

**Evaluating Investment Projects by Embedding Sustainability  
in the Preparation of Capital Budgeting**

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**Abstract:** *Strategic planning provides challenges and creating value to most organizations. Yet, one of the important strategic issues that need much more attention is the capital budgeting. Capital budgeting is a very critical decision taken by managers and once it has been taken it can't be changed. For this, detailed information about the different projects should be available. Also, good evaluation techniques must be followed to reach to the right decision. The main aim of this paper was to determine if the financial evaluation of a project is enough; or other issues should be included in the evaluation to reach the better choice. For the purpose of this, the researcher developed a model to embed sustainability in the budgeting process. Also, the author has tested this model through applying it to one of the Egyptian company. The results revealed the important of including sustainability pillars with the financial pillar in the capital budgeting process.*

**Keywords:** Capital Budgeting, Sustainability, Investment Decision, Strategic Planning.

## **1. Introduction**

Sustainability has been used extensively in the business nowadays. It has been used as a strategic management tool, as a tool for cost reduction and efficiency, and as a control tool. However, the researcher discussed how to use sustainability in selecting the best project. For the purpose of this, the paper will be classified into two manifolds. The first one will discuss how to develop the suggested model. In this section the researcher will study the previous researches that have tried to use sustainability in the investment decisions. By analyzing this part the researcher will come up with the research gap. Then, by working on this gap a model will be selected. The second part of this paper will implement the suggested model to a case study.

## **2. Previous Trials to Embed Sustainability in the Investment Decisions**

The sustainable investment concept is very old. It is suggested that shareholders are always seeking the best profits for their projects, and at the same time they should allocate their investment to projects that “did not hurt our neighbor in body or soul only”. This is the origin of sustainable investment (Just economics, 2011).

After this, the studies have emerged to embed sustainability

in the investments. Some studies found that there is a huge need to create indicators that help in measuring sustainability. (Moffatt, 1994) presented the challenges to build successful sustainability indicators which can lead to more sustainable society, and aid in the recognition of the finest sustainable policies and practices.

Also, (Pohekar and Ramachandran, 2004) have reviewed more than 90 published papers on sustainable energy planning and management. They found high application of “Multi-Criteria Decision Making” (MCDM) technique in unstable social and economic scenario. Moreover, (Krajnc and Peter, 2005) paper has concentrated on how to use indicators to ascertain that sustainable development is applied in a useful and relevant approach.

At the same area, (Ugwu; M.; A.; and S., 2006) paper suggested a model to evaluate sustainability in infrastructure projects. They used Multi Criteria Decision Analysis (MCDA) and AHP for developing the model. (Ding, 2008) paper studied the role, development and limitations of existing environmental building evaluation techniques applied in many countries. The study has led to constructing sustainability model for appraising building projects basing on a multi-dimensional approach which help ranking the alternatives.

Nevertheless, (Keseru, Jeroen, Cathy and Joost, 2016)

paper assessed the sustainability of transport investments throughout a Multi Criteria Analysis (MCA) and compared the result to the outcomes of the appraisal of stakeholder preferences.

However, all previous studies have the limitations of the concentration on only one type of projects; or concerning running projects. There is no study tried to build a model to evaluate sustainability in all types of project and for capital investments projects. Hence, the question of this research is how to integrate sustainable development pillars in the process of capital budgeting effectively to assess and select the most appropriate investment project?

### **3. The Suggested Model**

The researcher followed (Keseru, Jeroen, Cathy and Joost, 2016), (Ugwu; M.; A.; and S., 2006), (Krajnc and Peter, 2005) in constructing the model. To construct the model, the researcher applied the following steps:

- A- Identifying and selecting measurable indicators for each aspect in the sustainability pillars.
- B- Normalizing each indicator.
- C- Determining the weight of each indicator using Analytical Hierarchy Process (AHP) (Saaty, 1980). This will be used to evaluate the important of different individual indicators within each pillar to overall sustainability of the company.
- D- Using Integer Programming Model to find the best mix of

investments.

### **3.1 Steps of Applying the Model:**

#### **3.1.1 Identifying and Selecting Indicators:**

##### **3.1.1.1 Measures Related To Financial Aspect:**

Although IFAC (2016), suggested using Net Present Value (NPV), ([Brigham](#) and Michael, 2004) concluded that if there is mutually exclusive projects with different life, the use of NPV will be misleading as it doesn't take into consideration reinvested opportunity of the project with shorter life time. They suggested using the "Equivalent Annual Cost (EAC)". The researcher suggested to use EAC

EAC can be measured by dividing the net present value of the investment with the present value of the annuities factor

$$EAC = NPV / A(t,r)$$

Where

EAC is the equivalent annual cost of the project

NPV is net present value of the project

$$A_{t,r} = \frac{1 - \frac{1}{(1+r)^t}}{r},$$

t is life span of the project, r is annual interest rate

However, the second step is to normalize EAC. The researcher used the percentage of each sub-aspect to total aspects for the normalization. Then, the equation for this financial indicator will be stated as follows:

$$F = \%(EAC:TF)$$

Where

F is the equation for the financial pillar, TF is the total financial indicators

As long as the researcher used only one indicator for financial pillar, then  $F=EAC=TF=1$ .

### **3.1.1.2 Measures Related To Sustainability Pillars:**

Sustainability is built on three pillars. Each pillar is classified into aspects. An indicator for each aspect should be calculated. However, the researcher used the sustainability pillars and their aspects as stated in GRI framework (GRI, 2015).

#### **3.1.1.2.1 The economic pillar:**

This pillar “encompasses all aspects of economic interactions, including the traditional measures used in financial accounting, as well as intangible assets that do not systematically appear in financial statement” (Pusavec, Kramar, Krajnik, and Kopac, 2010). Also, (GRI, 2015) has identified sub-aspects for each aspect of the economic pillar and it has identified how to measure each one. The researcher followed these measured as shown below.

#### **3.1.1.2.1.1 Measures Related To Economic Performance Aspect:**

The GRI specify some indicators to measure this aspect; the

researcher followed GRI and used the Economic Value Retained (EVR). EVR is calculated as Direct Economic Value Generated (DEVG) minus Direct Economic Value Distributed (DEVD)

$$\text{EVR} = \text{DEVG} - \text{DEVD}$$

Then, the first economic measure will be calculated as follows

$$\text{EC1} = \%(\text{EVR} : \text{EC}).$$

Where

EC is the total economic sub-pillars

### **3.1.1.2.1.2 Indirect Economic Impact Indicators:**

“Indirect economic impacts are an important indication of where risks to reputation may develop, or where opportunities may emerge to expand market access or a social license to operate” (GRI, 2015). As these indicators are of non-monetary nature, the researcher suggested that different investments will add to reputation by different weights. So each investment will be given a score according to how it is adding to the organization’s reputation compared to other investments. The score will rank from 0 to 5 given that 5 means the best option; while 0 represent the worst one. The equation to calculate this aspect can be illustrated below:

$$\text{IEI} = S_i$$

Where:

IEI is the Indirect Economic Impact

$S_i$  is the score of the investment  $i$

Then the second economic measure will be

$$EC2 = \%(IEI:EC)$$

### **3.1.1.2.1.3 Procurement Practices**

This indicator illustrates if the new investment is using local suppliers. The researcher used the percentage of local suppliers purchase to total purchase

$$PP = (LP/TP)$$

Where

PP is procurement practice

LP is local purchase

TP is total purchase

When this percentage increases this means that the organization is depending on the local suppliers more than others. This means higher percentage is favorable. Then, the fourth economic impact will be:

$$EC3 = \%(PP:EC)$$

Finally, the overall economic dimension will be stated according to the following equation

$$EC = EC1 + EC2 + EC3$$

### **3.1.1.2.2 The Environmental Pillar**

“The environmental dimension of sustainability concerns the organization’s impact on living and non-living natural systems, including land, air, water and ecosystems. The Environmental



Category covers impacts related to inputs (such as materials, energy and water) and outputs (such as emissions, effluents and waste). In addition, it covers biodiversity, transport, and product and service-related impacts, as well as environmental compliance and expenditures” (GRI, 2015). However, this pillar is divided to many aspects as follows:

#### **3.1.1.2.2.1 Materials**

Classifying the total volume or weight of materials, that has been used in the business’s essential outputs, to **Non-renewable materials and/ or Renewable materials**. To measure this aspect, the researcher suggested calculating the weight of the non renewable materials to the total materials used:

$$M = \text{NRM} / \text{TM}$$

Where

M materials

NRM is non- renewable materials

TM is total materials

As long as this equation shows unfavorable environmental factor, the researcher suggests using negative sign for this measure. Then the First environmental indicators can be expressed as

$$En1 = -\% (M:EN)$$

#### **3.1.1.2.2.2 Energy**

This aspect is measuring total fuel consumption from non-

renewable fuel sources compared to total fuel consumption. The greater this percentage is, the greater the harm to the environment. The researcher used the following formula

$$UNRE = NRE/TE$$

Where

UNRE is Use of Non renewable energy

NRE is Non Renewable energy

TE is Total energy

As long as this equation shows unfavorable environmental factor, the researcher suggested using negative sign for this measure. Then, the second environmental equation will be

$$EN2 = - \% (URE:EN)$$

### **3.1.1.2.2.3 Water Consumption**

This aspect is concerning the total consumption of water used in the organization. The researcher suggested using the water invoice to measure this aspect. However, to relate the consumption of water to the volume of the organization's activities and to screen out noise from factors such as changing levels of output and to focus on the critical relationships, the researcher suggested calculating the water consumption by dividing the water invoice by the net income. Hence, the formula will be as follows:

$$WC = AWI/NI$$

Where

WC is Water consumption aspect

AWI is Annual Water Invoice

NI is Net income

However, the researcher suggested that as the water consumption increase, this will add to the unfavorable situation. So, the researcher used negative sign to measure this pillar. Then, the third environmental equation will be

$$EN3 = -\% (WC:EN)$$

#### **3.1.1.2.2.4 Emissions**

The Emissions aspect contains indicators on ozone-depleting substances, greenhouse gas (GHG) emissions and other significant air emissions (GRI, 2015). Businesses' GHG emissions can be resulted from two main sources are energy related emissions and process-related emissions. These emissions are representing an extremely high percentage of the "global warming". Then, to obtain the GHG Indicator, each source is evaluated and calculated independently, then summed together. This method of calculating GHG is derived from (Thomas, Rolls, & Tennant, 2000) study which is depending on a basic study done by the Intergovernmental Panel on Climate Change (Ith and Dukes, 1993).

After adding all emissios factors and reaching the total emissions, the researcher suggested to relate this emissions to the net income to avoid any different in the emissions amount due to

productions and operations different in the organizations. Then, the equation for calculating the emissions will be as follows:

$$E = \text{Total CO}_2 / \text{NI}$$

Where

E is the emission indicator

Total Co2 is the amount of Carbon dioxide in tons

NI is the net income

Also, this is unfavorable sign, and the researcher suggested to use negative sign to calculate this indicator. Then, the fourth environmental indicator is

$$\text{EN4} = -\% (\text{E}:\text{EN})$$

### **3.1.1.2.2.5 Effluents and Waste**

(GRI, 2016) determined the resources resulted in waste and effluents including: “water discharges; the generation, treatment and disposal of waste; and spills of chemicals, oils, fuels, and other substances.”

To calculate the effluent and waste, the researcher suggests using the following equation

$$\text{E\&W} = \text{NWC} / \text{EVR}$$

Where

E&W is Effluents and waste indicator

NWC is net water consumed

The researcher used negative sign to show this as unfavorable indicator. Then, the fifth environmental indicator is

$$EN5 = -\% (E\&W:EN)$$

To sum up all environmental indicators, the researcher used the following equation:

$$EN = En1 + En2 + En3 + En4 + En5$$

### **3.1.1.2.3 Social Pillar**

“The social dimension of sustainability concerns the impacts the organization has on the social systems within which it operates” (GRI, 2015). The Social Category includes the following sub-Categories:

#### **3.1.1.2.3.1 Labor Practices and Decent Work**

The Aspects derived from this category are basing on globally accepted standards which include:

##### **3.1.1.2.3.1.1 Employment**

This aspect is determined by calculating the total number of new workers that have been hired; as well as the turnover percentage of workers by gender, region and age. In this research, the study is targeted a new established investment, and then there is no turnover yet. For this, only the number of employee hired will be taken into consideration. To calculate this indicator, the total number of new employee (Emp) that will be hired is identified.

$$Emp = NOE$$

Where

NOE is number of employee hired

Then, first social indicator is

$$S1 = \% (EMP:S)$$

### 3.1.1.2.3.2 Product Responsibility

This sub Category is related to the organization's outputs which affect customers and all stakeholders directly. To measure this aspect, the researcher will use binary variables (0, 1). If the product is safety and doesn't affect stakeholders in a bad manner then, it has number 1; and if the opposite, it will have number 0.

Then the equation will be as follows:

$$PR = b$$

Where

b is the binary variable (0,1)

Then the second social indicator will be

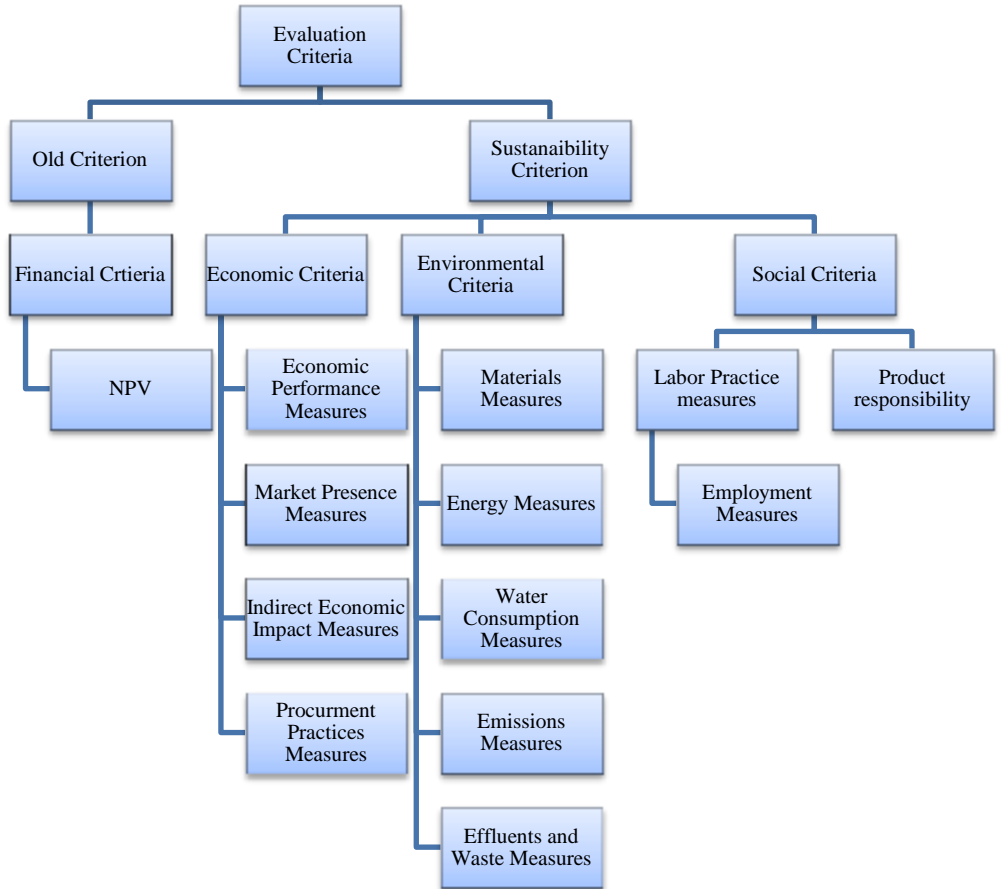
$$S2 = \% (PR:S)$$

After this, the total social impact can be calculated using the following equation

$$S = S1 + S2$$

The overall evaluation criteria can be summarized in the following figure

**Figure 1: Evaluation Criteria**



### 3.1.2 Calculating weight for each indicator

AHP is used to derive weight for indicators by prioritizing

their effect to the overall sustainability of the investment. However, to take the right choice in a planned approach and make priorities there is a requirement of decomposing the choice to the subsequent stages as proposed by (Saaty, 2008). Following this, the researcher constructed the matrices for each pillar and sub-pillars. After solving all matrices, the weight for each pillar and sub-pillars can be determined. Then, the value of each alternative can be determined using the coming equation:

$$V_j = W_F F_j + W_{EC} EC_j + W_{EN} EN_j + W_S S_j$$

Where

$V_j$  is the value of alternative  $j$

$W_F$  is the weight of the financial factor

$W_{EC}$  is the weight of the economic factor

$W_{EN}$  is the weight of the environmental factor

$W_S$  is the weight of the social factor

$J = (1, 2, 3, \dots, n)$

Finally, to reach to the optimal choice and chose the best mix of alternatives, the researcher suggested to use integer goal programming and constructed the following model:

$$\text{Maximize } \sum_{j=1}^n w_F F_j + w_{EC} EC_j + w_{EN} EN_j + W_S S_j$$

Subject to

$$\sum_{j=1}^n a_j X_j \leq b$$

$$X_j = 0 \text{ or } 1 \quad (j = 1, 2, 3, \dots, n)$$



where

$a_{ij}$  is the amount of resources needed for project  $j$ .

$b_i$  is the capital available.

#### **4. The Applied Study**

##### **4.1 Introducing the Company Used For Applying the Model**

The company used is one of the private sector companies; it works in land reclamation and agricultural development. This company is planning to build new factory to freeze vegetables and the half fried potatoes. The company is comparing four different scenarios. The first scenario is to freeze all products; i.e. vegetables, strawberry and fried potatoes. The second choice is to freeze fried potatoes only and excluding strawberry and vegetables. The third one is to freeze strawberry only. The last choice is to freeze all products from outside sources only, i.e. the company is not going to buy any raw materials it only takes goods from other firms and freeze it.

##### **4.2 Applying the Suggested Model**

The researcher has applied the previous proposed steps to evaluate the different scenarios and chose the best results. The following is the detailed steps:

###### **4.1.1 *Measuring the Value of Each Pillar***

###### **4.1.1.1 *Measuring the Financial Pillar:***

The researcher has measured NPV for each scenario as well

as EAC. After this, the researcher normalized the values using the percentage. NPV, EAC and the normalizing values for each scenario is listed in the table below. Also, the arrangement of the scenarios according to the best financial choice is provided.

**Table 1: Measuring the Financial Pillar**

Project Name	All	frozen	Potatoes	Strawberry
NPV	\$350,524,950.07	\$1,287,084,692.06	\$599,387,915.38	\$558,359,505.23
EAC	\$67,353,195.56	\$247,312,686.15	\$115,172,091.09	\$108,435,007.93
Normalizing% (F)	0.125128323	0.45945588	0.213965953	0.201449844
Arrangement of the projects	4	1	2	3

#### **4.1.1.2 Measuring the Economic Pillar:**

The economic pillar contains three measurements as discussed before. The measurements are Economic Value Returned (EVR), Indirect Economic Impact (IEI) and Procurement Practice (PP). Each value has been normalized using the percentage and attained the following result:

**Table 2: Measuring the Economic Pillar**

Project	EVR	EC1	IEI	EC 2	PP	EC3
All	70,913,368	0.1252404	4	0.266667	1	0.25
frozen	259,656,093	0.4585796	5	0.333333	1	0.25
Potatoes	121,145,092	0.2139548	2	0.133333	1	0.25
strawberry	114,503,648	0.2022253	4	0.266667	1	0.25

#### **4.1.1.3 Measuring the Environmental Pillar:**

Environmental pillar is divided to materials measured (M),

energy measure (NRE), water consumption (WC), emissions (E) and finally effluent and waste (E&W). However, as all projects are concerning vegetables and fruits, all of them have no effluent and waste and the EN5 for all are Zero. The measurement of each project and the final result is as follows:

**Table 3: Measuring the Environmental Pillars**

	M	EN1	NRE	EN2	WC	EN3	E	EN4	EN5
All	1	0.25	1	0.25	538,771	0.250341	3623.258	0.275417	0
frozen	1	0.25	1	0.25	528,975	0.24579	2966.915	0.225526	0
potatoes	1	0.25	1	0.25	493,710	0.229404	3809.207	0.289551	0
strawberry	1	0.25	1	0.25	590,689	0.274465	2756.171	0.209506	0

#### 4.1.1.4 Measuring the Social Pillar

In this pillar two sub-pillars have been measured are the employment rate (EMP) and the product responsibility (PR). The value of each project is as follows:

**Table 4: Measuring the Social Pillar**

	Emp=	S1=	PR=	S2=
All	339	0.262791	1	0.25
frozen	291	0.225581	1	0.25
potatoes	351	0.272093	1	0.25
strawberry	309	0.239535	1	0.25

#### 4.1.2 Determining the Priority and Weight of Each Pillar and Sub-Pillars:

##### 4.1.2.1 Determining the Priority and Weight of Each Pillar

A pair wise comparison between each pillar and the others has been made given into consideration that the most important pillar will be given 5 while the worst is given 1. The final weight for each pillar is determined as follows:

**Table 5:** The Final Weight of Each Pillar

	F	EC	EN	S
WEIGHT	0.2666667	0.3333333	0.2666667	0.1333333

#### **4.1.2.2 Determining the Priority and Weight of Each Sub-Pillars**

##### **4.1.2.2.1 Determining the Priority and Weight of the Financial Sub-Pillars**

As long as there is only one sub-pillar for the financial evaluation, then the weight for it is one.

##### **4.1.2.2.2 Determining the Weight of the Economic Sub-Pillars**

**Table 6:** The Final Weight Of The Economic Sub-Pillars

	EC1	EC2	EC3
Weight	0.5	0.4	0.1

Each value of the sub-pillars from table 2 is multiplied by its weight in table 6 to reach to the total amount of the economic pillar for each project as follows:

**Table 7:** Total Amount of the Economic Pillar for Each Project

	EC1	EC2	EC3	Total EC
All	0.06262	0.106667	0.025	0.194287
frozen	0.22929	0.133333	0.025	0.387623
potatoes	0.106977	0.053333	0.025	0.185311
strawberry	0.101113	0.106667	0.025	0.232779

#### 4.1.2.2.3 *Determining the Weight of the Environmental Sub-Pillars*

The final weight is as follows

**Table 8:** the Final Weight of the Environmental Sub-Pillars

	En1	En2	En3	En4
Weight	0.090909	0.091	0.454545455	0.363636364

Applying the same methodology for calculating the environmental pillar leads to the below table

**Table 9:** Total Amount of the Environmental Pillar for Each Project

	EN1	EN2	EN3	EN4	Total EN
All	0.022727	0.022727	0.113792	0.100152	0.259398
frozen	0.022727	0.022727	0.111723	0.082009	0.239186
potatoes	0.022727	0.022727	0.104274	0.105291	0.25502
strawberry	0.022727	0.022727	0.124757	0.076184	0.246396

#### 4.1.2.2.4 *Determining the Weight of the Social Sub-Pillars*

The output after solving the priority matrix is the coming weights:

**Table 10:** The Final Weight of the Social Sub-Pillars

	S1	S2
Weight	0.625	0.375

Also, the result for the social pillar is the following:

**Table 11:** Total Amount of the Social Pillar for Each Project

	S1	S2	Total S
All	0.164244	0.09375	0.257994
frozen	0.140988	0.09375	0.234738
potatoes	0.170058	0.09375	0.263808
strawberry	0.149709	0.09375	0.243459

#### 4.1.3 *Determining The Value Of Each Project:*

After solving and reaching to the value of each pillar for the different projects, the total value of the project can be attained by multiplying the weight of each pillar in table 5 by the total value of that pillar through implementing the following equation:

$$V_j = W_F F_j + W_{EC} EC_j + W_{EN} EN_j + W_S S_j$$

Then the final result will be as follows:

**Table 12:** Total Value of Each Project

	F	EC	EN	S	TOTAL Value of the Project	Arrangement of the projects
All	0.0333676	0.0647623	-0.069173	0.034399	0.06335637	4
frozen	0.1225216	0.1292077	-0.063783	0.031298	0.21924466	1
potatoes	0.0570576	0.0617702	-0.068005	0.035174	0.08599682	3
strawberry	0.05372	0.0775931	-0.065705	0.032461	0.09806882	2

#### 4.1.4 Applying the Suggested Model to the Case Study

Knowing that the total finance available is 100,000,000 and the finance needed for each project is as following

**Table 13:** Finance Needed

Projects	All	Frozen	Potatoes	Strawberry
Finance needed	80,761,200	79,897,200	80,833,200	33,800,000

Then, to reach to the optimal choice and chose the best mix of alternatives, the researcher applied the suggested integer multi goal programming as the following:

$$\text{Maximize } \sum_{j=1}^n w_F F_j + w_{EC} EC_j + w_{EN} EN_j + W_S S_j$$

Subject to

$$\sum_{j=1}^n a_j X_j \leq 100,000,000$$

$X_j = 0$  or  $1$  ( $j = 1, 2, 3, \dots, n$ ),  $a_j$  is the amount of resources needed for project  $j$ .

By solving the model using the excel solver the result is as the following:

**Table 14:** Arrangement of the Projects Using the Model

Project Name	Arrangement of the Projects
All	4
Frozen	1
Potatoes	3
strawberry	2

#### ***4.1.5 Comparing the Results from the Suggested Model with the Financial Results***

By comparing the results obtained from applying NPV only, as a criterion for evaluation in table1 with the results obtained from including sustainability pillars in the evaluation table 14, the researcher reached to the result that when including sustainability pillars the choice of the projects have been changed.

The first choice from the suggested model is to invest in frozen goods; this is the first choice also when applying the financial model. However, the second choice in the suggested model is to invest in strawberry but the second choice given the financial criteria only is to invest in potatoes. The third choice for the suggested model is to invest in potatoes; while in the financial evaluation the strawberry is the third choice. At the end, the fourth choice by both techniques is the same.



## 5. Conclusions

The following recommendations can be derived from the thesis:

- 1- Capital budgeting is a very critical decision and a vital strategic issue that needs to be developed and scrutinized in a continuous basis. For this, all variables around it should be cleared, measured and evaluated for the decision to be right.
- 2- Sustainability is a growing term that is used nowadays all over the world and in every piece of activity or operation. Sustainability pillars are very meaningful and can be used in the capital budgeting process, operations and daily work.
- 3- The results of applying the suggested model to the case study gave different results when compared to the results obtained from the financial evaluation only. This means that the inclusion of sustainability pillars in the budgeting process can improve the evaluation process.

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## Appendix

### Projected Income Statement for: Frozen

٢٠٢٣	٢٠٢٢	٢٠٢١	٢٠٢٠	٢٠١٩	٢٠١٨	
٢٠٩,٤٣٨,٧٥٠	٢٠١,٦١,٢٠٠	١٩٢,٦٨٣,٦٥٠	١٦٥,٨٧٥,٤٩٠	١٣١,٩٤٦,٤١٣	٨٣,٧٧٥,٥٠٠	<b>Revenues</b>
						<b>Deduct</b>
						<b>materials Raw</b>
١٧,١٩٦,٨٧٥	١٦,٥٠٩,٠٠٠	١٥,٨٢١,١٢٥	١٣,٦١٩,٩٢٥	١٠,٨٣٤,٠٣١	٦,٨٧٨,٧٥٠	<b>Packing materials</b>
٣,٧٤٧,٠٠٠	٣,٥٩٧,١٢٠	٣,٤٤٧,٢٤٠	٢,٩٦٧,٦٢٤	٢,٣٦٠,٦١٠	١,٤٩٨,٨٠٠	<b>Expenses Industrial</b>
٢٠,٩٤٣,٨٧٥	٢٠,١٠٦,١٢٠	١٩,٢٦٨,٣٦٥	١٦,٥٨٧,٥٤٩	١٣,١٩٤,٦٤١	٨,٣٧٧,٥٥٠	<b>costs Activity</b>
١٨٨,٤٩٤,٨٧٥	١٨٠,٩٥٥,٠٨٠	١٧٣,٤١٥,٢٨٥	١٤٩,٢٨٧,٩٤١	١١٨,٧٥١,٧٧١	٧٥,٣٩٧,٩٥٠	<b>Profit Gross</b>
%٩٠.٠	%٩٠.٠	%٩٠.٠	%٩٠.٠	%٩٠.٠	%٩٠.٠	<b>profit Percentage Gross</b>
						<b>Deduct</b>
٩,٥٢٥,٤٦٥	٩,٧٦,١٩٥	٨,٦٤٧,٢٣٨	٨,١٨٧,٦٨٧	٧,٧٢٧,٢٦٥	٧,٢٢٠,٨٠٠	<b>Expenses General</b>
						<b>Depreciation</b>
٦,٩٧٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	٦,٧٢٠,٠٠٠	
١٨١,٥٢٤,٨٧٥	١٥٨,٤٣٨,٨٨٥	١٥١,٣٢٨,٤٧٥	١٢٧,٦٦٠,٢٥٤	٩٧,٥٨٤,٥٠٦	٦١,٤٥٧,١٥٠	<b>Net income before interest</b>
						<b>Interest</b>
٦٥٤,٠٠٠	١,٣٠٨,٠٠٠	١,٩٦٢,٠٠٠	٢,٦١٦,٠٠٠	٣,٢٧٠,٠٠٠		<b>Add</b>
						<b>Revenues Other</b>
						<b>Net income before taxes</b>
١٨٠,٨٧٠,٨٧٥	١٥٧,١٣٠,٨٨٥	١٤٩,٣٦٦,٤٧٥	١٢٥,٠٤٤,٢٥٤	٩٤,٣١٤,٥٠٦	٦١,٤٥٧,١٥٠	
٣٦,١٧٤,١٧٥	٣٥,٣٥٤,٤٤٩	٣٣,٦٠٧,٣٦٥	٢٨,١٣٤,٩٥٧	٢١,٢٢٠,٧٦٤	١٣,٨٢٧,٨٥٩	<b>%٢٢.٥ Taxes</b>
١٤٤,٦٩٦,٧٠٠	١٢١,٧٧٦,٤٣٦	١١٥,٧٥٨,١١٠	٩٦,٩٠٩,٢٩٧	٧٣,٠٩٣,٧٤٢	٤٧,٦٢٩,٢٩١	<b>Income Net</b>

### Cash Flow Statement

Cash flow 2023	Cash flow 2022	Cash flow 2021	Cash flow 2020	Cash flow 2019	Cash flow 2018	
						<b>Cash Inflows</b>
٤١٣,٦٢٣,١٥٢	٢٩٣,٠٢٠,١٠٤	١٨٣,٦٠٣,٤٥٨	٩٤,٨١٦,٤٣٠	٣٣,٤٠٥,٤١٦	٠	<b>Beginning Balance</b>
١٥٧,٠٧٩,٠٦٣	١٥٠,٧٩٥,٩٠٠	١٤٤,٥١٢,٧٣٨	١٢٤,٤٠٦,٦١٨	٩٨,٩٥٩,٨٠٩	٦٢,٨٣١,٦٢٥	<b>Activity Revenues, Accounting Receivable (25% of sales)</b>

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٥٠,٢٦٥,٣٠٠	٤٨,١٧٠,٩١٣	٤١,٤٦٨,٨٧٣	٣٢,٩٨٦,٦٠٣	٢٠,٩٤٣,٨٧٥	.	Accounts receivable collected
.	.	.	.	.	.	Other revenues
.	.	.	.	.	٦٥,٤٠٠,٠٠٠	Loan
.	.	.	.	.	٢٩,٣٠٠,٠٠٠	Self financing
٦٢٠,٤٠٦,٥١٥	٤٩١,٩٨٦,٩١٧	٣٦٩,٥٨٥,٠٦٨	٢٥٢,٢٠٩,٦٥١	١٥٣,٣٠٩,١٠١	١٥٧,٥٣١,٦٢٥	Total cash inflow
.	.	.	.	.	.	Cash Outflows
٢٠,٩٤٣,٨٧٥	٢٠,١٠٦,١٢٠	١٩,٢٦٨,٣٦٥	١٦,٥٨٧,٥٤٩	١٣,١٩٤,٦٤١	٨,٣٧٧,٥٥٠	Activity cost
.	.	.	.	.	.	Paying Accounts payable
٩,٥٢٥,٤٦٥	٩,٠٧٦,١٩٥	٨,٦٤٧,٢٣٨	٨,١٨٧,٦٨٧	٧,٧٢٧,٢٦٥	٧,٢٢٠,٨٠٠	General Expenses
.	.	.	.	.	٨٤,٧٠٠,٠٠٠	Purchasing Fixed Assets
.	.	.	.	.	١٠,٠٠٠,٠٠٠	Change in the working capital
٦٥٤,٠٠٠	١,٣٠٨,٠٠٠	١,٩٦٢,٠٠٠	٢,٦١٦,٠٠٠	٣,٢٧٠,٠٠٠	.	loan Interest
١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	.	Loan Installments
٣٦,١٧٤,١٧٥	٣٥,٣٥٤,٤٤٩	٣٢,٦٠٧,٣٦٠	٢٨,١٣٤,٩٥٧	٢١,٢٢٠,٧٦٤	١٣,٨٢٧,٨٥٩	Taxes
٨٠,٣٧٧,٥١٥	٧٨,٩٢٤,٧٦٤	٧٦,٥٦٤,٩٦٤	٦٨,٦٠٦,١٩٣	٥٨,٤٩٢,٦٧٠	١٢٤,١٢٦,٢٠٩	Total Cash outflow
٥٤٠,٠٢٩,٠٠٠	٤١٣,٠٦٢,١٥٢	٢٩٣,٠٢٠,٠٠٤	١٨٣,٦٠٣,٠٥٨	٩٤,٨١٦,٤٣٠	٣٣,٤٠٥,٤١٦	Net cash flow

## Balance Sheet

2023	2022	2021	2020	2019	2018	
٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	Fixed Assets
٦٧,٤٥٠,٠٠٠	٦٠,٤٨٠,٠٠٠	٤٧,٠٤٠,٠٠٠	٣٢,٦٠٠,٠٠٠	٢٠,١٦٠,٠٠٠	٦,٧٢٠,٠٠٠	Deduct: Accumulated Depreciation
١٧,٢٥٠,٠٠٠	٢٤,٢٢٠,٠٠٠	٣٧,٦٦٠,٠٠٠	٥٢,١٠٠,٠٠٠	٦٤,٥٤٠,٠٠٠	٧٧,٩٨٠,٠٠٠	Net Fixed Assets
٦٧٧,٣١٤,١٥٢	٥٢٥,٦٤٧,٤٥٢	٣٩٠,٤٣١,٠١٧	٢٦١,٢٢٢,٣٣٠	١٥٠,٨٨٣,٠٣٤	٦٤,٣٤٩,٢٩١	Change in working Capital
٦٩٤,٥٦٤,١٥٢	٥٤٩,٨٦٧,٤٥٢	٤٢٨,٠٩١,٠١٧	٣١٢,٣٢٢,٣٣٠	٢١٥,٤٢٣,٠٣٤	١٤٢,٣٢٩,٢٩١	Total invested cost
.	.	.	.	.	.	The investment is financed through
٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	Owners equity
٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	Loan
٥٩٩,٨٦٤,١٥٢	٤٥٥,١٦٧,٤٥٢	٣٣٣,٣٩١,٠١٧	٢١٧,٦٢٢,٣٣٠	١٢٠,٧٢٣,٠٣٤	٤٧,٦٢٩,٢٩١	Retained Earning
٦٩٤,٥٦٤,١٥٢	٥٤٩,٨٦٧,٤٥٢	٤٢٨,٠٩١,٠١٧	٣١٢,٣٢٢,٣٣٠	٢١٥,٤٢٣,٠٣٤	١٤٢,٣٢٩,٢٩١	total invested cost

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### Projected Income Statement for: Potatoes

٢٠٢٣	٢٠٢٢	٢٠٢١	٢٠٢٠	٢٠١٩	٢٠١٨	
٢١١,٥٥٠,٠٠٠	٢٠٢,٦٠٨,٠٠٠	١٩٤,١٦٦,٠٠٠	١٦٧,١٥١,٦٠٠	١٣٢,٩٦١,٥٠٠	٨٤,٤٢٠,٠٠٠	<b>Revenues</b>
						<b>Deduct</b>
٦٩,٣٠٠,٠٠٠	٦٦,٥٢٨,٠٠٠	٦٣,٧٥٦,٠٠٠	٥٤,٨٨٥,٦٠٠	٤٣,٦٥٩,٠٠٠	٢٧,٧٢٠,٠٠٠	<b>materials Raw</b>
٢٨,٧٢١,٨٧٠	٢٧,٥٧٣,٠٠٠	٢٦,٤٢٤,١٢٥	٢٢,٧٤٧,٧٢٥	١٨,٠٩٤,٧٨١	١١,٤٨٨,٧٥٠	<b>materials Packing</b>
٤,٠٠١,٠٧٠	٣,٨٤١,٠٧٢	٣,٦٨٠,٩٨٤	٣,١٦٨,٨٤٧	٢,٥٢٠,٦٧٤	١,٦٠٠,٤٢٨	<b>Expenses Industrial</b>
١٠٢,٠٢٢,٩٤٥	٩٧,٩٤٢,٠٠٢	٩٣,٨٦١,١٠٠	٨٠,٨٠٢,١٧٢	٦٤,٢٧٤,٤٥٥	٤٠,٨٠٩,١٧٨	<b>Activity costs</b>
١٠٩,٠٢٧,٠٥٥	١٠٤,٦٦٥,٩٧٣	١٠٠,٣٠٤,٨٩١	٨٦,٣٤٩,٤٢٨	٦٨,٦٨٧,٠٤٥	٤٣,٦١٠,٨٢٢	<b>Profit Gross</b>
%٥١,٧	%٥١,٧	%٥١,٧	%٥١,٧	%٥١,٧	%٥١,٧	<b>profit Percentage Gross</b>
						<b>Deduct</b>
١١,٠٧٩,٩٧٦	١٠,٥٥٦,٦٨٢	١٠,٠٥٧,٢٢٦	٩,٥٣٠,٥٣٢	٩,٠٠٦,٦٦٥	٨,٤٣٨,٨٠٠	<b>General Expenses</b>
						<b>Depreciation</b>
٦,٩٧٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	١٣,٤٤٠,٠٠٠	٦,٧٢٠,٠٠٠	
١٠٢,٠٥٧,٠٥٥	٨٠,٦٦٩,٢٩١	٧٦,٨٠٧,٦٦٥	٦٣,٣٧٨,٨٩٦	٤٦,٢٤٠,٨٨٠	٢٨,٤٥٢,٠٠٢	<b>Net income before interest</b>
						<b>Interest</b>
						<b>Add</b>
						<b>Revenues Other</b>
١٠١,٤٠٣,٠٥٥	٧٩,٣٦١,٢٩١	٧٤,٨٤٥,٦٦٥	٦٠,٧٦٢,٨٩٦	٤٢,٩٧٠,٨٨٠	٢٨,٤٥٢,٠٠٢	<b>Net income before taxes</b>
						<b>%٢٢,٥ Taxes</b>
٢٠,٢٨٠,٦١١	١٧,٨٥٦,٢٩٠	١٦,٨٤٠,٢٧٥	١٣,٦٧١,٦٥٢	٩,٦٦٨,٤٤٨	٦,٤٠١,٧٠٥	
٨١,١٢٢,٤٤٤	٦١,٥٠٥,٠٠٠	٥٨,٠٠٥,٣٩٠	٤٧,٠٩١,٢٤٤	٣٣,٣٠٢,٤٣٢	٢٢,٠٥٠,٣١٧	<b>Income Net</b>

### Cash Flow Statement

Cash flow 2023	Cash flow 2022	Cash flow 2021	Cash flow 2020	Cash flow 2019	Cash flow 2018	
						<b>Cash Inflows</b>
١٩٦,٠٩٤,٣٨٤	١٣٥,٦٤٦,٨٨٣	٨١,٨١٧,٤٩٣	٤٠,١٠٧,١٢٤	١٤,٥٩٥,٣١٧	٠	<b>Beginning Balance</b>
١٥٨,٢٨٧,٠٠٠	١٥١,٩٥٦,٠٠٠	١٤٥,٦٢٤,٥٠٠	١٢٥,٣٦٣,٧٠٠	٩٩,٧٢١,١٢٥	٦٣,٣١٥,٠٠٠	<b>Activity Revenues, Accounting Receivable (25% of sales)</b>
٥٠,٦٥٢,٠٠٠	٤٨,٥٤١,٥٠٠	٤١,٧٨٧,٩٠٠	٣٣,٢٤٠,٣٧٥	٢١,١٠٥,٠٠٠	٠	<b>Accounts receivable collected</b>

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.	.	.	.	.	.	<b>Other revenues</b>
					٦٥,٤٠٠,٠٠٠	<b>Loan</b>
					٢٩,٣٠٠,٠٠٠	<b>Self financing</b>
٤٠٥,٠٣٣,٨٨٤	٣٣٦,١٤٤,٣٨٣	٢٦٩,٢٢٩,٨٩٣	١٩٨,٧١١,١٩٩	١٣٥,٤٢١,٤٤٢	١٥٨,٠١٥,٠٠٠	<b>Total cash inflow</b>
						<b>Cash Outflows</b>
٨٤,٦٩٧,٩٤٠	٨١,٣١٠,٠٢٧	٧٧,٩٢٢,١٠٩	٦٧,٠٨٠,٧٧٢	٥٣,٣٥٩,٧٠٥	٣٣,٨٧٩,١٧٨	<b>Activity cost</b>
١٦,٦٢٢,٠٠٠	١٥,٩٣٩,٠٠٠	١٣,٧٢١,٤٠٠	١٠,٩١٤,٧٥٠	٦,٩٣٠,٠٠٠		<b>Paying Accounts payable</b>
١١,٠٧٩,٩٧٦	١٠,٥٥٦,٦٨٢	١٠,٠٥٧,٢٢٦	٩,٥٣٠,٥٣٢	٩,٠٠٦,٦٦٥	٨,٤٣٨,٨٠٠	<b>General Expenses</b>
					٨٤,٧٠٠,٠٠٠	<b>Purchasing Fixed Assets</b>
					١٠,٠٠٠,٠٠٠	<b>Change in the working capital</b>
٦٥٤,٠٠٠	١,٣٠٨,٠٠٠	١,٩٦٦,٠٠٠	٢,٦١٦,٠٠٠	٣,٢٧٠,٠٠٠	.	<b>loan Interest</b>
١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠	١٣,٠٨٠,٠٠٠		<b>Loan Installments</b>
٢٠,٢٨٠,٦١١	١٧,٨٥٦,٢٩٠	١٦,٨٤٠,٢٧٥	١٣,٦٧١,٦٥٢	٩,٦٦٨,٤٤٨	٦,٤٠١,٧٠٥	<b>Taxes</b>
١٤٦,٤٢٤,٥٣٢	١٤٠,٠٥٠,٠٠٠	١٣٣,٥٨٣,٠١٠	١١٦,٨٩٣,٧٠٦	٩٥,٣١٤,٣١٨	١٤٣,٤١٩,٦٨٣	<b>Total Cash outflow</b>
٢٥٨,٦٠٩,٣٥٢	١٩٦,٠٩٤,٣٨٤	١٣٥,٦٤٦,٨٨٣	٨١,٨١٧,٤٩٣	٤٠,١٠٧,١٢٤	١٤,٥٩٥,٣١٧	<b>Net cash flow</b>

### Balance Sheet

2023	2022	2021	2020	2019	2018	
٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	٨٤,٧٠٠,٠٠٠	<b>Fixed Assets</b>
٦٧,٤٥٠,٠٠٠	٦٠,٤٨٠,٠٠٠	٤٧,٠٤٠,٠٠٠	٣٣,٦٠٠,٠٠٠	٢٠,١٦٠,٠٠٠	٦,٧٢٠,٠٠٠	<b>Deduct: Accumulated Depreciation</b>
١٧,٢٥٠,٠٠٠	٢٤,٢٢٠,٠٠٠	٣٧,٦٦٠,٠٠٠	٥١,١٠٠,٠٠٠	٦٤,٥٤٠,٠٠٠	٧٧,٩٨٠,٠٠٠	<b>Net Fixed Assets</b>
٣٨٠,٥٢٦,٨٢٨	٢٩٢,٤٣٤,٣٨٤	٢١٧,٤٨٩,٣٨٣	١٤٦,٠٤٣,٩٩٣	٨٥,٥١٢,٧٤٩	٣٨,٧٧٠,٣١٧	<b>Change in working Capital</b>
٣٩٧,٧٧٦,٨٢٨	٣١٦,٦٥٤,٣٨٤	٢٥٥,١٤٩,٣٨٣	١٩٧,١٤٣,٩٩٣	١٥٠,٥٥٢,٧٤٩	١١٦,٧٥٠,٣١٧	<b>Total invested cost</b>
						<b>The investment is financed through</b>
٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	<b>Owners equity</b>
٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	<b>Loan</b>
٣٠٣,٠٧٦,٨٢٨	٢٢١,٩٥٤,٣٨٤	١٦٠,٤٤٩,٣٨٣	١٠٢,٤٤٣,٩٩٣	٥٥,٣٥٢,٧٤٩	٢٢,٠٥٠,٣١٧	<b>Retained Earning</b>
٣٩٧,٧٧٦,٨٢٨	٣١٦,٦٥٤,٣٨٤	٢٥٥,١٤٩,٣٨٣	١٩٧,١٤٣,٩٩٣	١٥٠,٥٥٢,٧٤٩	١١٦,٧٥٠,٣١٧	<b>total invested cost</b>

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### Projected Income Statement for: Strawberry

٢٠٢٣	٢٠٢٢	٢٠٢١	٢٠٢٠	٢٠١٩	٢٠١٨	
٢٥٢,٠٠٠,٠٠٠	٢٤١,٩٢٠,٠٠٠	٢٣١,٨٤٠,٠٠٠	١٩٩,٥٨٤,٠٠٠	١٥٨,٧٦٠,٠٠٠	١٠٠,٨٠٠,٠٠٠	<b>Revenues</b>
.	.	.	.	.	.	<b>Deduct</b>
١٤١,٧٥٠,٠٠٠	١٣٦,٠٨٠,٠٠٠	١٣٠,٤١٠,٠٠٠	١١٢,٢٦٦,٠٠٠	٨٩,٣٠٢,٠٠٠	٥٦,٧٠٠,٠٠٠	<b>materials Raw</b>
١٧,١٩٦,٨٧٥	١٦,٥٠٩,٠٠٠	١٥,٨٢١,١٢٥	١٣,٦١٩,٩٢٥	١٠,٨٣٤,٠٢١	٦,٨٧٨,٧٥٠	<b>Packing materials</b>
٣,٢٦٦,٢٥٠	٣,١٣٥,٦٠٠	٣,٠٥٤,٩٥٠	٢,٥٨٦,٨٧٠	٢,٥٧٧,٧٣٨	١,٣٠٦,٥٠٠	<b>Expenses Industrial</b>
١٦٢,٢١٣,١٢٠	١٥٥,٧٢٤,٦٠٠	١٤٩,٢٣٦,٠٧٠	١٢٨,٤٧٢,٧٩٠	١٠٢,١٩٤,٢٦٩	٦٤,٨٨٥,٢٥٠	<b>costs Activity</b>
٨٩,٧٨٦,٨٧٥	٨٦,١٩٥,٤٠٠	٨٢,٦٠٣,٩٢٥	٧١,١١١,٢٠٥	٥٦,٥٦٥,٧٣١	٣٥,٩١٤,٧٥٠	<b>Profit Gross</b>
%٣٥.٦	%٣٥.٦	%٣٥.٦	%٣٥.٦	%٣٥.٦	%٣٥.٦	<b>profit Percentage Gross</b>
						<b>Deduct</b>
٩,٩٥٤,٢٩٦	٩,٤٨٤,٦٠٥	٩,٠٣٦,٢٠٠	٨,٥٥٨,١٢٧	٨,٠٨٠,٠٦٥	٧,٥٥٦,٨٠٠	<b>Expenses General</b>
٦,٩٧٠,٠٠٠	٤,٢٤٠,٠٠٠	٤,٢٤٠,٠٠٠	٤,٢٤٠,٠٠٠	٤,٢٤٠,٠٠٠	٢,١٢٠,٠٠٠	<b>Depreciation</b>
٨٢,٨١٦,٨٧٥	٧٢,٤٧٠,٧٩٥	٦٩,٣٢٧,٧٢٥	٥٨,٣١٣,٠٧٨	٤٤,٢٤٥,٦٦٦	٢٦,٢٣٧,٩٥٠	<b>Net income before interest</b>
١٩٤,٠٠٠	٣٨٨,٠٠٠	٥٨٢,٠٠٠	٧٧٦,٠٠٠	٩٧٠,٠٠٠		<b>Interest</b>
.						<b>Add</b>
٨٢,٦٢٢,٨٧٥	٧٢,٨٢,٧٩٥	٦٨,٧٤٥,٧٢٥	٥٧,٥٣٧,٠٧٨	٤٣,٢٧٥,٦٦٦	٢٦,٢٣٧,٩٥٠	<b>Revenues Other</b>
١٦,٥٢٤,٥٧٥	١٦,٢١٨,٦٢٩	١٥,٤٦٧,٧٨٨	١٢,٩٤٥,٨٤٣	٩,٧٣٧,٠٢٥	٥,٩٠٣,٥٣٩	<b>Net income before taxes</b>
٦٦,٠٩٨,٣٠٠	٥٥,٨٦٤,١٦٦	٥٣,٢٧٧,٩٣٧	٤٤,٥٩١,٢٣٥	٣٣,٥٣٨,٦٤١	٢٠,٣٣٤,٤١١	<b>%٢٢.٥ Taxes</b>
						<b>Income Net</b>

### Cash Flow Statement

٢٠٢٣	٢٠٢٢	٢٠٢١	٢٠٢٠	٢٠١٩	٢٠١٨	
						<b>Cash Inflows</b>
١٨٤,٧٠٦,٣٩٠	١٢٩,٥٨٤,٧٢٠	٧٩,٤٧٤,٧٨٨	٣٨,٩٨٨,٦٧٨	١١,٤٢٩,٤١١	.	<b>Beginning Balance</b>
١٨٩,٠٠٠,٠٠٠	١٨١,٤٤٠,٠٠٠	١٧٣,٨٨٠,٠٠٠	١٤٩,٦٨٨,٠٠٠	١١٩,٠٧٠,٠٠٠	٧٥,٦٠٠,٠٠٠	<b>Activity Revenues, Accounting Receivable (25% of sales)</b>
٦٠,٤٨٠,٠٠٠	٥٧,٩٦٠,٠٠٠	٤٩,٨٩٦,٠٠٠	٣٩,٦٩٠,٠٠٠	٢٥,٢٠٠,٠٠٠	.	<b>Accounts receivable collected</b>
.	.	.	.	.	.	<b>Other revenues</b>
					١٩,٤٠٠,٠٠٠	<b>Loan</b>
					٢٩,٣٠٠,٠٠٠	<b>Self financing</b>
٤٣٤,١٨٦,٣٩٠	٣٦٨,٩٨٤,٧٢٠	٣٠٣,٢٥٠,٧٨٨	٢٢٨,٣٦٦,٦٧٨	١٥٥,٦٩٩,٤١١	١٢٤,٣٠٠,٠٠٠	<b>Total cash inflow</b>
.	.	٨	٨	١	.	<b>Cash Outflows</b>
١٢٦,٧٧٥,٦٢٠	١٢١,٧٠٤,٦٠٠	١١٦,٦٣٣,٥٧٠	١٠٠,٤٠٦,٢٩٠	٧٩,٨٦٨,٦٤٤	٥٠,٧١٠,٢٥٠	<b>Activity cost</b>
٣٤,٠٢٠,٠٠٠	٣٢,٦٠٢,٥٠٠	٢٨,٠٦٦,٥٠٠	٢٢,٣٢٥,٦٢٥	١٤,١٧٥,٠٠٠		<b>Paying Accounts payable</b>

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٩,٩٥٤,٢٩٦	٩,٤٨٤,٦٠٥	٩,٠٣٦,٢٠٠	٨,٥٥٨,١٢٧	٨,٠٨٠,٠٦٥	٧,٥٥٦,٨٠٠	<b>General Expenses</b>
					٣٨,٧٠٠,٠٠٠	<b>Purchasing Fixed Assets</b>
	.	.	.		١٠,٠٠٠,٠٠٠	<b>Change in the working capital</b>
١٩٤,٠٠٠	٣٨٨,٠٠٠	٥٨٢,٠٠٠	٧٧٦,٠٠٠	٩٧٠,٠٠٠	.	<b>loan Interest</b>
٣,٨٨٠,٠٠٠	٣,٨٨٠,٠٠٠	٣,٨٨٠,٠٠٠	٣,٨٨٠,٠٠٠	٣,٨٨٠,٠٠٠		<b>Loan Installments</b>
١٦,٥٢٤,٥٧٥	١٦,٢١٨,٦٢٩	١٥,٤٦٧,٧٨٨	١٢,٩٤٥,٨٤٣	٩,٧٣٧,٠٢٥	٥,٩٠٣,٥٣٩	<b>Taxes</b>
١٩١,٣٤٨,٤٩	١٨٤,٢٧٨,٣٣	١٧٣,٦٦٦,٠٦	١٤٨,٨٩١,٨٩	١١٦,٧١٠,٧٣	١١٢,٨٧٠,٥٨	<b>Total Cash outflow</b>
٦	٤	٣	.	٤	٩	
٢٤٢,٨٣٧,٨٩	١٨٤,٧٠٦,٣٩	١٢٩,٥٨٤,٧٢	٧٩,٤٧٤,٧٨٨	٣٨,٩٨٨,٦٧٨	١١,٤٢٩,٤١١	<b>Net cash flow</b>
٥	.	٥				

### Balance Sheet

2023	2022	2021	2020	2019	2018	
٣٨,٧٠٠,٠٠٠	٣٨,٧٠٠,٠٠٠	٣٨,٧٠٠,٠٠٠	٣٨,٧٠٠,٠٠٠	٣٨,٧٠٠,٠٠٠	٣٨,٧٠٠,٠٠٠	<b>Fixed Assets</b>
٢٦,٠٥٠,٠٠٠	١٩,٠٨٠,٠٠٠	١٤,٨٤٠,٠٠٠	١٠,٦٠٠,٠٠٠	٦,٣٦٠,٠٠٠	٢,١٢٠,٠٠٠	<b>Deduct: Accumulated Depreciation</b>
١٢,٦٥٠,٠٠٠	١٩,٦٢٠,٠٠٠	٢٣,٨٦٠,٠٠٠	٢٨,١٠٠,٠٠٠	٣٢,٣٤٠,٠٠٠	٣٦,٥٨٠,٠٠٠	<b>Net Fixed Assets</b>
٣٠٩,٧٥٤,٦٩	٢٣٦,٦٨٦,٣٩	١٧٦,٥٨٢,٢٢	١١٩,٠٦٤,٢٨	٧٠,٢٣٣,٠٥٣	٣٢,٤٥٤,٤١١	<b>Change in working Capital</b>
٣٢٢,٤٠٤,٦٩	٢٥٦,٣٠٦,٣٩	٢٠٠,٤٤٢,٢٢	١٤٧,١٦٤,٢٨	١٠٢,٥٧٣,٠٥	٦٩,٠٣٤,٤١١	<b>Total invested cost</b>
.	.	٥	٨	٣	٦٩,٠٣٤,٤١١	
						<b>The investment is financed through</b>
٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	٢٩,٣٠٠,٠٠٠	<b>Owners equity</b>
١٩,٤٠٠,٠٠٠	١٩,٤٠٠,٠٠٠	١٩,٤٠٠,٠٠٠	١٩,٤٠٠,٠٠٠	١٩,٤٠٠,٠٠٠	١٩,٤٠٠,٠٠٠	<b>Loans</b>
٢٧٣,٧٠٤,٦٩	٢٠٧,٦٠٦,٣٩	١٥١,٧٤٢,٢٢	٩٨,٤٦٤,٢٨٨	٥٣,٨٧٣,٠٥٣	٢٠,٣٣٤,٤١١	<b>Retained Earning</b>
.	.	٥	٩٨,٤٦٤,٢٨٨	٥٣,٨٧٣,٠٥٣	٢٠,٣٣٤,٤١١	
٣٢٢,٤٠٤,٦٩	٢٥٦,٣٠٦,٣٩	٢٠٠,٤٤٢,٢٢	١٤٧,١٦٤,٢٨	١٠٢,٥٧٣,٠٥	٦٩,٠٣٤,٤١١	<b>total invested cost</b>
.	.	٥	٨	٣	٦٩,٠٣٤,٤١١	

### Projected Income Statement for: All

٢٠٢٣	٢٠٢٢	٢٠٢١	٢٠٢٠	٢٠١٩	٢٠١٨	
٢١١,٨٧٥,٠	#####	١٩٤,٩٢٥,٠	١٦٧,٨٠٥,٠	١٣٣,٤٨١,٢	٨٤,٧٥٥,٠٠	<b>Revenues</b>
٠٠		٠٠	٠٠	٥٠	.	
						<b>Deduct</b>
١١٣,٤٧٥,٠	١٠٨,٩٣٦,٠	١٠٤,٣٩٧,٠	٨٩,٨٧٢,٢٠	٧١,٤٨٩,٢٥	٤٥,٣٩٠,٠٠	<b>materials Raw</b>
٠٠	٠٠	٠٠	.	.	.	

## Evaluating Investment Projects by Embedding Sustainability

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١٧,١٩٦,٨٧ ٠	١٦,٥٠٩,٠٠ ٠	١٥,٨٢١,١٢ ٠	١٣,٦١٩,٩٢ ٠	١٠,٨٣٤,٠٣ ١	٦,٨٧٨,٧٥٠	<b>Packing materials</b>
<u>٣,٧٥٩,٥٠٠</u>	<u>٣,٦٠٩,١٢٠</u>	<u>٣,٤٥٨,٧٤٠</u>	<u>٢,٩٧٧,٥٢٤</u>	<u>٢,٣٦٨,٤٨٥</u>	<u>١,٥٠٣,٨٠٠</u>	<b>Expenses Industrial</b>
١٣٤,٤٣١,٣ ٧٥	١٢٩,٠٥٤,١ ٢٠	١٢٣,٦٧٦,٨ ٦٥	١٠٦,٤٦٩,٦ ٤٩	٨٤,٦٩١,٧٦ ٦	٥٣,٧٧٢,٥٥ ٠	<b>costs Activity</b>
٧٧,٤٤٣,٦٢ ٠	٧٤,٣٤٥,٨٨ ٠	٧١,٢٤٨,١٣ ٠	٦١,٣٣٥,٣٥ ١	٤٨,٧٨٩,٤٨ ٤	٣٠,٩٧٧,٤٥ ٠	<b>Profit Gross</b>
%٣٦,٦	%٣٦,٦	%٣٦,٦	%٣٦,٦	%٣٦,٦	%٣٦,٦	<b>profit Percentage Gross</b>
						<b><u>Deduct</u></b>
١١,٠١٨,٧١ ٤	١٠,٤٩٨,٣٣ ٨	١٠,٠٠١,٦٦ ٠	٩,٤٧٧,٦١٢	٨,٩٥٥,٧٦٥	٨,٣٩٠,٨٠٠	<b>Expenses General</b>
٦,٩٧٠,٠٠٠	١٣,٤٤٠,٠٠ ٠	١٣,٤٤٠,٠٠ ٠	١٣,٤٤٠,٠٠ ٠	١٣,٤٤٠,٠٠ ٠	٦,٧٢٠,٠٠٠	<b>Depreciation</b>
٧٠,٤٧٣,٦٢ ٥	٥٠,٤٠٧,٥٤ ٢	٤٧,٨٠٦,٤٧ ٥	٣٨,٤١٧,٧٣ ٩	٢٦,٣٩٣,٧١ ٩	١٥,٨٦٦,٦٥ ٠	<b>Net income before interest</b>
٦٥٤,٠٠٠	١,٣٠٨,٠٠٠	١,٩٦٢,٠٠٠	٢,٦١٦,٠٠٠	٣,٢٧٠,٠٠٠		<b>Interest</b>
						<b><u>Add</u></b>
٠						<b>Revenues Other</b>
٦٩,٨١٩,٦٢ ٥	٤٩,٠٩٩,٥٤ ٢	٤٥,٨٤٤,٤٧ ٥	٣٥,٨٠١,٧٣ ٩	٢٣,١٢٣,٧١ ٩	١٥,٨٦٦,٦٥ ٠	<b>Net income before taxes</b>
١٣,٩٦٣,٩٢ ٥	١١,٠٤٧,٣٩ ٧	١٠,٣١٥,٠٠ ٧	٨,٠٥٥,٣٩١	٥,٢٠٢,٨٣٧	٣,٥٦٩,٩٩٦	<b>%٢٢,٥ Taxes</b>
٥٥,٨٥٥,٧٠ ٠	٣٨,٠٥٢,١٤ ٥	٣٥,٥٢٩,٤٦ ٨	٢٧,٧٤٦,٣٤ ٨	١٧,٩٢٠,٨٨ ٢	١٢,٢٩٦,٦٥ ٤	<b>Income Net</b>

### Cash Flow Statement

Cash flow 2023	Cash flow 2022	Cash flow 2021	Cash flow 2020	Cash flow 2019	Cash flow 2018	
						<b><u>Cash Inflows</u></b>
١١٦,٠٨٩,٤ ٩٧	٧٨,٦٦١,٣٥ ٢	٤٥,٩٢٠,٦٨ ٤	٢١,٧٩٩,٥٣ ٦	٩,١٧٦,٦٥٤	٠	<b>Beginning Balance</b>
١٥٨,٩٠٦,٦ ٥٠	١٥٢,٥٥٠,٠ ٠٠	١٤٦,١٩٣,٧ ٥٠	١٢٥,٨٥٣,٧ ٥٠	١٠٠,١١٠,٩ ٣٨	٦٣,٥٦٢,٥٠ ٠	<b>Activity Revenues, Accounting Receivable (25% of sales)</b>
٥٠,٨٥٠,٠٠ ٠	٤٨,٧٣١,٢٥ ٠	٤١,٩٥١,٢٥ ٠	٣٣,٣٧٠,٣١ ٣	٢١,١٨٧,٥٠ ٠	٠	<b>Accounts receivable collected</b>
٠	٠	٠	٠	٠	٠	<b>Other revenues</b>
					٦٥,٤٠٠,٠٠ ٠	<b>Loan</b>
					٢٩,٣٠٠,٠٠	<b>Self financing</b>

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٣٢٥,٨٤٥,٧ ٤٧	٢٧٩,٩٤٢,٦ ٠٢	٢٣٤,٠٦٥,٦ ٨٤	١٨١,٠٢٣,٥ ٩٨	١٣٠,٤٧٥,٠ ٩١	١٥٨,٢٦٢,٥ ٠٠	
						<b>Total cash inflow</b>
						<b>Cash Outflows</b>
١٠٦,٠٦٢,٦ ٢٥	١٠١,٨٢,١ ٢٠	٩٧,٥٧٧,٦١ ٥	٨٤,٠٠١,٥٩ ٩	٦٦,٨١٩,٤٥ ٤	٤٢,٤٢٥,٠٥ ٠	<b>Activity cost</b>
٢٧,٢٣٤,٠٠ ٠	٢٦,٠٩٩,٢٥ ٠	٢٢,٤٦٨,٠٥ ٠	١٧,٨٧٢,٣١ ٣	١١,٣٤٧,٥٠ ٠		<b>Paying Accounts payable</b>
١١,٠١٨,٧١ ٤	١٠,٤٩٨,٣٣ ٨	١٠,٠٠١,٦٦ ٠	٩,٤٧٧,٦١٢	٨,٩٥٥,٧٦٥	٨,٣٩٠,٨٠٠	<b>General Expenses</b>
					٨٤,٧٠٠,٠٠ ٠	<b>Purchasing Fixed Assets</b>
					١٠,٠٠٠,٠٠ ٠	<b>Change in the working capital</b>
٦٥٤,٠٠٠	١,٣٠٨,٠٠٠	١,٩٦٢,٠٠٠	٢,٦١٦,٠٠٠	٣,٢٧٠,٠٠٠	٠	<b>loan Interest</b>
١٣,٠٨٠,٠٠ ٠	١٣,٠٨٠,٠٠ ٠	١٣,٠٨٠,٠٠ ٠	١٣,٠٨٠,٠٠ ٠	١٣,٠٨٠,٠٠ ٠		<b>Loan Installments</b>
١٣,٩٦٣,٩٢ ٥	١١,٠٤٧,٣٩ ٧	١٠,٣١٥,٠٠ ٧	٨,٠٥٥,٣٩١	٥,٢٠٢,٨٣٧	٣,٥٦٩,٩٩٦	<b>Taxes</b>
١٧٢,٠١٣,٢ ٦٤	١٦٣,٨٥٣,١ ٠٥	١٥٥,٤٠٤,٣ ٣٢	١٣٥,١٠٢,٩ ١٥	١٠٨,٦٧٥,٥ ٥٥	١٤٩,٠٨٥,٨ ٤٦	<b>Total Cash outflow</b>
١٥٣,٨٣٢,٤ ٨٣	١١٦,٠٨٩,٤ ٩٧	٧٨,٦٦١,٣٥ ٢	٤٥,٩٢٠,٦٨ ٤	٢١,٧٩٩,٥٣ ٦	٩,١٧٦,٦٥٤	<b>Net cash flow</b>

### Balance Sheet

2023	2022	2021	2020	2019	2018	
٨٤,٧٠٠,٠٠ ٠	٨٤,٧٠٠,٠٠ ٠	٨٤,٧٠٠,٠٠ ٠	٨٤,٧٠٠,٠٠ ٠	٨٤,٧٠٠,٠٠ ٠	٨٤,٧٠٠,٠٠ ٠	<b>Fixed Assets</b>
٦٧,٤٥٠,٠٠ ٠	٦٠,٤٨٠,٠٠ ٠	٤٧,٠٤٠,٠٠ ٠	٣٣,٦٠٠,٠٠ ٠	٢٠,١٦٠,٠٠ ٠	٦,٧٢٠,٠٠٠ ٠	<b>Deduct: Accumulated Depreciation</b>
١٧,٢٥٠,٠٠ ٠	٢٤,٢٢٠,٠٠ ٠	٣٧,٦٦٠,٠٠ ٠	٥١,١٠٠,٠٠ ٠	٦٤,٥٤٠,٠٠ ٠	٧٧,٩٨٠,٠٠ ٠	<b>Net Fixed Assets</b>
٢٦٤,٨٥١,١ ٩٧	٢٠٢,٠٢٥,٤ ٩٧	١٥٠,٥٣٣,٣ ٥٢	١٠١,٥٦٣,٨ ٨٤	٦٠,٣٧٧,٥٣ ٦	٢٩,٠١٦,٦٥ ٤	<b>Change in working Capital</b>
٢٨٢,١٠١,١ ٩٧	٢٢٦,٢٤٥,٤ ٩٧	١٨٨,١٩٣,٣ ٥٢	١٥٢,٦٦٣,٨ ٨٤	١٢٤,٩١٧,٥ ٣٦	١٠٦,٩٩٦,٦ ٥٤	<b>Total invested cost</b>
						<b>The investment is financed through</b>
٢٩,٣٠٠,٠٠ ٠	٢٩,٣٠٠,٠٠ ٠	٢٩,٣٠٠,٠٠ ٠	٢٩,٣٠٠,٠٠ ٠	٢٩,٣٠٠,٠٠ ٠	٢٩,٣٠٠,٠٠ ٠	<b>Owners equity</b>

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٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	٦٥,٤٠٠,٠٠٠	<b>Loans</b>
١٨٧,٤٠١,١٩٧	١٣١,٥٤٥,٤٩٧	٩٣,٤٩٣,٣٠٢	٥٧,٩٦٣,٨٨٤	٣٠,٢١٧,٥٣٦	١٢,٢٩٦,٦٠٤	<b>Retained Earning</b>
٢٨٢,١٠١,١٩٧	٢٢٦,٢٤٥,٤٩٧	١٨٨,١٩٣,٣٠٢	١٥٢,٦٦٣,٨٨٤	١٢٤,٩١٧,٥٣٦	١٠٦,٩٩٦,٦٠٤	<b>total invested cost</b>

## 4.1 CO<sub>2</sub> Emissions from Fuel Use

Fuel Types	Basic Unit -Liters (1)				Emission Factors (2)	Amount of carbon dioxide released (1)x(2)			
	Strawberry	Potatoes	Frozen	All	tCO <sub>2</sub> /Liter	strawberry	potatoes	Frozen	All
Petrol	270,000	432,000	360,000	396,000	0.00222	599.4	959.04	799.2	879.12

## 4.2 Electricity generation

Basic Units (kWh) (1)				CO <sub>2</sub> EF (tCO <sub>2</sub> /kWh) (2)	Total CO <sub>2</sub> from Electricity Use (1)x(2)			
strawberry	potatoes	Frozen	All		strawberry	potatoes	Frozen	All
3300000	4536000	3780000	4347000	0.000561	1851.3	2544.696	2120.58	2438.667

## 4.5 unit Kilometers transport

Project /Basic Units -Miles (1)				Transport Mode	tCO <sub>2</sub> /mile (2)	Amount of carbon dioxide released (1)x(2)			
Strawberry	Potatoes	Frozen	All			Strawberry	Potatoes	Frozen	All
961,200.00	961,200.00	97,200.00	961,200.00	Petrol	0.000299	287.40	287.3988	29.0628	287.3988
72,000.00	72,000.00	-	72,000.00						

## 4.7 total Global Warming Impact in CO<sub>2</sub> equivalent

Worksheet	GHG Source	Tones of CO <sub>2</sub> equivalent	Tones of CO <sub>2</sub> equivalent			
			Strawberry	Potatoes	Frozen	All

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4.1	Fuel Combustion	599.4	599.4	959.04	799.2	879.12
4.2	Electricity	1851.3	1851.3	2544.696	2120.58	2438.667
4.5	Unit Kilometer transport	305.4708	305.4708	305.4708	29.0628	305.4708
Total CO <sub>2</sub>		2756.170	2756.1708	3809.206	2948.842	3623.2578
		8		8	8	