Energy Efficiency Findings

Tewksbury Township

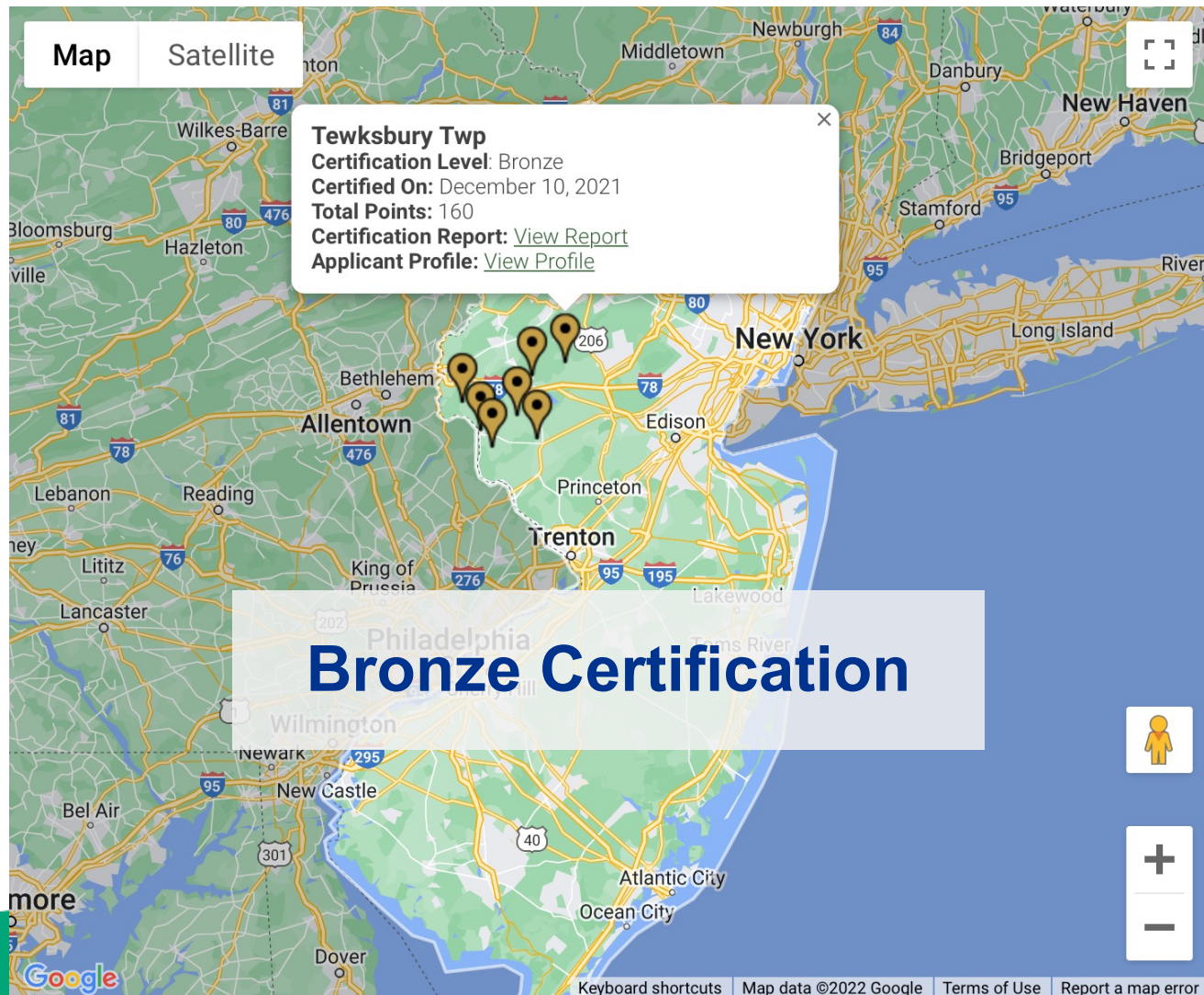**Rebeca Rodriguez**

August 2, 2022

Today's Agenda

- EDF Climate Corps

- Sustainable Jersey

- Energy Challenge

- Current Status

- Findings

- Recommendations

Climate Corps **=** Graduate Students **+** Organizations

Clean Energy Projects

Sustainable Jersey

Bronze Certification

The Energy Challenge at Tewksbury Township

Building Inventory + Energy Usage + Incentive Programs

Building Inventory

10

Facilities

Building Inventory

- Police/Admin/DPW

- Christie Hoffman Farm Park Construction Office / Affordable Housing Unit

- Mountainville Meeting Hall / Court

- Bartles House - Affordable Housing Unit

- Whittemore Wildlife Sanctuary

- Rescue Squad Building

- Christy Bartles Sewer Facility

- Hunters Glen Sewer Facility

- Oldwick Sewer and Plant Pump

Utilities

Energy Usage Tracking

ENERGY STAR® PortfolioManager®

Admin/Police/DPW

Name Meter ID ▲	Energy Type ⬍	Most Recent Bill Date ⬍	In Use? (Inactive Date) ⬍
Electric Grid Meter	Electric - Grid	05/11/2022	Yes
Natural Gas #1	Natural Gas	04/25/2022	Yes
Natural Gas #2	Natural Gas	04/25/2022	Yes
Natural Gas #3	Natural Gas	03/24/2022	Yes

Energy Usage Tracking
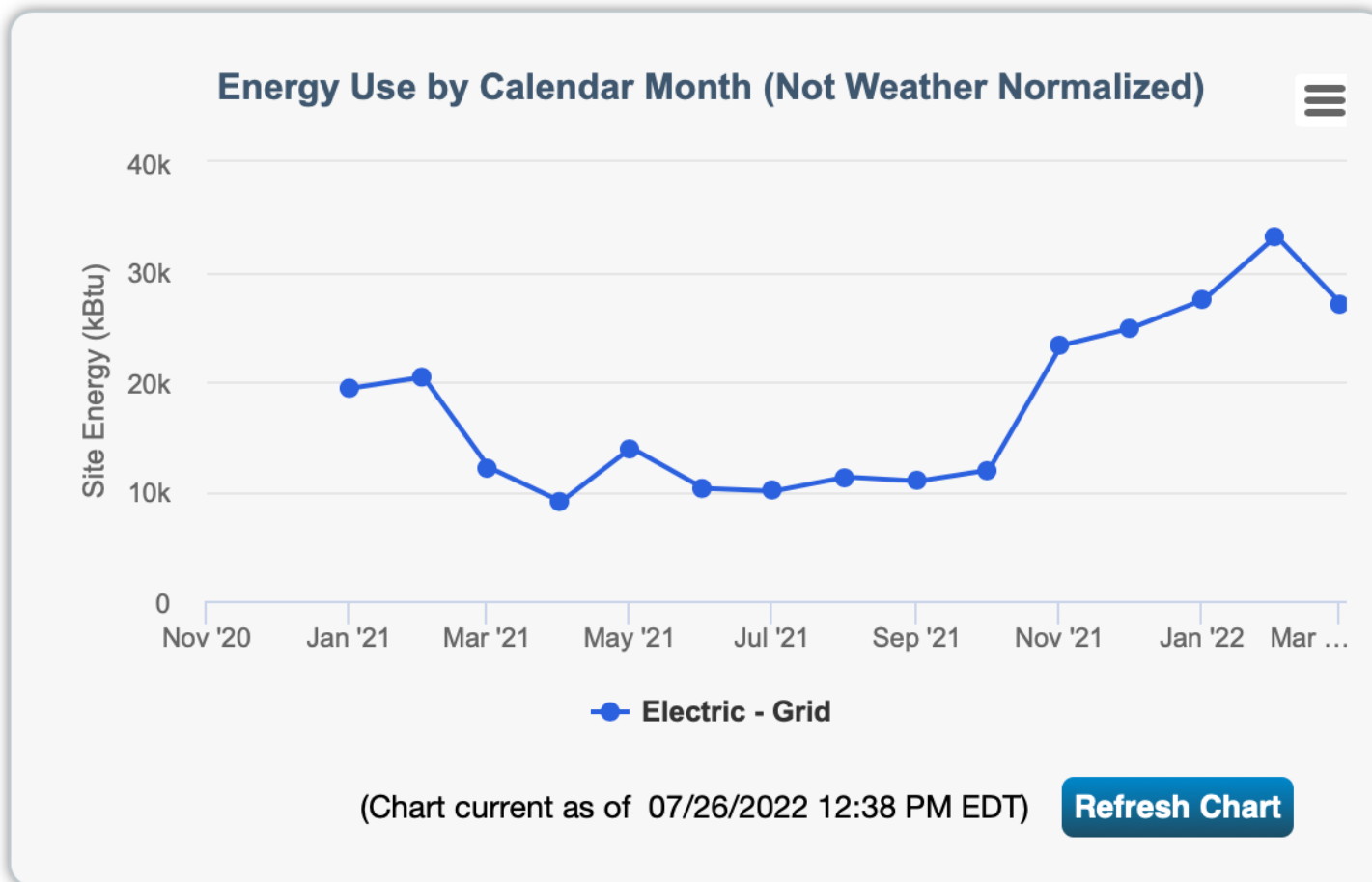
ENERGY STAR® PortfolioManager®

Admin/Police/DPW

▼ Monthly Entries

Display Year(s): | 2022 | Show All Years |

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost ($)	Estimation	Green Power	Demand (kW)	Demand Cost ($)	Last Updated
☐	1/12/2021	2/9/2021	12,480	1,457.92	☑	☐	37.2		7/5/2022 tewksbury1
☐	2/10/2021	3/9/2021	11,320	1,298.8	☑	☐	29.8		7/5/2022 tewksbury1
☐	3/10/2021	4/9/2021	12,360	1,407.72	☐	☐	31		7/5/2022 tewksbury1
☐	4/10/2021	5/10/2021	11,400	1,344.67	☑	☐	36.1		7/5/2022 tewksbury1
☐	5/11/2021	6/10/2021	10,520	1,250.6	☐	☐	32.5		7/5/2022 tewksbury1
☐	6/11/2021	7/12/2021	12,600	1,472.28	☐	☐	34.6		7/5/2022 tewksbury1
☐	7/13/2021	8/10/2021	12,000	1,409.77	☑	☐	33.4		7/5/2022 tewksbury1
☐	8/11/2021	9/10/2021	12,640	1,489.89	☑	☐	32.9		7/5/2022 tewksbury1
☐	9/11/2021	10/11/2021	7,320	930.41	☑	☐	32.9		7/5/2022 tewksbury1
☐	10/12/2021	11/9/2021	10,000	1,227.54	☑	☐	33		7/5/2022 tewksbury1

Energy Usage Analysis
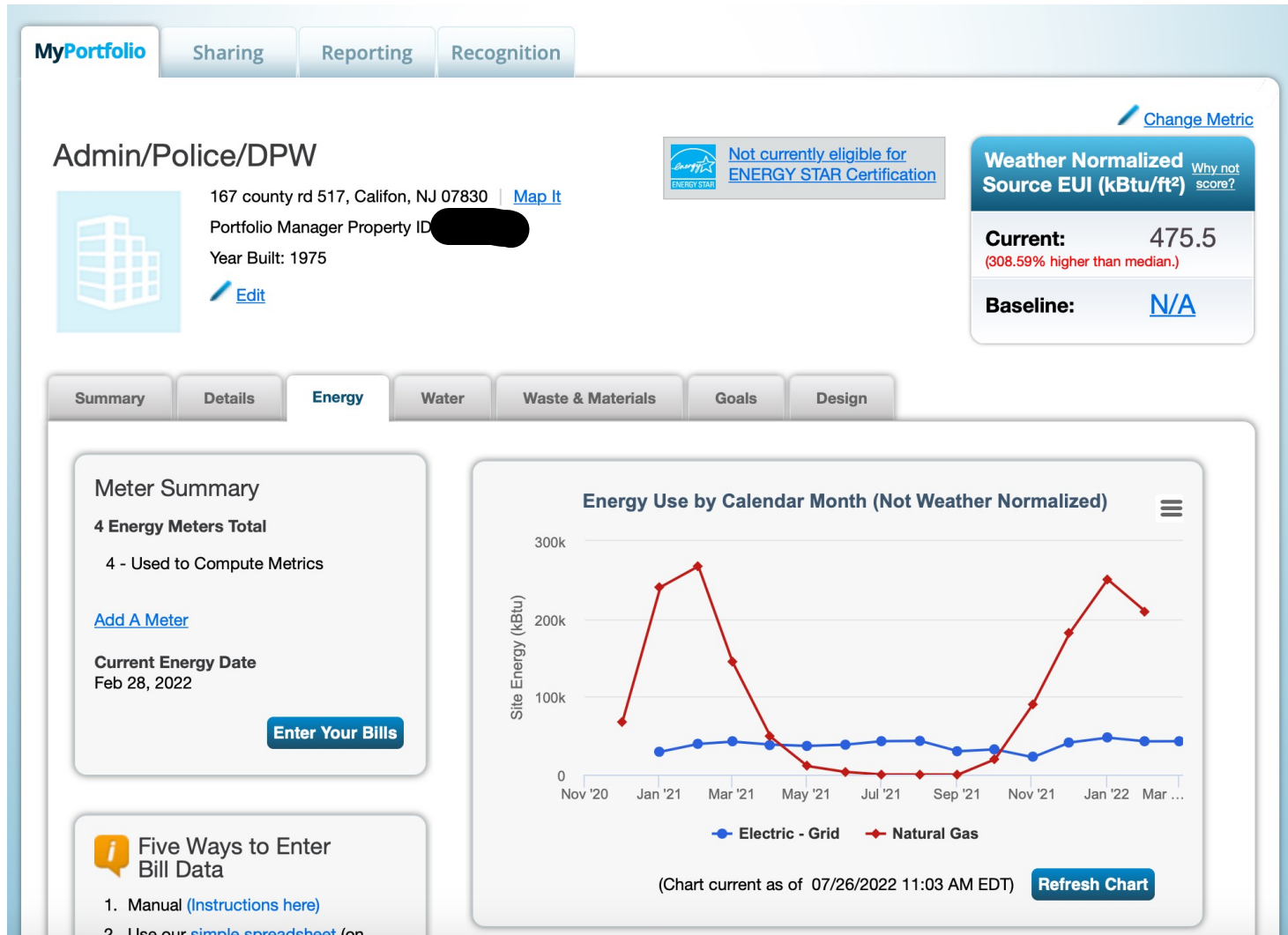
Energy Usage Analysis

Christy Bartles Sewer Facility

Energy Use by Calendar Month (Not Weather Normalized)

Electric - Grid

(Chart current as of 07/26/2022 12:38 PM EDT) Refresh Chart

Incentive Programs

Direct Install

- Turnkey Process

- Minimal Cost

- Fast turn-around

- Ongoing savings

- Financing

Direct Install

Representative energy efficiency measures

Technology	Energy Conservation Measure Description
Lighting	LED bulbs
	Exteriors
	Fixtures
	Sensors
HVAC	Smart thermostat
	Duct sealing
	AC tune-up

Direct Install

Step by step
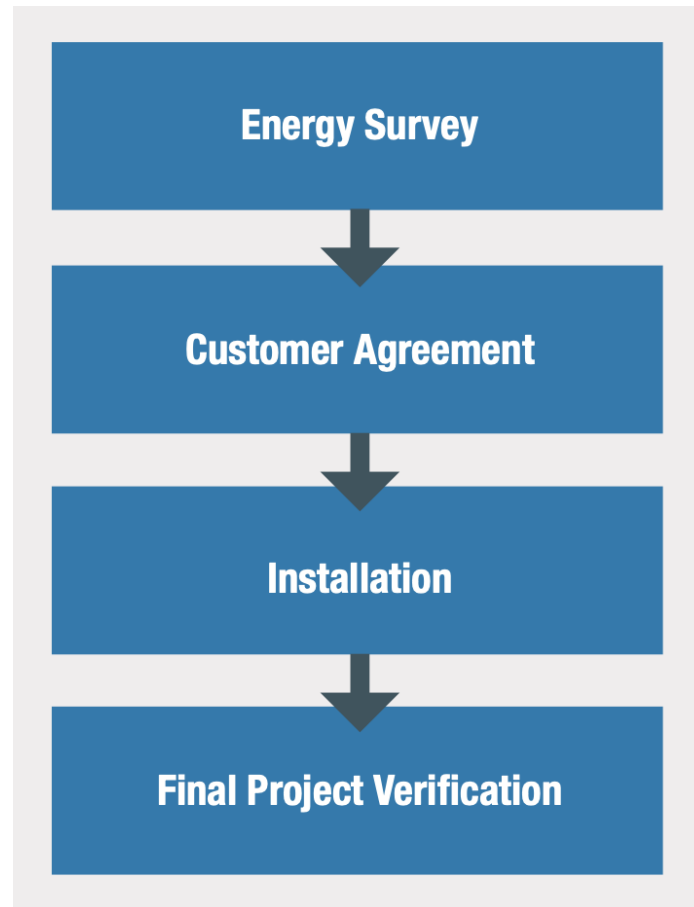
Sustainable Jersey Actions

Municipal Energy Initiatives

Energy Tracking and Management

10 Points

✪ Priority for all certification levels

- THIS ACTION HAS VARIABLE POINTS: 10, 20

Energy Efficiency for Municipal Facilities

5 Points

✪ Priority for all certification levels

- THIS ACTION HAS VARIABLE POINTS: 5 — 50 • NON-COMPETITIVE FUNDING AVAILABLE

Energy Tracking and Management

- Earn 20 points

- Requirements
  - Building inventory
  - 12 months of data
  - Energy Star Portfolio Manager
  - Performance benchmarking
  - Ongoing tracking system

Energy Efficiency for Municipal Facilities

- Earn between 30 to 50 points
  - Decrease of Energy Use Intensity

- Requirements
  - Building inventory
  - Energy assessment
  - Energy efficiency upgrades
  - Reporting energy savings

Next Steps for Tewksbury Township

Recommendations

Short Term

Mid Term

Long Term

Direct Install Findings

Priority:
Police/Admin/DPW

Christy Bartles Sewer Facility

Budgeting for next DI project

Contact engineering firm for solar assessment

JCPL EV Driven Program

Sustainable Jersey Recertification

Solar implementation

EV Charging Station

Energy tracking through ESPM

Confirm upgrades have worked
Sustainable Jersey actions

Q&A

Thank you!

Rebeca Rodriguez