



NIH Electric Vehicle Program

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NIH Sustainability Program

- Program managed via NIH Environmental Management System (NEMS)
www.nems.nih.gov
- Regular meetings with stakeholders at all levels and management with review of goals and progress
- Reduced - Scope 1 and 2 Greenhouse Gases by 31.3%
- Reduced NIH Fleet petroleum use by 83%
- Reduced energy use intensity by 35%
- Diverted 40% of non-hazardous waste / 92.2% of C & D debris



NIH Sustainability Program

- 100% compliance with end-of-life disposal requirements
- 95% procurement of energy efficient electronic equipment
- 11.5% use of renewable energy
- Awarded \$98 Million ESPC and UESC projects
- 2016 FEMP Award for Saving \$14.1 million in energy & water



EV Charging Decision

- As part of EO13514 NIH determined a need to support EV charging for employees
- Rules at the time did not support provision
- Deputy Chief Sustainability Officer – Dan Wheeland was briefed on the challenges
- Determined an approach through NIH Credit Union
- NIHFCU wanted to do their part to make NIH more sustainable



NIH Electric Vehicle Efforts

- MOU with NIH Federal Credit Union to provide electricity in 2012
- Survey campus to identify appropriate parking spots to designate for employee electric vehicles
- Get the word out
 - Signage
 - NIH Record
- Engage EV Users Group
- Develop process



Key Personnel/Offices Involved

- Electrical Engineering Section
 - Reports and electrical issues

- Parking office
 - Assisted in identifying appropriate parking spaces
 - Monitors use of parking spaces

- Business Office
 - Ensures payment is not included on NIH electric bill

- NIH Federal Credit Union
 - Provides payment for electricity



Process

- Approximately 75 EV Users park in one of 8 designated spaces
 - Each space has a 120-volt, 20 ampere dedicated circuit
- Electrical Engineering Section reads meters and reports monthly and cumulative usage & costs to EV program manager
 - As of August 30, 2016, the NIH EV program has supported the use of a cumulative total of 62,229 KWH.
- Program manager enters information into spreadsheet that calculates monthly costs



Process

- Invoice is created and sent to Credit Union for payment directly to Pepco
- Business office receives copy of invoice to ensure this amount is not included on NIH's Pepco bill
- Spreadsheet shows estimated time remaining on the balance
- When the balance is approximately one month away from \$0, an addendum to the MOU is created and signed



NIH EV Users Group

- Manages e-mail group for sharing information
- Self-manages parking availability
- Administered survey to users to gauge requirements for future expansion

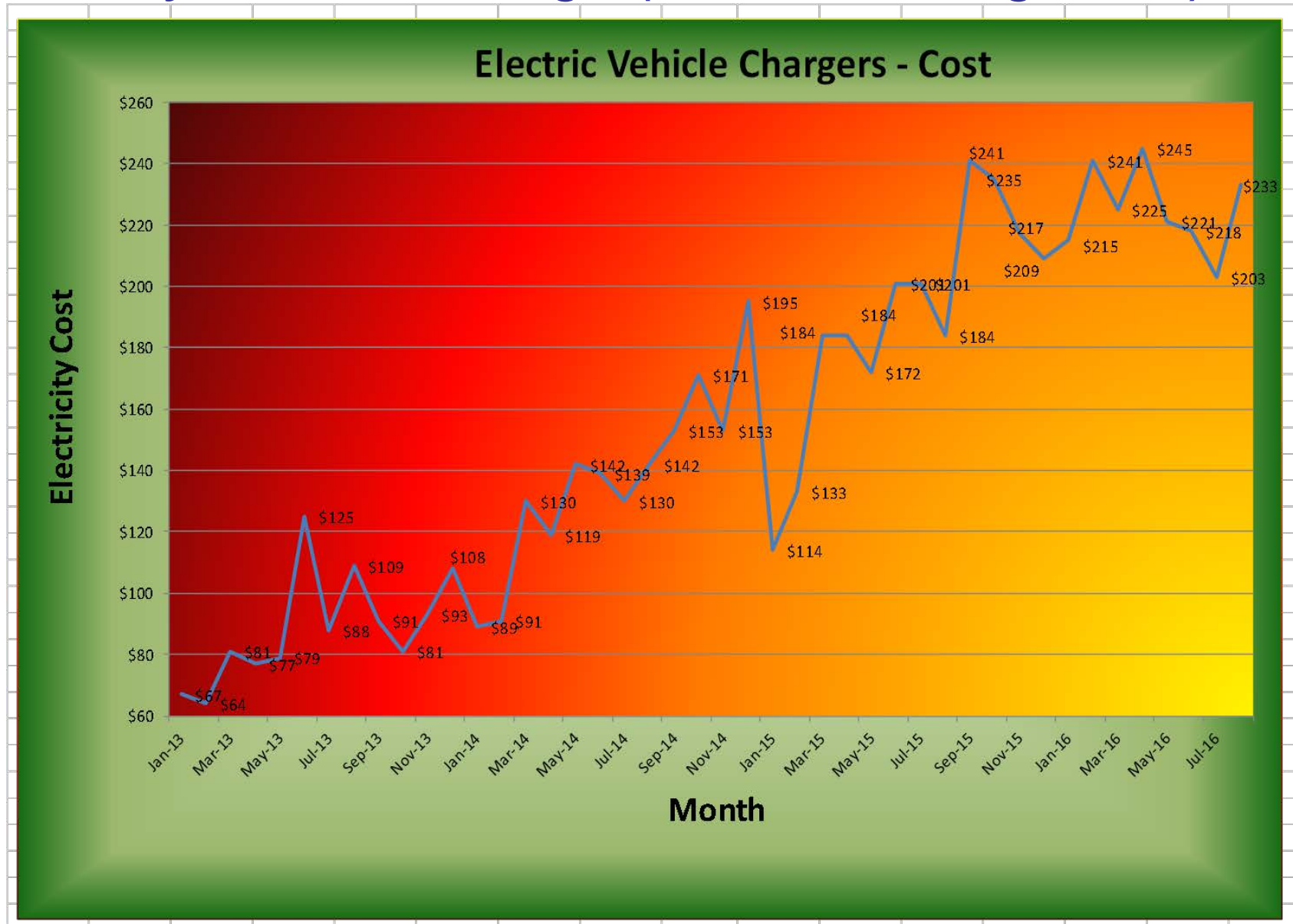


Lessons Learned

- If there are a limited number of spaces, ensure there is a mechanism for users to self-manage usage of parking spots
- Use clear signage to avoid inappropriate use of designated spaces



History of KWH Usage (Jan 2013-Aug 2016)





NIH Electric Vehicle Program Photos





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Future Plans

- Continue to include NIH Federal Credit Union in some capacity
- Developing plan to install charging stations/outlets for electric vehicle use in conjunction with large construction projects
- Considering option to provide EV charging for new EV fleet which might also be used by NIH employees during the day