

Biophoria

Team: Euphoria

1. Social Backgrounds, Business Incentives

The lack of composting is one of the leading reasons for the loss of energy. Food loss and waste not only exacerbate hunger and food insecurity but also add to the three global crises that pose a threat to our future as a species.¹ We, as humanity, don't have the luxury of using and wasting fossil sources. According to the Central Intelligence Agency, the world generates more than 66 percent of its electricity from fossil fuels, and another 8 percent from nuclear energy.² To reduce the amount of negative effects caused by nonrenewable sources, we introduce Biophoria.

2. Description Of Business

Our business provides for 2 groups: Students and Farmers. It constitutes a plan where the process of fertilization is maintained beneficially and sustainably.

a. Providing For the School and Students:

The idea of building a system which composts waste products exists, but its implementation in the schools hasn't been applied yet. Even though composting can attract unwanted pests and wildlife, which can create public health risks and damage property³This

1

<https://www.unep.org/news-and-stories/story/how-composting-can-reduce-our-impact-planet>

2

<https://education.nationalgeographic.org/resource/non-renewable-energy/>

3

<https://www.boisestate.edu/cobe/blog/2023/08/composting-complications-and-concerns/#:~:text=Composting%20can%20attract%20unwanted%20pests,for%20nearby%20residents%20and%20businesses.>

can be prevented with precautions taken. In this project, we aim high school students to acknowledge the process of composting and get a certificate which identifies them as competent. In the app we developed, students can improve themselves by learning the steps of composting. There is a section on the app where the instructive videos of composting are included. As they are watched, students get tasked around the information they learn, only then they complete them all and get a certificate, they get authorized for the composting that takes place in their school.

b. Composting on the school and making profit from it:

The business we effectuated provides schools composting systems where they can both make profit and let the students learn composting. The systems are provided complimentary to schools. By the time composting is done by the certificated students and fertilizers are ready to be used. Our company, Biophoria buys these fertilizers from the schools. Then we market these fertilizers to the farmers. We contact the farmers by the apply page in our application. After their appeal is approved, we sell the fertilizers to them. More details and financial plans are to be found on sections 3 and 4.

3. Marketing Strategies

<https://www.boisestate.edu/cobe/blog/2023/08/composting-complications-and-concerns/#:~:text=Composting%20can%20attract%20unwanted%20pests,for%20nearby%20residents%20and%20businesses.>

a) Analysis and target

In Turkey, the recycling processes are sadly less known and less applied. Most of the schools don't recycle any of their waste products. Main waste in the schools is caused by leftovers. Although their overproduction, which mostly occurs to be lunches, many of them don't recycle. The wasted amount of food and the potential energy from these sources are incredibly valuable. As Biophoria, our goal is to compost these waste products in the schools by providing them with the necessary equipment and the agriculture education. Our target customers will be Turkish high schools with large wasting amounts and farmers seeking cheap manure.

b) Marketing Strategies

i. Business Method

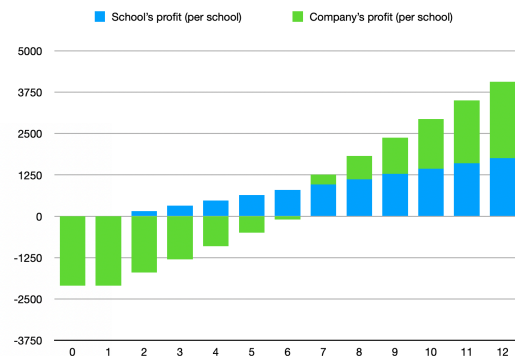
Our business doesn't require a large amount of budget to put into practice. Main reason is that we don't manufacture neither the manure and the composter. The composters will be merchandised. Whenever the company deals with a school, we'll purchase the necessary amount of composters. And since the manures will be produced by schools and purchased from later, no initial capital will be needed.

ii. Marketability

The strengths of our business lies in the receivers benefits from the deal. Schools get our composter machines free of charge, and in exchange we purchase the manure produced by them in expendable amounts. So both the receiver and the dealer benefit from the partnership. Then we move into profit by selling the manures to the farmers at market prices.

4. Financial Plan

Though we are at a loss for the first 7 months due to the composting systems we provide to the schools for free, our system pays off at the end of month 7 as shown in the graph given below.



	School's profit (per school)	Company's profit (per school)
0	0	-2100
1	0	-2100
2	160	-1700
3	320	-1300
4	480	-900
5	640	-500
6	800	-100
7	960	300
8	1120	700
9	1280	1100
10	1440	1500
11	1600	1900
12	1760	2300

As you can see in the graph, we intend to spend \$2,100 to purchase 15 composters for each school we have collaborated with. These composters have a capacity of 50 liters, which equals to 30 kg. After the first 45 days, we anticipate obtaining 30 kilograms of manure every 3 days. We plan to purchase 30 kg of manure for \$16 and sell it for \$56. This yields a profit of \$40 every 3 days, totaling \$400 monthly. Schools will earn \$160 monthly. We aim to achieve profitability by the 7th month, while schools will consistently make a \$160 profit monthly.