

Energy Conservation Measures

ECM No.	ECM Description	City Hall 920 Broad Street	Court House 31 Green Street	Finance 828 Broad Street	Central Police 22 Franklin Street	City Clerk 295 Halsey Street	Engineering 225 Central Avenue	Child and Family 94 William Street	Child and Family 110 William Street	University Child and Family 394 University Avenue	Ironbound Rec. Center 46 St Charles Street	Ironbound Rec. Center 226 Rome Street	JFK Rec. Center 211 West Kinney Street	Engine 10 Firehouse 360 Clinton Avenue	North Police District 1 Lincoln Avenue	Sanitation 80-85 Miller Street	911 Comm. Center 311 Washington Street	Symphony Hall 1020 Broad Street	
1	Boiler Plant Improvements																		
1A	Boiler Replacements	✓		✓				✓	✓				✓		✓				
1B	Boiler Controls	✓		✓				✓	✓				✓		✓				✓
2	Chiller Plant Improvements																		
2A	HVAC Improvements	✓																	
3	Building Automation Systems/Energy Management Control Systems (EMCS)																		
3A	Building Management System Upgrades	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3B	Demand Control Ventilation												✓						✓
4	Heating, Ventilating, and Air Conditioning (HVAC)																		
4A	RTU Replacements	✓					✓	✓	✓	✓			✓					✓	

ECM No.	ECM Description	City Hall 920 Broad Street	Court House 31 Green Street	Finance 828 Broad Street	Central Police 22 Franklin Street	City Clerk 295 Halsey Street	Engineering 225 Central Avenue	Child and Family 94 William Street	Child and Family 110 William Street	University Child and Family 394 University Avenue	Ironbound Rec. Center 46 St Charles Street	Ironbound Rec. Center 226 Rome Street	JFK Rec. Center 211 West Kinney Street	Engine 10 Firehouse 360 Clinton Avenue	North Police District 1 Lincoln Avenue	Sanitation 80-85 Miller Street	911 Comm. Center 311 Washington Street	Symphony Hall 1020 Broad Street
4B	Condenser Unit Replacements	✓							✓						✓	✓		
4C	Heat Pump Replacements		✓															
5	Lighting Improvements																	
5A	Lighting Improvements	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5A.1	Parking Lighting Upgrades	✓					✓								✓	✓		
5B	Lighting Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5C	Day Lighting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5D	Vending Miser	✓		✓														
5E	Destratification Fans											✓	✓					
6	Building Envelope Modifications																	
6A	Building Envelope Modifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6B	Window Upgrades	✓		✓											✓			✓
6C	Roof Upgrades	✓	✓															
7	Chilled Water, Hot Water, and Steam Distribution																	

ECM No.	ECM Description	City Hall 920 Broad Street	Court House 31 Green Street	Finance 828 Broad Street	Central Police 22 Franklin Street	City Clerk 295 Halsey Street	Engineering 225 Central Avenue	Child and Family 94 William Street	Child and Family 110 William Street	University Child and Family 394 University Avenue	Ironbound Rec. Center 46 St Charles Street	Ironbound Rec. Center 226 Rome Street	JFK Rec. Center 211 West Kinney Street	Engine 10 Firehouse 360 Clinton Avenue	North Police District 1 Lincoln Avenue	Sanitation 80-85 Miller Street	911 Comm. Center 311 Washington Street	Symphony Hall 1020 Broad Street
	Systems																	
7A	Piping Insulation	✓	✓	✓	✓										✓			
7B	Steam Trap Repair	✓	✓	✓														
7C	Install Thermostatic Valve	✓																
8	Electric Motors and Drives																	
8A	Premium Efficiency Motors and VFDs	✓				✓	✓		✓		✓	✓	✓	✓	✓	✓		
8B	Pool Filter Upgrades												✓					
9	Refrigeration																	
9A	VRV Upgrade of Window Units	✓																
9B	Refrigeration Upgrades										✓							
10	Distributed Generation																	
10A	Cogeneration											✓	✓					
10B	Energy Security/Microgrid	✓	✓		✓													

ECM No.	ECM Description	City Hall 920 Broad Street	Court House 31 Green Street	Finance 828 Broad Street	Central Police 22 Franklin Street	City Clerk 295 Halsey Street	Engineering 225 Central Avenue	Child and Family 94 William Street	Child and Family 110 William Street	University Child and Family 394 University Avenue	Ironbound Rec. Center 46 St Charles Street	Ironbound Rec. Center 226 Rome Street	JFK Rec. Center 211 West Kinney Street	Engine 10 Firehouse 360 Clinton Avenue	North Police District 1 Lincoln Avenue	Sanitation 80-85 Miller Street	911 Comm. Center 311 Washington Street	Symphony Hall 1020 Broad Street
11	Renewable Energy Systems																	
11A	Solar Photovoltaic PV ⁽¹⁾			✓		✓	✓		✓		✓		✓	✓	✓	✓	✓	✓
11B	Solar Hot Water										✓		✓					
11C	Alternate Fuel Vehicle Refueling Station															✓		
12	Energy/Utility Distribution Systems																	
12A	Transformer Upgrades	✓																
12B	Power Factor Correction	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓		✓
12C	Elevator Electrical Upgrades	✓		✓														
12D	Computer Management	✓	✓	✓	✓			✓	✓	✓				✓	✓		✓	
13	Water and Sewer Conservation Systems																	
14	Electrical Peak Shaving/Load Shifting																	

ECM No.	ECM Description	City Hall 920 Broad Street	Court House 31 Green Street	Finance 828 Broad Street	Central Police 22 Franklin Street	City Clerk 295 Halsey Street	Engineering 225 Central Avenue	Child and Family 94 William Street	Child and Family 110 William Street	University Child and Family 394 University Avenue	Ironbound Rec. Center 46 St Charles Street	Ironbound Rec. Center 226 Rome Street	JFK Rec. Center 211 West Kinney Street	Engine 10 Firehouse 360 Clinton Avenue	North Police District 1 Lincoln Avenue	Sanitation 80-85 Miller Street	911 Comm. Center 311 Washington Street	Symphony Hall 1020 Broad Street
14A	Energy Manager/Sub-Metering	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Energy Cost Reduction Through Rate Adjustments																	
15A	Demand Side Management and Energy Related Process Improvements	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15B	Demand Response	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓		✓
16	Energy Related Process Improvements																	
16A	Waste Stream Reduction and Recycling	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Commissioning																	
17A	Retro-Commissioning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17B	Continuous Commissioning	✓	✓		✓													
17C	Act Earth	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ - ECMs Included in the Recommended Base Project Scenario No.1

✓ - Additional ECMs included in the Recommended Project Scenario No.2, and Recommended Project Scenario No.3

✓ - ECMs Considered but Not Recommended

(1) – Solar Photovoltaic PV ECM is not included in the Recommended Project Scenario No. 3

Overview

Honeywell has closely evaluated and audited the City of Newark in order to develop the optimum mix of energy saving measures. These selected site-specific measures have been developed using the following process:

- Review Site Audits
- Engineering Team Site Visits
- Develop Measures
- Review Measures with Team