

Annual Report
Beautification and Energy Efficiency Board
City of Melbourne

Introduction

The Beautification and Energy Efficiency Board (BEEB) of Melbourne, Brevard County, Florida serves as the City's roadmap for making recommendations to City Council concerning affordable strategies associated with conservation, renewable energy, energy efficiency and achieving 100 percent clean energy by 2035 in City operations. The BEEB is committed to pause each year to review our progress and course correct as needed to quickly advance towards City goals. This report highlights the BEEB's projects from March 2024 – March 2025.

This report has been prepared with input from BEEB members and approved by the BEEB on May 19, 2025. The report is submitted to the City Council and available publicly on the City of Melbourne Beautification and Energy Efficiency Board website (https://www.melbourneflorida.org/Government/Municipal-Boards/Beautification-Energy-Efficiency-Board). The City of Melbourne is the primary stakeholder for BEEB activities in environmental sustainability. Support from City officials and City Council is vital to the City's energy and sustainability efforts.

BEEB Background

The BEEB was established in 2017 and charged with developing an environmental sustainability plan for City operations, assessing implementation of the plan and providing an annual report to the City Council. In addition, the BEEB reviews ordinances and policies having an environmental impact on the City. Also, the BEEB recognizes the efforts of others who contribute to the beautification, environmental protection and enhancement of the City.

For this reporting period, the BEEB met 9 times on the following dates: March 15, 2024, May 17, 2024, June 21, 2024, July 19, 2024, August 16, 2024, September 20, 2024, October 18, 2024, November 17, 2024, and January 17, 2025. These meetings were open to the public. Minutes for all meetings are posted at the City of Melbourne Beautification and Energy Efficiency Board website.

The BEEB is comprised of five regular members and two alternate members appointed by City Council. The following individuals currently serve on the BEEB: Dr. Randall Parkinson, chair; Joy Morris, vice-chair; Bruce Lindsay, regular member; Dr. John Windsor, regular member; Wade Senti, regular member; Andrew Pappas, alternate member and Bob Klaproth, alternate member.

The BEEB would like to thank the following City Staff for their support to the board: Todd Cook, Cheryl Caldwell, Ross McGinn, Jennifer Spagnoli, Megan Ruben, Lisa Goode and Jeff Whitehead. Also, the BEEB would like to thank past City Staff members Adam Klaproth and Jennifer Wilster for their contributions to the board.

Environmental Sustainability Plan for City Operations

In 2017, City Council adopted Ordinance No. 2017-49 to transition City operations to clean energy. As part of this commitment, the City continues to make incremental

progress to integrate sustainability in operations to meet Ordinance No. 2017-49 code requirements.

The City Public Works and Utilities Department Environmental Community Outreach Division provides the City's environmental stewardship efforts by making significant impacts in decreasing water usage, improving surface water quality, increasing recycling rates and reducing litter.

Four focus areas are discussed during BEEB meetings. They are City Energy Efficiency Evaluations, Strategic Energy Plan, Alternative Fuel Vehicles, Brevard Resilience Interagency Collaborative and Beautification. These focus areas, along with the City's environmental sustainability commitment, have been the foundation for the advancement of reaching the City's beautification and energy efficiency goals.

BEEB Focus Areas

The following BEEB focus areas serve as a venue for City staff, members of the public and subject matter experts to participate and voice recommendations for the City's engagement in sustainability efforts.

<u>Energy Efficiency Evaluations</u>. The City continues to audit the use of energy connected to fossil fuels and carbon dioxide emissions providing a sense of the City's consumption and associated costs.

In 2023, the BEEB supported future replacement of City Hall's current chiller-cooled system to a thermal ice storage chiller system as an internal energy efficiency strategy and requested evaluation of potential locations for the installation of the external elements of the chiller system. In March 2024, the BEEB was notified that the chillers have a tenyear warranty after installation in 2017 and will be placed on the capital improvement budget for replacement in two years unless the system fails unexpectantly. This project is being considered for 2027; all tax credits, cost and placement of the unit will be considered at this time.

FIT students presented, at a national conference in February 2024, energy efficiency findings for the Joseph Pellicano Law Enforcement Center. This information is scheduled to be presented to the BEEB at a future date.

Strategic Energy Plan. The BEEB continues to follow the City's usage of energy by year with the long-term goal of being 100 percent sustainably sourced by 2035. The City is in their fifth year of participating in the FPL Solar Together Program where the BEEB reviewed data from the FPL Generation by Fuel Type Report. Certain energy sources being used by FPL have come into question regarding the actual energy resources including fossil fuels. The BEEB has asked FPL to provide a presentation and address concerns; FPL has not responded. Without this information the BEEB is concerned the original board ordinance, establishing the composition of the BEEB, of 100 percent sustainable energy by 2035 is not attainable. Recommendations for changes to long term goals were approved by BEEB and forwarded to the city manager.

<u>Alternative Fuel Vehicles (AFV)</u>. The City received a \$146,130 Energy Efficiency and Conservation Block Grant from the US Department of Energy. Funding will be used for the implementation of an electric pilot program for the purchase of two electric pickup trucks and a vehicle charging station to be used by the Meter Service Division.

Electric vehicle charging stations were installed at the Joseph Pellicano Law Enforcement Center to serve customers. The electric vehicle station at the Eau Gallie Library, installed in 2024, has served 789 customers, generated \$3179 net revenue and was 100% in service.

At each BEEB meeting, members discussed AFV current affairs and issues of trade wars, supply chains and inflation resulting in impacts to the budgets.

<u>Brevard Resilience Interagency Collaborative (BRIC)</u>. The BRIC was established to focus on Brevard County municipalities working together to create a resilient and sustainable future for Brevard County communities. The BEEB supports this ongoing collaboration. One BRIC meeting was held, during the BEEB reporting period, which focused on LEED certification.

<u>Beautification</u>. The City continues to improve the beauty of the City by updating landscaping, planting trees and adding buffer zones to parks which include sea oats and mangroves. Dugouts and playgrounds were also replaced at city parks.

The City has been certified as a Tree City USA participant for 35 years. The Tree City USA program provides communities with a framework to maintain and grow their tree cover and to show residents and visitors they're committed to the mission of environmental change. Being a part of Tree City USA not only beautifies the community but also improves urban forestry, stormwater management and an overall healthier environment.

Other activities. Throughout the year, the BEEB may engage in other activities deemed to be included as appropriate action(s) for the group to pursue.

- a. Joseph Pellicano Law Enforcement Center Tour. Members of the BEEB toured the new law enforcement center to view environmental and energy efficient components included in the design/construction of the facility.
- b. Presentations. The following briefings were presented to the BEEB during this reporting period.
- Brevard County solid Waste Facilities, presented by Kevin Smith, provided an overview of the county solid waste facility and recycling efforts. Contamination in household recycling material remains an issue. Contamination efforts have been as high as 33% with 1,200-4,400 tons of recycled material being diverted to landfills. Mr. Smith attributed this to a decrease in educational outreach efforts which is needed to clear up confusion over acceptable material and differences in municipal recycling programs.

BEEB Awards

<u>Clean Energy Award</u>. In 2021, the BEEB developed a Clean Energy Award to encourage and publicly celebrate those in the Melbourne community who adopt efficient, sustainable and resilient technologies. The BEEB recruited four engineering/sustainability organizations to review the technical merits of the projects and recommend award approval. The four organizations are the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE), Association of Energy Engineers (AEE), US Green Building Council (USGBC) and Drive Electric-Florida (DEFL). There were no Clean Energy Awards presented in this reporting period. Award considerations being evaluated is the Joseph Pellicano Law Enforcement Center.

<u>GEMS Award</u>. The GEMS award was established to raise awareness about the efforts of the BEEB while recognizing a Melbourne citizen's home or business for their landscape beautification. Green Gables applied for the GEMS Diamond award in September 2024. The BEEB approved moving forward with presenting the award. At the time of this report, Green Gables has not provided a date/time for the award presentation.

<u>MVP Award</u>. Melbourne's Valuable Pond (MVP) award program, presented by Lisa Good, is an award being developed by the City to meet City National Pollutant Discharge Elimination System permit requirements. The permit went into effect for the City on December 2, 2024, and requires community participation to increase education and awareness of the City Stormwater Program. Ms. Good presented several times throughout the reporting period to solicit BEEB support in the development of an award for stormwater ponds to recognize communities on the health and beautification of stormwater ponds.

Conclusion/Way Forward

Much of the BEEB's focus over the last six years has been evaluating the likelihood of the City reaching its goal of 100 percent clean energy by 2035 in city operations, a primary goal of Ordinance No. 2017-49. Based on the evaluation, the BEEB concludes that the goal of achieving 100 percent clean energy in city operations by 2035 is unrealistic. The BEEB is working with city staff to request city council consider updating city code to extend the 2035 goal date to 2045 and adopt a more definitive definition of clean energy.

In addition, regarding alternative fuel vehicles, the potential for unpredictability within the supply chain for procurement of vehicles, capital equipment, and other goods could impact the City of Melbourne's ability to achieve energy efficiency goals near-term and over the course of the plan. The changing landscape with manufacturing, trade, and potential conflicts with China and other nations could limit export or present cost increases. By example, availability of permanent magnets or electric battery materials may impact the City's ability to procure affordable and reliable alternative fuel vehicles.

For the upcoming reporting period, the BEEB will continue discussions in key focus areas, as well as other activities deemed appropriate for the board to pursue.