# **Recycling Program for the University Waste**

We aim to reduce the solid waste production to 90 % to achieve our 2030 target. Pictures above show that October 6 University uses five programs to recycle wastes which are:

## a. Solid waste recycling program:

It is an initiative to recycle solid waste at the university as a first stage to spread this system in the surrounding environment and to establish an environmental dimension among students achieving full benefit from the waste.

## b. Paper recycling program:

Recycling paper by designing a variety of products that add beauty to the interior space of any environment.

#### c. Waste carton recycling program:

The program's idea is based on pressing the used carton after mixing it with resin materials and using it in making furniture such as chairs and tables.

## d. Wood recycling program:

reclaimade wood is used forconstruction of tables and chaires for sustainable furniture E. Glass recycling program:

recycling glass by Fitting table design using reclimade glass for construction of tables by fitting cylinder togother for sustainabe furniture .

## F. Car tires recycling program:

The project aim is to reduce the non-degradable material that polutes the environment, by reusing it in the outdoor furniture instead of burying it., as it can bear the weather fluctuations an add nature print in landscaping design .

In order to reduce the environmental pollution, it was necessary to reduce the waste we send to landfill. Our University recognizes the importance of its societal role in working with its supply chain and help others to minimize waste generation and in collaboration with the concerned parties for the purpose of waste management. Some procedures and measures are taken by the University for waste disposal and its effective management at all O6U facilities and premises.

There are more than 300 segregated recycling bins on campus for biodegradable and non-bio degradable materials like paper, plastic, and aluminum cans, as well as a newspaper and cardboard drop-off.

October 6 University adopts some procedures for reach waste-free campus through reducing waste, or reusing where appropriate, and recycling. Some materials can be reused several times instead of being disposable, like paper, plastic bags, packaging, and organic waste. Single sided printed-paper can be reused to print drafts or even used for notes writing. Extra unnecessary magazines and books can also be donated to community libraries, local schools, orphanages, etc

Examples: -



High-Performance Extraction Distillation System that recycles plant waste and convert it to natural fertelizer



Rotary evaporator for recycling of organic solvents





#### Description:

High-Performance Extraction Distillation System is a double vessel apparatus. The first vessel contains an oil bath and a heater (electrical or solar source) that is connected to a sensor to measure oil and system temperature while the other contains a water bath that is connected with a water tap, a colander, and a holder for carrying out the plant. In addition, a pressure unit was connected to the apparatus for high extraction. When the temperature reaches 100 C°, the produced vapor carrying out the volatile components will pass through a small tube to a condenser. After condensation, the apparatus disposes of the wastewater by integrating it into the irrigation system while the condensed distillate extract will be collected in a receiving flask for separation. This flask consists of a glass container for collecting oils lighter than water through a tap and a stain steel part for collecting aromatic water. The excess aromatic water re-enters the system for dynamic extraction through a tube connected to a pressure controller. The container bears from 25 to 30 KGs depending on the plant size. Aromatic water, oil, and aqueous extract are the immediate products of the apparatus while the plant residue can be used after the addition of alkali for the formation of cellulose and black leaker that act as a natural fertilizer or bio-insecticide. The novelty of this apparatus is in integrating the distillation part with the plant extraction unit in addition to applying programmed temperature and

controlled pressure in plant extraction and oil distillation and the apparatus formed of stain steel 316 chemical resistance unit.

## *Uses of this apparatus:*

- 1- Extraction of volatile oils with different methods (steam distillation or organic solvent),
- 2- Preparation of distilled water,
- 3- Recycling of organic solvents,
- 4- Plant extraction with different methods,
- 5- Production of natural fertilizers,
- 6- Production of cellulose,
- 7- Preparation of animal food through fermentation (silage),

Advantages: efficient, eco-friendly, high percentage yield of extraction as a result of pressure application, closed system, presence of 316 chemical resistant stainless steel, and zero waste



Recycling Program for University Waste





## Description:

Within the framework of the "Be modern and environmentally friendly: E-waste management" program for university youth, in cooperation with the Arab Union for Youth and the Environment, 3 containers for separating electronic waste were received as a gift to the Faculty of Economics and

Management - October 6 University for electronic waste recycling The community service sector distributed the containers in the places of student density to include most of the university places. The places for their distribution included in the university mall, an engineering building to serve the engineering sector, and a hospital building to serve the medical sector, on Wednesday, February 9, 2022.

https://o6u.edu.eg/NewsDetailes.aspx?FactId=17&News=16433



#### Description:

Students of the Community Service Committee (Green Group) at the Faculty of Economics & Management launched an awareness campaign at The University level under the title "Be Modern and Environmentally Friendly: Managing Electronic Waste and its safe disposal" to introduce the importance of safe disposal of electronic waste and how to use the containers for such waste, which

were donated by the Egypt Youth Association For the development and environment of October 6 University within the program to educate Egyptian University Youth on safe disposal of these wastes within the "Be Prepared For The Green" initiative, on Sunday, February 27, 2022. https://o6u.edu.eg/NewsDetailes.aspx?FactId=17&News=16450



Recycling Program for University Waste



Paper recycling program





Waste recycling initiative. .

Awareness of the importance of managing the surrounding environment resources to rationalize consumption and announcing the college's initiative to spread the idea of waste recycling in accordance with sustainable development. Egypt 2030 goals

https://o6u.edu.eg/NewsDetailes.aspx?FactId=15&News=9482 https://o6u.edu.eg/NewsDetailes.aspx?FactId=15&News=16287 https://o6u.edu.eg/NewsDetailes.aspx?FactId=15&News=16288



wood recycling program



glass recycling program



Car tires recycling



Bioreactor used to produce methane gas from organic waste to use for the purpose of heating or electricity generation

BIN	Yellow Bin	Blue Bin	Red Bin	Green Bin
Types of Waste	Paper waste	Glass, Metal Waste and E-	Plastic Waste	Organic Waste
Reduce	<ul> <li>Print and copy on both sides;</li> <li>Use LAN/WAN to exchange documents and memos instead of printing or faving:</li> </ul>	Broken items may be recycled as scrap wood or metal.	straws& disposables on	<ul> <li>Interact with students to identify the way to handle organic waste.</li> <li>Awareness posters on how to segregate different wastes and how to</li> </ul>
Recycle	<ul> <li>Reuse paper printed on one side for internal memos, "draft" documents or scratchpads.</li> </ul>	<ul> <li>E-waste is segregated and sent to vendors for recycling;</li> <li>Recycling carried out via environmental services</li> </ul>	• Use a reusable bottle for drinks for personal use and use your backpack when carrying extra items, instead of using plastic and	<ul> <li>Organic solvents         recycled using ROTA-         VAP at the Faculty of         Pharmacy then it reused         in cleaning purpose</li> <li>Recycling done through         environmental services         company (Alpharonia).</li> </ul>



(Automatic waste segregation machine that automatically separates different kinds of wastes





Sustainability consists in recycling rolled paper to be used in the work of design models with different animal shapes that take into account balance





Sustainability is the reuse of colored rolled paper to make a study of human facial features and show them in shade and light.





To make these designs, rolled colored paper was reused, and a variety of colors inspired by nature's colors were selected in the colors of trees, sand, sun and flowers.





Sustainability is the recycling of rolled paper for use in making nature-inspired design models by simulating the colors of water, sky and wave movement.





Sustainability is the reuse of colored rolled paper to conduct a study of the features of the African human face through the diversity in the use of different materials to show it.





These designs were implemented by recycling the coiled colored paper to show facial features taking into account the diversity in harmonious and integrated colors to show them.



Design of a middle and two chairs of re-managed inert, which are coarse yarn and recycled car tires



**Recycled Carton Chair** 



Side terrace of recycled carton



Chair of wood, sponge and recycled cloth



# Middle terrace and two recycled car tire chairs



Intermediate leverage of recycled bread, glass and environmental paint



Sole decor of recycled wooden ladder



Side Pelletizing of Re-managed Wood Trunks



Recycled Wood Trunks Lighting Unit and Lighting Units



Wall Mirror of Recycled Ores



Side Pelletizing of Recycled Failure



Design for wood travel and recycled leather



Recycled Cartoon Powder



Design for seating unit of recycled carton



Library unit of car tyres and recycled wood



Lighting units of recycled iron pipes



Decor unit (fountain) of plaster





A collection of maktat for students in the design of furniture from recycled ores such as (carton - paper - wood - glass)

Some miniature models of some household units using iron, rubber and recycled paper



Model for a small office unit to save books using recycled paper



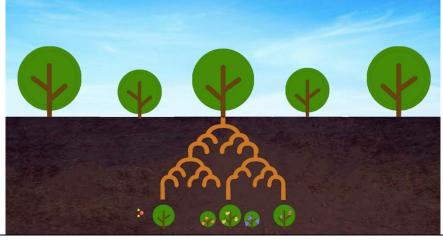
Miniature models of some bedroom furniture pieces using paper and recycled cloth



A stop motion film using recycled materials to raise awarness about how unhealthy our earth had become and without it there's no life



A stop motion film using recycled materials to raise awarness about how clean was the environment before humans interfered and which direction should be heading instead of the one we are in



A stop motion film using recycled materials to raise awarness about the importance of planting trees



A stop motion film using recycled materials to raise awarness about the bad influence of car smoke on the air and how it increases pollution



A stop motion film using recycled materials to raise awarness about the amount of pollution from factories affecting all life on land and sea



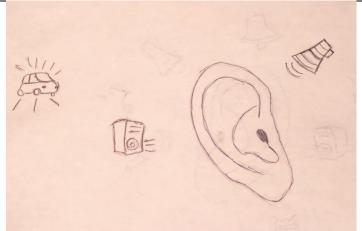
A stop motion film using recycled materials to raise awarness about land polluters and how to prevent it



A stop motion film using recycled materials to raise awarness about air pollution in a simple language for grownups and children



A stop motion film using recycled materials to raise awarness about recycling and how to reporpus items to reduce the amount of used plastic



A stop motion film using recycled materials to raise awarness about different types of pollution like noise and how to prevent them



A stop motion film using recycled materials to raise awarness about the importance of water to maintain life on earth



A stop motion film using recycled materials to raise awarness about how water pollution affects life and water and affects the fish that we eat



A stop motion film using recycled materials to raise awarness about recycling and how one paper can be used multiple times



A stop motion film using recycled materials to raise awarness about water pollution and its effect on fish and life underwater



A stop motion film using recycled materials to raise awarness about the bad effects of cutting trees

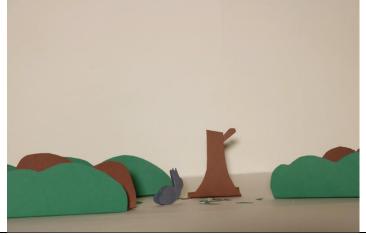


A stop motion film using recycled materials to raise awarness about the

# aftermass and side effects of smoking



A stop motion film using recycled materials to raise awarness about side effects of increasing the plastic waste on the environment



A stop motion film using recycled materials to raise awarness about how cutting trees is cutting homes and shelters of animal



A stop motion film using recycled materials to raise awarness about dumping wastes and garbage in water kills fishs and decrease amount of water available for drinking



A stop motion film using recycled materials to raise awarness about the importance of recycling and how much it helps the enivroment



A stop motion film using recycled materials to raise awarness about how ruining earth and the environment is ruining all lives



A stop motion film using recycled materials to raise awarness about keeping the forests safe for the animals