

PG&E × SFOA Green Career Videos

Full-Length Instructor Guide

Version 5.1 | March 23, 2026



SECTION 1

Access & Logistics



Webpage URL

<https://sfoa.earth/green-careers-experience>
(<https://sfoa.earth/green-careers-experience>)



Classroom Display

Instructors can play videos on a single monitor or supervise students watching on their own devices.



Student Devices

In order to complete the activities, students must have their own devices to access the SFOA website.



At-Home Option

Activities can be completed at home if per-student devices are not available in class.



SECTION 2

Video Summary — PG&E

These Green Career Videos introduce students to PG&E, one of California's largest energy providers, and highlight the company's mission to deliver reliable power while transitioning to more sustainable and resilient energy systems. Through interviews with electricians, engineers, and company leaders, students will hear firsthand stories about the skills, challenges, and rewards of careers in the energy sector. Students will gain practical insights into green careers in the energy industry, education and training options, salary expectations, and how to take first steps toward a career in energy.

🕒 Core Topics

Role of utilities in delivering electricity

PG&E's sustainability goals

Engineering career

Electrician career

PG&E career pathways (HS Diploma, AA, BA/BS)

Salary ranges and benefits



SECTION 3

Lesson Plans Overview

| PLAN TYPE | DURATION | DESCRIPTION |
|--------------------|--------------|--|
| Trailer | 3 min | A preview to spur interest before the full session |
| Full-Length Plan | 50–55 min | 3-part video (22 min) and 3 student exercises |
| 10-Minute Plan | 10 min | Short-form video; optional exercises |
| Individual Modules | 2–3 min each | Climate, College Story, HS Story, & Career Tracks |



SECTION 4

1-Day In-Class Plan Overview

1

Discussion 5 min

Intro: PG&E & Sustainability — Discussion: Exploring Career Goals & Perceptions

2

Video 7 min

Video – PG&E and Climate Change

3

Activity 5 min

Activity #1 – PG&E Climate Quiz: Test students' knowledge of PG&E's climate efforts

4

Video 7 min

Video – PG&E College Career Story & Training Programs

5

Activity 10 min

Activity #2 – Green Careers Exploration Quiz: Identify career interest types and check out PG&E careers that fit

6

Video 7 min

Video – PG&E High School Career Story & Career Tree

7

Activity 5 min

Activity #3 – PG&E / IBEW Training Programs & Exploring Job Listings: Show example PG&E job listings, introduce PG&E careers website

8

Discussion 5-10 min

Closing: Reflect on Learnings & Review Actionable Info

9

Follow-Up 5-7 min

Student Survey (Pass out/Share Survey link with students to complete at home same-day)



SECTION 5

Detailed Lesson Plan (45–55 min)

1

INTRO: PG&E & SUSTAINABILITY

5 min

Discussion

INTRODUCTION SLIDES

- Introduce students to the role of utilities in delivering electricity to customers
- Introduce the partnership between utilities like PG&E and Community Choice Aggregators (CCAs)

DISCUSSION QUESTIONS

Connect personal interests to the energy sector:

- When you think about your future, what kind of job do you imagine yourself doing?
- What do you enjoy—fixing things, solving puzzles, helping people, being outdoors, or working with tech?
- What comes to mind when you hear 'energy company' or 'PG&E'?
- What kinds of jobs do you think people do there?

2

VIDEO – PG&E & CLIMATE CHANGE

7 min

Video

Watch “PG&E & Climate Change” with students.



FEATURED INTERVIEW

Chris Warner

Sr. Director, Gas Transmission

3

ACTIVITY #1: PG&E CLIMATE QUIZ

2-3 min

Activity

Quiz Link: <https://sfoa.earth/pge-climate-quiz> (<https://sfoa.earth/pge-climate-quiz>)

Assignment: Students test their knowledge of the PG&E climate action plan discussed in Part 1 - How PG&E is responding to Climate Change. After completing the 5 questions and the quiz will display a score out of 5.

✓ 3-POINT RUBRIC

Emerging (1-2)

Student is building foundational understanding of PG&E's climate initiatives and beginning to connect key concepts.

Developing (3-4)

Student demonstrates solid comprehension of PG&E's climate strategy and can identify most key actions and goals.

Proficient (5)

Student shows comprehensive mastery of PG&E's climate commitments, accurately recalling specific initiatives and targets.

4

VIDEO – PG&E COLLEGE CAREER STORY & TRAINING PROGRAMS

7 min

Video

Watch “PG&E College Career Story & Training Programs” with students.



FEATURED INTERVIEW

Madison Currey

Gas Pipeline Engineer

5

ACTIVITY #2: GREEN CAREERS EXPLORATION QUIZ

10 min

Activity

Quiz Link: <https://sfoa.earth/green-careers-quiz> (<https://sfoa.earth/green-careers-quiz>)

The Green Careers Exploration Quiz is meant to help students discover their areas of interest when it comes to careers.

On the results screen, the quiz will show a score out of 100 for each of the six interest types (Realistic, Investigative, Artistic, Social, Enterprising, Conventional) based on their answers, as well as example job titles from PG&E that fit those interest areas.

Assignment: Write down your top 3 interest types and find a position at PG&E (jobs.pge.com (<https://jobs.pge.com>)) that you think fits each interest type. Write down the 3 positions you found and why you think they fit that interest type.

✓ 3-POINT RUBRIC**Emerging (1-2)**

Student identifies interest types and is beginning to explore how they connect to available careers at PG&E.

Developing (3-4)

Student clearly identifies top interest types and matches them to relevant PG&E positions with reasonable explanations.

Proficient (5)

Student demonstrates insightful self-awareness of interest types, selects well-matched PG&E positions, and provides thoughtful, detailed rationale for each choice.

6

VIDEO – PG&E HIGH SCHOOL CAREER STORY & CAREER TREE

7 min

Video

Watch “PG&E High School Career Story & Career Tree” with students.

**FEATURED INTERVIEW****Mike Roeseler**

Substation Maintenance Supervisor

7

ACTIVITY #3: PG&E / IBEW TRAINING PROGRAMS & EXPLORING JOB LISTINGS

10 min

Activity

**REVIEW TRAINING PROGRAMS**

- **IBEW Apprenticeships:** How to become an electrician.
- **PowerPathway:** Signature training program (Work after HS).
- **Summer Internships:** For students currently in an Accredited University.
- **Rotation Development Program:** For recent University graduates.

**PG&E OPEN POSITIONS**

- Use the 3 example jobs included in this packet or pick your own examples from <https://jobs.pge.com/> (<https://jobs.pge.com/>)
- Review the 3 positions with Students including qualifications, job description, and salary
- **Assignment:** Write a few sentences for each position explaining what the position entails, whether it is a fit for you and why/why not.

**3-POINT RUBRIC****Emerging (1)**

Student is beginning to engage with job listings and developing the ability to analyze position requirements and personal fit.

Developing (2)

Student reviews job listings thoughtfully, identifies key qualifications, and provides a reasonable self-assessment of fit for each position.

Proficient (3)

Student provides detailed, reflective analysis of each position, clearly articulating role requirements, personal alignment, and concrete reasoning for fit assessment.

8

CLOSING: REFLECT ON LEARNINGS & REVIEW ACTIONABLE INFO

10 min

Discussion

**CLOSING DISCUSSION QUESTIONS**

- Which job seemed most interesting? Why?
- Was there a job you wouldn't want? Why?
- What is one thing you learned today that you didn't know before?
- What steps would you take if you wanted to pursue a job at PG&E?

9

STUDENT SURVEY

5-7 min

Follow-Up

Survey Link: <https://sfoa.earth/gcv-pge-survey> (<https://sfoa.earth/gcv-pge-survey>)

Have students complete the Student Survey the same day.



SECTION 6

Learning Outcomes & Standards Alignment

1

Identify multiple career pathways available within the energy sector and how they map to education level.

2

Evaluate the role of energy providers in achieving California's climate and sustainability goals.

3

Identify career interest types based on RIASEC Interest Areas and Big Five Personality prompts

4

Learn how to browse open positions and analyze job listings on a company website.



California Standards Alignment

This curriculum aligns with California CTE, ELA, History-Social Science, and NGSS standards for grades 9–12. Check the full standards crosswalk below to find standards specific to your subject and grade level.



APPENDIX

Standards Crosswalk

| SUBJECT AREA | GRADE | STANDARD CODE | DESCRIPTION |
|---------------------------------|----------|---------------|---|
| CTE — Career Ready Practice | | | |
| CTE — Career Ready Practice | Grade 9 | CRP 2 | Communicate clearly, effectively, and with reason. |
| CTE — Career Ready Practice | Grade 9 | CRP 3 | Develop an education and career plan aligned with personal goals. |
| CTE — Career Ready Practice | Grade 10 | CRP 4 | Apply technology to enhance productivity. |
| CTE — Career Ready Practice | Grade 10 | CRP 12 | Understand the environmental, social, and economic impacts of decisions. |
| CTE — Career Ready Practice | Grade 11 | CRP 7 | Employ valid and reliable research strategies. |
| CTE — Career Ready Practice | Grade 11 | CRP 11 | Use technology to acquire, manage, and present information. |
| CTE — Career Ready Practice | Grade 12 | CRP 1 | Apply appropriate technical skills and academic knowledge. |
| CTE — Career Ready Practice | Grade 12 | CRP 10 | Plan education and career paths aligned to personal goals. |
| CTE — Energy & Power Technology | | | |
| CTE — Energy & Power Technology | Grade 9 | B1.0 | Explore the basic conventional and emerging principles and concepts of the energy industry, including energy production, transmission, and alternative energy technologies. |
| CTE — Energy & Power Technology | Grade 10 | B1.3 | Explain the flow of energy from generation through distribution to the customer. |
| CTE — Energy & Power Technology | Grade 10 | B1.6 | Explain the different structures of energy companies, including investor-owned utilities, municipalities, electric cooperatives, and independent power producers. |
| CTE — Energy & Power Technology | Grade 11 | B6.0 | Research methods of energy procurement, transmission, distribution, and storage. |
| CTE — Energy & Power Technology | Grade 11 | B7.1 | Understand the components and workings of the electric transmission and distribution network. |
| CTE — Energy & Power Technology | Grade 12 | B7.0 | Understand the interrelationships among components of energy systems. |
| CTE — Energy & Power Technology | Grade 12 | B1.5 | Identify the role and function of generation, transmission, and distribution organizations. |
| ELA — Speaking & Listening | | | |

| SUBJECT AREA | GRADE | STANDARD CODE | DESCRIPTION |
|--|----------|---------------|--|
| ELA — Speaking & Listening | Grade 9 | SL.9-10.1 | Initiate and participate effectively in a range of collaborative discussions with diverse partners on grades 9-10 topics, building on others' ideas and expressing their own clearly and persuasively. |
| ELA — Speaking & Listening | Grade 10 | SL.9-10.4 | Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning. |
| ELA — Speaking & Listening | Grade 11 | SL.11-12.1 | Initiate and participate effectively in collaborative discussions with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. |
| ELA — Speaking & Listening | Grade 12 | SL.11-12.4 | Present information, findings, and supporting evidence, conveying a clear and distinct perspective such that listeners can follow the line of reasoning. |
| ELA — Reading/Literacy in Science & Technical Subjects | | | |
| ELA — Reading/Literacy in Science & Technical Subjects | Grade 9 | RST.9-10.1 | Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. |
| ELA — Reading/Literacy in Science & Technical Subjects | Grade 10 | RST.9-10.7 | Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically into words. |
| ELA — Reading/Literacy in Science & Technical Subjects | Grade 11 | RST.11-12.1 | Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. |
| ELA — Reading/Literacy in Science & Technical Subjects | Grade 12 | RST.11-12.9 | Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. |
| ELA — Writing | | | |
| ELA — Writing | Grade 9 | WHST.9-10.2 | Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. |
| ELA — Writing | Grade 10 | WHST.9-10.7 | Conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate. |
| ELA — Writing | Grade 11 | W.11-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject. |
| ELA — Writing | Grade 12 | W.11-12.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| ELA — Language | | | |
| ELA — Language | Grade 9 | L.9-10.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. |
| ELA — Language | Grade 10 | L.9-10.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level. |
| ELA — Language | Grade 11 | L.11-12.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. |

| SUBJECT AREA | GRADE | STANDARD CODE | DESCRIPTION |
|-------------------------------|----------|-------------------|--|
| ELA — Language | Grade 12 | L.11-12.6 | Acquire and use accurately general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level. |
| History-Social Science | | | |
| History-Social Science | Grade 10 | HSS 10.3.5 | Understand the connections among natural resources, entrepreneurship, labor, and capital in an industrial economy. |
| History-Social Science | Grade 10 | HSS 10.3.6 | Analyze the emergence of capitalism as a dominant economic pattern and the responses to it, including Utopianism, Social Democracy, Socialism, and Communism. |
| History-Social Science | Grade 11 | HSS 11.5.7 | Discuss the rise of mass production techniques, the growth of cities, the impact of new technologies (e.g., the automobile, electricity), and the resulting prosperity and effect on the American landscape. |
| History-Social Science | Grade 11 | HSS 11.8.7 | Describe the effects on society and the economy of technological developments since 1945, including the computer revolution, changes in communication, advances in medicine, and improvements in agricultural technology. |
| History-Social Science | Grade 12 | HSS 12.1.4 | Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources. |
| History-Social Science | Grade 12 | HSS 12.4.2 | Describe the current economy and labor market, including the types of goods and services produced, the types of skills workers need, the effects of rapid technological change, and the impact of international competition. |
| History-Social Science | Grade 12 | HSS 12.4.3 | Discuss wage differences among jobs and professions, using the laws of demand and supply and the concept of productivity. |
| Science (NGSS) | | | |
| Science (NGSS) | Grade 9 | HS-ESS3-1 | Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. |
| Science (NGSS) | Grade 10 | HS-ESS3-3 | Create a computational simulation to illustrate the relationships among the management of natural resources, the sustainability of human populations, and biodiversity. |
| Science (NGSS) | Grade 11 | HS-ESS3-4 | Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. |
| Science (NGSS) | Grade 11 | HS-ETS1-1 | Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. |
| Science (NGSS) | Grade 12 | HS-LS2-7 | Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. |
| Science (NGSS) | Grade 12 | HS-ETS1-3 | Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics. |



SECTION 7

Alternative Delivery Options



3 Minute Trailer

The 3 Minute Trailer is a perfect way to get a preview of the content included in the full video. This version can be used by teachers, counselors, or students to decide whether to commit to watching the full video, and can be shared with students ahead of time to spur interest in the full video.



10-Min Short Form

A distilled version covering the core information. Best for counselors or limited time blocks. Activities are optional.



Individual Modules

Climate Story, College Story, High School Story, and Career Tracks. Ideal for targeted home study or specific student interests.



SECTION 8

Handouts



Net-Zero Home



SJCE Home Energy Rebates



PG&E Programs Summary



IBEW Apprenticeship Summary



Solar HS/AA/BS Jobs



Wind HS/AA/BS Jobs

Download all handouts at sfoa.earth/gcv-pge-handouts (<https://sfoa.earth/gcv-pge-handouts>)