

EDUCATION

Candidate - Doctorate of Philosophy

Public Affairs & Policy.
Portland State University,
graduation expected ~Spring
2023

Master of Science

Environmental Science and Eng.
(specialty–water quality)
Oregon Graduate Institute
(now OHSU)

Bachelor of Science

Environmental Science
Texas Christian University

PROFESSIONAL CERTIFICATIONS

- AEE Certified Energy Manager and Demand-Side Energy Manager
- Exemplar Global certified EMS, OHS, & QMS Lead Auditor
- IEnMP certified ISO 50001 and SEP Lead Auditor, SEP Performance Verifier, SEP Certified Practitioner EnMS - Industrial
- CalEPA ARB certified GHG Lead Emissions Verifier (Process, Transactions, Oil & Gas trained), GHG Lead Offsets Verifier (ODSs, Livestock, Urban Forestry), LCFS Lead Verifier (Fuel Pathways, Alt. Fuels Transactions)
- USGBC Certified LEED-AP BD+C
- Certified Earth Advantage Commercial Project Steward

PROFESSIONAL TRAINING

- ICAO CORSIA GHG Offset & Reduction
- ArcGIS software training
- AutoCAD software training
- 36 Hour Lean Six Sigma Green Belt Certified
- SEP Train the Trainer
- 40 hour RCRA training
- 40 hour OSHA HazWOPER training
- 40 hour USDOT HazMat training
- IECA erosion control & wetlands trainings
- FEMA ICS/NIMS training

SUMMARY OF EXPERIENCE

My professional work has focused on sustainability, energy efficiency, and improving business operations and practices. I have over 20 years of work experience, including 10 years in high tech companies, mostly working in facilities departments. Through Sustainable Environmental Services Corp. (SES) I provide energy and environmental consulting. I created and managed ISO-conformant Environmental Management Systems for two high tech companies before founding SES. I subcontract with many Certification Bodies as a Lead Auditor for ISO certification audits. I have assisted several companies in setting up their ISO management systems. I perform internal audits and provide Internal Auditor Training to ISO 9001, 14001, 50001, 45001, and the Superior Energy Performance program. Through SES I also provide assistance with developing statistical energy models, employee education programs, environmental compliance auditing, energy efficiency auditing, GHG emissions and offsets calculation and verification, and LEED green building support.

EMPLOYMENT EXPERIENCE

Principal & CEO, Sustainable Environmental Services Corp.

Hillsboro, Oregon, www.nwsustainable.net

12/2006 – Current

- Perform greenhouse gas (GHG) emissions verification as a Lead Verifier to the California Air Resources Board (CARB) Mandatory GHG Reporting Regulation (MRR) program, the Carbon Disclosure program, and The Climate Registry. Perform GHG offsets project verifications to the CARB, The Climate Reserve, and Climate Action Reserve cap and trade programs.
- Perform many ISO 14001 environmental management systems, ISO 50001 energy management systems, ANSI MSE 50021 Superior Energy Performance (SEP), and OHSAS 18001 safety management certification audits and Performance Verifications for multiple Certification Bodies, and a wide range of their commercial and industrial clients around the world. Also provide technical reviews for Certification Bodies for the audits of other auditors.
- Perform corporate social responsibility, health and safety, and food safety inspections and audits for a major multinational service-industry company around the world.
- Implemented certified ISO 50001 systems with two clients for Energy Trust of Oregon. Provided coaching on the standard, creating statistical models, reviewing documents, providing implementation tools, conducting mock audits, and attending Stage 1 and 2 certification audits.
- Implemented ISO 50001 with one client for BC Hydro PowerSmart, providing coaching on the standard, reviewing documents, determining the statistical model, providing implementation tools, and conducting internal audits. Also providing Strategic Energy Performance coaching to one client, focusing on employee engagement and metrics.
- Program Manager for the Northwest Energy Efficiency Alliance's and US DOE's pilot program to implement the Draft ISO 50001 and the US DOE's Save Energy Now and Superior Energy Performance programs in the Pacific Northwest. Provided technical implementation assistance to companies and their associated consultants participating in the pilot, primarily in documentation and standards conformance.
- Beta-tested ANSI Superior Energy Performance Certified Practitioner training with an ANSI/USDOE approved training company.
- Subject Matter Expert providing technical content for development of the Northwest Energy Efficiency Alliance's new version of their Continuous Energy Improvement program, focused on medium and small businesses. The program will be delivered primarily online in a tiered format, with information and tools development by the Subject Matter Experts.
- Program Manager for BC Hydro's ISO 50001 Implementation Study, performing research on adapting ISO 50001 for resource extraction industries and preparing initial implementation plans for select companies.

- Performed research for BC Hydro on utility and service-provider industry contractor management to inform possible changes to BC Hydro's Power Smart Trade Alliance program.
- Conducted audits of product compliance to the EPEAT global green electronics label. This label is required by many GSA contracts.
- Assisted companies within Urban Renewal Areas in Portland in developing sustainability projects, as part of the Zero Waste Alliance/Portland Development Commission Green Gain program, including ecoroof investigations, solar investigations, etc.

Senior Associate, Strategic Energy Group, Portland, Oregon

7/2007 – 12/2008

- Worked through a contract from the non-profit NW Energy Efficiency Alliance to help companies integrate continuous energy improvement processes into daily business practices. Project manager for 8 companies in the energy efficiency program.
- Worked through a contract with Connecticut Energy Conservation & Management Board to research state and federal energy policies and programs for high performance commercial & industrial buildings.
- Worked through a contract with non-profit Energy Trust of Oregon on evaluating the effectiveness of their energy efficiency incentive programs.

Sustainability Coordinator, Portland State University, Portland, Oregon

3/2004 – 7/2007

- Primary point personnel on all environmental sustainability considerations for the operations of the campus.
- Supervise 2 full-time staff personnel, 3 graduate assistants, and 7 to 10 student employees, and many volunteers.
- Coordinated Salmon-Safe stormwater and landscape management certification for the university in 2 months. This is the first school to receive certification.
- Developed educational materials, presentations, and tours focused on the green operations of the campus for students, faculty, and staff.
- Oversaw green aspects and LEED certification of new construction and remodeling efforts on campus.
- Assisted in obtaining \$144,000 federal earmark for solar test array and worked on installation which was completed in 2007. Worked on project development of 1 to 4 vertical axis, micro wind turbines for beta testing in the urban environment for the manufacturer.
- Worked with contracting departments to incorporate specific sustainability goals into food service, janitorial, and waste management contracts.
- Assisted with expansion of recycling program & instituted pre and post-consumer composting on campus. Coordinate regularly with PSU Academic Sustainability Coordinator on efforts such as Focus the Nation and the OECD Higher Education for Sustainable Development benchmarking program.
- Supervised obtaining City of Portland BlueWorks certification for PSU Facilities & Planning Dept.
- Assisted in obtained several AmeriCorp and DEQ Recycling grants worth a total of ~\$35,000 each.

Product Stewardship Coordinator, Xerox Corp., Wilsonville, Oregon

11/2001 – 3/2004

- Primary EH&S point personnel on new product development and integration of environmental sustainability considerations
- Key participant in major revision and establishment of new products & supplies recycling programs for customers
- Obtained ISO 14001 certification of manufacturing operations at site in 7 months & annually conduct ~250 hours of internal audits
- Primary coordinator of 3 to 8 environmental improvement projects annually under the ISO 14001 structure.
- Lean Six Sigma Green Belt for the EH&S group, working on improvement/efficiency programs
- Instituted onsite Environmental Committee to allow employees to voluntarily promote environmental issues onsite

Environmental Engineer, Fujitsu Microelectronics, Inc., Gresham, Oregon

1/2000 – 11/2001

- Managed recycling, air pollution, wastewater, groundwater, surface water, wetlands, erosion control, ISO 14001, and hazardous waste programs, permits, and monitoring plans. Wrote and submitted regular compliance reports for all programs.
- Project manager of wetlands delineations project of potential development areas of the site.
- Wrote and submitted to DEQ annual stormwater reports and stormwater pollution prevention plan updates. Conducted monthly stormwater inspections. Developed and implemented stormwater Best Management Practices onsite. Designed, developed, and implemented new stormwater pollution control plan for new Columbia Slough NPDES permit and negotiated monitoring and plan conditions with DEQ.
- Revised recycling system for all materials onsite, including food-contaminated Styrofoam.
- Coordinated and conducted both mandatory and voluntary onsite environmental education and training.
- Developed site wide annual pollution reduction goals and collected environmental cost accounting data, in coordination with parent company in Japan.
- Managed of hazardous waste programs and monitoring plans. Wrote and submitted annually to DEQ and EPA two annual hazardous waste and toxic use reduction compliance reports.

- Managed compliance and operational oversight of wastewater treatment systems, programs and monitoring plans. Wrote and submitted compliance reports monthly to City of Gresham. Assisted with optimization and management of wastewater treatment systems. Wrote application for new wastewater industrial pretreatment permit and negotiated new permit requirements with City of Gresham.
- Managed compliance and operational oversight of air pollution abatement systems, permits, programs, and monitoring plans. Wrote and submitted compliance reports semiannually to DEQ. Coordinated periodic stack testing and reviewed results. Assisted with optimization of scrubber efficiencies and selection and management of point-of-use air abatement systems.
- Wrote application for new air contaminate discharge permit and negotiated new permit requirements with DEQ.
- Oversaw onsite DOT compliant shipping program for transport of hazardous materials.

Environmental Engineer, Hynix (Hyundai) Semiconductor America, Eugene, Oregon

11/1996 – 1/2000

- Managed recycling, ISO 14001, wastewater, groundwater, surface water, wetlands, and erosion control programs, permits, and monitoring plans. Wrote and submitted regular compliance reports for wastewater and surface water. Wrote SOP's for stormwater monitoring, groundwater monitoring and recycling programs.
- Managed wetlands delineation, archeological survey, and soil remediation projects in onsite wetlands. Created community and employee outreach programs involving neighborhood education & wetlands restoration volunteering.
- Negotiated permits with regulators, The Nature Conservancy and citizens for wastewater discharge, stormwater discharge (401C, 1200C, 1200L, and 1200Z), air, and wetland permits.
- Wrote Integrated Stormwater Pollution Control Plans for 1200L and 1200Z NPDES permits. This included specially required hydrology and water treatment sections in addition to regular NPDES sections. Wrote Integrated Pest Management Plan for onsite landscaping maintenance to protect surface water.
- Environmental coordinator for HSA's ISO 14001 EMS. Designed, developed and presented training company-wide, created documents, managed environmental improvement goals, and registered the EMS to ISO 14001 in 9 months
- Managed redesign and construction projects for environmental pollution control systems for new Fab startup; particularly stormwater treatment, chemical delivery docks, VOC abatement, and ammonia exhaust abatement systems.
- Project manager and coordinator of contractors, environmental consultants, and equipment vendors.
- Oversaw, reviewed, and audited construction activity involving environmental systems on the site.