

Sustainable Jersey & Sustainable Jersey for Schools

Lessons from the Field: EDF Climate Corps Fellow program

Tony O'Donnell, *Economist/Project Specialist – Sustainable Jersey*



Environmental Defense Fund 2016 Fellows



Nana Abayie Boakye Boaten
EDF Fellow

Mine Hill School District (1)
Boonton Twp (3)
Boonton School District (1)



Erin McNichol, EDF Fellow

Howell School District (17)
Howell Township (26)



Chris Lavalley
EDF Fellow

Tom's River Twp (4)
Brick School District (12)
Manchester Twp (6)



Partnership Opportunity

“ This unique opportunity helps the host Communities and School Districts & Schools bridge the gap between available resources and energy-efficiency initiatives. ”



Schools

- 59 Certified
 - 204 Districts
 - 501 Schools



Municipalities

- 437 (78%) NJ municipalities participating
- 88% of NJ's population lives in these communities
- 193 municipalities certified:
 - 160 towns at bronze level
 - 33 towns at silver level



Goals of the EDF Fellowship

- Start and Complete SJ Energy Actions
- Identify energy efficiency opportunities
- Provide feedback and recommendations on SJ program from the field

PROSPERITY	ENERGY EFFICIENCY	POINTS
	Energy Audit*	(5-20)
	Building Efficiency Measures*	(5-30)
	Energy Tracking & Management	(5-20)
	Sustainable Energy Transition Plan	(10-20)

PLANET	CLIMATE MITIGATION & RENEWABLE ENERGY	POINTS
	School Carbon Footprint*	10
	On-site Renewable Generation System-Solar	(5-40)
	On-site Renewable Generation System-Geothermal	10
	Buy Renewable Electricity	10
	Collaborate with Municipality on Government Energy Aggregation Program	10



Priorities of the EDF Fellowship

1. Benchmark energy consumption
2. Recommendation roadmap for Sustainable Jersey points
3. Conduct energy audit through New Jersey Clean Energy Program
4. Identify building efficiency measures
5. Complete documentation for SJ actions



Highlights from the Field - 2016



Morris County

Energy Benchmarking and Energy Tracking and Management Systems.

Carbon Footprint Calculations for Canfield Avenue and Rockaway Valley Schools, and Boonton Township.

Home Performance with Energy Star (HPwES) action for Boonton Township.



Morris County

Recommended Building Efficiency Measures

Canfield Avenue School:

1. Installation of 5 kW Wind System (Vertical Axis Wind Turbine).
2. Installation of 31 remote mounted occupancy sensors.

Potential Energy Savings: 23,505 kWh (**4% of Energy Consumption**).



Rockaway Valley School:

1. Lighting Upgrades from fluorescent to LEDs
2. Installation of 36 remote mounted occupancy sensors.
3. Upgrade of 8 Exit signs to LEDs.

Potential Energy Savings: 269,051 kWh (**64% of Energy Consumption**).



Howell Township



- Bronze to Silver
- LGEA
- Energy Savings Improvement Program
- Estimated savings:
 - \$3.2 million - 34% ↓
 - 14.6 million kWh
 - 11,971 Metric Tons CO₂



Howell School District

- Green Team
- Power Save Schools
- Energy Savings Improvement Program
- Estimated savings:
 - \$12.1 million - 27-30%
 - 54.3 million kWh ↓
 - 53,968 Metric Tons CO₂

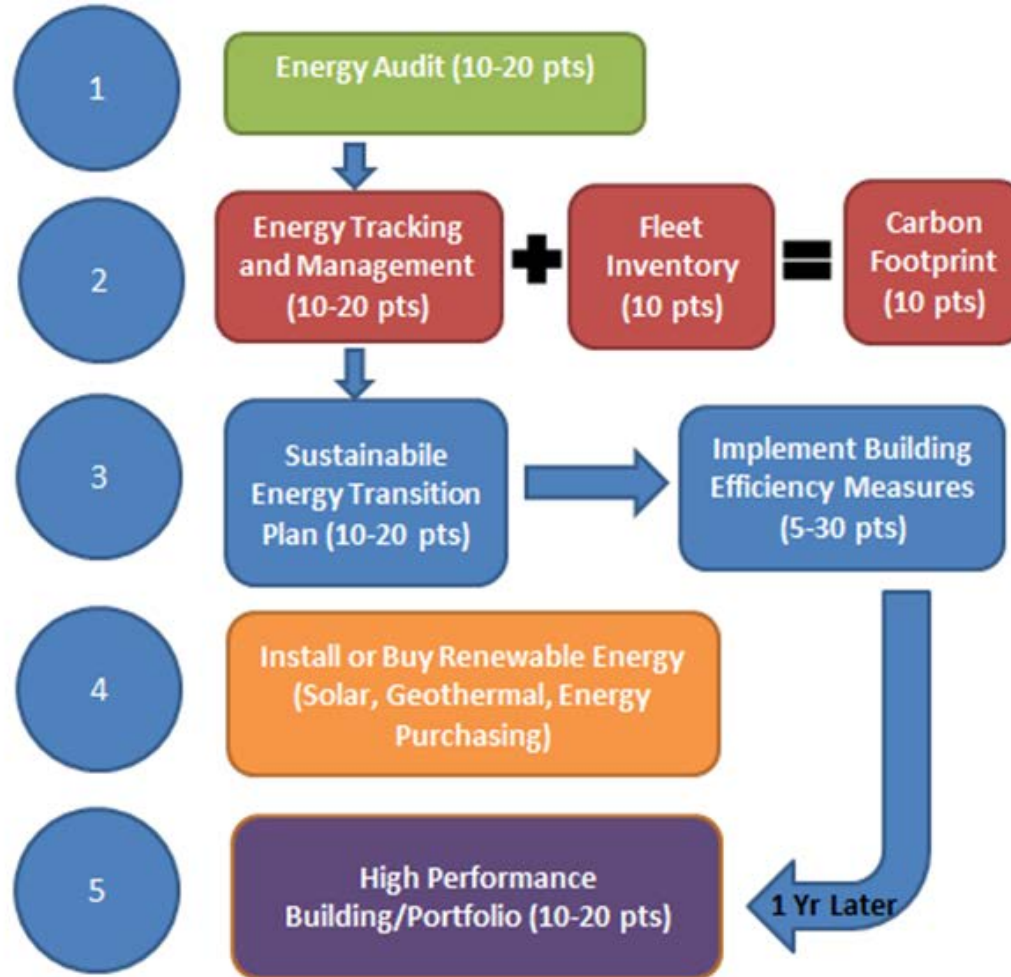


Ocean County

- LGEAs for Tom's River and Manchester Townships
- Green Teams for Brick School District and individual schools
- PowerSave Schools grants for two Brick schools
- Guide for SJ Points in Energy



Creation of an Energy Guide



Lessons Learned



Lessons Learned

- Finding out the key players
- Forming a green team
- Sustainable professional development for staff
- Encourage energy tracking going forward
- Mapping out programs
- Communicating success stories

