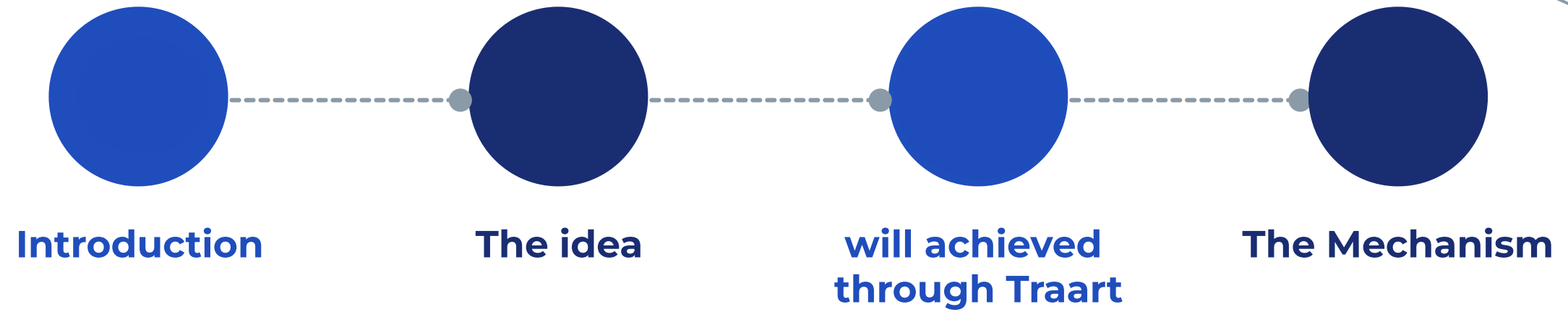




# TraarT

Smart Waste Container

# Timeline



# Introduction

In cities, waste production is often so high that it cannot be thrown into the trash, so the waste is placed next to the trash can. This situation constitutes uncivilized behavior in terms of appearance and street pollution. Moreover, garbage collection from trucks is a heavy and polluting problem because leaving waste for a long time may cause greenhouse gases to be emitted.



**pollution**




**Carbon Dioxide**



**Landscape  
Distortion**







“Our ambition is to build a more prosperous nation where every citizen finds what he desires. **The future of our nation, which we build together, will not be accepted unless we place it at the forefront of the world.**”

His Royal Highness  
*Crown Prince Mohammed Bin Salman*  
*AlSaud*



# the Idea

To facilitate the task, we are pleased to present a proposal (TraarT), a smart waste container that uses artificial intelligence techniques to harness technology to serve humans and the environment. The container mainly works on solar energy, through which many tasks are carried out, starting with classifying materials through sensing and organizing the type of material (paper, plastic, and glass). After grading, there will be intelligent sensors that determine the level of ultrasonic filling that monitors the waste with the help of The innovative tools, after exceeding a specific filling level limit, are compressed and ejected in the appropriate path through underground tubes divided by type of material and then delivered to the nearest plant for recycling and utilization of resources in a faster and more organized manner.



# will achieved through **Traart** :



## Environmental Sustainability

interact with the environment to avoid the depletion or degradation of natural resources to ensure long-term environmental quality.



## CO2 Reduction

The product can significantly reduce greenhouse gas emissions, especially carbon dioxide and methane emissions, significantly contributing to global warming and reduced air quality.



## Energy Efficiency

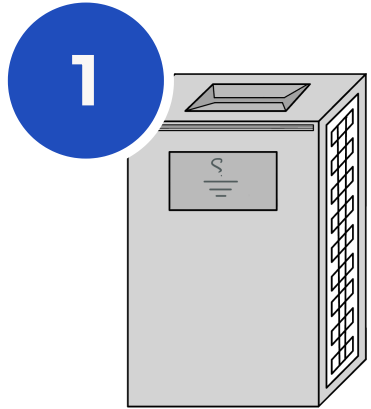
vital component of our strategy to increase the sustainability of our business while promoting energy efficiency. Its practice contributes to reducing emissions and strengthening the presence of green communities.



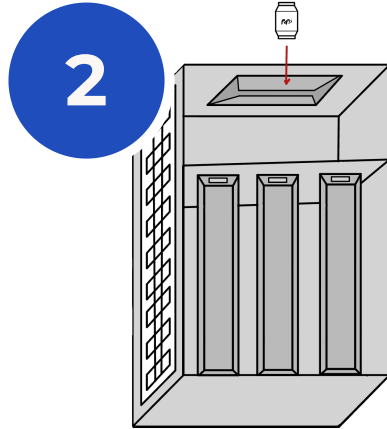
## Increasing the recycling rate

The Kingdom seeks to recycle 42% of waste in 2035, which requires more investments in the recycling sector and the importance of this on the environment and the sustainability of natural resources.

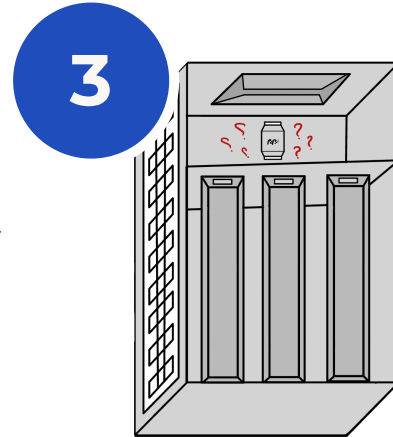
# The Mechanism



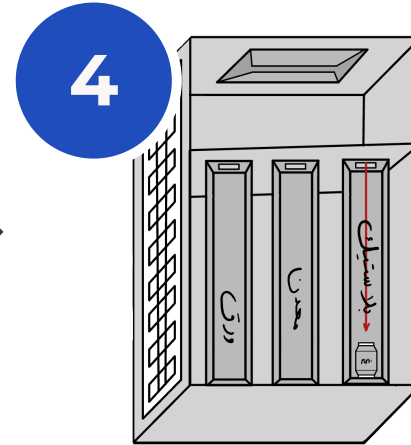
Here the picture shows the shape of the container, which is composed of a waste port, an interactive screen and also an air freshener.



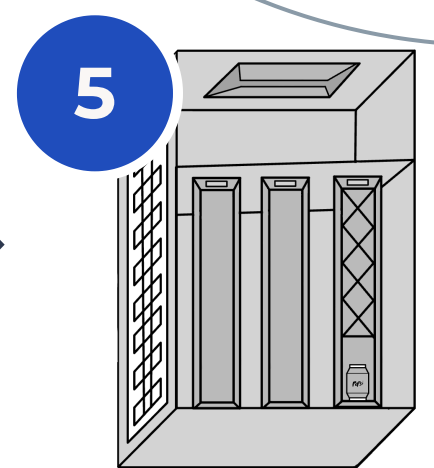
Now we will throw Pepsi in the container.



The material will be classified into (paper, plastic, glass).

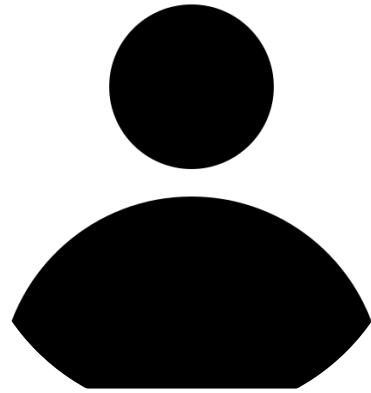


the material is classified into (paper, plastic, glass) where the type of material appears on the interactive screen in the first stage

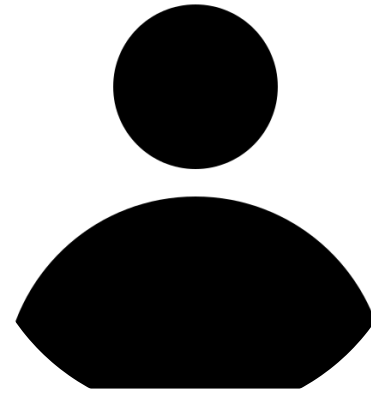


As the container operates on a mechanism that limits filling, and if the waste reaches a certain extent after being compressed, it will be discharged underground through the pipes designated for each type of material.

# Our Team



**May M.  
AlOtaibi**  
Software  
Developer



**Ghala M.  
Alkhaldi**  
Software  
Developer



A man with a beard and glasses is sitting at a desk, giving a thumbs up. He is wearing a light-colored shirt. In front of him is a laptop and a cup of coffee. The background is a blurred indoor setting with plants. The entire image is overlaid with a blue gradient and white curved lines in the corners.

# Thank you