



PROJECT 2 : Creation of Public Campaign on Environmental Impacts of Smartphones

PROJECT-BASED LEARNING ASSIGNMENT OVERVIEW

▶ Getting Started:

Now that students have explored fostering informed decisions and designing a future without pollution or waste through the two lessons offered, they are ready to work in groups to develop a Public Service Announcements (PSA) campaign to raise awareness of the environmental impact of smartphones with a goal to inform the public and change behavior.

Students will use the content developed in Lessons 1 and 2, in addition to perspectives gained from the Environmental Justice Lesson, as they develop their campaigns. The open-ended nature of the assignments and project allow for a range of depth and sophistication of the resulting work. You have the flexibility to implement this project work in whatever way best compliments your curriculum.



REMOTE LEARNING SUGGESTIONS

If you are implementing this program virtually or in a combination of in-school and at-home learning, you can utilize collaborative programs to assist students such as Google Docs, Zoom meetings, Google Hangouts, Flipgrid to name a few.

Your school may have specific programs approved for use. Students can develop their projects individually but we highly recommend group collaboration if possible.



▶ Additional Research:

Have students research read the following assigned readings from the report:

- [Grand Challenge 5](#), specifically Box 5-3 (Example Areas For Environmental Engineers To Help Foster Informed Decisions and Actions)
- Engaging With Stakeholders to Create Solutions, p. 71-73
- [Grand Challenge 3](#), specifically p. 48-52



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▶ **Group Presentations:**

We encourage you to have each student group develop a presentation (the format is at the discretion of the educator – suggestions would be PowerPoint, video, graphs, documents, etc.) for their PSA campaign. You might work with the school to have the campaigns shared with the student body to see which campaign has the biggest impact.

We suggest providing the students with 2 to 3 class periods to do research and 3 to 4 class periods to work on the design. This can also be assigned as an out-of-class time project for teams to work on.



Students should consider the following questions:

- What are the biggest environmental impacts in the production, use, and disposal of smartphones, including the resources required to build them?
- What opportunities exist to reduce those impacts through alternative approaches to sourcing, manufacturing, distribution, use, reuse, and recycling?
- Where do you think people could make the biggest impacts?
- How could you help people make choices that lessen environmental impacts through:
 - ▶ Providing information
 - ▶ Changing the decision context
 - ▶ Creating incentives
 - ▶ Establishing new rules and regulations?