Educator How To Hub: Start Here

Start an ENR Club

Relevant Learning Levels

✓ Primary ✓ Secondary ✓ Post-Secondary

WHAT IS AN ENR CLUB?

An **Energy and Natural Resources (ENR) Club** introduces students to the careers, technologies, and challenges that define today's energy systems and natural resource management — from renewable energy and sustainable forestry to water conservation and electric vehicles. It's a space to **explore hands-on STEM, environmental stewardship, and future-focused careers.**

How Is It Different from Other Clubs?

ENR Clubs overlap with other student organizations like:

- **Eco Clubs / Environmental Clubs** – focused on environmental awareness and activism
- **Sustainability Clubs** – emphasize school or community greening efforts and behavior change
- **Agriculture or FFA Chapters** – connect to land use, food systems, and agriculture careers
- **STEM Clubs / Robotics Teams** – center on engineering and innovation

ENR Clubs blend elements of all these, but with a clear focus on:

- **Energy systems** (generation, storage, distribution, and conservation)
- **Natural resource careers** (forestry, water, soil, land, and wildlife)
- **The role of infrastructure, policy, and technology** in building a sustainable future

Who Can Lead and Participate?

- Great for **science, STEM, CTE, and social studies teachers** to co-lead
- Open to students of all grade levels
- Can be a standalone club or a themed extension of an existing one

Getting Started

You'll need:

- A faculty sponsor
- A few engaged students (start small!)
- A meeting space and regular schedule
- A simple plan or theme for each semester (career focus, local project, guest speakers, etc.)
- *Optional: small budget or grant support for materials or field trips*

THEMES TO EXPLORE

Energy
(Transmission, Distribution, & Storage)
- Explore how electricity moves from power plants to homes and schools
- Investigate new energy storage solutions like batteries, flywheels and hydrogen

Utilities
- The energy grid: generation, distribution, and maintenance
- Water utilities: treatment, delivery, and conservation

Conservation and Land Management
- Forest management, reforestation, and ecology
- Wildlife corridors and biodiversity conservation

Ecological Research & Development
- Environmental innovation: biotech, carbon capture, green materials
- Using GIS or drones for habitat and landscape mapping

Environmental Protection
- Pollution: sources, impacts, and mitigation
- Policy and law around emissions, waste, and regulation

Resource Extraction
- Mining and fossil fuel extraction: environmental and economic impacts
- Land reclamation, site restoration, and sustainable practices

Primary Students (Grades K–8)

Career Exploration
- Invite a park ranger or utility worker for a show-and-tell
- Watch short videos about "green" jobs and draw what they do

Hands-On STEM Projects
- Build a pinwheel to learn about wind energy
- Sort classroom waste to explore recycling and conservation
- Plant a butterfly garden or native plants on campus

Campus or Community Engagement
- Make posters about saving water or protecting trees
- Help with a class or school garden project

Secondary Students (Grades 9–12)

Career Exploration
- Host a guest speaker with local ENR professionals
- Explore online energy and conservation career maps

Hands-On STEM Projects
- Build a small solar car or wind turbine
- Conduct an energy or lighting audit of your school
- Analyze local data on water use, energy trends, or habitat changes

Campus or Community Engagement
- Launch a recycling or conservation campaign
- Partner with a local environmental group for a volunteer day

Post Secondary Students (Grades 13+)

Career Exploration
- Organize networking events or job fairs with local ENR professionals
- Tour regional infrastructure sites
- Host a career development workshop focused on certifications, apprenticeships, and graduate programs in ENR fields

Hands-On STEM & Research Projects
- Conduct fieldwork or lab projects tied to campus operations
- Analyze policy, equity, or economic aspects of resource extraction, land use, or energy infrastructure

Leadership & Community Engagement
- Launch student-led initiatives (e.g., habitat restoration, electrification pilots, public awareness campaigns)
- Represent your institution at sustainability or climate policy events, conferences, or regulatory hearings
- Collaborate with local governments or NGOs on internships, community education, or applied projects