



CITY OF HENDERSONVILLE
ENVIRONMENTAL SUSTAINABILITY BOARD
City Hall - Assembly Room | 160 6th Ave E | Hendersonville NC 28792
Thursday, October 26, 2023 – 3:30 PM



AGENDA

1. CALL TO ORDER

A. Call To Order - Kelly Phale, Chairperson

2. WELCOME NEW MEMBER

A. Welcome new member - Kelly Pahle, Chair

3. APPROVAL OF AGENDA

A. Approval of agenda

4. APPROVAL OF MINUTES

A. Approval of October minutes

5. PUBLIC COMMENT

A. Public comment - 10 minutes

6. STAFF LIAISON UPDATE - Caitlyn Gendusa, Sustainability Manager

A. Asheville's Sustainability Board Annual Meeting (10 minutes)

B. Sustainability Plan Review Discussion (3 minutes)

C. Board review of Policy on Building Efficiency Standard Requirements for All New Municipal City Construction & Renovation (30 minutes)

7. CITY COUNCIL UPDATE - Lyndsey Simpson, Council Woman

8. SUBCOMMITTEE UPDATES

A. Hendo EarthFest – Ann Twiggs & Frank Stewart, Members (5 minutes)

B. Waste Reduction – Virginia Tegel, Member (5 minutes)

9. OLD BUSINESS

A. Tree Ordinance Review - Virginia Tegel, Member (10 minutes)

B. Parks & Greenspace Master Plan Update - Virginia Tegel, Member (5 minutes)

10. ADJOURNMENT

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.



CITY OF HENDERSONVILLE
ENVIRONMENTAL SUSTAINABILITY BOARD
 City Hall Chambers | 160 6th Ave E. | Hendersonville NC 28792
 Thursday, September 21, 2023 – 3:30 PM



AGENDA

1. CALL TO ORDER

- A. Call To Order; Kelly Pahle, Chairperson

Ann called the meeting to order at 3:33p.m.

2. APPROVAL OF AGENDA

- A. Approval of agenda

Virginia motioned to approve first followed by Jill.

3. APPROVAL OF MINUTES

- A. Meeting Minutes; Environmental Sustainability Board meeting August 17, 2023

Marcia motioned to approve first followed by Mary Ellen.

4. PUBLIC COMMENT

Virginia requests that a bike rack is installed at City Hall. Caitlyn is checking to see if there is any in storage and if this can be requested for FY25 budget. No other public comments.

5. PRESENTERS

- A. Crystal Cauley, Bird Sanctuary at Brooklyn Creek and Wildlife Habitat Certification - 10 minutes

Board unanimously approved the Wildlife Habitat Certification and future recognition of Wild Birds Unlimited for providing matching funds for the bird sanctuary.

Future efforts of bird sanctuary: Crystal would like 3 benches at sanctuary and is looking at expanding to a second location at Four Seasons Rotary Park. Caitlyn suggested the board consider in FY25 budget if funds should be requested for these improvements.

6. STAFF LIAISON UPDATE

- A. Litter Sweep Weeks - Caitlyn Gendusa, Sustainability Manager
- B. Brooklyn Creek Community Garden - Caitlyn Gendusa, Sustainability Manager
- C. Building efficiency projects (energy audit and policy) - Caitlyn Gendusa, Sustainability Manager

7. CITY COUNCIL UPDATE

A. Mayor Pro-tem, Lyndsey Simpson

- Plastic bag and styrofoam regulation discussion with MountainTrue and request for E.S.B. member to keep up to speed on progress/next-steps

Due to recent development with proposed state budget that would prohibit local government regulations in waste management, Councilmember Simpson would like to hold off on board involvement but would like to keep up to date on any new developments on the topic. Caitlyn will forward background information to board.

- Neighbors for More Neighbors Case for Support

Representative will present to board on this topic at the November meeting. The board is very interested in being involved in housing needs for the City. Caitlyn will email affordable housing background research she completed.

8. BOARD MEMBER UPDATES

A. Mayor's Monarch Pledge: Marcia Shaffer, board member

Councilmember Simpson is checking on Blue Ridge Community College plants and when they will be ready for a plant giveaway event.

The pledge requirements are fulfilled for this year and options were presented for next year. New cycle starts in December. Marcia advised the board votes on who will ensure we meet the program requirements for 2024.

B. Waste Reduction: Virginia Tegel, board member

Virginia is investigating a pilot compost drop off location at a nearby church. Virginia also voiced we should ensure compost is kept locally and not able to be sold for profit when presenting on Asheville's model.

Food Waste Solutions WNC conference coming up. Board members can visit wncfoodwaste.org if interested in attending.

9. SUBCOMMITTEE UPDATES

A. Hendo Earth Fest - Ann Twiggs and Frank Stewart, chair members

First meeting is Friday September 29th at 10:30a.m.

Virginia volunteered to handle volunteer coordinating for event.

10. NEW BUSINESS

A. Sustainability Strategic Plan energy section review, Caitlyn Gendusa - staff liaison

Topic will be discussed at the October board meeting.

11. ADJOURNMENT

Marcia motioned to adjourn first followed by Jill.

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2024 Sustainability Advisory Committee Goal Setting

SAC's Purpose

1. **Policy Development:** Provide guidance to the Mayor and Council on institutionalizing environmentally sustainable practices by evaluating and proposing policies that support City sustainability commitments.
2. **Education:** Increase awareness of energy and environmental sustainability by developing and recommending activities aimed at promoting sustainable behaviors across the community.
3. **Partnership:** Facilitate and encourage public and private partnerships that improve the effectiveness of efforts to create a more environmentally sustainable future.

MCAP Year 1 High Impact Activities

- Activity 1: Continue Installation of Renewable Energy Resources on Municipal Property*
- Activity 5: Incorporate Equity and Sustainability into Processes to Address Aging Infrastructure
- Activity 7: Establish a Policy for the Purchase, Sale, or Adaptive Reuse of Highly Vulnerable or Underutilized Assets
- **Activity 9: Integrate Climate Justice, Equity, and Resilience Best Practices into All Hazards Planning Committee and Emergency Response Plans and Operations**
- **Activity 10: Enhance Stormwater Control Measures for City-Owned Property**
- Activity 12: Utilize Green Fleet Policy for Fleet Electrification
- Activity 14: Use Climate Justice and Sustainability Tools for Planning and Decision Making*
- Activity 15: Monitor and Engage in State-Level and Utility Policies on Climate and Sustainability*
- **Activity 17: Conduct Solid Waste Master Planning Process**
- **Activity 18: Utilize Urban Forestry Practices on City Land in Priority Neighborhoods to Reduce Heat Island Impacts and Sequester Carbon**
- **Activity 20: Conduct Programs for Food Production, Community Gardening, and Edible Plantings on Public Lands***
- **Activity 21: Make Climate and Sustainability-Related Data and Progress Towards Goals Publicly Accessible**

*indicates ongoing high impact activities

Sustainability Organizational Work Plan Priorities for FY 2022-2023

- ★ Municipal Climate Action Plan (MCAP) Phase I: Tracking and Reporting
- ★ Integration of the Climate Justice Initiative into City Operations
- ★ Single-Use Plastic Reduction Project

2023 Annual Goals (from the 2022 Annual Report)

1. Evaluate and determine clean energy and energy efficiency projects and initiatives that may be expedited based on funding and other incentives in the Inflation Reduction Act, IRA. This effort could substantially accelerate the community's progress toward the 100% renewable energy goal.
2. Prioritize support for energy projects and initiatives that will contribute to the community's resilience to climate change.
3. Establish partnership with Asheville Area Redevelopment Commission to increase community awareness and education of stormwater and green infrastructure.
4. In collaboration with the Sustainability Department and other groups, evaluate ways to provide education for the community on how to improve our Climate Resilience.
5. Participate in the development of the Continuity of Operations Plan (COOP) and Emergency Operations (EOC) plan
6. Continued support, outreach, and education on the Food Scraps Drop-Off program.
7. Continued support of neighborhood community education for recycling program improvements with an emphasis on public housing (engagement, education, functionality etc).
8. Support educational efforts and engagement with local groups regarding adoption of a single-use plastic reduction ordinance.

City Council Annual Priorities

- ★ Homelessness Strategies
- ★ Equitable and Affordable Housing and Stability
- ★ Neighborhood and Climate Resilience
- ★ Reparations
- ★ Reimagining Public Safety
- ★ Improve and Expand Core Services



POLICY ON BUILDING EFFICIENCY & SUSTAINABILITY REQUIREMENTS FOR ALL NEW MUNICIPAL CITY CONSTRUCTION AND RENOVATIONS

Introduction and Purpose

- Incorporate green building standards into all facilities constructed and owned by the City of Hendersonville to demonstrate the City's commitment to sustainable building design in its own building practices and policies;
- Reduce energy costs by maintaining energy efficiency standards; and
- Take advantage of federal tax credits and utility rebates available for energy efficient buildings.

Requirements

Exterior Design and Construction

- Associated parking lots shall be constructed to be electric vehicle supply equipment (EVSE) capable. This includes:
 - o Electric panel capacity, dedicated branch circuit that is not less than 40-ampere and 208/240-volt, and continuous raceway both underground and surface mounted to enable the future installation of electric vehicle supply equipment.
 - o Building and associated area shall be designed as solar PV ready. This includes:
 - Adequate electrical conduit from the roof, ground, or parking lot to the electrical room to accommodate roof, ground mounted, and/or parking lot solar;
 - Designated space in electrical panel for future solar interconnection or for 2nd electrical panel or sub-panel;
 - Designated space outside or in electrical room for PV system equipment such as inverters and transformers for adequate cooling; and
 - Design roof to accommodate additional load requirement for PV system.
 - Solar orientation (direction and angle) should be included as a building design consideration for new construction.
 - o For renovations: When installing, ensure the existing roof is in a condition to adequately support the PV system's full lifespan without needing repairs or replacement that would require disassembling the PV system.
- 20% of the total area of new parking lots shall be constructed with pervious pavement/paver systems
- Must install at least 1 bike rack for every 1,500 square feet of building area.
- Roof must be EnergyStar certified

- Design landscaping in a way that reduces water use, manages stormwater, and enhances biodiversity which may include but is not limited to:
 - o Plants specified on the Tree Board's Recommended Landscape Species List;
 - o Invasive plants prohibited;
 - o Utilize smart irrigation instead of spray;
 - o Where possible, source trees with larger canopy to increase wildlife habitat potential; or
 - o Minimize sod/turf to decrease water and maintenance.
 - o Utilize green infrastructure in site design to mimic the predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain stormwater runoff on-site.
- Incorporate rainwater harvesting systems into all new facilities that will require irrigation or have equipment/vehicle washing stations on-site.

Interior Design and Construction

- Lighting
 - o All interior and exterior lighting is LED
 - o Exterior lighting for new construction shall be Dark Sky compliant.
 - o Motion sensing lighting required at frequently visited communal areas such as but not limited to public restrooms and/or kitchens.
 - o Consider lighting controls that allow for automatic or remote turn off or dimming when not needed.
- Heating & Cooling
 - o HVAC
 - Units shall have minimum rating that includes:
 - Central AC: 15 SEER rating or higher
 - Heat pump: 10.5 Heating Seasonal Performance Factor, HSPF or higher
 - Gas Furnace: 94 HSPF or higher
 - Boiler and/or oil furnace: 90 Annual Fuel Utilization Efficiency, AFUE or higher
 - Procurement process shall prioritize efficient electric equipment such as conventional heat pumps and mini split heat pumps.
 - Units shall have low-impact refrigerants or no refrigerants where possible.
 - o Where economically feasible, boilers shall not be used with a preference for solar hot water heaters and on demand water heaters where practical.
 - o Smart thermostats are required in areas that enable personal preferences in temperature control.
 - o Prior to procurement, a 5 year cost analysis shall be completed to consider the overall cost savings and environmental impacts either by the contractor or Sustainability Manager.
- Windows shall have a minimum U factor of ≤ 0.30 and SGHC ≤ 0.40 unless deemed as a historic building.
- Insulation shall have a minimum R-value which includes:
 - o Attics: R38 to R60
 - o Floors: R25 to R30
 - o Walls: 2x4: R13 to R15 or 2x6: R19 to R21

- Crawlspace: R25 to R30
- Plumbing
 - Plumbing fixtures shall not exceed the following flow rates:
 - Water closets = 4.8 L / flush
 - Urinals = 0.5 L / flush
 - Lavatory faucets = 1.9 L / min
 - Kitchen faucets = 5.7 L / min
 - Showers = 5.7 L / min.
- Appliances
 - Dishwashers, refrigerators, and washing machines must be EnergyStar certified
- Ambient and indoor air quality
 - Paint shall not exceed 50 g/l of volatile organic compounds, VOC's. Industrial maintenance safety coatings shall not exceed 480 g/l of VOCs.

Note: Standards were derived from best practices stated in Leadership in Energy and Environmental Design, LEED, U.S. Department of Energy: Energy Efficiency and Renewable Energy, and Bicycle Parking Ordinances for Top Bicycle Friendly Cities