



# SCC TEAM

Stop Climate Change  
Together Europe Achieves More

2018 - 2020



**Erasmus+**

**STOP**

**CLIMATE CHANGE**

**TOGETHER EUROPE ACHIEVES MORE**

**A Guide**

**2018 -2020**





Co-funded by the  
Erasmus+ Programme  
of the European Union



## INTRODUCTION

**Stop Climate change – Together Europe Achieves More (SCC TEAM)** is an international partnership project to support the exchange of good practices between organisations. It is implemented under Key Action 2 of the Strategic Partnerships of the Erasmus+ Programme.

Bartola Kašića Primary School in Vinkovci, Croatia, is the coordinator of this project. The partner schools are from different parts of Europe: 1st Gymnasium of Cholargos, Athens (Greece), Istituto Omnicomprensivo del Fortore Riccia – S.Elia, Riccia (Italy), Alytaus r. Simno gimnazija, Simnas (Lithuania), BC Broekhin Roermond, Roermond (the Netherlands), Szkoła Podstawowa Nr12, Gdynia (Poland).

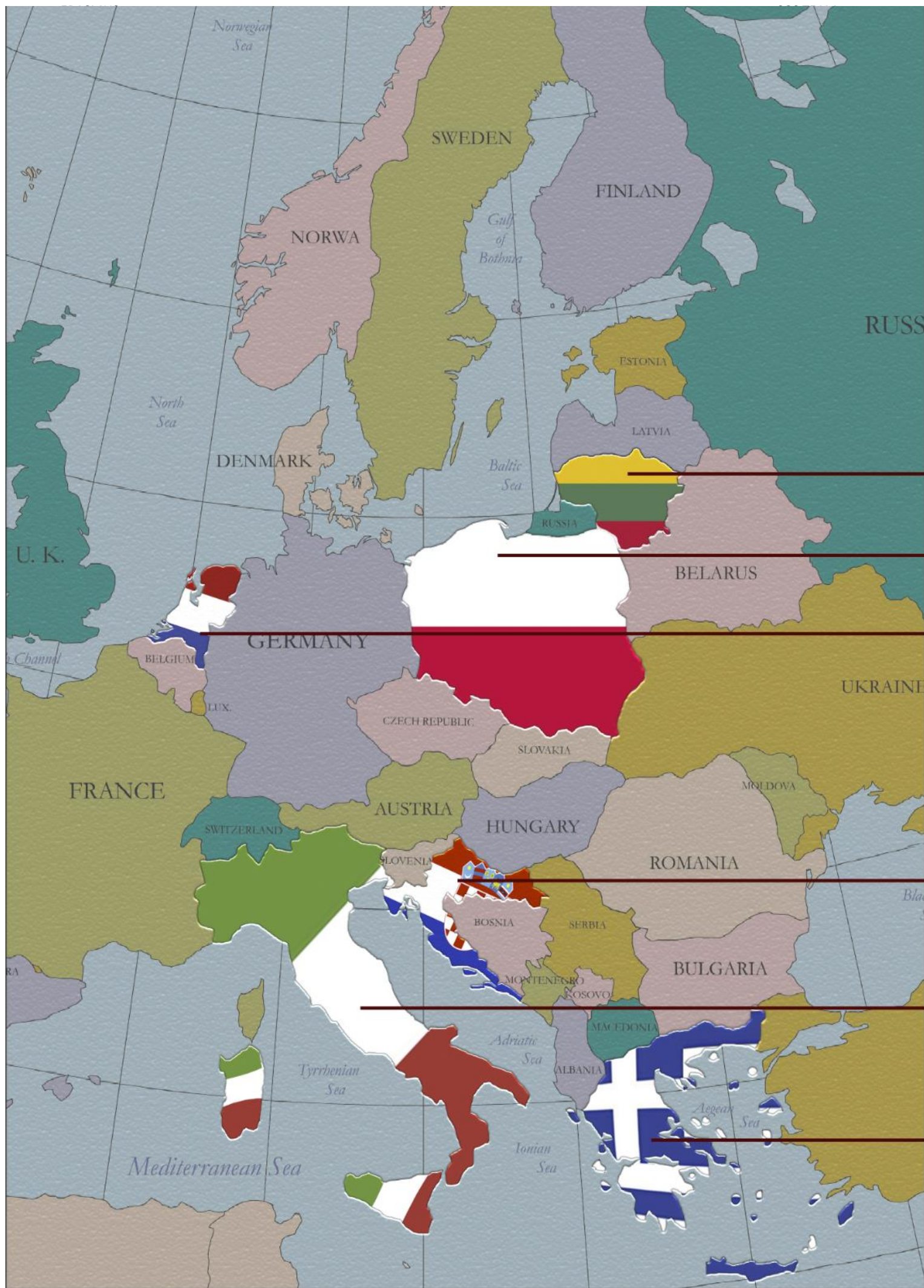
Climate change is and will be the most serious problem in the whole world. Most countries have already experienced disastrous effects of global warming, such as extreme weather, extreme heat, floods, droughts, forest fires, rising sea level. UN has a Development Programme with 17 sustainable development goals and goal number 13 is Climate action. There are other documents, like Kyoto Protocol, Paris Agreement, Europe 2020 Strategy,

in which countries are urged to mitigate the effects of climate change. World Health Organization also warns about negative effects of climate change on human health.

We believe that education is a key component of the solution and that educators can help in making significant positive changes. We want to educate today's generation so that they are prepared for future unknown climate conditions.

During the project, which also included parents and local communities, we all became more aware of the problem, which is not local or European, but global. Pupils searched for motivating slogans and come up with their own, but the one which describes our activities best is : "Think globally, act locally." Pupils studied water and carbon footprint, gave advice on how to reduce them, they studied renewable sources of energy and constructed solar powered cars and wind turbines. They took active part in marking World days, such as Migratory birds day, World water day, World meteorological day, World environment day, European mobility week, etc. All schools bought weather stations which will enable pupils to monitor weather conditions over longer period of time. Pupils performed school plays about climate and environment in English, teachers conducted climate based lessons at every short-term exchange of pupils. Doing project tasks improved our English language skills, ICT skills, communication skills and we gained a lot of knowledge about the project topic and about life and education in partner countries. Results of our activities are and will be available on our web page, eTwinning, YouTube.

**Gordana Maršić,**  
**project coordinator**



# PARTNERS IN THE PROJECT

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**Simnas - Lithuania**

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**Gdynia - Poland**

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**Roermond - Netherlands**

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**Vinkovci - Croatia**

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**Sant'Elia a Pianisi - Italy**

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**Athens - Greece**



# VINKOVCI, CROATIA

**Vinkovci** is a town in the east of Croatia, surrounded by fertile fields and oak forests. It is situated at 45 degrees latitude, halfway between the Equator and the North Pole. Vinkovci is considered to be the oldest town in Europe, it has been continuously inhabited for 8000 years. Vinkovci has population of 35000 people. The town is the administrative center of Vukovar-Srijem County. It is situated on the banks of the river Bosut in the rich and green Slavonian plain.

Vinkovci was inhabited in prehistoric period, but the present town was founded

on the ruins of Roman Coloniae Aureliae Cibalae, which was the birthplace of two Roman Emperors, Valens and Valentinian, who ruled a part of the Empire each, in the fourth century AD. Vinkovci became the military centre of the region in the Hapsburg Monarchy, it developed very fast and in the 18th century city centre acquired its present baroque outlook.



The town is proud of its celebrities, like Josip Šokčević, Croatian viceroy, Josip Runjanin, composer of the Croatian anthem, writers M. A. Reljković, Ivan Kozarac, Josip Kozarac, Joza Ivakić, artists Vanja Radauš, Slavko Kopač, Albert Kinert, and many others. The town is also known for sports clubs and its national festival of folk music and dances Vinkovačke jeseni, which takes place every September and attracts thousands of visitors. Vinkovci has 7 primary schools, several secondary schools, which educate pupils for numerous professions and prepare them for studying, and also Faculty of Agricultural Machinery.





## PRIMARY SCHOOL BARTOL KAŠIĆ

**Osnovna škola Bartola Kašića** is a primary school situated on the outskirts of Vinkovci. It has 350 pupils, aged 6 and a half to 14 and a half, and 32 teachers. Students learn two foreign languages, English and German, and take computer science as an optional subject. School has been doing projects for more than a decade. First we took part in a project of pupils' exchange on national level called *Putovanja*. Then we had a project about non-violent problem solving, in which the partner was a primary school from Serbia.



In 2010-2011 we took part in European Survey on Language Competences. In 2012 and 2013 we were winners of World Environment Day Contest with projects *Wonder Plants* and *We Want to Weed*. We had partners from Germany, Italy, Cyprus and Lithuania in Comenius project WET, Water Europe's Treasure 2012-2014. The second Erasmus+ project was "Young Citizens of Europe – our future" 2014-2016 and the third was "Young Enterprising Europeans" 2016-2018.

School offers pupils different activities. Pupils do sports and take part in competitions at local, regional and national level. Lots of pupils sing in the school choir or play an instrument in the school orchestra. They plant flowers and trees in the school garden, make items for selling at Health Fair, which takes place in Vinkovci every April.

School is active in local community and cooperates successfully with parents and various institutions. We are especially active in environmental protection. We were the winners of national competition for the most beautiful school garden in Croatia in 2017.



Students visit secondary schools' Open Doors Days to get information about their curricula and to choose which school to enroll in after the 8th grade. Taking part in Erasmus+ project *Stop climate Change- Together Europe Achieves More* is a possibility for teachers and students to improve their skills: ICT skills, foreign language skills, team-work skills and learn about causes of climate changes and ways of mitigating them. It is also a possibility to meet peers from other countries and develop a sense of belonging to a broader community, sense that they are all citizens of European Union. We also want to change pupils' and parents' attitude towards our endangered planet.

# ATHENS, GREECE



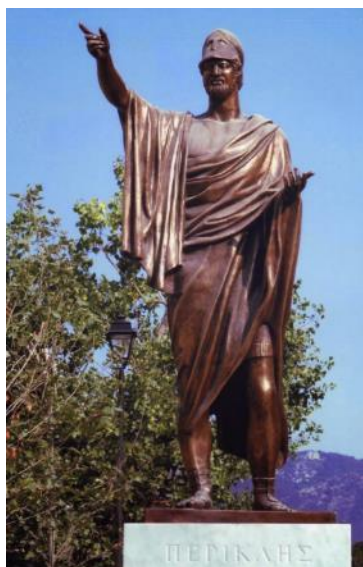
**Greece**, located at the crossroads of Europe, Asia and Africa, is a country in Southern Europe on the Balkan Peninsula, with the population of about 11 million. Our country has a very long history, with the Greek language being present in the country for nearly 4,000 years. The Greek ancient culture has had a significant influence on the arts, philosophy, politics, and sports of western society, including the genres of comedy and drama, western alphabets, Platonic ideals, the Olympics games. The Modern

Greek state was established in 1828, after the Greek Revolution of 1821 and managed to expand its boundaries, during the 19th and early 20th centuries.

**Athens**, the capital of Greece and a political, social, cultural, financial and commercial center of Greece was constructed around the Acropolis that is the symbol of Athens.



The sacred rock links the fabulous ancient civilization with the modern city. During its long and fascinating history, the city reached its zenith in the 5<sup>th</sup> century B.C (the "Golden Age of Pericles"), when its values and civilization acquired a universal significance and glory.



**Cholargos** is a suburb lying in the northwest foothills of Attica's mountain Hymettus, approximately 8 kilometers from the center of Athens. The municipality covers a region of 10.34 square kilometers with the population of 44.539 citizens.

Cholargos was founded in 1926 and the name of the suburb was chosen to honor Pericles, the most prominent and influential Greek statesman, orator and general of ancient Athens.





## 1st GYMNASIUM OF CHOLARGOS

**Our school** is a secondary school located in a suburb of Athens, 8 km far from the center of the city. It is a large, quite modern, two floored building.



There are a lot of classrooms on the first and the second floor. On the ground floor there are two computer labs, a chemistry lab, a technology lab, a library, a full equipped kitchen and a room for cultural activities. There are, also, headmaster's office, secretary's office and a room for the teachers' meetings, on the second floor and a staff room, on the first floor. Around the building there is a large yard including three grounds for athletic activities.



The total number of our school students is around 280 aged from 12 to 15 years old. There are about 30 teachers working in this school. According to the curriculum, lot of subjects taught in a Greek school: ancient and modern Greek language and literature, history, mathematics, physics, chemistry, English, French and German language, informatics, technology, music and gymnastic.

We usually organize educational excursions for our students. We take them to the museums, cultural events or theater. In our school, we have carried out many projects: about healthy eating and

cooking, mathematical literature, environmental subjects, astronomy. We have also participated as partners in European programs such as Comenius and Erasmus+.



We carried out a Comenius project "A chance, come and let's meet again" (2013-15) about peace, brotherhood, tolerance, an Erasmus + project "Facing future with health and empowerment" (2015-16) about creating a computer game, an Erasmus project (2016-18) with the title "Young Enterprising Europeans", about young entrepreneurship.

# SANT'ELIA A PIANISI, ITALY



**Sant'Elia a Pianisi**, a lovely little village of 6,7784 hectares, is situated on a hill, 666m above sea level. It is about 37 km from Campobasso, the regional capital of Molise. Here, in the woods and fields, corn wheat, oats and olives are grown. Sant'Elia a Pianisi was most likely founded between the Longobard age and the Norman age. Historians believe that a group of fugitives from a burnt castle and nearby villages came to Sant'Elia and built

homes and a small chapel consecrated in honour of the prophet Elia, the protector of fire. This could be the origins of Sant'Elia village and its name.

S.ELIA became "S. Elia a Pianisi" on March 26th, 1863 after Royal Decree No. 1218 added "a Pianisi" to its name. The name "a Pianisi" comes from a nearby town called Pianisi, which was destroyed by the Spanish vice King, de Moncada. After its destruction, the inhabitants of Pianisi moved to the village of S. Elia. Since this period, S.Elja has been a prosperous village. Since its beginnings, S.Elja a Pianisi has become famous for its delicious olive oil.



Until the 1970's Sant'Elia a P. was an industrial village as well as an agricultural one. At its peak, Sant'Elia a Pianisi had three pasta factories, an olive husk factory, an oil mill, a trousers factory. Some of these products are famous throughout Europe and America. Unfortunately, many of these industries



have moved out of Sant'Elia a Pianisi. However, two small shirt factories and a factory producing special Italian food still remain. Sant'Elia a Pianisi contains several important places of interest: the Parish Church, consecrated to the prophet Elia; the chapel of Saint Anne (19th century); the Chapel of Saint Rocco; The Convent of Cappuccini Fathers, dedicated to Saint Francesco d'Assisi; along Corso Laudo there is the Fountain of Peace, designed by Francesco Di Marco.



The fountain contains a baptismal fountain which dates back to the 15th century. It is the oldest archeological remain from Pianisi. There are the archaeological excavations of the castle of Pianisi. Moreover, cultural events are organized monthly by the municipality, called "Caffe' Letterari", and, above all, the town is proud of its typical food products.



## ISTITUTO COMPRENSIVO DI SANT'ELIA A PIANISI

**The Comprehensive Institute of Sant'Elia a Pianisi** is gathering the schools of six towns: Sant'Elia a Pianisi, Pietracatella, Macchia Valfortore, Monacilioni, Gambatesa and Tufara. These small towns have retained characteristics that are still recognizable and have im-



portant cultural and environmental resources.

The primary concern of the school is to organize personalized learning paths, considering the pupil's level of evolution and preparing all the most favourable conditions for his active and conscious participation in the activities of the class and the school and for reaching the training goals defined in the Curriculum at the end of the First cycle of education.

Our institute participated in Comenius projects in the past. The first two were international pupils' ex-

changes with Poland 2009-2011, then we were partner, together with Croatia, Germany, Cyprus, and Lithuania, in Comenius project WET, Water Europe's Treasure 2012-2014.

School offers pupils different activities. Pupils do sports and take part in competitions at local and regional level. Lots of pupils sing in the school choir or play an instrument in the school orchestra, the Seliaband. There are projects related to drama, theatre and cinema. Some of them concern theatrical and musical improvisation, to promote the use of various languages, such as gestures, images, music, song, dance and speech, others concern the creation of short films, to guide students to reading and understanding emotions. School takes part to national drama competitions and always ranks at the top. It is active in local community and cooperates successfully with parents and various institutions. We are especially active in environmental protection; we have been collecting waste in our school for years, for example.



Taking part in Erasmus+ project Stop climate change – Together Europe achieves more is a possibility for teachers and students to improve their skills: ICT skills, foreign language skills, teamwork skills and learn about how to preserve the health of the world. It is also a possibility to

meet peers from other countries and develop a sense of belonging to a broader community, sense that they are all citizens of European Union.

Our Institute joined the Istituto Comprensivo Riccia on 1st September 2019, so now its name is Istituto Omnicomprensivo del Fortore Riccia – Sant'Elia. The main offices are in Riccia, but all the activities and projects of our previous Institute remain the same.

# SIMNAS, LITHUANIA



## Simnas – the Town of Two Giants

A long time ago, there lived two good giants – Simas and Sinas. They came together and decided to pick a town to build a very beautiful church and help its citizens. However, they looked around, but

couldn't find an appropriate hill. Then one of them started bringing soil from the east and the other – from the west. They poured a hill and the holes that they took the soil from have now become the lakes of Simnas and Giluitis. The townsfolk, grateful for the giants, who took care of their town and became their friends, named their town with a combination of their names – Simnas.

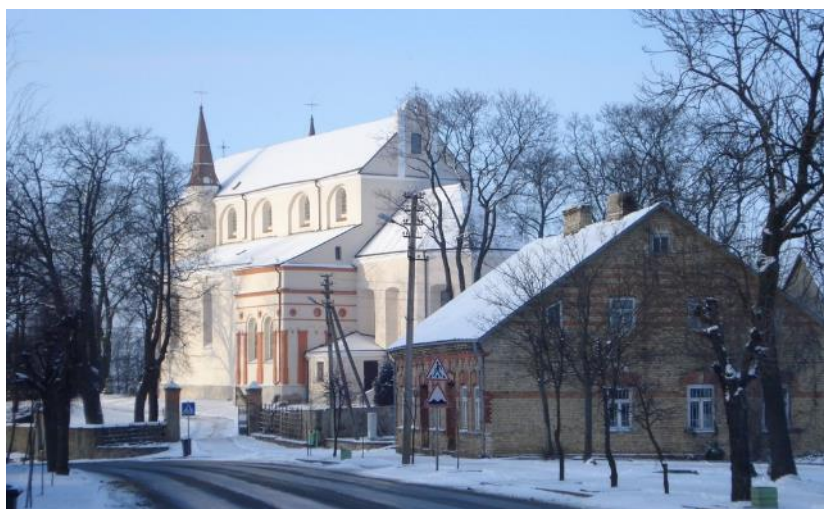


Historians are still debating about the first mention of the name of Simnas. Some state that it was first mentioned in 1382, other – in 1494. No matter, which of these is correct, Simnas still remains one of the earliest settlements in Užnemunė area. In 1626 it was granted Magdeburg rights and its own coat of arms. The image of St. Paul, chosen for the coat of arms of Simnas, is undoubtedly related to the name of Povilas Sapiega, who obtained the rights of autonomy for the town.

The ever-charming St. Mary's Accepting to the Heaven Church was built in Simnas in 1520, initiated by Jonas Zaberezinskis. In the 19th century Simnas was visited by numerous foreign researchers of renaissance, wishing to see and enjoy the view of this pearl of architecture. This is the oldest building in Užnemunė area and the only basilica-type cross-shaped renaissance church in Lithuania.

The historical centre of Simnas is an urban monument. A number of the town's buildings from the early 20th century survived to this day.

Today Simnas is the centre of the neighbourhood with about 1500 residents. At the beginning of March every year the city hosts its famous Simnas Fair. While St. John's Day celebration in June is the most fun and enjoyable in the entire region of Alytus.





## SIMNAS GYMNASIUM

**Simnas gymnasium** is a secondary school, located in the centre of Simnas. It is an improving, active, solidary educational institution, developing a personality who is capable of creating the future of his own, the future of his country and the future of the world. 310 students of age between 7 to 18 years old are educated in gymnasium. They are mainly of Lithuanian origin. There are about 30 teachers working in this school.



According to the curriculum, there are a lot of subjects taught in a Lithuanian school: Lithuanian language and literature, English and Russian, mathematics, history, physics, chemistry, information technologies, physical education, art, music and technologies. For evaluation of students' progress, we have grades (10-1). The grade 4 is enough for a student to pass successfully the class.



Our school is fully equipped with modern educational equipment. All classrooms are equipped with computers, audio-visual and multimedia equipment. There are computer labs, a science lab, a library, a canteen, a modern sports field.



The school of Simnas is well known in the region of Alytus due to the great performance of its students in various Olympiads. There is a great number of high level extra-curricular sport, riflemen's and art clubs. Students are active in various projects especially about environmental subjects, healthy living, Europe's history and culture.

# ROERMOND, NETHERLANDS



**Roermond** is a beautiful small city in the south of the Netherlands. Roermond has around 58.000 inhabitants. It is a unique city due to its international location, the large hinterland, its rich history, wide range of culture, the connection to the water, the natural areas in the area and the pleasant shopping heart that

attracts visitors from all over the world. The city has a protected cityscape and is rich in monuments. The city centre with its beautiful squares houses a wealth of historic buildings, such as churches and old trading houses.



The historic centre has interesting sights and is an attractive centre. Nature and water is



within the reach. The Maasplassen, directly in front of the gates of the city, form a vast water recreation area. The concatenation of lakes forms a wonderful backdrop for



water sports enthusiasts and nature lovers. There is a green belt around Roermond, which is wonderful for walking and cycling. Nature areas such as the Meinweg National Park, the Leudal and the river valleys of the Swalm and Roer offer a rich variety of forests, heaths and meadows. There is also something for everyone in the cultural field.

Everyday lots of people visit our City. Since 2001 Roermond has been home to a McArthur-Glen Designer Outlet, which has become one of the largest and most successful designer outlets in Europe with an average of almost six million customers per year, making it one of the biggest tourist attractions in the Netherlands.





## SCHOOL BISSCHOPELIJK COLLEGE BROEKHIN ROERMOND



**Our school, Bisschoppelijk College Broekhin Roermond,** is located in Roermond in the Netherlands. The school was founded in 1851. Nowadays around 1600 students attend classes in our school. And around 200 employees, teachers and other employees are employed at our school. Our school is one of the five secondary schools in Roermond. Students from 12 to 18 years old attend classes here. We have 3 levels of difficulty: vmbo, havo and vwo.



In the region we are known for the specific things our school offers. For example we have, vmbo-T+, probability classes, bilingual education, entrepreneur's route, free school, lots of international projects (including this Erasmus project), and a wide range of cultural activities. We think it is very important for every student to be seen, heard and appreciated. We are trying to give the students what they need individually.





# GDYNIA, POLAND



**Gdynia** is a young, dynamic city located on the south coast of the Baltic Sea in northern Poland. It is also a well-known, important seaport of Gdańsk Bay. Gdynia has a population of almost 250,000 making it the twelfth-largest city in the country. Gdynia, the city of Gdańsk and the spa town Sopot form a very popular metropolitan area called the Tricity (Trójmiasto)

with a population of over a million people. It is located by the sea and has remarkable, sandy beaches. Gdynia and the neighbouring towns are surrounded by the Tricity Landscape Park covering the area of 199.3 square kilometres.

A modern harbour and city were built in record time. After Poland regained its independence in 1918, a decision was made to construct a Polish seaport in Gdynia. The town was given a cosmopolitan character with modernism being the dominant architectural style and emerged as a city in 1926.

Gdynia's authorities aim to convert the town into a carbon-low city. They have banned plastic in the town hall and have organised plenty of educational programs for young people. Apart from common means of transport, like buses or suburban rail, there are unique trolley-buses which can be found only in two other Polish towns. Lots of money is invested to purchase modern, carbon-low buses and to build bus lanes in the city. There are also numerous cycling paths.

Ships at the quayside, yachts at the marina, boulevards along the sea and a cliff seen from a pier make Gdynia's atmosphere so distinctive today. It attracts tourists and people of culture. There are theatres, cinemas, museums, festivals, educational centres and sport clubs in the town. Clear air, families strolling along the sea and plenty of green areas make the town exceptional. Annual polls show that over 90% of residents are happy to live in Gdynia. It is the best result in Poland.



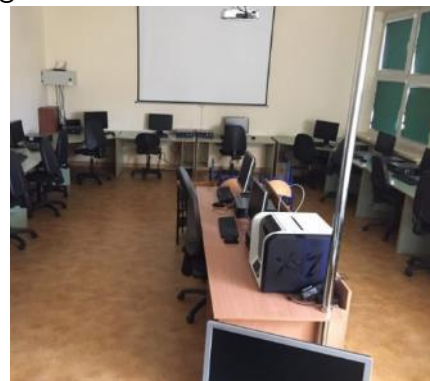
## PRIMARY SCHOOL No. 12 GDYNIA



**Primary School No. 12 in Gdynia** has a long history. It was founded before World War II in 1935. After the war had broken out, lessons were suspended and resumed on 23rd April 1945. When the school started its activity, there were 289 pupils but only 5 teachers and 5 classrooms. But soon it needed more space as more and more students began their education every year. In 1964 the school had to be moved to a new location within the same district, Witomino, where larger buildings were built. Today there are 801 students altogether whose

ages vary from 6 to 15, they are taught by 83 teachers and graduate from school after the eighth grade. Due to a change in Polish educational system, it is a primary school with additional kindergarten classes. However, till June 2019 there used to be middle school classes and students graduated our school at the age of 16.

Students learn different subjects that change at the course of schooling. Two foreign languages are taught, English is taught from the very beginning and German is added to the teaching program in the seventh grade. There are 3 computer labs, a library, a gym, a canteen, a swimming pool and a school yard.



All classrooms are equipped with audio-visual and multimedia appliances. Pupils take part in numerous skills, sports and knowledge competitions. We offer extra lessons for both, outstanding and poor students. Apart from compulsory subjects, there are also clubs in the afternoon like maths club, science club, sports club or choir. A lot of students are volunteers and help needy people or raise money for them.



Each school year plenty of activities are organized to meet children's needs. They are held in school and in various institutions. There are charity events, eco-happenings, cross-curricular projects, dramas, one-day and multi-day trips. We have annual school festival during which we put out shows, sell self-made food and find other ways to earn money for our school. We also arrange first-

aid courses and a special bus in which adults donate blood. We cooperate with parents, local authorities and institutions. Stop Climate Change - Together Europe Achieves More is the third international project in our school.

# PROJECT ACTIVITIES







## ACTIVITIES IN CROATIA

After we had learned that the Erasmus+ project „Stop climate change – Together Europe Achieves More“ was approved, we announced the logo competition. Pupils designed lots of logos, and the overall winner was the logo designed by Jana Ešegović.

It is very important to disseminate project activities and results widely, so we started with the opening ceremony. We invited teachers, pupils, parents, representatives of local community and the media. They were informed about partner schools, topic of the project and project activities. Folklore club „Šumari“ performed traditional Croatian songs and dances. Project was also presented to staff of two primary schools not included in Erasmus projects. Pupils presented project activities at the stand of Health Fair in Vinkovci. All activities and results were put into presentations, posters and videos that can be used by anyone interested in the project topic.



Pupils did research into reasons that make millions of people leave their homes and become climate migrants. They learned about greenhouse effect and global warming that cause melting of polar ice caps. World famous climatologist Milutin Milanković was born in Dalj, a village near Vinkovci. Pupils visited the museum in his birthhouse and learned a lot about Milankovitch cycles - effects of changes in the Earth's movements on its climate over thousands of years. School cooperates with local and regional institutions and we had two lectures conducted by Pavao Dragičević, an expert from the Public Institution for the Management of Protected natural Values in Vukovar-Srijem County – one was about endangered animal species and the other was about the influence of climate changes on migration of birds.





Experts from Institute of Public Health of Vukovar-Srijem county had a lecture for parents, teachers and pupils about influence of climate changes on human health. One of the negative effects is phenomenon of UHI – Urban heat island – urban areas have significantly higher temperatures than rural areas and periods of extreme heat cause the death of lots of people.

Scientists believe that the main cause of global warming is the use of fossil fuels. It is necessary to stop using them and start using renewable sources of energy that not pollute the environment: solar energy, wind energy, geothermal energy, energy of water, biomass, etc. Pupils made models of solar powered cars, wind turbine and watermill. They also calculated their carbon footprint and came up with advice how to reduce it. They made posters and put them in classrooms together with posters with advice how to reduce water footprint. We all worked in the garden and grew flowers and, what is more important, vegetables in order to teach pupils that it is important to eat locally grown food.



Pupils, teachers and parents took part in many activities of marking international days, such as European Mobility Week, Day of Biological Diversity, World Water Day, World Environment Day, World Meteorological Day. A group of pupils and teachers visited Croatian Meteorological and Hydrological Service in Zagreb where we learned about instruments for monitoring the weather and about climate changes. Our school bought and installed a weather station which was used by pupils to monitor the weather regularly.

We also joined a Croatian initiative "Plant a tree, don't be a stump" (Zasadi drvo, ne budi panj) and planted twelve trees donated by Hrvatske šume.

Throughout the project years pupils were turning their ideas about recycling into interesting products which were presented on Erasmus Day which was held at the end of the school year. They also presented interesting climate based experiments.





## ACTIVITIES IN GREECE

In terms of Erasmus project "Stop Climate Change – Together Europe Achieves More", teachers and students of 1<sup>st</sup> Gymnasium of Cholargos made lots of different activities connected with the environment and climate change.



Firstly, teachers made an introduction to the subject of the project, so that pupils found out what changes have been happening in the world and in their local area due to climate change. Pupils also learned about Red Cross and how this organization help during disasters caused by climate change, about global warming and green house, the impact of climate change on agriculture.





They attended a lecture by a famous Greek doctor at school about influence of climate change on health. They made presentations on urban heat island phenomenon, on water footprint and carbon footprint.



Teachers and students established at the top floor of the school building a weather station to monitor weather. They also organized a Christmas bazaar twice during the project where they sold objects for Christmas decoration made by recycling materials. The money earned at bazaar were donated to the Greek hospital "Elpida" nursing children with cancer. Visits to the Center for renewable energy sources and saving and to the Multifunctional Environmentally Sustainable Center SNFCC, where they conducted experiments connected with environment.



Finally, they made several activities during international days. On "Erasmus Day", 1<sup>st</sup> Gymnasium of Cholargos made a competition for the best object made by recycling materials. On "Water Day", students and teachers visited to the Observatory of Athens to attend an meteorological educational program "Wind and Water".

Students cleaned up a beach in Marathona, near Athens in terms of "Cleanup Day". They also cleaned and placed signs with the name of school on a mountain path of Ymitos, on "Forest Day". On "Mobility Week", students went to Parnitha mountain, they learned about advantages of walking and played interactive games.

The period of two years, teachers and students obtained knowledge and experience about the crucial problem of climate change.



## ACTIVITIES IN ITALY

On 3rd October 2018, our Institute organized the Opening Ceremony of the Erasmus+ project Stop Climate Change – Together Europe Achieves More, to introduce it to the entire school and local community. After that, students participated in the logo contest. Teachers



explained what a logo is and how it should be done. They told the pupils what ideas the Erasmus plus project logo had to contain and then students drawn and coloured the following logos. They made some posters with all the logos produced,

that will be exposed at school till the end of the Project.

The carnival parade is an important event for our territory.



Last year, our Institute took part in the parade with an allegorical chariot about climate change, the Erasmus theme. It was a way to create awareness about the climatic

problem in the whole population of our territory. Here are some stages of preparation of our float:

We carried out an interdisciplinary teaching workshop that enthusiastically involved students, teachers, families and our whole territory. By having fun, we conveyed a message of vital and global importance and we won the 8th edition of the carnival floats parade, which was organized by the "Associazione culturale GENIUS" of Sant'Elia a Pianisi.



**Monitoring the weather** - Our students monitored and wrote down the data regularly, about temperature, relative humidity, wind speed and direction, atmospheric pressure and rainfall. Then they drew two diagrams, one about temperature and one about rainfall in Sant'Elia a Pianisi in April 2019. Our Science teacher helped them to collect data, draw diagrams and finally create a poster, that is still on the wall of their classroom. They have continued to monitor the weather until today.

**Climate game** – One of our Primary School colleagues, that is in our project team, involved children in creating a climate game. First, they prepared and coloured the drawings



related to climate with the help of the teacher, then they had a lot of fun by mimicking climate change.



**Science climate based experiments** - Our students were involved in Science climate based experiments and they suggested doing two experiments related to greenhouse effect and climate change. The first was on the effects of pollution on the atmosphere. This experiment showed us that the combustion of oxygen and the production of carbon dioxide ( $\text{CO}_2$  – a compressed gas) decreased atmospheric pressure. The second one was on the increasing of temperature due to the greenhouse effect. The negative aspect of greenhouse effect is that it traps infrared rays.



**World cleanup day** - Some teachers and students of Pietracatella, a school of our Institute, took part at the World Cleanup Day on 21st September 2019, together with Legambiente, an Italian association linked to environmental issues. Around the world, participants of all ages and backgrounds tackled out-of-control waste, educated others on the perils of single-use plastic and encouraged individuals and governments to change behavior and policies regarding consumption and waste.

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**Fridays for Future** - The students and the teachers of Scuola Primaria e Secondaria di I grado di Sant'Elia a Pianisi participated in the school strike for climate, Fridays for Future, on 27th September 2019 for the second time.



**Tree Festival, 21/11/2019** - The third classes of Scuola Secondaria di Primo Grado di Sant'Elia a Pianisi attended the Tree Festival organized by our Istituto Omnicomprensivo del Fortore Riccia – S. Elia, with the participation of Legambiente, at the IPSASR in Riccia.

The treated theme was related to eco-sustainability, the protection of trees and the environment, for the protection of territory and the damage caused by climate change.





## ACTIVITIES IN LITHUANIA

During the two years implementation of the Erasmus+ project "Stop Climate change – Together Europe Achieves More 2018–2020" we organised numerous activities in Simnas gymnasium. All of them were connected with the aims of the project to raise awareness about climate change, to change students' and parents' attitudes and embrace a climate friendly lifestyle and to participate more actively in society.



We organised Erasmus+ Days and a science fair to present the results of our work. For the science fair students built models of windmills, wind farm models. Students and teachers shared their impressions from short-term exchange meetings.

A number of companies and institutions shared their knowledge with project participants during project implementation. In Vilnius Meteorological station, students learned more



about phenomena of climate change, their causes and consequences. Alytus Regional Waste Management Centre introduced pupils to municipal waste management methods, waste management volumes in Alytus region and told about the impact of landfills on the greenhouse effect. In Kaunas University of Technologies students attended a lecture about significance of renewable sources of energy. About the effect of climate change on birds migration and population, invasive and endangered species of animals and plants they were acquainted in Meteliai Regional Park and in Žuvintas Biosphere Reserve.

Teachers Rasa Ručienė, Inga Stankevičienė and Gediminas Kanapickas, Irena Tarasevičienė, Rima Pavolienė conducted lessons on the topic climate change: about climate change and its causes,



consequences, climate change threats to endangered animals, rising level of World Ocean and its consequences, ways to mitigate the effect of climate change.

Students created memory, board and card games, which they can play during English, Biology and Geography lessons.



Students participated in international actions such as World Clean up Days, European Mobility Week, World Birds Migratory Day and World Earth Day. Students picked up litter, shared leaflets with practical solutions how to improve public health and quality of life through promoting clean mobility and sustainable public transport. They walked and cycled trips to Meteliai Regional Park.

They organised Christmas charity fair in Simnas cultural centre where they have improved social, communication and civic competences and learned to be responsible citizens, take care for the environment and for needy. Students donated their earnings to Red Cross organization.





## ACTIVITIES IN POLAND

After students and teachers of our school had received the good news about the approval of the Erasmus+ project "Stop Climate Change – Together Europe Achieves More", we proudly hung up a banner informing about the project at the main entrance. Then, we



started working really hard. There was a logo contest in which plenty of students participated. The best three logos represented Poland in the international competition in Greece. The opening ceremony in our school was held in November 2018. Representatives of the local community, students, teachers and the school management gathered in the gym to begin the project officially. The school coordinator informed about its aims and appealed to everyone to protect the environment. Students

presented their PowerPoint presentations about partner schools and countries and about the first mobility in Greece. The school choir sang "Ode to Joy" and a young pupil performed a poem about the Earth. Students' logo projects were used as decoration.

Students took part in numerous lectures and workshops on a variety of subjects connected with climate change like the greenhouse effect, health, climate refugees, sustainable development etc. They made posters, lapbooks and presentations on the mentioned subjects and published them on the project website.



Our school celebrated a few international days connected with the environment. We took part in the World Cleanup Day, the Earth's Day, the Mobility Week, the Water Day and the Environment Day. We carried out experiments and were doing our best to make people aware of the climate problems we need to face. During the Earth Day activity we went for

a walk along the boulevard and were carrying baskets full of apples with eco-slogans attached to them. People who we met shared their experiences. They told us what they were doing to protect the planet. Erasmus+ members also enjoyed Biologists' Night which was organised at the University of Gdańsk in January 2019. We attended numerous lectures and workshops. We found out a lot about plants and animals as well as threats connected with their extinction in previous habitats.



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Baltic Festival at Gdańsk University of Technology in which we attended, was of great educational value too. Access to clear water is a great luxury of which plenty of people in the world are deprived. We were shown a model of sewage treatment plant and found out more about its elements. Tutors encouraged us to analyze how come we always have clear, safe for consumption water in our taps: where it comes from and how it is purified, what is ozone and how it can help us, and also where the water for

many hundreds of thousands Gdańsk citizens come from.

As humans use more and more electricity and new electronic appliances are constantly invented, we must develop alternative sources of energy. At a workshop we were taught different methods of gaining electricity out of natural sources of energy.

Some other subjects included: ozonation of water, dealing with smog, molecular cuisine with by-products, concrete cities, surface water pollution, sorting out the rubbish or 3 R's (reducing, reusing, recycling). In DIY section we could make eco-cosmetics, e.g. toothpaste, shower gel or bath bombs. Finally, we took part in ECO-BA(N)G!, a quiz on environment protection.

In order to monitor the weather, we bought a weather station. It was installed on the roof of our school building. Every day our pupils monitored and wrote down the most important data: temperature, relative humidity, wind speed and direction, atmospheric pressure and rainfall. We compared the current indicators to those from previous years and to those of our partners.



Under the superstition of a chemistry teacher, students prepared and carried out experiments during Erasmus Day and Science Fair. As the result of a competition for the best re-using idea, students voted and decided to reuse white T-shirts they had used to wear. We brought ecological paints and painted new patterns or slogans on our old T-shirts. Each of us designed and made his or her own project. When the T-shirts were dry, we organized an exhibition.

We hope we have managed to make our local society aware of the climate change problem and encouraged them to start acting.



## ACTIVITIES IN THE NETHERLANDS



Lecture climate refugees



Ecological footprint & sustainability



Best reusing idea



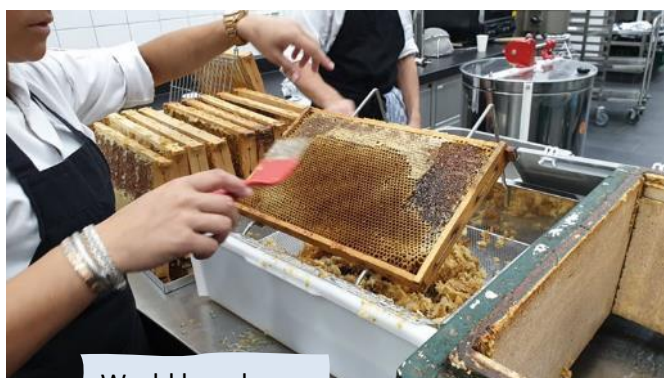
Little people – making art of garbage



Making birdhouses



Climate based experiments



World bee day



Warm sweater day



Opening ceremony



Climate march



Erasmusday &amp; Science fair



Water treatment plant



Excursion zoo



Rescue service



Clean up day





# MOBILITIES

- **ATHENS, GREECE** (22 – 26 October 2018)
- **VINKOVCI, CROATIA** (17 – 23 March 2019)
- **ROERMOND, THE NETHERLANDS** (12 – 18 May 2019)
- **GDYNIA, POLAND** (6 – 12 October 2019)
- **SANT'ELIA A PIANISI, ITALY**
- **SIMNAS, LITHUANIA**



ATHENS



VINKOVCI





ROERMOND



GDYNIA



## FIRST MOBILITY IN ATHENS



**Sunday 21st October:** It was the arrival day of all delegations. Teachers of all countries have accommodated in a hotel at the center Athens, students have been hosted by Greek families in Cholargos and this has been a very important experience for both of them.

**Monday 22nd October:** In the morning the visitors arrived and welcomed at school. The delegations presented their countries and schools. Later on, we visited the City Hall and the Mayor of the city welcomed all the visitors. After watching a film about Greece and its history there, we went for lunch.



**Tuesday 23rd October:** The day started visiting the museum of Acropolis with the famous findings from the temples of the Acropolis. Then, teachers and students of all countries continued sightseeing the sacred rock of Acropolis, where they admired the imposing temple of Parthenon, Erechthion and Athena Victory. They also enjoyed the view of the city all around. Before the lunch, they strolled along the narrow streets of Plaka, the oldest and the most picturesque neighborhood of Athens sightseeing the antiquities – Ancient Agora, Roman Agora, Hadrian Library etc.



**Wednesday 24th October:** In the morning, they visited by bus the "Center for renewable energy sources and saving", where they attended lectures about ways of saving energy. Then they visited the archeological museum of Marathon. After the lunch at the coastal town of Nea Makri, they went to the lake Marathon formed from the construction of Marathon dam and admired the beautiful land scape.



**Thursday, 25 October 2018:** In the morning teachers of all partners countries contacted lessons in English on climate change and its serious impacts. All teachers taking part in Erasmus project decided for the logo of the project voting the best among logos made by students of all countries. After coordinators' meeting, all delegations attended the performance of the play "The World is Sick" and the farewell ceremony.

town of Nea Makri, they went to the lake Marathon formed from the construction of Marathon dam and admired the beautiful land scape.



**Friday, 26 October 2018:** In the morning teachers and students had a meeting with the Professor Christos Zerefos (awarded by the Nobel Peace Prize in 2007) at the Research Center for Atmospheric Physics and Climatology of the Academy of Athens. Then, they visited by bus the wetland of Vravrona with high biotic diversity and watched some of numerous bird



species. They also guided at the remarkable archeological site of Vravrona with the temple of ancient goddess Artemis. Nearby, the whole group had lunch. Late in the afternoon, they visited the remains of the Temple of Poseidon, the major sanctuary to the sea god in the ancient classical period, at Cape Sounio and enjoyed the view from the top of the hill.



**Saturday, 27 October 2018:** Each team started its way back to the airport of Athens.

## SECOND MOBILITY IN VINKOVCI

The second short-term exchange of groups of pupils took place in Vinkovci, Croatia, from **17 March until 23 March 2019**. The title was "Reduce, Reuse, Recycle". Host school was Osnovna škola Bartola Kašića. We hosted 25 pupils and 11 teachers from partner schools from Greece, Italy, Lithuania, the Netherlands and Poland. Pupils stayed at their peers' homes. All groups arrived on 17 March and host school organised transport from the airport Nikola Tesla to Vinkovci.



On Monday, 18 March, there were activities at school. Pupils attended seven climate based English lessons conducted by teachers from all 6 countries. At welcoming ceremony they saw the performance of the school choir and orchestra, listened to poems in English and culture club "Šumari" performed traditional Croatian songs and dances.



Coordinators had the meeting to discuss ongoing and future project activities and the rest of the group went with pupils to Kunjevci forest, where foresters from "Hrvatske šume", company for woodland management, showed them the forest, some animals and talked about the changes they have noticed and that are caused by climate change.

On Tuesday, 19 March, teacher Vedran Menđušić presented his award-winning project of growing plants indoors, in controlled conditions. Then we went on a trip. We visited Vukovar, Ovčara memorial centre, Museum of Vučedol Culture, wine cellars in Ilok and Principovac, the highest point in our county.





On Wednesday, 20 March, a group of pupils was making costumes and rehearsing the play "Down in the Dumps". The play is about the importance of separating the rubbish and recycling. Other pupils were attending lessons with their hosts.

Then we visited "Spačva", wood processing company. We were shown the production of wooden pellets and brickettes, which are energy efficient and burning them does not produce greenhouse gasses. Producing them, the company has no waste after producing wooden floors, doors, garden furniture and veneer. We also went to Banja, a nearby artificial lake, and learned about plants and animals that live there and about endangered and invasive species.



On Thursday, 21 March, there was a successful performance of „Down in the Dumps“ at school. Then we went to the city centre. We were divided in two groups and took turns in activities: at Red Cross Vinkovci pupils learned about the role of Red Cross organisation and their work and they also had a short first-aid course. In the meantime, the second group was selling products brought by partners and talking to passers-by about the project. All the money was donated to Red Cross. At city hall we were welcomed by the deputy mayor. Teachers went to Đakovo and visited the State Stud Farm and the cathedral of St. Peter. Pupils had a party organised by parents.



On Friday, 22 March, we went to Zlatna Greda in Baranja. Pupils had a lecture and a workshop about climate change and renewable sources of energy conducted by Kristina Kovačević from Association for nature and environment "Zeleni Osijek". After some interesting and fun sports activities, we went to Nature park „Kopački rit“, we had a boat ride and a lecture about plants and animals that live there. Kopački rit is a home for numerous bird species, as well as other animals (fish, amphibians, insects, mammals). They are all affected by climate change. On the way back, we stopped in Osijek and visited the old part Tvrđa. All partner groups departed from Vinkovci on Saturday, 23 March. Transport to Belgrade airport was organised by host school.

## THIRD MOBILITY IN ROERMOND

We were very delighted to welcome teachers and students from Greece, Croatia, Italy, Poland and Lithuania to our beautiful city Roermond in the Netherlands.

### Monday

Today we went to the City Hall of Roermond where we met Deputy Mayor Rens Evers. We discussed the importance of saving our planet and reducing climate change. After the visit we all walked to our school where we were welcomed by our headmaster and we were treated on Dutch vlaai.

Each country prepared a climate based lesson. In the afternoon the students were free to explore Roermond and the teachers had a nice lunch where we could try all different kinds of local and biological products.



Visit City Hall of Roermond

### Tuesday

We started the day with an arts lesson about global warming and a coordinators meeting. After a short break we had a lesson about Amsterdam and water management. We had a nice lunch together and went to Waterschap Limburg where we had a guided Waterwalk through Roermond and along the rivers Roer and Maas. We learned about local animals, local plants, the importance of accurate water level management for agriculture and nature and about the ways in which the board fights drought.



Climate based lessons



Climate based art lesson



Waterwalk

### Wednesday

Today we visited the cultural capital of the Netherlands, Amsterdam. The students did a photo tour which showed them the most important aspects of the city and the teachers had a guided tour through Amsterdam. In the afternoon we had free time so that everybody could do or see whatever they wanted.



Guided tour through Amsterdam



## Thursday

Thursday was a long day. In the morning we visited a water treatment plant. In the afternoon there was some free time. We all came together at school in the evening to watch the play "Everybody's water" which was performed by students of all partner schools. After the play students, teachers and parents enjoyed an international buffet.



Visit water treatment plant

All partners had brought some typical delicacies from their home countries and all the Dutch parents had prepared international and typically Dutch dishes.



The play

## Friday

Today we went to "Deltapark Neeltje Jans". This is a theme park with an educational role. We learned about the floods in the province of Zeeland in 1953 and about how the Netherlands have protected themselves from such floods since then. We also took a very close look at the dams themselves and went inside one of them. After the deltaworks experience we had a typically Dutch meal, Friet with Fri-kandel or Krokett. After lunch we went on a boattrip across the Oosterschelde. To end the day we visited a sea-lion show.



We are very proud of the program we managed to make for our visitors and hope you all learned a lot and made memories for life.





## FOURTH MOBILITY IN GDYNIA

The fourth short-term exchange took place in Gdynia, Poland from **6th to 12th October 2019**. The Polish school, Szkoła Podstawowa nr 12 im. gen. Mariusza Zaruskiego hosted 23 students and 13 teachers from Croatia, Greece, Italy, Lithuania and the Netherlands. The students stayed at their peers' and were hosted by Polish families for the whole week. We attended numerous lectures and workshops connected with the environment and with ways of protecting it. We visited plenty of places to complete our project tasks. Some Erasmus+ members made social spots – short videos against devastation of our planet.



**On Monday, 7th October**, all Erasmus+ members gathered at school early in the morning. They were greeted by the headmistress Dorota Skulska-Wittbrodt and the Polish coordinator Justyna Wrześniowska-Choszcz. After a short opening ceremony and listening to "Ode to Joy" performed by the school choir, students and teachers left their signatures on a huge Erasmus+ blackboard and made some drawings on it. After that, each delegation planted a tree in the school yard. It was symbolic as the mobility title was "Save The Forests, We Need Oxygen".



After leaving the school, we visited Gdynia Infobox where we could see a model of the city surrounded by woods from the south and learn about its history and location. We also climbed an observation tower to admire Gdynia from a height. On our way to the town hall, a history teacher Magdalena Zmorzyńska showed us around the city. In the town hall we were warmly wel-

comed by the chairwoman of the city council Joanna Zielińska and a councillor Lechosław Dzierżak. They told us about the actions taken to make Gdynia more environmentally friendly. We were shown some short films about public transport, electrically powered bikes for rent, cycling paths and bus lanes. They also gave a speech about the ways in which the officials are trying to reduce CO2 emission.

**On Tuesday, 8th October**, we went on a trip to Mar-szewo Forest Botanical Garden, Gdańsk and Sopot. All the places are surrounded by the Tricity Landscape Park covering the area of 199.3 square kilometres. In Mar-szewo we were divided into two groups and attended a forest game connected with sustainable development and a lecture about the influence of climate changes on birds, their migrations and life habits. To meet the assumptions of the game, the students in small groups had to find task stations and solve all the puzzles. They discussed their answers afterwards and compared them with other groups. After the workshop on birds, an ornithologist from the Gdańsk University showed us how to ring the birds that had been caught in a net in Mar-szewo. She showed us how to measure, weigh,





recognize gender and told a lot about the species that had been caught. We were instructed how to release the birds and we set them free.

After a visit in the Forest Botanical Garden, we left for Sopot and Gdańsk. We chose a way through the beltway along the wooded areas of the Tricity. A guide showed us around Gdańsk and Sopot pointing at differences between the cities and the ways they have already been and might be affected by climate changes in the future.

**On Wednesday morning, 9th October**, coordinators met to discuss the issues and activities that had already been fulfilled, the activities in progress and to plan remaining tasks. Then the play "Save The Lofty Trees" was put up by Croatian, Greek and Polish students. After the play we went to the Gdynia Experiment Centre and spent a few hours visiting hundreds of interactive exhibits which refer to the environment and science subjects. We also made a model of a carbon-low-city under a supervision of educators.



**On Thursday, 10 October**, teachers from all the partner schools conducted lessons in English connected with climate change. Each student attended two lessons in an international group. Next, we went to the Gdynia Aquarium to attend a lecture and laboratory workshops which were conducted by educators. We were told a lot about the fauna and flora of the Baltic Sea and the influence of climate change on them. We were also shown photos of various living and extinct species. Then we used microscopes to carry out some laboratory tasks. After the lecture and the



workshops, we saw numerous water species of animals and plants living in the aquarium. We visited hundreds of exhibits and found out more about the Baltic Sea.

**Finally, on Friday, 11th October**, we went on a trip to Hel – a small town on Hel peninsula which is surrounded by the waters of the Baltic Sea on three sides. Due to climate change, the peninsula is likely to disappear flooded by the sea in the future.



In Hel educators took care of us again. We used a drag net to catch some species living in the Baltic Sea and were given a lecture about them. In the unique seal station (a breeding centre for seals, which are later released to help re-establish the species in the Baltic Sea) we watched seals being fed and trained by their instructors who showed us how they check the animals' health and condition. Next, we visited a museum of porpoise and took part in a workshop connected with environment. Finally, we walked along the seashore to the tip of the peninsula and watch the fauna of the coast. The exchange in Gdynia was very fruitful and had a great educational value. We worked in an international team to convince everybody that together Europe achieves more as far as fighting for the environment is concerned.

# SPECIFIC PROBLEM





## INVASIVE PLANTS - COMMON RAGWEED IN CROATIA

**Ambrosia artemisiifolia**, common ragweed (other names in Croatia: limundžik, amerikanka, partizanka) is a plant native to North America. It was introduced to Europe in the 19th century by ships transporting wheat. It was first spotted in Croatia in 1941. It has become an invasive species in some European countries.

Ragweed is an annual broadleaf weed, it grows to 150 centimeters and a single plant can produce millions of grains of pollen. Pollen is wind-dispersed.

Pollen of common ragweed is a major cause of hay fever during the late summer and early autumn. It is a major public health problem, about 30% of people in the continental part of Croatia suffer from allergies caused by ragweed, which affects their quality of life. Lots of people suffer itching, swelling of the mouth, runny eyes and nose, asthma. Ragweed grows near houses, by roads, at construction sites, in fields and can significantly reduce yields of crops, often more than 30%.



It is important to eradicate it, but it has become resistant to some herbicides. It is better to cut it regularly or to pull the plants manually. We cooperated with the Department of Public Health, distributed leaflets and put up posters to inform the public about the importance of ragweed eradication. We also pulled up the plants in the field near the school as hand pulling is an organic way to control ragweed.



Ragweed is rapidly spreading in Europe. It adapts quickly and climate change will enable this highly allergenic plant to advance to the North of Europe and warmer temperatures will also extend the ragweed season.

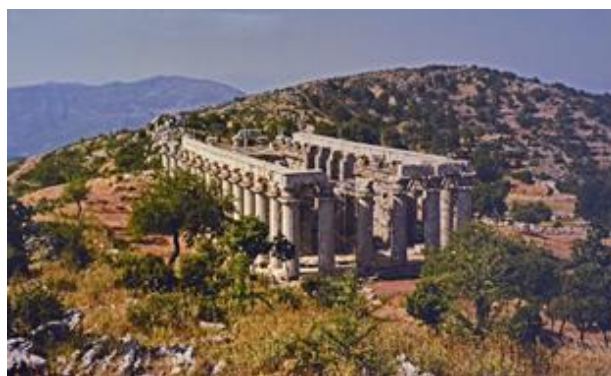


## CLIMATE CHANGE AND CULTURAL HERITAGE IN GREECE

Climate change has a wider impact on cultural landmarks across the globe. UNESCO World Heritage sites located in coastal areas are increasingly at risk from global warming, rising seas, flooding and erosion. In the Mediterranean region, especially in Greece a lot of cities and archaeological sites known from their long history and civilization are in danger from at least one of these hazards, flooding or erosion, by the end of the century.



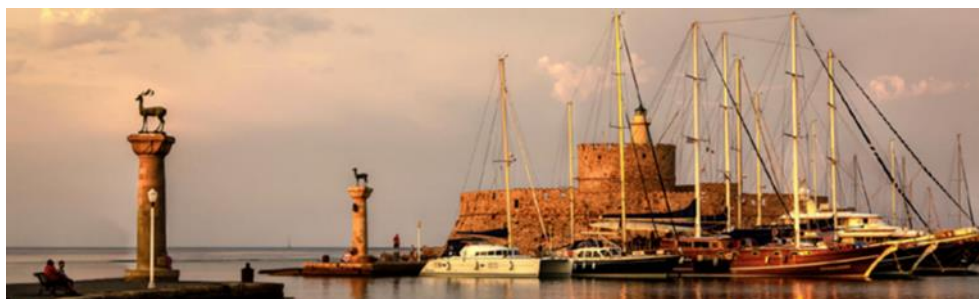
Some places on the island of Mykonos, one of the most famous and touristic island in Greece is also in danger. The ancient walls of the medieval city of Rhodes built by the Ioannites knights and the old town of Corfu are threatened by gradual erosion from the rising tides.



According to predictions, by the end of the century, sea levels are expected to rise by 20 to 59 centimeters. However, some researchers believe that existing models underestimate the threat for the Antarctic glaciers. So, by the end of the century, it is more probable for sea levels to rise between 80 centimeters to

2 meters. These quantities may sound small or negligible, but they are not.

The effect of this situation on the coastal line of Attica is obviously in the photo below. There will also be very significant problems in archeological sites located in forest areas or on steep slopes that are vulnerable to erosion. High temperatures and lack of rainfalls make forest areas drier, and therefore more vulnerable to forest fires. Some of these specific destinations protected by UNESCO, are the Temple of Epicurean Apollo and Ancient Olympia that will be in immediate danger.



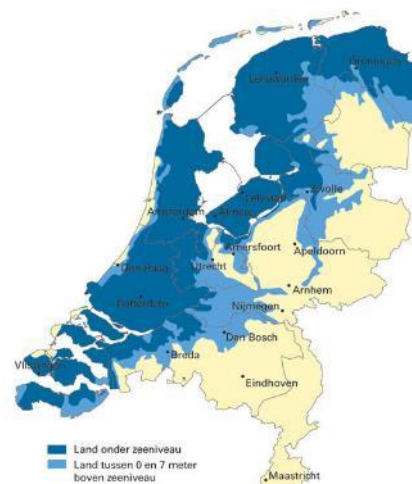


## EFFECTS OF CLIMATE CHANGE IN THE NETHERLANDS

### ISING SEALEVEL

The Netherlands is famous for its polders and dikes. We are known as that industrious little nation on the North Sea that has successfully kept the sea at bay for centuries. But the sea that we have been fighting for our entire history was not increasing in volume. This situation is now being seriously disrupted by warming seawater and melting glaciers and ice caps, leading to a slow but steady sea level rise. A very big area of The Netherlands lies below sea level. We build dams and dikes to prevent The Netherlands from flooding.

In order to keep the seawater at bay, the dikes need to be raised. As a result, the polders behind them will become relatively deeper, making them more vulnerable and more expensive to maintain. These higher dikes are also a problem in themselves: they prevent natural silting, which means our delta is unable to grow along with the advancing sea.



The Netherlands; area of land that is above and is below sea level

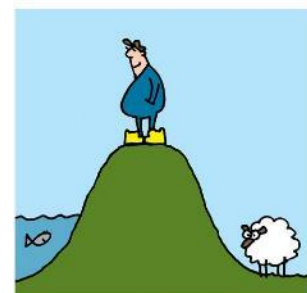


The Oosterscheldekering; part of the Deltawerken

Even we have dams and dikes, in 1953 the sea won the battle during the watersnoodramp. To prevent such disaster in the future, the Netherlands build the Deltawerken. The Deltawerken is a series of construction projects in the southwest of the Netherlands to protect a large area of land around the Rhine-Meuse-Scheldt delta from the sea. The works consist of dams, sluices, locks, dykes, levees, and storm surge barriers located in the provinces of South Holland and Zeeland. The aim of the dams, sluices, and storm surge barriers was to shorten the Dutch coastline,

thus reducing the number of dikes that

had to be raised. Along with the Zuiderzee Works, the Delta Works have been declared one of the Seven Wonders of the Modern World by the American Society of Civil Engineers. The Delta Project of which the Delta Works are part of was originally designed in a period of time in what environmental awareness and ecological effects of engineering projects were barely taken into consideration. Although the level of awareness for the environment grew throughout the years, the Delta Project has caused numerous irreversible effects on the environment in the past. Blocking the estuary mouths did reduce the length of dykes that otherwise would have to be built to protect against floods, but it also led to major changes in the water systems. For example, the tides disappeared, which resulted in a less smooth transition from sea water into fresh water. Flora and fauna suffered from this noticeable change. In addition, rivers got covered up by polluted sludge, since there was no longer an open passage to the sea.



### DRY SUMMERS

On the one hand the Netherlands is trying to keep away the water of the sea. But on the other hand, we have a lack of water inland during the summers. Due to the climate change over the past few years we had to deal with very dry summers. This results in a drop of the groundwater level and causes streams to dry out. This is a big problem for farmers who want to grow crops. Another problem the dry summers cause is the huge increase in roadside fires and forest fires.



Dried out fields

## SMOG IN POLAND

Air pollution is a huge problem in Poland as it is among the most polluted countries in the European Union. Smog causes severe diseases and affects mostly the elderly. It is said that



more than 45 thousand Poles die prematurely every year from diseases linked to air pollution.

According to 2016 World Health Organization report, 33 out of 50 most polluted towns were in Poland. Most of them are in southern Poland, in Silesia which accounts for 40% of the national greenhouse emissions. The growth of industrial production as well as coal-based power and heat

generation are the main sources of air pollution in the region of Silesia. In many cities, the number of smog days exceeds one third of the year. In the most polluted cities like Kraków, Katowice or Rybnik, concentrations above the EU daily limit value are registered around 150 days per year.

Polish Smog Alert activists organized a happening to show the quality of air in the most polluted places of Poland. They built a huge model of lungs and left it outdoors for two weeks. The lungs were white at the beginning of the experiment and very dark at the end.



Local authorities have done a lot to fight smog but still the situation requires further action. As household boilers are the main reason for high concentrations of PM10 and PM 2.5, city councils participate in costs of exchanging them for more environmentally friendly heating systems. Municipal police use drones equipped with sensors to detect any illegal pollutants being spewed into the air. When anti-smog laws are violated, the homeowners are fined. Although a lot has been said about the problem of smog and homeowners have been appealed to, still too many Poles are deaf to reason and burn coal lacquered wood, colourful magazines or even rubbish in their boilers.



colourful magazines or even rubbish in their boilers.

Gdynia is a seaside city with frequently occurring winds. Thanks to its climate residents enjoy much cleaner air than in other parts of Poland.

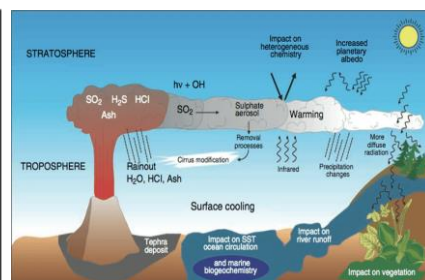
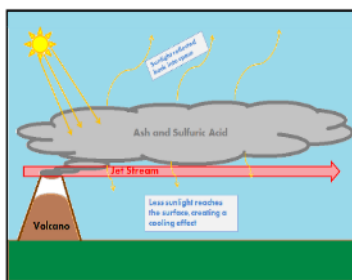


## VOLCANOES AND CLIMATE IN ITALY

A volcano is simply a rupture (opening or vent) on the earth's surface (crust) through which molten magma (extremely hot mixture of gases, lava, ash and other burning substances) escape on to the earth's surface.



Volcanoes occur at weak zones or points in the earth's crust. The word, 'volcano' was made out of the name of a Roman god of a small island in the Mediterranean Sea of Sicily called 'Volcan'. Volcanoes can have both a cooling and warming effect on the planet's climate. When volcanoes erupt, they emit a mixture of gases and particles into the air. Some of them, such as ash and sulphur dioxide, have a cooling effect, because they reflect sunlight away from the earth. Others, such as CO<sub>2</sub>, cause warming by adding to the greenhouse effect. The cooling influence is particularly marked in the case of large eruptions able to blast sun-blocking particles all the way up to the stratosphere. The cooling influence of an individual volcano will dominate for the period immediately after the eruption but the warming impact will last much longer. Volcanic eruptions can impact global climate, reducing the



amount of solar radiation reaching the Earth's surface, lowering temperatures in the troposphere, and changing atmospheric circulation patterns. Large-scale volcanic activity may last only a few days, but the massive outpouring

of gases and ash can influence climate patterns for years. Sulfuric gases convert to sulfate aerosols, sub-micron droplets containing about 75 percent sulfuric acid. Following eruptions, these aerosol particles can linger as long as three to four years in the stratosphere.

Volcanic eruptions cause short-term climate changes and contribute to natural climate variability.

Italy is a volcanically active country, containing the only active volcanoes in mainland Europe. The country's volcanism is due chiefly to the presence, a short distance to the south, of the boundary between the Eurasian Plate and the African Plate. The magma erupted by



Italy's volcanoes is thought to result from the upward forcing of rocks melted by the subduction of one plate below another. Vesuvius is the only active volcano in mainland

Europe, and has produced some of the continent's largest volcanic eruptions. Located on Italy's west coast, it overlooks the Bay and City of Naples and sits in the crater of the ancient Somma volcano. Vesuvius is most famous for the 79 AD eruption which destroyed the Roman cities of Pompeii and Herculaneum.

## DROUGHTS IN LITHUANIA

Lithuania's Hydrometeorological Service declared a national hydrological drought, the country's Environment Ministry announced on July 2, 2019.



The decision was made in response to calculations after the existing and the lowest average multiannual water levels were compared. It was determined that water levels are lower or equal to the lowest average multiannual water level in 28 out of 48 water measuring stations in the country. The hydrological drought is declared when water levels are lower in more than half of the stations.

It's not a new phenomenon as we've had heatwaves before but due to climate change, they are becoming more frequent and intense. Temperatures are setting new records in Lithuania as the mercury pushed over 35 degrees centigrade in some areas. Temperatures exceeding 30 degrees used to be a

rare thing. Now it happens practically every year. Heatwaves are longer and temperatures are higher. Nature of precipitation has also changed as showers are more and more often followed by periods of drought. The general level of precipitation is growing in Lithuania but it is distributed unevenly as periods of abundant precipitation are followed by longer periods of drought. Climate change is also bringing stronger winds, squall and tornadoes. (<https://en.delfi.lt>)





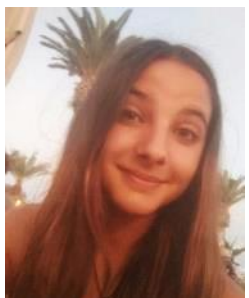
# STUDENTS' IMPRESSIONS



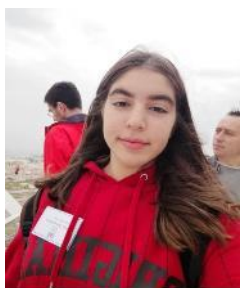
## IMPRESSIONS FROM GREEK STUDENTS



**Heleni:** Erasmus+ 2018-2020 "Stop climate change – Together Europe achieves more" is an unforgettable and totally unique experience. It made me more aware of the problems our planet has been facing lately, and it made me want to take action immediately. Also, I met people from foreign countries and made friends with them and I really hope I will get to see them again sometime.



**Valia:** I am going to the 3rd grade of Junior High School. I participate on the Erasmus Team in my school, by which I traveled to the Netherlands and got the chance to meet new people and make new relationships. Erasmus is a great program in my opinion because by it you learn about the environment and ways to protect it. So, if your school has an Erasmus team you have to go!



**Melina:** Through the work of Erasmus I was informed for the size of the problem of climate change. I had the opportunity to work with my classmates but also with children from abroad. We also learned about the effects and the results of climate change, from the other teachers of the six countries who take part in the program. I also hosted a girl from Italy and that was very exciting. I look forward to traveling to Italy too.



**Aggeliki:** The Erasmus+ program I participate in is a good opportunity to discover a new culture of a different country from the one you live in and to make new friends and new experiences. The Program is almost finished and I can say with great confidence that it is worthwhile for a student to enter it and experience the experiences that I have experienced.



**Olga:** I feel so satisfied that I took part in the Erasmus programme! I met a lot of people from other countries of Europe and I learned how to cooperate with them. I also did projects that helped me to understand better the phenomenon of climate change and I improved my English. I had the chance to travel abroad without my family and that did me stronger and more mature.



**Harry:** Since the beginning of this program, my life has changed significantly. I have made friends from different countries who I had the opportunity to get to know during their visit to Greece last year. With many of these children I'm still in contact and we communicate through internet. I strongly recommend this program to anyone who wants to do something exciting in his free time, make new friends and visit a new country.



## IMPRESSIONS FROM CROATIAN STUDENTS



**Bruno:** I was very happy when I visited Greece and made new friends. It was the best week I have ever had. During the project we learned a lot of interesting and important things.

**Domagoj:** Erasmus+ project was for me a great opportunity to travel, meet interesting people, see new places, improve my English language skills and learn new things.



**Maja:** I learned a lot about climate changes and how dangerous they are. I also travelled, hosted guests from partner countries and had the time of my life.

**Jana:** I liked Greece so much that I will surely go there again. I think that participating in European projects is great for young people.



**Petra:** Meeting girls and boys from different countries gave me the opportunity to learn about other cultures. Hosting young people was a beautiful experience. I learned a lot about the influence of climate changes on our health and about renewable sources of energy. I want my neighbourhood and the whole world to do whatever we can to make the situation better.



**Anetta:** I acted in two school plays in English and I liked it very much. It was fun and I hope that everybody in the audience will take care of water and will stop polluting the world.

**Sara:** I was in the Netherlands. It was a wonderful experience and I would like to visit it again one day. We saw fascinating dams that protect the land from the rising sea level.



**Valentina:** Erasmus+ project was the opportunity for me to learn about climate change connecting what I already knew with new things and trying to talk about it in English. I was in Portugal, there I made new friends and learned about history, culture and everyday life. It was really interesting.



**Lara:** taking part in project activities was very useful for improving lots of skills, ICT, English language skills and especially my self-confidence.

**Mateja:** My whole family was a part of the project. My parents also learned about climate changes and we all changed our lifestyle.

**Klara:** Erasmus+ connects young people from different parts of Europe and I am sure that we will manage our resources better when we grow up. Meetings were educational and fun.



# IMPRESSIONS FROM DUTCH STUDENTS





## IMPRESSIONS FROM POLISH STUDENTS



**Pola:** I had an amazing time. I learned more about climate change, how we can care about the earth, how we can use less plastic and more. People were very nice and friendly. We had so much fun! Our program was very well-organized. I hosted two girls, from Croatia and Lithuania. We were at the seaside, in the centre of Gdynia and in many other places. I will never forget that week.



**Anna:** The project showed me in what state our planet is and what can be done to help it. The trip to Croatia is a wonderful memory. I met many nice and kind people there. I also got to know local culture.



**Michał:** I really recommend taking part in Erasmus+. The only thing you need to have is a positive attitude towards meeting interesting people and enjoying their company.



**Natasza:** Erasmus is a great opportunity for young people like me. It gave me an amazing experience and fantastic memories. We did a huge work for nature. We planted trees in the school yard, went to the forest botanical garden and to the Hel Peninsula where we learned about sea animals. We visited many other educational places. The most important thing was that we learnt a lot about climate change. With people like us, the planet will be safe for a long time.



**Zuzanna:** Participation in the Erasmus + project gave me an opportunity to meet new, fantastic people, to learn from one another about our culture, language, traditions, even perception of the world. About how different yet similar we all are. I became more sensitive and educated about one of the biggest problems of today's world which is global warming. I also extremely improved my English skills and felt more confident. I truly recommend taking part in Erasmus+ projects and short exchanges of students.



**Katarzyna:** The trip to Croatia with Erasmus+ was a great experience. I could learn English in practice, meet new friends and I had fun.

## IMPRESSIONS FROM ITALIAN STUDENTS

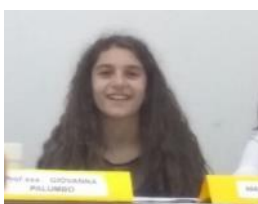


**Marina:** I participated in the mobility in Greece from 21st to 27th October 2018. This experience was very beautiful and instructive for me because I spent a very interesting week. I visited wonderful places like the city of Cholargos and Athens. I tried new foods and I learned to communicate better in English. This experience made me grow because I had to learn to face new situations without the help of my parents. It allowed me to meet a wonderful family who welcomed me with great affection and to which I am still attached. It allowed me to know the problem of climate changes and with the lessons of the teachers I understood the importance of this issue. I learned what I can also do, in my little, to help reducing pollution and to help our planet.



**Angelica:** My Erasmus experience was very good, I was in Croatia and I loved it, I had a lot of fun. Moreover, I learned to live alone without the help of my parents.

**Alessandra:** It was a beautiful experience to be in Croatia. I knew a school and a social reality different from mine. I learned that we have to respect more the environment.



**Maria:** Last year, I was in The Netherlands with the Erasmus project "STOP CLIMATE CHANGE". This experience introduced me to new cultures and it helped me to improve my English. I liked it because I met new people, I acted in the school play and I learnt that the world is our house, it doesn't exist a Planet B.



**Francesco:** I really liked both the experiences in Greece and in Poland, because I had the opportunity to compare different realities from a school and a social point of view. I have acquired qualities such as independence and responsibility. I think that good friendships were born, which I hope can continue even after the project deadline. I learned that we have to respect more the environment through our commitment.

**Felice:** I was in Poland, it was a great experience. I met interesting companions from other countries, the meeting was educational and fun. Taking part to the activities was useful to my growth.



## IMPRESSIONS FROM LITHUANIAN STUDENTS



**Augis:** Participating in Erasmus+ project was one of the best experiences in my life. I had opportunity to travel to Greece. I made good friends, had tons of fun hanging out with them and just socializing. I could compare how different and similar lifestyle, culture in Greece and in Lithuania. The beauty of nature and culture seemed very unique and interesting.

**Audrius:** The best experience in the project, of course, was the short-term exchange meeting in Greece. I got to visit this beautiful country, met amazing new people and got a lot more confident. I doubt, that I'll ever forget it.



**Ada:** Things I have learned during the project are really important and will be useful in my future life. The most important thing I realised that climate change is one of the greatest dangers and challenges we have to deal with it.

**Marita:** I am very grateful for this project because now I can speak English more fluently. Visiting Poland, I found out interesting things, made new friends. My host family was extremely hospitable. I experienced the best impressions I hadn't expected.



**Evaldas:** I am very glad that I got this huge chance to take a part in this project. Preparing had a chance to improve my English speaking and interacting skills and I met lots of people from different countries.

**Arnas:** Taking part in this project has changed my attitude to consumption. I have started to think how it is possible to use and buy less.



**Miglė:** Thanks to this project I had the opportunity to travel to the Netherlands, learn about its culture, improve my English language skills and make new amazing friends. It's a wonderful experience!

**Aistė:** Participating in the Erasmus+ project, I have changed my point of view on climate change. The greenhouse effect is more noticeable every year with the temperatures rising. So, this problem cannot be taken lightly and we must by all means, stop it from ruining our futures.

# PROJECT LOGOS





# Project Logos

## Lithuania

Pupils from all partner schools designed logos for the project. We chose the logo designed by **Lithuanian** pupil **Miglė Zailskaitė** to be our common project logo, but there are lots of great designs.



## Croatia



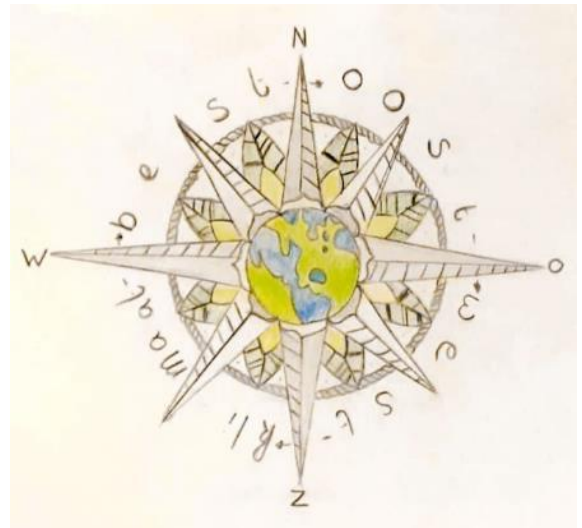
## Greece



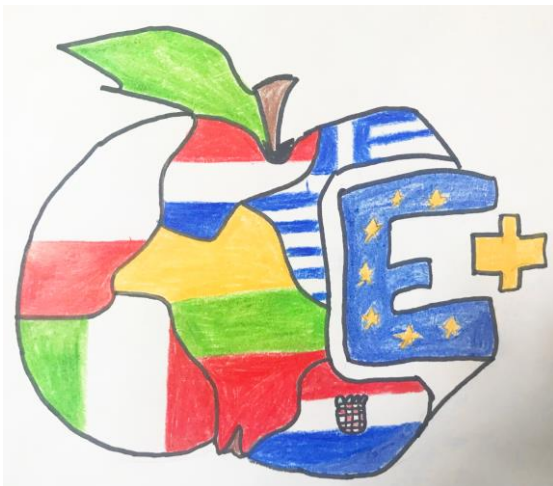
Italy



the Netherlands



Poland





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**Web page:**

<https://sccteam.weebly.com/>

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Climate change is a long-term shift in global or regional climate patterns. Often climate change refers specifically to the rise in global temperatures from the mid-20th century to present.

**National Geographic**

Climate change is a broad range of global phenomena created predominantly by burning fossil fuels, which add heat-trapping gases to Earth's atmosphere. These phenomena include the increased temperature trends described by global warming, but also encompass changes such as sea-level rise; ice mass loss in Greenland, Antarctica, the Arctic and mountain glaciers worldwide; shifts in flower/plant blooming; and extreme weather events.

**Nasa**

We are the first generation to feel the effect of climate change and the last generation who can do something about it.



**Barack Obama, Former US President**

We are living on this planet as if we had another one to go to.

**Terri Swearingen**