



**FELLOW CASE STUDY:**  
INTERNAL EMPLOYEE PROGRAM LAUNCH,  
OUTREACH AND ENGAGEMENT





# Incentivizing Green Commuting

Commute.org

Climate Corps 16-17

## 2017 Commuter Challenge

### 2017 Commuter Challenge

Goal: To increase alternative commuting behavior to, through or from San Mateo County with the ultimate goal of reducing traffic, congestion, and SOV commuting

### Commuter Outreach

- Utilize Existing Social Media
- Creating New Social Media (Instagram)
- Weekly Targeted Email Reminders
- Targeted Marketing & Direct Incentives
- Implementing New Features in the Tool
- Bike to Work Day Tie-In
- Social Media Contests

### Employer Outreach

- Newsletter and Email Blast Templates
- Creation of Event Specific Materials
- Outreach at Employer Tabling Events
- Problem Solving with Employers



## Results



## Lessons Learned

### Successful Strategies

- Consistency and scheduling are necessary in building a strong social media presence
- In person events with direct incentives is the most effective outreach strategy
- Building relationships with motivated transportation coordinators at employer sites is key in implementing commuter benefits or other TDM strategies

### Recommendations for Improvement

- Identify and reward only those commuters who change their commuting behavior
- Integrate community based social marketing into the overall challenge marketing strategy
- Lead by example by encouraging an office culture of sustainable commuting

Erin Fieberling

Erin earned her degree in Environmental Science and Management from the UC Davis and completed an AmeriCorps term as a Sustainability Coordinator at Bishop O' Dowd High School. She hopes to build a career in climate protection by pursuing a graduate school program abroad focused on sustainability and city planning.

## Acknowledgements

Thanks to my site supervisor and collaborator Kim Comstock, to Betsy, Richard, Karen, Weiser, Terry, Gina and John at Commute.org for your encouragement. Thanks to SEI : Bailey Hall, Nathan McKenzie, and Rebecca Aviles. Lastly thanks Steve Miller for planning and implementing such a great fellowship program.





**FELLOW CASE STUDY:**  
RESEARCH, ANALYSIS AND PLANNING





# Exploring Products, Solar and Community at

# SUNPOWER

## Product Management



Products and regulatory bodies I've researched



DATA USAGE DISTRIBUTION OF INSTALLED PVS SYSTEMS THAT SENT DATA WITHIN MONTH



Products I've helped launch and analysis that supports those decisions



A sampling of meetings that are on-going to support products



Examples of products I've helped bring to EOL and the data that supports planning

### Stage Gate 0: Exploration

- Competitive Research to determine pricing
- Policy Analysis to determine product requirements and delivery timing
- New product research to explore new partnerships

### Stage Gate 1+2: Product Definition

- Develop business case enabling PVS5 to automatically report Solar RECs
- Analyze cellular data usage from database to segment customers and identify opportunities
- Explore potential financial exposure to Sunpower of potential inverter problem

### Stage Gate 2-5: Execution, Production and General Release

- Engage internal stakeholders to push product to launch
- Manage Back-end processes to ensure fluid launch

### Stage Gate 6: Product End-Of-Life

- Make business case for why a product should no longer be supported
- Manage inventory depletion to ensure no material is wasted
- Create plan to support customers through warranty period

## Industry Engagement



### Conference Volunteer

Volunteered at conference on distributed energy, engaging professionals and learning about the industry



### CELI Fellow

14-week professional fellowship with young leaders in the industry



### SunCode Hackathon

Created business model for a solar installer commercial marketing product with team



### Vote Solar Equinox

Volunteered at industry event and networked with companies in the solar industry



## Community Engagement



### Tree Planting

Volunteered with the Watershed Project to plant trees in Richmond, CA



### RE-Volv Solar Champion

Raised \$26,000 with team of volunteers to install solar at a non-profit in Oakland, CA



### Volunteer Roof Install

Helped install solar systems for multi-house community in West Oakland, CA



### Youth Career Engagement

Engaged students in discussing career opportunities in solar



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Bachelors Degree in Materials Science and Engineering from MIT, looking to bring more renewable energy to the world by connecting technology, people and businesses

Cecilio Aponte III

### Acknowledgements:

I would like to thank Emily Humphreys and Matt Mayberry for being excellent managers and teaching me about the profession, the industry and the company. I would also like to thank the rest of the SunPower team for being helpful and welcoming during my time here. Lastly, a general thanks to all of the amazing people I've met since moving to California – they've been great friends and teachers





**FELLOW CASE STUDY:  
DATA ANALYSIS AND REPORTING**





# Communicating Change Management for Sustainability

## University of California, Office of the President

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### Climate Reporting and Zero Waste

#### GHG Inventory: UCOP Climate Reporting

The University of California system voluntarily reports its climate emissions on an annual basis to The Climate Registry (TCR). One of my primary accomplishments was the successful reporting and verification of UC Office of the President's 2015 inventory of twelve buildings.

- Greenhouse gas **inventories** focus on onsite combustion, purchased energy and heating, and other emissions sources like vehicles and waste
- UCOP's inventory takes an **operational control approach** that combines leased and owned properties as well as its Wholesale Power Program (WPP) into one inventory
- My tasks** included tabulating data from the new UCOP online utility database, checking for gaps, contacting building managers about anomalies, and collaborating with **third party verifiers** to ensure accuracy of reporting
- Climate reporting informs other UCOP processes like its **Climate Action Plan** and system wide **Carbon Neutrality Initiative** strategy to reach net zero carbon emissions by 2025



Five Points Solar Park



#### UC Zero Waste Communications Campaign: Closing the Gap

UC has a sustainability goal of achieving Zero Waste by 2020, defined as 95% material diversion from landfill. However, campus diversion rates range from 40-85%, and each one has a unique set of issues in successfully maximizing its reduction, recycling, composting, and sustainable procurement efforts. A common narrative across the UCs was also missing when I arrived.

- I worked with the UC Solid Waste and Recycling Group to deploy front end and back end best practice and educational **web materials** on zero waste
- I assisted the UCOP Sustainability Associate Director in making **the business case** for zero waste through **data, charts, and graphics**
- Under the Carbon Neutrality Initiative, I also created a presentation that explained the **nexus of co-benefits between carbon neutrality and zero waste** with a focus on reuse, waste to energy, and agricultural carbon sequestration



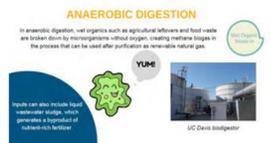
### Achievements and Outcomes

#### UCOP 2015 TCR Inventory

- 2015 GHG Inventory verified and approved by TCR
- 6,556 metric tons of CO2e in Scopes 1 and 2
- Improved the process for future years by adding climate and energy use data to UCOP's online building database for ease of access

#### UC Zero Waste Communications Campaign

- Created content for the #MyLastTrash online toolkit
- Contributed to three presentations for the Zero Waste Taskforce
- Provided critical input for proposed revisions to the UC Sustainable Practices Policy with a shift towards reduction, per user data, and strategic procurement



### Lessons Learned

#### Successful Strategies

- Friendly persistence is key to diligent data collection
- Align projects with institutional goals and audience values and incentives
- Redundancy and steadiness is vital when shifting gears in a large institution

#### Recommendations for Further Program Improvement

- Strengthen ties to student communities to tap into greater support for sustainability projects and initiatives
- Continue to work with additional university entities (like ANR) to expand the reach of department projects
- Expand UCOP's Carbon Neutrality Initiative focus to include a broader set of sustainability goals



Robert Barton  
Robert has a Master's degree in Sustainable Solutions from Arizona State University. His background is in environmental education, community development, and change management with a focus on sustainability.

#### Acknowledgements

My profound thanks to the many people who contributed to my success in this fellowship including Janika McFeely, Matt St. Clair, Hilary Bekmann, Jake Pollack, Andy Murdock, Carolyn Miller, Matthew O'Carroll, Steve Miller, and Bailey Hall.





**FELLOW CASE STUDY:  
BUSINESS OUTREACH AND ENGAGEMENT**





# SFO's Green Business Program & Zero Solid Waste Plan

## San Francisco International Airport

Climate Corps 16-17

### Greening SFO

#### Project 1: Green Business Program

SFO's Green Business program is aimed at increasing energy and water efficiency, generating cost-savings, reducing waste, and creating a healthier environment for all employed at or traveling through the Airport.

- Reduce Costs
- Save Money
- Gain Recognition
- Expand Web Presence
- Promote Wellness
- Reduce Use of Natural Resources

#### Project 2: Zero Solid Waste Plan

The objective of this task is to examine the current sources of waste generation at SFO and identify the material handling practices that are used to dispose of Material Solid Waste (MSW) and source-separated recyclable and compostable materials. The task's primary focus is directed towards identifying those parties who are the greatest generators of non-renewable MSW, recyclables, and compostable organics. I am responsible for generating data from an airport-wide compactor survey and creating the Task 2 Zero Solid Waste Report before my Fellowship ends at the end of the month.

### Outcomes

#### Green Business Program

SFO has 180+ tenants doing business throughout all terminals. My goal is to certify at least 12. I currently have 6 Green Businesses certified, and have enrolled nearly 80 tenants into the program.

- SF Environment Green Business metrics:

Commodity	Waste Diverted	Waste Diverted
	(lbs/year)	(lbs during the chosen period)
Mixed Recycling	5,574	20,634
Mixed Organics	5,907	21,866
Garbage (Not diverted, sent to landfill)	1,248	4,620

	Per Year	Since Enrollment	Total Cost Savings Since Enrollment
Greenhouse Gas Emissions Saved	86,976,105 lbs of CO2	420,229,367 lbs of CO2	\$714,389.92
Energy Saved	94,676,052 kWh	431,131,193 kWh	\$43,682,212.43
Water Saved	9,744,048 gallons of water	44,159,083 gallons of water	\$88,318.17

#### Zero Solid Waste Plan

In my Airport Mixed Waste Compactor survey, I found that a large majority of waste thrown away into the trash compactor is compostable. Data from a majorly used Terminal 3 compactor showed that 86.5% of waste thrown away was compostable. I am currently writing SFO's Zero Solid Waste Task 2 Report which will show a broader scope of data from previous years as well as data from my previous survey.

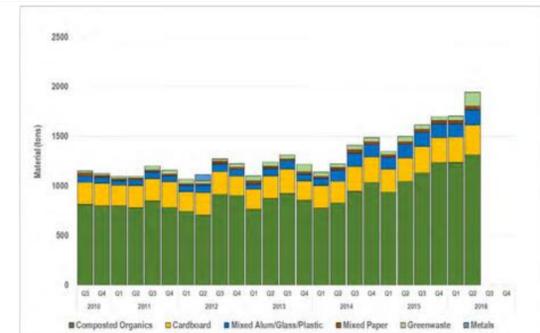
### Lessons Learned

#### Successful Strategies

1. Identifying Boundaries
2. Finding stakeholder leverage points
3. Incentivizing programs

#### Recommendations for Improvement

1. Additional interns to support projects
2. Integration of CRM software to keep track of Green Business leads
3. Integration with task management software for project management efficiency



Ricardo "Richie" Magallon



Fellow background: Ricardo Magallon has several years of work experience in fields requiring excellent communication skills, laboratory skills, and an extensive knowledge of corporate sustainability and global environmental issues. Ricardo's background in environmental management provided him with a diverse set of skills that allowed him to branch out and work in multiple industries involving his knowledge of the sciences, economics, data analytics, customer support, and systems thinking. Ricardo aspires to work for a reputable organization that understands the value of environmental and sustainable management.

#### Acknowledgements

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