## **CONCEPT NOTE**

# Upcycling as a way to generate less waste and create value-added products in a creative way

Creativity, sustainability

## Duration: 30 months

#### Direct target groups:

- Primary and secondary school teachers
- Primary and Secondary Schools

#### Indirect target groups:

- Families of the children
- The whole community

# Partners:

- Schools
- Environmental and ecological associations
- City councils and municipalities

#### Objectives:

- Raise school children's awareness of environmental challenges and climate change.
- Develop innovative practices for pupils to become agents of change in using fewer resources, reducing waste use and offsetting carbon footprint emissions.
- Develop the sustainability competences of educators and education managers.
- Promote interdisciplinary collaboration, innovative learning and the development of creativity.
- Promote interdisciplinary teaching in cultural, environmental, economic, design and other contexts.
- Increase sense of initiative and entrepreneurship.
- Foster innovation, creativity and entrepreneurship in different fields of education.

#### Rationale:

The disproportionate growth in the volume of waste in today's society is jeopardising nature's ability to sustain our needs and those of future generations. Waste is considered to be one of the biggest environmental problems in our society. This is a global problem, which mainly affects the more developed countries, where per capita consumption is higher.

In Europe, we currently use 16 tons of material per person per year, of which 6 tons become waste. Although the management of that waste continues to improve in the EU, the European economy currently still loses a significant amount of potential 'secondary raw materials' such as metals, wood, glass, paper, plastics present waste streams. In 2010, total waste production in

the EU amounted to 2,5 billion tons. From this total only a limited (albeit increasing) share (36%) was recycled, with the rest was landfilled or burned, of which some 600 million tons could be recycled or reused.

Just in terms of household waste alone, each person in Europe is currently producing, on average, half of ton of such waste. Only 40 % of it is reused or recycled and, in some countries, more than 80% still goes to landfill (source: Environmental Data Centre on Waste, Eurostat).

Turning waste into a resource is one key to a circular economy. The objectives and targets set in European legislation have been key drivers to improve waste management, stimulate innovation in recycling, limit the use of landfilling, and create incentives to change consumer behaviour. If we re-manufacture, reuse and recycle, and if one industry's waste becomes another's raw material, we can move to a more circular economy where waste is eliminated, and resources are used in an efficient and sustainable way.

https://ec.europa.eu/environment/waste/index.htm

The solution to this problem is not easy. The population must be aware of the need for responsible consumption and, above all, of the need to avoid the consumption of single-use plastic products (e.g. cup bags, straws, trays, etc.) and the need to recycle waste products properly.

On the other hand, efforts should be made to reuse as much waste as possible. Although this seems to be the task of local governments and administrations, there is much that people can do. That is why it is important to make children and young people aware of the importance of reusing the things we no longer use. To do this, there is nothing better than making it attractive, so that they can do things they like using their creativity.

This is what the concept of upcycling is all about. Upcycling represents a variety of processes by which "old" products get to be modified and get a second life as they're turned into a "new" product. In this way, thanks to the mix and aggregation of used materials, components and items, the end result is a "new product" with more value than the original value of the sum of all its components. In other others, upcycling is about materials or items that get to be re-adapted and/or re-purposed in a creative way, and whose lifespan is, therefore, expanded.

https://youmatter.world/en/definition/upcycling/

### **GENERAL PRIORITIES**

**Environment and fight against climate change:** The Programme aim to support, across all sectors, awareness- raising about environmental and climate-change challenges. Priority will be given to projects aimed at developing competences in various sustainability-relevant sectors, developing green sectorial skills strategies and methodologies, as well as future-oriented curricula that better meet the needs of individuals. The Programme will also support the testing of innovative practices to prepare learners, staff and youth workers to become true agents of change (e.g., save resources, reduce energy use and waste, compensate carbon footprint emissions, opt for sustainable food and mobility choices, etc.). Priority will also be given to

projects that – through education, training, youth and sport activities - enable behavioural changes for individual preferences, consumption habits, and lifestyles; develop sustainability competences of educators and education leaders and support the planned approaches of the participating organisations regarding environmental sustainability.

#### SPECIFIC PRIORITIES in the field of school education

**Development of key competences**: Projects under this priority will focus on promoting cross-curricular collaboration, using innovative learning approaches, developing creativity, supporting teachers in delivering competence-based teaching and developing assessment and validation of key competences.

**Promoting interest and excellence in science, technology, engineering, and mathematics (STEM) and the STEAM approach**: This priority supports projects that promote the STEM approach to education through interdisciplinary teaching in cultural, environmental, economic, design and other contexts. The priority includes development and promotion of effective and innovative pedagogies and assessment methods. Developing partnerships between schools, businesses, higher education institutions, research institutions, and wider society is particularly valuable in this context. At strategic level, the priority serves to promote development of national STEM strategies.

# **Intellectual Outputs:**

- IO1: Development of the conceptual background and the framework for the blended course
- IO2: Blended course for educators about the importance of recycling/upcycling with practical ideas on how to implement this in the classroom.
- 103: Cycle of webinars: training webinars on creative process planning.

Where educators can explain how they have implemented the course practically in the classroom and show some of the things they have done. In this way the programme will reach a wider public.

IO4: Guide including recommendations on how to implement upcycling to educators and families.

To raise awareness in the community.