ECOLINGUA

**EcoLingua Curriculum:**

**Digitally Enhanced Pedagogy for Integrating Environmental Issues into Language Teaching (ECOLINGUA)**

**EcoLingua Project – Activity Plan**

**Work Package 2 – Integration of Environmental, Climate, and Ecology Topics into English Language Teaching**

## 1. General Information

- Partner Institution: University of Rome Tor Vergata
- Country: Italy
- CEFR Level: B2
- Activity Number: Act1
- Title of Activity: *Renewable Energy: Powering the Future*

## 2. Strategy Statement

This activity plan integrates renewable energy into English language teaching for B2-level secondary students (triennio, licei). It draws on authentic resources such as a National Geographic video and UN fact sheets, fostering both linguistic development and environmental awareness.

The activity combines CLIL (Content and Language Integrated Learning), Task-Based Learning, and Inquiry-Based Learning, which support cross-curricular education. These approaches encourage active learning, problem-solving, and collaborative skills, all of which are essential for preparing students for the challenges of the 21st century.

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The methodology follows principles of scaffolding (gradually moving from receptive skills such as listening and reading to productive tasks in speaking and writing), while using authentic, real-world materials to build relevance. It also promotes cross-curricular links with science and civic education, ensuring that language learning is meaningful and interdisciplinary.

This activity directly supports the *Indicazioni Nazionali per i Licei* and the curricular objectives for the *triennio*, which emphasize:

- Developing communicative competence in English through authentic, content-based tasks.
- Strengthening transversal competences such as critical thinking, argumentation, and problem-solving.
- Promoting Civic Education, with a focus on environmental sustainability, citizenship, and responsible participation in society.

The topic also aligns with the UN Sustainable Development Goals (SDG 7: Affordable and Clean Energy), by raising awareness of clean and renewable energy sources and encouraging students to reflect on solutions for a sustainable future. Students not only expand their English language proficiency (listening, speaking, writing, vocabulary) but also become more critically engaged citizens, able to connect language learning with global challenges.

## 3. Activity Details

### Learning Objectives

- Language: acquire renewable energy vocabulary, summarize authentic materials, engage in debate, write an FCE-style essay.
- Environmental: identify renewable energy sources, evaluate pros/cons, link energy to SDGs and national sustainability goals.

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**Target Skills & Competences**

- Language Skills: Listening, Speaking, Reading, Writing.
- Linguistic Focus: Vocabulary (renewable energy), Grammar (modals), Pronunciation (stress in technical words).
- Environmental Competences: sustainability awareness, critical thinking, responsible citizenship.

**Resources, Materials & Media**

- Printed handouts: vocabulary worksheets, comprehension tasks, fact sheets, essay guidelines.
- Digital resources: National Geographic video (*Renewable Energy 101*) .
- Audio-visuals: projector/whiteboard.
- Visuals: UN infographics, National Geographic graphics.
- Links National Geographic: Renewable Energy 101 (https://www.my-mooc.com/en/video/renewable-energy-101-national-geographic)
- Student Worksheet Pack
- Renewable Energy Fact Sheets

**4. Detailed Activity Procedure (90-minute lesson)**

| Stage | Time | Teacher Actions | Student Actions | Method / Approach | Materials / Resources |
|---|---|---|---|---|---|
| Warm-up | 8 min | Show contrasting images of fossil fuels vs renewables; ask prediction question; elicit prior knowledge | Share opinions in pairs, then class feedback | Inquiry-based, communicative lead-in | Projector, visuals |

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| Vocabulary Pre-task | 12 min | Introduce 8–10 target words (e.g. *geothermal, biomass, carbon footprint*). Guide matching and pronunciation drill. | Match words, create oral example sentences, practice stress | CLIL, scaffolding | Vocabulary handout |
| Video – Gist & Detail | 20 min | First viewing: gist Q (*What is renewable energy?*). Second viewing: comprehension worksheet (MCQs + gap-fill). Lead correction and feedback. | Watch twice, complete worksheet, compare answers, class discussion | Task-based listening, collaborative checking | National Geographic video, worksheet |
| Group Fact Sheet & Pitch | 20 min | Divide into 5 groups (solar, wind, hydropower, geothermal, biomass). Give each group a fact sheet. Monitor prep for 2-min persuasive pitch. | Read fact sheet, select 3 pros + 1 con, prepare 2-min pitch, present to class | Project-based learning, cooperative work | UN/NG fact sheets, rubric |
| Debate | 20 min | Introduce motion: *"Renewable energy should replace fossil fuels within 20 years."* Allow prep time for each side, moderate debate. | Prepare arguments, debate in teams ("For" vs "Against"), use modals | Debate, inquiry-based learning | Teacher notes, student rubrics |

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| Wrap-up & Reflection | 10 min | Summarize key arguments and sources. Set homework essay.<br><br>*Do you think renewable energy is the key to solving climate change?*<br><br>Option: short in-class 3–4 sentence reflection on *What I learned today*. | Reflect in writing or orally, note homework task | Reflection, exam practice | Essay guidelines |

**5. Differentiation & Inclusion**

The activity is adaptable for mixed-ability groups: weaker students receive sentence starters and word banks, while stronger students are encouraged to extend with more technical vocabulary. Students with special needs are supported with subtitles for the video, simplified handouts, and oral alternatives for written tasks. Visual, auditory, and kinesthetic learners are engaged through the varied materials and approaches.

**6. Assessment & Evaluation**

During the group pitch, students are evaluated on the clarity of their content, the persuasiveness of their delivery, the range and accuracy of language, their fluency, and the balance of participation within the group. A strong pitch contains at least three solid arguments, a memorable opening, and uses technical vocabulary naturally.

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In the debate, assessment focuses on the quality and logic of arguments, the ability to respond to others, and the accurate use of modal verbs to express obligation, necessity, or possibility. Fluency and vocabulary range are also taken into account, with the expectation that students interact spontaneously rather than simply reading notes.

The essay is assessed using FCE criteria (Content, Communicative Achievement, Organisation, Language)

Alongside teacher evaluation, student-friendly rubrics are provided in simplified language with checkboxes. Students use them for self-assessment after their pitch, peer assessment during the debate, and reflection after completing their essay. This dual system encourages ownership of progress and metacognitive awareness.

**7. Sustainability & Follow-Up**

Possible follow-up projects include designing posters or infographics for a school exhibition, launching a “save energy at home” campaign where each student tracks one week of household energy habits, or collaborating with the science department to measure the school’s energy footprint. Another creative option is to set up an online exchange with partner schools abroad to compare renewable energy solutions in different regions, giving students an authentic international dimension. These follow-up projects directly support SDG 7 by raising awareness about clean, affordable energy and encouraging students to adopt more sustainable habits in their own communities.

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