

CONFERENCE EZA-UNAIE

“GREEN DEAL. WILL IT BE A SUSTAINABLE TRANSITION?”

LEVICO TERME(TN)
4-6 NOVEMBER2022



Presentation by Lia Di Menco
eTwinning European ambassador

Lia Di Menco ambasciatrice eTwinning Italia- Europa 2010-2022

An eTwinning PBL project a.s. 2021-22





Planning the project

★ Planning a good project

- Elements of good Project Design

Create a Project Design checklist starting from your students' needs

Consider Starting Points

Consider “Driving Questions” and NTK questions

Look at project ideas

Consider project walls

Create a digital project wall

The eTwinning platform



- **Planning our eTwinning project**
 - Partners from Italy: Lia Di Menco(English), Gianfranco Grossi(Graphic design), Lucia Mazzella(Maths), Elisa Miatello(Italian),
 - From Spain: Jose Alberto Villaescusa Garcia (Architecture)
 - From Turkey: Busra Caliskan (ICT)
- **Pupils' ages** students aged 16-17
- **Classes involved** Class 4AG of the IIS "T.CATULLO" in Belluno; Class 4AM of the IT IS "Brustolon-Segato" in Belluno (Italy); Class3 ESO, 4ESO of the IES "MARE NOSTRUM" in Alicante (Spain); 10th graders involved 15-16-year-old students of the Cay Nene Hatun Vocational and Technical Anatolian High School in Afyonkaraisar (Turkey)
- **Languages used:** English for communication between partners and during group works or for individual works; Italian, Spanish and Turkish for internal communication
- **Project timeframe** The project will take about 7 months, from November to May (Including time per week)

The Teaching Unit of our project



★ AIMS OF THE PROJECT WITH TOPIC AREAS REQUIRED RESOURCES AND MATERIALS

FOR THE INTERNATIONALIZATION OF THE SCHOOL

- Title of the project: Designing eco-houses
- Topic areas: Graphic design; English; ICT; Citizenship; Art
 - Materials: Graphic laboratory, ITC LAB
 - paper, camera, digital tools; Computers; Zoom for online meetings
 - Apps used throughout the project:
 - Voki, Flipgrid (students' presentation), Padlet;
 - Word, PPT, Pdfs (documents) Canva for Infographics; Sketchup, Roomle (for 3D houses), Illustrator (for posters), Madmagz, Emaze (to spread our project)

Ambassadors' roles

showing the way

CREATING A PROJECT WALL TO LEAD OUR STUDENTS
PROJECT

[s://docs.google.com/presentation/d/1Ji00kol65DDuSxjqAfvq6jS5EKBJRRJ5aDB2891ije/edit#2fd7751_0_0](https://docs.google.com/presentation/d/1Ji00kol65DDuSxjqAfvq6jS5EKBJRRJ5aDB2891ije/edit#2fd7751_0_0)



KEY COMPETENCES TO BE REINFORCED THROUGHOUT THE PROJECT



THE 4 c's 21° century competences:

- ★ COLLABORATION/SELF-MANAGEMENT
- ★ CREATIVITY/AUTHENTICITY OF THE PROJECT/THE FINAL PRODUCT MUST BE PUBLIC
- ★ CRITICAL THINKING/PROBLEM SOLVING
- ★ COMMUNICATION/ORGANIZING TEAM WORKS AND ONLINE MEETINGS AND FORUMS WITH PROJECT PARTNERS

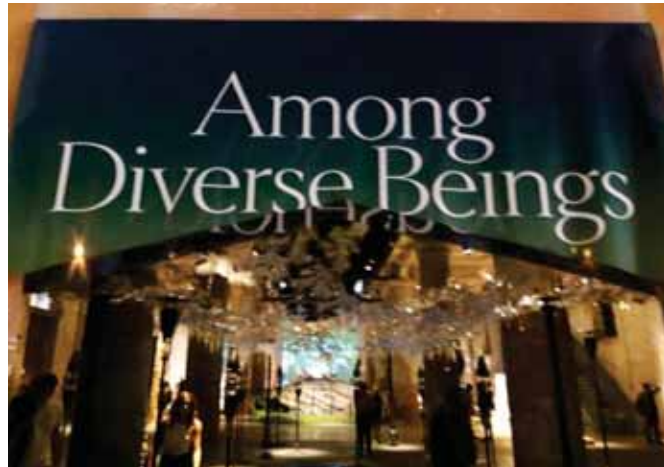
CITIZENSHIP

★ Priority given to sustainability and environment

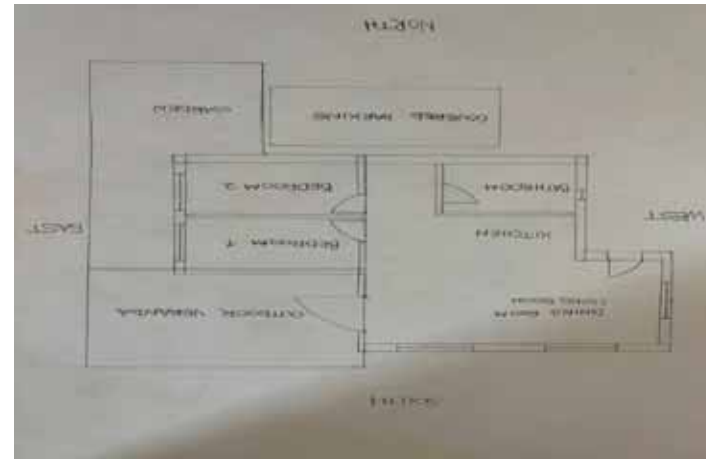
- Pre-Planning Eco-Houses with maintenance systems
 - Working on recycling in our own country
 - BRIEF OF THE PROJECT
 - **PART 1: INTRODUCTIONS and LOGO OF THE PROJECT** (15th OCTOBER-10th NOVEMBER)
 - LOGO for the project (the logo HAS TO BE DIGITAL)
 - REVISION of the HEALTH AND SAFETY and the rights for THE IMAGES OF THE STUDENTS (parents sign a document)
 - ONLINE MEETINGS (FROM 10-14th NOVEMBER)
 - **PART 2: DESIGNING THE HOUSES**
 - A) DESIGNING THE HOUSES IN A SKETCH (10th NOVEMBER- 10th DECEMBER)
 - B) DESIGNING THE HOUSES IN ROOMLE/SKETCHUP



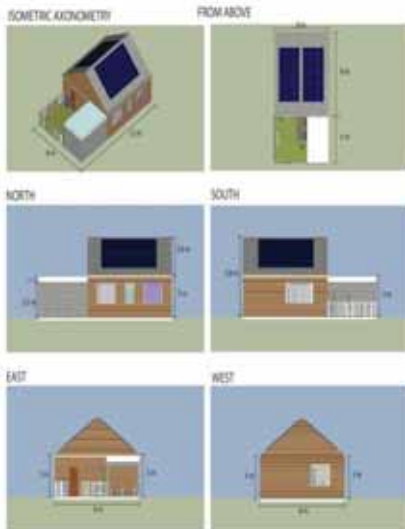
- ★ **WHERE DID WE DRAW INSPIRATION FROM?**
- ★ **THE “BIENNALE” OF ARCHITECTURE HELD IN VENICE in September 2021** with its innovative materials and new ways of considering the social aspect of dwellings: dwellings for tribes in remote places or dwellings for mass population inside huge skyscrapers with green windows on all sides. Great attention was given to the different needs of diverse beings



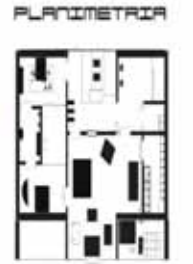
1st step SKETCHES OF HOUSES: Students at work on 3D houses



PROJECT ECO HOUSE: AURORA DAL MASO AND DAVIDE TERRIBILE FINAL HOUSE STATEMENTS

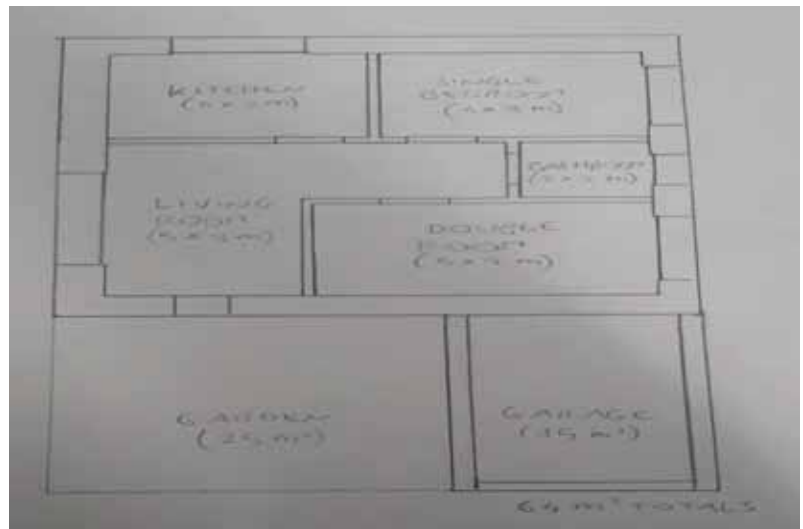


RELATION
The architectural project is situated in the flow of the urban context, where the house is a small-scale intervention in a green area. The house is a small-scale intervention in a green area. The house is a small-scale intervention in a green area. The house is a small-scale intervention in a green area.



RELAZIONE
The architectural project is situated in the flow of the urban context, where the house is a small-scale intervention in a green area. The house is a small-scale intervention in a green area. The house is a small-scale intervention in a green area.

PROGETTO ECO HOUSE
Pellegrini Aurora, Terribile Davide
Data: 20/12/2021 | Città: Padova, 41° 40'



THE BEST HOUSE CONTEST AND THE MAINTENANCE SYSTEM



1st MARCH-5th MARCH

Students and teachers vote for the best houses on which the maintenance systems will be installed

An Italian house



An Spanish house



An Turkish house



TALKING ABOUT eSAFETY IN OUR SCHOOLS



The poster features a central illustration of a person with blue skin and hair, wearing a black shirt, looking at a smartphone. The background is a mix of blue and orange tones with speech bubbles. At the top, there are logos for the Italian Ministry of Education, the National Center for Digital Security (CNS), and the National Day for Digital Security (DINA).

08 febbraio 2022
GIORNATA PER LA SICUREZZA INFORMATICA E IL CONTRASTO AL BULLISMO E CYBERBULLISMO

CLASSI DEL BIENNIO
ore 10.00-12.00
a cura di **LAURA SPONGA**
"Pericoli e responsabilità in rete"
con partecipazione della docente Eleonora di Stefano e dell'evento di Anagninista per il Safe Internet Day

CLASSI DEL TRIENNIO
ore 13.00-15.00
a cura di **Allison DE NANDO**
"Bullismo, cyberbullismo, rischi su Internet, cybercrime e responsabilità personali"
con la partecipazione degli studenti attraverso le loro domande, che saranno raccolte prima e durante l'evento, e saranno coinvolte il risultato.

 **SCRIVI le tue DOMANDE**
<https://forms.gle/15x18Z7Pw5wqzgc9>

OUR DOCUMENTATION TO EXPLORE THE LEGAL ASPECTS OF SUSTAINABILITY IN EUROPE



Charter of fundamental rights of the European Union:

- Article 37 Environmental protection. A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development
- Article n. 9 of the Italian Constitution



FINAL PRODUCT:

DIVIDING STUDENTS INTO 5
INTERNATIONAL TEAMS

5 POSTERS WITH THE IDEAS OF
EACH COUNTRY ON RECYCLING

POSTER 1: RECYCLING IN YOUR
COUNTRY AND NEW IDEAS

POSTER 2: MATERIALS FOR ECO-
HOUSES AND TO IMPROVE OUR
ENVIRONMENT





WHAT	WHY	WHERE	WHEN	EFFECTS
AIR POLLUTION	TOXIC FUMES FROM CARS AND FACTORIES			CITIES AFTER THE INDUSTRIAL REVOLUTION
HOZONE LAYER PROBLEMS;ATSMA;LUNG CANCER	POLLUTION DUE TO EMISSIONS OF CARBON DIOXIDEATMOSPHERE THERE IS NO FILTRATION OF SUN RAYS,WHICH CAUSES CANCER OF THE SKIN,BREATHING		FROM MID 50's TO OUR TIME	
GLOBAL WARMING	GREENHOUSE EFFECT		IN RECENT TIME	INCREASING TEMPERATURES EVERYWHERE MORE STORMS AND MORE FREQUENT
				SNOWFALL AND DRAUGHT; MELTING OF GLACIERS; SHORTAGE OF WATER SUPPLIES

PREVENTION AND RESOLUTIONS :PROPOSALS ARE ACCEPTED

FOLLOW UP: DISCUSSION

TASKS:

GO TO YOUR OWN REALITY

DO EXAMPLES OF SIMILAR EVENTS

FIND OUT MATERIALS THAT CONVEY THE MEANING AND GIVE INFORMATION ON THE EXAMPLES YOU HAVE CHOSEN

EXCHANGING OPINIONS AND CARRYING OUT USEFUL EMPLOYMENT OF THEM,
THROUGH **INTERVIEWS AND FINAL PRESENTATION(USING A TOOL, like PREZI,PADLET, SLIDESHARE,etc.)**

GAMIFICATION:CREATE A CROSSWORD PUZZLE WITH THE MOST IMPORTANT WORDS OF YOUR ACTIVITY

WORKING ON SUSTAINABILITY IN OUR CLASSES: THE GOALS OF THE AGENDA 20-30



1



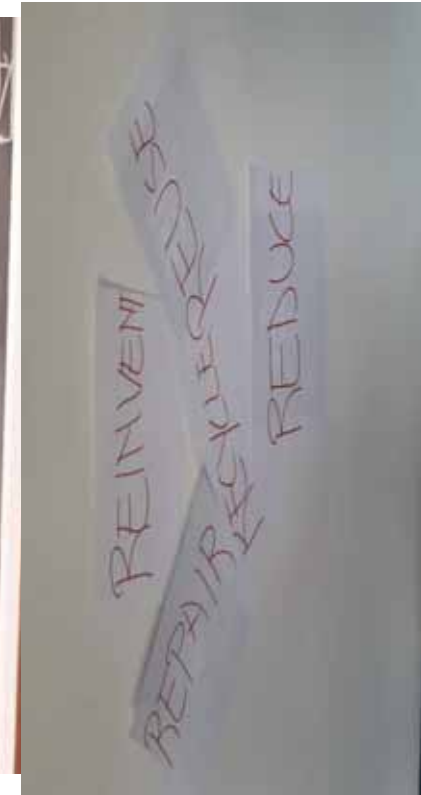
2



3



4



DAILY ACTIONS TO FOSTER AWARENESS

CIRCULAR ECONOMY AGAINST THE TAKE-MAKE-DISPOSE(LINEAR ECONOMY)

1



2



3



4



GROUP WORKS ABOUT RECYCLING IN OTHER COUNTRIES



RECYCLING
IN BRAZIL

WORKING ON THE QUIZ



RECYCLING
IN MOROCCO

TEST ON SUSTAINABILITY



- 1. What is a simple definition of sustainability? (1 point)
- Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs.
-
- 2. How many Sustainable Development Goals are there? (1 point)
- A. 12
- B. 17
- C. 20
-
- 3. Give at least 2 advice items how to make your living place more sustainable. (2 points)
- Example: Riding bicycles
- Increasing the quality of public transport
- Buying food from local farmers and businesses
-
- 4. Which are the three main pillars of Sustainability? (3 points)
- A. _____ (energy, climate change, water, availability of resources) Environment
- B. _____ (resource efficiency, price volatility, consumption, waste management) Economic
- C. _____ (health, equality) Social
-
- 5. What is Linear Economy? (1 point)
- A linear economy traditionally follows the “take-make-dispose” step-by-step plan. This means that raw materials are collected, then transformed into products that are used until they are finally discarded as waste
- 6. Mention the five "Rs" of Circular Economy. (2 points)
- Reduce, Repair, Reuse, Recycle and Reinvent

RECYCLING IN YOUR COUNTRY (ITALY)



- FROM PRODUCING TO REUSING: COTTON AND PAPER

TEAM 1 COTTON THE CYCLE OF PRODUCTION

- Production:** Cotton fibres are taken from the fur that wraps around the seeds of the plant. This fur is made of cellulose. Cotton yarn is obtained from the spinning of this fur. Cotton processing begins with the collection of the seeds that are processed following a ginning process.
- Use:** Cotton is typically used to make summer clothes and underwear; it can also be used for liners and towels. Hydrophilic cotton and wadding are produced from fibre. The oil for food use is obtained from seeds.
- Recycling:** To produce regenerated cotton, only two ingredients are needed: old fabrics or waste from the production of cotton and polyester created by recycling plastic bottles. If the regenerated cotton fiber is reinforced with another stronger fiber, such as polyethylene, then the fabric becomes soft and strong. The regenerated cotton fibers are thus combined with other polyethylene fibers obtained by means of a particular technique for processing plastic bottles. When the two fibers are woven together, they create a new soft, comfortable and 100% eco-friendly product.
- Reuse:** Reff Cotton, launched in 2019, is an innovative sustainable material, inspired by the world of fashion, which takes fibers from industrial yarn and textile processing for use in paper production. It is developed according to circular economy principles. Favert, the agency creator of this project, takes waste product from cotton textile manufacturing processes, often left as fluff on the side of the machine, and after a special treatment introduces it into the pulp that is used to make Reff. Reff Cotton is a 100% recyclable and biodegradable ecological paper, which is printable and convertible, creating an excellent high-quality paper.
- In Veneto, the data updated to 2020 show that the recycling rate of materials has settled on cutting-edge levels, in fact: paper 81% glass 77% plastic 63% wood 63% aluminum 70% and steel 62%. Electronic devices are also recycled with 38%, batteries 43% and vehicles 85%. textile waste = 10%, waste from education 77% mineral oils 47%, vegetable oils = 8% Organic fraction = 7.5%.**
- In Veneto the recycled material is used in many different ways. For example, the paper or the cotton are chopped and the plastic residuals are taken out. After that, the materials are impacted and used to create objects like computers, bottles or paper. Plastic and iron materials are cleaned and reused, to become tools for industrial use in building structures.**

TEAM 3 Paper

Which materials are used?

1) Wood: -65% maple; -25% birch; -10% popo. → With these three types of wood, a dough is created from which paper is made.

Recycled paper is used in many ways like:

- new paper sheets
- crayons and pens
- phone covers
- waterbottle in bamboo

Ways of recycling

The Italian paper mills recycle 16% more than 2020

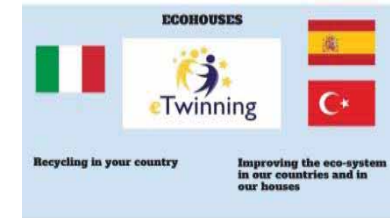
2021

Recycling in Veneto

What is it made of?

- 1) The bark is removed from the trees and burnt, becoming sawdust;
- 2) The next step is the cooking one, in ionised water at 158°.
- 3) The process produces a black liquid which is then washed;
- 4) In the last step, the water is extracted and the sheet of paper is ready.

THE LIFE OF A HIGHLIGHTER THE LIFE OF A PENCIL



HIGHLIGHTER

gruppo 2

A pump pushes the plastic balls and the bottoms.
The cartridge is made in polyester.
Put into the plastic bodies a color concentrate is created, which is mixed and inserted into the cartridges.
Finally the tip and the caps are inserted.
Finally the product is shipped and sold.
The cartridge is disposed of in the undifferentiated and the external part in the plastic bin.



HOW TO MATERIALS ARE RECYCLED IN VENETO?

The plastic packaging collected by municipal operators is unloaded in special sorting centers, where it is dragged by a conveyor machine for unpacking and maceration.

The most recycled material is glass



HOW THEY ARE REUSED?

Plastic is reused to create: deformable tubes for food, cosmetics, pharmaceuticals, detergents; PET bottles for mineral waters, soft drinks, milk complete with plastic closures; screw caps for PET bottles. Another "terrain" for the use of plastic is the roofing sector for agriculture.



RECYCLING IN OUR COUNTRY

TEAM 4



THE LIFE OF A PENCIL



<ul style="list-style-type: none"> • CARBONE • CACCIAPIENA • LEGNO 	<ul style="list-style-type: none"> • RECYCLING • CACCIAPIENA • LEGNO 	<ul style="list-style-type: none"> • CACCIAPIENA • LEGNO 	<ul style="list-style-type: none"> • CACCIAPIENA • LEGNO
---	---	--	--

THE PENCILS, SINCE USED, MUST BE THROWN IN THE UNDIFFERENTIATED

MATERIALS RECYCLED IN VENETO (OUR REGION)

STEEL



CARDBOARD



PAPER



PLASTIC

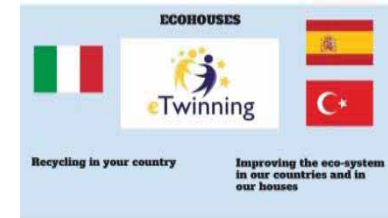


HOW ARE THE RECYCLED MATERIALS REUSED?

These materials, if cleaned, can return to the production cycle as a raw material or to produce energy. When it is dirty, it can undergo a selective treatment before being sent to the final plants.



THE LIFE OF A COMPUTER



HOW TO ECO-DISPOSE THE COMPUTERS?

2.

THEY ARE WASTE THAT MUST BE DISPOSED OF IN THE ECOLOGICAL ISLANDS AND IN THE APPROPRIATE CENTERS RAEE.

1.

COMPUTERS ARE SPECIAL WASTE BECAUSE THEY CONTAIN POLLUTING AND TOXIC SUBSTANCES, WHICH CANNOT BE DISPERSED INTO THE ENVIRONMENT..



3.

TOXIC MATERIALS:

- MOTHERBOARD, BATTERY, CONTAIN BERYLLIUM
- CABLES, WIRES AND CHIPS CONTAIN CADMIUM
- ELECTRONIC BOARDS, SWITCHES CONTAIN MERCURY AND CHROMIUM



4.

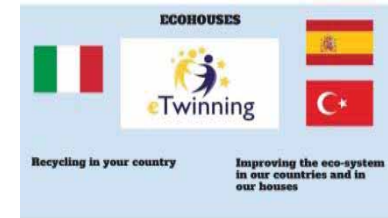
RECYCLING OPTIONS:

- USE YOUR OLD PHONES OR COMPUTERS AS A SPARE
- GIFTS AND THEN REUSE THEM
- DONATE THEM TO CHARITIES FOR THE COLLECTION OF SMARTPHONES AND COMPUTERS



TEAM 5

RECYCLING IN YOUR COUNTRY (SPAIN) IMPROVING THE ECO-SYSTEM



How do we recycle in Spain?

In Spain, collection is carried out in three different containers:



The yellow container: used to dispose of plastic, such as bottles, plastic cups, plates and disposable cups...

The blue container: used to dispose of paper, such as sheets, notebooks, newspapers, magazines, wrapping paper...

The green container: used to dispose glass, such as bottles of wine, water, juice, beer, spirits...

The brown container: used to dispose, food and do compost, such as food scraps such as fruit skins, fish bones, plants...

The grey container: used to dispose, all the things that you can't throw in the other containers. For example, used tissues, toys, bottles, pacifiers, kitchen utensils...



The clothes container: used to dispose clothes like: shoes, t-shirts, jackets, coat... Which is it intended for reuse, after its selection and sanitization.

The oil container: used to dispose the rests of oil. Every time we spend a bottle of oil we must deposit it in the yellow container. This container is suitable for plastic containers, such as detergent bottles or yogurt containers, cans and briks.

How to improve the eco-system in Spain?

Pay container system

- A good idea to improve the eco-system in Spain, it's introduce some especial containers. These encourage recycling by paying every time you recycle plastic bottles



Ellen MacArthur

- MacArthur's proposal is based on maximizing the value of the materials used, he created the foundation that bears his name in 2010 and has already signed agreements with large multinationals such as Google or Danone



The use of recycled plastic for the manufacture of new products has a lower environmental impact than the use of virgin material, it is also a basic concept of the Circular Economy: the use of waste as resources



SPANISH WORKS



Recycling in Spain



In Spain we use these containers to recycle the different types of materials.

This truck goes from city to city collecting electronic devices such as televisions or refrigerators that cannot be thrown into another container to recycle them.



works in the same way as the previous truck but the materials are dumped into containers and picked up by a truck later.

Recycling in your country



Yellow: Plastic
Blue: Paper
Green: Crystal
Grey: Waste in general
Orange: Clouds
Rojo: Dangerous Waste



We reuse:
- Things like we can use two times
- We reuse paper or plastic to do new things
- The clothes we don't use we give to more people to reuse

Curiosity
On July 3, 2021, the European Directive came into force that prohibits the sale of disposable plastic items such as straws, cotton swabs, cutlery or plastic plates, among others,



Improving the eco-system in our houses



making the most of natural light



use energy-saving light bulbs



use reusable materials



separate the garbage



Avoid leaving appliances plugged in

RECYCLING IN YOUR COUNTRY (SPAIN) IMPROVEMENTS



IMPROVEMENTS

I propose that we get rid of gas-powered furniture inside of houses, as well as climatic adaptations to the exterior, for example, if it's located in a hot place, paint it white so it reflects heat



12



ECOLOGY
&
SUSTAINABILITY

13



14



15



16

TALKING ABOUT SUSTAINABILITY AND RECYCLING IN TURKEY



RECYCLE



SUSTAINABILITY



Bottles, jars, glass cups, vases and other glass wastes are collected separately in collection boxes or where waste is generated, and these wastes are separated according to their colors and given to recycling facilities. Here it is separated from waste and additives. Glass materials are broken and mixed into the raw material mixture and poured into the melting furnaces.



Turkey catches up 17 goals of Sustainable Developments, they are:

(1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation and Infrastructure, (10) Reduced Inequality, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life On Land, (16) Peace, Justice, and Strong Institutions, (17) Partnerships for the Goals.

RECYCLING IN YOUR COUNTRY (TURKEY)



RECYCLING IN TURKEY

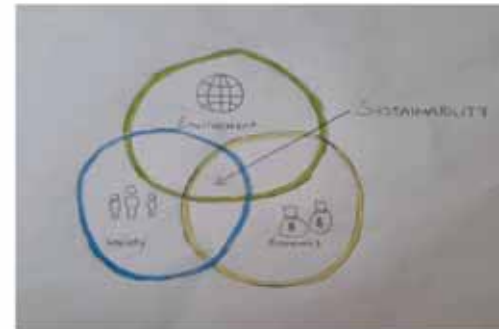
After the Zero Waste (Sıfır Atık) Project initiated in Turkey, the recovery rate increased from 13 percent to 22.4 percent. This figure is expected to accelerate after the Paris Climate Agreement. Especially with the increase in sensitivity in plastic recycling, it is aimed to have the highest recycling rate in this area.



SUSTAINABILITY IN TURKEY

"Solid Foundations for Common Goals"

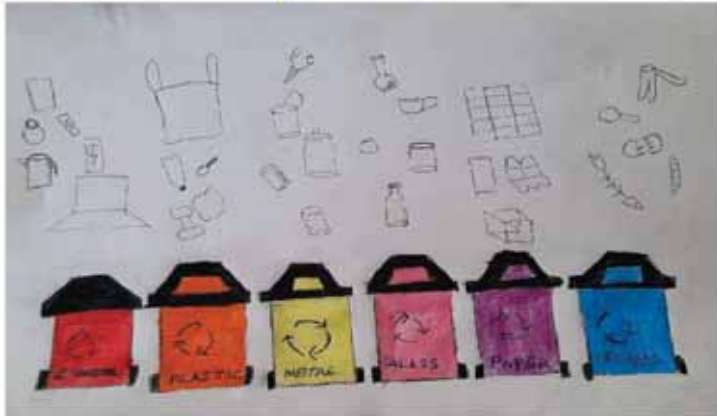
The understanding of sustainable development determines the common denominator in the economic and social development goals of Turkey as "sustainability".



RECYCLING IN YOUR COUNTRY (TURKEY)



RECYCLING IN TURKEY



SUSTAINABILITY IN TURKEY

In Turkey, the basic philosophy of sustainable development is to evaluate the interaction of the economic and social structure and the environment in a holistic way and to ensure that present and future generations benefit from the opportunities brought by development in an equitable way.



To be continued... Art as a dream from this year's "Biennale".
A message of hope



THE COLOURS
OF LIFE
AGAINST
DESTRUCTION

THE
END

FINAL PRODUCT TO SPREAD OUR PROJECT



- WEB MAGAZINE (MADMAGZ) online exhibition on emaze èòatform

<https://madmagz.com/magazine/2038155Emaze>

<https://www.emaze.com/@ALRWQWTZR/eco?autoplay>

Thank you!

LIA DI MENCO

dimencolia@yahoo.it

lia.dimenco@gmail.com



eTwinning is an initiative of the European Union and funded by Erasmus+, the EU's programme to support education, training, youth and sport in Europe. This presentation has been prepared for the European Commission by European Schoolnet under a contract with the Union, however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.