

International Exhibition

# THE VALUE OF WASTED MATERIALS



7.-8. September 2012



Documentation

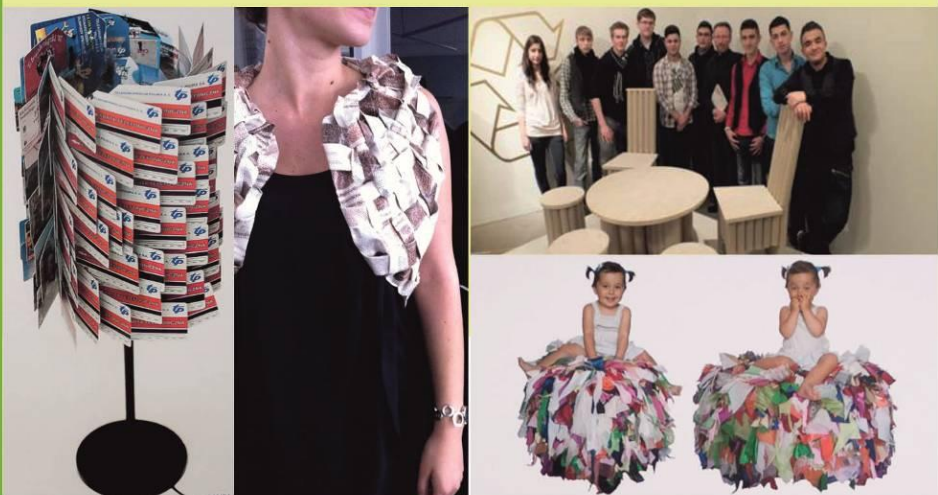
# INTERNATIONAL EXHIBITION



Venue

Congress Center of the  
Municipality of Kilis

17, G. Kapeta str.  
61100 Kilis, Greece



The project „The value of wasted materials“ is funded by the European Commission as a Leonardo Learning Partnership under the Lifelong Learning Programme.



Lifelong  
Learning  
Programme



ORGANIZED  
BY



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Lifelong  
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Programme

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<http://thevalueofwastedmaterials.blogspot.de/>

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# INTRODUCTION

## Project Background

The project is a Leonardo Da Vinci Learning Partnership under the Lifelong Learning Programme from 2011 to 2013. The involved partner organisations came from Greece, Germany and France to discuss about the topic of waste reduction, environmental protection and recycling at the same time while developing approaches for new learning and teaching methods.

The main goal of the project is to discover new working methods and to create new learning instruments for the Vocational Training of students and adult learners in different kind of qualifications by studying the wasted materials specific to each type of technical domain chosen by the participating partners.

Environment protection is a big actual problem in the European development of technology but also in education. The economic gaps from an European country to another are generating an innovation pressure that should lead to new solutions in the benefit of all other countries. By creating an European network of partners in order to share the experience and the good practices and to transfer innovative educational methods from a country to another we will obtain better results and deeper understanding of the problems, we will increase the learning motivation of the students and the quality of lifelong learning in the field of waste reduction.

**"One man's trash is another man's treasure"**



## Objectives






The projects first objective is to discover new methods and instruments for vocational education and training based on interdisciplinarity that will be used to form the future professionals in order to valuate the wasted materials and to be able to find solutions to decrease the energy consumption.

Second the project aim to realize the transfer of the innovative based on interdisciplinarity methods of education from a country to another by international exhibitions, workshops and sessions of scientific communications

And during the projects time the participating nations would like to create a communication network of educational institutions and organizations that will promote the good practices and the results of the project in order to increase the quality in VET and the interest of future professionals in the research of practical solutions that will reduce the waste in all the technical domains.

## Activities

In order to achieve this objective the partners will organize 4 different types of activities:

-  Interdisciplinary teachers-students team workshops consisting of practical exercises and research about the specific waste from the domain they learn. The workshops will be realized by each partner, will be included as possible in its current learning activities and will have the purpose to find solutions to reduce, recycle or reuse the spoilage.
 
-  International scientific communications session with the participation of students and trainers of each partner to present research, studies, experiments and results about waste reduction, energetic efficiency, sustainable development and environmental protection.
-  International workshops for VET trainers that will exchange experience and good practices examples about new working methods and new learning instruments useful for Vocational Education.
-  International exhibition with results from the local teams work activities.

This handbook will present the implementation of this exhibition with impressions and feedback from the involved to offer everyone who was not able to participate the exhibition in Greece the opportunity to make up.

In the handbook you could find a detailed list of all exhibits and its artists with images and descriptions which represents the main part of this documentation. Later on there is an evaluation part and its analysis included to prove the exhibitions success. This is also possible by a view into the guestbook and feedback from organizers, artists and visitors.



# GENERAL EXHIBITION'S INFORMATION

Due to this activity point "The value of wasted materials" partnership planned an exhibition that has taken place in September 2012 in Kilkis, Greece.

The exhibits have been items which have either utilitarian or artistic value and which are made out from wasted materials such as glass, metal, wood, paper, etc., by people who are involved in this field either professionally or as a hobby.

The poster is for an exhibition titled "Διεθνής Έκθεση THE VALUE OF WASTED MATERIALS" held from 7-8 September 2012. It features a green background with white and yellow text. The top section lists the dates and times for two days: 7 September (15:00 - 22:00) and 8 September (10:00 - 14:00 and 18:00 - 20:00). Below this, there are three small images showing various artworks made from waste materials. The middle section contains a block of Greek text explaining the exhibition's purpose and the types of items displayed. The bottom section shows a photograph of the exhibition venue, a modern building. The poster also includes logos for the European Union, the Lifelong Learning Programme, and the organizing institution, the Municipality of Kilkis.

**Διεθνής Έκθεση**  
**THE VALUE OF WASTED MATERIALS**  
**7 - 8 Σεπτεμβρίου 2012**

**7 Σεπτεμβρίου**  
15:00 - 22:00

**8 Σεπτεμβρίου**  
10:00 - 14:00  
18:00 - 20:00

Τα εκθέματα είναι αντικείμενα που έχουν είτε χρηστική ή καλλιτεχνική αξία και είναι φτιαγμένα από υλικά όπως γυαλί, μέταλλο, ξύλο, χαρτί, κλπ., από ανθρώπους που ασχολούνται είτε επαγγελματικά είτε από χόμπι. Οι εκθέτες είναι καλλιτέχνες, αλλά και πολιτιστικοί σύλλογοι, σχολεία, ιδρύματα, κλπ. που εκθέτουν έργα των μελών τους. Κάθε αντικείμενο θα συνοδεύεται από μια σύντομη περιγραφή έτσι ώστε να ο επισκέπτης να έχει όλες τις σχετικές πληροφορίες. Κάποια από τα αντικείμενα θα εκτεθούν με τη μορφή αφίσας με φωτογραφίες και μια περιγραφή, λόγω του ότι δεν κατέστη δυνατό – για κάποιο λόγο – να εκτεθεί το πρωτότυπο.

Τα εκθέματα προέρχονται από την Ελλάδα, τη Γερμανία, την Πολωνία, τη Σουηδία, τη Γαλλία και την FYROM.

**Τόπος**  
**Συνεδριακό Κέντρο Δήμου Κιλκίς**  
**Γ. Καπέτα 17, 6100 Κιλκίς,**

Το Σχέδιο "The value of wasted materials" χρηματοδοτείται από την Ευρωπαϊκή Επιτροπή σαν ένα Leonardo / Εκπαίδευσης Συμπράξεις του Προγράμματος Δια Βίου Μάθησης.

Ευρωπαϊκή Ένωση  
Lifelong Learning Programme

Ελλάδα  
Γαλλία  
Γερμανία  
Πολωνία  
Σουηδία  
FYROM

Διοργάνωση από

Exhibitors have been artists, but also cultural associations, schools, institutions, etc., exhibiting their members' items.

Every exhibited item has been accompanied by a short description in order to allow visitors to have the necessary information concerned. Some items have been exhibited in the form of a poster with photos and a description due to the fact it wasn't possible – for some reason – to exhibit the prototype.

The exhibits came from Greece, Germany, Poland, Sweden, France and the former Yugoslav Republic of Macedonia.

Fig. 1: Original Greek Exhibition Poster

## EXHIBITIONS PREPERATION

The preparations for the organization for the international exhibition of Kilkis were divided into two parts.

The first part involved the finding of potential exhibitors and the way to organize the shipment and later on the return of the exhibits. Each partner communicated through internet, phone and in person, with individuals and legal entities, that would potentially be interested in such an exhibition. More analytically, the Greek partner communicated by sending an invitation of interest, with bodies in Greece, Bulgaria, FYROM, France, Italy, Spain, Romania and Cyprus. The German partner communicated in a similar way with bodies in France, Sweden and Poland. For this purpose an agreement plan was drawn up, that had to be signed by each partner of the programme and the potential exhibitor. This agreement included the following: the purpose of the programme and the exhibition in general, procedures of shipment and return of the exhibits, as well as general information on the structure of the organization of the exhibition, such as the time, the place, its duration etc. After the finalization of the exhibitors and exhibits and the completion of the catalogue, the process of putting the exhibits in the exhibition place began.

The second part of the preparations involved informing the public about the exhibition, aiming at the maximum attendance of visitors. For this purpose:

- Posters were created and hung up in main parts of the town of Kilkis.
- Announcements were published in local newspapers.
- The exhibition was communicated through the use of Social Media to as many users as possible.

### Congress Centre of Kilkis

The exhibition of "Value of Wasted Materials" take place in the Congress Centre of Kilkis which is a modern multipurpose building as it actually houses, besides the conferences, also cultural events of prose, music, theatre, etc. The scene has an area of almost 130 m<sup>2</sup>. The acoustic shell of the hall has been constructed using a reflective furred ceiling while in the study for the acoustic the perimetric walls are also included.

The Congress Centre of Kilkis disposes a foyer, a bar and offices for secretarial and administrative support. The whole project has been funded by the ERDF (Local Authorities Special Programme), the "Leader" Programme, and also with National funds.

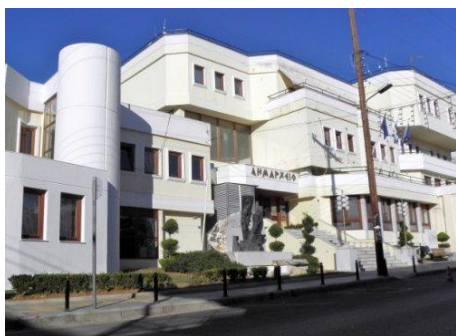


Fig. 3: Congress Centre of Kilkis



Fig. 2: lecture hall inside the Congress Centre

# EXHIBITORS

Over 40 different Exhibitors from five different countries provided their work in "the Value of wasted Materials" international Exhibition. Students, school classes, companies and private persons helped to create such a variety of fascinating exhibits made up of "waste".

Table 1: Exhibitors

No.	Country	Organization	Artist	Description
1	Greece		Elsa Pakopoulou	A new fashion accessory made out of parts from paper, plastic and wood
2	Greece		Evgenia Evgenidou	Ornaments like frames made out of parts from pieces of wood, chips of wood, wire and acrylic colours
3	Greece		Stavros Giavasidis	Useful items like lamps, table, sculpture
4	Greece		Panagiotis Michalopoulos	Useful items like bags, wallets, backpacks made out of parts of plastic from recycled posters
5	Greece		Chrysa Polyzou	Accessories like necklaces, pins, earrings, rings, bracelets
6	Greece		Theodoros Kirmilidis	Ornaments like ships made out of recycled pieces of wood and components taken from old electric devices
7	Greece		Koula Fotiadou	Useful items like mirror, painting, patchwork made out of parts of wood found in the sea and old cloths
8	Greece		Christos Tsiligeridis	Creation of paintings made out of wood and paper
9	Greece	OPONGA Kilis	Dimitra Pantelakou.	Puppets made out of iron, cotton, paper, metal, plastic
10	Greece		Christos Tsonias	Piano made out of paper, violin frame made out of metal and violist made out of recycled materials
11	Greece	5th Primary School of Kilis		Dolls, robots made of paper, candlesticks made out of old glass jars
12	Greece	University of Western Macedonia, Department of Mech. Engineering		Exploitation of waste tires to produce advance materials, gasification with carbon dioxide, energy exploitation of waste wood: categories-efficiency-perspectives, energy exploitation of waste wood: industrial proofs.
13	Greece	ECONDESIGN		Bags, Wallets made of plastic from recycled posters.



14	Germany	Primary School Rüssen	<b>Simone Heuschkel (teacher)</b>	<b>Future City</b> Piece of art showing a abstract structure of a city in far future
15	Germany	Primary School Rüssen	<b>Simone Heuschkel (teacher)</b>	<b>School Advertising</b> Letters big as the students, for the arrangement in front of the school (the letters symbolize the name of the school)
16	Germany	Primary School Rüssen		The basis of these art projects are cartons, which the pupils had to collect and bring to school. Afterwards the teachers advised them how to cut them in right position for fitting on shoulders and the head. Using hot glue and sticky tape other packaging has been arranged around the basis of cartons. Afterwards the whole piece has been wrapped with papier-mâché, dried and painted in the end according to the imagination of the pupils.
17	Germany	Comprehensive School Friedenstal Herford	<b>Rainer Mattern (teacher)</b>	<b>Seating Furniture</b> Seating unit and 1st prize of the recycling prize in 2011
18	Germany	Schindler Consulting Zespol Szkol Nr.3		<b>Hardware Diagnostics</b> Apprentices of Electronic and IT from the Zespol Szkol Nr. 3 in Poland, who participated in a students exchange with the Training Centre of Zwickau (the course was hold by Swen Schindler, a local IT consultant)
19	Germany	Hans-Ehrenberg Grammar School		The pupils created a handbag. They used old, waste bicycle inner tubes and used textiles. Besides this bicycle chains, light cables and other parts of a bike have been used. The outer part consists of the tubes which have been interwoven in each other. The inner part is made of an old bicycle shirt which has been sewed to the outer part. The handle is a tyre. All the materials have been rest materials of bikers, which had no use to the users anymore.
20	Germany	Geschwister Scholl Grammar School		An orchestra with instruments produced with waste. The orchestra consists not only of traditional instruments, but also of other items which create sounds (old bicycle tire etc.).

21	France	Atelier D'éco Solidaire	50 creative artists	"Nos déchets débordent de valeurs" (our waste is full of resources) Art Show & sale
22	Sweden		"Fröken Frost" (Misses Frost)	Material: Barbwire, hinges, metal chains, cast, rusty tools, mirrors, etc.
23	Poland	Krakow School of Art and Fashion	Aleksandra Chmielowicz	Lamp made of forks - Hanging lamp. Lampshade made of glued disposable plastic forks
24	Poland	Krakow School of Art and Fashion	Angelika Szelağ	Pouf made of Styrofoam covered with strips of fabrics
25	Poland	Krakow School of Art and Fashion	Karolina Gaca	Lamp made of telephone cards
26	Poland	Krakow School of Art and Fashion	Jadwiga Pańczyniak	Dress made of a hundred gallon black garbage bag and a metal zipper
27	Poland	Krakow School of Art and Fashion	Malgorzata Łubian	Waistcoat made of oilskin and skirt made of white shirts
28	Poland	Krakow School of Art and Fashion	Malgorzata Łubian	Skirt made of pieces of old sweater and old T-shirts
29	Poland	Krakow School of Art and Fashion	Students of the 1 <sup>st</sup> and 2 <sup>nd</sup> year	Topic: Lamps Book lamp, Can cutters Lamp, Cheese shoe shelf, Gray paper chair, green lamp, transparent lamp, green nest lamp
30	Poland	Krakow School of Art and Fashion	Daniel Marcińczak	The lamp is made of sticks, drilled in the mid-lengths and mounted on a wooden shaft. It gives a delicate, decorative lighting at the base of the lamp.
31	Poland	Krakow School of Art and Fashion	Dominika Kaczmarczyk	Standing lamp A lampshade made of a bubble envelope and the base made of metal can with luminescent insert.
32	Poland	Krakow School of Art and Fashion	Ewa Dyk	The lamp is made of zips, giving each side a different light. The light can be regulated by the opening and closing the zip. It is based on the structure of soft wire, so the shape of the lampshade can be changed.
33	Poland	Krakow School of Art and Fashion	Gabriela Huzarska	The lamp was made of used toilet paper rolls, which were cut and folded into triangles. Thereby they create a repeatable system in shape of a roller.
34	Poland	Krakow School of Art and Fashion	Izabela Jonczy	Hanging lamp made of metal mesh and twine.
35	Poland	Krakow School of Art and Fashion	Justyna Likus	Standing Lamp- Candy light The following has been used to create the lamp: Candy wrappers, filament used by florists and (IKEA) Hemma base.

<b>36</b>	Poland	Krakow School of Art and Fashion	<b>Karolina Kowal</b>	Lamp made of eggs packaging
<b>37</b>	Poland	Krakow School of Art and Fashion	<b>Karolina Łaskawska</b>	The lamp is made of origami created from newspaper attached to flexible wires. They can also be made of colourful magazines, comics, etc. the origami are attached to metal wires joined together.
<b>38</b>	Poland	Krakow School of Art and Fashion	<b>Katarzyna Radomska-Duda</b>	Hanging lamp made of polyethylene foam.
<b>39</b>	Poland	Krakow School of Art and Fashion	<b>Katażyna Magdalena Madej</b>	Lamp and bag The lamp was made of corrugated PVC pipe, twine and carton box covered in recycled fabric.
<b>40</b>	Poland	Krakow School of Art and Fashion	<b>Malgorzata Jungowska</b>	Trikuatra Decorative place mats were used to produce this hanging lamp. The indirect lighting comes from energy saving LED lighting.
<b>41</b>	Poland	Krakow School of Art and Fashion	<b>Monika Sztan</b>	Standing lamp The base was created of an old lamp, renovated and painted. Afterwards plastic bottles were used to create the lampshade by burning out the holes combined with cable straps.
<b>42</b>	Poland	Krakow School of Art and Fashion	<b>Paulina Cichoń</b>	Night lamp. Lampshade is made of a cut carton and the base is from Leroy Merlin.
<b>43</b>	Poland	Krakow School of Art and Fashion	<b>Zofia Miarka</b>	The lampshade is made of straws and plastic bottle.

# Exhibits

Due to the fact that some of the exhibits were not transportable we helped ourselves by presenting posters about the artworks with pictures and descriptions in Kilis to show everybody else what was produced in the different countries. For this documentation we will list here all the exhibits as posters which were used in the exhibition.

## Greece:



Responsible Partner:  
Epimorfotiki Kilis  
Sm Ue



ΕΛΛΑΣ  
GREECE

### Recycling in Wasted Materials by Elsa Pakopoulou

#### Materials and Resources

- Parts from paper, plastic, wood

#### Process

- Collect wasted material of paper, plastic and wood in order to re-use it
- Process the materials and create a new fashion accessory

**Target Group:** Visitors of the International Exhibition of Kilis that was implemented for the needs of LEONARDO DA VINCI -PARTNERSHIP



Fig. 4: Exhibit Nr. 1

**Responsible Partner:**  
Epimorfotiki Kilkis  
Sm Ue



## Recycling in Wasted Materials by Evgenia Evgenidou





**Materials and Resources**

- Parts from pieces of wood, chips of wood, wire and acrylic colors

**Process**

- Collect wasted material of pieces of wood, and chips of wood in order to re-use it
- Process the materials and create ornaments like frames

**Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI - PARTNERSHIP**




Fig. 5: Exhibit Nr. 2:

**Responsible Partner:**  
Epimorfotiki Kilkis  
Sm Ue



## Recycling in Wasted Materials by Stavros Giavasidis





**Materials and Resources**

- Parts from metal, textile, hydraulic cannabis, wood, Ytong, paper, old electronic components, wood found in the sea

**Process**

- Collect wasted material of metal, textile, hydraulic cannabis, wood, Ytong, paper, old electronic components, wood found in the sea
- Process the materials and create useful items like table lamp, sculpture and others

**Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI - PARTNERSHIP**








Fig. 6: Exhibit Nr. 3:




Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Panagiotis Michalopoulos



ΕΛΛΑΣ  
GREECE



Materials and Resources

- Parts from plastic from recycled posters

Process

- Collect wasted material of plastic
- Process the materials and create useful items like bags, wallets, backpacks

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP






Fig. 7: Exhibit Nr. 4



Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Chrysa Polyzou



ΕΛΛΑΣ  
GREECE



Materials and Resources

- Parts from Corrugated paper, lace, non-expanded cable, Handmade paper lace, suede laces, Cardboard (canson), oak, beads, nail polish, felt, yarn, pine bark, ribbons, silicon ribbon, plastic bottle, beads, garden hoses, pins, corals, nespresso capsules, pebble

Process

- Collect wasted material of paper, plastic, silicon e.t.c.
- Process the materials and create accessories like Necklaces, Pins, Bracelets, Earrings, Rings

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP






Fig. 8: Exhibit Nr. 5





Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Theodoros Kirimlidis





Materials and Resources

- Parts from recycled pieces of wood, components taken from old electric devices (washing machines, refrigerators, e.t.c.)

Process

- Collect used material of wood and electric devices
- Process the materials and create ornaments like ships

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP



Fig. 9: Exhibit Nr. 6:



Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Koula Fotiadou





Materials and Resources

- Parts from wood found in the sea, old cloths

Process

- Collect used material of wood in the sea, old cloths
- Process the materials and create useful items like mirror, painting, patchwork

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP



Fig. 10: Exhibit Nr. 7:



Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Christos Tsiligeridis



ΕΛΛΑΣ  
GREECE



**Materials and Resources**

- Parts from wood, paper

**Process**


- Collect used material of canvass, wooden frame, wooden hanger, pebble
- Process the materials and create paintings

**Target Group:** Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP

Composition entitled "the King is Naked"




Fig. 11: Exhibit Nr. 8:




Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue

## Recycling in Wasted Materials by Dimitra Pantelakou



ΕΛΛΑΣ  
GREECE



**Materials and Resources**

- Parts from iron, cotton, metal, paper, plastic e.t.c.

**Process**

- Collect used material of sheet iron, cotton textile, metal buttons, paper mache, paper towel holder and toilet paper, pieces of wire, knitting needles, cardboard, sponge, scouring kitchen, plastic caps from shampoo, Styrofoam
- Process the materials and create Puppets

**Target Group:** Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DAVINCI -PARTNERSHIP





Fig. 12: Exhibit Nr. 9

Responsible Partner:  
Epimorfotiki Kilkis  
Sm Uic





## Recycling in Wasted Materials by Christos Tsonias



ΕΛΛΑΣ  
GREECE

**Materials and Resources**

- Parts from paper, canvas, wood, metal e.t.c.

**Process**

- Collect recycled materials from paper, canvas, wood, metal, iron e.t.c.
- Process the materials and create piano from paper, violin, fairy made from metal, violinist from recycled materials

**Target Group:** Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI -PARTNERSHIP










Fig. 13: Exhibit Nr. 10:

Responsible Partner:  
Epimorfotiki Kilkis  
Sm Uic





## Recycling in Wasted Materials by University of Western Macedonia – Ass. Prof. George Skodras



ΕΛΛΑΣ  
GREECE

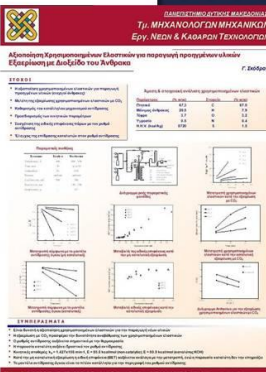
**Materials and Resources**

- Used tires

**Process**

- Research study carried out by the Dept. of Mechanical Engineering of UoWM;
- Exploitation of Used Tires to produce advanced materials (activated carbon);
- Study of Gasification with Carbon Dioxide;
- Definition of the appropriate mechanism of the reaction;

**Target Group:** Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI - PARTNERSHIP



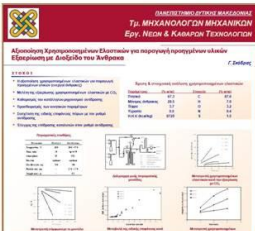
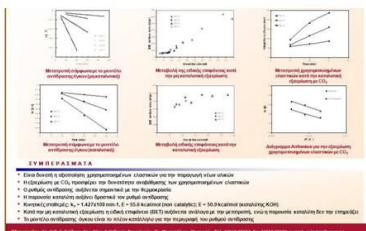





Fig. 14: Exhibit Nr. 11:




Responsible Partner:  
Epimorfotiki Kilkis  
Sm Uic



## Recycling in Wasted Materials by University of Western Macedonia – Ass. Prof. George Skodras





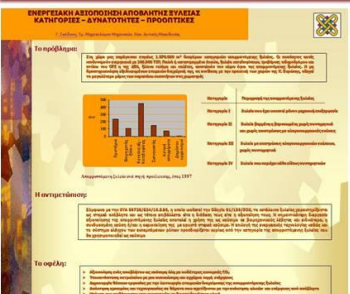
Materials and Resources

- Energy exploitation of wasted Wood

Process

- The problem: Greece produces 1.070.000m<sup>3</sup> of wastes of wood;
- How to deal with this: Residuals of wood are considered as solid wastes, therefore it is obligatory their disposition & exploitation;
- Advantages: use of a waste as combustible, replacement of oil, creation of workplaces, acquiring of know-how, etc.;

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI - PARTNERSHIP









Fig. 15: Exhibit Nr. 11:

Responsible Partner:  
Epimorfotiki Kilkis  
Sm Uic



## Recycling in Wasted Materials by the 5<sup>th</sup> Elementary School of Kilkis






Materials and Resources

- Paper, cord, plastic, glass, ribbons, tin, etc.

Process

- Pupils, in the frame of the “Environmental Education” use to collect wasted materials like paper, cord, plastic, glass, ribbons, tin, etc., from the schoolyard, or from their homes. Afterwards, they create different items that expose in the school.

Target Group: Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI -PARTNERSHIP






Fig. 16: Exhibit Nr. 12:

Responsible Partner:  
Epimorfotiki Kilkis  
Sm Ue



## Recycling in Wasted Materials by EConDESIGN



### Materials and Resources

- Plastic from recycled posters, banners, carton, kitchen utensils

### Process

- ECon Design object is the production of products made with ecological awareness and respect to the principles of fair trade, with exceptional design and very good prices. Materials used are carton, kitchen utensils made of the best silicone, bags and accessories made of recycled or re-used materials as well as many beautiful toys and stationery both for the office and school
- Items produced are bags, wallets, backpacks, jewelry, office items, etc.

**Target Group:** Visitors of the International Exhibition of Kilkis that was implemented for the needs of LEONARDO DA VINCI -PARTNERSHIP



Fig. 17: Exhibit Nr. 13

## Germany:

**AUGUST HORCH  
AKADEMIE**

**GRUNDSCHULE RÜSSEN**  
"Our City in the Future"

**Creative Upcycling in Art Courses lead by a Trained Art Teacher**

Responsible Partner: August Horch Akademie (DE)

**Target Group:** Pupils (aged 9-11) of the art class in Grundschule Rüssen


**Materials:** Packing material (relatively big and the best cartons)

**Process:**

- ❖ Painting and gluing of cartons according to the instruction of the teacher
- ❖ Arranging parts on the floor and afterwards attaching them to the wall of the class room


Fig. 18: Exhibit Nr. 14: Simone Heuschkel






**AUGUST HORCH  
AKADEMIE**

**GRUNDSCHULE RÜSSEN**  
"School Advertising"



**Responsible Partner:**  
August Horch Akademie (DE)

**Creative Upcycling in Art Courses lead by a Trained Art Teacher**




**Materials and Resources**

- Big and old packaging (milk, cereals etc.)

**Process**

- Create groups of 4-5 pupils
- With parents: Build basements of the letters at home
- With caretaker: Arrange letters in front of the school



**Target Group:**  
**Result:**

Pupils (aged 9-11) of the art class in Grundschule Rüssen  
Letters, symbolizing the name of the school, big as the students






Fig. 19: Exhibit Nr. 15: Simone Heuschkel



**AUGUST HORCH  
AKADEMIE**

**GRUNDSCHULE RÜSSEN**  
"Future Spacemen"



**Responsible Partner:**  
August Horch Akademie (DE)

**Creative Upcycling in Art Courses lead by a Trained Art Teacher**



**Target Group:** Pupils (aged 9-11) of the art class

**Materials:** Packing material (relatively big and the best cartons)

**Results:** Futurist costumes of spacemen for children



- 1**

Cutting cartons in shape according to instructions of the teacher (fitting on head and shoulders)
- 2**

Arranging other packaging around the basement using hot glue and sticky tape
- 3**

Wrapping the piece with papier-mâché and dry it
- 4**

Painting the costumes according to the ideas of the pupils

Fig. 20: Exhibit Nr. 16: Simone Heuschkel





AUGUST HORCH  
AKADEMIE

Responsible  
Partner: August  
Horch Akademie  
(DE)



## GESAMTSCHULE FRIEDENSTAL HERFORD

"Seating Furniture"

Creative Upcycling made by a 10th grade handicraft class



### Process

Pupils created a concept and design. They used cardboard tubes and leftovers of plywood to create chairs and table for a seating unit. They had to build the furniture on their own by using tools etc. and their design craft.



### Target group

Pupils of the 10th grade of the engineering class of the comprehensive school Friedenstal Herford

### Results

Seating unit and 1st prize of the recycling prize in 2011.



Fig. 21: Exhibit Nr. 17 : Rainer Mattern



Responsible Partner:  
August Horch  
Akademie (DE)



## SCHINDLER CONSULTING

"Hardware Diagnostics"



Upcycling in Computing Courses lead by Swen Schindler

### Materials and Resources

- Functional parts from non-functional hardware of computers

### Process

- Remove the functional parts of old hardware and process this material in order to re-use it
- Arrange the hardware parts in a new, innovative and creative cover (microwave, refrigerator etc.)




### Target Group:


Apprentices of Electronic and IT from the Zespół Szkół Nr. 3 in Poland, who participated in a students exchange with the Training Centre of Zwickau (the course was held by Swen Schindler, a local IT consultant)




Fig. 22: Exhibit Nr. 18: Schindler Consulting



**HANS EHRENBURG GRAMMAR SCHOOL**  
"Flat Tyre Bag"




Responsible Partner:  
August Horch Akademie (DE)




3<sup>rd</sup> prize of the Design Recycling Prize in 2008

**Target Group:** Pupils of the 10<sup>th</sup> grade

**Result:** A hand and shoulder bag made with second-hand materials for the inner lining





**Bicycle chains**  
**Light cables**  
**Interwoven tubes**  
**Old bicycle shirt**  
**Tyre (for the handle)**

MATERIAL

Fig. 23: Exhibit Nr. 19



**GESCHWISTER-SCHOLL GRAMMAR SCHOOL**  
"School Trash Orchestra"



Responsible Partner:  
August Horch Akademie (DE)



Creative Upcycling in Art Courses lead by a Trained Art Teacher

**Target Group:** Pupils in 6<sup>th</sup> – 7<sup>th</sup> grade (interested in music)

**Result:** An orchestra with instruments produced with waste. The consists not only of traditional instruments, but also of other items which create sounds (old bicycle tire etc.)







Fig. 24: Exhibit Nr. 20:



## France:



**AUGUST HORCH  
AKADEMIE**

**ATELIER D'ECO SOLIDAIRE**

"Nos déchets débordent de valeurs" (Our waste is full of Resources)



Responsible Partner:

[www.atelierdecosolidaire.com](http://www.atelierdecosolidaire.com)

August Horch Akademie (DE)






April 2011

- Collection of bulky waste and exhibition in Bordeaux of raw material to raise public awareness

May until October 2011

- 24 workshops during 6 weeks for processing of waste

November 2011

- Successful final Art Show and Sale in Bordeaux



**Target Group:** Volunteers (students, unemployed persons, retired persons, designers, visual artists, woodworkers, persons at risk of being socially marginalized)




Fig. 25: Exhibit Nr. 21:

## Sweden:



**AUGUST HORCH  
AKADEMIE**

**FRÖKEN FROST**

Artworks from old metal material



Responsible Partner:

[www.frökenfrost.se](http://www.frökenfrost.se)

August Horch Akademie (DE)




Mirrors

Rusty Tools

Cast **MATERIAL**

Metal Chains

Barbwire Hinges



**Target Group:** All age groups, favorable of the field of mechanic engineering. Especially applicable for mechanic apprentices, who are interested in art and to do handicrafts with metallic material.




Fig. 26: Exhibit Nr. 22:

Poland:



Fig. 27: Exhibit Nr. 23:



Fig. 28: Exhibit Nr. 24:





Fig. 29: Exhibit Nr. 25:



Fig. 30: Exhibit Nr. 26:



Fig. 31: Exhibit Nr. 27:



Fig. 32: Exhibit Nr. 28:





## CRACOW SCHOOL OF ART AND FASHION DESIGN

Selection of artworks designed by students of the first and second year

Responsible Partner: August Horch Akademie (DE)

[www.fashionschool-photographyschool.com](http://www.fashionschool-photographyschool.com)






Ecodesign is a environmentally friendly field of interior and furniture design, which uses re-cycled materials



Lamp made of fine wires and can cutters



Lamp made with an old book and plexi



Lamp made of transparent disposable plastic cups



Lampshade made with green twine which is used to decorate flower bunches

Fig. 33: Exhibit Nr. 29



## CRACOW SCHOOL OF ART AND FASHION DESIGN

Lamp

Made by Daniel Marcińczak

Responsible Partner: August Horch Akademie (DE)

[www.fashionschool-photographyschool.com](http://www.fashionschool-photographyschool.com)



The lamp is made of sticks, drilled in the mid-lengths and mounted on a wooden shaft. It gives a delicate, decorative lighting at the base of the lamp.

### "Light tree"



Wykonał: Daniel Marcińczak  
1z SWP 2012



Lampa wykonana z patyków, przewierconych w połowie długości i zamocowanych na drewnianym trzonie. Delikatne, dekoracyjne oświetlenie w podstawie lampy.



Fig. 34: Exhibit Nr. 30



Fig. 35: Exhibit Nr. 31



Fig. 36: Exhibit Nr. 32:





Fig. 37: Exhibit Nr. 33:



Fig. 38: Exhibit Nr. 34:



Fig. 39: Exhibit Nr. 35



Fig. 40: Exhibit Nr. 36



Fig. 41: Exhibit Nr. 37

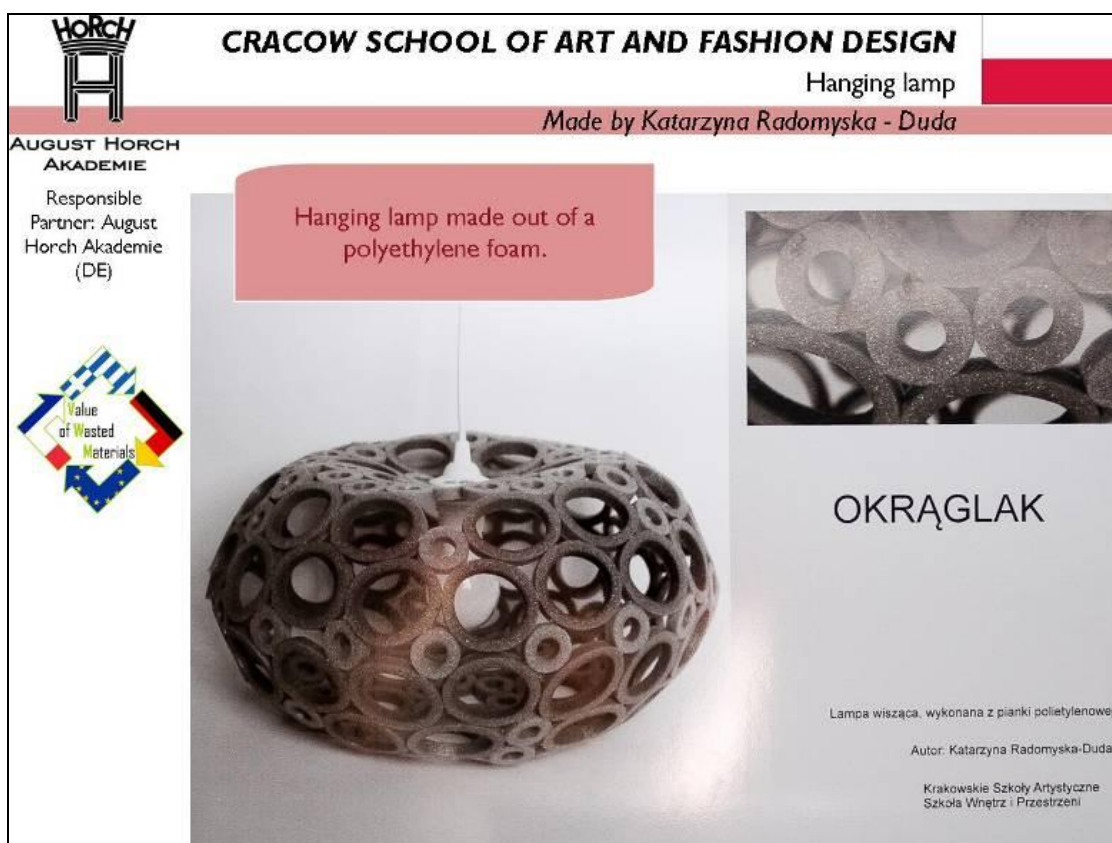


Fig. 42: Exhibit Nr. 38





Fig. 43: Exhibit Nr. 39



Fig. 44: Exhibit Nr. 40





Fig. 45: Exhibit Nr. 41



Fig. 46: Exhibit Nr. 42



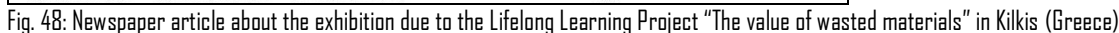
Fig. 47: Exhibit Nr. 43

The public awareness of the exhibition was greater than expected due to the variety of media used. The "Value of wasted Materials" exhibition was published in several printed and online newspapers as well as on websites and facebook. In the following we summarized and translated the articles in English.

## Epimorfotiki Kilkis

Two-day International exhibition in Kilgis with objects made of wasted materials.

The two-day International Exhibition in Kilkis featuring objects made of wasted materials, organized by Epimorfotiki Kilkis, was concluded successfully on Saturday September 8th. Creations of practical and /or aesthetic value from various parts of Greece and Europe were met with great interest, and visitors, especially young children, had the chance to gain a new perspective on materials that are typically dismissed as useless and trivial.





## 2. Online Newspaper Kilkis 24: Exhibition of wasted materials

Epimorfotiki Kilkis sm llc organizes in Kilkis an international exhibition on the subject of "the Value of Wasted Materials". The exhibition will take place in a period of two days, on September 7th and September 8th 2012 at the Congress Centre of the Municipality of Kilkis, a place that was readily provided by the Municipality of Kilkis. The exhibition constitutes an action within the framework of the international Grundtvig project, entitled "The Value of Wasted Materials" and involves participants from Germany and France. It will display objects of artistic and/ or practical value, that were created from useless materials such as glass, metal, wood, paper etc by people who are very much involved in this concept and have a personal (hobby) or professional interest.



Fig. 49: Website of the exhibition in Kilkis (Greece):

Blogs about the exhibition on the website www.kilkis24.gr

### 3. Online Newspaper Kilkis Today

Exhibition on the subject "the Value of wasted materials" by Epimorfotiki Kilkis sm llc on September 9<sup>th</sup>.

Epimorfotiki Kilkis sm llc hosts an international exhibition in the Congress Centre of the Municipality of Kilkis on the subject "The Value of Wasted Materials".

The exhibition will display objects of artistic and/ or practical value, that were created from useless materials such as glass, metal, wood, paper etc by people who are very much involved in this concept and have a personal ( hobby) or professional interest.

*Read more on [www.kilkistoday.gr](http://www.kilkistoday.gr)*



Fig. 50: Online Newspaper Kilkis Today

## 4. Facebook: The Value of Wasted Materials

Epimorfotiki Kilkis:

"Good morning everyone! On behalf of Epimorfotiki Kilkis I would like to thank everybody who contributed to holding this successful exhibition. A special thanks to all visitors of the exhibition as well as all exhibitors, who devoted their time and energy to transform useless things into exciting and often very practical creations. Domestic and other Greek and foreign exhibitors did their best to remind us of the proverb "one man's trash is another man's treasure"!"



Fig. 51: Facebook Website of the exhibition in Kilkis (Greece): [www.facebook.com/events/519689011390920/](http://www.facebook.com/events/519689011390920/)



## Resume of the exhibition of "The value of wasted materials":

On Saturday, September 8th the International Exhibition organized by Epimorfotiki Kilkis and the partners of the Leonardo "The Value of Wasted Materials" project ended. In the exhibition items made out of materials that for many people are considered useless were exhibited.

Exhibitors from Kilkis, known or less known, exhibited – to those who gave themselves the opportunity to visit the exhibition – their work having significant artistic value, or handy items that can be used in the everyday life.

Items like patchworks and pouf made out of remnants and old materials, table lambs made out of plastic forks, or phone cards, wood, or paper, paintings, from reused wood, bags and wallets from plastic posters, ornaments from paper, wire, or plastic, ships made out of wood and component of old electric devices like fridges, TVs, washing machines, etc, wooden puppets, are among the items that visitors had the opportunity to see.



Apart from the exhibitors from Kilkis we had also participants from Thessaloniki, Polykastro; we received exhibits from Poland, and the University of Western Macedonia. Due to the long distances instead of exhibits from Germany, Sweden and France the visitors could see them on Posters. Representatives from "August Horch Akademie GmbH", our project partner from Germany were present during the 2-days exhibition.

Visitors of all ages came to the exhibition during the 2 days it was open.

The success achieved induces partners of the project to repeat the initiative at the first opportunity.

Right after their visit of the exhibition many people told us their thoughts about the works and the event itself. Here we collected some of these, almost positive opinions from the organiser, the municipality of Kilkis and some of the exhibitors.

### The Organiser's Statement:

This exhibition gave us the opportunity to become familiar with the work of people who transform useless materials into creative and useful items and manage to construct objects that we would never have imagined. To our big surprise we discovered that there are many people in our area that create extraordinary things out of useless materials. We are very pleased that we were able to offer them the opportunity to display their work and to meet other people with same interests.

Furthermore, the response of the public was so positive and the feedback we got so encouraging, that we feel confident that we can host other similar exhibitions in the future.

We would like to thank our partners in the programme for the excellent cooperation, as well as all the participants, without whose valuable assistance, we would not have been able to produce such good results."

### Statement of the Municipality of Kilkis:

"It is the first time that our town hosts an international exhibition on this subject and the first time for many local artists to be given the opportunity to exhibit their works to their co-citizens. We feel proud that our small town has so many worthy artists and are very glad that we were able to contribute to the making of the exhibition, by providing for the venue of this exhibition. We would like to thank the participants from all countries and to assure them that we will offer our assistance in other initiatives in the future."

The municipality of Kilkis is planning a similar exhibition for the 2013 (after the end of the project "The value of wasted materials") due to the big success of the international exhibition.

### The Exhibitors' Statements

"The exhibition was great, as I had the opportunity to display my work among other fellow Greek and European artists in my hometown. It should have been longer through, let's say 1 week, as there was also a local fest and a lot of people couldn't come. Overall, it was a great experience"

*Elsa Pakopoulou*

"We have the chance to meet other people who love art and exchange views about the exhibits from the wasted materials."

*Stavros Giavasidis*

"The exhibition was very interested and successful. Also the cooperation between the team was really good."

*Chrysa Polyzou*

"Great experience! Good job!"

*Evgenia Evgenidou*

"The exhibition was well organized. Congratulations to the organizers!"

*Koula Fotiadou*



### A view into the guestbook of the exhibition

Each visitor got the opportunity to write thoughts, experiences, praise and critics into a guestbook on the reception. Many of them used it to say some words about the organization and the artworks. Afterwards you will have a look into this.

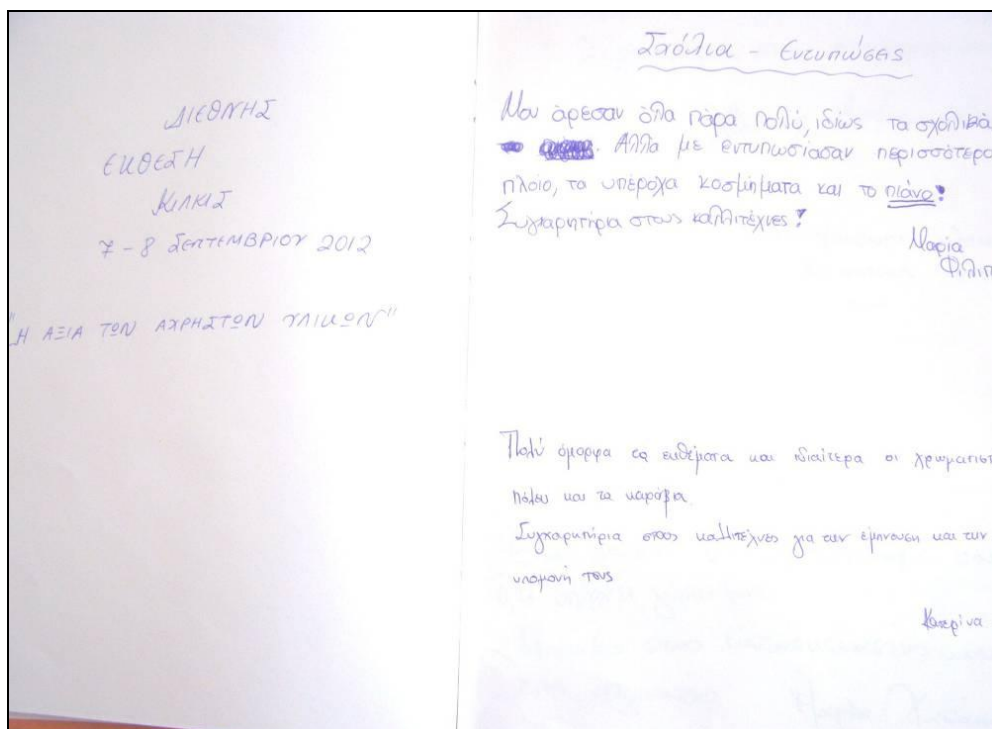


Fig. 52: Front page with Exhibition information and first comments

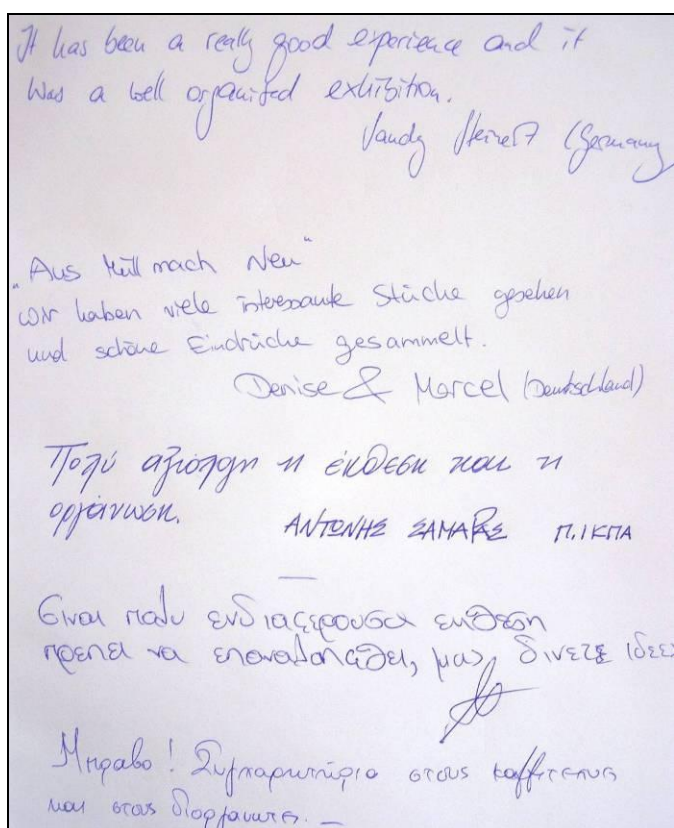
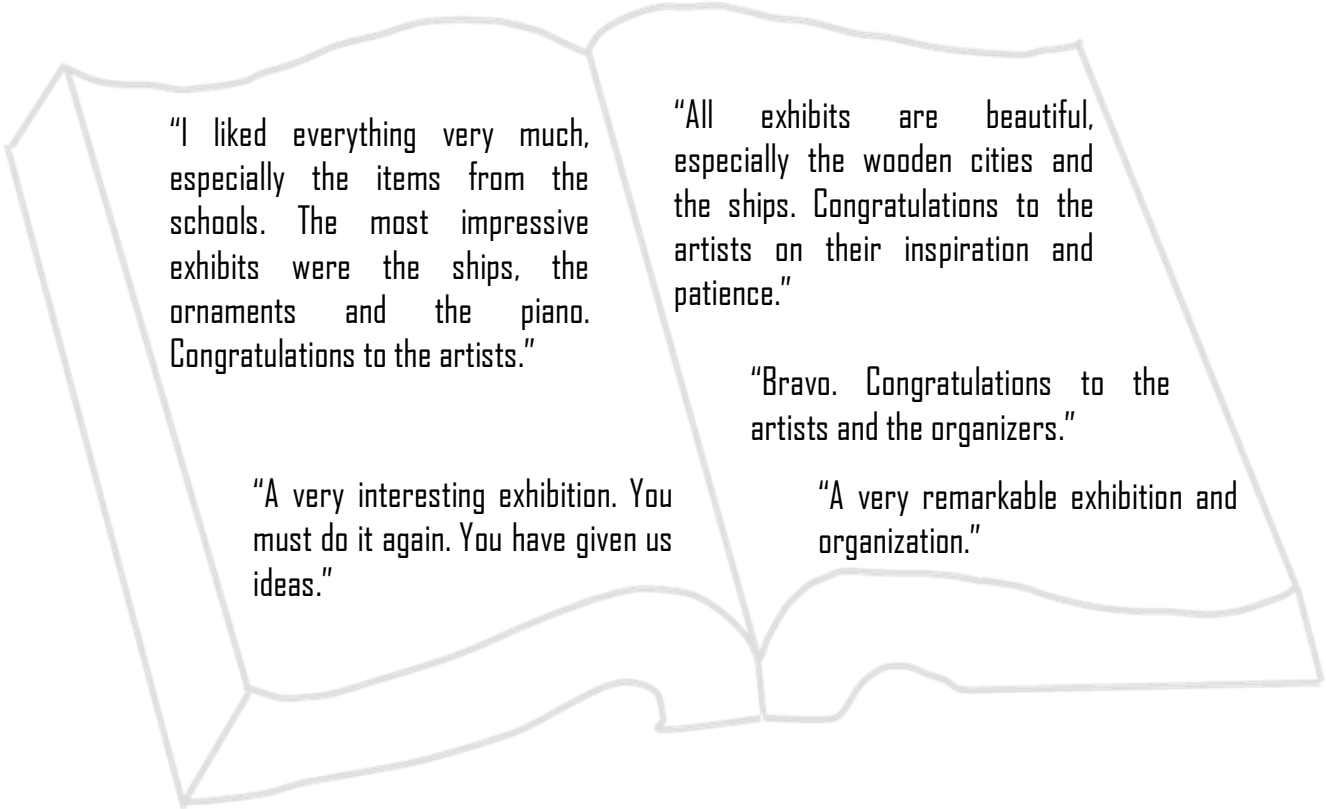


Fig. 53: international comments



We translated some of the visitors' opinions, thoughts and feedback from the guestbook into English:



"I liked everything very much, especially the items from the schools. The most impressive exhibits were the ships, the ornaments and the piano. Congratulations to the artists."

"A very interesting exhibition. You must do it again. You have given us ideas."

"All exhibits are beautiful, especially the wooden cities and the ships. Congratulations to the artists on their inspiration and patience."

"Bravo. Congratulations to the artists and the organizers."

"A very remarkable exhibition and organization."

## Evaluation

A separated survey for organizers and participants/visitors created the evaluation of the exhibition. Evaluating facts has been statistically data of course and opinions concerning the success and achievement of objectives within the exhibition, personal experiences during the activity and personal opinions regarding the own involvement or action. At this section diagrams are used to visualize and interpret the results.

### Organizer's results

#### Distribution organizers into sex and age groups

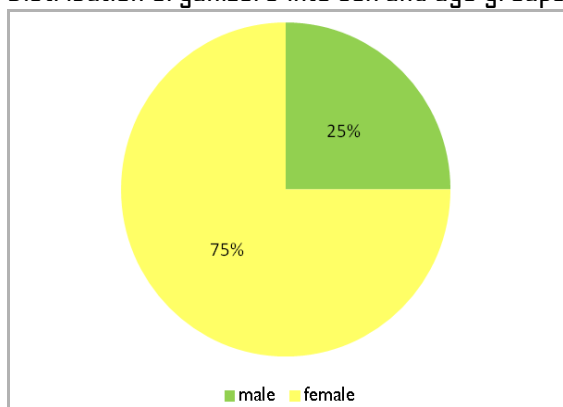


Chart 1: Organizer's sex

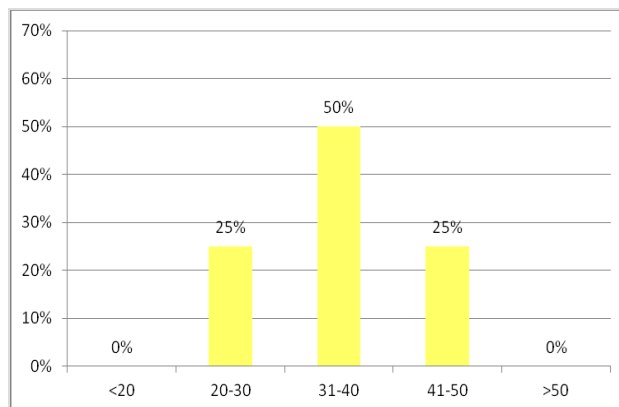


Chart 2: Organizer's age

Three-fourth of the exhibition organizers have been female, while one fourth has been male and the organizers are between 20 and 50 years old, but half of all are in the age of 31 to 40. This represents a good mixture and is very helpful for sharing ideas caused by the variety of different experiences.

#### Satisfaction concerning the learning process and working results

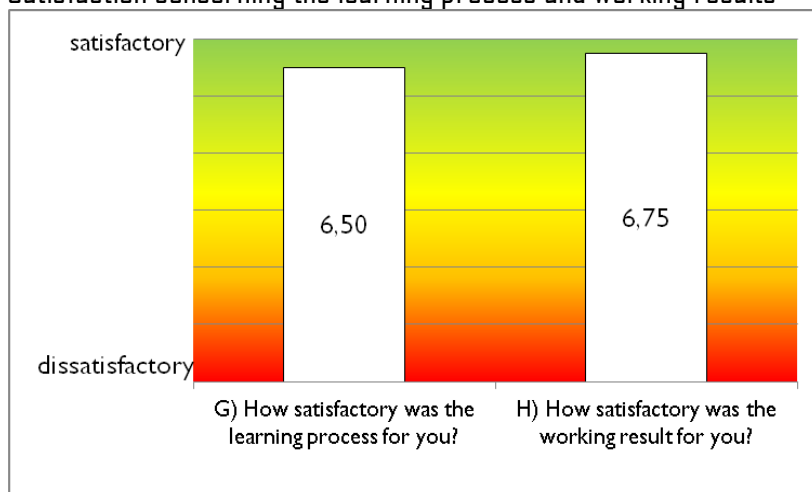


Chart 3: Satisfaction concerning the learning process and working result

By using a scale from 1 (dissatisfactory) to 7 (very satisfactory) the organizers should mark how satisfied they have been with the learning process and the working results. With an average of 6,5 and 6,75 in both questions the activity reached nearly every time best notes and if it will be done twice their will not be need to make great changes in the concept.

### Reasons for the participation in the exhibition

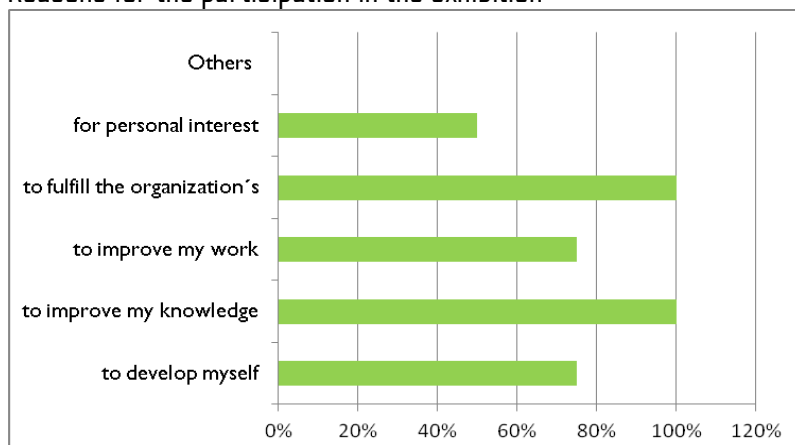


Chart 4: Which are the reasons/ expectations why you participated in the described activity?

The organizers answered the question about their reasons for participating in the exhibition mainly with "fulfill the organization's" and "improve my knowledge". So we could see that they had also personal interests in this project and that is why the exhibition was so successful.

### Adoption of learning results into daily work.

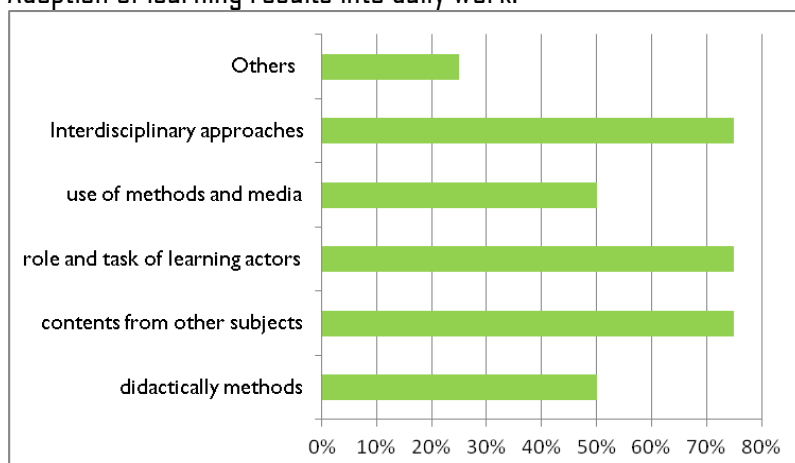


Chart 5: Could you adopt some of the following points into your daily work?

The question if the organizers could adopt some of the listed points into their daily work was 75 % answered by "interdisciplinary approaches" which was the main objective of the hole project, accordingly the exhibition and shows that all different parts came together in the exhibition.



## Expectations, Review and Forecast

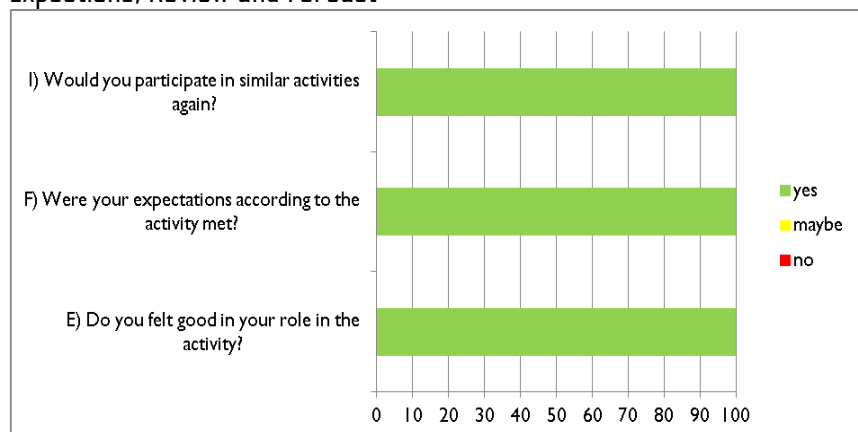


Chart 6: Evaluation concerning the role and expectations of the activity

100% “yes” in all the above questions means that everyone felt well in their activity, all expectations were met and everyone would like to work in a similar project again. This is a wonderful result and represents that everyone did its best to make the exhibition successful with their personal experience and overall engagement.

## Participant's results

### Distribution between male and female participants

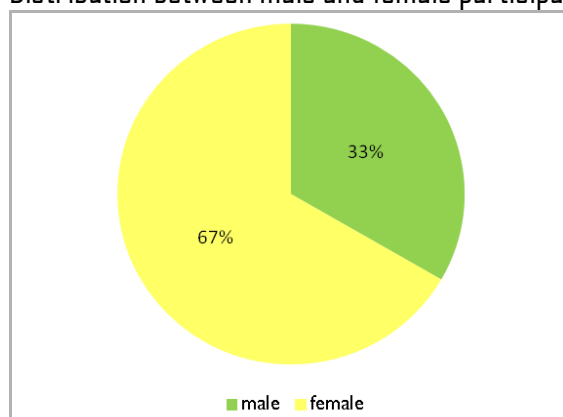


Chart 7: Participant's sex

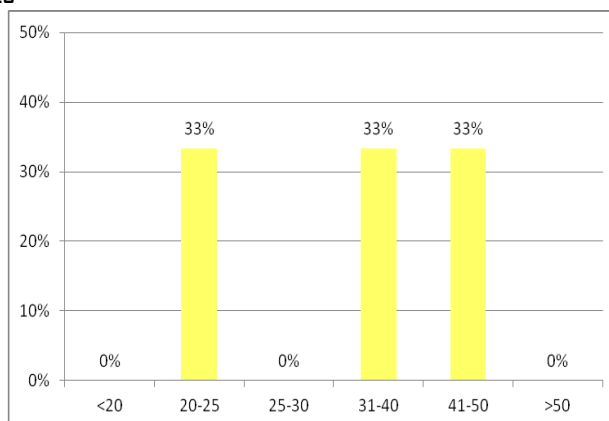


Chart 8: Participant's age

Participants in this case mean spot tests from the artists, employees of the organizer's companies as well as spontaneous visitors. Two thirds of the exhibition participants were female, while one third was male.

The right chart above is divided into two sections. There are the exhibitors who are mainly in the age between 31 and 50 and there are the visitors mainly in studying age between 20 and 25. That represents an average age of 30,7 years which is quite young and means that fortunately also young people are aware of the topic of waste reduction and recycling.

## Satisfaction with learning process, working results and integration into study/apprenticeship

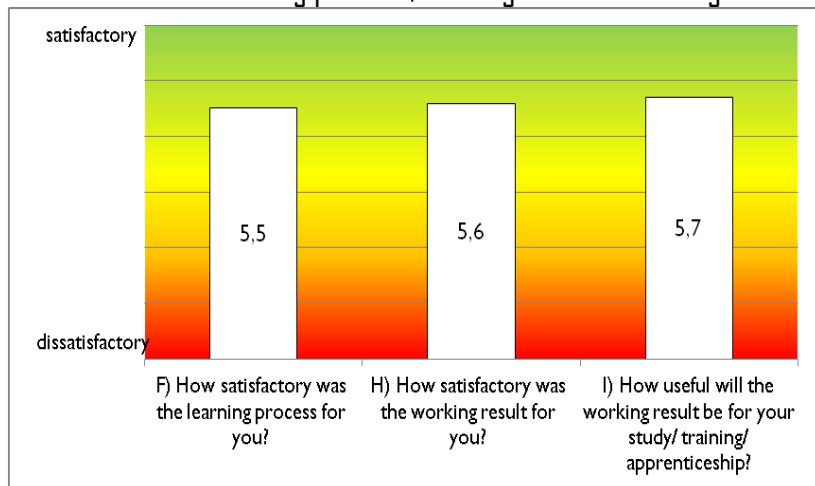


Chart 9: Satisfaction concerning learning process and working result

By using a scale from 1 (dissatisfactory) to 7 (very satisfactory) the participants should mark how satisfied they were with the learning process and the working results and how useful it was. With averages from 5.5 to 5.7 we already reached good results, but there is some space for improvement for a next time.

## Reasons for participating the exhibition

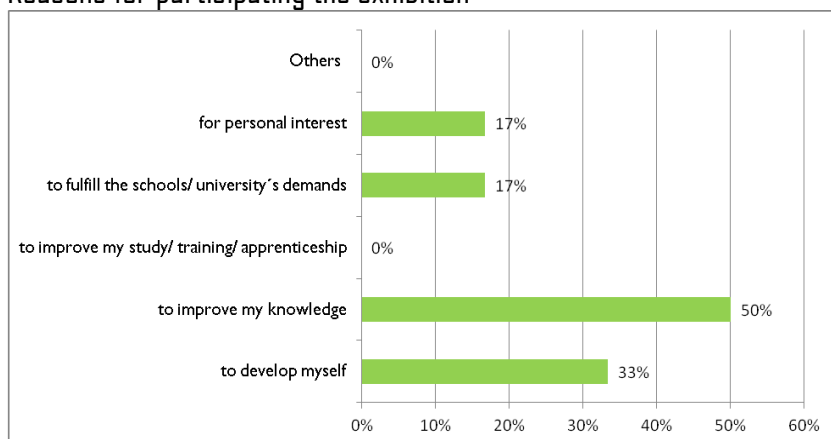


Chart 10 Which are the reasons/ expectations why you participated in the described activity

Most of the participants answered the question about their reasons for participating the exhibition with "improve my knowledge" and "develop myself" which means that they are also personally interested into the topic and do not participate just to fulfil study tasks.

## Expectations, Review and Forecast

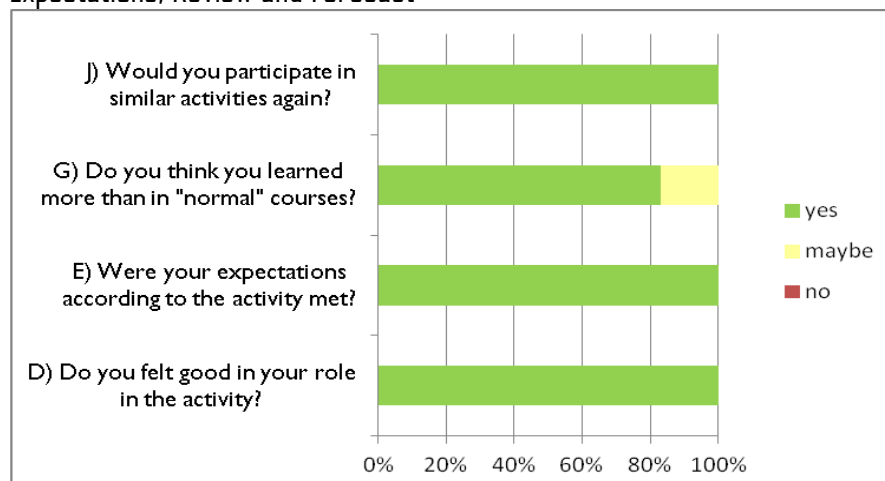


Chart II Evaluation concerning expectations and opinions of the exhibition.

Nearly every of the above questions was answered with 100 % "yes" so we see that everyone felt well in their role, all expectations were met and everyone would participate in a similar project again. Just some improvements in the difference compared to "normal courses" could be necessary.

## Conclusion

The before mentioned evaluation points clarify that the exhibition was a complete success which mainly depends on the excellent engagement of all involved persons but a special tribute belongs to the variety over 40 different exhibitors who did the impossible to recycle waste into such beautiful artworks.

And also the main objective of the exhibition was met: raise awareness for the topic of waste reduction and recycling to improve environmental protection and reserve resources.

Maybe one little fact for improvement is the better involvement of the "learners" so that they could become more influence in the activity and realise the difference to normal theoretical school or university courses and try themselves in practical exercise.

But all in all the partnership could review at a very well organized, successful implemented and great recognized exhibition with a huge audience and public awareness.



## ENCLOSURE



Fig. 54: The samples drew interest by younger and older visitors.



Fig. 55: The whole exhibition room was decorated by exponents from all over Europe



Fig. 56: Exhibition overview

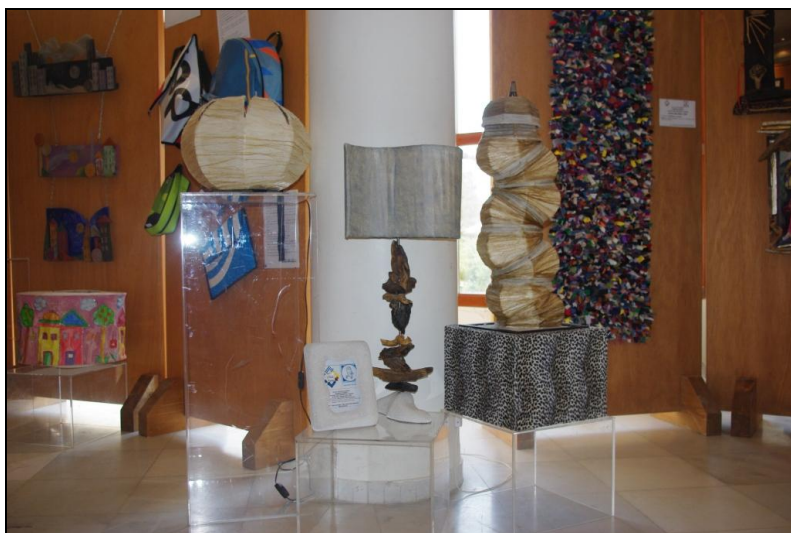


Fig. 57: "lamp-designing" was one of the main topics during the exhibition.



Fig. 58: Mr. Handover certificates of attendance



Fig. 59: The colourful pouf, a lamp made up of telephone cards, recycled clothes and a knife-and-fork-lamp were just some of the fascinating exhibits.





Fig. 60 These little beauties have not earned to be called waste any more.

The exhibits that probably were most viewed during the exhibition were the music instruments (piano, viola, guitars, violin) made out of ecological used materials like paper ,denim-jeans, soft plastic, synthetic leather, burlap-canvas, etc.



Fig. 61 the greatest attraction: a piono with legs from display dummies



Fig. 62 instruments made up of wasted materials





# PROJECT PARTNERSHIP



## EPIMORFOTIKI KILKIS SM LLC

56, Dairanis str., GR-61100, Kilkis - GREECE

Web: [www.epimorfotiki.gr](http://www.epimorfotiki.gr)



Epimorfotiki Kilkis SM LLC was founded in 1995 and specializes on providing modern Vocational Training and Lifelong Learning Services (LLS), as well as advanced Consultative & Supportive Services, with the aim to continually promote the sustainable development of the territory, the business activity and the development of local human resources.



## AUGUST HORCH AKADEMIE GMBH

Gürtelstraße 29A/30, 10247 Berlin - GERMANY

Web: [www.august-horch-akademie.de](http://www.august-horch-akademie.de)



August Horch Akademie (AHA) is a private training provider and consultancy which delivers management training to industry as well as to training organizations and public authorities. Besides the training unit the company works as project developer, coordinator and evaluator within a large number of EU and national programmes.



## AUDIT CONSEIL EXPERTISE FORMATION

300 Route des Crêtes, Espace Sophia Antipolis

06902 Sophia Antipolis - FRANCE

Web: [www.gestionforma.com](http://www.gestionforma.com)



Audit CONSEIL Expertise is an office of management and a training organization located in NICE with agencies in PARIS and Toulouse. ACEF is a joint venture of regional development centers and is dedicated to promoting and enhancing the cooperation between individuals, regional bodies, universities and enterprises in vocational training and education into the European environment.

