

Sunnyvale Sustainability Commission Sub-Committee Proposal for 2017 Inaugural Sustainability Speaker Series



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Goals

- Educate, Engage and Motivate residents and businesses to take action on key sustainability issues in Sunnyvale. Tie into what is important to people and how the topics directly affect them.

Proposal

City of Sunnyvale Speaker's Series - Practical Sustainability

The following is a proposal for the first 3 events in the Sustainability Speaker Series. The topics are relevant to residents and businesses in Sunnyvale and compliment the roll-out of local initiatives Silicon Valley Clean Energy and the Food Scraps program which are launching this year.

1. Electrification (Home and Business):

Two steps to Sustainable Energy. Clean up Electricity and Electrify Everything.

Hook: Save money over time using electricity to heat your home and business while supporting the transition to clean greenhouse gas free energy.

Introduction: Community Choice Energy (SVCE Speaker – James Tuleya, Don Bray, Pamela Leonard, or Melody Tovar)

Main Speaker: Building Electrification (Speaker **Pierre Delforge** of Natural Resources Defense Council)

Content: Why convert from natural gas to electricity for heating homes and businesses? Current cost effective options for residential space heating, water heating and clothes drying. Options for commercial building fuel switching to electricity.

Discussion and Q&A about costs of fuel switching, economics of rooftop solar vs. CCE, case studies, and resources available.

Speaker Profile — Electrification, Home and Business



- **Pierre Delforge** Director, High Tech Sector Energy Efficiency, Energy & Transportation Program
- **Areas of Focus** Energy efficiency, information technology, consumer electronics, appliance codes and standards.
- **Bio** Pierre joined NRDC in April 2010 after 20 years in the I.T. industry where he worked in software development, hardware integration and most recently as the lead for HP's energy and climate strategy. At NRDC Pierre focuses on reducing the electricity consumed by information technology and consumer electronics in spite of their rapid growth. While information technology has a tremendous potential to transform the way we live and work and help the world transition towards a low-carbon economy, the global explosion in the number of electronics devices continues to make energy efficiency of electronics and the internet a critical priority. Pierre received a M.S. from Ecole Centrale de Paris and Diploma in Computer Science from Cambridge University. He started his career in the UK and France, and moved to the Silicon Valley in 2004.
- [Pierre Delforge Blog Very Cool Heat Pump Water Heaters save energy and money](#)
- [Pierre Delforge Blog Slashing emissions from fossil fuels burned in buildings](#)

Proposal

City of Sunnyvale Speaker's Series - Practical Sustainability

The second event will also complement the roll-out of Silicon Valley Clean Energy.

1. Electrification (Transportation)

Two steps to Sustainable Energy. Clean up Electricity and Electrify Everything.

Hook: Reduce pollution, never go to a gas station again, and support the transition to greenhouse gas free electric transportation.

Introduction: Community Choice Energy (SVCE Speaker – James Tuleya, Don Bray, Pamela Leonard, or Melody Tovar)

Main Speaker: Electrifying Transportation (Speaker – **Sarah Jo Szambelan** SPUR, or Luke Tonachel NRDC Director, Clean Vehicles and Fuels)

Content: Why convert transportation from petroleum fuels to electricity? Opportunities for personal automobiles, municipal fleets, public transportation, and shipping/rail/trucking. Benefits for human health and the environment. Infrastructure and policies needed to speed the transition.

Discussion and Q&A about costs and incentives for Electric Vehicles, Charging infrastructure, Train electrification, case studies, and resources available.

Speaker Profile – Electrification of Transportation



Sarah Jo Szambelan Research Manager Public policy and economic research, data science, GIS at SPUR (San Francisco Bay Area Planning and Urban Research Association)

2016 Report Fossil Free Bay Area

<http://www.spur.org/publications/spur-report/2016-09-21/fossil-free-bay-area>

Proposal

City of Sunnyvale Speaker's Series - Practical Sustainability

The third event will complement the roll-out of the Food Scraps program.

1. Zero Waste Journey

Hook: Save money, Simplify your life, Eat more nutritious food and Protect the environment by following the 5 R's – Refuse (to buy trash), Reduce, Re-use, Recycle, and Rot

Introduction: Sunnyvale ESD designated speaker on upcoming food scraps program (timing, what to expect, how to participate).

Main Speaker – Zero Waste (Speaker **Bea Johnson** Author of Zero Waste Home, Speaker and Blogger or Tim Oey Sunnyvale Resident, Zero Waste Blogger and BPAC Commissioner or Wendy Hediger, Zero Waste Coordinator at City of Palo Alto)

Content: Simple changes you can make at the grocery store, other stores and online to practically eliminate household waste. Impact of Zero waste for the city, residents and businesses.

Discussion and Q&A: Questions about particular waste challenges, available resources.

Speaker Profile – Zero Waste Journey



Bea Johnson - Author of **Zero Waste Home**,
Speaker, blogger

- [Bea Johnson TEDX talk](#)
- [Bea Johnson Zero Waste Home video](#)
- [Bea Johnson talk at Google](#)

Proposal

City of Sunnyvale Speaker's Series - Practical Sustainability

Consideration should be taken to 'marketing' the events through appropriate community awareness channels (City's Quarterly Report, Library event notifications, The Sun, social media such as NextDoor, city website, etc.)

- To encourage participation, some refreshments should be served – possibly donated by local Green Businesses.
- Events should be videotaped and made available on the Community TV channel as well as on appropriate city website pages.
- Following each event, feedback should be gathered from participants to identify positive and negative elements and to tune the content and topics for future events.
- As a supplement to the speakers series we recommend a curated website of videos to educate residents and businesses on various aspects of sustainability. Recommendations would be made by Sustainability Commission with ESD staff having the role of curating the content that could be added to the existing Sustainability website. Approvals for website content would go through established city channels.

Next Steps

1. Meet with City Staff prior to January Commission meeting to discuss more detailed options. – Done 1-13-17 (Kristel, Steve, Elaine, Melody)
2. Research speakers for “Electrification” and “Resource Use” topics. (Done, Kristel, Elaine, Steve)
3. Present plan for first events to Sustainability Commission for approval at February meeting.
4. Present plan to Council in March.
5. Once approved, Environmental Services Department Staff arrange specifics (dates, venues, speaker engagements, payments) and publicizes the events.
6. Environmental Services Department hosts events.
 - Include Refreshments
 - Gather feedback to identify improvements for future events.
 - Take video of events to broadcast on Community TV and post on city website.



Appendix

and Resources

Topics

Water

- Purple Pipes – Recycled water network expansion
- Earthquake preparedness of the water supply
- Graywater systems & Storm water catchment
- Drought effects on Snowpack, Groundwater

Climate Change

- Adaptation
- Climate Action Plan
- Carbon Footprint

Energy

- Community Choice Energy
- Home Electrification / Net Zero Energy use / Electric Vehicles
- Renewables for Home & Business
- Home & Business Efficiency Upgrades

Land Use & Transportation

- Open Space
- Traffic Reduction, Transportation alternatives, Electrifying Transportation
- Smart Growth
- Smart Cities

Resource Use

- Circular Economy
- Zero Waste - Recycling, Food Scraps, Composting
- Chemical Contaminants / Pesticides
- Ocean Plastics

Venue and Publicity Ideas

- Venues (depending on expected number of attendees)
 - Council Chambers (Allows for convenient videotaping for TV)
 - Library
 - Community Center
 - Theater or Auditorium
- Publicity
 - Sunnyvale.ca.gov website
 - Sunnyvale SUN Newspaper
 - NextDoor Mobile App
 - Library Events Electronic Display
 - Wolfe & El Camino Banner
 - Quarterly Report Newsletter
 - Other

Speaker and Panelist options (preliminary)

Name	Affiliation / Title	Theme / Topic	Commissioner or Contact
William McDonough	Author – Cradle to Cradle	Intelligent Design, Wise Resource Use	Zornetzer
Dame Ellen MacArthur	Ellen MacArthur Foundation	<u>Circular Economy</u>	
Will Travis	Consultant, writer, teacher	<u>Impacts of Climate Change Driven Sea Level Rise</u>	Wickham
Jason McLennan	CEO McLennan Design	Communities of the Future	<u>Ecospeakers.com</u>
Kimber Lanning	Local First Arizona	Smart Growth, Urban Planning	
Jay Famiglietti	Hydrologist, UC Irvine & JPL	California Drought	
Bruce Lourie	Environmental Policy Author	Failed Sustainability	
Charlie Gay	DOE Sunshot Director	Future of Photovoltaics	Wickham
Tom Werner or Richard Swanson	CEO or Founder – SunPower	Going Solar & Industry trends	Wickham
	NOAA	Sea level rise in bay area	Zornetzer
	USGS	Drought forecasts for Bay Area	Zornetzer
Michael Brune	Sierra Club		
Don Weden	Retired Santa Clara County Planner	Smart Growth	
Stephanie Reyes	Interim CEO, Greenbelt Alliance	Water and sustainability in CA	
Erik Walukiewicz	Fremont Union HSD, Facilities	Area High Schools – Sustainability initiatives	Wickham

Speaker and Panelist options (preliminary)

Name	Affiliation / Title	Theme / Topic	Commissioner or Contact
Sarah Jo Szambelan	SPUR	Electrification	Wickham / Marshall
Gil Friend	Chief Sustainability Officer, City of Palo Alto	Electrification, Zero Waste,	Marshall
Andy Hoskinson	Center for Sustainable Energy (Oakland-based)	EV Implementation	SPUR
Cal Silcox	PG&E	PG&E's electric vehicles program	SPUR
Regan Zane	Professor of Electrical and Computer Engineering, and Founder and Director of the Center for Sustainable Electrified Transportation (SELECT), Utah State University	Transportation Electrification: Technologies Towards a Sustainable Future for Transportation Systems	
Dom Nozzi	City planner with extensive experience in pedestrian and trail planning as well as in planning to protect the living urban environment. Executive Director of Walkable Streets Urban Design.	Author of <u><i>Road to Ruin: An Introduction to Sprawl and How to Cure It</i></u> ,	

Approaches

- One Speaker per event, and events rotate through various Sustainability topics
- Panel Discussion with multiple experts on a given theme. Each event has a different theme.
- Annual Themes with each event either a Panel Discussion or individual Speakers
- Cover both regional and local issues and initiatives

Themes

➤ Threats to our region and adaptation strategy

- Climate Change
- Transportation
- Housing
- Open Space
- Drought

➤ Sunnyvale local initiatives

- Community Choice Energy
- Solid Waste Reduction (Food Scraps)
- Water Pollution and Control / Recycled Water / Graywater & rainwater collection
- Climate Action Plan – Progress and Future Plans
- Land Use & Transportation (Smart Cities)
- Sustainability in our Schools

➤ What you can do - Home & Business

- Home Energy Audit, Financing & Upgrades
- Carbon Footprint
- Plastic Packaging, Composting, Recycling
- Chemicals in Home & Garden
- Electrification (Home and Auto)
- Going Solar

➤ Smart Cities

- Transportation / Walkable Cities
- Land Use / Urban Planning / Smart Growth
- Systems Thinking / Internet of Things / Energy & water monitoring and control

Individual Speakers

- Multiple potential speakers identified
 - William McDonough – “Cradle to Cradle” Author
 - NOAA expert on sea level rise in Bay Area
 - USGS expert on drought forecasts for Bay Area
 - Dept. of Energy SunShot Initiative Director on the future of photovoltaics
 - Community planning expert on “Smart Cities”

➤ Multiple Panel possibilities identified

*Local Sunnyvale Sustainability Initiatives Panel

- Smart Growth
- Land Use
- Transportation: Limitations and Opportunities
- Walkable City
- Sustainability in our schools

*Smart Cities Panel

- Retrofitting existing infrastructure
- Benchmarking - Success Stories
- What is a “Smart City”?

Resources for connecting with Speakers

- Sustainability Commissioner Professional Networks
- Environmental Services Staff Professional Networks
- Sunnyvale Cool
- www.ecospeakers.com
- US Green Building Council
- American Institute of Architects
- Silicon Valley Leadership Group
- Acterra
- Greenbelt Alliance
- 350.org
- Sierra Club
- Natural Resources Defense Council
- Silicon Valley Toxics Coalition
- Sustainability Advocates in Universities, Businesses, Local and State Government