Educator How To Hub: Go Further

Find & Plan an ENR Field Trip

Relevant Learning Levels

✓ Primary ✓ Secondary ✓ Post-Secondary

WHAT'S THE BENEFIT OF FIELD TRIPS?

Field trips give students a firsthand look at how environmental and energy systems operate in the real world. Whether visiting a solar farm, water treatment plant, or local conservation project, these experiences deepen understanding and make learning more tangible and therefor, memorable. Field trips connect classroom content to real-world career paths and perceptible impact. They also help students see themselves as future problem-solvers in their own communities.

START HERE

1

Determine the Purpose

Identify the instructional goals for the trip. The field trip should reinforce topics already present in your curriculum or support career exploration.

Ask yourself:

- What concepts are my students learning (e.g., energy systems, conservation, engineering, environmental science)?
- What types of sites or industries connect to those topics?
- Is the primary goal technical understanding, exposure to careers, civic engagement, or another outcome?

Examples of aligned trips include:

- A water treatment plant visit during a unit on infrastructure and public health
- A tour of a utility control center as part of an energy systems CTE course
- A nature preserve visit during a biodiversity or conservation unit

2

Identify Relevant Local Hosts

Begin exploring potential field trip hosts in your area. These could include:

Industry & Public Sector Partners:
- Electric or water utility providers
- Renewable energy facilities (e.g., wind, solar, geothermal)
- Environmental agencies (e.g., forestry, waste management, air quality boards)
- Conservation groups or land trusts
- Construction firms, energy auditors, or engineering companies

Start with known local contacts, district or school partnerships, or parent/community networks.

3

Make the Ask

When reaching out to a prospective site host, clearly communicate your needs and goals. Consider using a standardized Letter of Request (example on the GIE Educators Page) to streamline communication.

Include the following:
- A brief description of your class and what students are studying
- Proposed dates or time windows for the visit
- Number of students and grade level
- Any specific objectives or outcomes for the visit
- Any logistical needs (e.g., group size limitations, PPE requirements, accessibility)

4

Prep Your Class

- Communicating clear behavior expectations and dress code (especially for industrial or outdoor environments)
- Teaching a short pre-lesson about the host organization and their work
- Assigning students to develop 1–2 questions each to ask during the trip

Encourage students to view themselves as future professionals during the experience.

5

Reflect and Share

After the trip, lead students through a structured reflection to ground learning and insights.

Suggestions include:

- Class discussion: What did you learn? What surprised you? What careers stood out?
- Revisiting the questions developed before the trip: were they answered?
- Student thank-you notes or emails to the host (optional for older students, but recommended for younger or middle school students)

Field Trip Location & Topic Ideas

Field Trip Location	Primary (K–8)	Secondary (9–12)	Post-Secondary (13+)
Water Treatment Plant	What happens to water after we use it?	Water infrastructure & public health	Water quality analysis, environmental compliance,
Solar or Wind Farm	How do the sun and wind make energy?	Renewable energy systems, efficiency, climate impact	Grid integration, system design, technician/ engineering careers
Hydroelectric Dam or River Project	How water helps make electricity	Renewable energy, ecosystems, local land use conflicts	Turbine tech, civil engineering, watershed management
Forested Conservation Area	Exploring wildlife habitats & local ecosystems	Forest health, conservation careers, biodiversity	Forestry management, GIS, ecological surveying
Utility Control Center / Power Station	How do we get electricity at home or school?	Grid systems, energy distribution, careers in utilities	Energy auditing, load balancing, infrastructure planning
Local Farm / Urban Agriculture Site	Where does our food come from?	Sustainable ag practices, land use, soil conservation	Agroecology, resource economics,
Environmental Lab / Research Center	Scientists help take care of our planet	Data collection, field sampling, climate change investigations	Lab procedures, instrumentation, R&D methods
Reclamation or Mining Site	Rocks and minerals—what do we find underground?	Resource extraction and restoration, energy materials	Geology, remediation tech, environmental permitting
Waste Management Facility / Landfill	Where does our trash go?	Recycling systems, environmental impact, civic responsibility	Solid waste engineering, emissions monitoring, policy/regulatory roles