# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE UKRAINIAN-AMERICAN CONCORDIA UNIVERSITY

School of Management and Business Department of International Economic Relations, Business & Management

Bachelor's Qualification Work

# Sustainable business opportunities for the business development

(based on the Diana K case)

Bachelor's student of

Field of Study 29 – International

Relations

Specialty 292 – International Economic Relations Educational program – International Business Naser Kristina

Research supervisor

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(First Name, Last Name) Ph.D. in Economics

#### Abstract

The work is dedicated to examining the problem of climate change and it's impact on the overall economy, with a particular focus on the restaurant industry. The paper summarizes theoretical approaches to how sustainability can benefit all business sectors and the planet as a whole, based on sociological surveys, studies, research, and calculations. The significance of sustainable development in various social and economic spheres is highlighted. The author identifies the most challenging domains in the restaurant sector where the implementation of sustainable practices and innovations is essential. An analysis is conducted on how sustainable business practices can benefit the overall economy and the restaurant industry. The business that the author based their research on is «Dubai Resturant», a sole proprietorship business located in Kyiv, Ukraine. Creator generated a sustainable business strategy, sustainability roadmap and provided different recommendations and insights on increasing the profit, attracting new clientele, boosting the level of employee participation and saving costs for «Dubai Resturant». Additionally, author created a «sustainable business plan» for the entity with a market analysis, financial plan, marketing strategy and a business model. The paper concludes by evaluating sustainable business opportunities for the business development.

*Keywords:* sustainability, sustainable development, sustainable innovations, restaurant industry, climate change, business development, business strategy.

#### Анотація

Робота присвячена вивченню проблеми зміни клімату та її впливу на економіку в цілому, з особливим акцентом на ресторанному бізнесі. Робота узагальнює теоретичні підходи до того, як стійкий розвиток може принести користь усім секторам бізнесу та планеті в цілому, спираючись на соціологічні дослідження, опитування, аналитіку та розрахунки. Висвітлено значення сталого розвитку в різних соціально-економічних сферах. Автор визначає найбільш складні сфери в ресторанному секторі, де впровадження стійких практик та інновацій є важливим. Проводиться аналіз того, як стійка бізнес-практика може принести користь загальній економіці та ресторанному бізнесу. Підприємство, на якому автор грунтувався у своєму дослідженні, — приватне підприємство «Ресторан Дубай», розташоване в Україні, місто Київ. Автор створив стратегію сталого бізнесу, настанови для сталого розвитку та надав різні рекомендації та ідеї щодо збільшення прибутку, залучення нових клієнтів, підвищення рівня участі працівників та зменшення витрат для ресторану. Крім того, автор створив «стійкий бізнес-план» для підприємства з аналізом ринку, фінансовим планом, маркетинговою стратегією та бізнесмоделлю. Документ завершується оцінкою стійких бізнес-можливостей для розвитку бізнесу.

*Ключові слова:* стійкість, сталий розвиток, стійкі інновації, індустрія гостинності, зміна клімату, розвиток бізнесу, бізнес-стратегія.

# PHEE-institute «Ukrainian-American Concordia University»

### School of Management and Business Department of International Economic Relations, Business and Management

Educational level: Specialty: Educational Program bachelor degree 292 "International Economic Relations" "International Business"

**APPROVED** Head of Department Prof. Liubov Zharova

TASK FOR BACHELOR'S QUALIFICATION WORK

Naser Kristina (Name, Surname)

1. Topic of the work: <u>Sustainable business opportunities for the business development (based on the Diana K case)Supply</u>

Supervisor of the work <u>Liubov Zharova</u>, Dr of Sci in Economics.

(surname, name, degree, academic rank)

Which approved by Order of University from "22" September 2022 № 22-09/2022-2c

2. Deadline for bachelor's qualification work submission "23" April 2023

3. Data-out to the bachelor's qualification work

Materials from internship received during consultation with representatives of the company. Information from open resources in the Internet, official reporting of financial and economic activities of the enterprise.

# 4. Contents of the explanatory note (list of issues to be developed).

There are main topics a student should develop in this work:

- Sustainability as a new framework for the business.
- Restaurant industry in the scope of sustainability
- Threats and opportunities for the restaurant business
- Sustainable business (case of Dubai restaurant)
- Increasing business effectiveness and possibilities through sustainability
- Best sustainable innovations for restaurants

# 5. List of graphic material (with exact indication of any mandatory drawings)

Graphs and figures for analysis of economical and statistical information on the company and its development, visualization of mechanism of development, etc.

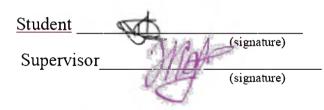
| Part of the project | Surname, name, position                  | Signature |          |
|---------------------|--|-----------|----------|
|                     |  | Given     | Accepted |
| 1                   | Liubov Zharova, Dr. of Sci. in Economics | ST        | Mat      |
| 2                   | Liubov Zharova, Dr. of Sci. in Economics | ST.       | Mat      |
| 3                   | Liubov Zharova, Dr. of Sci. in Economics | ST.       | The      |

#### 6. Consultants for parts of the work

#### 7. Date of issue of the assignment

|    | Time Schedule   |            | 1       |
|----|---|------------|---------|
| N⁰ | The title of the parts of the bachelor's qualification work | Deadlines  | Notes   |
| 1. | I chapter   | 31.12.2022 | In time |
| 2. | II chapter  | 20.02.2023 | In time |
| 3. | III chapter   | 11.04.2023 | In time |
| 4. | Introduction, conclusions, summary                          | 23.04.2023 | In time |
| 5. | Pre-defense   | 26.04.2023 | In time |





#### Conclusions:

The work was completed according to the schedule and in full. The text of the study has a logical structure, and the list of references indicates its thoroughness. The work aims to explore and evaluate how sustainability can benefit the entire planet and all business sectors. The focus is on the restaurant business. As part of the work, there was a study of the relationship between the development of the restaurant business and other industries from sustainable development and sustainable development benefits from them. Attention is paid to the analysis of the impact of sustainable growth opportunities on a specific subject of the restaurant business. (using the example of Septime in Paris, France). Information about how the average consumer feels about the importance of sustainable development in the restaurant industry and the food sector as a whole has been analyzed, and developed a roadmap for implementing sustainable development for the restaurant. The work was performed at a high level and deserved an "Excellent" rating.

Supervisor

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#### **INTRODUCTION**

It is not a surprise that currently, our world is on the edge of a global climate catastrophe. Everything is impacted by climate change, including global affairs and the economy. Societies and lives are shaped by it, and it essentially affects every aspect of our lives. Before explaining why sustainability is essential, I would like to explain what exactly is climate change and how it affects us since, unfortunately, many people still 'can't grasp the fact that this crisis is very much real and has a negative effect on our existence, our everyday lives and even our economy.

The climate of the Earth is changing, and it is anticipated that this pattern will likely over the next generation. The amount of  $CO_2$  gases released globally and the lack of accuracy in the Earth's climate's sensitivity to those emission levels become the crucial dimensions of the extent and severity of climate crisis/change beyond the next few decades. According to the Climate Change Knowledge Portal, «world estimated mean temperature increase might be kept to 2°C or below with considerable reductions in greenhouse gas emissions. -industrial times, however, the increase in annual average world temperatures relative to pre-industrial times might reach 5°C or more by the end of this century if significant reductions in these pollutants are not implemented».

The effects of climate change threaten almost every industry, either directly or indirectly. The immediate dangers posed by the external surroundings constitute the external risks associated with climate change. Flooding, hurricanes, droughts, and wildfires are all signs of the climate catastrophe and can all lead to injury land, and transportation infrastructure. Moreover, climate change negatively affects all the businesses and is one of the main threats to a stable economy. I will provide a more in-depth explanation to this statement : people are less productive and are able to work less during extreme weather. Millions of people are deeply affected by hurricanes, storms, and typhoons, which further leave individuals in severe poverty and devastation, after remorselessly destroying their neighborhoods and villages. I would also like to mention other social and economic impacts that the climate change is causing or will cause shortly, as shown in the figure below.

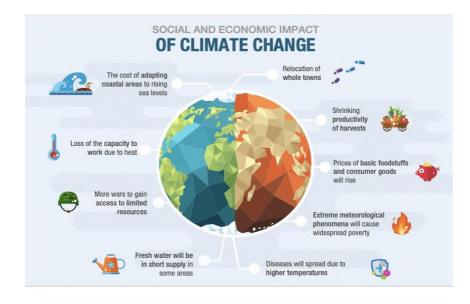


Fig. 1.1

Social And Economic Impact Of Climate Change

Source : https://www.iberdrola.com/environment/impacts-of-climate-change

Consequently, by meeting our current requirements without compromising the potential of future generations to meet their own, green solutions, commodities, developments, and services are created. The environment is recognised as a finite resource in sustainable development. For the sake of the world, our environment, humanity, and all other living things, it is crucial to use the environment and its resources wisely while also safeguarding them. Sustainable lifestyle choices enhance our quality of life, preserve our ecosystem, and conserve the environment for future generations. Furthermore, we, as a current generation, must be extremely aware of our actions and their consequences on our future.

Manufacturing, logistics, and customer service are all included in a comprehensive approach to sustainability in the corporate world. Reducing emissions and being more sustainable and environmentally oriented has advantages for the business's long-term health . I will explain the immediate advantages of raising environmental recognition in more detail in the paper.

The **relevance** of this work is the extensive and quickening effects of climate change and extreme weather, which impact all aspects of life for every living organism and make it practically impossible to stabilise our economy and make a safe environment for every industry in the business world. The **aim of the bachelor thesis** is to study and analyse sustainability and sustainable development, as well as how they can affect and enhance the business world and the restaurant industry business.

The bachelor's thesis aims to research and evaluate how sustainability can benefit the entire planet and all business sectors. However, most of work will be devoted to the restaurant business and sustainable opportunities for the restaurant industry growth, development, opportunities and benefits. Additionally, the value of sustainability has recently emerged as a key factor in business growth.

The following evaluations were made to accomplish this task:

• develop an understanding of climate change, sustainability ;

• uncover how the development of the restaurant business, as well as other industries, is affected by and benefits from sustainability and sustainable developments;

• study the impact of sustainable growth opportunities on a concrete restaurant business entity. (on the example of Septime in Paris, France);

• provide understanding of opportunities, advantages and disadvantages of sustainability in a''' restaurant on example of «Dubai Restaurant» - business entity where I completed my internship ;

• conduct research into understanding how sustainability can help to further improve and expand the restaurant business industry ;

• collect and evaluate the leading sustainable restaurant innovations ;

• assemble information on how the average consumer feels about the significance of sustainability in the restaurant industry and in the food sector overall.

This work's **methodology** is supported by peer-reviewed academic articles, wellregarded online publications, several diagrams, tables, and graphs, as well as personal statistics/calculations and analyses.

The study's primary **research objects** include sustainability within its context and the significance of sustainable business developments in the restaurant sector.

The **research's subject** is sustainability in Dubai Restaurant. **Bachelor thesis consists of an introduction, 3 chapters, conclusion and a list of references.** 

#### **CHAPTER 1.**

#### SUSTAINABILITY AS A NEW FRAMEWORK FOR THE BUSINESS

#### **1.1** Sustainability as an imperative for industries developments

Unregulated capitalism fundamentally originated due manufacturing to organisations incorporating tremendous amounts of petroleum-based fossil fuels to expand and develop. There are numerous examples and documented cases, including the automotive, chemical, and electric industries, and the oil industry. Current environmental disasters have indeed been significantly influenced by the use of fossil fuels and the destruction of natural resources. Looking back at the nineteenth century, we can see from various works of societal, economic, and environmental historians that have increasingly demonstrated the ideas and distress about environmental damage and protection of the environment at that The concept of sustainability development emerged in the late 20th century as a response to concerns about environmental degradation, social inequality, and economic instability. The idea of sustainability is based on the recognition that human activities must be compatible with the natural systems that support life on Earth, and that economic and social progress must be achieved in a way that does not compromise the ability of future generations to meet their own needs.

The modern sustainability movement can be traced back to the United Nations Conference on the Human Environment in Stockholm in 1972, which marked the first global effort to address environmental issues on a large scale. The conference highlighted the interconnectedness of environmental, economic, and social issues, and called for a new approach to development that would prioritize sustainability and the preservation of natural resources. In 1987, the Brundtland Commission, formally known as the World Commission on Environment and Development, released its report "Our Common Future," which defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The report emphasized the importance of balancing economic growth, social equity, and environmental protection, and called for a global transition to more sustainable forms of development. Since then, sustainability development has become a central focus of international policy and planning efforts. In 1992, the United Nations Conference on Environment and Development, also known as the Earth Summit, produced the Rio Declaration on Environment and Development, which called for sustainable development as a key goal of global policy. The summit also led to the creation of several important agreements, including the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity. In the decades since the Earth Summit, sustainability development has continued to gain momentum as a global movement, with many countries and organizations adopting sustainability policies and initiatives. The Sustainable Development Goals (SDGs), a set of 17 goals adopted by the United Nations in 2015, provide a framework for sustainable development efforts around the world. The SDGs aim to address a range of issues, including poverty, hunger, health, education, gender equality, clean energy, climate action, and biodiversity.

Overall, the history of sustainability development reflects a growing awareness of the need to balance economic, social, and environmental concerns in order to create a sustainable future for all. While progress has been made, there is still much work to be done to ensure that sustainability is integrated into all aspects of global policy and decisionmaking.

I would also like to add some information about female-scientists in different sustainable sectors. It's time to acknowledge that there are many outstanding female leaders in the field of scientific research, despite the perception that it is a male-dominated field. Since ancient times, strong women have been at the forefront of advancement when they have discovered a market or subject ready for further study. The aforementioned scientific geniuses and leaders have achieved strides in their disciplines and drawn attention to some of the most significant environmental problems confronting humanity :

1. Environmental Science:

• Dr. Jane Lubchenco, an environmental scientist and marine ecologist, has been a leader in advancing the understanding of marine ecosystems and advocating for sustainable fishing practices. She served as the Administrator of the National Oceanic and Atmospheric Administration (NOAA) from 2009 to 2013, where she worked to promote sustainable marine resource management and climate change adaptation.

2. Renewable Energy:

• Dr. Maria Skyllas-Kazacos is a chemical engineer and energy researcher who invented the Vanadium Redox Flow Battery, a technology that allows for efficient storage of renewable energy. Her work has been instrumental in advancing the use of renewable energy sources, particularly in remote areas where traditional power grids are not available.

3. Sustainable Agriculture:

• Dr. Vandana Shiva, an Indian physicist and environmental activist, has been a leading voice in advocating for sustainable agriculture practices and promoting seed sovereignty. She has written extensively on issues such as genetically modified crops, agricultural biodiversity, and the impact of industrial agriculture on the environment and rural communities.

4. Sustainable Architecture:

• Dr. Christine Bruckner is an architect and sustainable building expert who has worked on numerous projects aimed at reducing the environmental impact of buildings. She is a co-founder of the German Sustainable Building Council and has been instrumental in developing green building standards and promoting sustainable building practices in Germany and beyond.

5. Sustainable Transportation:

• Dr. Joan Ogden is a mechanical engineer and transportation researcher who has worked on developing alternative fuel vehicles and promoting sustainable transportation practices. She is the founder and director of the Sustainable Transportation Energy Pathways (STEPS) program at the University of California, Davis, which focuses on developing sustainable transportation systems.

These are just a few examples of the many female scientists who have made significant contributions in various sustainable sectors. Their work highlights the important role that women play in advancing sustainable development and addressing the complex environmental and social challenges facing our planet. Before explaining why sustainability is important and beneficial to all business industries, I would like to note that there is more to sustainable development than only being concerned with the ecosystem or earning profit through growth in the economy, (which is the definition that we are most familiar with), however, it is also the point where the three pillars of society, economics, and environment converge. Business sustainability is advantageous to companies and goes beyond just pressuring corporations to preserve the environment. The other reason is rather simple : it enhances a corporation's appeal to prospective customers, investors, and other firms examining their value chains to satisfy their sustainability goals. Combining environmental, financial, and social variables leads to the development of thriving, diversified communities both now and in the future. In order to leave a healthy planet to future generations, it recognises that natural resources are limited and should be managed wisely. On the figure below you can see six sustainable business values, that prove the importance and advantageous of sustainability in all business sectors. It provides equal working opportunities, saves the environment, cares for consumers wellbeing and most importantly values ethics and acts accordingly.



Fig. 1.2

Sustainable Business Value

# Source : <u>https://www.mdpi.com</u>

I will provide more in-depth information about sustainable values in business since it's a crucial part in explaining why sustainability is important in every sector of business. First and foremost, sustainable businesses make sure to include everybody and provide them with equal growth opportunities. It is also a great way to maintain a diverse, rich and a healthy working environment by giving all coworkers, employees, suppliers, and customers the chance to express what is important and valuable to them. Also, values in sustainable businesses are different. They are completely incorporated into every aspect of daily business, including through the recruiting procedure, the social media presence of the business, processes of an organisation, and, of course, through the authority and leaders themselves. They are evident and thoroughly embedded in workplace culture and the company's vision and mission.

Other than saving the environment and creating a safe and prejudice-free working environment, why exactly is sustainability beneficial and important to all industries in the business world? The simple answer is that it boosts sales and creates numerous opportunities, which helps to create and maintain a healthy economic environment. Other than that, various reasons advocate the importance of SD (sustainable development). Sustainable entities/businesses fulfil the needs of your consumers. Thankfully, this decade we are able to see and experience a huge shift in how people view climate change. Each year, more and more people start caring and valuing eco-friendly, sustainable products and their actual production. Nowadays many consumers are willing to pay more for the goods and the sustainable businesses. Providing this opportunity to your consumers will satisfy their needs, and one of them is doing something for the environment and contributing to the climate crisis solution. Below I will provide statistics regarding this matter. Those statistics are gathered from Travel Perk, years 2019-2021 :

• Consumer loyalty to businesses that support social or environmental causes will increase by 88%.

• In a 2019 survey, 85% of participants claimed they have changed in a little, modest, or large way to be more sustainable over the preceding five years. (63% of those responders fell under the modest to major category).

• In the same study, 81% of participants stated that they planned to purchase more ecologically friendly goods during the next five years.

• Consumer preference for brands with superior sustainability records is 83%.

• According to 83% of consumers, it's crucial or highly crucial for businesses to make a difference by creating products that can be recycled or reused.

More than half of consumers would pay more for sustainable products designed to be reused or recycled.

• 78% of respondents believe that environmental sustainability is crucial, enjoy the concept of sustainability, and wish to lead more sustainable lives.

• 70% of consumers with a strong sense of purpose typically spend an extra 35% for sustainable goods. (57% of consumers are ready to alter their shopping patterns to lessen their harmful effects on the environment.)

• Sustainability is rated as one of the top 5 value drivers by 50% of consumers.

• 34% of consumers are willing to pay more for sustainable products and services.

• 32% of millennials have made significant changes to their behaviour and shopping patterns to be more environmentally friendly.40% of consumers in year 2021 chose brands and providers with environmentally sustainable practices and values. An increase of 6% compared to 2020.

• 30% opted for low carbon emission and/or shared modes of transport (electric vehicles, public transport etc), an 11% increase compared to 2020.

• The global green technology and sustainable development market is expected to grow from \$11.2 billion in 2020 to \$36.6 billion by 2025.

Additionally, utilising eco-friendly practices and equipment is financially advantageous for every sector of the corporate world. I will explain this matter more detail in the next chapter. However, I would like to include some of the information here, since it also contributes to the importance of sustainability in the business world:

• In a review of academic literature on environmental, social, and governance (ESG) standards and company performance, it was discovered that out of 200 research, 90% concluded that excellent ESG standards reduce the cost of capital.

• Incorporating good ESG principles into a business plan improves operational performance, according to 88% of these studies.

• 80% show that stock price success is favourably connected with sustainable corporate practices.

There are also some examples from different business industries that were able to cut costs due to implementing sustainability and being more environmentally conscious. Walmart reduced gasoline consumption by around 87% between 2010 and 2019, preventing 15,000 metric tons of CO2 emissions and saving close to \$11 million in a single year. Another example from another business industry would include GE (General Electric), which saved \$300 million by lowering water use and greenhouse gas emissions by 32% and 45%, respectively, between 2010 and 2020.

To sum this section up, I would like to emphasise one more time that sustainability is critical in the corporate world, since it allows us to work in a healthy and a diverse culture where everyone is on the same level and there is no salary gap, racism, bullying and discrimination of any kind. I would also like to add that environmentally friendly businesses have a higher motivation in their employees. The reason is rather simple - ' 'it's important for us as a society to feel like we contribute to something big and meaningful. And last but not least, we need to work towards making every industry more sustainable, rather than just focusing on one sector, since the more businesses are environmentally friendly - the sooner we will experience some positive changes both in the socioeconomic factors and in the environmental factors as well.

#### 1.2 Restaurant industry in the scope of sustainability

In previous section I focused on the importance of sustainability in the business industry as a whole, while in this chapter I will focus on the restaurant business industry and on the importance of sustainable development in this particular business sector.

More restaurants and food businesses are becoming aware of the urgent problem of the restaurant industry's lack of sustainability. 2.87 million tonnes of garbage, containing meals, packing, and other non-food pollution, are generated annually by the food service, hospitality and tourism industries. The percentage of recycled garbage, subjected to anaerobic digestion, or composted garbage would be less than half - only 43%. One million tonnes of garbage are made up of food, of which 77% might have been consumed and was preventable. The remaining waste is made up of packaging like plastic. Up to 15% of

greenhouse gas pollutants caused by human activity are attributable to this food, which is disposed of in landfills. Food waste is only one part of sustainability, though.

Eatery environmentalism is the practice of reducing an organisation's ecological consequences. Restaurants should conduct their business in a way that safeguards, conserves, or improves the ecosystem. While still promoting economic development, sustainable practices should also improve the lives of individuals and communities. Despite popular belief, food service sustainability encompasses more than merely reducing the amount of food waste. How exactly do restaurants become sustainable? They take into account and consider the following elements:

- How are the foods made?
- By what method is the food packaging made and what exactly is it made

of?

- How is the food served up?
- In what way is the food eaten?

Other than that, environmentally conscious eateries also concentrate on following factors to increase the sustainability :

• Increasing resource efficiency: Resources are now being used up more quickly than they are being generated. Water and energy are included in this.

- Utilising environmentally friendly products.
- Reducing the generation of waste
- Enhancing recycling procedures.
- Lowering emissions of greenhouse gases.

And why exactly is sustainability in the restaurant business important? The main reason is, of course, the climate crisis that I discussed in the previous chapter. For this reason, people are becoming more conscious of how their behaviors affect the environment and what has to be changed to stop long-term harm. Additionally, eateries and other food-related enterprises must think about the effects of their actions and take sustainable measures that can be sustained. As I previously indicated, 13% of carbon dioxide emissions caused by human activity are attributable to food waste, which mostly generate restaurants and other food-related industries mostly generate. One of these factors demonstrates the

importance of achieving sustainability for restaurants. As a matter of fact, there are more than 30 separate industries that make up the food and beverage manufacturing sector. Slaughterhouses, the processing of meat, poultry, seafood, wheat mills, matings, confectioneries, sugar confectionery products, the processing of fruits and vegetables, fats and oils, and edible oils, spaghetti, infant meals, and dairy-based products are a few examples. The manufacture of beverages, beer and wine, as well as whiskey distillation, all fall under the category of beverages.

People are looking to restaurants and other companies as they grow more environmentally conscious to see their actions to safeguard the world. A restaurant with good practices will be seen more favourably than one with questionable ones. The following figure with statistics will confirm this statement.

On the figure below you can see statistics about how food sustainability is important to people.

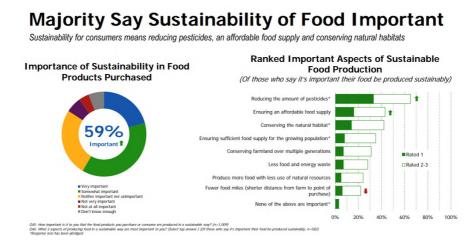


Fig. 1.3

Majority Say Sustainability Of Food Is Important

Source : https://www.zestlabs.com/fresh-food-sustainability/

Fig. 1.3. demonstrates that the majority of consumers value sustainably produced food. According to data from studies on food sustainability, 86% of consumers would switch places and brands to one that is associated with a good cause, given similar price and quality, up from 63% in 2016. Additional statistics state that customers would prefer to place orders from restaurants that remove extra packaging before delivering their meal in 54% of cases, a restaurant that employs eco-friendly packaging and doesn't use single-use plastic is

preferred by more than half of respondents (56%). Environment-friendly packaging that is plant-based, plastic-free, and compostable is significant to 63% of consumers.

Therefore, sustainability in the business sector is extremely important. Food industry contributes tremendously to the climate crisis that our planet is facing, for that reason the restaurant business industry should level up and think on how they can solve this problem in the near future. Not only will this help the environment and reduce the greenhouse emissions, but it will also enhance the 'restaurant's income by boosting up the sales.

# 1.3 Threats and opportunities for the restaurant business

Even though we can not underestimate the importance of sustainability and environmentally friendly production, there are always both advantages and disadvantages in everything, including of going completely sustainable. When it comes to the advantages of making a sustainable restaurant, there are numerous pros. There are the following advantages :

• Cost Savings: Implementing sustainable practices in a restaurant can lead to significant cost savings over time. For example, installing energy-efficient lighting and equipment, reducing water consumption, and sourcing local and seasonal ingredients can all help to reduce operating costs.

• Increased Sales: Offering sustainable options and promoting environmentally conscious practices can help to attract new customers and increase sales. Many consumers are willing to pay a premium for sustainable and ethically sourced products.

• I would mark this advantage as one of the most significant ones - enhance your standing in the neighbourhood and expand your clientele. An eatery is more likely to gain a good reputation in the community if it demonstrates that it cares about the environment and works to support the area by donating food and meals. Your restaurant may see an increase in the number of new customers, as well as an increase in client loyalty.

• Going sustainable will also boost the level of staff engagement. The reason is that restaurants are more likely to experience improved engagement if they involve their staff in all aspects of their sustainable policies and procedures. Employees who are invested in, devoted to, and committed to a company are likelier to stay on as employees. As a result, this may increase their motivation at work and promote employee retention.

• Of course, the most predictable advantage is that making a restaurant sustainable positively influences the environment. Nowadays, we can observe that sustainable restaurants can dramatically benefit the environment. The carbon footprint can be decreased by reducing the ' 'restaurant's carbon dioxide emissions. Making your restaurant go sustainable is able to make a significant difference by improving the eateries's recycling habits, cutting down on food waste, and also taking into account how the food is grown, transported, and packed.

• Another great benefit of sustainability in an eatery is that restaurants may have the chance to set themselves and their products and concept apart from those of their rivals and the rest of the restaurant/food industry.

• Improved Health and Safety: Sustainable practices can help to improve the health and safety of both customers and employees. For example, using natural cleaning products and reducing the use of harmful chemicals can create a safer and healthier working environment.

• The last but not least advantage of sustainability in a restaurant is that it gives your business an opportunity to raise awareness in your location/city/neighbourhood. Raising awareness of the significance of using sustainable practices can be accomplished by setting an example for other eateries and food enterprises. This way, you will make your consumers aware of the steps your restaurant is taking and could encourage them to increase their composting or decrease their waste production.

The next advantages will be presented in the statistical data conducted from Travel Perk. It has been studied that companies who excel at innovation and sustainability and trust outperform their competitors in their sector, generating 3.1% higher operating profits and better returns for investors. Another study discovered a strong link between a company's financial performance and its resource efficiency. According to the study, a business can increase operating profitability by up to 60% by cutting resource expenditures. As I mentioned earlier, sustainability in the business industry will result in more motivated employees who are willing to stay long-term in your business. And for this matter there are statistics. For example, in the United States of America, food industry employees, who make up more than 50% of the workforce, think they are more inclined to choose to work for a business/restaurant with a strong environmental goal. Approximately 70% of restaurant restaurant participants stated that an eateries sustainability strategy will influence their choice to work there in the long run. And employees are actually willing to develop more eco-friendly skills and do a more though research in the sustainability matter, to be more marketable at work (in total 67%).

When talking about any business it's important to look at it from the investors point of view. And in the restaurant business industry it is even more crucial. Consequently, 74% of restaurant industry investors reported that in 2021 they were more likely to withdraw and disengage from businesses that performed poorly in terms of sustainability, which can reveal that sustainability is important to everyone that is taking part in the development of the restaurant : employees, consumers and investors/stakeholders.

So why exactly should we use sustainability? First of all, it saves money, so it's good and beneficial both for your finances and the world. It also improves our health, conserves natural resources, creates a more sustainable economy, and saves the environment.

When it comes to making a restaurant sustainable, there are numerous and various advantages, however, to be completely realistic, there are also some disadvantages. But nevertheless, I consider them more of a «difficulty», rather than a «disadvantages». Those are the disadvantages or difficulties :

• The first con of making your restaurant completely sustainable is that some adjustments could be actually tricky or slowly implemented.

• Higher Upfront Costs: Implementing sustainable practices in a restaurant can require an initial investment in new equipment, technologies, or infrastructure, which can be more expensive than traditional alternatives.

• Limited Availability of Sustainable Products: Depending on the location of the restaurant, it may be challenging to source sustainable ingredients and products consistently. This can lead to higher costs, supply chain challenges, and potential menu limitations. (For example in Ukraine it would be more expensive, since the source of sustainable products and innovations is limited).

• Potential for Reduced Profit Margins: Depending on the sustainability measures implemented, there may be a higher cost of goods sold, which can impact profit margins. Additionally, some consumers may not be willing to pay a premium for sustainable products, which could limit sales.

• Sometimes, sustainable products and businesses don't perform as well or as effectively as conventional ones.

• Time and Effort Required: Implementing sustainable practices can require additional time and effort from restaurant staff and management, which can be a challenge for businesses with limited resources.

• Also, even though sustainability in restaurants is a trend right now, and people are willing to pay more for sustainable goods and services - still in comparison to other preferences, some customers place a lower priority on sustainability and sustainable restaurants, while making some service/food choices.

• Lack of Consensus on What Constitutes "Sustainable": There is no universally agreed-upon definition of what constitutes sustainable practices in the food industry, which can lead to confusion or inconsistency in implementation.

• And I would mark this con as the biggest disadvantage (at least in Ukraine and other Eastern European and Asian countries for the current moment) - consumer knowledge of sustainability may be poor in various markets, industries and geographic regions.

For the matter regarding the last point - there are various sustainable development reports from every country, and I think that ' 'it's important to disclose SDG reports in this chapter, since many companies tend to overlook such analysis before establishing a business in a new country/market. Therefore there is a huge possibility that the business will fail. Such reports are especially highly valuable in the restaurant and other business industries, which are not first necessities.

With such reports, you can see how each country and each market will respond to the sustainability innovations, and in our case, it can help to observe the market in the country you plan to open a sustainable eatery. It will also help us see how people in different countries respond to sustainability and also whether or not they have the opportunity to afford sustainable goods and services. Additionally, businesses may better engage stakeholders, improve sustainable decision-making processes, and increase accountability by measuring and sharing their impact on the SDGs. For example, I will provide a sustainable development report on Ukraine from the year 2021.

The sustainable Development report on Ukraine from 2021 will be presented in figures and graphs.

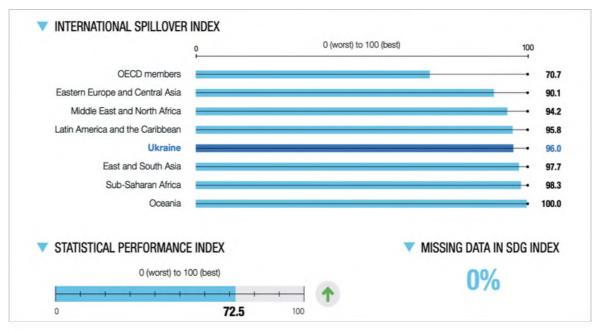
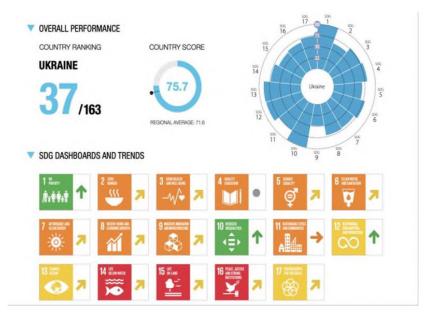


Fig. 1.4

International Spillover Index Of Ukraine

Source : <u>https://dashboards.sdgindex.org/map/spillovers</u>

Regarding the Spillover score, Ukraine has a total of 90. The ability of each country to accomplish the SDGs may be impacted positively or negatively by the activities of other nations. The Spillover Index evaluates these spillovers in three areas: security, economics & finance, and environmental & social impacts embodied in trade. A higher score indicates that a nation has more positive spillover effects and fewer negative ones. SDG and other factors will be shown on Fig. 1.5.





#### Overall Performance Score Of Ukraine

Source : <u>https://dashboards.sdgindex.org/map/spillovers</u>

The overall SDG score calculates how far the country has accomplished all 17 SDGs. The result can be seen as a percentage of SDG accomplishment. If a score is 100, then all SDGs have been accomplished.

When it comes to the Spillover score, Ukraine has a total of 90. The ability of each country to accomplish the SDGs may be impacted positively or negatively by the activities of other nations. The Spillover Index evaluates these spillovers in three areas: security, economics & finance, and environmental & social impacts embodied in trade. A higher score indicates that a nation has more positive spillover effects and fewer negative ones.

The poverty rate and reduced inequalities remain. However, the score is moderately improving, insufficient to attain the goal, making one of those points the best in the SDG achievements. Almost the same thing can be said about the health and well-being of the nation, quality of education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation, infrastructure and sustainable cities and communities have the same result - significant challenges remain with score moderately improving, insufficient to attain goal. On the other hand, the situation is slightly better with responsible production and consumption, climate action and partnerships for the goals have a moderately improving score, while challenges still remain, but the situation is significantly better with those indicators. However, there is a significant problem with life on land, life below water and peace (the reason is pretty obvious for this one). Those factors are marked as red, which means that major challenges remain, but Ukraine is on the way to improve those factors.

In conclusion, I wouldn't really suggest establishing a completely sustainable restaurant in Ukraine, because its demand will be low as of now. However, considering Ukraine's fast development and great technological innovations, in the next couple of years - sustainability in all sectors of business in Ukraine will rise in popularity, therefore rising the popularity and the demand of sustainable eateries in the country.

Additionally, after winning the war, Ukraine will rebuild a more adaptable, green, and equal country. According to SDG Knowledge Hub, Ukraine will take advantage of the chance provided by the after-war recovery to create neighbourhoods that are healthier, more environmentally friendly, and more habitable than they were before, which would raise the environmental consciousness in the Ukrainian society and in the country as a whole. Given that buildings in Ukraine account for over 49% of the country's total energy consumption, government organisations should prioritise energy-efficient housing as the foundation of their efforts toward sustainable development.

After the war, Ukraine can start considering how to use financial assistance to foster resilient and sustainable growth. Rebuilding with sustainability in mind will make Ukraine's citizens and future generations more equal, resilient, and environmentally friendly, therefore raising the possibility of making sustainable business popular and profitable.

While there is a chance to invest in new, more environmentally friendly infrastructure, it is also essential to keep up anti-corruption initiatives, such as those that support open government procurement procedures and the reliability of government permitting bodies. Sustainable cities might provide future generations with healthier, safer, and more equal environments, which will also create more investment opportunities, and overall a healthier place for sustainable/green business in Ukraine.

To sum this chapter up, developing a sustainable restaurant has its advantages and disadvantages. Nevertheless, I think the advantages of sustainability in a restaurant and in any other business industry outweigh the disadvantages. Additionally, it is also important to

consider in what country you are planning to open your sustainable eatery, since the biggest part of your sustainable restaurants success will depend on the market you are in and on the knowledge that your market has on sustainability and how much it is valuable for them, as we saw on the SDG report of Ukraine. Plus, it is essential to make a thorough research before considering making your entity sustainable. Although I am sure that soon enough the trend of sustainable restaurants and other services will spread through the world more and become the new norm in the restaurant business industry.

# CHAPTER 2. SUSTAINABLE RESTAURANT BUSINESS (CASE OF DUBAI RESTAURANT)

As I disclosed in the previous chapter, sustainable businesses have various advantages and numerous opportunities, that will make the business prosper and get different investors and other business-growth opportunities and privileges.

The business entity I completed my internship in is Dubai Restaurant, located in Kyiv, Ukraine. For a little background about the Restaurant I worked in - the business was opened in 2018 and gained almost immediate success because of a great business plan and management. This enterprise is a sole proprietorship business, which is one of the most common business structures in the foodservice sector. When it comes to the time of creation, the location where I completed my internship in took five-six months to build. The enterprise I worked at, has the expansion of tourism in the area as their mission statement. AlsoR, from my internship experience in «Dubai Restaurant», I would like to add that the Restaurant's mission must be sincere to provide a great impression. A strong and genuine mission statement will help any business draw in clients who share your ideas and partners and investors. As a result, «Dubai Restaurant» uses mission as a strategy and a tool to build relationships with those who share the same views and ideas. A sincere mission of the business entity is a huge part of developing a successful and impressive business, and I can say with certainty that the entity I worked at has a sincere mission statement, which contributes to its success. I took the role of the Restaurant's general manager and had HR, strategy and innovation management duties.

#### 2.1 General characteristics of the Dubai restaurant and its environment

Regarding sustainability in Dubai Restaurant, Dubai Restaurant is doing their best to be more sustainable and environmentally conscious. However, it's fair to acknowledge that there is still a long way to go in order for the Restaurant to be considered green and environmentally friendly. Gladly, some ways and steps need to be taken for Dubai Restaurant to come out as a green and completely sustainable restaurant, like the Septime restaurant in Paris, France, for example. (I will provide surface information about this business entity in this chapter and more in-depth information about it in chapter 3, 3.1).

As a I was taking the role of a general manager, I took care of most of the operations in the Restaurant. Some of my tasks included: managing and control the Restaurant's whole operation, providing top-notch guest services ensuring client happiness and comfort, create and implement customer loyalty programs, plan and creating a comprehensive restaurant marketing plan, effectively addressing consumer inquiries and grievances, managing and coordinate shifts, manage and guide personnel, hire new hires, train workers, and assess staff performance, calculate consumption, foresee needs, keeping an inventory, and, of course, I tried my best for the Restaurant to reduce spending and waste. Part of it was because of my personal passion for sustainability and environmentalism, and the other part is because I believe that sustainable businesses work better and provide top-notch services for their consumers since it means that Restaurant is doing their best to keep their consumers and employees healthy and satisfied.

Additionally, each business has responsibilities and obligations. Dubai Restaurant has obligations to:

- Clients ;
- Staff;
- Government ;
- Environment and society.

I will focus on the environmental and societal responsibilities and obligations, since they greatly contribute to the topic of my work, and are a huge part of sustainable and ethical business as a whole. Businesses have a responsibility to protect the environment by taking steps to mitigate any harm that their operations may do to it. Before making an investment, an increasing number of institutional investors consider the company's environmental responsibility activities. What justifies the value of environmental responsibility? Every person who has ever lived has depended on the natural world for their survival, and people living in the modern world are no different. This makes environmental stewardship extremely significant.

We now live in a crucial moment when we must make the transition to sustainable methods of living since our needs have far outgrown what our environment can offer us. Every enterprise in the world contributes significantly to building that better future. To achieve this, businesses should embrace a triple bottom line sustainable model, prioritizing economic prosperity, social equality, and environmental conservation. Whereas accomplishing the objectives of ecological preservation and long-term commercial growth depend on environmental stewardship. Given this, it is evident that all companies, large and small, have a duty to take steps to lessen their adverse effects on the globe and to contribute in any manner they can. There are many reasons for a corporation to make an environmental commitment one of its top goals beyond simply preventing environmental degradation and the severe effects that will result from that. Soon, maintaining environmental responsibility will be necessary to guarantee a company's long-term viability. As I stated in the previous chapter, as consumers start to place a greater emphasis on purchasing goods from ethical businesses and as manufacturing regulations become more stringent, many common and successful but very destructive business methods will become less and less viable in the years to come. For instance, The European Union (EU) has taken several measures to reduce the consumption and production of single-use plastics, including the introduction of a ban on certain single-use plastic products. The ban is part of the EU's efforts to address the environmental impact of plastic waste and move towards a more circular economy.

The Single-Use Plastics Directive, which was adopted by the European Parliament and the Council of the European Union in 2019, aims to reduce the environmental impact of certain single-use plastic products. The Directive prohibits the sale of a range of singleuse plastic products, including plastic cutlery, plates, and straws, as well as certain polystyrene products and cotton buds. These products will be banned from sale in the EU from July 2021.

In addition to the ban, the Directive requires EU Member States to take measures to reduce the consumption of other single-use plastic products, including food containers and cups. Member States are also required to implement measures to ensure that producers of plastic products contribute to the costs of waste management and cleanup. The ban on single-use plastics is expected to have a significant impact on the environment by reducing the amount of plastic waste that ends up in landfills and oceans. The EU estimates that the measures could avoid the emission of 4 million tonnes of CO2 and save consumers €7 billion by 2029.

The EU's ban on single-use plastics is just one example of the growing global movement to reduce plastic waste and promote more sustainable practices. Many other countries and cities around the world have also introduced measures to ban or reduce the consumption of single-use plastics, highlighting the urgent need to address the environmental impact of plastic waste.

Laws regarding plastic also exist in Ukraine.In 2019, the Ukrainian government adopted a national waste management strategy, which aims to reduce the amount of waste generated in the country and increase recycling rates. The strategy includes measures to promote the separation and recycling of waste, as well as the development of waste-toenergy facilities.

In addition to the waste management strategy, Ukraine has introduced several regulations aimed at reducing the use of plastic bags. In 2017, a law was passed that requires retailers to charge customers for plastic bags, with the aim of reducing the number of bags used and promoting the use of reusable bags.

More recently, in 2020, Ukraine's parliament adopted a law aimed at reducing the use of single-use plastics. The law includes measures to reduce the consumption of plastic bags, straws, and other plastic products, as well as provisions to encourage the use of reusable alternatives. For this reason businesses must know about it and stick to their environmental responsibilities. Therefore, businesses that largely rely on ecologically damaging activities will find it difficult to shift when rules like this go into effect and may run into legal problems if they don't in a timely manner, so it's smart and admiring that Dubai Restaurant takes those factors into account and are already taking steps in order to be more environmentally friendly, since heavily relying on damaging activities will suffer greatly in the future. There are the number of ways in which Dubai Restaurant is reducing their carbon footprint and I will list and explain them further in this chapter.

As for societal obligations, business's should create employment possibilities that are equal for everyone, which is also considered a part of sustainable and ethical business.

But social responsibility: What is it? In order to be socially responsible, a company must act in a way that benefits society as a whole as well as its shareholders. Investors and consumers who seek investments that are profitable and contribute to the welfare of society and the environment place a growing emphasis on social responsibility. Despite historical criticism that society is not fundamentally considered a shareholder in business, luckily, younger generations are embracing social responsibility and promoting change and acting responsibly toward our environment and society requires both individuals and businesses. Social responsibility, also known as corporate social responsibility when it comes to enterprises, is growing in importance as a result of changing social norms. The core of this approach is to implement laws that support a moral equilibrium between the conflicting demands of pursuing profitability and serving society as a whole. These regulations may be either commission-based (philanthropy: charity, labor, or other resources) or omission-based (for example: «be eco-friendly» or «think green» campaigns, including greenhouse gas reduction). In the case of Dubai Restaurant, this business donated a lot of money to different charities, including the frequent and ongoing donations to the Armed Forces of Ukraine, as well as charity for ill kids and homeless people, which inspired me a lot and truly showed the motive and values of the business, 'it's employees and the owner of the entity. Many businesses, including those with "environmental" initiatives, have integrated social responsibility into their business models without sacrificing profitability.

Before making an investment or a purchase, more investors and customers consider a company's commitment to socially responsible activities. As a result, upholding social responsibility can support the main goal of maximizing shareholder wealth. There is also a moral requirement. Future generations will be impacted by our actions—or lack thereof. Simply put, social responsibility is a smart business practice, and not doing it can negatively impact the balance sheet, and I am glad to say that the business I was an intern in took this fact into account. Company morale definitely benefits from social responsibility, particularly when a business can involve its workers in its charitable endeavours.

Other than that, there are four types of social responsibility. According to the International Organization for Standardisation, a company's capacity to strike a balance between seeking economic performance and abiding by societal and environmental challenges is a crucial component of functioning effectively and efficiently. A firm can embrace social responsibility in several ways, including giving, encouraging volunteerism, using ethical hiring procedures, and making environmental changes. For instance, businesses trying to minimise their environmental impact would try to reduce waste and carbon emissions. The societal obligation to treat employees ethically, which may entail paying a fair salary, also applies where there are few regulations protecting employees. I find it interesting enough that corporate social responsibility is criticised. Some people disagree that companies ought to be socially conscious. "Social obligations of business" are remarkable for their low analytical standards and lack of discipline and objectivity, according to economist Milton Friedman. Only people, according to Friedman, are capable of feeling social responsibility. Businesses cannot live by their very nature. Some experts contend that social responsibility goes against business's core purpose, which is to maximise profit.

However, various businesses now engage in social responsibility since it has become more widely accepted. In the workplace and as customers, younger generations are embracing social responsibility and bringing about change. More and more businesses (owned mainly by Generation-Z) are taking action regarding the matter of sustainability and environmentalism.

Which advantages of social responsibility stand out the most? The key advantages of social responsibility are helping society and reducing harmful environmental effects. Customers increasingly seek products and services from socially conscious businesses, which can benefit their bottom line. Another critical question is «how does corporate social responsibility help businesses?» :

• Improved Reputation: CSR initiatives can help businesses build a positive reputation with stakeholders, including customers, employees, and investors. By

demonstrating a commitment to social and environmental issues, businesses can enhance their brand image and strengthen relationships with stakeholders.

• Increased Customer Loyalty: Customers are increasingly interested in purchasing products and services from companies that demonstrate a commitment to social responsibility. By engaging in CSR activities, businesses can attract and retain customers who are looking for socially and environmentally responsible options.

• Enhanced Employee Engagement: Employees are more likely to feel engaged and motivated when they work for companies that align with their values. CSR initiatives can help businesses attract and retain top talent by demonstrating a commitment to social and environmental issues.

• Cost Savings: CSR initiatives can help businesses reduce costs by improving resource efficiency, reducing waste, and minimizing environmental impact. For example, by implementing energy-efficient practices, businesses can reduce their energy consumption and lower their operating costs.

• Increased Innovation: CSR initiatives can also drive innovation by encouraging businesses to develop new products, services, and business models that address social and environmental issues. This can lead to new market opportunities and increased competitiveness.

To sum up this topic, the positive effects of social responsibility on society and the environment outweigh any negative effects. Companies that exercise social responsibility can do so in various ways, such as enacting environmental changes, using moral work practices, encouraging volunteerism, and supporting philanthropy. Customers are actively seeking out socially conscious companies, which can help corporate bottom lines.

While completing my internship and working in the Dubai Restaurant, I learned and observed what this business entity does to help the environment. I also gave a couple of my ideas that will help the Restaurant go greener and as environmentally friendly as possible. The steps that Dubai Restaurant took in order to raise their environmental friendliness include the following :

• First of all, the Restaurant is reducing the water usage. Water is needed for almost every part of a foodservice operation, from the bathrooms to the dishwashing

stations. However, restaurants must take action to preserve water because fresh water supplies are quickly running out. One of the best ways to reduce your water usage is to utilise low flow spray valves, which allow you to use less water when washing dishes.

• The second thing Dubai Restaurant does is investing more money on energysaving equipment. In the foodservice industry, electricity is used a lot, mostly by appliances. One of the best methods to lower their Restaurant's energy usage is to switch from traditional to energy-efficient equipment and appliances. There are other easy changes you may do as well in order to save energy. Utilising energy-saving light bulbs, such as LED ones that were utilised in the Dubai Restaurant - is the simplest and least expensive option.

• This business additionally only makes purchases from regional farmers and markets. One of the best ways to reduce your company's carbon footprint is to buy food from regional vendors. Since it has to travel a shorter distance, food from nearby farms takes less time on a truck.

• Using eco-friendly disposables is one of the simplest ways to be more environmentally conscious in 2022. Fortunately, there are some top-notch, environmentally friendly alternatives to traditional plastic disposables. For instance, Dubai Restaurant substitutes bamboo and sugarcane for plastic silverware and plates in favour of disposable and biodegradable alternatives.

All those steps are great, beneficial and admiring, especially for a small and relatively new business. However, I would like to explain how Dubai Restaurant can go more sustainable and what they can do right now in order to achieve this goal. In this chapter I will heavily focus on water usage, food waste and electricity usage, because those problems contribute the most to the environmental catastrophe, that is mostly caused by businesses - small ones and especially the huge corporations. Other recommendations and innovations regarding sustainability in the Dubai Restaurant will be explained in the next chapter (chapter 3, 3.3).

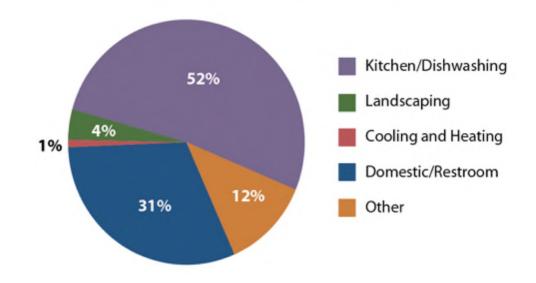
# 2.2. Analysis of possible scenarios of sustainable development for the Dubai restaurant

Firstly, we have cutting down water usage in the Restaurant. We disclosed that the business entity cuts down water usage with utilising low flow spray valves, which allow the Restaurant to use less water when washing dishes, however, there are many more ways regarding the matter of the water usage. Additionally, minimising water waste has advantages for the environment as well as the ability to save operational expenses by up to 13%. Because hot water is used for various purposes in food service establishments, using less water can save money on energy costs. In a restaurant, water is utilized for almost everything, including cooking, dishwashing, cleaning, and more. The amount of water used by various restaurants varies greatly, and estimations made by research studies of the precise amount used also vary. Since water prices can differ greatly across the nation, costs can range even more than usage. However, any restaurant manager will admit that their establishment uses excessive water. While some estimates place the daily water use of a typical sit-down restaurant as high as 26,000 gallons, the more typical figure is between 3,500 and 7,500 gallons, with an average of 5,900. 26 litres per seat each day is another figure that appears in studies. On average, quick serve restaurants consume one-third of the entire amount, however utilisation per seat is typically substantially greater. Over 2 million gallons of water are consumed annually at a rate of 5,800 gallons per day. Thousands of dollars are figuratively being flushed down the toilet each year. This type of usage would cost more than \$8,000 per year at a typical rate of 4 cents per gallon, but the price is far higher for many restaurants. Other factors besides size can greatly impact how much water is used and how much it costs. As an illustration, the type of equipment in a restaurant can significantly alter the water equation, as will be detailed later.

Additionally, that ignores the effects of leaks in irrigation systems, dishwashing machines, toilets, and other appliances. For instance, a running toilet uses more than 200 gallons per day, increasing the cost of an ordinary quick-service restaurant by more than 11%. Leaks in irrigation systems can use tens of thousands of gallons daily. Almost all food service operations, from the smallest café to the greatest institution, habitually squander a

significant amount of water. The good news is that resolving the issue is simple. Through small adjustments to practice and the replacement of some equipment, savings in the range

of 25% to 30% are easily achievable. The potential savings may potentially be bigger in many circumstances. On the figure below, you can see the end uses of water in restaurants





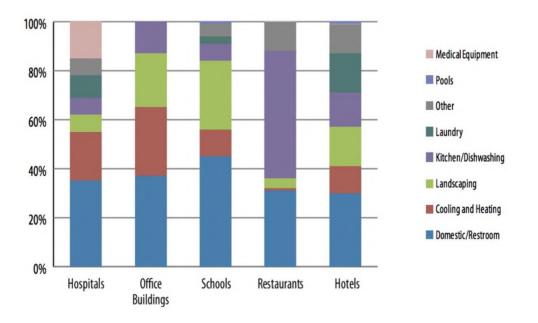


End Users Of Water In Restaurants

Source : <u>https://powerhousedynamics.com/resources/white-papers/water-water-</u> everywhere-and-10-ways-restaurants-stem-flow/

Breaking old behaviors is the largest barrier to water conservation in restaurants. The water savings won't happen even if a restaurant owner installs all the modern watersaving equipment available if the cooks, dishwashers, and waiters continue to operate similarly.

Due to the frequent personnel turnover that is customary in restaurants, it might be a challenging undertaking. Given how deeply embedded it is in a restaurant environment, their successor is likely to bring the same tendency.





Usage Of Water In Different Public And Commercial Environments Source : https://www.epa.gov/watersense/types-facilities

This graph contrasts how water is used in different public and commercial environments. (World Environmental Protection Agency, 2019). As we can see on the graph, restaurant industry consumes far more resources than other industries.

Summing the topic of water waste in the restaurants, it's important to come up with at least a couple of solutions. As I mentioned earlier, what Dubai Restaurant does in order to cut down water waste is great, however, regarding those statistics and graphs provided above, we can see that the problem is so huge, that an extreme water shortage catastrophe caused by the restaurant industry seems inevitable. Of course, Dubai Restaurant is considered as a small business, so the water usage is not as crazy as in other restaurants, especially in the United States of America, where restaurants seem to use water so carelessly, even if the whole «go green» and «let's save our planet» movement is huge there.

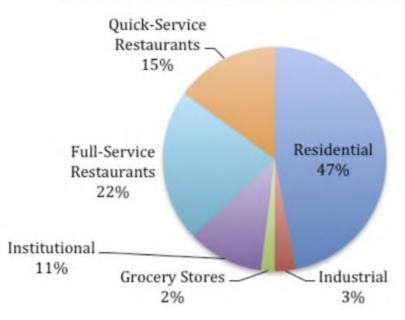
Taking all of this into account, I would like the Restaurant I worked at to perform better in this section, since I know that those changes will be better for the business

and our planet's well-being. Additionally, the people that work in this Restaurant are all of the younger generations: millennials and Generation-Z.

Let's look at some actions Dubai Restaurant may do to cut down on water waste :

- Consistently checking for dripping faucets and pipes ;
- Put an end to marketing packaged water ;
- Shut off the boiler.

Another crucial topic regarding sustainability in a restaurant is food waste. Further in this section I will provide graphs, statistics and figures. I will also explain food waste in the Dubai Restaurant, providing tables, calculations and formulas.



# **Food Waste Sector Percentages**

Fig. 2.3

Food Waste Sector In Percentages

Source : https://www.nmrestaurants.org/the-facts-about-food-waste/

As we can see on Fig. 2.3, Full-Service Restaurants (22%) and Quick-Service Restaurants (15%) contribute a significant percent to the food waste in the world. The restaurant industry contributes 37% in total, making it the second biggest contributor to food waste (after residential).

The damaging effects of food waste on the environment are becoming more widely known. Reducing food waste is anticipated to have positive effects, particularly on the emission of greenhouse gases, the usage of energy, and the security of food, water, and land. Food waste is becoming a more serious issue due to our actions and ignorance. The food business, especially food waste in restaurants, is one of the numerous causes. Understanding food waste intended for human consumption that ends up being thrown out, lost, or eaten by pests at later stages of the cycle is what is precisely meant by "food waste" in the context of the food supply chain. About one third, or 1.6 billion tons, of the food produced for human consumption globally is lost or wasted along the whole food supply chain.

The second biggest source of food waste is outside the home, which includes garbage from cafeterias, restaurants, canteens, snack bars, and other establishments. Compared to smaller establishments, big restaurants, waste food more frequently. Restaurant food is wasted in three stages: during preparation (47%), during storage (19%), and during eating (34%), when clients of the establishment leave leftovers on their plates.

Restaurant food waste types can be divided into: kitchen food waste, which is waste generated during the preparation stage as a result of excessive cooking, poor storage, excessive peeling, etc. Client food waste is the leftover food that customers leave on their plates. Buffet leftovers are food that has been left over after being served as extra at buffet dinners.

Even though in comparison Dubai Restaurant is not considered a huge restaurant with frequent banquets - the amount of food that is wasted is still pretty significant. Especially considering the fact that Dubai Restaurant is a steakhouse. And from the whole restaurant industry - steakhouses contribute the most to the food waste.

It is important to note that the percentage of waste when cooking meat is much higher than during defrosting. During heat treatment, the percentage of meat loss can be up to 37%. When frying vegetables, mass waste can go up to 41%, because there is a lot of water in them, and at high temperature it evaporates.

The important question is: how to calculate the percentage of food loss during processing? There is a generally accepted algorithm for how calculating the percentage of weight loss during processing, which is also used in the Dubai Restaurant. Consider the step-by-step instructions used in the restaurant business:

1.Determining the gross weight (before processing). To do this, we weigh the product on scales to record its mass before processing.

2.Mechanical processing. Some products need to be cleaned before cooking, to get rid of excess elements. For example, clean the onion and cut off the tail. Similar

actions are applied to other food products. Next, the product is sliced, if required by the recipe. After mechanical processing, the product must be weighed again. As a result, we get the net weight (after processing).

3.Heat treatment. It is worth noting that heat treatment is not necessary for all dishes, it all depends on the recipe. For example, heat treatment is not required to prepare a summer salad, so in this case product losses will occur only after mechanical processing. If the product has undergone heat treatment, you need to wait until it cools down, and then measure the mass.

4. Then after mentioned above steps Dubai Restaurant starts the calculating process. After machining, we know the net weight and we also know the weight of the product after heat treatment. To calculate the percentage loss after heat treatment, the establishment I completed my internship in used formula below(and 'it's used in every Restaurant) :

The formula for the percentage of waste : Gross mass - Net mass / Gross mass \* 100.

To ensure that Dubai Restaurant does not lose a single percentage of profit, they record internal documents and introduce special rules for administrators and other staff. Only by carefully working out each cost item and determining acceptable fluctuations for it, the establishment will not lose money on additional purchases and increase the efficiency of restaurant management. It is important to work with technical cards, for example in the establishment I worked at the Poster system is used. Constant restaurant losses are a common problem, but not inevitable. To get rid of them, the establishment first needs to disassemble all the technical costing maps of dishes. Ideally, a technologist, a chef, and an accountant-commodity specialist should be involved in this. In the establishment I was an intern in, a chef and an accountant would take care of this matter.

To get ready for the food waste calculation process in Dubai Restaurant, following steps are taken :

1.Firstly, they start with semi-finished products and study each position several times. Taking into account all the cleaning, frying, boiling - percentages of product losses directly affect the Restaurant's losses. This should be done at least once, and then the 'Restaurant's line cooks will follow them.

2.Secondly, they developed a bookmark for the average consumption, and not for 1 kg, as accountants usually ask for (because that way 'it's less work for the accountants, but the calculations are not reliable).

3. Then comes the approval and recording the date of the changes. It is important that you review the electronic maps at least once a season, as seasonality affects the weight and waste of many products.

4. This step is very important in food waste calculations - do not forget about the variable costs of the Restaurant - take into account all the decorations of the dishes, possible losses during serving to the customer, etc.

5.After approving all calculated maps and the cost price of all dishes, proceed to the creation of the "Nomenclature of goods with trademarks and input prices" form. This is especially important if the facility has a senior in each department who orders products for his area. They must approve the range and input prices.

6.Set the range of permissible fluctuations. Enter the average cost in the cost price. With the help of the accounting system, it will be possible able to analyse the cost price and its fluctuations on a daily or weekly basis. For example, as it is implemented in Poster.

7.When all costing maps have been worked out, the cost price has been determined and the product range with input prices has been approved, it is time to plan sales and calculate food cost. After setting the food cost, analyse and approve the rest of the kitchen costs and the general costs of the Restaurant. Let's consider the most common of them.

Reliable calculations are very important in order to observe the 'Restaurant's situation with the food waste, so each Restaurant should be very precise while making those calculations and also while preparing the products for the calculations.

While completing my internship at the Dubai Restaurant, I observed what debiting is and how it affects the percentage of food waste.

In a utopian world, there are no write-offs in restaurants, but in real life it will not work like that. For a restaurant to lower their food waste percentage and overall be more environmentally conscious, the kitchen manager should develop a menu so that all the products in the dishes «cross over». This step by itself can save the Restaurant a significant amount of money and reduce their contribution to a huge issue regarding food waste. Another important thing to remember is if, for example, there is a salad with avocado and shrimp on the menu, and it, let's say, costs more than other salads, so the probability of weak sales is already quite high. And if avocado is not part of the other dishes, the next day the cost of the salad will increase (because the product is weathered, blackened, stale, etc.), and therefore the percentage of write-offs will also increase. One more important point. The kitchen manager should prescribe the rules for using products from the refrigerator to store the stock so that the products with the earlier date of purchase are used first, and the new supply is placed on the shelves behind.

Now I will prove an example of Dubai 'Restaurant's write-off table from the bar, this is how the Restaurant calculated the write-offs inn order to minimise costs and decrease for waste in the establishment:

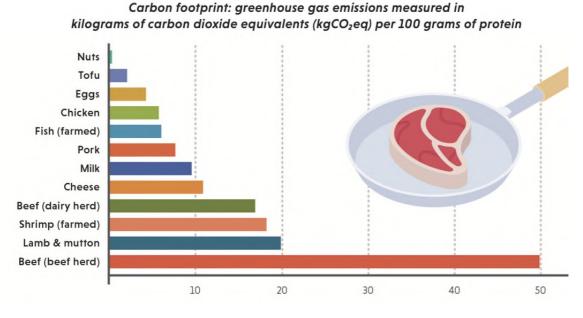
### Table 2.1

### Dubai Restaurant's write-off table from the bar

| Source: | compiled | by | the | author. |
|---------|----------|----|-----|---------|
|---------|----------|----|-----|---------|

| №     | Product         | Amount | Measurig<br>unit | Price  | Total            |
|-------|-----------------|--------|------------------|--------|------------------|
| 1     | Pineapple       | 4,4    | Kg               | 48,17  | 211,95           |
| 2     | Orange          | 7,0    | Kg               | 31,72  | 222,04           |
| 3     | Basil           | 0,2    | Kg               | 76,60  | 15,32            |
| 4     | Grapefruit      | 4,3    | Kg               | 46,29  | 199,05           |
| 5     | Pear            | 1,2    | Kg               | 61,26  | 73,51            |
| 6     | Blackberry      | 0,15   | Kg               | 144,60 | 21,69            |
| 7     | Carom           | 0,09   | Kg               | 80,00  | 7,20             |
| 8     | Coffe Brazil    | 4,85   | Kg               | 444,64 | 2156,50          |
| 9     | Coffee Ethiopia | 0,2    | Kg               | 747,60 | 149,52           |
| 10    | Lime            | 2,3    | Kg               | 100,07 | 230,16           |
| 11    | Lemon           | 3,8    | Kg               | 44,02  | 167,28           |
| 12    | Raspberry       | 0,2    | Kg               | 51,25  | 10,25            |
| 13    | Milk 2,6%, 1L   | 3,6    | L                | 23,46  | 84,46            |
| 14    | Carrot          | 0,6    | Kg               | 15,50  | 9,30             |
| 15    | Mint            | 0,59   | Kg               | 99,45  | 58,68            |
| 16    | Chili papper    | 0,02   | Kg               | 917,50 | 18,35            |
| 17    | Rosmarin        | 0,07   | Kg               | 338,00 | 23,66            |
| 18    | Cream 10%       | 0,5    | Kg               | 40,14  | 20,07            |
| 19    | Strawberry      | 1,6    | Kg               | 40,25  | 64,40            |
| 20    | Thyme           | 0,1    | Kg               | 330,00 | 33,00            |
| 21    | Pecan nuts      | 0,3    | Kg               | 60,00  | 18,00            |
| 22    | Chicken egg     | 10     |                  | 1,26   | 12,60            |
| Total |                 |        |                  |        | 3805<br>hryvnias |

Dubai Restaurant already does a couple of things in order to minimise their contribution to the global catastrophe - global warming/environmental crisis, however, as I mentioned earlier, Dubai Restaurant is mostly a steakhouse, and the most used meat is beef. The environmental advocacy group EWG claims that eating beef produces more than twice as much carbon emissions as eating lamb and more than nine times as many as eating chicken. Nitrous oxide, a greenhouse gas 290 times more potent than carbon dioxide (CO2), is released by chemical fertilisers used to fertilise animal feed. When animals eat this diet and create dung, methane emissions are produced that are 76 times stronger than CO2 emissions. To make animal feed, grasslands and woodlands are plowed under and tilled, which releases carbon from the soil into the sky. While the economy as a whole is cutting greenhouse gas emissions, agriculture's share has increased since 1992 by 16%.





Diet's Climate Footprint

Source : <u>https://www.ewg.org/sites/default/files/2022-04/EWG\_TipSheet\_Meat-</u> <u>Climate\_C02.pdf</u>

On Fig. 2.4 we can see how much proteins contribute to the environmental catastrophe. Which is not very surprising :

• Animal waste, infections, and excess nutrients from farms can enter drinking water sources through farm fields.

• The chemicals used to treat animal waste and other organic materials in water supplies have been linked to cancer. High levels of nitrate in drinking water are also associated with certain types of cancer.

• Overuse of fertilizers and animal waste can lead to toxic algae blooms in bodies of water.

• Air pollution from the meat industry causes more premature deaths each year than emissions from coal-fired power plants. Antibiotic resistance is a significant problem, with over 78% of antibiotics used in animal agriculture.

• Even if we change farming practices, it won't be enough to reduce greenhouse emissions associated with meat if the world's protein demand doubles and most of it is met by animal proteins. We need to change our diets to address this issue. Chapter 3.2 will provide solutions for altering our diets.

To sum this section up it's important to answer one more question : how can Dubai Restaurant reduce food waste, in order to be considered more sustainable? When I was completing my internship as a general manager, I took into account the food waste problem and offered a couple of ideas to minimise the problem :

• Creating a waste diary. When you carry out your Restaurant's waste audit, record and make note of your Restaurant's efforts to reduce food waste heading ahead in a waste diary. As they prepare recyclables and trash for pickup, have workers weigh the materials. Encourage employees to make notes about any interesting items that were thrown out, such as broken beer steins, delivery pallets, or spoiled food. This was Dubai Restaurant can monitor the progress over time and determine whether their attempts to reduce trash in the Restaurant have made any headway by keeping a waste journal for the establishment.

• As I mentioned a little earlier, Dubai Restaurant already does this step in order to prevent spoiling - they order before parity. By improving inventory management and placing orders in accordance with parity levels, Dubai Restaurant lessen the amount of food that spoils in the kitchen. Parity levels are the bare minimum of inventory required to keep up with demand while allowing for a very little margin of error to take into consideration variations in daily demand. Look back to previous sales information to anticipate your parity levels. For instance, by looking at sales during the same time last year, you can predict New 'Year's Eve celebration sales forecasts. To better predict what you'll use, use those forecasts along with any seasonal recipe adjustments. Software can make ordering parity levels much simpler. In order to reduce ordering uncertainty and food waste, modern inventory management solutions that are coupled with procurement technologies may automatically develop order guidelines based on what is already in the kitchen and what is needed to maintain parity.

• This step is extremely important, because without it you can't change much in the culture of your Restaurant when it comes to sustainability and food waste. Implement waste-reduction measures in restaurants. Create a zero-waste policy. Zero-waste policies have been effectively implemented by several restaurants to cut down on waste and food prices, but they are not the standard in the business. It is more practical to make tiny changes in every area of the kitchen to create a culture where everyone is accountable for minimising food waste. Composting might be an alternative for surplus that cannot be used again. If you have the room, make nutrient-rich soil for your own herb and veggie garden with composted food waste. Keep in mind that it's preferable to prevent food waste from occurring in the first place rather than trying to eliminate it after it has.

• I would also like to include the first-in, first-out approach. Use the FIFO strategy in your Restaurant to lower the quantity of spoilage. Inventory will be arranged and cycled in a FIFO compliant kitchen such that the oldest goods are used first, reducing food loss as a result of spoilage.

• Dubai Restaurant already determines and maintains inventory days on hand. The average number of days you keep inventory before selling it is referred to as inventory days on hand. This computation can be used to determine the total amount of inventory in your Restaurant or specific inventory items. For instance, if you order 90 kgs pounds of beef and utilise 50 kgs per day, you will have enough beef "on hand" for six days. 90 kgs of beef divided by 50 kgs each day is 6 days of «on hand».

• This is also an already existing thing in Dubai Restaurant - a monitor for wasted food. Tracking restaurant food waste enables you to identify menu items that aren't doing well, provides you with a clear picture of the types of food waste you're producing, and

enables you to look for trends to identify the underlying reasons of that waste. Additionally, a kitchen display system can significantly lower waste in your Restaurant. In addition to creating tons of paper waste, lost tickets lead to wasted food and extra orders. By streamlining your kitchen and providing visibility into sales and fulfillments, an electronic ticket tracking system can drastically reduce food waste.

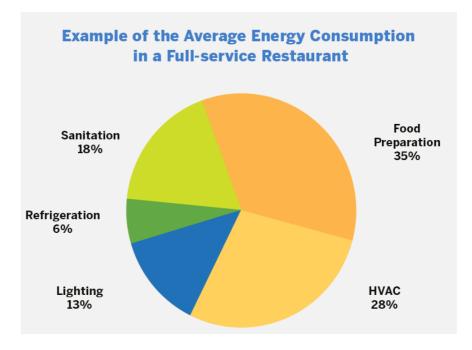
• Proper food organisation. Ensure that all food items are kept at the ideal temperature and in the proper container. Label every perishable item with the date it was purchased, the date it should be discarded, and the number of servings it contains. To make it simpler for back of house employees to understand what sort of item is in each container, some kitchen staff will mark containers using a color-coded system.

• Present regular specials. Weekly specials and discounts are excellent ways to quickly find new uses for leftover food before it expires and becomes food waste. If you have excess chicken breast because business was slower than anticipated this week, consider repurposing them by offering them as a limited-time deal.

And my last but not least environmental area of focus in the Dubai Restaurant is energy efficiency. Restaurants use five to seven times as much energy per square foot as comparable commercial establishments, and they consume more than 30 times as much electricity as the average home. The refrigeration, lighting, heating, ventilation, and air conditioning systems in restaurants are some of the equipment with the highest energy expenses. The scale of the impacts on the earth will vary depending on how and where the power is produced and transported, but nearly every component of the electricity system has the potential to have an impact on the environment.

Given that it is practically difficult to create, transport, or use energy without severely affecting the environment, energy and environmental concerns are intimately intertwined. Climate change, water pollution, thermal pollution, solid waste disposal, and air pollution are some of the environmental issues directly linked to the production and consumption of energy. The emission of air pollutants from the combustion of fossil fuels mostly causes urban air pollution. The main cause of greenhouse gas emissions is also the burning of fossil fuels. Energy use is linked to a variety of concerns with water pollution. Oil leaks are an issue. Oil leaking on the ground or into water has a fixed probability in all petroleum handling processes. The extraction of coal can contaminate the water. Modifications in hydraulic conductivity brought on by mining operations frequently expose previously pollution free streams to specific mineral substances that leach from the soil and result in acid mine drainage. Another by-product of several forms of energy use is solid waste. Along with coal, mining for coal necessitates the removal of a lot of earth.

The following are examples of generic environmental effects: emissions of greenhouse gases and other air pollutants, particularly when a fuel is consumed.





Examples Of The Average Energy Consumption In A Full-Service Restaurant Source :<u>https://www.constellation.com/solutions/for-your-small-business/small-business-resources/restaurants.html</u>

• A standard eatery may spend over \$3,000 per month on amenities such as gas and electricity.

• Energy use in restaurants is five to seven times higher than in other commercial structures.

• Lighting is typically used in restaurants for 18 to 21 hours per day.

Dubai Restaurant spends each month around \$2,800 on electricity and gas. I mentioned previously that in order to be more energy efficient, Dubai Restaurant is investing more money on energy-saving equipment. One of the methods this establishment uses is

lower their Restaurant's energy usage by switching from traditional to energy-efficient equipment and appliances. Utilising energy-saving light bulbs, such as LED ones that are used in the establishment. However, there are many more ways in order for Dubai Restaurant to be more emery efficient. It's crucial to look into every cost-saving option because so many expenses reduce restaurant profitability. Dubai Restaurant can spend the savings in energy-efficient capital purchases to minimise the Restaurant's energy use and boost their Return on Investment by starting small and achieving quick successes.

While completing my internship, I proposed some suggestions to the restaurant for reducing energy use (other than using LED light bulbs):

• Knowing what the restaurant's energy costs are. Recognise where and how energy is used most frequently in your restaurant Restaurant to lower your energy expenditures. A shutdown strategy might reduce costs, for instance, if you find that running equipment at night consumes a lot of energy. You can identify areas for improvement by using an energy management system to examine the equipment's operational and capital expenditures.

• Proper utilisation of equipment. One of the major expenses for running a business can be refrigeration. If doors are accidentally left open, your refrigerators and freezers can waste substantial energy. A great suggestion would be installing door sensors that warn the staff to address this problem. Additionally, pack food products intelligently to improve air circulation around the appliances, or consider getting an energy-efficient refrigerator for the kitchen.

• Improve the heating, ventilation, and air conditioning system with workable fixes. By replacing restaurant's heating and cooling systems, Dubai Restaurant may lower the cost of the restaurant equipment. Installing a vestibule, top and side awnings, or both near the door will assist regulate the climate in the Restaurant and reduce operating costs (this is not unusual for restaurants).

• Adapt outdated appliances. Monitoring the age of the appliances can help you reduce the amount of energy your restaurant uses. Older, less energy-efficient appliances drain the budget because they use more energy to function.

To wrap this chapter up and to draw conclusions, I would like to rate Dubai Restaurant in terms of sustainability. There are certain categories whether determine if business is sustainable or not. There are 10 focuses are to rate the environmentalism of a business. They are divided in 3 groups:

- Societal;
- Environmental;
- Sourcing.

I will start with society. These include community engagement, treating all employees fairly and responsible marketing.

• Community engagement. Dubai Restaurant is an active member of our community. As I stated earlier, this business donated and donates a lot of money to different charities, including the frequent and ongoing donations to the Armed Forces of Ukraine, as well as charity for ill kids and homeless people.

• All employees are treated fairly and are given the same opportunities. There is also no prejudice and the workplace is completely comfortable, supportive and uplifting.

• They also definitely use responsible marketing. A responsible marketing strategy ensures that in addition to satisfying the consumers' demands, the business also benefits the community in which they both operate. It's about establishing trust.

When it comes to environmental rating, it is divided in water saving, energy efficiency and waste management.

• Regarding water saving, I mentioned earlier that Dubai Restaurant utilizes low flow spray valves, which allow them to use less water when washing dishes.

• Dubai Restaurant is investing more money on energy-saving equipment. One strategy used by this business is to reduce energy consumption in their Restaurant by utilizing energy-efficient equipment and appliances instead of conventional ones. using energy-efficient light bulbs, like the LED ones used in the Dubai Restaurant.

• Waste management. I'm sure that Dubai Restaurant can do more in this area. However, it will be fair to note that the entity still does more regarding this problem than other establishments in the restaurant industry, considering the fact that they are relatively new on the market. Nevertheless, 'it's important to make improvements in this area, before the catastrophe becomes too inevitable.

And last is environmental area is sourcing, which includes environmentally friendly farming, local and seasonal, ethical meat and dairy and fair trade :

• Earlier in this chapter I stated that Dubai Restaurant only makes purchases from regional farmers and markets, which is one of the best ways to reduce the company's carbon footprint is to buy food from regional vendors. Since it has to travel a shorter distance, food that comes from nearby farms spends less time on a truck.

• When it comes to seasonal, Dubai Restaurant buys in season. Buying and eating food that is in season minimizes greenhouse gas emissions, since it doesn't require the significant energy input necessary for crops to be produced outside of the natural growing season, which is accomplished by artificial heating or lighting.

• Ethical meat and dairy. Dubai Restaurant bases on steaks, burgers and etc, so the majority of their products are meats and dairy. Ethical meat and dairy means buying only organic meat and dairy, which can be very expensive. There are meat and dairy companies that only include organic farming, 100% grass-fed livestock, compassionate treatment of animals, and regenerative farming. So, I would suggest every restaurant/cafe buy products from such companies, even though it may be more expensive. For all the positive reason, I would advise Dubai Restaurant to switch to farms like that, since meat production already causes a huge environmental catastrophe, 'it's important to reduce and minimize the risks by switching to more ecological and environmentally conscious companies, especially is your business is based on selling products and services that mostly include meat.

• And last but not least is fair trade. Dubai Restaurant is absolutely considered a fair-trade business by all the standards. In order to guarantee that a set of standards are met during the manufacture and supply of a product or ingredient, fair-trade is a certification system. It basically translates to premium, ethically manufactured goods for consumers, which Dubai Restaurant does and meets all fair-trade standards.

Closing this chapter, we can see that Dubai Restaurant is a progressive and innovative establishment in the restaurant business industry, always open to suggestions and

alternatives to be more environmentally friendly. The rating for sustainability in this entity would be 70 out of 100. They can definitely improve the dairy and meat buying and more control on food waste and water usage. There is always room for improvement, and given that this entity is progressive, innovative and open - I'm sure that with some time Dubai Restaurant will become more green and ecological and will do everything to minimise their carbon footprint.

However, I would like to suggest one more thing, the most important one in my opinion - finding a person that will be passionate about the occurring global catastrophe and be able to spread their knowledge to the staff. In order to make change, such things should be engraved in the company's culture, where everyone shares similar values and feels responsible for our environment. It is also important to implement certain policies, since policies give organizations direction, uniformity, responsibility, efficiency, and clarity in how they conduct business. For example, a zero-waste policy has been effectively implemented by a bunch of eateries in the industry to cut down on waste and food prices. All in all, there are many different ways for a business to become more green and conscious. I hope that Dubai Restaurant will consider every suggestion and possibility and implement certain changes that will help our earth and provide the business with more investment opportunities and prosperity.

#### CHAPTER 3.

## INCREASING BUSINESS EFFECTIVENESS AND POSSIBILITIES THROUGH SUSTAINABILITY

In this chapter I will explain why a sustainable business plan is essential, and what possibilities and benefits it provides. Although just 55% of firms have sustainability strategy, 87% of executives agree that sustainability is vital. In order to satisfy changing investor pressure, consumer demand, and legal constraints, sustainability must be incorporated into strategy. Additionally, sustainability has been shown to draw top people, cut expenses, and increase revenue.

Organizations must prioritise sustainability if they want to be relevant and competitive in today's marketplace. Driving sustainability demands firms to reinvent every aspect of their business, much like digital transformation does. Today's company strategy should include sustainability as a key component. The now-famous acronym for sustainability for firms is Environment, Social, and Governance. Sustainability for organisations plays out across three dimensions.



# Fig. 3.1

Climate action

Source : <u>https://ec.europa.eu/eurostat/statistics-</u> explained/index.php?title=SDG\_13\_-\_Climate\_action&oldid=439560 To briefly explain and describe fig. 3.1 - any firm that wants to be relevant in the upcoming years must incorporate sustainability into its corporate strategy, as worldwide demand for sustainable development is only expected to grow.

Therefore, future company plans must be sustainable. As I mentioned earlier, 87% of business executives agree that sustainability is crucial. With only 55% of firms having sustainability strategies, the issue is a lack of implementation. In reality, it is essential to have a sustainability plan and a chief sustainability officer who reports directly to the board.

Firms can make long-term investments by implementing a sustainability plan. However, there are obstacles to promoting sustainability in a business, such as a lack of board commitment, poor accountability, lack of power for sustainability teams to carry out projects, and skill competences.

There are sustainability-related factors that influence strategy :

• Stakeholder Expectations: Stakeholders, including customers, investors, employees, and communities, are increasingly expecting businesses to demonstrate a commitment to sustainability. Companies that fail to address ESG issues risk losing the support of their stakeholders and may face reputational damage.

• Desire from consumers. As millennials and Generation-Z consumers proliferate, there is a rising demand for sustainable goods. Consumers in Generation-Z are eager to pay extra on sustainable goods, according to 80% of them. In Europe almost 70% of customers cut back on the use of single-use plastic in order to adopt a more sustainable way of life. One third of western and northern European shoppers looked for brands with excellent sustainability credentials. Any firm that wants to be relevant in the upcoming years must incorporate sustainability into its corporate strategy, as worldwide demand for sustainability is only expected to grow.

• Regulatory Environment: Governments around the world are implementing regulations to address environmental and social issues, such as climate change and human rights. Companies that fail to comply with these regulations risk facing penalties and other legal consequences.

• Resource Availability: Natural resources, such as water and energy, are becoming increasingly scarce and expensive. Companies that rely on these resources for

their operations may face significant challenges if they do not take steps to manage their use and reduce waste.

• Increased Productivity. Being sustainable will increase staff motivation to deliver greater results. Sustainability lowers expenses and has a 59% impact on operating profits. Being sustainable boosts productivity as well. Businesses with inclusive cultures are 30% more profitable and 19-23% more productive.

• Supply Chain Risks: Companies are increasingly being held responsible for the social and environmental impacts of their supply chains. Risks such as human rights violations, environmental damage, and corruption can have significant reputational and financial consequences for businesses.

• Innovation and Opportunity: Companies that prioritize sustainability can benefit from innovation and new business opportunities. For example, companies that develop sustainable products and services or implement resource-efficient practices can gain a competitive advantage and attract customers who value sustainability.

Putting environmentalism at the forefront of strategic planning process is important and beneficial. In the upcoming years, sustainability will be crucial, and it will be crucial to integrate it into company strategy. The number of Fortune 500 firms now hiring their first Chief Sustainability Officers is rising (CSO). To satisfy investor pressure, customer demand, legal constraints, talent acquisition, and greater productivity, it is crucial to prioritise sustainability.

So, to sum this section up, sustainability has become an increasingly important concept in the business world. It involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. By adopting sustainable practices, businesses can increase their effectiveness and unlock new possibilities. Here are some ways in which businesses can do so: Cost savings : Sustainable practices can lead to cost savings by reducing energy, water, and, for example, implementing energy-efficient lighting and HVAC systems (HVAC stands for Heating, Ventilation, and Air Conditioning. It refers to the technology used to provide indoor comfort and air quality in buildings. HVAC systems are designed to control the temperature, humidity, and air quality in indoor spaces to ensure occupant comfort and safety) can reduce electricity usage

and lower utility bills. Additionally, using recycled or biodegradable materials can reduce waste disposal costs. These cost savings can increase a business's profitability and provide a competitive advantage. Additionally, sustainability can drive innovation by encouraging businesses to develop new technologies and products that reduce environmental harm. For example, developing electric vehicles or renewable energy technologies can open up new markets and business opportunities. It also improves brand reputation: Consumers are increasingly aware of environmental and social issues, and they expect businesses to address these issues responsibly. By implementing sustainable practices, businesses can improve their brand reputation and attract environmentally conscious customers. A positive brand reputation can also attract new customers and improve customer loyalty.

In conclusion, businesses can increase their effectiveness and unlock new possibilities by adopting sustainable practices. Sustainable practices can lead to cost savings, improved brand reputation, regulatory compliance, innovation, and employee engagement. By embracing sustainability, businesses can create value for themselves and for society as a whole.

#### 3.1. Examples of sustainable restaurants and how it benefits them.

Before talking about suitable restaurants, it's important to define what a sustainable restaurant industry is, based on three theories : Top Bottom Line, Circular Economy, SDG.

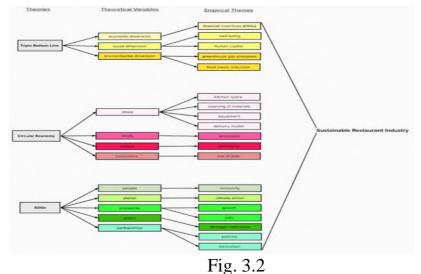


Figure : Coding Tree: Towards A Sustainable Restaurant Industry Source : <u>https://kth.diva-portal.org/smash/get/diva2:1694932/FULLTEXT01.pdf</u>

Briefly about those theories :

Triple Bottom Line (TBL) is a theory that refers to the three aspects of sustainability: economic, social, and environmental. It is a framework for evaluating the performance of a company or organization in terms of its impact on these three areas. The economic aspect of TBL refers to the financial bottom line of a company. It evaluates the profitability and financial sustainability of the business, including factors such as revenue, costs, and profits. The goal is to ensure that the company is economically viable and can continue to generate profits over the long term. The social aspect of TBL refers to the company's impact on society and the community. It evaluates the company's relationships with its employees, customers, suppliers, and other stakeholders. The goal is to ensure that the company is socially responsible and contributes to the well-being of the community in which it operates. The environmental aspect of TBL refers to the company's impact on the natural environment. It evaluates the company's use of natural resources, energy efficiency, waste management, and pollution control. The goal is to ensure that the company is environmentally responsible and reduces its impact on the planet. The TBL theory emphasizes the importance of balancing these three aspects of sustainability to create long-term value for the company and society. It recognizes that companies have a responsibility to consider the social and environmental impacts of their operations in addition to their financial performance. Overall, the TBL theory provides a comprehensive framework for evaluating the performance of companies in terms of their impact on the economy, society, and the environment, and helps to promote sustainable business practices.

• A circular economy is an economic system that aims to minimize waste and maximize the use of resources by keeping materials and products in use for as long as possible. It is a regenerative system that is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. (I explained the concept of circular economy in details in the chapter 3.2).

The Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. The SDGs are part of the 2030 Agenda for Sustainable Development, which is a plan of action for people, the planet, and prosperity.

The 17 SDGs are as follows: no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and strong institutions, partnerships for the goals.

Each of the SDGs has specific targets and indicators that are intended to guide policy and investment decisions at the national and international levels. The SDGs are designed to be integrated and indivisible, meaning that progress in one area can contribute to progress in another. The SDGs represent a global commitment to sustainable development and are intended to be achieved through partnerships between governments, the private sector, civil society, and other stakeholders. The SDGs are an important framework for promoting sustainable development and creating a more prosperous, equitable, and sustainable world for all. (I evaluated Ukraine based on SDG in the first chapter of my bachelor thesis).

Now moving on to the topic of «sustainable restaurants and how it benefits them». One of the most significant benefits of running a sustainable restaurant is cost savings. By using energy-efficient equipment, reducing water usage, and minimizing waste, sustainable restaurants can significantly reduce their operational costs. For example, they can save on energy and water bills by investing in high-efficiency kitchen appliances and fixtures. Additionally, sustainable restaurants can save on food costs by sourcing ingredients locally, which reduces transportation costs and ensures that ingredients are fresh and in season.

In addition to cost savings, sustainable restaurants benefit the environment by reducing their carbon footprint. This is achieved by using renewable energy sources, such as solar power, and minimizing energy consumption through efficient lighting and heating. Sustainable restaurants also use composting and recycling to minimize waste and reduce the amount of materials sent to landfills. By using environmentally friendly practices, sustainable restaurants can help to reduce air and water pollution, conserve natural resources, and preserve ecosystems.

Sustainable restaurants also benefit from enhanced brand reputation and customer loyalty. Consumers are becoming increasingly conscious of the environmental and social impact of the products and services they use, and are seeking out businesses that align with their values. Sustainable restaurants that prioritize environmental and social responsibility are likely to attract customers who are looking for dining options that align with their values. Additionally, sustainable restaurants can differentiate themselves from their competitors by offering unique and eco-friendly experiences that appeal to a growing market of environmentally conscious consumers.

Finally, sustainable restaurants benefit the community by promoting ethical sourcing and supporting local economies. By sourcing ingredients from local farmers and producers, sustainable restaurants help to support small businesses and strengthen local food systems. This not only benefits the local economy, but also helps to promote food security and reduce food waste. Sustainable restaurants can also support charitable causes and community initiatives, which can help to build strong relationships with the local community and promote positive social impact.

In conclusion, sustainable restaurants benefit from cost savings, environmental impact reduction, enhanced brand reputation and customer loyalty, and social responsibility. These benefits make it an attractive choice for restaurateurs who are looking to align their business with their personal values and attract a growing market of environmentally conscious consumers. By promoting sustainable practices and ethical sourcing, sustainable restaurants can play an important role in creating a more sustainable and equitable future.

There are many examples of sustainable restaurants around the world. Here are a few:

• Blue Hill at Stone Barns (New York, USA) - This farm-to-table restaurant sources all of its ingredients from the surrounding farm, ensuring that everything is seasonal and fresh. It also uses renewable energy sources and composts its food waste.

Benefits: By sourcing ingredients locally and using renewable energy, Blue Hill at Stone Barns reduces its carbon footprint and supports the local economy. By composting its food waste, the restaurant also reduces the amount of waste that goes to landfills. • Silo (Brighton, UK) - This zero-waste restaurant uses every part of the ingredients it sources, from the stems to the seeds. It also has a closed-loop system for food and packaging waste, which is turned into compost and used to grow more ingredients.

Benefits: Silo's zero-waste approach helps to reduce its carbon footprint and eliminates the need for landfill space. By composting its waste, the restaurant also produces more ingredients, creating a self-sustaining system.

• Noma (Copenhagen, Denmark) - This Michelin-starred restaurant sources most of its ingredients from the Nordic region, supporting local farmers and reducing transportation emissions. It also has its own greenhouse and garden, where it grows many of its ingredients.

Benefits: By sourcing ingredients locally, Noma reduces its carbon footprint and supports local agriculture. By growing its own ingredients, the restaurant also ensures that they are fresh and of the highest quality.

• The Perennial (San Francisco, USA) - This restaurant has a unique focus on sustainability, using regenerative agricultural practices to grow its ingredients. It also has a closed-loop system for food and packaging waste, which is turned into compost and used to grow more ingredients.

Benefits: The Perennial's regenerative agriculture approach helps to improve soil health and biodiversity, making its ingredients more nutritious and sustainable. By composting its waste, the restaurant also eliminates the need for landfill space and produces more ingredients.

As I mentioned earlier, I will mainly focus on Septime restaurant for my research. Septime is a restaurant in Paris that has gained a reputation for its innovative approach to modern French cuisine. Located in the 11th arrondissement, it opened its doors in 2011 and quickly became one of the city's most popular dining destinations. Its chef, Bertrand Grébaut, has won numerous accolades for his inventive and delicious dishes, which use fresh, seasonal ingredients to create a menu that is both sophisticated and approachable.

One of the hallmarks of Septime's cuisine is its focus on sustainability and local sourcing. Grébaut is committed to using only the freshest and most seasonal ingredients,

often working with small-scale producers and farmers to obtain the best quality produce. This commitment to sustainability extends to the restaurant's wine list as well, which features a selection of natural, organic, and biodynamic wines from small-scale producers. The restaurant's interior design is simple and understated, with a focus on natural materials and textures. The walls are clad in rough-hewn wood, while the floors are made of polished concrete. The furnishings are minimalist and elegant, with simple wooden chairs and tables. The overall effect is one of understated elegance and refinement, creating a serene and relaxing atmosphere for diners to enjoy their meals.

The menu at Septime changes regularly to reflect the seasons and the availability of fresh ingredients. Dishes are created with an eye towards balance and harmony, with flavors and textures carefully balanced to create a cohesive and memorable dining experience. One of the restaurant's signature dishes is the beetroot tartare, a visually stunning dish that features thin slices of raw beetroot layered with crème fraîche, chives, and walnuts.

There are reasons why Septime in Paris is considered on of the most sustainable restaurants in 2021 :

• The vast majority (99%) of the food served at Septime is sourced from France. The restaurant has established a farm near Paris and also buys food from multiple local farmers.

• Septime has a strong emphasis on preserving seeds, which is demonstrated through their involvement in an initiative called Conservatoire du Gout. The restaurant partners with a French local farmer and ten other chefs to conserve 1,350 varieties of seeds.

• Vegetables emphasis. At Septime, vegetables make about 92% of the menu.

• The Chef at Septime adopts a sustainable approach to meat by purchasing the entire animal and using it seasonally. The less common parts of the animal are highlighted in dishes such as rillettes and soups/stews or used in crew meals.

• Septime chooses not to serve beef for two main reasons. Firstly, beef production has a negative impact on the environment and it is challenging to find meat that meets the restaurant's high standards. Secondly, French people have a strong preference for milk/dairy rather than cow farming.

• Septime uses chicken that has been butchered at the age of five months. Lamb is rarely served, but when it is, it comes from Mount St. Michele in France.

• Septime restaurant is committed to using sustainable fishing practices to minimize its impact on the marine environment. To achieve this, the restaurant only works with fishermen who use small vessels of 10 meters or less and focus on sustainable methods such as angling, bottom gill-nets, traps, and trammels, as well as coastal and dive fishing. The restaurant's menu is based on the catch from the previous day.

• Septime ensures that its producers are treated fairly. The restaurant sources its seafood from a supplier who pays 33% more than market rates and prioritizes working with small-scale French fishermen. In some cases, Septime requests that farmers grow specific vegetables before committing to purchasing the entire crop at a competitive price.

• Septime practices organic winemaking at its three-acre vineyard in St. Emilion, which is currently undergoing a conversion to ecological farming. The restaurant exclusively serves natural wines, with a significant portion arriving in Paris by boat from the Rhône region. Producers of these wines refrain from using pesticides, insecticides, and other synthetic chemicals commonly found in conventional wine production.

• Clean water. The restaurant exclusively offers filtered water supplied in used wine bottles because it rejects plastic containers.

• Sending the message out. Staff in Septime are active members of the Mangeons Local movement, that encourages regional trade as well as agribusiness. As well, they contribute to the Bien Pour Climat, that decreases the environmental impact of the restaurant industry. The front-of-house personnel at the restaurant goes out of their way to explain each dish's ingredients and where they came from as they are being served.

• Assisting the neighborhood. Gribeut and Purriet participate in a variety of initiatives to help the community, they also join organizations that provide meals to the underprivileged. Residents can apply for internships and apprenticeship programs, and all staff members—from the maitre d' to the chef to the dish washer—share tips equally.

• Gender equality. Because Septime employs 55% women, it is somewhat uncommon in the predominately male restaurant industry. All employees receive at least three times the French starting salary and, with bonuses, up to double that amount.

• Effect on the environment. When the Septime crew in Paris became disappointed with the recycling and garbage management services provided by their municipal authorities, they began collaborating with a private corporation that assists them in gauging and tracking rubbish. The surplus is used for employee meals. Ingredients and cut-offs that would otherwise be thrown away are instead repurposed in sauces and entrees. The restaurant is also developing a concept for precise portioning.

Overall, Septime is a restaurant that stands out for its commitment to sustainability, its focus on fresh, seasonal ingredients, and its inventive and delicious cuisine. Its understated and elegant interior design creates a serene and relaxing atmosphere for diners, while its constantly evolving menu and wine list ensure that there is always something new and exciting to try. For anyone looking for an exceptional dining experience in Paris, Septime is definitely worth a visit.

The good news is that Septime is not an exceptional situation when it comes to sustainability — numerous restaurants in the years 2018–2022, with such high levels of worldwide awareness, are continuously enhancing their processes.

What advantages does sustainability offer restaurants? Being a sustainable restaurant has several advantages, including:

• A boost in revenues. According to a study about sustainable businesses, restaurants typically save \$7 in operational costs for every \$1 they spend on decreasing food waste. This has a Return on Investment of 600%.

• Cutting costs. Restaurant may cut costs by improving the menu planning, cooking techniques, and reducing food waste. You'll save money overall if you spend less on food that is thrown out. Also, you might reduce labor expenses. Your overall productivity will increase if you streamline kitchen operations, properly store and label food, and tweak your menu to cut down on the time your restaurant staff must spend on these tasks.

• Enhancing your standing in the neighborhood and expand your clientele. Business is more likely to gain a good reputation in the neighborhood if it demonstrates that it cares about the environment and works to support the neighborhood by donating food and meals. Your restaurant may see an increase in the number of new customers, as well as an increase in client loyalty.

• Boosting the level of employee participation. Eateries are more likely to experience improved engagement if they involve their staff in all aspects of their sustainable policies and procedures. Workers that are invested in, devoted to, and committed to a company are more likely to stay on as employees. This may increase their level of motivation at work and promote employee satisfaction.

• Positively impact on ecology. As I mentioned earlier, restaurants that use sustainable methods can significantly improve the environment. The carbon footprint can be decreased by reducing your greenhouse gas emissions. You can make a big difference by improving your recycling habits, cutting down on food waste, and taking into account how your food is grown, transported, and packed.

• Spreading the message in your neighborhood. Raising awareness of the significance of using sustainable practices can be accomplished by setting an example for other eateries and food enterprises. Making your consumers aware of the steps you are taking could encourage them to increase their recycling or decrease their food waste.

Unfortunately, there are no available/published annual reports on Septime restaurant, or any other sustainable restaurant. However, I would like to explain what key elements are included in the sustainable report of an eco-friendly business:

• Environmental impact: The report should include information on the business's efforts to reduce its carbon footprint and conserve natural resources. For example, it could describe how the business has implemented energy-efficient lighting and HVAC systems, installed low-flow water fixtures, and reduced waste through composting and recycling.

• Social responsibility: The report should cover the business's efforts to contribute to the community it serves. For example, it could describe how the business has donated a portion of its profits to local charities or sponsored community events. It could also highlight the business's efforts to create a diverse and inclusive workplace, such as by implementing hiring and training practices that promote diversity and equality.

• Economic performance: The report covers the business's financial performance over the past year. For example, it could detail the business's revenue, profit margins, and

any challenges faced. It could also highlight any investments the business has made in sustainable initiatives and their impact on the bottom line.

• Future sustainability goals: The report describes the business's plans for future sustainability initiatives and their expected impact. For example, it could outline how the business plans to reduce its carbon footprint even further, implement more sustainable packaging practices, or expand its charitable contributions.

So summing this chapter up, in general sustainable restaurants benefit from:

- Reduced carbon footprint, helping to combat climate change ;
- Cost savings through energy efficiency and waste reduction ;
- Positive branding and increased customer loyalty ;
- Supporting local agriculture and reducing transportation emissions ;
- Improved food quality and nutrition.

#### 3.2. Best sustainable innovations for restaurants

Before talking about the best sustainable innovations in the industry it's important to be informed about ways businesses can speed up technology for long-term effects. International commerce promotes worldwide manufacturing and usage, resulting in rising living standards, but at what cost to the earth and future generations? Business as usual won't get us near to meeting the SD (sustainable development) goals within the next decade, despite the important role that businesses play in developing solutions to prevent environmental and health disasters. Performance evaluation for sustainability. Everyone has been compelled to reconsider how businesses gauge their performance as a result of the Coronavirus outbreak. Managing profitability and growth has long been a requirement for sound business, but the crisis has highlighted the value of resilience. For many years, global supply chains have been improved to be as effective as possible. Yet, many highly optimized and effective supply chains collapsed as a result of a lack of flexibility and agility when COVID-19 imposed international limits. A top focus measure is now assisting supply networks in adapting and introducing more resilience. Climate change has not decelerated, despite the fact that the health crisis has caused numerous environmental attempts to do so. Companies must place more importance and concentration on the environment if they want to have the finest businesses. Business leaders learned quite clearly in 2020 that controlling their carbon footprint is just as important to their success as managing their top and bottom lines. This could end up serving as the tenet by which we judge and direct enterprises both now and in the long term. Using innovative accounting techniques that link economic, social, and environmental implications, corporations can assess their success more comprehensively. Businesses need to embrace and put into practice technologies that enable and drive completely redesigned business processes if they want to quicken the pace of change required to have a beneficial impact at scale. The management of carbon dioxide emissions and the shift to a circular economy are the two most crucial topics that need urgent attention.

Control of carbon emissions. To detect and manage carbon dioxide and other greenhouse gas emissions across the whole value chain, from the sourcing of materials through manufacturing to final distribution, businesses in the digital era rely on technical solutions. In order to comply with this, suppliers, operations, and logistics will need to calculate and declare their own emissions. Businesses may utilize this data to obtain better insights, aggregate, analyze, and more effectively manage the environmental impact of each of their particular goods and services. Businesses must now speed technological advancement, and there are a few ways they might achieve so.

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Fig. 3.3

Food : greenhouse gas emissions across the supply chain Source : <u>https://ourworldindata.org/food-choice-vs-eating-locall</u> Corporations are already responding to investor advice, public demand, and corporate obligations to label their products with information about item emissions, as seen in the food service industry, by doing so. This creates a positive feedback loop by providing consumers with the knowledge they need to make better informed buying decisions.

Implementing a circular economy and minimizing waste. The circular economy: what is it? A circular economy is an economic system that aims to minimize waste and maximize the use of resources by keeping materials and products in use for as long as possible. It is a regenerative system that is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. In a circular economy, products and materials are reused, repaired, and recycled rather than discarded as waste. This approach helps to reduce the amount of waste generated by society and minimize the impact of resource extraction on the environment. The circular economy is based on three principles:

• Designing out waste and pollution: Products are designed to be reused, repaired, or recycled, and waste is eliminated as much as possible.

• Keeping products and materials in use: Products and materials are kept in use for as long as possible through reuse, repair, and recycling.

• Regenerating natural systems: Natural systems are restored and regenerated through sustainable practices such as regenerative agriculture, reforestation, and biodiversity conservation.

• The circular economy is a sustainable alternative to the traditional linear economy, which relies on a "take-make-dispose" model of production and consumption. By keeping resources in use for as long as possible and minimizing waste, the circular economy helps to reduce the environmental impact of economic activity and promote sustainable development.

The infographic below explains the circular economy paradigm.

The circular economy model: less raw material, less waste, fewer emissions



Fig. 3.4 Circular Economy

## Source:<u>https://www.europarl.europa.eu/resources/library/images/20230222PHT76</u> 206/20230222PHT76206\_original.jpg

It is impossible to reduce emissions to zero under the current paradigm of fossil fuel use and the linear approach to production and consumption. Just around 8% of the materials entering the global economy each year, which totals 98 billion tonnes, are reused or repurposed. Because it is ineffective and negatively affects our environment beyond terrestrial boundaries, it has a substantial financial cost to businesses and societies. Research indicate that we need to switch over to shuttered production networks right away. Technology may speed up the circular benefits for businesses when it comes to the circular economy and using precious materials for longer. Businesses stand to benefit much from recovering value from commodities that are today wasted.

Moving on to sustainable innovations for a restaurant. In recent years, sustainability has become an increasingly important consideration for businesses across all sectors. Restaurants are no exception, as they can have a significant environmental impact through their use of energy, water, and food resources, as well as through the waste they generate. Fortunately, there are several sustainable innovations that restaurants can implement to reduce their environmental impact and promote sustainability.

• One of the most significant sustainable innovations for restaurants is energyefficient equipment. Restaurants can replace old, energy-intensive equipment with energy-efficient models, such as refrigerators and ovens, as well as lighting and HVAC systems. This can not only reduce energy consumption but also lower operating costs, making it a win-win solution for both the environment and the restaurant's bottom line.

• Another sustainable innovation for restaurants is water-saving measures. Restaurants can install low-flow water fixtures, such as faucets and toilets, to reduce water consumption. They can also implement water-conserving practices, such as using dishwashers only when fully loaded and recycling water for non-food-related purposes. These measures can help conserve water resources and lower water bills for the restaurant.

• Restaurants can adopt sustainable sourcing as an important innovation for sustainability. By sourcing their food and ingredients from local and sustainable sources, restaurants can minimize their carbon footprint while supporting local farmers and suppliers. This may involve using organic, non-GMO ingredients and implementing strategies such as portion control and composting to reduce food waste. In addition to its environmental benefits, sustainable sourcing can also enhance the quality and freshness of the food served, which can boost the restaurant's reputation and customer satisfaction.

• Alternative packaging is another sustainable innovation that restaurants can implement to reduce waste. Restaurants can switch to biodegradable or compostable packaging materials, such as bamboo or paper products, to reduce waste. They can also implement reusable packaging programs for takeout and delivery orders, reducing the use of single-use plastic packaging that can harm the environment

• Renewable energy is another sustainable innovation that restaurants can adopt. They can install renewable energy sources, such as solar panels, to generate electricity and reduce their dependence on fossil fuels. This can not only reduce the restaurant's carbon footprint but also provide cost savings over the long term.

• Finally, community involvement is an essential sustainable innovation for restaurants. They can partner with local organizations and charities to support sustainability initiatives in their community, such as food rescue programs or waste reduction efforts. This can not only improve the restaurant's reputation but also promote sustainability throughout the community.

Additionally, there is sustainable technology, which can be used in a restaurant. Sustainable technology maintains efficiency while reducing waste. With the aid of restaurant technology solutions like payroll and employee management software, kitchen display screens, guest-facing point of sale technology, and an integrated customer relationship management solution, the volume of many areas of restaurant operations, including paper waste and food waste, can be managed and reduced.

«Tablet orders». Tablet-based ordering can bring several benefits to a restaurant, including: improved accuracy, since tablets reduce the risk of human error in taking orders. This can lead to improved order accuracy and reduced incidents of incorrect orders and returns. It is also a faster service, because tablet-based ordering can help speed up service, as orders are sent directly to the kitchen without the need for a server to manually take orders and enter them into the system. Another pro is enhanced customer experience. Customers can take their time browsing the menu and placing their orders, without feeling rushed by a busy server. They can also customize their orders more easily, which can lead to higher customer satisfaction. You will also get increased revenue, since ablet-based ordering can help restaurants process more orders in a shorter amount of time, which can lead to increased revenue during peak hours. Tablet ordering gives you better data tracking, because tablets can help restaurants track ordering data and trends, such as which items are popular and at what times of day. This can help restaurants make more informed decisions about their menu and pricing strategies. And last but not least - reduced paper usage: tablet-based ordering eliminates the need for paper menus and order forms, which can help restaurants reduce their paper usage and contribute to a more sustainable business model. Overall, tablet-based ordering can provide several benefits to a restaurant, including improved accuracy, faster service, enhanced customer experience, increased revenue, better data tracking, and reduced paper usage.

• Displays for kitchens, also known as kitchen display systems (KDS), can bring several benefits to a restaurant, including: improved accuracy. Displays can also help reduce the risk of human error by displaying the correct order details and reducing the need for manual data entry. This can lead to improved order accuracy and reduced incidents of incorrect orders and returns. It will also better the organization. Displays can

help organize orders by category, such as starters, mains, and desserts, making it easier for kitchen staff to prioritize and prepare orders efficiently. KDS is able to enhance communication. Displays can improve communication between the front-of-house and kitchen staff by providing real-time updates on order status and changes. This can help reduce misunderstandings and delays in order processing. The next advantage is increased efficiency, displays can help kitchen staff process orders more quickly and efficiently, reducing wait times for customers and increasing the number of orders that can be processed during peak hours. It will also give you a better data tracking, since displays can help restaurants track order data and trends, such as which items are popular and at what times of day, this can help restaurants make more informed decisions about their menu and staffing strategies. And last but not least - reduced paper usage. Displays eliminate the need for paper order tickets, which can help restaurants reduce their paper usage and contribute to a more sustainable business model. In general, displays for kitchens can provide several benefits to a restaurant, including improved accuracy, better organization, enhanced communication, increased efficiency, better data tracking, and reduced paper usage.Software for paychecks and management. Due to the growth of endto-end people management solutions, managing restaurant workers may now be done without the use of paper for hiring, scheduling, and payroll. Many restaurants have switched to cloud-based, mobile-friendly employee scheduling software, which enables staff to view their schedules, request shift changes, change their availability, request time off, and track hours worked from a laptop or smartphone. Posting schedules in the break room is a thing of the past. Without the need of paper pay stubs, paper checks, or paper tax forms, payroll software and services enable restaurant management to compute and administer salaries, ensure adherence to both federal and state income rules and taxation, and track labor expenditures. Businesses may save time, worry, and paper by implementing a digital payment and people management solution for eateries.

• A CRM integration solution can offer numerous advantages for businesses. For instance, by integrating your CRM system with your POS device, you can reduce the need for paper-based advertising of activities, menu promotions, or any operational changes. This centralized approach can help businesses in several ways, including the following:

centralized customer data. A CRM integration solution allows businesses to centralize customer data from different sources such as email, social media, phone calls, and website interactions. This enables businesses to have a 360-degree view of their customers, including their preferences, purchase history, and communication history. This can help businesses personalize their interactions with customers and provide better customer service. It also provides automation. A CRM integration solution can automate many tasks such as lead capture, email marketing, and sales tracking. This reduces the workload on employees and allows them to focus on more important tasks such as customer engagement and building relationships. With CRM you get improved communication, since CRM integration solution can improve communication between different departments such as sales, marketing, and customer service. This enables a more coordinated approach to customer engagement, leading to better customer experiences. Analytics is another important aspect, a CRM integration solution can provide businesses with valuable insights into customer behavior, preferences, and engagement. This information can be used to make data-driven decisions, such as adjusting marketing campaigns or product offerings to better meet customer needs. And last but not least, it will increase the revenue by improving customer engagement and providing better customer service, which results in higher revenue and improved business outcomes. Summing up, a CRM integration solution can help businesses build stronger customer relationships, improve communication, and increase revenue.

While preparing my internship paper I gathered information about various sustainable innovations for restaurant, therefore I'd like to review the biggest and the most innovative sustainable opportunity for the business development. This innovation is in the food and agriculture sector.

Restaurant business relies on meals production, therefore using and buying lots of foods, especially a considerable amount of meat. Furthermore, the two greatest developments are: meat that is grown in the laboratory, which lessens the methane emissions from cows, and vertical farming, which makes better use of water and land resources. As I disclosed in the previous chapter, the production of food is responsible for one-third of all greenhouse gas emissions. Agriculture is a key contributor to biodiversity loss and uses 70%

of the fresh water in the globe. Additionally, every time we plant veggies, we remove carbon from the soil, lowering its fertility. Those farms use 95% less water than conventional farming, while lab-grown meats require 99% less land than traditionally-raised equivalents, utilize 96% less water, and emit 96% fewer emissions. As soon as those sustainable developments become completely legal and fully licensed, it would be revolutionary to use those developments in the «Dubai Restaurant» to enhance the restaurants sustainability.

An easier and more accessible steps on road to sustainability in the restaurant business are: buying locally in bulk.

To wrap up this chapter, I would like to disclose that new environmental initiatives might not be simple to implement. It's crucial to keep in mind that a restaurant doesn't just turn completely green instantly. A few tiny actions, especially over time, can make a significant difference. Sustainable innovations are crucial for restaurants looking to reduce their environmental impact and promote sustainability. From energy-efficient equipment and water-saving measures to sustainable sourcing, alternative packaging, renewable energy, and community involvement, there are many options available for restaurants to adopt sustainable practices. By implementing these sustainable innovations, restaurants can not only benefit the environment but also improve their bottom line and enhance their reputation in the community.

# **3.3.** How to make «Dubai Restaurant» more sustainable and how it will benefit the entity

There are numerous ways in which «Dubai Restaurant» can increase their sustainability. Even though the entity is relatively environmentally conscious - there are still a lot of room for improvement. In previous chapters I discussed what this entity does in order to decrease their carbon footprint. How the entity manages waste, saves electricity, reduces water waste and the rest. Therefore, in this chapter I would like to create a «perspective» sustainable business plan for «Dubai Restaurant». This business model can be used for «Dubai Restaurant» to evaluate and better their environmental consciousness, as well decreasing the carbon footprint.

• Executive Summary: The completely sustainable version of «Dubai Restaurant» aims to promote sustainable practices in the food industry by serving delicious and nutritious meals that are prepared using locally sourced and seasonal ingredients. The focus is on offering plant-based cuisine, with an emphasis on reducing our carbon footprint while also providing a unique dining experience to our customers.

• Market Analysis: The restaurant industry has been growing at a steady pace in recent years, and the demand for sustainable food options is on the rise. Consumers are increasingly concerned about the environmental impact of the food they consume, and they are willing to pay a premium for products that are sourced sustainably. Additionally, the plant-based food market has been growing exponentially, with a predicted market value of \$74.2 billion by 2027. Therefore, «Dubai Restaurant» should cater to this growing market segment, offering a unique dining experience that aligns with the values of their customers.

• Business Model: «Dubai Restaurant» should operate as a full-service restaurant, open for breakfast, lunch, and dinner, seven days a week. The menu will feature a range of plant-based options, with an emphasis on seasonal and locally sourced ingredients. Their food will be prepared using energy-efficient equipment, and they will utilize sustainable practices in the kitchen, such as composting and recycling. Additionally, the restaurant will focus on meat-based dishes.

• Marketing Strategy: The marketing strategy will focus on social media platforms, influencer marketing, and local events. There should be more collaborations with local farmers and producers to promote the restaurant's use of locally sourced ingredients, and the eatery will also host events to educate their customers about sustainability practices. The restaurant's interior will be designed to create a cozy and welcoming atmosphere, which will encourage customers to spend more time and return for repeat visits.

• Financial Plan: Sustainable version of « Dubai Restaurant» will require a total startup capital of \$350,000, which will be used for leasing, equipment, staffing, marketing, and operating expenses for the first year. The entity should anticipate generating \$500,000 in revenue during their first year of rebranding, with a net profit margin of 15%. The

revenue will come from the sale of food, beverages, and merchandise. The long-term plan is to expand the business by opening additional locations in other cities and countries. I would suggest expanding in Europe first. (List of cities suggested for expenditure with reasons will be provided below).

In conclusion, green «Dubai Restaurant» aims to create a sustainable restaurant that provides customers with delicious, healthy, and locally sourced food while promoting sustainable practices. By emphasizing plant-based cuisine, energy-efficient operations, and local partnerships, we believe we can create a unique dining experience that aligns with the values of their customers.

List of cities I suggest expanding the business to : Copenhagen, Denmark. Copenhagen is known for its excellent bike infrastructure and commitment to reducing carbon emissions. It has set a goal to be carbon-neutral by 2025 and is well on its way to achieving that goal. Amsterdam, Netherlands. Amsterdam is another city with a strong bike culture and a commitment to sustainability. It has implemented measures to reduce traffic congestion, improve air quality, and increase the use of renewable energy. Stockholm, Sweden. Stockholm has set a goal to be fossil-fuel free by 2040 and has implemented various measures to reduce carbon emissions and increase the use of renewable energy. It also has a comprehensive public transportation system. Oslo, Norway. Oslo has set a goal to be carbon-neutral by 2030 and has implemented various measures to reduce carbon emissions and increase the use of renewable business will most likely succeed in those areas, due to their high percentage go environmental consciousness.

However, in order for «Dubai Restaurant» to be truly successful, it's important not to underestimate how important staff training is. As I mentioned in my internship report, training the restaurant staff to be passionate about the matter of sustainability is an important step in order to make a restaurant more sustainable and successful. I believe that in order to make staff more passionate about the environmental matter in «Dubai Restaurant», the business needs just one employee who fervently supports the cause and must be able to teach the staff. In restaurant business, employees, especially the front of house, is the best resource for providing information to visitors. For example, in order for the staff at «Dubai Restaurant" to tell clients the stories about the animals, seafood, and produce they utilize, they should also be trained on those ingredients. Employees can first explain how the menu is organized around seasonality and sustainability if a customer inquires as to why there isn't any prawn on the menu today.

Being a sustainable restaurant is already an «innovation», however, it's also important to change things from time to time, therefore utilizng new technological alterations, therefore the next thing I propose to the business entity is to add more innovation and new products. My proposal of innovation is creating online mobile ordering. Apart from it being more comfortable, it's also that customers may slowly peruse online menus while under less time constraint, which increases the likelihood that they will order more food and boosts revenues. And the next innovation I have in mind is devoted mobile applications. Clients download those apps on their mobile devices. A compelling loyalty program that rewards clients with points and freebies should be on the app. Customers are also informed by apps about promotions, occasions, and coupons. For this idea I got inspired by Starbucks cafe, their customers may place orders while on the go, pay with their phone, track their rewards, and locate nearby stores using the Starbucks app. On top of that, I suggest adding a restaurant reservation feature in the app. By automating the restaurant's reservation system, the entity can automatically appear more professional to customers and minimize mistakes. The software eliminates with the requirement to monitor reservation phone calls or assign a person to do so, because busy staffers make mistakes. Many clients favor the independence to look for open bookings and choose their own dining time. From the economic perspective, due to the innovations I proposed, the income will grow, since people love things that are somewhat new and convenient, therefore they will come to the restaurant more, thus boosting the sales. And it's not hard to implement those innovations in the business entity, so it can be done in a week or a two. It's also important to have a budget so you can see how much you can spend on those innovations. The average cost for making an app is  $\sim$ \$2,500-\$3,000. Creating an online mobile ordering - ~\$400. Restaurant business, as any other business, should be innovative and keep up with trends as much as possible, since this is what maintains a restaurant relevant in the modern business world dull of competition.

Additionally, 90% of customers demand creativity, to have unique experiences, to appreciate various tastes, and to view various visual ideas and designs, so for this reason I would also suggest changing the design and decorations of the restaurant. Intentional design adjustments can maintain customer interest while emphasizing the brand message. Staying faithful to the brand message is vital because clients love authenticity. Giving it a new angle, though, can help revive interest in the brand or attract new customers.

All those innovations and propositions I mentioned above uniting with the entity being fully sustainable will result in a : new and loyal clientele ; extreme growth in income ; new opportunities (investment, etc).

How will «Dubai Restaurant» benefit from making the eatery green? Aside from the general and well-known advantages that I disclosed more than once in my paper, I will provide new statistical data. These statistics highlight the growing demand for sustainable and plant-based food options, as well as the potential financial benefits for restaurants that adopt sustainable practices :

• According to a study by the National Restaurant Association, 58% of adults in the United States say they are more likely to visit a restaurant that offers environmentally friendly food options.

• The plant-based food market is expected to reach \$74.2 billion by 2027, according to a report by Meticulous Research.

• A study by the World Resources Institute found that if restaurants in the United States reduced food waste by just 25%, they could save \$1.6 billion annually.

• The United Nations Food and Agriculture Organization estimates that about one-third of all food produced for human consumption is lost or wasted each year, which contributes to greenhouse gas emissions and other environmental issues.

• A study by the Green Restaurant Association found that certified sustainable restaurants save an average of \$7,000 per year in energy costs and \$3,000 per year in water costs.

• A report by the Good Food Institute found that sales of plant-based meat alternatives in the United States grew 27% in 2020, with a total market value of \$7 billion.

Now I would propose creating a sustainability roadmap for Dubai Restaurant. A sustainability roadmap is a strategic plan that outlines specific actions and goals that an organization or community aims to achieve in order to transition to a more sustainable future. The roadmap provides a framework for decision-making and guides the organization or community toward more sustainable practices.

The roadmap typically includes a set of goals and targets related to environmental, social, and economic sustainability, as well as specific actions that will be taken to achieve these goals. It may also include timelines for implementing these actions, as well as metrics to track progress and measure success.

Some common components of a sustainability roadmap might include:

• Identifying key sustainability challenges and opportunities for the organization or community

• Setting targets and goals for sustainability performance, such as reducing greenhouse gas emissions, improving social equity, or promoting sustainable business practices

• Developing a plan of action to achieve these goals, including specific initiatives, policies, and programs

• Establishing metrics to track progress and measure success over time

• Engaging stakeholders, including employees, customers, suppliers, and community members, in the sustainability roadmap process

Overall, a sustainability roadmap is an important tool for organizations and communities that are committed to sustainable development and want to take concrete steps to achieve their sustainability goals.

A sustainability roadmap for Dubai Restaurant in years 2023-2024 would look like that:

#### **1. Energy and Water Efficiency:**

• Conduct an energy audit and water usage analysis to identify opportunities for reducing consumption and waste

• Install more energy-efficient light bulbs and fixtures, and use natural light where possible

- Replace old appliances with energy-efficient models
- Install low-flow faucets and toilets, and fix leaks promptly
- Train staff on energy and water-saving practices

### 2. Waste Reduction and Recycling:

- Implement a recycling program for paper, glass, plastic, and other materials
- Use reusable containers for food and beverage storage and transportation
- Purchase products made from recycled materials
- Compost food waste and use it to enrich soil for a kitchen garden or donate it to a local farm or community garden

• Reduce food waste by implementing portion control, menu planning, and staff training on food handling and storage

#### **3.** Sustainable Food Sourcing:

- Source ingredients from local, organic, and sustainable producers and suppliers
- Offer plant-based and vegetarian options on the menu

• Reduce meat consumption and source meat and poultry from suppliers with humane and sustainable practices

• Use sustainably harvested seafood and avoid species that are overfished or at risk

• Educate customers on the benefits of sustainable food choices and the impact of their food choices on the environment

## 4. Community Engagement:

- Partner with local organizations to support community events and initiatives
- Donate excess food to local food banks or homeless shelters
- Support local farmers and producers by featuring their products on the menu

• Participate in community clean-up events and promote sustainable practices to customers and employees

• Encourage customer feedback on sustainability initiatives and incorporate feedback into the roadmap.

## 5. Employee Engagement and Education:

• Provide training on sustainability practices and goals for all staff

• Encourage employee engagement in sustainability initiatives, such as recycling and composting programs

• Recognize and reward employees for sustainability achievements and innovation

• Provide regular updates and information on sustainability progress and initiatives

• Encourage employee participation in sustainability events and community engagement opportunities.

Overall, this sustainability roadmap will help Dubai Restaurant to reduce its environmental impact, contribute to the local community, and educate employees and customers on sustainable practices. By setting specific goals and timelines for implementation and monitoring progress, the restaurant can continuously improve its sustainability performance and be a leader in the industry.

#### CONCLUSION

The fact that our world is currently in danger of a catastrophic global climate change is not astonishing. Climate change has an effect on everything, including the economy and world politics. It essentially has an impact on every part of our life and shapes societies and lives. Before going into why sustainability is crucial, I'd like to clarify what climate change is and how it impacts us because, regrettably, many people still struggle to understand how detrimental this problem is to our existence, daily lives, and even our economy.

The Earth's climate is changing, and it is predicted that this pattern will continue for the foreseeable future. Beyond the next several decades, the scope and severity of the climate crisis/change will depend critically on the amount of CO2 gases released globally and how accurately the Earth's climate will respond to those emission levels.

Almost every industry is at risk from climate change, either directly or indirectly. The immediate threats brought on by the outside environment make up the external risks related to climate change. Hurricanes, floods, droughts, and wildfires are all symptoms of the climate crisis and can all damage infrastructure for land and transportation. Moreover, climate change is one of the biggest risks to a stable economy and has a detrimental impact on all enterprises. Extreme weather reduces people's ability to work and productivity. Hurricanes, storms, and typhoons have a profound impact on millions of people, leaving them even more destitute and poor after mercilessly demolishing their communities and neighborhoods.

The effects of climate change on the economy can vary depending on the specific region, industry, and type of impact. Some effects can be felt immediately, while others may take longer to manifest. For instance, extreme weather events such as floods, hurricanes, and wildfires can have immediate and significant impacts on local economies, leading to property damage, loss of crops, and disruption of transportation and infrastructure. These effects can result in increased costs for businesses, reduced productivity, and lost revenue. Other impacts may be more gradual, such as sea level rise or changes in temperature and precipitation patterns, which can affect industries such as agriculture, fishing, and tourism over time. These effects can result in reduced yields, changes in migration patterns, and

increased susceptibility to pests and diseases. Furthermore, climate change can also lead to long-term impacts on the economy, such as the need for investments in infrastructure, changes in insurance policies, and shifts in consumer behavior. These effects can take years or even decades to materialize, but can have significant implications for the overall health of the economy. In summary, the effects of climate change on the economy can range from immediate and severe to gradual and long-term and it is clear that the economic impacts of climate change are significant and require urgent attention from policymakers and businesses alike.

Sustainable development acknowledges that the environment is a finite resource. It is essential to use the environment and its resources properly while also protecting them for the benefit of the whole globe, our environment, humanity, and all other living creatures. Choosing a sustainable way of life improves our quality of life, protects our ecology, and protects the environment for future generations. The current generation must also be acutely conscious of its activities and how they will affect the future.

The aim of my bachelor thesis was to study and analyse sustainability and sustainable development, as well as how they can affect and enhance the business world and the restaurant industry business, and throughout the work I learned that sustainability can have several positive effects on the business world and the restaurant industry, including cost savings, Increased customer loyalty, improved reputation, and, of course, reduced environmental impact.

During this work, I evaluated how sustainability can benefit the entire planet. Sustainability refers to practices that meet the needs of the present without compromising the ability of future generations to meet their own needs. Adopting sustainable practices can benefit the entire planet in numerous ways, like protecting the environment, reducing greenhouse gas emissions, promoting economic stability, enhancing social well-being and fostering global cooperation. Altogether, sustainability can benefit the entire planet by promoting environmental protection, economic stability, social well-being, and global cooperation. By adopting sustainable practices, we can create a more resilient, equitable, and prosperous world for ourselves and future generations. Overall, sustainability increases sales and opens up multiple prospects, which contributes to the creation and maintenance of a favorable economic climate. In addition, many arguments support the significance of SD (sustainable development). Businesses that are sustainable meet the needs of their customers. Thankfully, this decade has allowed us to witness and feel a significant change in how people perceive climate change. Every year, more and more people begin to value and care about environmentally friendly, sustainable products and the processes used to produce them. Many people are now willing to pay more for items and services that are sustainable. Giving your customers with this chance will meet their requirements, one of which is taking action to address the climate issue and the environment.

Concerning «Dubai Restaurant», many recommendations and advancements are mentioned in chapter 3, however one thing I want to add is - staying faithful to the brand message is vital because clients love authenticity. Giving it a new angle, though, can help revive interest in the brand or attract new customers. And, of course, the thing that would definitely help «Dubai Restaurant» to prosper and flourish more, is being more sustainable. The restaurant will get numerous benefits : environmental benefits, cost savings. Sustainable practices, such as reducing food waste and conserving energy, can help a restaurant save money in the long run. For example, investing in energy-efficient equipment and appliances can lower energy bills, and composting can reduce waste disposal costs. Another benefit is improved reputation, since customers are increasingly concerned about the environmental impact of their choices, including where they eat. A sustainable restaurant can attract customers who prioritize sustainability and want to support businesses that share their values, therefore, a positive reputation can also lead to increased brand loyalty. There are also many health benefits. Sustainable restaurants often prioritize using fresh, organic, and non-GMO ingredients, which can lead to healthier and more nutritious meals. Additionally, sustainable practices such as reducing food waste can help to reduce the amount of unhealthy processed foods that end up in landfills. And last but not least - supporting the local economy. Sustainable restaurants often prioritize sourcing food from local farmers and suppliers, which can help to support the local economy and promote sustainable agriculture

practices. This can also help to build stronger relationships between the restaurant and its community.

However, as I mentioned in my bachelor work and in my internship paper, «Dubai Restaurant» already does some activities that are green and sustainable, which I'm very fond of. Nevertheless, more can be done and I'm sure that with time and patience «Dubai Restaurant» will achieve complete sustainability, which will be innovative, profitable and beneficial both for the entity and the environment.

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