

Why Sustainable Business is Better

Nicole Santa Maria

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**Abstract**

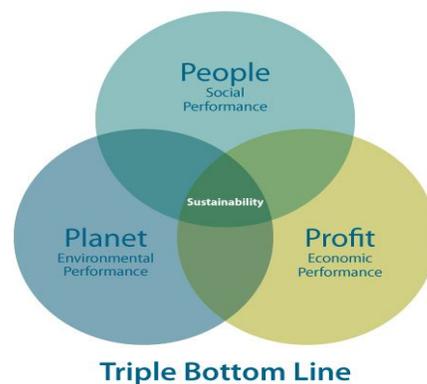
With growing concerns and numerous sources of data confirming climate change we must look toward a future in sustainable practices. While individual people can do their part in reducing their personal carbon footprint it is clear that the ones who truly need to change are corporations. Big businesses are the largest contributors to the negative effects of greenhouse gases. With this in mind it is only a matter of time until the people demand change. This change does not need to be delayed, if companies can become leaders in sustainable business reforms and practices, not only will we find better results, for our planet but they may even find better results in their profits. To demonstrate the positive results, of what may be seen as relatively “small” changes, we will analyze the implementations and the implications of the State University of New York at New Paltz “Green Revolving Fund.” This will be accomplished through an understanding of past projects and my own proposal for the current University community. This paper will also touch on much larger business decisions through reimagining and redefining industry standards. While we will also explore the limitations of these processes; any company can take steps towards a better, more sustainable, business.

## What is a Sustainable Business?

According to the Environmental Protection Agency (EPA), “To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations” (Learn About Sustainability, 2016). In other words sustainability is a balance to create conditions that will last even if the resources are finite. A sustainable business takes this concept of sustainability and works it into a business model to influence the triple bottom line. Coined in 1994 by John Elkington, “the triple bottom line” was literally three separate accounts for a

company: “One is the traditional measure of corporate profit—the “bottom line” of the profit and loss account. The second is the bottom line of a company's “people account”—a measure in some shape or form of how socially responsible an

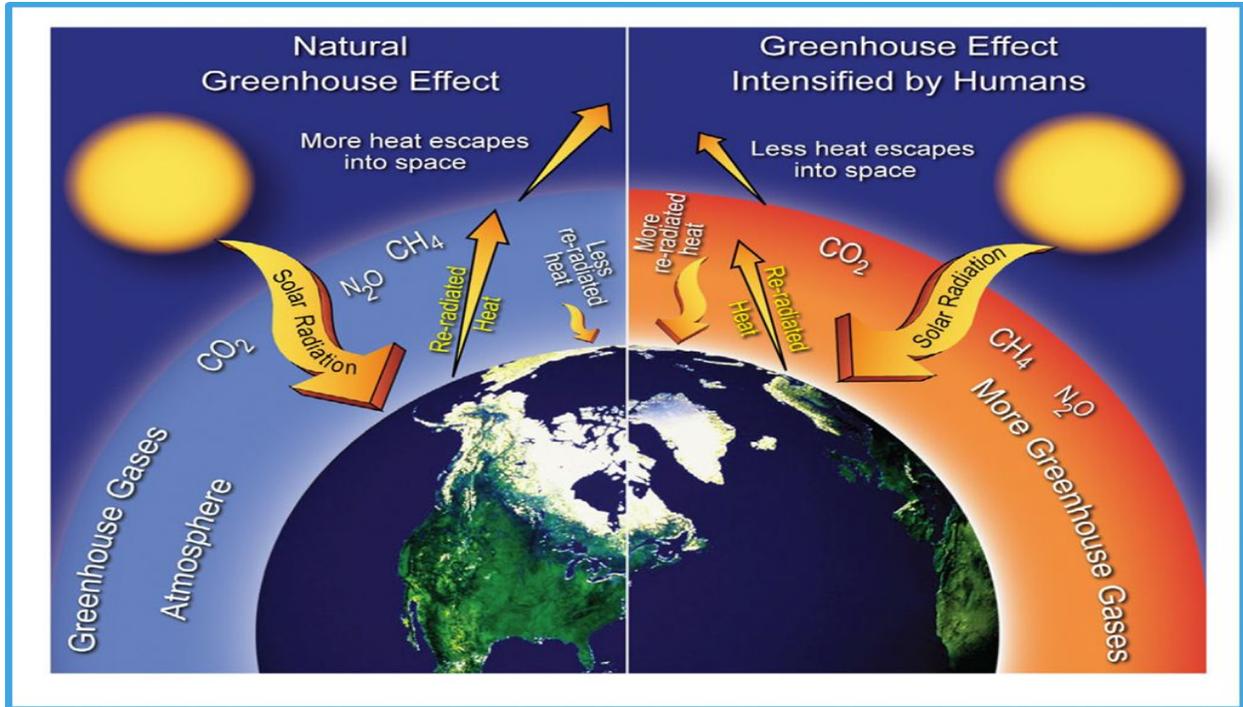
organization has been throughout its operations. The third is the bottom line of the company's “planet” account—a measure of how environmentally responsible it has been” (Triple Bottom Line, 2009). This concept is often known as the three P’s for profit, people, and planet and for a business to be sustainable it must utilize each section of this Venn diagram. An example of the three P’s concept is the 2015 article, *Philippines project turns 'ghost' fishing nets into carpets*, which has the people of Guindacpan diving for discarded fishing nets, known as “ghost nets” on the ocean floor. These old and broken nets are a result of everyday fishing in the Philippines but



the nets kill marine life and tangle on the coral ecosystem which kills the very fish they are fishing for. Due to this, a company called NetWorks made a deal with the local people, they get paid to dredge up and clean the old nets and the company gets the old nets to use the fibers for recycled materials. But this is not charity, it's business. NetWorks sells the nets to a company called Interface who uses the fibers to create carpets. This business model presents a sustainable advantage. Profit: getting the recycled materials used in making carpets allows for the company to lower their material costs. People: part of the revenues go toward paying people to find the recycled nets as any employee would be paid. This income allows the people to pay for school supplies, start businesses, and overall improve the standard of living. Planet: with the nets posing a threat to the underwater ecosystem; removing the nets allows life to once again flourish in the water and revitalize the fish supply (Almendral, 2015). A sustainable business sees a profit to be made by helping where work needs to be done. A sustainable business affects change in a way that will have their firm last for generations to come and watch future generations flourish.

### **Climate Change Overview**

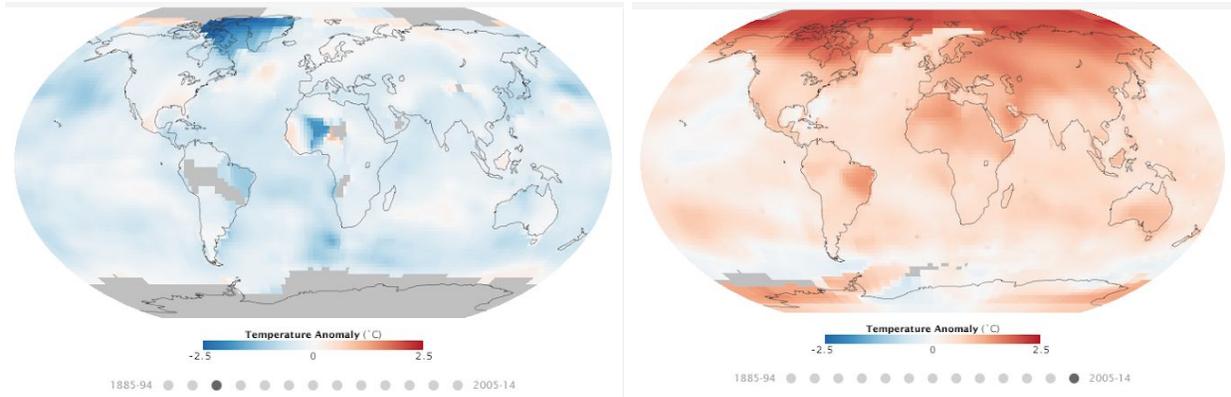
Why target businesses in the first place? Why can't the average person each do their own part to work toward a better future? If all seven billion people in the world could just do a bit toward this cause wouldn't we be just fine? Of course the average person can work toward a more sustainable future, but the average person is not the main source of greenhouse gas emissions. Big businesses are. Major greenhouse gases consist of Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), and Fluorinated gases usually from industrial, agricultural, and commercial practices. Below is an illustration of how greenhouse gases affect climate change:



The Earth's atmosphere creates a natural "Greenhouse Effect" in which solar radiation is absorbed, reflected, and released. However when greenhouse gases are increased, the solar radiation is further trapped. Below is a thermal image from NASA's Earth Observatory:

The maps above show temperature anomalies, or changes, not absolute temperature. They depict how much various regions of the world have warmed or cooled when compared with a base period of 1951-1980. (The global mean surface air temperature for that period was estimated to be 14°C (57°F), with an uncertainty of several tenths of a degree.) In other words, the maps show how much warmer or colder a region is compared to the norm for that region from 1951-1980." (World of Change: Global Temperatures, n.d.)

The first image is of the Earth's temperatures from 1905- 1914 and the second image is of Earth's temperatures from 2005-2014:



These “small” temperature changes have more impact than most people realize. An increased average temperature of the Earth, can melt glaciers (increasing water levels and destroying habitats) increase wildfires and other natural disasters. Often times the heat is not pronounced in all areas or it won’t be at all times. Some freezing winters can be offset by extremely hot summers in the area or in a completely different part of the world: “A one-degree *global* change is significant because it takes a vast amount of heat to warm all the oceans, atmosphere, and land by that much. In the past, a one- to two-degree drop was all it took to plunge the Earth into the Little Ice Age. A five-degree drop was enough to bury a large part of North America under a towering mass of ice 20,000 years ago” (World of Change: Global Temperatures). It is often said that if the Earth’s temperatures rise two degrees celsius (often referred to as “the point of no return”) the effects of climate change will have catastrophic and irreversible effects on the planet and on humanity. As we only have less than one degree celsius until this point, some advocacy groups are calling for drastic changes before 2020 unless we will face “runaway climate change.” If we were to focus on just one effect of climate change, hurricanes we see that damage affects all businesses. In a National Geographic article titled, *2017 Hurricane Season was the Most Expensive in U.S. History*, America early tabulations had been estimated to have had more

than \$200 billion dollars worth of damage from 17 hurricanes. This was an estimation. Hurricane Harvey cost about \$180 billion, Hurricane Maria cost about \$45-\$95 billion, and Hurricane Irma cost about \$150-\$200 billion alone. These are costs that your business might be a part of paying if it is struck by a hurricane or has suppliers, manufacturers, or even distributors in an area hit by a natural disaster. Climate change has been so thoroughly proven by scientists around the globe that it is reckless to disregard the concept. Big corporations are the largest contributors to climate change and there is insignificant steps toward any regulation for their harmful actions: “Just 100 companies have been the source of more than 70% of the world’s greenhouse gas emissions since 1988, according to a new report... more than half of global industrial emissions since 1988... can be traced to just 25 corporate and state-owned entities” (Riley, 2017). To gather data on this subject is a movement toward noticing emissions produced by businesses. In 1988 the Intergovernmental Panel on Climate Change was established and began collecting data on the global emissions of companies. While the average person may contribute to climate change in little ways these corporations have so many resources invested in fossil fuels and detrimental practices (such as deforestation, fracking...etc) that they have an impact we can not even compare to our everyday practices.

### **Businesses and Sustainability**

When you think of businesses and sustainability it can be difficult to see how or why one should make these changes to their business, yet changes both large and small changes can make a difference. A large scale example of how a business can become more sustainable is by offering the story of Ray Anderson and his carpet company Interface. Interface is a “petroleum-intensive

company” that had a goal, “...take from the earth only what can be renewed by the earth, naturally and rapidly -- not another fresh drop of oil -- and to do no harm to the biosphere. Take nothing: do no harm” (Anderson, 2009). When the primary input of a company is petroleum, it may seem like an impossible task to move toward a sustainable business. Oil being a non-renewable resource with such an importance in most businesses makes it a scarce resource before we even run out of it. However we have the technology, we are working towards new advancements that can help companies move toward business that will not be such a detriment to the environment: “ We have diverted 148 million pounds -- that's 74,000 tons -- of used carpet from landfills, closing the loop on material flows through reverse logistics and post-consumer recycling technologies that did not exist when we started 14 years ago. Those new cyclical technologies have contributed mightily to the fact that we have produced and sold 85 million square yards of climate-neutral carpet since 2004, meaning no net contribution to global climate disruption in producing the carpet throughout the supply chain, from mine and well head clear to end-of-life reclamation -- independent third-party certified” (Anderson, 2009). Interface’s business of tile carpet, interchangeable square pieces of carpet that lay together to cover the whole room, had reduced and reused by such large amounts that they have created a neutral impact on the environment. Now considering that they had to make these substantial changes to their business anyone looking after a bottom line might be worried but Mr. Anderson said it himself, “From real life experience, costs are down, not up, reflecting some 400 million dollars of avoided costs in pursuit of zero waste -- the first face of Mount Sustainability. This has paid all the costs for the transformation of Interface” (Anderson, 2009). A difficulty often seen with sustainability is the difficulty to picture the long run. Sustainable efforts pay for themselves

eventually. This can be in cost savings or higher profit margins for products and services.

Businesses can take the time to assess their environmental impact and find a way to use this to help the planet and their wallets.

While it may be hard to picture a company that relies so heavily on oil to change to a neutral impact company, Interface's carpet business, this company exemplifies how easy to see how a large business is able to make such big changes. Now of course this is a great example of moving to a highly sustainable business model, but such drastic changes do not come quickly or easily. Businesses without such a large supply of capital can be more sustainable in many other ways. The United Nations puts out a list of "Sustainable Development Goals" (UNSDG) under what they determine would best create an impact for our planet and its people. You may notice that they do not mention these items for profit, but that is where businesses come in. Businesses can use these goals to increase sustainability as it relates to also increasing profit or other business objectives. The UNSDG's orders their goals starting with the most important: 1.) No poverty 2.) Zero hunger 3.) Good health and well being 4.) Quality education 5.) Gender equality 6.) Clean water and sanitation 7.) Affordable and clean energy 8.) Decent work and economic growth 9.) Industry, innovation, and infrastructure 10.) Reduced inequalities 11.) Sustainable cities and communities 12.) Responsible consumption and production 13.) Climate action 14.) Life below water 15.) Life on land 16.) Peace, justice, and strong institutions 17.) Partnerships for the goals (SDGs ∴ Sustainable Development Knowledge Platform, n.d.) To intertwine the UNSDG's and business the United Nations Global Compact released how each of the UNSDG's can be accomplished to further business ventures (How Your Company Can Advance Each of the

SDGs, n.d.). If we want to increase sustainability we can easily look at this list and analyze measures that can be taken to incorporate these goals into a business model. Listed I analyzed each UNSDG and put them in perspective to business.

No Poverty: “In 2013, an estimated 767 million people lived below the international poverty line of \$1.90 a day” (Goal 1, 2015.). While it may seem like a use of extra money to pay workers a living wage it can be less costly than one may think: A large scale example “If the minimum wage were increased to \$15 an hour, prices at fast food restaurants would rise by an estimated 4.3 percent, according to a new study. That would mean a McDonald’s Big Mac, which currently goes for \$3.99, would cost about 17 cents more, or \$4.16 (Covert, 2009). Improving wages could be as simple as raising product/ service prices by mere cents. The profit margins stay the same and workers receive a higher pay which will likely improve their productivity. A smaller scale example can take the sustainability goal of no poverty and see this as an inspiration to improve their operations. By offering the incentive of a pay increase, smaller businesses can have employees find ways to cut costs while still being effective. An improvement to efficiency such as switching vendors, updating credit payment information, selling online...etc can be thought up to raise enough money for a pay raise, a decrease in prices (so they are more affordable and attract more customers which increases business), and possibly a larger profit margin even with a pay increase.

No Hunger: “Ending hunger demands sustainable food production systems and resilient agricultural practices. One aspect of that effort is maintaining the genetic diversity of plants and

animals, which is crucial for agriculture and food production.” (Goal 2, 2015). Food and pharmaceutical producers and sourcers should change their production means to create greater crop diversity. Many farms are expected to provide one crop and keep that crop to a physically attractive and set taste standard. Monocropping, growing one crop on one piece of land, can leave food products open to attack. Diversity of plants is key to a productive ecosystem and can affect growth and ground management for the better which can ensure that not all plants are affected by disease or disasters. Increasing biodiversity decreases the amount of ground maintenance from the singular absorption of nutrients. Many plants can even act as natural pesticides removing the high need for chemicals. Improving the growth of plants sounds like good business when this can reduce the cost of growing crops. This will mean sharing plots of land and rotating fields which requires more planning but could help tackle food production while also improving the bottom line. (Why is it important? n.d.).

Good Health and Well Being: When running a business it is good practice to want your workforce healthy and working. Installing or offering access to a gym is one way to show workers you care while also keeping them working longer and perhaps better than before. Of course installing a gym or offering a gym membership costs money, “Many insurance companies will offer reduced premiums for businesses that have an onsite gym. This ranges from lower premiums for health care insurance to liability. In addition, studies have shown that when employees have access to an onsite gym they are far more likely to be healthier which means they will use less health care, sick time, and be more productive while at work. All of these mean more money for the business.” (B, n.d.). Offering a gym can reduce the cost for insurance, time

off, and an increase the amount of work an employee can complete. A gym as a benefit works for the employer and the employee which could provide more retention, recruitment, and revenue.

Quality Education: Every business wants to hire the best candidate; but no one is perfect. We have education to build skills and knowledge relevant to our careers and future growth. Offering conferences, skills training, and college programs can look like they work more in favor of employees, but in reality they are learning skills that better your business. Offering opportunities increases worker loyalty, motivation, and productivity which all mean more cash for your company. There are even certain government grants to provide businesses with part or all of the capital to fund these workshops and informationals: “Sending employees back to school is a win-win for both employees and employers. Companies get a better skilled workforce and a pool of employees that can work their way up in the company, and employees get credentials that might help them climb the career ladder” (Evans, 2015). Of course many employers may worry about luring their trained workers away from their own company. However your business will want to examine offering certain programs through a cost benefit analysis.

Gender Equality: “Achieving gender equality and the empowerment of women and girls will require more vigorous efforts, including legal frameworks, to counter deeply rooted gender-based discrimination that often results from patriarchal attitudes and related social norms” (Goal 5,2015). In this 21st century society we seem to have come to the understanding that when men and women are under equal work circumstances women deserve equal pay to their counterparts. While this is still an ongoing climb to equality, businesses that empower their

female workers are likely to receive more productivity from women who notice their efforts and seek internal promotions while attracting more qualified candidates.

Clean Water and Sanitation: “Effective water and sanitation management relies on the participation of a range of stakeholders, including local communities” (Goal 6, 2015). Water is one of the basic needs for life on this planet and it is an integral part of business. The heating and cooling of water, access to clean water, and utilization of water in general are common practices for a company. Water waste can be costly and so installation water saving appliances could bring a lot of benefit. Less costly items are replaced sink faucets, water bottle refilling stations, and efficient flushing toilets which make back and save you money in the long run.

Affordable and Clean Energy: Solar, wind, hydro, geothermal, nuclear, bio, and hydrogen energy sources are becoming more and more apparent and more and more cost saving. With the rise of these renewable resource, and clean energy tools, energy costs can be cut down for any business. While not all businesses can risk or afford nuclear energy access to alternative energy, products can offer significant the cost savings. Let’s take a common renewable energy, solar: “Going solar can eliminate your electric bill completely or reduce it so dramatically that electricity costs are no longer a significant factor in your budget.” (How to save energy costs, n.d.). Energy savings vary based on how much energy is used by the business, but any company with the capacity to improve efficiency is likely to benefit from this measure.

Decent Work and Economic Growth: “Increasing labour productivity, reducing the unemployment rate, especially for young people, and improving access to financial services and benefits are essential components of sustained and inclusive economic growth” (Goal 8, 2015). Now this goal may seem unrelated to increased sustainability in business, since businesses employ workers they need, but this too can be something a business uses to improve productivity. Rightsizing an organization takes some reworking. If you can’t afford to lay off workers and offer them severance cuts businesses can cut hours and shift workers based on an appropriate strategy. When Volkswagen needed to cut back on workers they reduced hours from a 36 hour work week to a 28.8 hour work week. This resulted in a pay reduction but it did not fulling cut off their cash flow. Volkswagen also created a shift in part time employment. As young employees joined their work hours would increase and as older workers moved toward retirement their hours would decrease. There are several strategies organizations can institute to save jobs and keep productivity up for growth in the company (Storey, 91, 1998).

Industry, Innovation, and Infrastructure: “Despite steady improvements in manufacturing output and employment, renewed investment will be needed in the least developed countries to build needed infrastructure and ensure the doubling of industry’s share of GDP in those countries by 2030” (Goal 9, 2015). This point can easily be applicable to businesses. In the most simplified form a business needs to analyze and improve efficiencies. This relates to manufacturing, distribution...etc and must be corrected to save costs and cut time to complete tasks. For example, if you move to a place that does not have the roads necessary or roads in an inconvenient area to get materials to your manufacturing plant then the roads need to be built.

Reduced Inequalities: “Diversity is critical for organization’s ability to innovate and adapt in a fast-changing environment” (Walter, 2014). One way a business can reduce inequalities is by upholding a diverse workforce. Racial, age, and cultural diversity is often cited as main examples when introducing this topic. Those with different upbringings and experience often times benefit companies by innovating new ways of thinking and executing processes. Diversity has long since been recognized as a useful and important tool for growing, adapting, and moving a business. Whether it is a need to innovate, expand into new areas, or just increase productivity diversity can be of assistance. New ideas are discovered, understandings and language can be crossed, and inspiration to the workers of the corporation can be ever present when there is a mix of minds from all types of origins and experiences. Diversity is the mingling of different people, from different places, with different abilities. But diversity is not always easy, sometimes it takes diversity training to allow different generations to learn from, or at least understand, one another.

Sustainable Cities and Communities: “Better urban planning and management are needed to make the world’s urban spaces more inclusive, safe, resilient and sustainable” (Goal 11, 2015). This point can apply to business facilities in that any business would want their workplace to be safe and secure for all of their employees. This is to ensure that workers are not hurt on the job and that government agencies such as the Occupational Safety and Health Administration (OSHA) do not find safety hazards in which companies receive fines or reason for legal proceedings.

Responsible Consumption and Production: "...a strong national framework for sustainable consumption and production that is integrated into national and sectoral plans, sustainable business practices and consumer behaviour, together with adherence to international norms on the management of hazardous chemicals and wastes" (Goal 12, 2015). Following regulation dumping and production standards means your company will not be fined by government agencies such as the Environmental Protection Agency (EPA). Illegal and/or harmful consumption and production processes are also likely to create a bad reputation with communities who may boycott your product/services.

Climate Action: "Mitigating climate change and its impacts will require building on the momentum achieved by the Paris Agreement on Climate Change, which entered into force on 4 November 2016. Stronger efforts are needed to build resilience and limit climate-related hazards and natural disasters" (Goal 13, 2015). Reducing emissions of climate changing products is similar to the point on "Affordable and Clean Energy". Many clean energy steps can save your business money; so now is the time to make a plan of action.

Life Below Water: "The increasingly adverse impacts of climate change (including ocean acidification), overfishing and marine pollution are jeopardizing recent gains in protecting portions of the world's oceans" (Goal 14, 2015). Many products rely heavily on water products so if processes pose a negative impact on undersea ecosystems and life it, in the long run, will hurt your business. Certain sectors may be hurt by this topic more than others; for example overfishing can cause fishermen and fish markets to go out of business. If you rely on the life

under the water you need to make sure you do not overdraw resources to the point where they can not be replenished.

Life on Land: Just as many businesses rely on products from under water many more products rely on products from the land: “However, declining trends in land productivity, biodiversity loss and poaching and trafficking of wildlife remain serious concerns” (Goal 15, 2015). For a business such as a paper mill you would need to plant many more trees for one tree cut down. Replenishing supplies relies on how you plan to create an ever flow of products. If your company relies on a material from the land it only makes sense that you need that material to continue or else your business will be forced to fail.

Peace, Justice, and Strong Institutions: “Progress promoting peace and justice, together with effective, accountable and inclusive institutions, remains uneven across and within regions” (Goal 16, 2015). Public tension and violence is bad for business. Conflict surrounding your company can halt production, transport of supplies or products, and might endanger workers. Businesses need to scan locations for these types of disturbances in order to save themselves from a breach in ethics. These breaches could range from corruption resulting in extortion to war breaking out and stopping all activity.

Partnerships For The Goals: “Despite some positive developments, a stronger commitment to partnership and cooperation is needed to achieve the Sustainable Development Goals” (Goal 17, 2015). Just as these goals need people to commit to their ideals businesses need to for strong

relationships. Strong relationships with: suppliers can get you cheaper prices and/or better quality, distributors get your products more promotion and makes it more likely for purchase, customers it sets up loyalty to your company and its products/services, and other companies whether it is through less targeting in terms of competition or merger/ acquisition deals.

All of these goals point a business in a way to make more money or sustain themselves for the future. Of course not all points may relate to your business; but they can also provide opportunities. If you do not rely on life underwater but you have the capability to create a product or service that meets this need that too is a way to create revenue and/or sustainability in a business.

The main necessity in setting up sustainable practices for a business is to analyze your business from all angles and apply measures where they are most needed and where you have the resources to



improve. As you can see from this picture from Andrew J. Hoffman's, the Holcim (US) Professor of Sustainable Enterprise and Education Director, Graham Sustainability Institute at the University of Michigan, businesses have multiple internal and and external components in

which a business can make changes for improved sustainability. These include New Product Development, Corporate Reputation, Internal Culture/ Employee Retention, Consumer Demand, Cost of Capital, Insurance Risk Management, Disaster Preparedness/ Resilience, Resource Availability, Operational Efficiency, Supply Chain Logistics, Strategic Direction, and Regulatory Compliance.

New Product Development: Creating new products can be an excellent way to increase profits and keep your company running. What you sell is generally how a business earns money. To continue bringing in revenue a company must continually adapt to their market and produce goods. Bringing in another piece of this sustainable business model, businesses can look at market demands to create products in necessity or that are trending. Relating this to the Clean Water and Sanitation UNSDG, if a company notices that lead is apparent in water in a developing country they can create a filter to help create clean drinking water while making a profit based on their necessity for the product. All the while this will likely improve their reputation as a company searching to improve the world and create a better future.

Corporate Reputation: Transitioning from the last point, if a company expects people to buy from them they should also expect consumers want the company to have a good reputation. Having a good reputation draws in customers who align themselves with your values and competencies. Goods and services are often easily substitutable in terms of product or brand. Maintaining and improving your brand image is vital to a company gaining good press and

having customers continued loyalty. Creating a green business can be the difference in a consumer buying your product over the product of another company.

Internal culture/ Employee Retention: Having a positive culture can be the deciding factor in retaining hard working and vital employees. It is imperative that companies create an atmosphere in which employees want to increase their productivity and share their knowledge and experience. If we take Health and Well Being into account then employees are likely to see the actions of care and concern as a benefit they may not be able to get in another company.

Education can be used to increase worker knowledge and increase their loyalty to the company that offered them the advantage of learning. Both of these UNSDG's fulfill a worker's desire to increase their output and improve the company as a whole.

Consumer Demand: Where there is demand there is opportunity. A company should always conduct environmental scanning in order to assess the needs and wants of their customer base. This will allow businesses to improve products and perhaps even open new markets. For the continuation of desire for what a company produces the company must continually understand what customers are looking for. Looking for demand can be as easy as looking at the impacts of climate change. Some go along with products and services that will have a lighter or no impact on climate change because they believe in the damaging effects it produces; and some people need certain products and services because of those damaging effects.

Cost of Capital: Understanding the value of your business can help to gain future investments. Know your businesses worth and capitalize on improvements to increase the perceived value. Adding clean energy sources to your business can increase it's value and save you money in the long run. Making clean energy choices will always come at a cost but using analysis you can see just what you need to pay it off.

Insurance Risk Management: Insurance can be expensive. Decrease that cost by providing ways to decrease possible insurance collections. This can mean improving infrastructure, innovation new ways of operating safely and effectively, and creating your business around safe practices. By accomplishing these tasks not only will employees be grateful for your policies but your accounting and public relations teams will thank you. We already touched on how OSHA can give business major fine, but your company will also not have negative incidents in the news all around the world. The inaction of your company can have lasting damages if operations are ill met with precautions.

Disaster Preparedness/ Resilience: Disasters are expensive and completely out of a businesses hands. But fighting climate change is one way to reduce the risk of natural disasters which will in turn reduce the risk of your business being affected by a disaster. When a disaster does strike have a plan of action if your plant is no longer able to produce goods or collect supplies. Having a linchpin can only leave your business vulnerable to failure. Understand your supply chain, production, and distribution methods in order to identify whether or not all are working in a capacity that they can survive an issue. Looking back at No Hunger we see that the reduced

biodiversity of a crop can leave them unprotected if a fungus, bacteria, pest...etc were to attack. As a business you have the power to hold expectations of your suppliers in order to protect your supplies. Create strong institutions that can handle any challenges sent its way.

Resource Availability: Find your resources and find more of them. Creating multiple outlets for supplies is just one way to make sure your business can operate in its most effective manner. Life Under Water and Life on Land had shown us that resources are not limitless. Create opportunities to expand resources for future use and to create more outlets to recover resources. This can be costly but the cost of improving operations is often less than the cost of overuse to the point of collapse.

Operational Efficiency: Conducting a constant internal analysis of your business is an effective way to ensure that your business is operating at top efficiency. Cutting useless operations and costly tasks can increase the capital the business makes, through savings, and decrease the amount of time it takes to complete the tasks required. As long as quality is still under control, optimizing your business can save a company money in the long run. This might entail partnering up with other companies and/or setting up goals that will be accomplished in time. This means operating sustainably in terms of business consumption.

Supply Chain Logistics: Watching where you get supplies can affect what type of products and services a business turns out. This can go into company reputation by sourcing from environmentally friendly organizations and it can tie in with increase operational efficiency as

you want to make sure your tasks are completed up to your selling standards or better. Know where input are coming from and how they were retrieved. These business aspects could have wasteful operations which can be reduced such as decreasing the amount of heating and cooling in a facility while also decrease the amount of greenhouse gases produced.

Strategic Direction: Know where you want to go as a business. Understand the message you are putting out and how consumers will respond to this message. Will you choose to be a luxury service? If so you might need to spend more on amenities. Will you diversify? Then you want to see how your businesses align and how they can create synergy. Will you create cheap products? You will want to decrease your operational costs. Know your core competencies, understand your market, and start working toward your strategy. When you have created a plan you are to create one that you see lasting a lifetime, a sustainable community of inputs, outputs, and creation.

Regulatory Compliance: Not being up to regulation can be costly. Recall of products, halting of operations, and government investigations will cost a business a lot of capital. Staying within government regulations can be great but these often change and so will your business. This could mean paying above minimum wage, or reducing the company's reliance on petroleum because of an impending rise in taxes. Your business will always want to stay in the realm of compliance and should constantly analyze for any and all gender, race, sexuality and other inequalities in order to keep within good work practices. Leaving your business flexible to change and looking to the future of regulatory changes can keep your company ahead of fines and fees. To stay

ahead means to have room to move and it can create a better reputation of social responsibility for a company that sets the standard of good business.

While some of these tied in the UNSDG's they all relate to previous suggestions based on the UNSDG points outlined previously. All of these components are intertwined and connect in ways that can lead to a better, more sustainable, business.

### **What Is Holding Us Back?**

Time and Resources: While many sustainability efforts can save a business money, and in some case make a business more money, it can be difficult to get the capital needed to make these changes. Startups and small businesses can often use every dollar to keep their businesses afloat and may not have any disposable income: "Solar energy, wind energy, and nuclear power- These are renewable or cleaner, of course. The initial investment is very high. In particular wind turbines assuming the collateral such as maintenance is almost zero, and the life span of the mill is 20 years, just match the cost of other sources. In terms of high risk high reward, the initial investment is high, rendering the return on investment (ROI) very high" (T, 2007). Money for sustainability efforts can take time, savings, and research before action is taken. If you take an sustainability effort as common as solar panels and want to add them to your business is can cost hundreds to thousands of dollars. That money is not easy to come by for some businesses and the time to make it back may seem to far off to lose that capital. But turning a business sustainable does not only require time and money, it requires knowledge. Many small to medium enterprises lack the knowledge on opportunities for increased sustainability.

Publicity and Redirectioning: While “going green” is a hot topic in society nowadays it does not always get the coverage it truly deserves. Companies do not need to give out information about the sustainable, or sustainability planning, efforts of their business. This can lead to organizations ignoring sustainability or even involving themselves with greenwashing: “Greenwashing is the use of marketing to portray an organization's products, activities or policies as environmentally friendly when they are not. The act of greenwashing, also known as "green sheen," entails the misleading of consumers about the environmental benefits of a product or policy through specious advertising, public relations and unsubstantiated claims (Staff, 2018). Greenwashing can come from all sorts of businesses including oil heavy ExxonMobile. It was uncovered that as early as the 1970’s Exxon knew that their fossil fuel product was a detriment to the environment. Instead of bringing awareness to the subject, or beginning change in their organization, Exxon hide the information and spent millions of dollars on misleading information about climate change to the public (Henn, 2016). On August 5th 2016 Exxon released an advertisement at the Olympics touting their “to-do list” of mapping oceans, working on biofuel, and fighting malaria with the phrase “And you thought we just made the gas.” While Exxon does put money into these projects they are fractions of the dollars they put into spending aimed at finding more fossil fuels such as petroleum “And in the long run, it’s those fossil fuels that may have the larger impact on the disease: numerous studies have shown that unchecked climate change will expand the range of mosquito borne diseases and other health disasters” (Henn, 2016). While some of their actions are commendable, it does seem as though Exxon’s “green” actions are based solely for publicity purposes; especially when they continue to devastate the environment and lobby

against climate change measures. Even so there are not enough regulatory resources to always find out about deceitful actions such as these. That is why when a company wants to add validity to their claims on sustainability they will often get a third party certification such as a B-Corp status:

Certified B Corporations are social enterprises verified by B Lab, a nonprofit organization. B Lab certifies companies based on how they create value for non-shareholding stakeholders, such as their employees, the local community, and the environment. Once a firm crosses a certain performance threshold on these dimensions, it makes amendments to its corporate charter to incorporate the interests of all stakeholders into the fiduciary duties of directors and officers. These steps demonstrate that a firm is following a fundamentally different governance philosophy than a traditional shareholder-centered corporation (Sunate, 2017).

Getting a B-Corp certification is a way to demonstrate a company's commitment to sustainability by providing transparency for all portions of their company and review of any and all records. Once certified a B-Corp must continue to uphold their amended charter and dealings in order for the public to have a greater trust their statements and actions.

### **How to Get Involved**

Voting: Casting your vote for representatives is one way to aim for people who support your views, by exercising our right to our republic, to join office and hopefully fight for changes you want to see. Register to vote in your district by going to government offices such as the

Department of Motor Vehicles. Know your representatives and represent what is meaningful to you.

Lobbying: Get involved on the ground level of making change. Talk to representatives, start collective action, and/or attend meetings for change at your local government office. Make sure those who can make an impact on policy know what you want. Try not to be alone. Gather and join others who hold your view. There is a power to numbers and when the people get together politicians need to listen or face that they may be voted to leave office. Look out for legislation being reviewed and passed such as New York's Carbon Tax. The Carbon Tax is a bill that has been created due to a joint effort on behalf of Dr. Sarah Hsu and Assemblyman Cahill. A carbon tax levies a fee on the production, distribution, or use of fossil fuels based on how much carbon they emit. This has been created due to the obvious presence and effects of climate change. This intervention is a regulation aimed to change behavior. The carbon tax will act as a market based instrument to get corporations to pay for pollution and climate change. It encourages alternatives to carbon and other greenhouse gases, raises revenue to combat climate change, improves the environment, leads to higher social responsibility, and creates "green" jobs. An example, and model, for the carbon tax is Canada's implementation of a revenue-neutral carbon tax starting at \$10/ ton and raising \$5/ton every year (in an effort to ease companies into making changes). This has reduced emissions and there was no decline in economic growth. This "change forcing legislation" is something like a cigarette tax. It can influence change but if certain aspects don't change the money goes to fixing the problem(s) caused by greenhouse gases. Companies will be forced to pay for the probable damage they will cause by emitting greenhouse gases. This bill is

proposing a modest carbon tax of \$15/ ton which would raise \$7 billion in the first year.

Companies would likely look to conservation and alternatives (solar, wind, and hydroelectric) which will increase their overall sustainability and help the environment. Since the federal government is not likely to take action with large scale regulation certain states have started the conversation and are taking action that you could be a part of.

Donating: If you do not have time to dedicate to increased sustainability for your country or state, donate money. Do some one time research and find a charity that will actively work toward your cause. Websites like Charity Navigator can help you vet sites on a time crunch but it is always suggested that you look into the charity once you have found one you like.

Green Revolving Fund: Businesses need to start somewhere in making transitions and so my main suggestion to facilitate this is a Green Revolving Fund (GRF):

A Green Revolving Fund (GRF) is an innovative financial tool that supports the efficient delivery of... sustainability projects. It is usually a special account designated for investment in projects that improve energy efficiency or minimize the use of material resources, thus reducing environmental impact and operating expenses. Operational savings (or a portion thereof) are returned or “revolved” back to the GRF account. This characteristic replenishes the GRF and provides capital for returns to investors and for financing the next round of projects without the need for additional external capital. (Weisbord, page 5, n.d.).

As one can tell, a GRF is an investment, seeking a high return on investment, while creating a more sustainable business. It is a long term financial plan to make money and a better future for our planet. The best way to get a GRF involved in a business is to create widespread knowledge of its activities and requirements. This is an excellent way to involve employees in coming up with ideas and staying committed to changes. This fund is especially intriguing as it is practiced in my own university where I and other groups researched our own ideas to improve our school: “Developing return-oriented green revolving funds (GRFs) is a rapidly growing trend at colleges and universities. A green revolving fund (GRF) is a special account designated for investment in on-campus projects that improve energy efficiency or decrease material use. GRFs invest in a variety of cost-saving initiatives, resulting in significant financial and environmental benefits.” (Weisbord, page 3, n.d.).

In order to put this plan into action, I and several other students worked on our own Green Revolving Fund project to benefit the sustainability and profits of the State University of New York at New Paltz. We decided on a focus of reducing waste and we went with our first idea of bringing a reverse vending machine to our campus. A reverse vending machine might be better known as a bottle deposit. People come and insert used containers for a small monetary fee and the producer of the containers recycles the materials for further use: “The New York State Returnable Container Law or "Bottle Bill" requires all retailers and distributors of bottled beverages in New York State to pay a bottle deposit of at least 5 cents per bottle to their beverage dealers or distributors. The cost of this bottle deposit is passed on to the consumer as a distinct charge” (NYS Department of Environmental Conservation, n.d.). The consumer is

returned the 5 cents but collectors are offered a 3.5 cent handling fee for which they can make their own profit. (NYS Department of Environmental Conservation, n.d.). Upon returning a plastic bottle, aluminum can, or glass container the consumer receives 5 cents for each return. But in order to further incentivize recycling of these containers, businesses can return each bottle for 3.5 cents. This means that a mass collection from multiple consumers can result in your business making money. To capitalize on this opportunity I contacted a company called TOMRA and inquired about their bottle return systems. This business offers three options. Option one: buy a reverse vending machine for \$10,000-\$15,000 and incur all handling costs and maintenance. Option two: Lease a machine for a couple thousand dollars and incur all handling costs and maintenance. Option three: Volume lease a machine for about \$50 per type of product the machine can handle (i.e. \$50 if it is just a plastic bottle depository but \$100 if it is a plastic bottle and aluminum can depository) in which they would handle the products and maintenance but they would take 1.75 cents (50%) of the 3.5 cent handling fee offered to businesses. Based on the SUNY New Paltz Green Revolving Fund standards which holds \$10,000 a project should only use about half of the funds finances and it must pay off the cost in 2-4 years. After this time 10% of the profit earned goes to the school while 90% of the profit earned goes back into the Green Revolving Fund. Based on this criteria we could not afford purchasing a machine, and the cost of moving the recycling and handling maintenance outweighed the benefits compared to a service which offered all service included. With the volume lease option TOMRA would set up the machine to have the money go to the on-campus dining plan or printed for monetary redemption. TOMRA would pay the 5 cents instead of the school footing the cost until reimbursement, allow the school to display advertising (which they could sell for extra profits), and provide analytics

on when the most recycling occurs, what the most recycled items are, and if an additional machine (or more) would be necessary. If we focus on just plastic bottles the SUNY New Paltz campus receives 240,000 plastic bottles of beverages each year. If we were to take a 100% return rate into account (without considering outside beverage bottles purchased and brought onto the campus) the campus can make \$4200 ( $240,000 * \$0.0175$ ) and subtract the cost of the machine for the year ( $\$50 * 12$  months) equaling \$600 our total net profit would be \$3600 ( $\$4200 - \$600$ ). If we receive a 50% return rate net profits would equal \$1800 ( $\$3600 / 2$ ). If we would like additional financing we could reach out to on campus partners such as Campus Auxiliary Services and/or Coca Cola.

Make Suggestions in Your Own Life: In jobs, activities, and home life sustainability can be spread anywhere. Now that you have so many ideas on how businesses can be improved you can bring up ideas, be creative, and be a leader in sustainability.

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