Clean Energy Resolution and Sustainability Updates

Town Board Workshop
January 22, 2024

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Clean Energy Resolution 2017

The Town of Hillsborough, North Carolina shall establish a transition from fossil fuel-powered operations to 100% clean/renewable energy by December 31, 2050, or sooner and 80% clean, renewable energy by 2030, to build a more resilient community, promote an environmentally sustainable economy, and to protect our local community and the Earth for current and future generations.

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Background

- 2017: Clean Energy Resolution
- 2018: Energy Baseline Report
- 2018: Clean Energy Resolution Project Report
- 2019: Rooftop Solar Photovoltaic Assessment
- 2019: Southeast Sustainability Directors Network (SSDN)
- 2020-2022: Orange County Climate Council (OCCC)
- 2021: Local Government Clean Energy Report
- 2021-2023: Hillsborough Comprehensive Sustainability Plan
- 2023: Hillsborough Strategic Plan for FY2024-26

HILLSBOROUGH
COMPREHENSIVE
SUSTAINABILITY PLAN

| Sustainability | Connected Community | Economic Vitality | Community Safety | Service Excellence |

| 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |

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Partnerships

- Central Pines Regional Council (formerly TJCOG)
- Orange County Climate Council (OCCC)
- Environmental Defense Fund (EDF)- Cities Initiative
- Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO)
- North Carolina Department of Transportation (NCDOT)
- Southeast Sustainability Directors Network (SSDN)
- Upper Neuse River Basin Association (UNRBA)
- Triangle Water Supply Partnership (TWSP)

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Past Progress: Policies and Advocacy

- Parks Master Plans sustainability recommendations (2017-2022)
- Grounds Maintenance best practices (2019)
- Managed natural landscapes ordinance (2019)
- Joint comments on Duke Energy-Integrated Resource Plan (2021)
- Transportation and connectivity priorities (2021)
- Joint comments on Duke Energy-Carbon Plan (2022)
- Telecommuting policy for employees (2022)
- Public, Level 2, Electric Vehicle Supply Equipment Suitability Analysis (2022)
- LEED Community-Orange County (2022)
- Town standard for streetlights (3000 Kelvin, Type 2, 50 Watt) (2023)
- Solarize the Triangle (2022/2023)
- "Leave the Leaves" video and campaign (2023)
- Vision Zero Policy (2023)

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Past Progress: Projects

Community Services
- LED lighting transition of Mercury Vapor (MV) streetlights
- LED lighting transitions at facilities
- Programmable thermostats at facilities
- Tankless hot water heaters at facilities
- Energy Star equipment/appliances at facilities
- Stormwater green infrastructure (ex. riparian buffer restoration, bioswales, compost blankets)
- Grounds maintenance (ex. Pollinator/wildlife habitat, invasive species removal, Tree City, Bee City USA)

Utilities
- Wastewater Treatment Plant upgrade
- Implementation of control system at Water Treatment Plant
- Elizabeth Brady Pump Station Variable Frequency Drive (VFD) Improvements

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Past Progress: Projects

Police

- 3-Electric patrol bicycles
- 2-hybrid police vehicles

All Departments

- Transition from desktop computers to more efficient laptops
- Reduce use of Styrofoam and single-use plastics at town events
- Recycled paper products
- Employee Engagement Committee
- ENGAGE Hillsborough Series

ENGAGE
HILLSBOROUGH

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Upcoming:

- Future Land Use Map Update
- Unified Development Ordinance Rewrite
- Future train station (Net-Zero ready goal)
- Highway 86/Fleet renovation (Electric vehicle ready)
- Adron Thompson renovation (Solar ready)
- New stormwater management plan
- Charging and Fueling Infrastructure (CFI) Grant (Round 2)
- LED transitions of streetlights (High Pressure Sodium)
- Multimodal transportation projects
- Ridgewalk greenway

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Future Needs and Opportunities

Budget Needs

- Energy tracking and management software (FY25)
- Facility management software and floor plans (FY25)
- Recycling at town parks (FY25)
- Updated solar analysis for facilities/parks
- Sustainability intern
- Grants administration help
- Matching funds for future grant applications
- Tree inventory/urban forestry plan
- Electric vehicle charging for fleet
- Solar farm through Green Source Advantage (GSA) program
- Solar and battery storage for facilities
- Solar canopy parking and picnic shelters
- Solar canopy electric vehicle charging

- Stormwater green infrastructure projects
- Tree Plantings/reforestation
- Climate Pollution Reduction Grant (CPRG)

Program/Policy Needs

- Rightsizing/transitioning fleet
- Electronic retention policy to reduce paper waste
- "Climate Corner" in employee and citizen newsletters
- Green Team (Engagement Committee)

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Sustainability Funds – Recommended Programming

Recommended Use	FY22	FY23	FY24	FY25	FY26	FY27
• Train Station Solar Panels	$300,000	$300,000	$150,000			
• Energy Tracking Software • Recycling at Parks • LED Streetlight Conversion			$150,000			
• Updated Solar Analysis for Facilities • Sustainability Intern • Grant Administration Assistance				$200,000		
• GSA Program • Tree Inventory/Urban Forestry Plans					$400,000	
• Solar and Weatherization Projects • Tree Planting/Reforestation						$300,000

- How to fund sustainability initiatives for Utilities projects? Major need without current dedicated funding.

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Questions and Discussion

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