism
- Promote the farmers market and the local food pantries as a way to improve quality of life in Boone

### Staff Recommendations

- Upgrade toilets
- Replace windows with double-pane windows (within historic designation)
- Upgrade refrigerator to a more energy efficient model
- Continue to look for alternatives for dog waste disposal bags
- Continue to look for ways to reduce packaging and waste for event giveaways

## Public Works

Built  
Environment

Equity &  
Empowerment

Climate &  
Energy

Health &  
Safety

Economy &  
Jobs

Natural  
Systems

Education, Arts, &  
Community

### Sustainability Committee Recommendations

- Complete replacement of streetlights with LEDs
- Negotiate with power companies as to the cost assigned based on the reduced energy demand
- Consider hiring a consultant for the water treatment plant to propose a more energy efficient process to avoid the cost of energy in drying solid waste
- Improve recycling education

### Staff Recommendations

- Monitor when non-gasoline alternatives become available for specialized vehicles
- Explore alternative methods for drying solids at the wastewater treatment plant as expansion becomes necessary
- Explore other ways to advertise and provide education on toilet rebate program
- Consult engineer on developing technologies for raw water system

# Police

Built  
Environment

Equity &  
Empowerment

Climate &  
Energy

Health &  
Safety

Economy &  
Jobs

Natural  
Systems

Education, Arts, &  
Community

## Sustainability Committee Recommendations

- Replace paperwork (forms, records, etc) with electronic copies after having established proper cybersecurity
- Gather and track data on work-day emissions, and identify which emissions cant be offset due to safety issues and address those separately
- Gather and track data on employee emissions (add actual employee miles to GHG inventory)
- Identify retention issues, looking at workload, pay scales, and conducting exit interviews to determine why officers are choosing to leave
- Explore a program to supply officers and their families with tickets and passes to events
- Explore more events like Coffee with A Cop for more community cohesion
- Ensure police officers are properly conducting or attending poverty, civil rights, and equity training. This department has the ability to make a big impact in this category of sustainability
- Establish and maintain a list of issues officers on the ground are noticing while on the job. Compile and compare issues to determine which issues need addressing the most
- Increase number of officers that are swift water certified for water rescues during flood events
- Increase the number of electric bicycles
- Add another hybrid police car

## Staff Recommendations

- Continue purchasing electric assist bicycles when available
- Investigate and test non-gasoline patrol cars

# Fire

Built  
Environment

Equity &  
Empowerment

Climate &  
Energy

Health &  
Safety

Economy &  
Jobs

Natural  
Systems

Education, Arts, &  
Community

## Sustainability Committee Recommendations

- Consider if it's possible to use some type of gray water system to replace the large amount of potable water used to clean equipment
- Explore the possibility of improving insulation on the old stations to save energy

## Staff Recommendations

- Electric vehicle to conduct non-emergency uses, such as fire inspections and travel
- Increase preparedness and planning
- Video conference for stations to allow training to be conducted without movement of apparatus between stations
- Solar water heater for station #1 and #3
- Continue the upgrade of lighting to LED in apparatus storage areas
- Network recommendations:
  - Virtualization of servers
  - Improved connectivity between facilities
  - Centralized locations

## Conclusion

To be completed at the end of the draft.

## Appendix

Department summary materials and minutes of department meetings