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Liceo **ALBERT EINSTEIN** TORINO

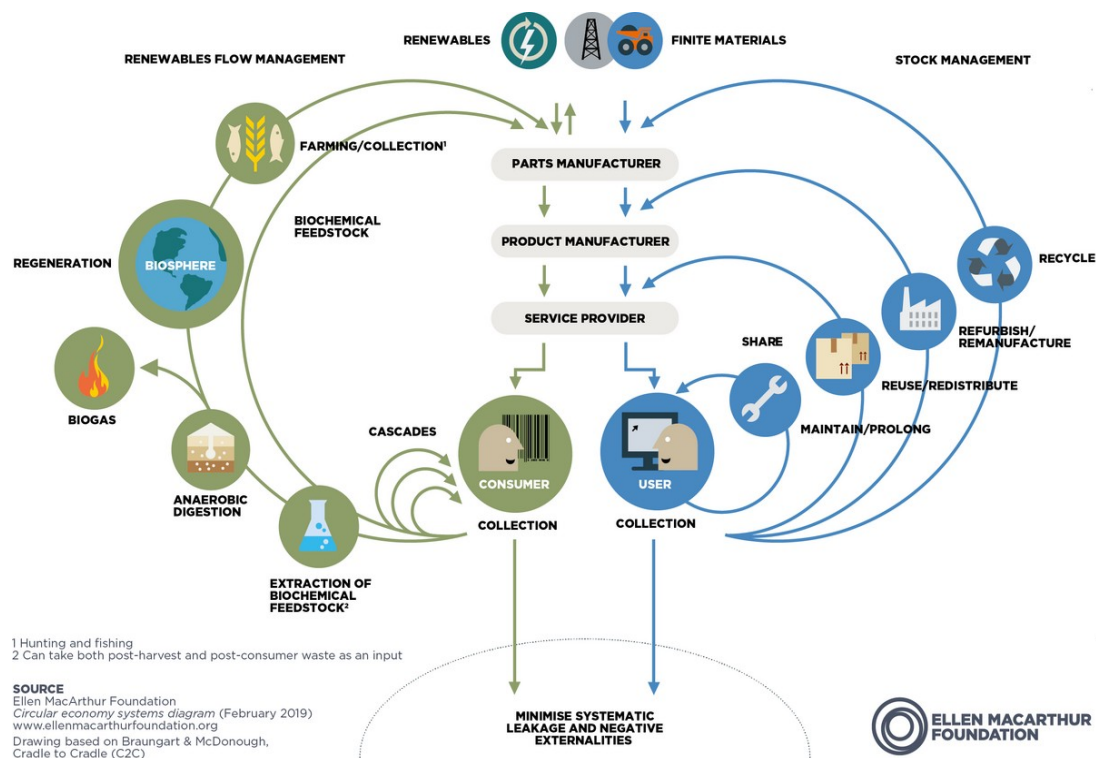
Erasmus + Climate Change Challenge

Project no. 2021-1-FI01-KA220-SCH-000031639

Plastics Recycling Working Schedule

Turin Meeting – 2022, October 24th - 29th

Circular Economic System Diagram



INDEX

The project: objectives and contents - PLASTICS RECYCLING

Warming up activities

Presentation of research on plastic use in individual countries from participating schools

Project Activities: comparisons and presentations of results

Self-evaluation: evaluation of the quality of the results

THE PROJECT: OBJECTIVES AND CONTENTS

CHALLENGE: Make students aware of the importance of changing their behavior regarding the use of Plastic and its recycling. Plastic is a new material in the landscape of materials used and it is our use of it that makes it a waste, and since its specific gravity is less than 1, (water has a specific gravity of 1) so it floats'. To achieve this goal, all partner schools will study this material in their country, its use and the amount that is used. During the meeting we will do a comparative study to get a global and local view of the problem, trying to find practical ideas to make plastic a resource and not a pollutant. Later, we will carry on dissemination campaigns in the other local schools or city organizations, to raise awareness. **OBJECTIVES:**

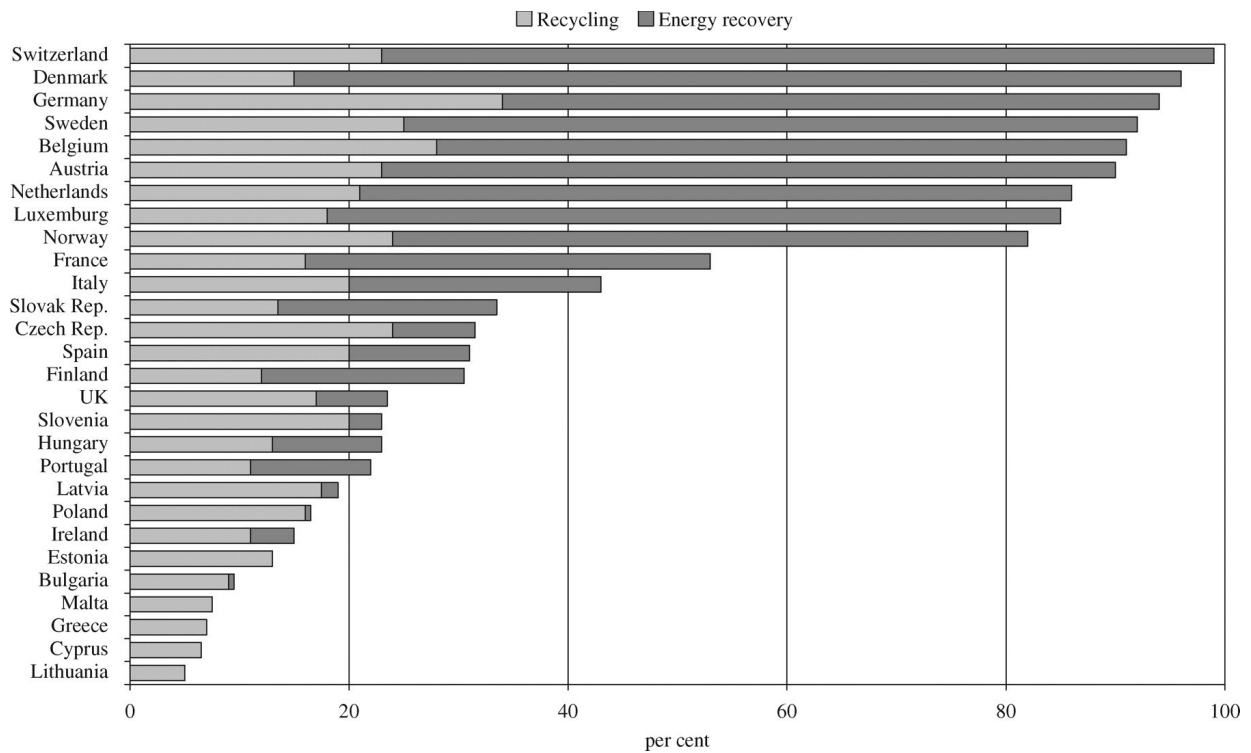
TARGET AUDIENCE: Community, family, industry, NGCOs, students and teachers.

TIME:

ACTIVITIES

A) WARMING ACTIVITIES

AIMS:



Plastics recycling

https://www.youtube.com/watch?v=uM_xTb2wFKA

B) WHAT IS A PLASTIC FOOTPRINT?

Everything we use, wear, buy, sell, and eat takes water to make. The plastic footprint measures the amount of CO₂ we produce each of the goods and services we use.

The plastic footprint is a measure of humanities awareness use of consumed and/or polluted".

<https://www.footprintcalculator.org/home/en>

https://www.youtube.com/watch?v=uM_xTb2wFKA

<https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/plastic-carbon->

[footprint/#:~:text=The%20carbon%20emissions%20from%20plastic,produce%20a%20kilogram%20of%20plastics.](#)

| 7 Types of Plastic Toxicity | | | | | | | |
|-----------------------------|----------------------------|---------------------------|--------------------|--------------------------|-----------------------|---|---|
| Plastic Polymer | POLYETHYLENE TEREPHTHALATE | HIGH-DENSITY POLYETHYLENE | POLYVINYL CHLORIDE | LOW-DENSITY POLYETHYLENE | POLYPROPYLENE | POLYSTYRENE | ALL OTHER PLASTICS |
| Resin Code | | | | | | | |
| Abbreviation | PET or PETE | HDPE | PVC | LDPE | PP | PS | OTHER |
| Recycle Rate | Commonly Recycled | Commonly Recycled | Sometimes Recycled | Sometimes Recycled | Occasionally Recycled | Commonly Recycled (but difficult to do) | Difficult to Recycle |
| Yearly Recycle Percentage | | | | | | | |
| Decomposition Rate | 5-10 Years | 100 Years | Never | 500-1,000 Years | 20-30 Years | 50 Years | Majority of these plastics never Polylactic acid: 6 months |

8 BillionTrees.com

C) CALCULATE YOUR PLASTIC FOOTPRINT.

Let's start thinking about how much plastic our families consume. This website was created for Americans, so when you are asked, choose any state.

<https://www.youtube.com/watch?v=jufxNpuYcQI>

D) CRITICAL THINKING.

AIMS:

Self-reflexion

To find real solutions to stop our bad habit consumption and save the planet.

Think about our consumption habits and their impact on the planet.
Write your conclusions.

<https://www.unep.org/plastic-pollution#:~:text=Plastic%20pollution%20can%20alter%20habitats,capabilities%20and%20social%20well%2Dbeing.>








E) OUR CONSUMPTION.

Prepare information on plastic consumption in the area where you live or in your city. Draw a graph.

<https://rethinkplasticalliance.eu/news/italy-reported-to-eu-over-plastics-law-failure/>

Italy is the first country in Europe and the second in the world for...

<https://www.sciencedirect.com/science/article/abs/pii/S0921344921006686>

| PLASTIC RECYCLING CHART | | | | | | |
|--|---|--|--|---|---|---|
|  PETE |  HDPE |  PVC |  LDPE |  PP |  PS |  OTHER |
| Polyethylene Terephthalate | High Density Polyethylene | Polyvinyl Chloride | Low Density Polyethylene | Polypropylene | Polystyrene | Other Plastics |
| <ul style="list-style-type: none">• Soft Drink Bottles• Tote Bags• Carpet• Paneling• Peanut Butter Containers• Prepared Food Trays• Salad Dressing Bottles | <ul style="list-style-type: none">• Grocery Bags• Milk Jugs• Recycling Bins• Base Cups• Plastic Lumber• Agricultural Pipes• Car Stops | <ul style="list-style-type: none">• Pipes• Window Profiles• Fencing• Flooring• Shower Curtains• Lawn Chairs• Children's Toys | <ul style="list-style-type: none">• Plastic Bags• Six-Pack Rings• Dispensing Bottles• Wash Bottles• Molded Lab Equipment | <ul style="list-style-type: none">• Auto Parts• Industrial Fibres• Food Containers• Dishware | <ul style="list-style-type: none">• Desk Accessories• Cafeteria Trays• Plastic Utensils• Coffee Cup Lids• Styrofoam• Video Cassettes• Packaging Peanuts | <ul style="list-style-type: none">• Headlight Lenses• Safety Shields/Goggles• Plastic Lumber Applications• Various Bottles |

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<https://www.piedmontplastics.com/services/sustainability>

Italy is the second largest consumer of plastic in Europe: in 2020, 5.9 million tons of fossil polymers were consumed, corresponding to almost 100 kg per person.

<https://eccoclimate.org/la-plastica-in-italia/#:~:text=Italy%20is%20the%20second%20largest,almost%20100%20kg%20per%20person.>

F) Plastics Wastes CONSEQUENCES: pollution .

AIMS:

To be aware of the incorrect use of plastics in our local areas

- 1) Watch the following video and sum up the main ideas
https://www.unep.org/interactives/beat-plastic-pollution/?gclid=Cj0KCQiA6fafBhC1ARIsAIJjL8kR88ZH_rtdwwJUeqSyBzejWolzFh3j1w8k1z732JV0yjGnasZ9r5gaAkq2EALw_wcB.
- 2) <https://www.twicetheice.com/blog/12-ways-to-reduce-plastic-at-home/>

<https://www.thelocal.it/20190521/what-is-italy-doing-about-the-shocking-level-of-plastic-pollution-on-its-coastline/>



2) Read the following text <https://www.thelocal.it/20170811/more-than-40-per-cent-of-italian-coastline-is-polluted/>

3) Find examples plastic pollution

G) FINAL PRODUCTS

VIDEO 1: Make a video with all the conclusions and data found doing the previous activities (water footprint, conclusions, graph of the water consumption, and examples of floods and droughts in their country).

VIDEO 2: Present an activist that you have selected as a role model (who, what, why).

PROJECT ACTIVITIES

ACTIVITY 1

1 Comparative study:

Compare your results with those of other groups or schools and compare the results shown in the previous videos. Comment on the differences in terms of consumer footprint and impact with your partners from other schools or organizations.

1. In Padlet, everyone shares their best ideas and practices for making better use of water.
2. Create a poster with Canvas or a similar poster creator with the ten most interesting ideas.
3. Print them out and hang them on the walls of your school or club.

ACTIVITY

ACTIVITY 3

ACTIVITY 4

SELF-EVALUATION