

APPLE INC.

How Doing Right for the Planet is Good for Business



Apple Inc. has proven to be one of the most popular and innovative technology companies of the last decades. The company's high standards, along with its ethics and brand philosophy, have made every product it produces live up to the company's reputation. While making products that are far superior to those of other companies and being a highly profitable company and brand is important to Apple, more ethical issues such as the health of our planet is another Apple concern. Apple's continued and unabated carbon emissions into the atmosphere are contributing more and more to climate change. A change of consciousness is what is needed to improve the situation. Apple Inc. is one of the technology companies committed to reducing its carbon footprint and becoming carbon neutral by 2030 while staying a market leader. Apple proves that going green does not harm profitability.

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Introduction

Apple was founded on April 1st, 1976, where Steve Jobs and Steve Wozniak had the idea of creating smaller and more sophisticated computers that could be used in the home office. This idea became a reality and in July 1976 the first computer, called Apple I, was sold for US\$ 666.66. This first computer was hand-built by Wozniak and lacked a keyboard, television, and data input or output port (macworld.co.uk). The generation leap of this computer was a revolutionary change as the Apple II had the first color graphics, tape-based storage, and a built-in keyboard [15]. Apple II went on sale in April 1977 and cost US\$1,295. The great innovation the company was betting on caused its sales to increase from \$7.8 million in 1978 to \$117 million in 1980. For this increase in value, Apple goes public in the stock market with an IPO of \$22. The decade of the eighties brings great changes for Apple, with the departure of Wozniak in 1983. In 1984, the new Lisa and Macintosh computers were released. In 1985 Jobs left the company and founded his own company called NeXT Software. The development of Windows, Microsoft's sophisticated operating system and Apple's major competitor, meant a severe loss in Apple's market share. In early 1997 Apple was faced with the need to improve its operating system and bought NeXT Software, which meant the return of Steve Jobs to Apple. He became CEO of Apple and introduced Mac OS 8 as the operating system. In August of the same year, the Alliance with Microsoft was announced, and \$150 million was invested in Apple stocks [12]. In 1998 the iMac and the portable computer, PowerBook G3, were announced. The 2000s were quite revolutionary and made Apple one of the most valuable companies in the world. The early 2000s saw the introduction of Mac OS X, the iPod, the iTunes Store, and a makeover of the PowerBooks, using a white polycarbonate material. In 2006 the MacBook Pro was born and in 2007 the iPhone, the company's best-seller to date, as well as Apple TV were introduced to the market. Today Apple is one of the largest hardware and software companies due to its great vision of progress. Other products such as iPad, Apple Watch, and services such as Apple Pay make this company, not an ordinary technology company but one of the most powerful companies in the world. Despite the early death in 2011 of its co-founder and CEO Steve Jobs, Apple has been able to carry out its philosophy and vision and made Apple the great company it is today, being the first company to reach the value of one trillion dollars.

Apple's innovations are not only focused on technology but also on the environment. As early as 1991 Apple began to develop an ecofriendly business by eliminating the use of lead in its batteries. Climate change is one of the biggest issues nowadays, caused essentially by the excess of carbon dioxide emissions due to the use of non-renewable energies. Although many companies are unaware that they are worsening the environmental situation of our planet, Apple has declared that it aims to be carbon neutral by 2030. One of the main reasons why I have chosen to focus on Apple in the scope of this is because this company offers innovation, it is a unique brand that offers an emotional user experience. Because of the brand identity and philosophy, the quality of its devices, the experience the user gets when using Apple products, and above all its goal to help the environment by reducing CO₂ emissions, Apple Inc. is the ideal company to focus on this work.

Analysis

Operations and Business Divisions

The organizational structure is key to leading any company to achieve its goals effectively. Apple Inc. is characterized as being a highly innovative company that is always one step ahead of its competitors. That is why having good operations and business divisions is key to achieving its

innovative objectives. Wizards do not reveal their secrets and that's why the way Apple operates is not fully known. Apple is undoubtedly a big fish in the technological market as few companies can compete with it. Furthermore, Apple's products are characterized mainly by their sleek designs, ease of use, and longevity of the products. One of the tasks of the operations team is to be involved in the product design and manufacturing process. The product design process is a labor-intensive and often overlooked process. The operations team works with the industrial design and product design teams to ensure that the products manufactured meet Apple's promises and standards. This way users can enjoy Apple in every way. Apple has an organization in which all departments are under a single functional organization. That Apple continues to maintain such an organization is incredible due to the complexity and size of the business. The hierarchy of its business organization is a hub-and-spoke system, with Tim Cook as the central hub, the Chief Executive Officer (CEO). Cook supervises the organization of the different areas of expertise of the company to ensure that the different departments work as they should. The different departments are divided based on products and have teams in Design, Hardware Engineering, Hardware Technologies, Software, Services, Machine Learning & AI, Marketing, Marketing Communication, Operations, Sales, Retail, People, Finance, Legal, Corporate Communications, Environmental, Policy & Social, and Corporate Development [8]. Apple's organizational structure allows for interactions between various departments within the company, thus allowing for better communication and collaboration to ensure goals are met. Because Apple has such a wide range of products, more operations, departments, and jobs are necessary. Every employee, from the smallest to the largest in responsibility, must be committed to meeting the values and standards of this large company to maintain and deliver the best of Apple.

Business strategy

At first glance, what makes consumers fall in love with Apple products is their appearance. Although the physical appearance is one of the most influential characteristics when it comes to buying a product, Apple products stand out mainly for their technology, innovation, and advanced functionality. Apple uses a marketing strategy based on product differentiation, conveying to users that the products and the experience with them are innovative, intimate, and unparalleled. Apple's marketing and advertising have been based on improving products that have been previously released to the market. Examples of product improvements are innovations such as Touch ID, Face ID, iCloud, or Apple Pay system. Apple bets on an easy-to-use software and clean and elegant hardware. The software that Apple offers in all its products is simple and smooth to use. If a user is used to the software of another product, the transition to Apple may be a bit difficult at first. However, getting used to Apple's software, the transition back to other types of software is difficult and not as smooth and clean. Apple's hardware designs are clean and elegant, and very versatile. In addition, most products are offered in different sizes and colors to suit consumer preferences. This company does not offer products per se, it offers experiences, lifestyle, and simplification of tasks, that is why enhancing customer experience is another of Apple's strategies. Every year at events, presenters focus on explaining and telling stories of how the devices will make people's lives more practical. Although iPhones are Apple's top product, the company does not want to depend its sales and success exclusively on this product but wants to emphasize other products such as iPads or MacBooks, and accessories such as the AirPods and the Apple Watch. Another great strategy implemented is its vertical integration, making Apple a closed and exclusive ecosystem. This is characterized by the complicity of all its products and how they complement and synchronize. One of its best features is Airdrop and iCloud because one can access virtually

any stored information from any Apple device. By only working with Apple products, users find it more attractive to use Apple products to enjoy the full user experience. Apple's strategies have a lot to teach, from the structuring of its strategy, through the management of its speeches to the possibilities offered by innovations in its products and software.

SWOT Analysis



Figure 1: Apple Inc. SWOT Analysis

Strengths:

1. **Globally Iconic Brand Image:** Apple has established itself as one of the most important and innovative brands in the technology market. The bitten apple logo is a very popular and valued brand in society. Due to the innovation, quality, and longevity of its products, Apple has millions of followers around the world.
2. **Sustainability:** Apple has set out to completely erase its carbon footprint by 2030. Its commitment to improving the environment is reflected in many of its products. In 1991 Apple stopped using lead in its batteries, and since 2016 it has reduced more than half of its plastic use in packaging. Apple also counts with Liam, a robot that recycles old iPhone devices.
3. **Customer Loyalty:** Apple's promise of quality and innovation is palpable in each of its products. Once a user has made the transition to Apple, the chances of going back are minimal. Because of their quality, innovation, design, handling, and user experience, Apple products satisfy users' needs and expectations, thus sealing their loyalty to the brand.
4. **Ease of use:** All products offered by Apple use very similar software. All, macOS, iOS, and WatchOS offer a user-friendly interface and very simple handling.

Weakness:

1. **Expensive Products:** Most of the products that Apple offers are priced higher than what other brands offer, for example, iMacs, MacBooks, and iPads have a higher price than other PCs, laptops, and tablets from other competitors.
2. **Exclusivity of Products and Incompatibility with other Software:** Apple offers a closed and exclusive ecosystem of products. Many Apple products have great complicity, blending

very well with each other. Therefore, the user is consciously or unconsciously forced to buy exclusive Apple products.

3. Limited Advertisement and Promotions: Despite Apple's great popularity, the company does not invest large amounts in advertisements. By not reaching the public on a more continuous basis, Apple relies on its various conferences and in-store staff to sell the product and make it available to them.
4. Limited Distribution Network for its goods: Apple's products are physically limited in sales. There are not many retailers authorized to sell Apple products. This can limit the distribution of its products, and close product expansion frontiers.

Opportunities:

1. Product Diversification: Many other tech companies are expanding their product range by releasing different accessories. For example, Xiaomi has decided to offer personal transport products such as electric scooters and bikes, smart devices such as air and water purifiers, cleaning gear, and Wi-Fi routers, and even musical instruments and sports machines. Apple does not need to broaden its horizons that much, as entering largely unknown sectors can be detrimental to the company. However, it can be more open-minded to different options in the future.
2. Consistent Customer Growth: Customer loyalty is one of the most characteristic strengths of Apple, its consistent growth is no surprise. Apple's customer retention rate is 92%, therefore, the number of people that rely on Apple by buying more than once from their products is really high. Due to recommendations and reviews, more and more people decide to switch to Apple.
3. Qualified Professional: One of Apple's promises is to offer high-quality products. For this, the team behind every idea, every product, must be a highly qualified team capable of fulfilling the objectives that the company demands.
4. Expansive Distribution Networks: Apple would benefit if it decided to expand its distribution network, making its products more accessible and expanding its reach to other countries.

Threats:

1. Coronavirus Outbreak: Like many other companies, Apple has suffered the consequences of the COVID-19 pandemic. The global economic recession due to the pandemic led to a drop in the stock market and many companies were affected, including Apple. A large part of Apple's manufacturing and supply chain is in China, the country that was the epicenter of the pandemic and the first on running short of supplies.
2. China Tariffs: The tariff that the US government has established for imports from China has increased. As the cost is more expensive for Apple, this may increase the price that customers must pay for the products. In this way, Apple may see a decrease in sales.
3. Competitors: Because Apple has higher-priced products than other companies, its competitor including Samsung, Dell, or HP Inc., taking advantage of new technological advances, are competing with Apple in the market. While Samsung competes more with Apple in mobile devices, Dell and HP are competition focused on PCs and laptops.
4. Fear of imitation: Apple is an innovative brand that is way ahead of its competitors. Many technologies incorporated in this brand's products are imitated by competitors to have a chance to gain a foothold in the market. Apple is also a fashion brand and owning Apple products brings features to the consumer that are well regarded in society.

Key products and services

Apple currently offers on its official website different products in which are Macs, including MacBook, iMac, Mac Pro, Mac mini, Pro Display XDR; iPads, where you can find the iPad, and the Pro, Air, and mini ranges; iPhone featuring iPhone 11, SE, 12 and 13, including the Pro version; Watch, featuring Apple Watch Hermès, Nike, Series 3, Se and Series 7; AirPods, including second generation and third generation AirPods, the AirPods Pro, and AirPods Max. In addition, Apple has an accessories tab where the consumer can buy cases, watch bands, and complementary accessories such as a wireless battery and replacements for items such as the Apple pencil. The operating system of these products is mostly the same, although some features change slightly to suit the different products. Macs have MacOS, iPads have iPadOS, iPhone runs on iOS, and Apple Watch on watchOS. Apple offers different features such as Touch ID and Face ID, technologies in charge of reinforcing data security and user privacy. Recently, other services such as Apple Pay and AppleCare have been added. Apple also has its own store, the AppStore, through which you can download or purchase different apps that are of interest to users.

Porters Five Forces Model

Porter's five forces model aims to examine the five key forces of competition within a particular industry. These five forces are rivalry among existing competitors, bargaining power of buyers, bargaining power of suppliers, threats of new entrants, and threat of substitution.

Rivalry Among Existing Competitors: Apple has strong competition mainly in the computer sector, with its main rivals being Lenovo, HP Inc., and Dell. As will be seen shortly, these three companies have a larger shipment number of computers worldwide than Apple, so they are ahead of Apple when it comes to product distribution (See Figure 2). This is usually because the prices of these other companies' products are not as high. However, Apple's great innovations and marketing strategy keep the company in the position of one of the most profitable brands in the computer market.

Bargaining Power of Buyers: The bargaining power of buyers is weak for Apple, due to the number of loyal followers that Apple has. As we have seen in the SWOT analysis, customer loyalty is one of Apple's strengths, that is easily maintained, if not enlarged due to the growing number of new customers. In addition, Apple has 92% of customer retention; although this company may suffer the losses of some of its customers, this numbers would be negligible for Apple and would not represent a large loss of revenue.

Bargaining Power of Suppliers: This force is relatively weak for Apple because it has a large number of suppliers. This allows it to have a high number of supplies even if the relationship with a supplier weakens or the price to be paid is high. Because of Apple's power and importance in the market, its suppliers are also reluctant to lose business with them. "This strengthens Apple's position when negotiating with suppliers and conversely weakens its position" [11]. Apple's Environmental Progress Report from 2020 states that more than a hundred of Apple's suppliers have committed to Apple to participate in carbon emission reduction by committing to using renewable energy (p.3).

Threat of New Entrants: Although Apple has established itself as one of the biggest brands in the digital market, the threat of new entrants is a weak to a medium threat. Large companies such as

Samsung, Google, or Dell, are increasingly accentuating the competition in mobile, computer, and laptop manufacturing with Apple. Although they may be major rivals to Apple in the future, Apple continues to strengthen its position and reputation by implementing new products with new technologies and keeping its customers satisfied with its work. On the environmental issue, many companies have decided to reduce their carbon footprint just like Apple. This can be a disadvantage for Apple if some of the more competent companies such as Microsoft manage to achieve better results in a shorter period.

Threat of Substitution: Substitute products, according to the Porter Five Force model, are substitutions that can replace one of Apple's products. For Apple, an example of a replacement product is a smartphone that could replace an iPhone. The threat of substitution is relatively low force for Apple. The reason is that most potential flagship products have limited capabilities compared to Apple's products, as in the example of a landline phone compared to an iPhone which has a greater usefulness in today's time.

Because of the brand identity and philosophy, the quality of Apple's devices, and the experience the user gets when using those products, make consumers more willing to pay a higher price. Therefore, regardless of time and price, Apple will always have followers who support its product unconditionally.

Key competitors

Although Apple has established itself as one of the best and most innovative tech businesses, the existence of other big brands such as Microsoft, Samsung, or Dell is giving the Californian brand a lot of competition. Apple has competition in the manufacture of computers and smartphones. Among the main competitors for computer manufacturing are Dell, Lenovo, and HP. Table [??] shows the top PC vendors worldwide for the two previous years (2020 and 2021).

Company	3Q21 Shipments	3Q21 Market Share (%)	3Q20 Shipments	3Q20 Market Share (%)	3Q21-3Q20 Growth (%)
Lenovo	19,945	23.7	19,601	23.5	1.8
HP Inc.	17,624	20.9	18,718	22.5	-5.8
Dell	15,242	18.1	12,048	14.5	26.5
Apple	7,222	8.6	6,725	8.1	7.4
Acer Group	6,036	7.2	6,327	7.6	-4.6
ASUS	6,028	7.2	5,714	6.9	5.5
Others	12,049	14.3	14,153	17.0	-14.9
Total	84,147	100.0	83,286	100.0	1.0

Figure 2: Preliminary Worldwide PC Vendor Unit Shipment Estimates for 3Q21 (Thousands of Units)*

(*Adapted Source: Gartner.com)

Table 1 shows Lenovo leading the PC market in 2021, followed by HP Inc. and Dell. Having market shares of 23.7%, 20.9%, and 18.1% respectively. Apple is in the fourth position with a 9.5% market share difference from its closest rival.

Aside from product competition, Apple counts on rivalry from other companies towards taking a more environmentally friendly path. Companies such as Microsoft, Google, and Amazon have also publicly stated their intentions to be completely carbon neutral in the next few decades. Although these tech companies have similar goals, Figure 2 shows how Apple has a much lower carbon dioxide emission than the other companies that share the same carbon-neutral goals.

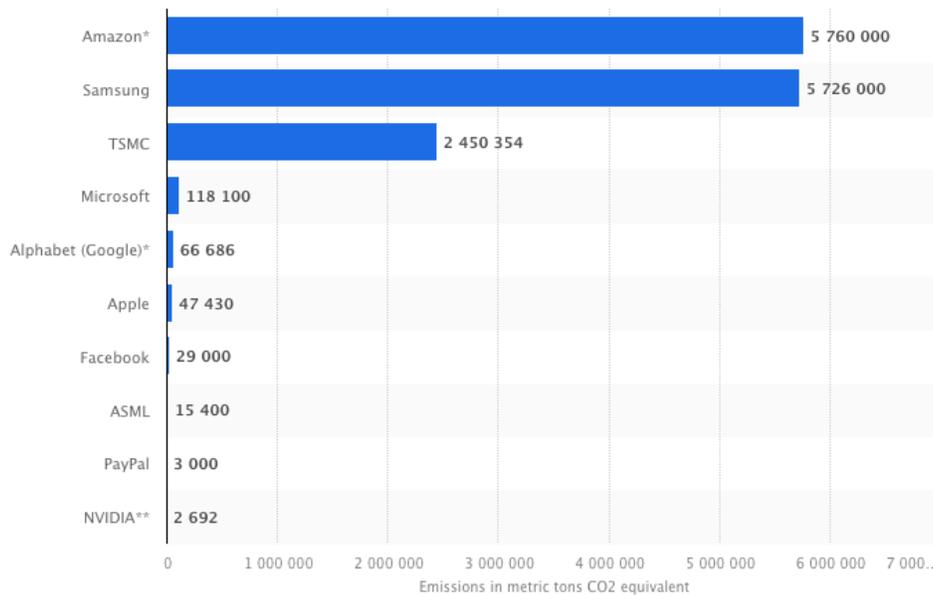


Figure 3: Carbon dioxide (CO₂) emission of different tech companies in 2020*

(*Adapted source: Statista.com)

Financials

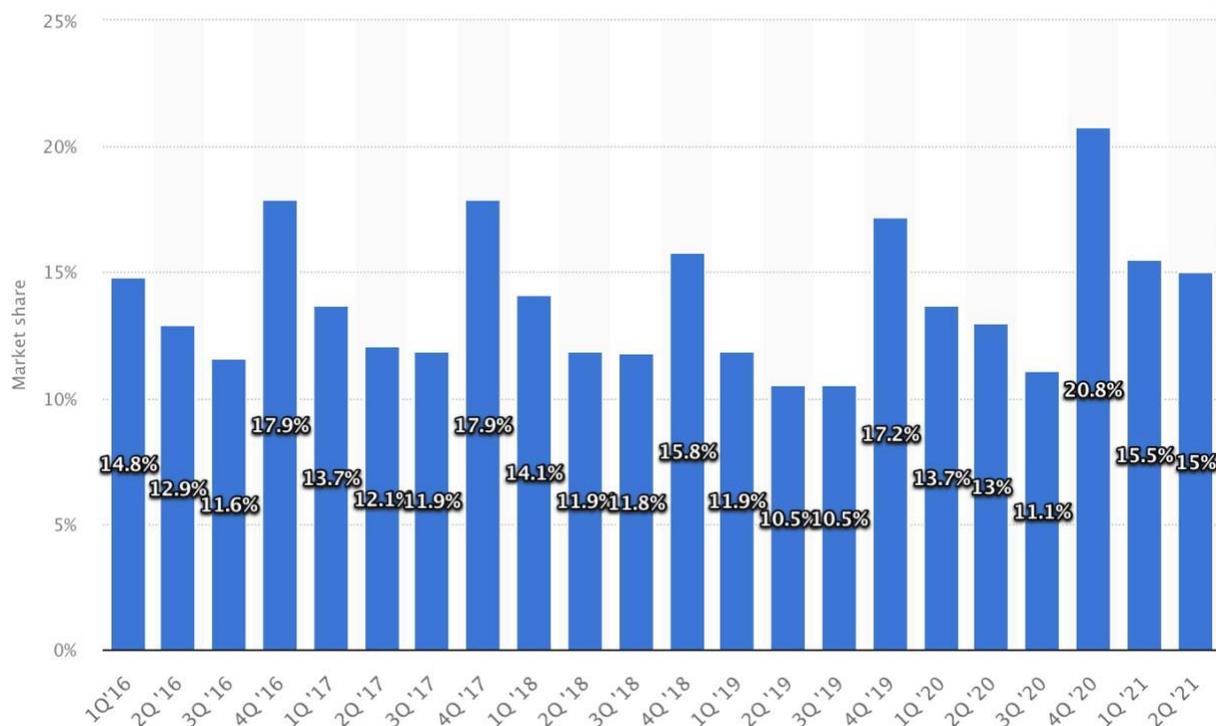


Figure 4: Apple's Market Share from 2016 to 2021*

(*Adapted source: Statista.com)

Figure 4 shows that Apple's market share in the smartphone market always cycles between 12 and 20%, with a peak each year in the fourth quarter, corresponding with the release of new iPhone models.

According to Gadgets 360 by NDTV, Lenovo is the market leader in laptop shipments (over 20 million PC units) for the second quarter of 2021 with a share of 23.9 percent. Furthermore, the PC market "grew by 13.2 compared to the second quarter of last year despite global component shortage" (Washington, 2021). However, Apple could only account for a market share of 7.4 percent with 6.1 million shipped units. Nevertheless, Apple could increase its revenue from \$274,515,000,000 in 2020 to \$365,817,000,000 in 2021 and could increase its profit by \$50,000,000,000 (Apple Inc, 2021). This indicates that Apple could not only handle well the financial crisis due to the Covid-19 pandemic, but also that its strategy seems to be working in the market. Comparing financial ratios to one of Apple's biggest competitors Lenovo, Apple is handling finances much better. Apple's profit margin (25.88%) beats Lenovo's profit margin (2.42%) by over 23%. Apple's Return on Assets is 20.18% and its Return on Equity is 147.44%. Lenovo on the other side could account for a Return on Assets of 4.83% and a Return on Equity of 40.93%. This means that Apple has generated on average 23% more profit for each dollar of sale, has generated almost 5 times as much profit from its total assets, and could generate almost three quarters more net income per dollar of invested capital. All these numbers reflect Apple's efficiency in the use of money which is one reason why Apple generated \$300,000,000,000 more revenue than Lenovo (67.67 billion) in 2021 [14]. Besides, Apple's Trailing P/E ratio is 31.99,

much higher than Lenovo's Trailing P/E ratio of 9.00 which can indicate that investors in Apple expect high growth rates in the future. This can be one of the reasons why Apple's stock is being traded at \$179.30 (12/15/2021) and Lenovo's stock at \$21.49 (12/15/2021). The expectation of high growth rates, among other reasons, is due to Apple's forward-thinking as well as its strategy and goal to be carbon neutral. Figure 5 summarizes Apple's financial lead over Lenovo.

	Apple	Lenovo
Revenue (000,000)	365,817	67,670
Profit Margin	25.88%	2.42%
Return on Assets	20.18%	4.83%
Return on Equity	147.44%	40.93%
P/E Ratio	31.99	9.00
Stock Price	\$179.30	\$21.49

Figure 5: Summary of Apple's financial lead over Lenovo

Key Technology or IT

Apple is one of the computer companies that present the best technological innovations. This is one of the main reasons why every year Apple amazes its public with new product releases. Excellence is one of Apple's basic pillars. Many tech companies have decided to use more renewable and environmentally friendly technologies and materials to take that step towards a greener future. Apple has great and sophisticated technologies such as its OS operating system. The iPhone, iPad, Mac, and Apple Watch all have very similar software. The software interface that Apple offers is very different from others in both design and handling, making them really innovative. One of Apple's major projects is to reduce its carbon dioxide (CO₂) emissions and become carbon neutral by 2030. Many of the measures that have been taken include small details in material usage and new internal chip development. In mid-2020 Apple announced that it was going to stop relying on Intel for its processor chips. The use of Apple silicon has improved the efficiency of products such as the Mac, causing its energy usage to decrease by 60 percent compared to previous models. Another of Apple's goals is to eliminate the use of plastic in its packaging by 2025, and therefore use only recycled and renewable materials. One of the great tools incorporated by is Liam, Apple's iPhone disassembly system. This robot disassembles iPhones and recycles different components of these mobile devices to extend the life of these materials. Overall energy usage has decreased by seventy percent since 2008. With the development of these technologies and short- and long-term renewable targets, Apple's devices are twenty-five percent most energy-efficient than other devices on the market [3].

Environmental Discussion

Global warming and climate change are two of the biggest threats humanity faces. Major tech companies have committed to achieving net-zero carbon emissions in the coming decades. Carbon dioxide emissions are one of the main causes of global warming and results in climate change. Apple, a pioneer in technological innovation, has announced that it aims to be completely carbon neutral by 2030. The three pillars on which its strategy is based are "Climate change", "Resources", and "Smarter Chemistry". The purpose of these pillars is to reduce 75 percent of carbon emissions,

eliminate all use of non-renewable material of all products, and to help improve the health of the planet. Apple intends to meet these goals by adopting low-carbon design in the manufacturing process of its products by increasing energy efficiency and reducing energy use by using renewable materials and electricity, by avoiding direct gas emissions by adopting renewable energy sources in their own facilities and supply chain, and by investing in projects that restore ecosystems, including the Restore Fund, Apple's Project in forest restoration.

Apple has achieved a 40 percent reduction in carbon dioxide emissions since 2015.

Figure 6 shows the historical carbon footprint since 2012 and the projected future emissions and carbon removal.

In addition to carbon dioxide emission reductions, Apple has managed to adopt the full use of renewable energy for the electricity used in its offices, retail stores, and data centers in 43 countries across the world (unfcc.int). Apple's efforts to become a more environmentally conscious company are becoming clear. In April 2021, Apple announced the opening of a foundation called Restore Fund to accelerate reforestation. The fund has a total of \$200 million and aims to eliminate atmospheric carbon dioxide.

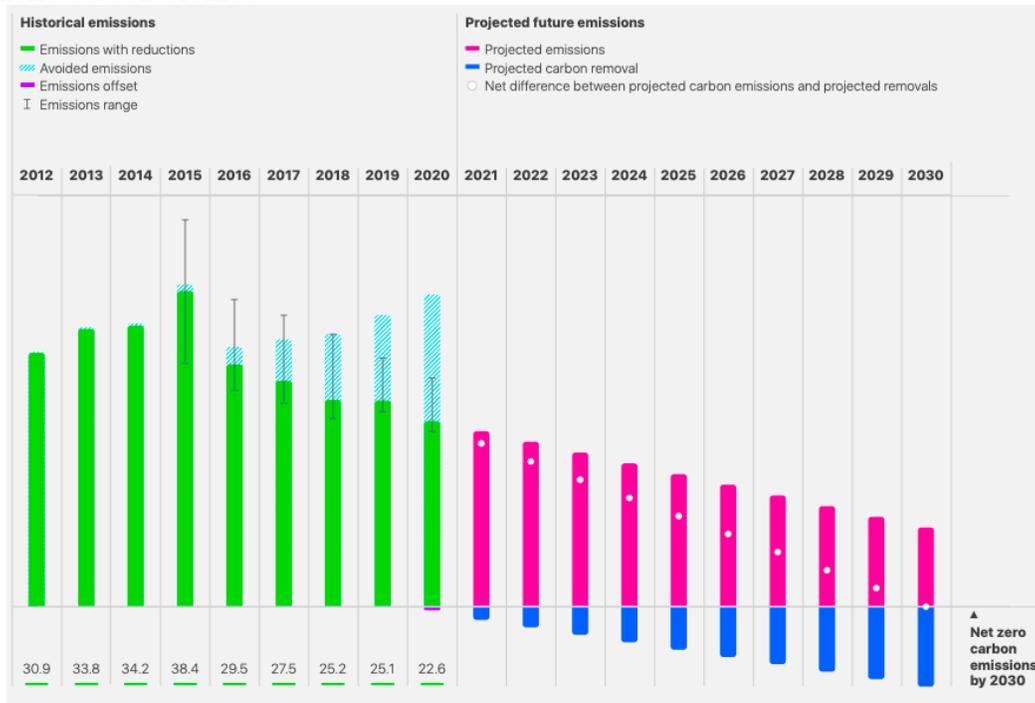


Figure 6: Carbon Emission of Apple Inc. from 2011 to 2020*

(*Adapted source: Apple Environmental Progress Report)

The process with the highest carbon emission is the manufacturing process with a percentage of 71%. One of Apple's goals is to get its suppliers to be willing to reduce their carbon footprint as well. Apple has managed to convince 44 of its suppliers in 16 different countries to accept the goal of using one hundred percent renewable energy for the production of its products. One of the biggest challenges for Apple is to get its suppliers in China to switch to renewable energy. That is why Apple decided to create the China Clean Energy Fund, to help the cause and bring the company closer to its goals.

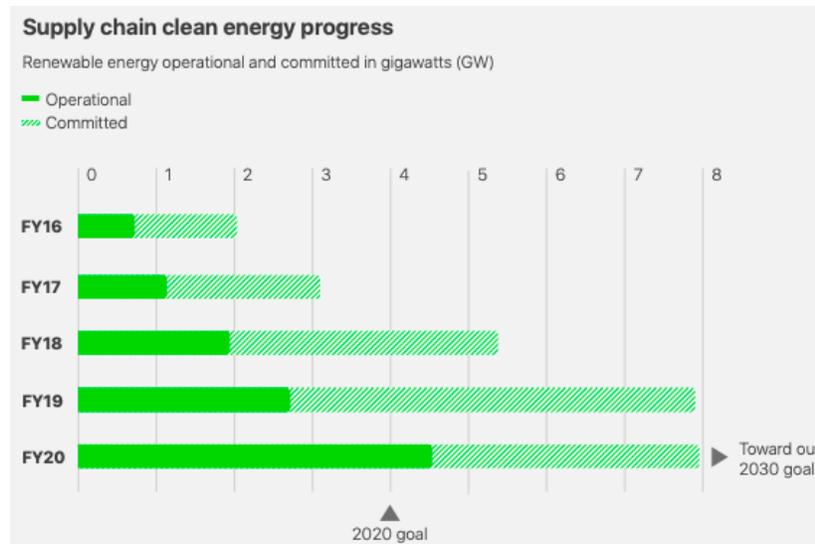


Figure 7: Supply chain clean energy progress from 2016 to 2020*

(*Adapted source: Apple Environmental Progress Report)

Many of the products Apple offers are made with a higher percentage of recycled materials compared to past models. The MacBook Air with Retina display contains 40 percent recycled materials, the iPhone 12 and Apple Watch Series 6 have a percentage of 99% recycled materials. These are certainly impressive figures and show that Apple can achieve everything it sets out to do. Apple has also managed to reduce its use of plastic in its packaging by a 65 percent, opting for more responsible materials such as virgin wood fiber and recycled fiber.

Conclusion

Apple Inc. has become one of the most innovative technology companies in the world. The Californian company managed to become the first company to reach a value of one trillion dollars. Although the figure is colossal, it should not come as a surprise since Apple has great strengths and market strategies that have established it as one of the best companies in the mobile devices and PC manufacturing market. Apple is also very environmentally conscious and has the long-term goal of being carbon neutral by 2030. Its commitment to its major suppliers to follow the company to a greener future is reflected in the reduction of carbon emissions over the last nine years. All measures taken to reduce the use of non-renewable energy and materials can be seen directly in its products. Many of its products have a high percentage of recycled material content, which shows that Apple's goals are achievable. From 2015 to 2020, Apple has been able to reduce its carbon footprint by 40 percent. To reach that goal of becoming carbon neutral, Apple must reduce its emissions by 75 percent compared to 2015. Considering the figures, Apple has 10 years to reduce emissions by 35 percent.

As seen, Apple's innovations are not only extrapolated to its products, but also to ideas for improving the environment through its products. Due to the ambition and high standards in all the goals that Apple sets for itself, I see it more than possible that the goal of being carbon neutral by 2030 will become a reality.

References

1. Adamkasi. (2019, August 30). *Porter five forces analysis of Apple*. Porter Analysis. <https://www.porteranalysis.com/porter-five-force-analysis-of-apple/>
2. *Apple Business Strategy: A brief overview - research-methodology*. Research. (2021, February 13). <https://research-methodology.net/apple-business-strategy/>
3. *Apple Environmental Progress Report*. (2021). https://www.apple.com/environment/pdf/Apple_Environmental_Progress_Report_2021.pdf
4. "Apple Inc. (AAPL) Income Statement." *Yahoo! Finance*, 16 Dec. 2021, <https://finance.yahoo.com/quote/AAPL/financials?p=AAPL>.
5. Bajarin, T. (2017, April 3). *Apple's strategy explained in one simple idea*. Time. <https://time.com/4723389/apple-strategy-iphone-ipad-apple-tv/>
6. Ghiyath, Ribana, Sg, Carl, Xaruka, Akdogan, B., Gupta, S. K., G, J, & Carrie. (2021, December 13). *Apple SWOT 2021: SWOT analysis of Apple*. Business Strategy Hub. <https://bstrategyhub.com/swot-analysis-of-apple-apple-swot/>
7. Gottsegen, G. (2017, May 18). *Surprise, surprise: Most iPhone users stick with the iPhone*. CNET. <https://www.cnet.com/tech/mobile/apple-iphone-92-percent-retention-morgan-stanley-survey/>
8. *How Apple is organized for Innovation*. Harvard Business Review. (2021, December 15). <https://hbr.org/2020/11/how-apple-is-organized-for-innovation>
9. Jurevicius, O. (2021, October 22). *Apple SWOT analysis (5 key strengths in 2021)*. Strategic Management Insight. <https://strategicmanagementinsight.com/swot-analyses/apple-swot-analysis/>
10. Kahney, L. (2019, April 12). *How Apple's operations department works [Cook book outtakes]*. Cult of Mac. <https://www.cultofmac.com/616052/how-apple-operations-department-works/>
11. Maverick, J. B. (2021, May 19). *Analyzing porter's 5 forces on Apple (AAPL)*. Investopedia. <https://www.investopedia.com/articles/investing/111015/analyzing-porters-five-forces-apple.asp>
12. Mesa, A. F. Apple history timeline. <https://g.bott.org/sections/history.html>

13. Meyer, P. (2019, February 14). *Apple Inc.'s Organizational Structure & its characteristics (an analysis)*. Panmore Institute. <http://panmore.com/apple-inc-organizational-structure-features-pros-cons>
14. “Lenovo Group Limited (LNVGY) Valuation Measures & Financial Statistics.” *Yahoo! Finance*, Yahoo!, <https://finance.yahoo.com/quote/LNVGY/keystatistics?p=LNVGY>.
15. Rawlinson, N. (2021, July 28). *Apple was 41 years old in April, here's some history*. Macworld UK. <https://www.macworld.co.uk/feature/history-of-apple-steve-jobs-mac-3606104/#toc-3606104-6>
16. Team, S. W. O. T. A. (2021, September 7). *SWOT analysis of Apple: Apple Strengths and weaknesses 2021*. Swot Analysis Template. <https://www.swotanalysis-template.com/swot-analysis-of-apple/>
17. *This Month in business history: The founding of Apple Computers, inc.*. Research Guides. <https://guides.loc.gov/this-month-in-business-history/april/apple-computers-founded>
18. Washington, Vineet. “Lenovo Leads Global PC Market in Q2 2021; HP, Dell Follow: IDC.” *NDTV Gadgets 360*, 12 July 2021, <https://gadgets.ndtv.com/laptops/news/lenovoleads-global-pc-market-q2-2021-23-9-percent-market-share-hp-dell-apple-idc-report2484987>.