

Cost calculations

For the greenhouse we have made general cost calculations to know when we make profit in order to know the price per squared meter and the price of the seed packages. There are still a lot of uncertainties, because of lack of information sources.

1.	amount	surface	costs without btw	energy	price per kwh	profit per year
*solar panels	16	24	€ -6.156,00	3400	€ 0,23	€ 782,00
vending machine	1	1	€ -1.050,00	1500	€ 0,21	€ -315,00
*cabinet	1	2	€ -	0	€ -	€ -
*tools	10	0	€ -	0	€ -	€ -
house	1	270	€ -30.000,00	0	€ -	€ -
the plans	125	95	€ -4.000,00	0	€ -	€ -
maintenance	1	0	€ -3.840,00	0	€ -	€ -
magazines	10	1	€ 201,50	0	€ -	€ -
Wi-Fi	1	1	€ -30,00	2,1	€ 0,21	€ -
*furniture	4	8	€ -2.000,00	0	€ -	€ -
watering	25	5	€ -1.000,00	-		€ -30,00
steps	2	1	€ -50,00	0	€ -	€ -
lights	15	2	€ -100,00	72	€ 0,11	€ -8,00
renting land	1	270	€ -5.400,00	0	€ -	€ -
building permission	1	270	€ -4.000,00	0	€ -	€ -
promotion	2	0	€ -1.500,00	0	€ -	€ -

* if we can get the sponsors (table 5.)

In this table the general cost are presented of the greenhouse. The cost of building and the renting of the land for example. Some costs are estimations, So it is a guideline. With sponsors we can save initial cost in the first year.

2.	Costs per package	price per package	Package in the vending machine	Estimated Sold package	Times refilling vending machine	sold	profit
Recipes package	€ -0,35	€ 3,19	18	10	4	720	€ 2044,8
Separate package	€ -0,1	€ 1,29	6	10	4	240	€ 285,6
							€ 2.330,40

Here are the cost and the prices shown of the seed package we will sell in the greenhouse. The amount of sold packages is an estimation, because there are no numbers how many seeds people will use. It could also be possible that people buy their seeds somewhere else, but with the recipes packages we try to motivate people to buy our packages.

3. Low plots	High Plots	high	low	Squared meters	Price per month
60	65	1	0	1	€ 4,99
		0	1	1	€ 7,99
		2	0	2	€ 9,98
		1	1	2	€ 12,98
		3	0	3	€ 14,22
		0	2	2	€ 15,98
		2	1	3	€ 17,07
		1	2	3	€ 19,92
		4	0	4	€ 18,96
		0	3	3	€ 22,77
		3	1	4	€ 21,81
		2	2	4	€ 24,66
		1	3	4	€ 27,51
		0	4	4	€ 30,36

This are numbers from our example plot of the greenhouse. So the greenhouse will have 125 plots to rented out. We took an formula for if you rent more than 2 squared meters you will have 5% discount.

4. Squared meters	high	low	Total rented	total per month	Total per year	general profit a year
1	65	60	125	€ 813,73	9764,76	9435,31
4	26	25	124	758,82	9105,86	

This is a plot about the amount of money we make upon all the plots. In this case all the plots are rented out. Which would probably not be the case all the time. So if being realistic it will always be less than this amount, but we took the general profit a year that we needed in order to make profit.

5.	Costs in products					
payment per year for promotion		1e year	2e	3rd	4th	5th
applebee	2.000,00	-	-	1.000,00	1.000,00	1.000,00
wine	-	1.000,00	1.000,00	1.000,00	1.000,00	1.000,00
kitchen	-	2.000,00	2.000,00	2.000,00	2.000,00	2.000,00
Solar panels	6.000,00	-	-	-	1.500,00	1.500,00
tools	2.000,00	-	-	-	500,00	500,00

In this table the sponsors we will have at this moment are shown. The idea is that the companies give us product, to have or to borrow in order for promotion for them. However after a couple years they will have to pay per year for the promotion. This makes or costs less in the first year.

6.	costs	earning	Profit a year	Amount of money
1st year	€ -50.339,50	€ 15.194,71	€ -35.144,79	€ -35.144,79
2nd year	€ -10.568,50	€ 15.194,71	€ 4.626,21	€ -30.518,58
3rd year	€ -10.568,50	€ 16.194,71	€ 5.626,21	€ -24.892,36
4th year	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ -17.266,15
5th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ -9.639,94
6th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ -2.013,73
7th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ 5.612,48
8th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ 13.238,70
9th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ 20.864,91
10th	€ -10.568,50	€ 18.194,71	€ 7.626,21	€ 28.491,12
total	-145.456,00	173.947,12	€ 63.635,91	€ 28.491,12
Total profit in 20 years				€ 109.753,24

In this plot comes everything together in order to show if we make profit. After 7 years or business will make some money. Although we could make more money with sponsoring or we could make the greenhouse even more green and innovative.

Something we excluded was costs of employees. If we would place multiple houses at once the employees will be good to use, someone for the website, someone for the greenhouse and checking all the administration. We thought of asking the township if they could provide us for people who take care of the greenhouse, for example the Wedka.

So to conclude the results we still have to optimize our numbers, but looking at these we will make money.