San José Environmental Innovation Center

- Architect: J. Francis Ward
- Built in 1958 as a wax paper factory
- Rare example of Mid-Century Modern Architecture in the Bay Area
- Site: 4.27 acres
- Original Warehouse: 40,500 square feet
- New HHW building: 6,600 square feet

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History & Timeline

• 1958: Warehouse built
• 1973: Purchased by City
• 2006: Acquired by Environmental Services
• 2009-2010: Phase I - Paving, landscaping & street improvements
• 2011-2014: Phase II – Warehouse renovation, new HHW building
• 2016: Phase III - Solar installation

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Environmental Innovation Center - Location

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Master Plan: EcoPark

Mission: Transform a blighted City property into a campus that supports environmental stewardship and economic development.

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Program + Design Vision

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Design Goals + Targets

- LEED Platinum target
- Environmentally responsible systems
- Demonstration opportunities
Sustainability features

1. LED Lights
2. Silva Cells™ (tree root system)
3. Solar Tracking Skylights
4. Recycled Water Piping
5. Pervious Pavement (including recycled materials)
6. Smart Irrigation System (weather-based)
7. Wind Turbines
8. Solar Panels
9. Drought Tolerant Plants
10. Electric Vehicle Charging Stations
11. Modular Wetland®
12. Recycled Concrete
13. Bioswales
14. Public Art Feature
15. Cool Roof
16. Solar Light Tubes
17. Low VOC Materials (paints, adhesives, flooring)
18. Low/No-water Fixtures
19. Reclaimed Wood
20. Interior Composting Toilets

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Green Features

- 343.8 kW system
- 599,000 kWh (projected annual generation)
- 1,164 total PV panels on roofs and car ports
- 21 inverters (16 currently used + 5 for future expansion)
- System offsets 100% of EIC’s annual energy use
**Environmental Benefits**

- CO2 Emission Saved: 308,795.06 kg
- Equivalent Trees Planted: 17,130.88
- Light Bulbs Powered: 1,331,070.63 For a day

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**Overview**

- Current Power: 67.29 kW
- Energy today: 1.12 MWh
- Energy this month: 9.36 MWh
- Lifetime energy: 439.25 MWh

**Power and Energy**

- Graph showing solar production from 31/12/2015 to 31/12/2016.
- Solar Production: 374,355 MWh

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Green Features

Solar PVs and wind turbines on landmark tower

Solar tracking skylights and solar light tubes

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Green Features

- Award winning public art feature captures and reuses rainwater
- Interior composting toilets
- Silva cells (tree root system)
- Drought tolerant landscaping and smart irrigation system
- Vegetated swales and bio-retention area for stormwater
- Pervious pavement types

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Lessons Learned

• Get partners on board early

• Value engineering – stay true to intentions despite reduced budget

• Be flexible
  o Installed PV system evolved from plans
  o Funding options (NMTC, EDA grant)
Questions?

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Bonus slides
New Markets Tax Credits

• Promotes economic development in low-income communities

• U.S. Treasury Department awards tax credit allocations to Community Development Entities (CDEs)

• Tax credit allocations sold to investors in exchange for equity in qualifying projects (7-year compliance period)

• Specialized consultant support to assist City with NMTC transaction

• Transaction structure designed to minimize City risk and maximize benefit
New Markets Tax Credit Funding Structure

- **Leverage Lender (City)**
  - $19M Leverage Loan
  - Debt Payments (interest-only)

- **Investment Fund**
  - $7.7M Equity

- **Investor (JPMorgan Chase Bank)**
  - $10.8M New Markets Tax Credits

- **Community Development Entities (BR, NCCLF, NDC)**
  - Qualified Equity Investment ($26.6M)
  - QLICI Loans ($25.9M)
  - Debt Payments (interest-only)

- **Qualified Borrowing Business & Ground Lessor (EIC QALICB, Inc.)**
  - Rent Payments (Master Lease)

- **Developer & Master Tenant (City)**
  - Rent (Ground Lease – paid upfront)

- **CDFI Fund Department of Treasury**
  - Certification of CDEs and Allocation of NMTCs
Flow of Funds - 7 Year Compliance Period

City of San José (Leverage Lender)
- Interest Payment

Investment Fund
- Return on Investment

Community Development Entities
- Interest-Only Payment

EIC QALICB
- Rent

City of San José (Master Tenant)
- Rent

Subtenants (ReStore, PSV, HHW)