

ENERGY WITH CONSCIOUSNESS



Activity Sheet

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Description

This Fundación Repsol educational programme brings energy efficiency to the classroom by **developing energy audit simulations** in educational centres. A series of **experimental, participatory, and educational science activities** focused on the audit are developed.

These activities encourage **research, creativity, and teamwork skills**, and involve the collaboration of **Repsol volunteers**, who contribute their knowledge as company employees.



Objective

Raise awareness among future generations about **responsible energy use** and help get them involved in **spreading awareness about respecting the environment to others**.

Beneficiaries

Students in Years 9 and 10.

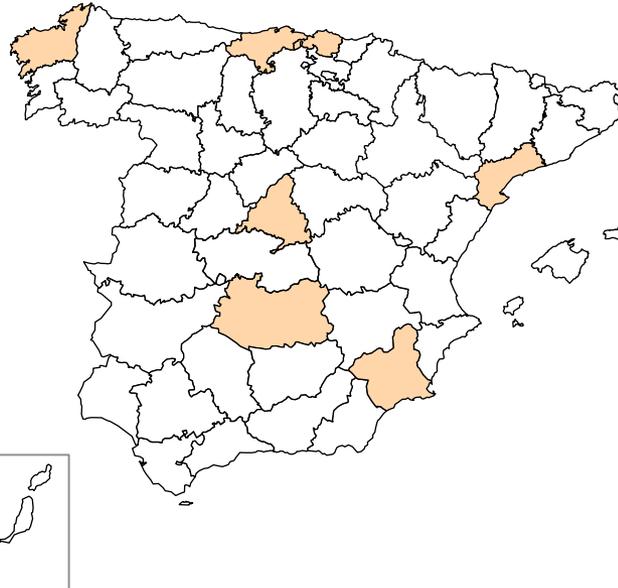
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Location

This programme is carried out in different educational centres in A Coruña, Bizkaia, Cantabria, Ciudad Real, Madrid, Murcia, and Tarragona.

Date and time

Sessions take place during **the school day** from 9:30 a.m. to 1:30 p.m. from February to March.



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Programme objectives

- Promote behaviours related to energy efficiency in young people.
- Help students develop research skills.
- Encourage teamwork as a fundamental pillar of science.
- Learn what an energy audit involves and how to carry one out and communicate it through empirical practice in the school itself.
- Generate interest in “science as a whole”, contributing to training technology and science professionals close to society.



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Programme structure

Phase I: Let's prepare the programme

The teacher prepares the project in class, introducing key energy-related concepts that are subsequently addressed throughout the programme, and begins to prepare the audit, gathering information about the centre necessary for the audit. Regarding the organization of the class, the teacher is responsible for dividing the students into three equal teams, corresponding to the three systems to be audited: electrical, water, and thermal.

Phase II. Let's learn together

The Repsol volunteer goes to the educational centre, preferably in a pair, for a school day (approximately). The day begins with a brief presentation of the project, introduces and / or reviews the basic concepts, and carries out the proposed experimental activities that are structured into the three energy systems to be audited.

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Afterwards, the volunteer reviews the concepts addressed during the day and establishes the rest of the work plan. In addition, the audit is explained briefly and any questions the students might have are answered.

Phase III. Let's get started

The students begin to carry out the energy audit with help from their teacher, who will guide them for about two to three weeks. To do this, each group audits the system they were previously assigned by collecting information and data and then analysing it.

Phase IV. Let's share our ideas

Finally, once each system has been studied, the students put their findings together and an energy audit report is written, indicating their results and offering ideas and improvements that can be made, if the centre wishes to do so.

The report is presented to the school's students, teachers, and participating volunteers.

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Materials

The volunteers have supporting material to help them carry out the project: *Volunteer guide*.

The teachers and students have their own guides.

Training

The volunteers will receive training beforehand on teaching and communication skills and how to carry out the activity.

This **training** will take place at the end of January or throughout the month of February, and will last around an hour and a half .



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Requirements

- **Current, pre-retired, or retired Repsol employee.** Students with undergraduate or master's degrees from the UPCT (Cartagena), URV (Tarragona), or ICAI-ICADE (Madrid) universities can also participate.
- Studies related to the areas of Science, Technology, Engineering, or Architecture, whether VT or university education. Experience in energy efficiency and/or Environmental Science is valued. Even so, people with other backgrounds who feel they have something to offer the project will be taken into consideration.
- Prior experience **leading activities with children and/or teenagers** will be considered.
- A good level of English will be valued, since the programme may be taught in this language in some centres.
- **Have a certificate accrediting he/she has not been convicted of crimes of a sexual nature.** If the volunteer does not have this document, it will be requested through Fundación Repsol.

Deadline

Learn more about the project and sign up on the [Repsol Volunteering](#).

If you want to know more about the programme, click on this [link](#).

For more information: voluntariado@fundacionrepsol.com.