

## SUMMARY

With **sixteen years** of experience in the **solar industry** and over twenty years in the broader field of **sustainable resource management**, I bring a creative and analytical focus to **sustainable energy consulting**.

Skills include **feasibility studies, preliminary design, energy modeling (PVsyst), capacity testing, financial analysis, GIS / Sketch-up, optimization, project management, and technical training**.

## EXPERIENCE

### **FOUNDER/SENIOR CONSULTANT, Leafbird Consulting LLC, – Davis, CA**

**2021 – Present**

- Formed woman-owned independent consulting firm. My services include energy production estimates, preliminary design and feasibility studies, landscape GIS analysis, performance testing and troubleshooting, and solar plus storage sizing and modeling.
- Developed detailed CAD to PVsyst energy models on complex terrain and for architectural designs. Supported EPCs and Owners with energy modeling, contract review, and acceptance testing. Modeled commercial PV + storage systems energy production and cashflow using Energy Toolbase. Provided group and individual training in PV energy modeling methods.

### **PERFORMANCE ENGINEER, Blue Oak Energy / Coronal Energy – Davis, CA**

**2008 – 2021**

Multiple positions over 12 years—from Sales Development to Program Manager to Energy Consultant.

- Managed solar feasibility study for University of Southern California (USC) including site prioritization, energy savings assessment and financial analysis.
- Provided technical support on solar energy modeling and performance analysis throughout the project life-cycle. Managed Blue Oak energy modeling team.
- Developed excel tools for post processing of PVsyst energy model data in combination with DC and AC coupled battery energy storage systems. The tools run multiple scenarios for sizing optimization.
- Prepared solar performance projections including resource assessment, PVsyst energy modeling, 3D/ terrain shade analysis, soiling and snow predictions, and probability of exceedance analysis.
- Analyzed annual performance data at hourly and sub-hourly time-steps to evaluate sub-hourly clipping losses, and other discrepancies from expected performance.
- Developed and implemented system capacity tests and performance guarantees. Provided performance monitoring and troubleshooting support for Asset Management team.
- Performed LCOE driven design optimizations focusing on the intersection of energy production, site layout, technology selections, and project economics.
- As Program Manager in 2011, coordinated development, design, construction, and performance monitoring for 13 commercial solar projects across 7 states. Provided detailed analysis throughout the project to support client's financial and environmental goals.



**GRANT WRITER / COMMUNICATIONS SPECIALIST, CEC – Queens, NY** **2007-2008**

Community Environmental Center (CEC) was a not-for-profit urban energy conservation organization.

- Wrote successful proposals for contracts to serve as institution-wide greening consultant.
- Prepared grant applications for foundation and government funding opportunities.
- Analyzed technology and policy developments relevant to energy efficiency in buildings.
- Supported outreach strategy for promotion of weatherization for low income households in NYC.
- Created database and geographic information system to track projects and CO<sub>2</sub> emission reductions.

**ENVIRONMENTAL CONSULTANT, Self Employed** **2005 – 2007**

***eDesign Dynamics, New York, NY – 2007***

Modeled water budget for design of rooftop rainwater harvesting / water reuse system for eco-restaurant.

***Town of Dryden, Dryden, NY – 2007***

Compiled design guidelines for stormwater management with a focus on Low Impact Development.

***Arghyam Trust, Bangalore, India – 2005 to 2006***

Provided field support and project guidance for school rooftop rainwater harvesting project.  
Supported development of online educational resources for India Water Portal.

**ENVIRONMENTAL PLANNER, Town of Dryden – Dryden, NY** **2003 – 2005**

- Secured NY State incentives for new town hall energy efficiency measures.
- Managed implementation of federally funded rail-trail project.
- Facilitated comprehensive planning process and implemented water resource management programs.
- Provided technical support to local boards for environmental review of development projects.

**GRADUATE RESEARCHER, Cornell University, Natural Resources – Ithaca, NY** **2001 – 2003**

Researched planning techniques and regulatory mechanisms for water resource protection.

Surveyed local governments across New York State to assess capacity to protect water resources.

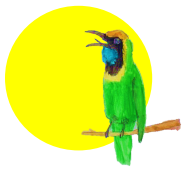
**ENVIRONMENTAL EDUCATOR, Scenic Hudson Land Trust / AmeriCorps – Poughkeepsie, NY** **1998 – 2000**

Taught programs on physical, chemical, and biological water quality monitoring for grades 3 to 12.

Created and taught outdoor environmental education programs at Land Trust preserves.

**FARM APPRENTICE, Merrifield Farm – Limington, ME** **Summer / Fall 1997**

Worked for family running a six-acre vegetable and flower farm – an opportunity to learn about small scale, low chemical input agriculture. Program organized by the Maine Organic Farming Association.



## AFFILIATIONS / VOLUNTEER EXPERIENCE

**PRESIDENT, BOARD OF DIRECTORS, Davis School Arts Foundation – Davis, CA** **2023 – Present**  
Funding arts programs in the school district, non-profit operations.

**VOLUNTEER, Habitat for Humanity – New York, NY; New Haven, CT; Boca Raton, FL** **1991, 1995-6**  
Assisted with roofing, painting, framing, drywall, cement mixing, etc.

## EDUCATION

**M.S. Natural Resource Management and Planning**, Cornell University, Ithaca, NY **2000 – 2003**

**B.S. Environmental Biology**, Yale University, New Haven, CT **1993 – 1997**

**LEED (Leadership in Energy and Environmental Design) Accredited Professional** **2008**

**Solar Photovoltaic Design and Installation Intensive**, Solar Living Institute, Hopland, CA **2008**

## PUBLICATIONS

Reaugh, B., Beckensten, R., **Gross, D.**, Brearley, D. (2017). SCADA Systems for Large-Scale PV Plants. SolarPro Magazine, May/June, 18-32.

**Gross, D.** (2003). Assessing Local Government Capacity for Ecologically Sound Management of Flowing Water in the Landscapes of the Great Lakes Basin. MS Thesis, Natural Resources, Cornell University.

**Gross, D.**, Levy J., Pinney, D., Schomaker, K. (1997). New Milford Farms and Organic Residue Recycling. In: Chertow, M. and Portlock, M. (Eds.). Developing Industrial Ecosystems: Approaches, Cases, and Tools. (2002, pp. 49-68). Yale School of Forestry & Environmental Studies Bulletin Series. 95.