Autocase® BUILDINGS

ENERGY RETROFITS AS PUBLIC POLICY

EXAMINING THE BENEFIT/COST TRADE-OFFS AT THE BUILDING LEVEL

HOW CAN MIAMI-DADE COUNTY GET BUY-IN FROM BUILDING OWNERS ON THEIR POLICY?

Miami-Dade County is making strides towards a more resilient and sustainable community, with one its policy initiatives being Building Efficiency 305 (BE305). Among the goals of BE305 are reducing water supply constraints, improving energy efficiency, reducing building operating costs for owners, and increasing the awareness of building efficiency and data-driven decision making.

Part of the BE305 package is the Building Performance Ordinance (BPO), which aims to improve performance of over 10,000 large, existing buildings in the county through benchmarking, re-tuning or retro-commissioning, and regular auditing.

The County understand the benefits for its own buildings but it must make the case to private owners who will be required to make building expenditures to meet the mandate.





QUANTIFYING THE BENEFITS FOR ALL STAKEHOLDERS

In order to provide context to this large-scale change, seven case studies covering seven different major building types were analyzed using the Autocase software, to demonstrate the returns to owners, the community and the environment from the ordinance's implementation.

Across the board, the BPO's triple bottom line impact at the building level was positive through the life of the investments. The upfront investments are not only offset by the total lifetime financial and environmental value, but also building owners can expect a positive return on their investments associated with BPO implementation.

Investments considered were:

- LED Lighting
- Water Conservation
- Building Envelope Improvements
- Electric Boiler Replacement
- Roof Replacement
- Chiller Replacement/Optimization
- Chilled Water Air Handling Unit
- Variable Frequency Drives

Through the lens of economic analysis, leveraging the Autocase software, officials at Miami-Dade County were able to quickly assess and effectively disseminate the value added, to the building owners and the community at-large, the implementation of BE305 and the BPO.



AUTOCASE MAKES THE BUSINESS CASE FOR HIGH PERFORMING & SUSTAINABLE BUILDINGS

Autocase for Buildings is a software tool that models the environmental and social dollar values of building designs and, together with financial costs, evaluates their net, triple bottom line (TBL) benefit over the life of a project using a rigorous cost-benefit analysis (CBA) framework. These considerations cover full life cycle costs, occupant impacts such as increased health outcomes, and effects to the community such as air pollutant reductions. With Autocase, the cost and time required to compare design alternatives at any stage of a project is a fraction of today's custom studies. As a result, design firms can easily evaluate and justify different approaches and, in so doing, contribute to the future economic, social, and environmental success of every project.

For more information about how TBL-CBA would assist your project, go to www.autocase.com.