

ERASMUS+, Key Action 2, Cooperation for Innovation and Exchange of Good Practices Strategic Partnerships for Schools

iGo Eco - Respect and care about the

Earth 2020-1-PL01-KA229-081538_5



LEARNING / TEACHING / TRAINING ACTIVITY

2 NOT "ego" but ECO-ENERGY (global warming issues and renewable energy for sustainable development)

PLACE: SIENA/ITALY
DATES: 06-12 FEBRUARY 2022

I.I.S. T. SARROCCHI VIA PISACANE N. 3 53100 SIENA

1. PARTICIPANTS

Rossetti	Patrizia	Italian coordinator
Bennati	Elisa	Teacher
Consortini	Leonardo	Teacher
Barcelli	Davide	Teacher
Bianchini	Giulio	Student
Bandini	Niccolò	Student
Ceccherini	Gaia	Student
Bianciardi	Giulia	Student
Coppi	Samuele	Student
Formentin	Pietro	Student
Caratelli	Matilde	Student
lannucci	Ester	Student
Grazzini	Davide	Student
Boscagli	Bernardo	Student
Batelli	Elia	Student
Anselmi	Matteo	Student

Guest partners:

COUNTRY	FIRST NAME	SURNAME	TEACHER/STUD ENT
CDAIN	Laia	Dodral Albarah	
SPAIN		Pedrol Alborch	Student
SPAIN	Mar	Gracia Monreal	Student
SPAIN	Christian	Machon Murillo	Student
SPAIN	Clara	Espeja Poveda	Student
SPAIN	Ines	Ogando Ledesma	Student
SPAIN	Simò	Gaya Cabré	Student
SPAIN	Sofia	Carillo	Teacher
SPAIN	Alicia	Rivero	Teacher
POLAND	Martyna	Czekajewicz	Student
POLAND	Magdalena	Janota	Student
POLAND	Paulina	Katolik	Student
POLAND	Nikola	Kulig	Student
POLAND	Agata	Kurek	Student
POLAND	Aleksandra	Rudolf	Student
POLAND	Agnieszka	Gemborys	Teacher
POLAND	Lucyna	Kalek	Teacher
TURKEY	Eylem	Güneş	Student
TURKEY	Bensu	Bilgin	Student
TURKEY	Beyza	Nur Alptekin	Studnet
TURKEY	Sılanur	Ayazgün	Student
TURKEY	Gazel	Bozkurt	Student
TURKEY	Murat	Yağmur	Teacher
TURKEY	Kenan	Gümüşsoy	Teacher
ROMANIA	Antonia Gabriela	Caruceru	Student
ROMANIA	Anamaria	Petrica	Student
ROMANIA	Gabriela	Poiata	Student
ROMANIA	Valenntina Madalina	Cernic	Student
ROMANIA	Teodora	Smintanca-strigariu	Student
ROMANIA	Mariana	Andone	Teacher
ROMANIA			Teacher
GREECE	Erma	Xhema	Student
GREECE	Eleftheria	Benaki	Student
GREECE	Flora	Porgioti	Student
GREECE	Dafni	Komi	Student
GREECE	Margarita	Atsoniou	Student
GREECE	Nikolaos	Belios	Teacher
GREECE	Argyrios	Gkoumas	Teacher

2. PURPOSE

Renewable energy is a core issue in the world today, it affects jobs, homes, food production and climate change. The world would not function without energy and the importance of clean affordable energy has never been more relevant. Our purpose has been to focus on this topic and make the students protagonist getting to know and discussing about this topic.

We wanted to make them reflect on the energy that surrounds us, at school, at home. Energy provides heat, light and electricity. It fuels vehicles, powers computers and prepares food. It's a core of students' daily life across the world and it's a subject that we should encourage them to engage with.

Students have discussed about the value of these new sources and the importance in humanity progress for a better future.

They also reflected on the difficult access to energy across the world where a huge amounts of global population don't have the chance to use electricity. Today's students can be the ones to drive the change and strive for clean and affordable energy for all.

The discussion of the topic among students of different nationalities has also allowed to widen their knowledge on renewable sources in other countries.

3. OBJECTIVES

- Raise awareness of the different types of renewable energy: solar, wind, water, geothermal, biomass
- Develop communication and interpersonal skills
- Improve the level of English
- Learn new vocabulary connected with the topic
- Develop creativity and critical thinking skills

4. ACTIVITIES

6th-12th FEBRUARY 2022

	6th February 2022
Arrival of the delegations in Siena	

7th February 2022	
8.30 a.m.	Welcome Speech
9.00 a.m.	Activity 1 Lecture: "iGo Eco meets the Blue Deal Team"
10.30 a.m.	Coffee break
11.00 a.m.	Activity 2 Presentations: schools, cities
13.30 p.m.	Packed lunch
14.30 p.m.	Activity 3 Workshop on renewable energy sources:
	Focus on hydraulic energy and marine energy (submarine kite and offshore wind turbine)
15.30 p.m.	City tour
20.00 p.m.	Dinner at the restaurant all together teachers and students

8th February 2022	
8.30 a.m.	Activity 4
	Presentations: renewable energy sources in each country involved in the project
10.30 a.m.	Coffee break
11.00 a.m.	Activity 5
	Workshop: Photovoltaic and solar energy, hydrogen car and inshore wind turbine

12.00 a.m.	Activity 6 Workshop: Geothermal energy
13.30 p.m.	Packed lunch
15.00 p.m.	Visit to the Town Hall with the main frescoes in the city
17.00 p.m.	Free time in the city centre
20.00 p.m.	Free evening

9th February 2022	
8.30 a.m.	Departure to Larderello by bus
10.00 a.m.	Activity 7 Trekking at the geothermal park in Larderello
13.00 p.m.	Lunch at the brewery
15.00 p.m.	Activity 8 Visit to the geothermal power plant in Larderello
17.30 p.m.	Departure from Larderello to Siena
20.00 p.m.	Dinner at the restaurant all together teachers and students (on the Italian delegation)

10th February 2022	
8.30 a.m.	Departure to Florence by bus
10.00 a.m.	Scavenger hunt in groups
13.00 p.m.	Lunch and free time
16.30 p.m.	Meeting point in Florence: Santa Maria Novella Train Station
20.00 p.m.	Free evening for students.
	Dinner at the restaurant for teachers.

	11th February 2022	
8.30 a.m.	Activity 9 part 1	
	Group work: production of a vademecum on good practices to save energy for peers and younger students	
10.30 a.m.	Coffee break	
11.00 a.m.	Activity 9 part 2	
	Group work: production of a vademecum on good practices to save energy for peers and younger students	
13.30 p.m.	Packed lunch	
14.30 p.m.	Free time downtown, shopping, packing up	
20.00 p.m.	Dinner at the restaurant all together teachers and students (on the Italian delegation)	

12th February 2022

Departure of the delegations

5. ACTIVITY DETAILS

Day 1 Monday 8 February 2022

Objective: Blue Deal project was aimed to introduce our activities on renewable anergy. It's a project leaded by the University of Siena with 12 partners from the Mediterranean countries representing different actors in the field. The project aims to increase transnational activity of innovative cluster and networks of the Blue Energy Sector.

The conference opened our activities immediately after the speech of one of the Principal's collaborator who gave our hosts a general overview of our school.

They started talking about the environmental sustainability and the history of the blue energy that today includes a great collaboration among 6 countries working together to strengthen the connection and cooperation between research, innovation and business, to identify opportunities and solutions for self-sufficiency of small communities.

The idea was to raise awareness and action for social innovation even among students that can join special competitions organised by the association.

Italy is a country in the Mediterranean Sea and the power and potential of the water is underestimated but thanks to new blue energy technologies now it is possible to create energy from the water that surround us. To make this topic easier for young people and a wide audience the experts have created a comic with the story of Maestrale and the energies of the Mediterranean Sea.

The day continued with the presentations of the schools and the cities of each delegation. This allowed students to approach new cultures and traditions. It's been a good start to make students familiarise.









Day 2 Tuesday 9 February 2022

Objective: sharing knowledge about renewable energy sources in the different countries, what each country is doing during this ecological transaction

On the second day the participants presented their research on renewable energy. It's been a very interesting moment where students shared different knowledge and realised what each country is really doing through the voice of people that can witness what is happening.

After the coffee break the students had the opportunity to see in our school lab all the different types of prototypes to produce green energy. Our collegue, the engineer Loenardo Consortini showed how each type of device works which the advantages and disadvantages in their use are. The teacher made some simulations and students had the opportunity to see with their eyes and experience being the protagonists of the activities.

After lunch we went to the city centre to visit the Town Hall and the stunning room with the frescoes of famous local painters. We did a guided tour inside Palazzo Pubblico that has always represented the centre of civic life for the citizen of Siena; it has frequently been the centre of the most significant events in the history of the city. The guide showed the most spectacular frescoes of Ambrogio Loernzetti, Simone Martini and Duccio da Buoninsegna.

Immediately after we visit the palace where all the equipment and clothes for the parade of the Palio are stored. It is a place closed for the public visits but we had the privilege to enter and admire the costumes reproduced like the original and feel the atmosphere of this incredible competition.



Day 3 Wednesday 9 February 2022

This day was dedicated to the visit in Larderello where we saw one of the most important geothermal power plant. It is the oldest plant in the world. The students could experience directly how a real geothermal plant works.

The visit started at the "Biancane" with an interesting trekking among the geothermal phenomenon. The story goes back in time when Prince Piero Ginori Conti of Trevignano worked for his father in law Florestano de Larderel in the processing of boric acid. It was through this work that Conti eventually found his way into geothermal energy with the creation of the first geothermal energy generator in 1904. From this humble beginning the geothermal potential of Larderello was expanded in an area known as the Devil's Valley. The plant was gradually added to throughout the years and now Larderello has 34 plants operated by the Italian company Enel Green Power. The visit continued in the local museum where the environmental guide illustrated the students the exhibition space dedicated to energy from the earth. Students saw materials, documents and halls, they learned the story of Larderello, saw the historical library, a rich photographic archive. We thought that this was the ideal starting point for getting to knw the geothermal areas and understanding the complexity of a hundred-year-old history made up of people, industry and technology. Before going back home we could see the opening of a geyser through a special well and it's been incredible to see the strength, the pressure and the power of the underground gas.

The visit ended with a lunch at a local brewery where the power of the plant is spoiled for the production of beer.

Back to Siena we had dinner all together in the city centre



Day 4 Thursday 10 February 2022

Objective: visit the city of Florence and discovery of its history, tradition and culture. Play a game, a scavenger hunt, and communicate in English as much as possible

It's been the day of the trip to Florence. Here we thought that a Scavenger hunt could have been the best way to discover this extraordinary city. The students were divided into groups of 5/6 with mixed nationalities in order to allow them to talk in English as much as they could.

The idea of the game was to tour the city and find spotlights where they had to take a selfie of the group and finally they had to solve a mystery of a murder and find place, criminal and weapon used to commit the crime.

The activity lasted about two hours and the teams collected a lot of information while having fun touring the city.

The afternoon was free to let them explore and browse on their own with their time.

The activities stimulated the students to talk in English, to move in a new place using a map or even a gps of their mobiles if necessary. They had to find some historical information and had the opportunity to get closer to the Italian culture.

Day 5 Friday 11 February 2022

Objective: summary of the project activities

This last day was dedicated to the production of the final project connected with the topic we had to deal with that is to say "renewable energy".

During the previous days the students had the opportunity to talk about green anergy, they shared information, they experienced what happens in other countries thanks to the presentations of the correspondents and saw with their ayes prototypes of different plants and finally they visited a real power plants, history and how it works.

Students worked together, divided in mixed groups of different nationalities. They had to produce a vademecum on wise behaviour to save energy for peers and younger students.

We let them free to choose the best way to do that, through a song, a video, a power point presentation ect. This allowed them to use their creativity.

We gave a different topic to each group: water, sun, biomass, geothermal, wind energy.

At the beginning they found an agreement about how to realise the project. That involved different skills like speaking, team work, organisation and realisation of the work.

The final output was different from team to team; someone realised a song, others a tik tok video, others a kind of documentary. They showed their work obtaining a great success.

Finally all the participants were awarded with the certificates of attendance and later on we went to the city centre for the farewell dinner.

Teachers sang along many songs together, it was a very special and moving moment .

Students continued sharing their time together hanging around the city until the time to go to bed before the following day of departure.



Travelling gives the chance to open your mind, to find the opportunities to witness a completely new way of life. It grants you the opportunity to practice the English language and find new friends. This is Erasmus, this is "iGO ECO".