STUDENT IMPACT PROJECT IDEAS
Sustainability Ambassadors
Rapidly advancing a more sustainable future

GREEN BUILDING & URBAN PLANNING

Take action at home, at school or in the community. Communicate your impact to peers, stakeholders, and policy makers to urge collective action. Post your actions on the map.

TOP TEN: If you are especially proud of the impact of your project, and it meets our criteria, we invite you to submit your work to our Annual Top Ten Impact Projects.

1. Change all of the light bulbs in your house to LED, then calculate and report how much energy you conserve and GHG emissions you avoid. Read this article: The American Light Bulb Revolution. And visit Project Drawdown for the BIG IDEA Project Drawdown Solution #33

2. Calculate the energy use of the top five electronic devices or appliances you use in a typical day at home and identify opportunities to use more energy efficient appliances. See strategies and product ideas at Energy Star.

3. Conduct a Home Energy Audit supported by Puget Sound Energy or by Seattle City Light.

4. Develop a campaign to sign families up for investing in Puget Sound Energy's Green Power Program or Seattle City Lights' Green Up Program.

5. Calculate the EUI of your home and make a list of recommendations to improve it. See “How to calculate the Energy Use Intensity of a building.”

6. Establish a home remodel plan using King County’s Eco-Cool Remodel Tool. Communicate findings and urge collective action.

7. Design your future, cost effective home or multifamily complex that meets the Evergreen Standard using case studies and the scorecard from the Built Green certification process. Communicate findings and urge collective action.

8. Update policy makers on advances in Built Green rated homes in your neighborhood or city. Use the mapping tool to show the number and location of Built Green homes in your area.

9. Develop a neighborhood plan to improve access to affordable, sustainable housing. King County is experiencing explosive growth and unprecedented inequity in access to housing. We face an affordable housing shortfall of 156,000 homes today and a projected deficit of 244,000 homes by 2040. Closing that gap requires an additional 44,000 affordable homes every five years. Capital dollars currently available to King County’s affordable housing developers are nowhere near what is needed. Far too many low-income King County
households—disproportionately people of color—are now perpetually housing insecure or pushed into homelessness. Enveloping everything is the climate crisis. In recognition of the issue’s urgency and the effects of the built environment, Washington state’s energy code includes bold mandates for reducing net energy consumption and greenhouse gas emissions by 2031. See Housing Development Consortium.

10. Create a 20-year plan to redevelop your community as an EcoDistrict. Compare your EcoDistrict plan to your city’s 20-year vision which is part of their comprehensive planning process as required by the Washington State Growth Management Act.

11. Create a TOD plan for your city that takes full advantage of how to develop housing, shopping services, and open spaces densely clustered around transit centers either for bus or light rail. See King County Transit Oriented Development

12. Analyze your home or apartment for solar power potential using Project Sunroof.

13. Coordinate with your School District Resource Conservation Manager (RCM) to research your school building’s data on energy, water, and waste. Find out how to access the district dashboard. Make recommendations for improvements and review new data.


15. Design a net zero water home, multifamily complex, school or office building. Here are some useful starting places: Ideal Net Zero Water Building | New Construction Goal: Net Zero Path to Newt Zero Water | Toward Net Zero Water


17. Design a system for harvesting rainwater from the roof of your home, multifamily complex, or school and repurposing it to increase water use efficiency. Rainwater Harvesting 101

18. Design a system for capturing, filtering and infiltrating 100% of the stormwater that falls on your property or the school campus. Prove in your design that the water cycle will function the same way it would if the same area was still a forest. How would your design for stormwater treatment be different if you could build the whole facility from scratch? Storm Smart Schools


20. Design your future school to meet the Living Building Challenge.

21. Design an office building that achieves the highest level of LEED Certification.

22. Design an office building that meets the Living Building Challenge.

24. Develop an advocacy campaign for replacing school portables with the greenest possible alternative. See SAGE (Smart Academic Green Environment) Classroom.

25. Enter your design for a future school in the SchoolNEXT Competition.


27. Develop a lesson plan and teach younger students key concepts about green building design.

28. Work with a lead teacher and your building Principal to start a Green Building Architecture STEM Course at your school.

29. Design a green home consumer awareness campaign in partnership with a local, certified green realty company.

30. Develop fact sheets for green school construction featuring leading edge school districts. Inform your school district Facilities Department and present your findings to the School Board.

31. Identify local architectural firms with a strong track record in sustainable school design. Research their websites, project portfolios, and values. Conduct email or phone interviews to find out what the issues and opportunities are for advancing the greenest schools possible. Where are we stuck and what are the best strategies to speed up this trend? Inform your school district Facilities Department and present your findings to the School Board.

32. Apprentice or job shadow with architectural and engineering firms that have a strong focus on green school design, sustainability or high performance buildings.

33. Write a new policy (or update an existing policy) on green school building construction and operations for your school district. Find out which school district already has the strongest policy and use it as a model. Or go beyond it. Inform your school district Facilities Department and present your findings to the School Board.

34. Write a series of letters to the editor, student blogs, or radio and TV spots on the merits of green building systems for a more sustainable future.

35. Propose a student-led workshop or mini-keynote at the A4LE Regional Conference.

36. Advocate for your city council to meet and exceed commitments they made through the King County Cities Climate Collaborative (K4C).