



Sustainability Ambassadors Presents

CLEAN ENERGY FUTURE

July 27-29, 9:00-12:00 | 9 STEM Clock Hours | Zoom interactive

PBL Curriculum Design Lab for Secondary Teachers *and...*
2050 Workout for Student Ambassadors and invited peers

[REGISTER TODAY](#)

Problem Statement

What are the most effective solutions across sectors, systems, and scales for managing the relationship between energy conservation, generation, distribution, and storage? What role can students play in designing and amplifying these solutions to ensure a clean energy future?



<https://pixabay.com/photos/solar-energy-solar-panels-5622969/>

Why you should attend...

- You use electricity from the power grid.
- You know that energy consumption is a HUGE contributor to our carbon footprint.
- You love it when your students are authentically engaged.
- You love identifying real-world contexts for meeting academic standards.
- You are personally fascinated by intersectional challenges like this one.
- You value a clean energy future.

About the Lab

You flip the switch and the lights come on. You adjust the thermostat and the furnace fires up. But is the way we generate electricity and heat our homes **compatible with a sustainable future?**

Are the buildings we live, learn, and work in as energy efficient as they could be? When energy consumption is typically about **40-45% of a city's carbon footprint**, and we need to reduce this down to 0%, where do we start?

This Lab is an ongoing practicum, convening technical experts, teachers, student leaders, and community champions to figure out how to create an **energy future that is 100% clean**. Will it be through innovation in policy, technology, consumer behavior, or economics?

Together, we will explore, build, and refine the most intriguing, problem-based, place-based learning opportunities for applying sustainable systems design at **four scales** - Household, Neighborhood, City, Bioregion, and through **five systems lenses** - Equitable Outcomes, Engineering Design, Economic Development, Ecosystem Services, and Educating for Sustainability. **Learn how to align academic rigor with community problem-solving.**

- PRACTICE** The fundamentals of problem-based, place-based learning
- ANALYZE** Climate science in context of local solutions
- APPLY** Systems thinking to identify solutions, track impact, report to stakeholders
- COACH** Student Impact Projects aligned with city climate action plans
- DESIGN** Lessons for application in your classroom
- EXPLORE** Career profiles of people who are working on solving this problem

Associated Standards and Frameworks

- OSPI - [Environmental Sustainability Standards](#)
- NGSS - High School [Human Sustainability Standards](#)
- OSPI - [Social Studies Standards](#) for Civics, Economics, Geography, History,
- [College, Career, and Civic Life \(C3\) Framework](#) for Social Studies
- [Common Core State Standards](#) - English Language Arts/Literacy and Mathematics

[Ready to Register?](#)

What is the 2050 Workout?

Student leaders participate in the PBL Lab along with teachers, but through a parallel, youth-led track focused on a fascinating thought experiment, **“What would it be like to achieve 100% sustainability in our communities by the year 2050?”** Students self-organize in research, facilitation, and presentation teams to prepare for the **2050 Update** on August 26, our annual livestream event attracting thousands of viewers from across the nation. Student Ambassadors, invited peers, and our team of Sustainable Systems Coaches facilitate a different focus associated with each of the summer PBL Labs. In exploring one system in depth, the intersectionality among systems is revealed with a special emphasis on equity outcomes and

climate change action. How fast can we generate the best solutions? What are the prototypes and tipping points already in play? What would it actually look like if we succeed?

Funder Acknowledgement. Thank you!



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