CHAPTER 3

BEYOND THE BOTTOM LINE: INTEGRATING SUSTAINABILITY INTO BUSINESS

Rashmi Sachan[1]
Assistant Professor, Department of Commerce,
Lucknow Public College of Professional Studies, Lucknow, U.P., India

Sweety Jain[2]
Assistant Professor, Department of Commerce,
Lucknow Public College of Professional Studies, Lucknow, U.P., India
Corresponding Author- sweetyjainlpcps@gmail.com

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ABSTRACT

This chapter examines the critical shift from traditional profit centric business model to an integrated approach that increases the sustainability as a core value. It examines the evolving landscape of corporate sustainability highlighting cases studies of organisation that have successfully aligned their strategies with the sustainable principles.

This paper also includes framework for assessing sustainability impacts, the role of stakeholder engagement and the potential for innovation driven by sustainable practices. Through case study of various successful companies, it can be conclude that how sustainability can drive motivation enhance brand loyalty and improve operational efficiency the paper emphasize the importance of stakeholder engagement and collaborative approaches showcasing how a commitment to sustainability can create share value for both businesses and society.

This paper also suggests actionable inside and strategies for

leaders seeking to drive meaningful change within their organisations, ultimately advocating for a paradigm shift that priority sustainability as a core business imperative.

3.1 INTRODUCTION TO SUSTAINABLE BUSINESS PRACTICES

Sustainability is a term that reminds us that in this era of technological shift where we are progressing as a society, we also need to take care of the environmental, economic, social and human factors. Under this concept of sustainability we will learn to fulfil our present generation's needs without compromising the resources for our future generation.

The concept of sustainability was introduced in 1987 for the "first time in the famous Brundtland Report" produced by several countries for the UN. It's also called our common future. This report was the first to warn about the negative environmental impacts due to economic developments and globalisation; it also offered some solutions to the problems arising from the growth of industrialization and increase in population.

In 2010, the United Nations Summit decided on the MDGs i.e **Millennium Development Goals ,** that are a roadmap to combat hunger and poverty, improve health, education, living conditions, overcome environmental degradation and work towards gender equality.

In 2015, **The Sustainable Development Goals (SDGs),** were adopted by the United Nations The17 SDGs were integrated as "a universal call to eradicate poverty, protect the planet, and ensure that by 2030, all people enjoy peace and prosperity". These were also known as the "Global Goals".

FIGURE 3.1 THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

India has also made significant progress towards attaining several Sustainable Development Goals (SDGs). According to the United Nations Sustainable Development Solutions Network, in 2023, "India was ranked 112 out of 162 countries in terms of the SDG Index with a score of 63.45 out of 100". India's position has improved by 3 and its score by around 3 points, as compared to 2019.

3.2 SUSTAINABILITY IN BUSINESS

The economy and environment are interdependent on each other. The negative impacts of the development cannot be ignored, therefore businesses nowadays need to integrate environmentally and socially responsible practices to conserve the resources for future generations and fulfil the needs of the present generation.

To foster long-term success businesses need to inculcate sustainable business practices. Let's understand the importance of sustainability in businesses:

- **Minimisation of Risk:** The process of detecting, analysing, and taking action to reduce or control the effects and consequences of hazards is called mitigation. Risk mitigation in the business context requires taking steps to reduce the likelihood of adverse effects on the achievement of business objectives. Since business operates in a dynamic environment it is exposed to various types of risks, one of them is environmental risks which includes resource scarcity, environmental degradation, regulatory and climatic risks. All these environmental risks can be reduced or controlled if sustainable business practices are followed. If businesses adapt to technologies that use resources efficiently, dependency on the scarce resources can be reduced. Companies can implement pollution control measures and follow circular economy methods which would reduce the emission of harmful gases or pollutants and ensure reusing or recycling of materials used in the production process. Operational risks related to internal processes, systems and people. Mitigation strategies may include establishing internal controls, training employees, and using technology to increase efficiency and reduce costs.

- **Cost and Energy Efficient:** Cost and energy efficient are two important aspects of a good business. Both reduce environmental impact and operating costs, making the company more sustainable. Cost efficiency in the context of sustainability requires optimising services to reduce waste and overall costs. This will include things like good supply chain management, reducing waste and using good technology. Energy efficiency is an important aspect of

sustainability because it helps reduce the environmental impacts of energy use. Efficient companies are focused towards reducing their carbon footprint and harmful emissions by making use of energy-saving technologies and practices.

- **Conserve Ecosystem:** Sustainable trade is essential to conserve biodiversity, ecosystem services and the overall health of the planet. Sustainable trade focuses on long-term solving of issues, with the aim to balance human needs with the preservation of ecosystems. The use of eco-friendly and ethical practices, responsible harvesting and production methods will help in reducing the overexploitation of natural resources. Businesses can contribute to the conservation of natural resources by avoiding activities that lead to deforestation, flooding, and other damage to the environment. Companies can engage in charitable events and programs aimed at protecting biodiversity and ecosystems.Sustainable Trade supports climate change minimisation, water conservation, protection of marine ecosystems, use of organic agriculture, responsible waste management and ensures partnerships and economic activities that help local communities.

- **Sustainability enhances brand reputation:** A brand committed towards social and environmental responsibility will attract positive public perception. Businesses may raise customer awareness by conveying to them the environmental and social implications of their products or services. Consumers that are well-informed are more inclined to pick brands that promote sustainability, resulting in brand loyalty. Like, **Patagonia**, an American outdoor apparel manufacturer, is a global pioneer in sustainable branding. They've built a loyal client base and significantly improved brand exposure by promoting environmental concerns and committed to ethical labour standards. Such brands are generally stronger in times of crises. The goodwill created by sustainable practices may help organisations in overcoming through difficult times and maintaining a positive reputation. Influence and reputation grow when a company's attempts to lessen environmental effect or promote social problems are made public. The Body Shop, an international beauty company, has established its name on cruelty-free and environmentally friendly products. Their dedication to environmental and social problems has resulted in a loyal consumer base, resulting in continued brand growth.

- **Sustainable Practices Fosters innovation and competitiveness:** The Companies that show active participation and engagement in adapting sustainable practices will be able to meet the dynamic customer needs,

regulatory compliance, and environmental concerns. Governments throughout the world are enforcing stronger environmental and social responsibility laws. Like, "Water (Prevention and Control of Pollution) Act, 1974 (Water Act), Air (Prevention and Control of Pollution) Act, 1981 (Air Act), Environment (Protection) Act, 1986 (EP Act) – This is the umbrella act which entails the following rules:
E-Waste (Management) Rules, 2016;
Bio-Medical Waste Management Rules, 2016;
Construction and Demolition Waste Management Rules, 2016;
Hazardous and Other Waste (Management and
Trans boundary Movement) Rules, 2016;
Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989;
Coastal Regulation Zone Notification, 2011; h) Environment Impact
Assessment Notification, 2006; and
Plastic Waste Management Rules, 2016."

- Brands that embrace sustainable practices on a proactive basis are better positioned to comply with these rules, lowering the risk of legal challenges and related expenses.
- With its Sustainable Living Plan, "**Unilever**, a multinational consumer products firm, has set a new standard in sustainability. This proactive strategy not only complies with regulatory standards, but also reduces possible risks linked with changing laws."
- In today's aware consumer climate, sustainable branding initiatives are no longer a luxury; they are a need for firms hoping to thrive. Both Indian and foreign companies have recognized sustainability as a key driver of brand awareness and growth.
- Companies that use resources wisely, avoid waste, and minimise environmental effects may lower manufacturing costs, improve supply chain efficiency, and compete on price and quality.
- By implementing eco-friendly methods, promoting ethical ideas, and integrating with communities, these businesses are not only benefiting themselves but also contributing to a more sustainable future.
- Incorporating sustainability into your business entails more than just being environmentally conscientious; it entails making the world a better place while ensuring long-term success.

3.3 IMPLEMENTING ECO- FRIENDLY PRACTICES IN BUSINESS OPERATIONS-

- **Green Supply Chain Management-** Green supply chain is a framework that integrates the environment sustainability from the procurement of raw material to the final disposal of the product, involving the entire business operations. By adopting Green supply chain management, Business can reduce carbon footprints and it enhances the overall efficiency of business operations. It includes sustainable procurement, energy-efficient transportation, and responsible waste management. Thus, a green supply chain is not only a business strategy but also a commitment towards the environment and sustainability. Moreover, green supply chain management not only connects the businesses with sustainable development goals (SDGs) But also provides numerous benefits to the businesses including regulatory compliance, cost saving and enhanced relationship with stakeholders.

- **Renewable Energy Adoption in Operations-** A shift from conventional energy sources to renewable energy sources like solar, wind, hydro, or geothermal power, businesses successfully contribute to environmental sustainability. This shift offers a wide range of benefits for companies including the reduction in carbon emissions, stability of energy costs in the long term, fostering brand image and customer loyalty. With technological advancement, the efficiency of renewable energy systems is improving rapidly, which offers businesses an opportunity to meet regulatory requirements, and contribute to sustainable goals.

- **Waste reduction and recycling programs-** To reduce waste, businesses should set up various recycling programs for materials like paper, plastics, glass, and metals, supported by well-placed recycling bins and proper guidelines. For Successful Completion of these programmes, businesses can engage shareholders, suppliers, partners in the adoption of eco- friendly practices, investing in recycling infrastructure and maintain proper monitoring of the performance of the programs.

- **Water conservation measures-** Businesses should adopt various measures like regular maintenance and proper fixing of leaks, implementing efficient water fixtures and technologies, such as water efficient appliances and low flow faucets for conservation of water. Businesses can also adopt rain water

harvesting as well as a water recycle and reuse system. By educating the employees about the importance of water conservation and encouraging them for optimum utilisation of water. By integrating these measures, businesses can contribute to environmental preservation and also enhance their CSR profile.

- **Eco Friendly Product Development-** Eco-friendly product development is a keystone for businesses that aspire to implement sustainable practices in their operations. To commence on this transformative journey, companies should prioritize the creation of products that minimize environmental impact throughout their life cycle. This involves adopting a cradle-to-cradle approach, considering sustainable materials, energy-efficient manufacturing processes, and recyclability of the product. Moreover, businesses should emphasize durability and longevity, discouraging the culture of disposable goods. Transparent communication with the consumers about the eco-friendly features of products helps build trust. Collaborating with suppliers who adhering to eco-certifications can also enhance the credibility of the product. Overall, integrating eco-friendly principles into product development responds to the growing demand for responsibly produced goods, fostering a positive impact on the business as well as on the planet.

3.4 CORPORATE SOCIAL RESPONSIBILITY (CSR) IN SUSTAINABILITY

By implementing the New Companies act 2013, India became the first country to make CSR activity mandatory. CSR refers to the various steps and strategies adopted by a company to ensure that its corporate governance and operations are designed to make the world a better place. In the context of sustainability, CSR refers to a company's commitment to managing its social, environmental and economic responsibility and to be a better stewards of the environment and social landscape in which the company operates. In this context sustainability refers to the idea of meeting the needs of the present without compromising with the resources of future generations to meet their own needs. CSR activities address social, economic, environmental challenges that have major contributions in sustainability. Some of the CSR initiatives are-

- **Environmental Conservation-** Environmental conservation in business refers to active participation in the protection and preservation of the environment, taking initiatives including reduction of carbon footprints, waste reduction and

recycle programmes, adopting renewable energy resources, water conservation, supporting biodiversity protection and promoting eco-friendly product development etc. By taking all these initiatives businesses can significantly contribute to the SDGs (Sustainable Development Goals) and also foster a culture of innovation, awareness and responsibility.

- **Sustainable Supply Chain Management-** With the advancement of supply chain, the advancement of sustainability is also required. This can be done by embracing conscious practices in production, sourcing and distribution. Traceable and transparent supply chains can foster accountability and also make consumers aware about their choices whether it is aligned with their values or not. Furthermore SSCM reduces the risks aligned with climate change, resource scarcity and geopolitical instability. Companies can drive positive change within their operations as well as across the broader global supply chain landscape by collaborating with suppliers and integrating with innovative technologies.

- **Social and Community Development:** As it is mandatory for the companies in India to contribute in CSR activities, many companies are contributing in healthcare, education, infrastructure, wellbeing of local communities, girl education, running NGOs for long term sustainability. CSR initiatives in social development also include numerous programs that empower individuals through skill-building and employment opportunities that promote economic resilience. This approach to CSR strengthens the reputation of the companies as well as creates a sense of shared responsibility for creating a sustainable and inclusive future for generations.

- **Stakeholder Engagement:** Stakeholder engagement is a crucial driver for sustainability. Various companies' foster collaboration and shared responsibility among stakeholders such as employees, customers, local communities, and investors in decision-making processes, to better understand diverse perspectives and needs. Moreover, collecting feedback from stakeholders helps in identifying potential environmental and social risks in operations and supply chains. This engagement of stakeholders builds trust, encourages long term thinking, enhances accountability and also fosters a commitment of business to sustainability.

- **Ethical Business Practices-** Ethical business practices include ethical behaviour, ethical considerations, ethical conduct etc. Every business must prioritize ethical conduct that includes fair labour standards, employee engagement, diversified promotion etc. Business operations must be free from unethical practices, and behaviour. Ethical Behaviour enhances consumer loyalty and trust, creating a brand image and ensures healthy relationships with stakeholders.

- **Transparency and Reporting-** Transparent business reporting refers to the sharing of company related information like its performance, inflow and outflow, operations to its stakeholders. This transparency fosters accountability, trust, and loyalty and also helps in building credibility with customers, suppliers, investors and the stakeholders of the company. Transparent reporting allows stakeholders to assess a company's sustainable performance and also provides a basis for identifying areas for improvement, fostering a culture of sustainability.

3.4 SUSTAINABILITY CHALLENGES FACED BY BUSINESSES

Business faces various challenges in adopting sustainable business practices. This happens because of the complex process of sustainable business practices. Here are some challenges that are based by any business while implementing sustainable practices in their businesses-

- **Complex Supply chain-** Modern supply chain is becoming more complex in every state so it becomes challenging for any business to maintain sustainability at every stage. Furthermore, the availability of sustainable raw material becomes challenging when it is sourced from regions having tax regulations. To ensure sustainability through supply chain includes various issues like transparency, traceability and ethical practices. To overcome this challenge businesses need to engage the suppliers in sustainability initiatives.

- **Climate change and environmental factors-** Climate change and environmental factors like shortage of water, change in demands, changes in weather etc are the major challenges for businesses in implementing sustainable business practices. To overcome these challenges businesses must require changes in the internal system of business as well as initiate collaboration with stakeholders to adopt sustainability.

- **Lack of education and awareness-** The employees of any organization may lack the necessary knowledge and skills that are necessary to support

sustainability practices. To make them aware about the sustainability principles, comprehensive training programmes should be organised. Also it is necessary to educate the suppliers, consumers and related persons of the businesses about the importance of sustainability and inform them about the business's commitment to sustainability.

- **Regulatory Uncertainty-** Changing regulations at the local, national, and international levels can impact everything from emissions standards to waste management practices. This uncertainty complicates compliance efforts and also hinders long-term planning and investment. It is challenging for the businesses to predict future regulatory requirements and, lack of a stable regulatory framework can create a cautious business environment, where companies may hesitate to make substantial commitments to sustainability without a clear understanding of future compliance obligations.

- **Measuring and Reporting Impact-** It will become a challenge for the businesses to quantify their contributions to sustainability, transparently due to lack of standardized measurement frameworks. This measurement complexity not only hinder businesses in representing the tangible outcomes of their sustainability efforts but also hinders effective comparisons and benchmarking across industries. To overcome this challenge, development of transparent reporting mechanisms, industry's collaboration to establish common standards are necessary.

3.5 CASE STUDIES OF COMPANIES ADAPTED SUSTAINABLE BUSINESS PRACTISES

- **Tesla,** An electric car company is known for its commitment to sustainability in all aspects of its operations. Tesla's core business is the production of **electric vehicles**, which reduce dependence on fossil fuels at home and help reduce emissions compared to the motorised car. It has invested in the construction of the **Gigafactory**, which will be used to produce electric cars and electronic products. To reduce carbon emissions associated with production, factories are trying to use renewable energy sources such as solar and wind.
Tesla has also developed electrical appliances such as the **Powerwall** for home use, that reduces the dependency on the grid , while it stores the solar energy which can be used when the sun is not shining and the Power pack for commercial and utility use.

- Tesla's **Autopilot and Fully Self-Driving** (FSD) features are designed to improve traffic flow, prevent accidents and increase fuel efficiency. These

technologies help improve road safety while also potentially reducing overall transportation-related emissions.

- The company has also developed solar roof tiles and panels which demonstrates the company's commitment to solar energy solutions. These products allow users to produce clean energy for their homes and commercial use. It also focuses on recycling materials in its vehicles as part of its business cycle and considers the circular economy, where materials can be reused or recycled to reduce waste and the environment.

- Tesla has researched two-way charging (**bi-directional charging**) technology that would enable the electric car to not only absorb electricity from the grid but also feed excess energy back into the grid. The concept could help grid stability and integration of renewable energy sources. The company is working to reduce the environmental impact of its supply chain. This involves obtaining raw materials responsibly, reducing water consumption, and encouraging suppliers to embrace sustainable practices.

- Tesla is a pioneer in battery technology innovation. The development of more energy-dense and cost-effective batteries benefits not only the performance of electric cars but also the general feasibility of renewable energy storage systems.

- Tesla issues yearly sustainability reports that describe the company's environmental effect, carbon footprint, and progress toward sustainability targets. The company's dedication to openness keeps stakeholders up to date on its sustainability initiatives and accomplishments.

- **Google** has undertaken many sustainable business initiatives to reduce its impact on the environment, support renewable energy and contribute to the future. Google has implemented the following core business practices:

- **Purchasing Renewable Energy:** Google is committed to purchasing renewable energy equal to 100% of the electricity used worldwide. This requires direct investment and the purchase of electricity from renewable energy sources such as wind and solar power plants.

- **Efficient Data Center Operations:** Google has invested heavily in building and operating energy-efficient data centres. This includes energy-saving improvements to cooling systems, server performance, and architecture.

- **Measures to reduce waste:** Google has developed strategies to reduce waste in its operations. The company is working to achieve zero waste to landfill by encouraging recycling and placing it in offices and data centres.

- **Water Saving:** Google is committed to saving water in its data centres and offices. The company uses water-saving technologies such as circulating water cooling systems to reduce its water footprint.
- **Product Life Cycle Considerations:** Google attaches importance to creating products in the circular economy. Product recovery, recycling and banning the use of hazardous substances in equipment are part of this.
- **Supply Chain Sustainability:** Google is committed to ensuring its supply chain adheres to responsible and sustainable manufacturing standards. This includes the seller taking into account conflict of information, business ethics and environmental liability issues.
- **Energy Investment:** Direct Investment in Renewable Energy Projects: Google invests directly in renewable energy projects around the world. This includes wind and solar projects and helps expand renewable energy sources.
- **Engagement and public reporting**: Google provides regular environmental reports detailing its progress, achievements, and challenges in meeting security goals. This clarity helps stakeholders understand the company's commitment to sustainability.
- **Design Green Buildings:** Google designs and operates many buildings with green building concepts in mind. Many of its buildings have received Leadership in Energy and Environmental Design (LEED) certification for their design and environmental performance.
- Google has set a goal to achieve net zero carbon emission across all its operation and value chains and run on carbon free energy 24/7 such as solar and wind energy by 2030.
- It is also aiming towards Zero Waste to Landfill for their global data centre operations and divert all food waste from landfill by 2025. Under this till 2022 , 10 out of 26 (38%) Google-owned and -operated data centres have achieved zero-waste to landfill and 85% of food waste diverted from landfill.
- Google shall use recycled or renewable material in at least 50% of plastic used across our consumer hardware product portfolio by 2025. Google used 41% of the recycled plastic in products manufactured in 2022 .
- Google is also working towards making its product packaging 100% plastic-free by 2025. Till 2022 it has achieved 96% plastic-free packaging for new Google products launched and manufactured.
- **Tata Consultancy Services (TCS)** is a prime example of an Indian company using a sustainable business model. TCS, a world-renowned IT services and consulting firm headquartered in Mumbai, has implemented various strategies to integrate sustainability into its business.
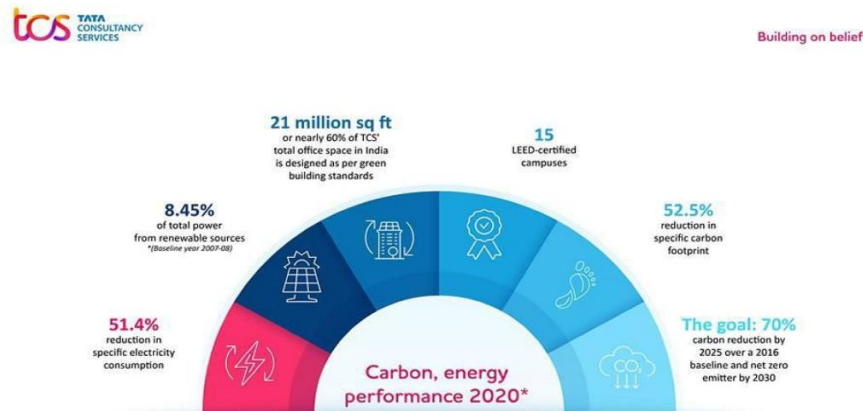
FIGURE 3.2 TATA CONSULTANCY SERVICES (TCS)

TCS is investing in green data centres to reduce energy consumption and carbon footprint. It aims to reduce carbon footprint by 70% by the year 2025 (over 2016 levels) and to achieve net-zero emissions by 2030. The company is investing in renewable energy to increase its operations. The company has set a goal of using 100% renewable energy and recycling 100% of their biodegradable waste by 2025 and eliminating single-use plastics from their campuses. They have also taken steps to achieve these goals by installing solar panels and obtaining a renewable energy fire certificate.

FIGURE 3.3 SECURE BORDERLESS WORKSPACE (SBWSTM)

It has also built a transformational work-from-home platform Secure Borderless Workspace (SBWSTM) for its half a million associates spread across 46 countries,

contributing to the wellbeing of the associates and the creation of a more sustainable planet. Adopted paperless initiatives to reduce dependence on paper and create a digital workplace. It also aims towards creating a paperless workplace. More support is being provided to electronic documents, electronic signatures and online collaboration tools to reduce the environmental impact of paper use.

TCS values employee participation in environmental projects.

The organisation organises motivational events, training and supports to educate employees on the importance of leadership. This includes measures to save energy, reduce waste and promote environmental transport. TCS takes part in many social development projects by supporting the environment. This includes agriculture, waste management and water conservation. By participating in these programs,. These examples demonstrate TCS's involvement and approach to sustainability across many of the company's activities, including infrastructure and energy for employee engagement and growth. As more businesses see the value of sustainable practices, examples like TCS are encouraging others to follow suit.

ITC is a diversified company that controls stocks in industries such as tobacco, restaurants, cardboard, packaging and agriculture. ITC integrates sustainability into its business strategy in the following ways:

Carbon Positive Status: ITC has achieved the "Carbon Positive" designation, meaning that the company absorbs more carbon than it takes in. In order to maintain water quality balance, the company has invested in water improvement projects, rainwater harvesting and water quality management systems.

Environmentally Friendly Packaging: ITC is the first company to use environmentally friendly packaging solutions. The company is committed to designing and manufacturing recyclable and environmentally friendly packaging to reduce the environmental impact of its products.

Renewable Energy: Like TCS, ITC is also investing in renewable energy. The company has developed wind energy projects and solar power plants to meet the huge demand for clean and sustainable energy.

Social Activities: ITC's sustainability activities extend beyond the environment. The company engages in a variety of activities such as education, healthcare and skills development, all of which contribute to the overall health of its business units.

By integrating sustainability into its core business strategy, ITC strives to create long-term benefits not only for shareholders, but also for people and the

environment. These examples show how different businesses are using technology to solve environmental and social problems.

3.6 FUTURE TRENDS IN SUSTAINABLE BUSINESS

As the fragile state of our world dominates the news, with people and businesses alike desperate for change, we wonder what the situation will be like in 2023 to improve security. Many changes have changed the world agenda this year.

3.6.1. MORE USE OF RENEWABLE ENERGY SOURCES

The renewable energy sources have become more accessible in recent years, and it is believed that this trend will continue into 2023. Long-term cleaning through recycling processes and the use of new technologies. Homeowners can reduce their environmental impact and energy costs by switching to a pump or solar panel. The energy prices are rising day by day, causing people to shift more towards renewable energy sources like solar panels. The installation of renewable energy is important to provide independent energy to power the house. This reduces the need for fossil fuel power. Installation of solar thermal, heat pumps, water heaters, biomass boilers, and natural cooling. Are a good way to combat excess carbon emissions by 80%. Additionally, heat pumps are three times more expensive than boilers, resulting in significant savings in energy costs.

"Around 40% of global emissions come from buildings, and most of these result from the ways we heat our homes and businesses. Switching to cleaner, low-carbon options will play a critical role in tackling climate change." **Nationalgrid.com**

As predicted by the experts, the prices of renewable energy sources will be the same as the normal heating options by 2023, giving a reason to people to switch to sustainable products.

Renewable energy emits no or low greenhouse gases. That's good for the climate.

3.6.2 USE OF MATERIAL THAT CAN BE EASILY RECYCLED

Recycling is not a new concept for the business world, as environmental awareness increases, people will learn more about climate change and recycling will become part of the sustainability effort. From the stage of production till selling each person involved the supply chain can

take actions to reduce and recycle packaging and also encourage consumers to do the same. This situation is seen in all sectors, from food to retail.

While consumers demand environmentally friendly and sustainable products, it is not surprising that companies are also taking steps to improve their sustainability. Forecasts predict that increased awareness of recycling methods, especially for plastics and packaging, will lead to positive results.

According to analysis of a recent review by Smithers Pira titled "The Future of the Recycling Market to 2023" the percentage of recycled material in plastic packaging will increase as retail companies decide to use recycled material, the report has also taken into consideration that the governments around the world is taking necessary steps to establish recycling programs, that will help in sustainable development for companies at all levels of the economy.

3.6.3   INCREASED   AWARENESS   FOR   PLANT-BASED   AND 'ALTERNATIVE' FOODS

In many countries, businesses continue to evolve with advances in transportation solutions. Increasing bicycle use, low-carbon public transportation, and the introduction of electric and other vehicles are among the developments. According to a recent study by Oxford University, "People can reduce their carbon footprint by up to 73% by not eating meat or dairy products." That contributes to huge savings, and it's easy to understand why more and more people are choosing vegan food. This is a stable industry that many of our stakeholders predict will continue beyond 2023.The creation of "alternative" foods is on the rise, and we can all look forward to seeing more of these products in the future.

Animal agriculture accounts for around 15% of the world's greenhouse emission, therefore, "Fake" meat and cheese are becoming increasingly common in supermarkets and restaurants. The demand for food safety for food producers and consumers is increasing. This isn't surprising when you look at the data. "Wood-based meat uses 47-99% less land and produces 30-90% less greenhouse gases (Good Food Institute)."

A plant-based food generated less CO_2 and methane and it also requires less land and water use,. It also has other benefits, such as increased health and well-being and reduced air pollution. That's why more and more people are becoming aware of what they drink and where it comes from.

3.6.4. ADDRESSING CLIMATE-POSITIVE TECHNOLOGY

In today's era of technological advancement,, future predictions undoubtedly include bigger and better technologies that will combat climate change and promote sustainable development. Frequent use of existing and new technology tends to reduce our impact on the planet and personal environment.EU adoption increased from 8 million households in 2018 to nearly 22 million households in 2020, according to a recent Statista study.

While these smart devices give users the ability to control more than just their energy use, they're not the only ones that can do it.
It helps reduce electricity in the house. By 2023, many of our home appliances, from "smart" stoves to refrigerators and dishwashers, will become energy efficient, easier to control, and consume less energy in the shortest time possible.All these new technologies are not only beneficial for families but also for the business world. For example, cloud storage and video conferencing may be similar technologies compared to electric cars.

3.6.4.1 IMPROVED TRANSPORT AND INFRASTRUCTURE

In many countries, businesses continue to evolve with advances in transportation solutions. Increasing bicycle use, low-carbon public transportation, and the introduction of electric and other vehicles are among the developments.

Although some countries will adopt electric vehicles faster than others, there is no doubt that the transportation of the future will find its place on the world's roads and highways.

Many people we spoke to saw the importance of safe and efficient transportation in the coming years.
It's no wonder that this is a source of concern when you consider the elements that affect and are caused by fossil-fuelled transportation. Passenger cars generated approximately 41% of global CO_2 transport emissions in 2020. More than any other means of transportation.

Necessary steps are being taken to lessen the negative impact of road vehicles. From adopting electric vehicles, buses, and vans, an effort is also being made to encourage the use of public transportation or bicycles.

Many European cities have limited use of car to make transportation easier. This includes Malta, Luxembourg, Spain and many more countries.

According to a study by Oxford University, : "Cycling instead of driving a day can reduce carbon emissions by 67%." This shows that while it may not be possible to replace every vehicle, the ability to reduce emissions is still important.

Most countries are currently working hard to improve transportation, but we expect this change to improve further for 2023 as efforts increase.

3.6.4.2 REUSE AND PURCHASING SECOND-HAND PRODUCTS

The popularity of second-hand shopping and reusing items and resources has continuously increased. Not only does it substantially minimize the environmental effect of new product manufacturing, supply chains, and delivery, but it also saves millions of customer's money. In the present context, this is an extremely important topic. This sustainable future trend has the advantage of being applicable to a wide range of items, from apparel and packaging to furniture and materials.

By 2032, the used apparel sector will be valued more than $282 million. Consumers who want to prevent pollution, climate change and poor performance are increasing the need to purchase second-hand clothes. Since 42% of second-hand buyers are between the ages of 18 and 37, young people with limited financial resources also need to reduce their expenses in the short term.

As the number of consumer environments increases, we should expect reusable and recyclable materials to become more popular. From 2023 we may see more second-hand, vintage and repurposed brands at the core of our products.

These are huge incentives, and if governments around the world embrace these changes, we will see significant improvements in the world's health.

FIGURE 3.4. FUTURE TRENDS IN SUSTAINABLE BUSINESS

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