



Fall 12-21-2020

A Winner's Mentality: Building An Environmental Dynasty Through Sustainable Sports

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Abstract

This paper examines the short- and long-term benefits of sustainability in professional sports and how it can be used as a platform for educating others on sustainable practices, focusing mainly on the 4 major sports leagues of North America as well as European Soccer. Chapter 1 provides an overview of the sports industry and the effects it has had on the environment. The sports industry's relationship with environmental issues, such as pollution and waste, are also examined through case studies and data analysis. Chapter 2 explores the history of the sports industry since 1900 and how it has evolved into the entity it is today. This evolution and its impact on the environment are examined using two case studies involving major sporting events. In Chapter 3 the economic side of sports and the motivations behind decision making are covered. The ways in which the industry has evolved in a capitalist society from business behind the scenes to game-day operations is analyzed. These ideas are explored in the context of globalization and the impact it has had on both the sports industry and the environment. Chapter 4 explores the ethical practices within the economic and environmental aspects of the sports industry, and its interactions with local and global communities. The use of sports and its platform as leverage to educate people about sustainability is also highlighted. The final Chapter lays out clear policy suggestions for making the sporting industry more sustainable both economically and environmentally. Methods and examples of the implementation of these practices and how they work toward the goals of government agencies is also discussed. Key words: sports, sustainability, globalization, commodification, management, organizations, education, ethics, philosophy, history, environment, environmental issues.

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Introduction: Sports on Earth

Did you know golf is the only sport that has ever been played on the moon? Well, here on Earth, professional sports are played on a variety of surfaces consisting of water, grass and wood. Without them we would not have hockey, soccer, basketball, football or any other sport. However, activities within the professional sports industry are putting these very surfaces at risk through environmental degradation. The industry as a whole plays a major role in global economies and in turn, the environment. The world of professional sports has evolved from being essentially non-existent to a multi-hundred-billion-dollar entity in the space of 120 years. The industry consists of organized leagues and organizations within those leagues. As is the case with almost every industry, the professional sporting industry is a major contributor to environmental issues with practices and operations that create greenhouse gas emissions, produce, consume and waste energy and generate large amounts of solid waste. The goal for organizations, leagues and committees is to reduce the industry's contributions to environmental degradation through the implementation of sustainable and green business practices. The consensus in the industry is that they can no longer be on the sidelines waiting to adapt to an ever-changing environment. By consulting with organizations who specialize in sustainability and analyzing data, organizations and leagues have already begun the process of revamping the way they conduct business. Through waste management, efficient facility and sustainable energy management as well as education, sustainable business and investment in communities, organizations can and will be more sustainable, thus reducing their impact on the environment. The industry is massive, garnering interest from tens of millions of people worldwide and having operations in almost every country. With such a massive global influence there lies within a great opportunity to educate and promote sustainable and ethical business practices. The relationships

that organizations have with communities offer a great platform to promote lessons and initiatives that motivate individuals to think and act more consciously when dealing with environmental issues. Just as a player, coach or team might adapt within a game, the industry is having to emulate the on-the-fly thinking and acting of players and coaches to find success. Due to its massive scope and global reach, the industry is primed to be a leader and a model for how other industries can adapt to ever changing environmental and social conditions.

Human activity has put our planet and the environment in a dangerous spot that threatens its capability to provide us with the essential aspects of life. Earth is currently facing a situation similar to being down three games to none in a seven-game series or a three-goal deficit in the third period of a Stanley Cup Final game. It is being pushed to the limit and on the brink of elimination, which means it is time to dig deep and fight back. To overturn this deficit, the professional sports industry will have to team up with other industries and individuals to implement sustainable practices aimed at defeating environmental degradation. If professional sports organizations and leagues can become more sustainable and play their part in the battle against environmental degradation, they might just be the secret weapon in overturning the deficit. It is now time for the industry and those within it to step up to the penalty spot and convert the winning kick, using the strong right foot of sustainability, to complete the comeback against environmental degradation.

Chapter 1 explains the relationship between professional sports and the environment using quantitative data. Chapters 2 through 4 explain the history, economics and ethics within the world of professional sports and how they relate to the environment. Finally, in chapter 5 I list a number of changes and policy recommendations that leagues and organizations can make to become more sustainable.

Chapter 1 The Stats Behind Sports' Impact on The Environment

Professional sporting events, just like any other event, use a significant amount of energy for operations to run smoothly, in turn emitting a large amount of greenhouse gases. Stadiums also use and waste a significant amount of water and plastic. The amount of energy used and waste emitted varies significantly from stadium to stadium and from sport to sport. As the popularity of sports continues to grow globally, so will the amount of waste, pollution and energy generated during each event, thus furthering the importance of efficient system integration. It is difficult to get a full and complete understanding of just how much energy is consumed and wasted by a stadium and its attendees before, during and after a game. The same can be said for total greenhouse gas emissions because there are many potential polluters in the time before a game starts and after it ends. While stadiums themselves do emit greenhouse gases through heating, cooling and electricity usage, a large portion of greenhouse gas emissions come from carbon dioxide emitting modes of transportation used by fans, teams and delivery companies. This makes total greenhouse gas emissions hard to quantify accurately because the method of transportation used by every fan, staff member and player getting to and from the stadium varies. However, the overall environmental impact of the industry as a whole is significant but unfortunately, reliable data pertaining to the environmental impacts of stadiums and sports is extremely limited. As we know, many people, especially those in more rural or non-metro areas, rely on personal vehicles or ride-sharing companies for transport while events held in metro areas allow for more public transportation opportunities. The size of stadiums also varies from sport to sport with NHL and NBA stadiums being the smallest and MLB, NFL and Soccer stadiums being much larger. Therefore, gaining a complete understanding of net energy

usage and greenhouse gas emission for a single sporting event is difficult due to a variety of factors.

The world presently faces a plethora of multi-faceted environmental issues that are the main drivers of the climate crisis. Environmental issues include air and plastic pollution, biodiversity loss, deforestation, droughts, floods and food and water insecurities. These issues impact all walks of life and threaten the very existence of Earth as we know it. According to the 2014 Intergovernmental Panel on Climate Change report, “human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems” (IPCC 2014, 2). These impacts result in things like higher global temperatures both on land and in oceans, sea level rise, extreme weather events among other things. All these resulting impacts have detrimental effects on biodiversity, ecosystem services and the well-being of human and non-human species. Human activity is the main driver of accelerated environmental and climate change and it is mainly due to our production of greenhouse gas emissions from industrial activities, transportation and energy production. “Anthropogenic greenhouse gas emissions have increased since the pre-industrial era driven largely by economic and population growth. From 2000 to 2010 emissions were the highest in history. Historical emissions have driven atmospheric concentrations of carbon dioxide, methane and nitrous oxide to levels that are unprecedented in at least the last 800,000 years, leading to an uptake of energy by the climate system” (IPCC 2014, 44).

Among the most significant environmental issues stemming from climate change is the increase in global temperatures. The IPCC report states, “each of the last three decades has been successively warmer at the Earth’s surface than any preceding decade since 1850. The period

from 1983 to 2012 was very likely the warmest 30-year period of the last 800 years in the Northern Hemisphere” (IPCC 2014, 40). Data shows that “the globally averaged combined land and ocean surface temperature data as calculated by a linear trend show a warming of 0.85 [0.65 to 1.06] °C over the period 1880 to 2012” (IPCC 2014, 2). Warming leads to a series of negative effects that include sea level rise, changes in weather patterns, impacts to ecosystem services and an increase in severe storms. Increases in global temperatures can be directly attributed to the increase in greenhouse gas emissions from human activity. According to the 2014 IPCC report, “about half of the cumulative anthropogenic CO₂ emissions between 1750 and 2011 have occurred in the last 40 years...since 1970, cumulative CO₂ emissions from fossil fuel combustion, cement production and flaring have tripled, and cumulative CO₂ emissions from forestry and other land use have increased by about 40%” (IPCC 2014, 45). Furthermore, “CO₂ emissions from fossil fuel combustion and industrial processes contributed about 78% to the total GHG emission increase between 1970 and 2010 and globally, economic and population growth continue to be the most important drivers of increases in CO₂ emissions from fossil fuel combustion” (IPCC 2014, 5). The economic activities of humans have contributed immensely to the environmental issues we have today because of climate change. The professional sports industry generates its fair share of greenhouse gas emissions and although it is tough to calculate precisely what that amount is, it is important for leagues and organizations to reduce their contributions.

According to a study done by the National Resources Defense Council, on average all NHL games during a given regular season, which amounts to 2,542 games, emit just over 500,000 tons of greenhouse gases in total, per season. For comparison a single coal producing power plant can produce, on average, around 23 million tons of greenhouse gas emissions per

year (Wharton 2013). In contrast to the NHL's relatively low emission levels, the Wharton report also examined the greenhouse gas emissions created by fans travelling to and from the stadiums of two MLB and NFL teams. The MLB team that I chose to highlight is the Los Angeles Dodgers, using one stadium and the NFL teams being the N.Y. Jets and N.Y. Giants who share one stadium. They calculated the number of parking spots at each stadium, the number of total miles driven by fans and the total number of CO2 emissions in pounds for each individual game just from vehicles. Dodger Stadium in Los Angeles has a total of 16,000 parking spots with an estimated 930,000 total miles driven to and from the stadium resulting in a CO2 output of over 828,000 pounds per game. MetLife Stadium in East Rutherford, New Jersey which houses the Jets and Giants, has 23,800 parking spots with an estimated 1,428,000 miles driven to and from the stadium resulting in a total CO2 output of over 1,232,000 pounds per game. Of course, greenhouse gas emission data does vary from game to game and season to season depending on modes of transportation, access to public transportation and overall performance of the teams. Both MetLife Stadium and Dodger Stadium are accessible by public transportation such as buses and trains, so that helps reduce the total number of cars being used. This is one of the main hurdles that organizations must overcome to reduce their overall impact on the environment, a very difficult task because not all stadiums are accessible through public transportation, so the use of individual vehicles will always be present. Obviously, stadiums with larger capacities will create more waste and use more energy than smaller ones while also seeing a larger volume of gas-powered vehicles. The reduction in use of individual vehicles and creating mass transit solutions will be the biggest task for all organizations and leagues to tackle, with no uniform solution readily available.

While stadiums' greenhouse gas emissions are relatively low, compared to those created by vehicles, they still emit them through energy production which allows for operations to occur. Stadiums also produce a large amount of solid waste, which, along with energy and water usage, is their largest contribution to environmental problems. This waste is made up mainly of plastic items like cups, plates and bottles as well as packaging materials and food waste. Waste generated by stadium goers ends up in landfills, rivers, oceans, wetlands and other natural landscapes. These waste items have a significant impact on ecosystems and their services throughout the world. Harmful chemicals from plastics seep into waterways through runoff, lowering the quality of the water while simultaneously putting plant, animal and human populations at risk. According to a study done by the EPA, sporting event attendees generate an estimated 39 million pounds of trash per year in the United States alone. Furthermore, the United Nations Environment Programme estimates that major sporting events "generate up to 750,000 plastic bottles apiece" (UNEP 2018).

The environmental impact of a given stadium varies from stadium to stadium, but with the recent introduction of green solutions and sustainable practices some organizations have been able to reduce those impacts. For example, the 2012 FA Community Shield game in Birmingham, England generated a total of 5,160 tons of carbon dioxide emissions according to Britain's Carbon Trust, "with transportation (to and from the game) responsible for 5,000 tons. The stadium's energy use, which led to 60 tons of carbon emissions, was down 7%, thanks to efficiency improvements in lighting, heating and other systems" (Wharton 2013). However, in contrast to that example, Dallas Cowboys stadium in Arlington, Texas is not very efficient and generates an unbelievable amount of energy. "During moments of peak demand on game day, the 80,000-seat stadium may consume up to 10 megawatts of electricity. Liberia has the capacity

to pump less than a third as much power into its national grid” (Zaldivar 2017). Liberia has a population of around 3.7 million people and the Cowboys stadium has a max capacity of 80,000, astonishing when you consider those two numbers. Cowboys Stadium is just one example of sports stadiums using a large amount of energy, with some using new, efficient systems and some still relying on older systems. For example, Metlife Stadium which replaced the old Giants stadium, “consumes 30% less energy thanks to LED lighting and lighting controls that are powered by a “solar ring” of 1,350 solar panels” (Energy.gov 2017). It is important to note that the environmental impact of a given stadium depends on several factors that include capacity, type and number of events and the efficiency of systems within the stadium, such as energy usage and recycling. Although stadiums are not the main contributor to environmental issues associated with the sports industry, they are a significant part of the equation.

As is the case with all environmentally harmful actions, ecosystem services are greatly affected by pollution, waste and energy usage. While the sports industry may have a smaller impact than other harmful industries, like agriculture and metal mining, it still has a significant impact. These impacts affect ecosystem services while simultaneously contributing to environmental change, ultimately impacting human beings’ quality of life. All ecosystem services are impacted because of harmful practices within the sports industry, these services include regulating, provisioning and cultural services. Environmental regulating services are defined as “the benefit provided by ecosystem processes that moderate natural phenomena...including pollination, water purification, erosion and flood control and carbon storage and climate regulation” (Miller 2011). Environmental provisioning services are defined as “any type of benefit that can be extracted from nature...this includes water, timber, natural gas and oils and plants that can be made into clothes and other materials” (Miller 2011). These

environmental services are affected by the greenhouse gas emissions emitted through stadium construction, energy creation and usage and modes of transportation used for travel. The extraction and use of natural capital such as water, timber and natural gas to construct stadiums and facilities alike, degrade the already thin amount of resources our planet possesses, reducing the capability of the aforementioned services. The degradation of natural capital also reduces the capability of Earth to provide us with basic materials we need to survive like water, shelter and food, in turn threatening the health of humans and the planet itself. Regulating services that help to maintain air, water and soil quality, are also negatively affected by pollution from construction and gameday operations. Trees and plants, which are essential to regulating air and water quality, are among the most significantly impacted service providers. The cultural ecosystem services that are provided to us “include the non-material benefits people obtain from contact with ecosystems. They include aesthetic, spiritual and psychological benefits” (Miller 2011). When these ecosystem services are impacted it has a significant effect on the planet's ability to sustain basic life and puts the well-being of humans at risk. The ability to maintain ecosystem services and ensuring they can continue to provide us with these benefits. Without these services, human life would become unsustainable and potentially impossible as we would have no regulation of things like air, water and climate, a lack of readily available food and water and a significant number of diseases through uncontrolled pathogens and pest populations. Pollution stemming from the sports industry's practices contributes significantly to ongoing environmental issues which inevitably has a harmful effect on the planet's ability to provide us, and all life, with ecosystem services. This means organizations must put a greater emphasis on rethinking the way they operate and begin to think creatively about transportation systems and minimizing waste.

According to the UN Environmental Program “building and managing a sport facility and operating an event uses energy and can contribute to air pollution, greenhouse gas emissions and waste generation, as well as to ozone-layer depletion, habitat and biodiversity loss, soil erosion (from site construction) and water pollution”(Wharton 2013). The UN further stated, “the main environmental impacts associated with a sporting event are: the development of scarce or fragile land; pollution from liquid spills; noise and light pollutions; consumption of non-renewable sources; the consumption of natural resources (such as water and wood); the creation of greenhouse gasses by consumption of electricity and fuel; and from spectators' waste” (Otto as cited by Wharton 2013). The environmental impacts of the sports industry, in combination with impacts from other industries, are felt throughout the globe. This puts an emphasis on creating efficient and sustainable solutions for business operations, which have already begun in many leagues and countries. For example, The Green Sports Alliance is an organization that has teamed up with almost 600 organizations in 14 countries and 15 different leagues to promote and integrate sustainable and green practices to lower their environmental impacts. This includes professional teams, college conferences and teams and individual venues that restructure their operations and incorporate things such as renewable energy, recycling and efficient use of water resources (Green Sports Alliance 2011). Although the data may vary from stadium to stadium, league to league and country to country it highlights the fact that the sports industry is playing a role in environmental degradation and there is a need for the development and implementation of sustainable practices.

Chapter 2: The History of Sport and the Environment Since 1900

Sports and sporting activities have been present in society for centuries but the world of professional sports that we have today did not really emerge until the mid-to-late 19th century.

Sporting activities included hunting, fishing, boxing and horse racing and these represented leisure activities or past times that the wealthier segments of society often engaged in. All these activities, except boxing, were rooted in and connected to the environment or local landscape in some way shape or form. There was minimal to no organization, other than word of mouth traditions, and leagues or ruling commissions had not yet been established. This was a very bare bones operation, and the “idea” of sport was more for leisure or personal enjoyment. Late on in the 19th century, there was a movement towards developing and organizing sports in a more modern fashion. This was happening rather fast in England where capitalism and enclosure had created a class system that separated the poor from the working class and them from the elites. The elites were responsible for the creation of, and participation in, the aforementioned sporting activities of hunting, fishing and horse racing. Eric Dunning, a sociologist and professor at the University of Leicester, refers to this as the “first wave” and mentions the “second wave” of sport in England as the precursor to the modernization of sports we have today. “A nineteenth century wave in which soccer, rugby, hockey, tennis, athletics and water sports such as rowing and swimming began to take on modern forms...While in the second (wave), members of the bourgeoisie – the industrial middle classes – joined the landed classes in taking the lead. ‘Clubs’ were the organizational form of the first wave; ‘associations’ and ‘unions’ of the second” (Dunning 2008, 10). This was one of the aspects of the birth of modern sport and it created the framework for organizing leagues, associations, rules commissions, conferences, divisions and clubs or teams. Sporting “practices” had traditionally been a part of military training throughout history and athletic competition has been around since about 776 B.C. in Greece but they were never actually organized. The organization of modern sport, as Dunning points out, did not occur until the mid-to-late 19th century. Before that time, the sport industry did not exist and sports

were merely activities that people engaged in. The popularity of sport and its rapid growth during the 20th century can be attributed to a few factors, one of which is the commodification and marketing of organized leagues.

A sport like soccer, or more widely known as football, has its fingerprints on societies all over the world, hence the tag “the world’s game”. Soccer holds a level of significance in the development and advancement of the modern sporting industry. It was one of the first team sports to be developed and organized and to implement a governing or ruling body. England was the first country to have an organized soccer league where the first Football Association, which still exists today, was created in London in 1863. The organizational aspects of the Association allowed for the sport to grow not only in England or Europe but all throughout the globe, the first example of the globalization of sport. The English game grew from 12 clubs in 1892 to over 92 in 2020. Since 1900 the creation of professional soccer leagues has spread to every corner of the globe, with the biggest leagues being in Spain, Germany, France, Italy, England, The United States, Mexico, Argentina and other countries. As soccer’s popularity grew and grew, the aspects of sports business grew with it. The development of major stadiums and continental tournaments meant that more and more people would be attending games, driving the marketability of the sport through the roof. Since leagues were rapidly developed in various countries, and the game had become international, the creation of a world governing body was necessary. FIFA or the Federation Internationale de Football Association was created in 1904 to promote the game, foster friendly international relationships and to control every type of association football (soccer). This governing body was followed by the creation of UEFA in Europe that oversees club and national competition between teams throughout the continent. The globalization of the game and international governing bodies means that competition occurs

between nations all over the world. Soccer is the ultimate example of the creation and development of modern sport and it paved the way for the creation of other leagues throughout the world.

Organized hockey, basketball, baseball and American football all followed the lead of soccer and have become massively popular and influential aspects of the sporting industry themselves. These four sports helped further the international popularity and obsession with sports. Like soccer, hockey is an international sport played in North America, Europe and Asia. The creation of an international governing body in 1908 known as the IIHF, allows for the sport to operate in a similar manner to soccer by hosting tournaments and promoting the game worldwide. 81 countries are part of the IIHF and it includes hockey at the youth and professional level for both men and women. Canada, Russia, Sweden, Finland and the United States are the dominant forces within international hockey, and these countries have the biggest leagues in the world. The NHL grew from 6 original teams in 1917 to 31 in 2020, another example of tremendous domestic growth.

Basketball has its own international governing body, although the sport is much more popular in Canada and the United States. FIBA, created in 1932, the basketball version of FIFA, hosts international tournaments like the World Cup of Basketball and has helped bring the game to countries throughout the continents of Africa, Asia, South America and Europe. The WNBA in the United States has allowed women to play professionally for the last two and a half decades and American women have dominated the international women's game. The globalization of basketball has allowed for it to become the fastest growing sport in terms of popularity in the world. Competitive leagues in France and Spain have produced NBA draft picks from various European countries over the last two decades, a further testament to the global reach of the game.

The main league in China, the NBL, has also produced NBA level talent in recent years. The NBA, which consists of 29 teams in the United States and 1 in Canada, is the driving force behind the globalization of the game. It first started in the late 1980's and early 1990's with players like Larry Bird, Michael Jordan and Magic Johnson. International competition is usually dominated by the United States, although Spain, France and Argentina have all won major international tournaments.

American football is the only sport that is played within the borders of the United States. The popularity of the sport both domestically and internationally is tremendous, however. The sport and league have both grown incredibly fast starting with 5 teams in 1920 expanding to 32 teams in 2020. The NFL merged with the AFL in 1966, combining the two professional leagues of football into one. With no international competition, the game has not been able to develop in other countries, but the NFL is creating initiatives to promote the league and the sport in European countries. Canada has its own version of American football with slightly different rules and unfortunately not as much popularity. Other leagues exist within the United States but with the NFL dominating market share and popularity it is hard for those leagues to grow. Also, the intense physical demands of playing the sport mean that only a small percentage of the population can play the game professionally. However, even without international tournaments or similarly competitive leagues, other than Canada, the NFL's global reach is not lacking. The league has played games in England and Mexico in recent years, increasing the popularity and reach of the game to South America and Europe.

The rapid growth of professional sports leagues across North America and Europe during the 20th century have made it into the powerful, global entity it is today. Another aspect of the growth of the industry is the popularization of the professional athlete. Throughout the 20th

century many famous athletes graced the 4 major leagues of North American professional sports as well as the major European soccer leagues. Names like Babe Ruth, Yogi Berra, Kenny Dalglish, Pele, Johnny Unitas, Wilt Chamberlain, Gordie Howe, Bobby Orr, Jim Brown, Oscar Robertson and Roger Staubach among others, took their respective games to new heights. Those were the first stars of sport in the 20th century and many who came after them, like Michael Jordan and Tom Brady, elevated the industry to new heights. All of these players were what we would consider superstars, many of whom appeared on magazine covers and cereal boxes and in television shows and movies. People began to idolize these superstars and more and more people wanted to play and watch sports because of them. The celebrity status of these athletes meant that teams and leagues alike could easily leverage that status to grow the popularity of the sports they played. A star player helped teams sell tickets which packed stadiums and brought with it an increase in revenue from merchandise and concession sales. The growth of the industry relied on successful teams and superstar players that attracted fans and maximized profits. The growth of the industry, however, was not only due to the popularity and success of players and teams or the growth of leagues.

The growth of sport also depended on social, cultural and economical factors that allowed for the industry to expand across the globe. Socially, sport is a constant talking point with new developments happening each and every day. The outcome of a game or the trade of a player created buzz in the media and among people throughout the world who cared enough about it. The presence of sport in media spaces like radio, television and publications meant that it was able to reach audiences everywhere, captivating them and sparking an interest. As a cultural symbol, sports allow people from all walks of life to come together and relate to one another through that common interest. Culturally, soccer might be the most influential sport

because of the fact it is played nearly everywhere. Despite differences in language, race, ethnicity, gender and social status the ability for people from completely different backgrounds to connect through a sport like soccer should not go unnoticed. The economic aspect of sports allowed the industry to reach new heights across North America, Europe and the rest of the globe. The desire to maximize profit, gave birth to the commodification of all aspects of each team, league and sport. Through commodification, organizations and leagues were able to make money from all aspects of their operations. This includes tickets, jerseys, DVD sets, hats, memorabilia and food and beverage, among other things. The intense desire for profit and the ability to maximize it due to an increase in demand has led the industry to great heights but has brought with it environmental harm that is often ignored or swept under the rug.

As the sports industry's popularity grew and grew, the aspects of sports business grew with it, as people realized there was money to be made. Rapid globalization and new transportation methods allowed for global development of almost all sports, except American football, even though it is watched throughout the globe. The development of major stadiums, continental tournaments and the use of mass marketing, has had a tremendous impact on the global economy and the environment. Major sporting events such as the Super Bowl, The Olympics and The World Cup attract thousands upon thousands of spectators to both the actual venue(s) and the city or cities that host the events. People have been attending sporting events around the globe since the emergence of professional sports in the early 1900's. By scanning old footage of any major sporting event, it is easy to see packed stadiums have been a theme throughout and continue to be so today. In the past 4 decades the maximum capacity of stadiums has grown as teams are financially capable of expanding, resulting in even larger crowds. For example, the NFL has 13 stadiums that have a maximum capacity of 70,000 or more with 4 of

them able to hold 80,000 people or more, by far the largest venues in professional sports in the United States. The NHL, however, has only one arena with a maximum capacity of more than 20,000 people, that being Montreal's Bell Centre. The Premier League which is the top division in English soccer has 6 stadiums with a maximum capacity of more than 50,000 people. The major impact the sporting industry has on the environment stems from the number of fans attending the game, their travel methods and the amount of food and beverage they consume. Although the economic benefits of these events help local economies and individual sports organizations as well as leagues, the underlying environmental impacts usually go unnoticed. In recent years newly developed stadiums have instituted efficient systems and sustainable infrastructure that has reduced the negative environmental impact of the stadium itself. This is one way in which sports organizations are adapting to changing environmental conditions, but they still must look at investing in other efficient, sustainable segments of business.

By examining the individual case of the '03/'04 FA Cup Final in Cardiff, Wales, we can better understand the impact of this event on the environment and how the effects went almost totally unnoticed. This case study revolves around the chapter of major sport events and environmental sustainability as put forth by Dingle & Mallen to analyze the industry's relationship with the environment. "This chapter (which contains the case studies) provides a critical examination of environmental sustainability and major sport event research" (Dingle & Mallen, 54).

The FA Cup Final is arguably the biggest domestic soccer cup game in the United Kingdom. The competition has been played since 1872 and consists of all English teams from the top division down to the lowest division, the National League, 7 tiers below the top level. The final is always played at a neutral site and has had an attendance of over 70,000 more than

100 times. This final featured a Premier League club, Manchester United, one of the biggest clubs in the world and Millwall F.C. a relatively small club in England who played in the second division that season. This game had a crowd total of 71,350 people with 70% of tickets sold to Manchester United supporters and the remaining 30% going to Millwall supporters. The study examines several factors including economic impacts both short and long term and direct or indirect benefits of hosting large events as well as environmental impacts and welfare issues. However, this specific study “moves beyond an identification of environmental impacts and takes steps towards estimating them. Specifically, this paper also links local and global environmental impacts to event related consumption” (Collins as cited by Dingle & Mallen 2007). For a long time studies had not included or analyzed potential environmental impacts of large events but in recent years councils have been created to focus more attention on doing so. The researchers of this event analyzed research conducted by AEA Technology that detailed air emissions, electricity consumption and production, energy production, waste arisings and water consumption to calculate greenhouse gas emissions. By analyzing this information they were able to link one industry’s production to another one’s pollution. In the case of the FA Cup Final they linked “additional tourism spending from the FA Cup Final to economic effects and then environmental externalities from Cardiff industries” (Collins as cited by Dingle & Mallen 2007). They then focused on estimating visitor consumption in four areas for the day of the cup final, these areas include, travel to the event, food and water, infrastructure of the event venue and waste. These four categories were examined because they were deemed to have the greatest environmental impacts. The influx of visitors to Cardiff on the day of the game brought about significant economic benefits for local industries such as restaurants, travel companies, hotels and merchandise shops. “It was estimated that in 2004 there was some 2.9 million Sterling of

spending by visitors at the FA Cup Final” (Collins as cited by Dingle & Mallen 2007). A large influx of about 70,000 people also put a large strain on the infrastructure and transport systems of the city of Cardiff and generated a large amount of waste, one the city is not used to handling. Local environmental impacts directly related to the game itself totaled nearly 124 tons of greenhouse gas emissions. The largest and most significant impact on the environment directly related to the FA Cup game was the “visitor travel patterns” (Collins as cited by Dingle & Mallen 2007). Alluding to the fact that methods of travel are some of the most environmentally dangerous aspects of a given sporting event. “Visitor travel to the event generated an ecological footprint of 1670 global hectares (about 4127 acres), 55 percent of the total footprint of the FA Cup Final game...visitor consumption of food and drink was the second largest component and created a footprint of 1381 global hectares (about 3412 acres)” (Collins as cited by dingle & Mallen 2007). In summary the FA Cup Final game had a significant global ecological footprint and was mostly perpetuated by transportation methods and food and beverage consumption. However, “the actual infrastructure of the event venue has a relatively small footprint because of the durability of materials used in its construction and the number of visitors that will use the venue over its estimated life span” (Collins as cited by Dingle & Mallen 2007). A single event had a massive ecological and environmental impact due to human activity but the stadium itself did not contribute massively to this, further highlighting the importance of sustainable building and the use of efficient systems within a given stadium. It can be assumed that similar levels of global environmental and ecological impacts have been occurring because of human travel and consumption at sporting events for decades. This case study focused on environmental impacts from a large event, now we will look at the impact of a mega-event on climate change, highlighted by Dingle & Mallen.

The event in question is the 2010 FIFA World Cup in South Africa, where teams from 32 different countries participated in the event. The region saw a massive influx of tourists from all over the globe as the tournament lasted from June 11th to July 11th. It is estimated that over 500,000 people flocked to the region to take part in the event and its festivities. A mega event, such as the World Cup, is classified as being “very large events when evaluated according to cost, visitor numbers or psychology” (Otto as cited by Dingle & Mallen, 2010). The researchers in this case examine the relationship between the 2010 World Cup and tourism, specifically considering the environmental impacts associated with tourism and their relation to climate change. Most importantly the study focuses on “the major areas of concern connected with a mega event such as the 2010 Soccer World Cup, in terms of energy consumption and CO₂ emissions, include operational aspects that could be directly connected to the event, such as the stadiums and the transport connecting the spectators with the event” (Otto as cited by Dingle & Mallen, 2010). A major aspect of World Cups is that the games take place in a variety of stadiums throughout the host country, creating a large demand for various methods of transportation. Since South Africa is not a small country and some fans had tickets to more than one game, the overall usage of CO₂ emitting transportation methods was relatively high. The researchers “identified domestic air travel, diesel trains and tourist coaches as among the highest CO₂ emissions contributors” (Otto as cited by Dingle & Mallen, 2010). This again highlights the largest polluting action of any sporting event whether it be one game or a large scale, multi-week event is the methods of transportation used by spectators. Results from this study confirmed that methods of transportation, being private cars, diesel trains and air travel were the greatest contributors to pollution at the 2010 FIFA World Cup. Although other aspects of tourism like food and beverage consumption and energy usage at hotels and resorts played a role in

contributing to greenhouse gas emissions at the tournament, transportation was the largest contributor. The stadiums themselves did not contribute much to impacting climate change, but they did contribute low levels of CO₂ emissions during construction.

The rapid growth of large-scale events and leagues has led to an international increase in popularity to the sporting industry worldwide. As previously mentioned, larger stadiums will attract larger crowds which in turn will have harmful impacts on the environment and environmental services. Stadiums are not the main issue however, it is more so the travel to and from games, individual consumption and waste created by spectators that contributes significantly to environmental hazards. Stadiums are responsible for energy production and consumption and the creation of solid waste through event sales and new strategies for combating these must be developed. The rapid global growth of sports in the last 120 years has created a host of environmental problems that can be attributed to all aspects of the gameday experience. As leagues continue to expand globally, CO₂ emitting transportation methods are likely to increase, creating a need for development of new, sustainable mass transit options. Europe has done a good job in integrating railway systems to access stadiums as a way to minimize greenhouse gas emissions and the United States should seriously consider looking into developing their own systems. The history of sport and the environment is one that many would consider separate, however they are very closely related, and it is important to shed light on their relationship.

Chapter 3: Sport in the Global Economy

The global sports industry generates a significant amount of revenue year in and year out, both in domestic and international competitions. The impact of the industry on local and global

economies, means that cities, states and countries have a level of reliance on the financial and on-field success of sports teams. Ticket sales, gameday productions, merchandise, player trades and transfers and sponsorship deals are all major money producing aspects of sports teams. The industries of food and beverage, tourism, travel and accommodations are among those that benefit the most from the business dealings of the sports industry. Organizations and leagues in the industry have evolved into capitalist entities in terms of the ways in which they do business, with rampant commodification a major aspect of this shift.

Due to the significant growth of the industry over the 20th and 21st centuries, the marketability and value of every sport, team and player has gone up tremendously. This has allowed for exploitation and corruption to be present within governing bodies, marketing companies, individual organizations and players themselves. The bargaining power of leagues and organizations, inevitably, brings into question the motivations behind business decisions and whether or not people at all levels of the industry act ethically and make decisions that act in the best interest of everyone and not just a select few individuals. The sports industry is no different than any other major, international industry and organizations like Real Madrid, The Dallas Cowboys, New York Yankees and Los Angeles Lakers are not much different than massive oil or agricultural companies, in terms of influence. As business continues to grow within the industry, the influence the industry has on various country's economies will only become more significant. The scale of the industry, the motives behind business decisions, the decisions themselves and the sustainable development of business structures will be integral to the success or failure of organizations and leagues moving forward, as they have been over the past 120 years.

Understanding how sports business operates first requires us to understand what sports business is. Hans Westerbeek, an Australian educator and researcher, simply defines sport business as, “the profit-seeking or surplus-seeking production of sporting goods or services” (Westerbeek 2013). In the case of professional sports, sports business is the production and sale of the sport (games) and the production and sale of all goods related to a given team, organization or event. Because the industry has grown into a global entity, we must now understand these aspects of sports business in the context of globalization. Westerbeek credits “economic liberalization and technological progress” as two main components of the industry’s growth. Furthermore, Westerbeek expands on these two components and lays out how they have allowed sports business to expand. “The breakdown in the economic frontiers between nations has allowed sport to become more widespread, to gather more fans, and to present the opportunity for greater business development. Globalization has also brought with it the availability of large amounts of venture capital. Not only are emerging market nations benefiting from greater interest from venture capitalists, businessmen and entrepreneurs, but the opportunity to expand domestic leagues, clubs and events as well as exporting local sporting products are being capitalized on around the world. Rapid development of information technology allows users access to all types of information, including high-quality footage of live sporting events, and has led to an expansion of market size for sport, not seen before in the history of the industry” (Westerbeek 2013). Globalization has been key in the expansion and development of the modern sports business and the commodification of products and services has also been a key part of growth.

Sports organizations have become more and more like corporations in recent decades in the ways they operate and conduct business. They have evolved into public entities that people

can buy and sell on stock markets throughout the world. This lends itself to the fact that the economy of sport is continually finding ways to expand and accrue as much profit as possible. Speaking on this topic, Adrian Walsh demonstrates how teams have gone about making themselves private entities, similar to corporations. “Most have undergone some significant division of ownership and control along the ‘joint-stock’ model, while some are either capitalised as public limited companies that are listed on major stock exchanges or operate as a franchise” (Walsh 2007). The privatization of individual teams has put more emphasis on marketing, commodifying and profiting from any and all aspects of business. This includes players, merchandise, broadcast rights and team's personal brands. Through these practices, sports teams and the industry itself have become extremely valuable entities who contribute to the economy. The top three most valuable teams in the world according to Forbes are The Dallas Cowboys valued at 5.5 billion dollars, The New York Yankees valued at 5 billion dollars and The New York Knicks valued at 4.6 billion dollars (Badenhausen 2020). Interesting to note that all three franchises operate entirely within the continent of North America. These teams generate a significant amount of revenue per year and have all grown significantly in value since they were purchased, another testament to the rapid growth of the industry through commodification and marketing of goods. These teams and many others market themselves as brands that are able to sell the product they produce, that being the game they play as well as team related merchandise. The privatization of sports teams and the commodification of everything associated with them are two examples of the driving forces behind the massive economic growth of modern sport.

It is important to understand how business operates in the industry and how intense commodification has evolved to have a massive impact on decision making. First, we must understand what commodification is and how it relates to the sports industry. “Put most simply,

commodification is the transformation of a good or service into a *commodity*, that is, into a thing which is bought and sold” (Walsh 2007). This pertains to teams, players, merchandise, stadiums and the sports themselves. Commodification of players has turned them into goods that are bought and sold between organizations, and it is one of the most financially influential aspects of sports. Commodities, then, are items that have a use value as well as an exchange value, which are determined by intrinsic value and market value, respectively. With that being said, “commodification is defined as the transformation of a thing with only use-value to a good with both use-value *and* exchange-value. A good comes to possess an exchange-value when it is bought and sold on a market of some kind for money or some equivalent” (Walsh 2007). The market for players is known as the trade or transfer market and in recent years deals made for players have grown significantly in terms of value. Within the sports industry, the idea of a market, can also be applied to the sale merchandise as well as organizations and their likeness. The amount of commodification in the era of modern sport has increased tremendously and it will continue to grow as interest and popularity expand globally.

As sports’ popularity continues to grow across the globe, so does the industry of sports business. Understanding the amount of revenue generated and sources of revenue generation are important in understanding how to conduct and manage business. According to Business Wire, the annual value of the sporting industry, worldwide, from 2014 to 2018 was an estimated 488.5 billion dollars and is expected to grow to about 614 billion dollars in 2022 (Steinberg 2019). Some aspects of the industry that contribute to such a large amount of revenue include sponsorships, the emergence of e-sports, merchandise sales and the growth of sports viewership on internet accessible devices like tablets and smartphones. Ticket sales and gameday productions also generate revenue but are being put at risk by the emergence of in-home

entertainment technology. Media and broadcasting rights for sporting events in the United States and Europe also contribute to annual revenue generation. The NFL earns over 5 billion dollars annually just from television broadcast deals, one-third of total annual revenue, while the MLB earns 3.2 billion, the NBA 2.6 billion (Heitner 2016). The English Premier League earns a little over 1 billion dollars from broadcasting alone in the United States but earns over 6.7 billion in domestic broadcasting deals in the United Kingdom (Sandomir 2015). The globalization of sports is a main component of the industry's ability to generate mass revenue, for instance the English Premier League, as noted above, generates over one billion dollars in television revenue in a deal with NBC in the United States alone.

Looking at the business of the NFL as an example of intense growth and commodification, we can see the amount of money that is made through the broadcasting of multiple games a week. The games are the product that the league produces, for fans to consume. This generates a massive amount of revenue through viewership, both in attendance numbers and people watching at home. The league, along with every other league, sells the rights to their broadcasts. The NFL's most recent television deal, in 2013, was an agreement with the networks of CBS, NBC, FOX and ESPN for season-long NFL football broadcasting rights on Sunday, Monday and Thursday. Since Sundays are the league's biggest day of production, CBS, NBC and FOX are reportedly paying "3.1 billion dollars per year" (Steinberg 2019) for the rights to broadcast games. Adding in the payments by networks for Monday and Thursday night games, the overall earning from the television deal for the NFL is roughly 5.65 billion dollars annually (Steinberg 2019). A prime example of commodification within the industry of pro sports. As Walsh points out, "in commodifying these games we see that they have come to possess both a use and an exchange value" (Walsh 2007). Commodification does not stop there. Arguably the

most important example of commodification is of the players and their likeness which drives up revenue and earnings for leagues, teams and players themselves.

Major players attract and generate significant increase and loss in revenue depending on whether they are bought, sold or traded from team to team. Players have the ability to increase their own market value through their level of play and personal accolades or performances. The presence, or lack thereof, of a star player can significantly influence the financial success of a given team, as well as their performance on the field. This drives teams to try and find star players either through a trade or transfer or through the draft process. In the four major North American sports leagues, the NHL, NBA, MLB and NFL, players are traded between teams or have the freedom to sign wherever they choose through free agency at the expiration of their contract. Players act as commodities that are exchanged on the trading market within individual leagues. Soccer is a bit different in the way that players are bought and sold or “transferred” between teams. In Europe, where soccer is the largest sport on the continent, players can move between countries and leagues, for example a player can move from Spain to England or Italy to Germany. Decisions on buying and selling players in soccer are a bit more comprehensive and involve a fair amount of cost-benefit analysis, not to say North American sports do not do the same, there is just more of a need for it in the soccer world. Soccer teams put a price tag on their player, regardless of contract situation, although players with long-term contracts are unlikely to be sold, and teams that are interested must match that price tag or come close to it, in order to secure a transfer. Because teams have to pay other teams hard currency, it requires them to scout the player in question and analyze their finances to see if a deal is feasible. In North American sports, players are usually traded for other players or draft picks or both rather than a sum of money. For North American sports teams, the financial planning associated with trades pertains

to the length and value of contract they offer to players. The commodification of players, in all leagues, is a prime example of the ruthlessness of business within the sporting industry. Players have essentially become pawns in the grand scheme of sporting business but at the same time are the most important aspects in generating revenue for organizations and leagues, which in turn allows them to negotiate high earning contracts for themselves. Players are the driving force behind the success of the sporting industry and many players are the reason why all sports have a global following. Players like Cristiano Ronaldo, LeBron James, Tom Brady, Sidney Crosby, Mohamed Salah, Lionel Messi, Patrick Mahomes and Connor McDavid are examples of modern players who have accelerated the international growth of modern sports. Intense commodification of them and others, have driven merchandise sales, advertising revenue and helped to increase the value of the franchises they play for.

The commodification of players has also created controversy because more often than not, players are viewed only as commodities or tradeable assets that an organization possesses. It is important to remember that players are human, and they are not just a means of making financial gains and this is sometimes forgotten by fans and organizations alike. Walsh highlights this issue, “one common complaint about modern commercial sport is that athletes come to be viewed as mere commodities, both by those who pay for their services and by sports fans. Soccer players are traded in end-of-season negotiations between clubs like cattle at a market. Fans regularly talk of whether a player was a good buy or represents value for money” (Walsh 2007). Usually, this is how players are judged, whether or not they live up to the amount of money that was shelled out to secure their services. The assessment of players as nothing but business assets, or commodities, highlights the ruthlessness of the sporting industry and its purely capitalist tendencies.

Commodification is a major part of this growth but of course it is not the only factor in play. As previously mentioned, the industry has been able to expand globally because of globalization, advancements in technology and the ability of teams and leagues to market themselves in countries where they do not operate. Thus, the modern sports industry has been able to grow and expand on a global scale because of the capitalist nature of business dealings throughout all leagues. Walsh highlights this in the following quote, “the classical definition of commodification does not fully capture another worrying feature of modern sport. It is not just the buying and selling which occurs that raises concerns, but rather the depth or pervasiveness of market relations in sport” (Walsh 2007). Pervasiveness is defined as the quality of spreading widely or being present throughout an area or group of people. The sporting industry has its hands in a plethora of jars so to speak, which means they can market themselves and benefit from their dealings in economies all over the world. Played throughout the world, soccer seems to be the sport with the most global influence. The popularity of teams like Real Madrid, Barcelona, Liverpool and Manchester United is present in all countries. These teams represent the upper echelons of successful sporting entities because of their popularity and brand recognition, they can profit tremendously from the sale of the goods associated with their brands. Some of these goods include the actual on field play and merchandise such as jerseys and other clothing items. Walsh explains another idea associated with the capitalist industry of sports, known as “hyper-commodification”. “By ‘hyper-commodification’ we are referring to both the substantive increase in the range and number of goods that are bought and sold as well as the intensification of market understandings and attitudes towards sport itself” (Walsh 2007). According to Walsh, there are four aspects of this idea of hyper-commodification. They include, “the transformation of clubs and systems into corporations, the emergence of large numbers of

highly paid sportspeople, the advent of large scale advertising and merchandising in sport and finally the ‘venalisation’ of the *ethos* of sport” (Walsh 2007). All of these aspects have enabled the modern sports industry to grow to the immense size it has, even more so than many probably imagined. With that being said, the rapid growth of any industry includes negative aspects where certain people or institutions benefit more than others. With such rapid and expansive growth, threats to people and the planet are unfortunately inevitable in a capitalist society.

The scope and influence of the sports industry is so massive which means it inevitably has an impact on the environment in some way, shape or form. Thus, it is necessary for those in management positions within the industry to think actively and consciously about their relationship with the environment and adjust business practices to become more efficient and sustainable. This mode of thinking will also be beneficial to communities both near and far from operations. The impact of sporting events on the environment, as we know, is quite substantial and therefore, current modes of operation need to be addressed and re-engineered to limit environmental damage. Decisions on adjusting business practices must be made by people in high level management positions for teams and leagues. The business management of teams and leagues has had to evolve with changing economic and environmental conditions. Hans Westerbeek summarizes what sport business really means in modern times. “In order to talk about sport business, we may briefly need to reflect on sport management, and how the professionalization of an industry has been fast-tracked by the onset of globalization, delivering an increasingly complex, dynamic and competitive arena of business. Sport management in that regard is about how to run sport, how to develop its management, how to improve its offering and output – a clear focus on the production of sport. Sport business on the other hand is about the wider perspective of industry, its marketplaces and the congregation of producers and

consumers. It focuses on the commodification of sport, how to best commercialize potential products and how to sell them to a growing and progressively more segmented marketplace” (Westerbeek 2013). Because of the environmental impact of the industry, emphasis must now be placed on upper-level management to create and maintain sustainable and successful business strategies. Understanding how to successfully go about managing all of these aspects of business, especially in the context of globalization, requires adaptability in decision making as well as consultation with people on all levels of the organization combined with input from community members and government officials. The goal is to ensure that each organization and league maximizes their ability to generate revenue while also acting ethically and responsibly for people and the planet. Globalization has afforded the industry with opportunities that have been seized to grow it into one of the most powerful and influential economic entities in the world.

Managing any company can be very difficult but if executed correctly with the right principles at the forefront of decision making, success and longevity can all but be assured. When managing a sports organization it is important to remember that the success of the organization relies on the ability to attract and retain fans. Of course, other factors like on-field success, community relations, sponsorship deals and having a clear and ethical vision for the organization are in play, but fans, or consumers, are what drive financial success. Since we are now aware of the impact that the modern sports industry has on the environment, it is paramount for leadership across the industry to institute a unified approach to sustainable environmental practices. These practices must be developed across the industry and set forth with agreement, realistic goals and incentives which in turn will assure economic success. For this to occur, organizations and leagues must make sure leadership positions are filled with candidates that are capable of creating and guaranteeing strategic plans for new and continued financial and

environmental success. An integral part of ensuring the success of these plans is the ability for leagues and organizations to communicate and work in conjunction with one another. The continued success of the industry relies on the ability of leaders to integrate sustainable plans both for business and the environment and limit their desire for personal gain.

The evolution of modern sport has resulted in a change in vision in the way business and management is handled. Management in sports business pertains to the planning, organizing, controlling, leading and budgeting of operations for a specific organization or league. In doing so, large and usually tough decisions must be made by those employed to do so. The understanding of the discipline of sports management is rather new in educational settings. For instance, before the 1960's teachings of sport business and management were not offered in universities or other academic settings. As the industry grew the necessity for individuals to be educated on the aspects of sports business management became essential. According to Westerbeek, "the applied discipline of the management of sport organizations has only recently been embraced by (some) universities as a serious field of academic inquiry and teaching...It seems that disciplines closest to the organizational practice of what was predominantly volunteer-driven sport activity were also the first to detect (or even feel) the need for more professional sport management" (Westerbeek 2013). Those associated with sports, like coaches, owners and organizers, saw the necessity of educating people on how to properly operate a sports team or league as a for-profit entity. The creation of this academic discipline has enabled interested individuals to study and understand the ways in which sports business management functions.

Debates have been sparked regarding who is best fit for taking charge of these operations. "The applied sport scientists argue that they best know *sport*, which is countered by the business

professors who argue that it is about *management and marketing* applied to sport organizations” (Westerbeek 2013). Sport scientists are those who study “kinesiology, exercise science, physical education and human movement sciences” (Westerbeek 2013). Although these people understand the aspects of the physical playing of sports, they may not be the best suited to manage business operations, although their input is necessary to ensure the health and safety of players. As noted earlier, players are arguably the most important aspect of sports business because they produce the product (games) and without them, sports wouldn’t exist. However, managing business operations involves much more than just the players and that is where the argument lies for people educated in business, or sports management, to be best suited for management positions. The evolution of the industry and its growth under globalization has made operations and their management much more complex than they were three or four decades ago. Speaking on this idea, Westerbeek points out the differences in business motives and who carries out operations. “Only a few decades ago the majority of organizational activity in sport was delivered through non-commercial, volunteer and community-based initiative. Today the sport-industry landscape is dramatically different. The majority of financial resources in sport are generated and spent by highly skilled and experienced professionals who are in the sport industry to make a living. The organizations that they run vehemently compete for limited resources and even when they are not-for-profit by nature, they still require a no-nonsense rational business approach to their management in order to survive and ultimately thrive” (Westerbeek 2013). In our current world, those in charge of managing operations are having to deal with a whole new problem, that being their organization's impact on the environment. Where sport has usually been focused primarily on profit and marketability it must now turn its attention towards integrating environmentally safe practices. Through effective planning, decision making and management,

organizations and leagues can ensure the longevity of their business operations while continuing to integrate various environmental and sustainable practices.

To remind you, the largest environmental impacts arise from revenue generating practices associated with in-person activities. These include the travel of teams and fans to and from games, energy consumption during game day operations, i.e. food and beverage production and electricity consumption for lighting, heating and cooling of facilities and finally, the massive amounts of waste generated at individual events. Other components of sports related business activities that impact the environment and its services include stadium construction, merchandise production and the operation and maintenance of facilities. For example, the NFL has, in recent years, begun to think with a more environmentally based mindset involving its facilities. “Most greening efforts in the NFL appear to be led by stadium owners, with each newly constructed or renovated stadium touting statistics for clean energy usage, diversion of waste, and green building certification” (Sanderson & Shaikh, as cited by McCullough 2020, 46). Although people around the league are beginning to think in a more eco-friendly and sustainable manner, profit is still a main focus in the decision to do so. “Many of these measures emerge from the synergy between green technologies and profit, as new efficient systems, from lighting to ventilation, have proved to be attractive sources of direct private return and corporate sponsorship...the question remains as to why a league or individual team or facility owner would invest in large-scale greening efforts where the returns are largely societal and not captured by the individual investor...green practices generate additional revenue indirectly through fans...Furthermore, by aligning its practices with shifting social views towards the environment, the NFL and its teams can attract new fans” (Sanderson & Shaikh, as cited by McCullough 2020, 46). The move toward implementing green and sustainable measures shows the NFL is aware of

what their role is in limiting environmental harms, but the true motivator here, it appears, is to benefit financially. Environmentally harmful components of business require new methods of strategic planning and management that are in line with environmental standards and protocols to ensure damage is kept to a minimum. Identifying and understanding what effective management strategies might be and how to effectively use them will be key moving forward.

Chapter 4: Economic and Environmental Ethics of Sport--the Good, the Bad and the Ugly

In the industry of professional sports there are a variety of ethical aspects to consider when making decisions concerning business dealings, interactions with the environment and relationships with local and global communities. Since the industry is so massive in size and operations occur on both a national and international level, ethical dilemmas are sure to arise. In recent decades, standards of ethics in business have evolved alongside changes in society and perception of what is considered ethical or unethical. The same can be said in relation to the environment, as new knowledge on the relationship between sports business and environmental damage continues to emerge. Since the industry operates on a global stage, leagues and organizations have both positive and negative impacts on various communities worldwide. Unfortunately, throughout the industry, ethical aspects of business are not always considered, and this creates a number of issues for organizations, individuals and the environment. To better understand the evolution and application of ethics, or lack thereof, it is essential to examine motivations behind decision making, both past and present. The decisions made concerning the economic dealings of sport ultimately influence all aspects of the industry. The inherently capitalist nature of modern professional sports means the opportunity to maximize profit is constantly near or at the top of the list when making decisions. Due to this desire for profit, it is common for ethics to be overlooked, often resulting in a number of consequences.

As human beings we have a responsibility to act ethically and safely when it pertains to our interactions with the environment and the natural world. This includes a shift toward more sustainable thinking and living in all aspects of life. Our planet is being put under an immense amount of stress from the ways in which humans currently operate and in doing so, we are risking a permanent alteration of Earth in a negative way. We have an ethical responsibility to shift towards sustainable living in order to ensure the welfare of both our present world as well as our future world. “Living sustainably means living on natural income, the renewable resources such as plants, animals, soil, clean air and clean water, provided by the earth’s natural capital. It also means not depleting or degrading the earth’s natural capital, which supplies this income, and providing the human population with adequate and equitable access to this natural income for the foreseeable future” (Miller 2011). Many people believe in human-centered ideas of the world where we are the most important beings, and the world is here for our taking. Yet, it is essential to educate people on the importance of ensuring health and safety of other forms of life since we all share the same planet. These ideas are highlighted in the worldview of environmental wisdom which states “we are a part of and totally dependent on nature, and nature exists for all species” (Miller 2011). Furthermore it explains, “we should encourage earth-sustaining forms of economic growth and discourage earth-degrading forms. Our success depends on learning how nature sustains itself and integrating such lessons from nature into the ways we think and act.” (Miller 2011) It is essential that this worldview is taken up not only by those within the professional sports industry, but by everyone on our planet because it is our ethical duty to live more sustainably in order to ensure the continued health and safety of our planet and all forms of life.

As highlighted in the previous section, the industry of professional sports has grown into one of the largest and most influential markets in the world. The professional sports leagues that operate in Europe and North America are the biggest and most powerful in the industry. Unfortunately, the presence of greed and an innate desire for profit among human beings, means ethical and moral principles are at risk of being tossed out the window when an opportunity for profit arises. This does not apply strictly to those operating in the sports industry but rather it is present in all for-profit industries. Under the emergence of globalization, the professional sports industry has been able to create new opportunities for maximizing profit. Aspects of globalization like intense commodification, new market opportunities and advancements in technology allow for individuals within the industry to make tremendous financial gains.

Adrian Walsh speaks on the negatives of commodification and the motivations behind business decisions in sports using the term “venality”. Venality is defined by Walsh as, “the dominance of financial considerations in one’s all-things-considered judgments.” According to the dictionary it is defined as, “the quality of being open to bribery or overly motivated by money.” Furthermore, in relation to sport, venality deals with, “both players and administrators making decisions predominantly with respect to the ‘bottom line’. The danger with such venality is that the ideals of individual excellence and sportsmanship will be evacuated as financial considerations become increasingly dominant” (Walsh 2007). Here we see the emergence of greed and what motivates decision making within the industry. It is summed up perfectly by Walsh in *Ethics, Money and Sport*, “with respect to sport itself, commodification can lead those in charge of its development and administration to regard it as a mere vehicle for financial reward and in this way the internal developmental logic of sport is corrupt.”

Due to the size of the industry and the aforementioned generation of revenue, corruption is an ever-present threat to operations. Corruption appears in many different aspects of sports from financial corruption to doping and match-fixing. Match-fixing and gambling have emerged as two major aspects of corruption in the world of sports. In soccer this is a major problem but it is emerging in other sports as well. “This is an issue that has been developing over the last few years concerning match-fixing and its relationship to unregulated, or loosely regulated, gambling operations” (McNamee, as cited by Auweele 2017, 9). One of the most notorious examples of corruption occurred in 2015 when FIFA, the international governing body of soccer, awarded the 2018 World Cup to Russia and the 2022 World Cup to Qatar. Many people were suspicious of the decision to award both nations with the honor of hosting the biggest soccer competition in the world and after a long investigation by the Justice Department of the United States they found evidence of corruption. According to the New York Times, “representatives working for Russia and Qatar had bribed FIFA officials to secure hosting rights for the World Cup in Men’s soccer” (Panja & Draper 2020). This included money laundering, fraudulent or unauthorized wire transfers and bribes for media and broadcasting rights. “More than half the people involved in the votes for the 2018 and 2022 World Cups, including the former FIFA president Sepp Blatter, have been accused of wrongdoing, though not necessarily criminally charged” (Panja & Draper 2020). Soccer has long been the sport involved in scandals of corruption due to the fact that many operations occur across various countries. This again highlights the desire for personal benefit and growth among individuals in executive and decision-making positions.

The presence of venality in the process of making business decisions raises questions of how business is conducted and what the true driving forces are behind making decisions. These business decisions involve stadium and sponsorship deals, player contracts, the sale of

broadcasting rights, production of merchandise and general financial management. Players, coaches, and high-level executives are all part of the decision-making process concerning various sports-related business dealings, with financial gain, undoubtedly, near or at the forefront of their minds. However, most big money decisions fall on the shoulders of high-ranking executives and those in upper-level management positions. Other examples of driving forces behind decision making include “various ideals, such as the pursuit of individual excellence, sportsmanship and community-mindedness” (Walsh 2007). These driving forces are positive in nature and they resemble lessons learned through playing sports. However, the desire for financial gain puts these positive driving forces at risk of being neglected during business dealings within the industry. If, and when, that occurs ethical principles are relegated to the bench.

Organizations are more likely to make decisions that consider and potentially benefit everyone involved in operations, including the community. Organizations have an ethical responsibility of building and maintaining strong relationships with communities because they operate within the boundaries of a given area. Since organizations are made up of a number of departments and individuals working together, it is essential that an ethical framework is in place to ensure harmony and success. However, organizations are guilty of making decisions that only benefit them and result in negative outcomes for others. Leagues are probably the guiltiest of acting in the best interest of themselves and seeking maximum financial gains. In one case, the commissioner of the NHL, Gary Bettman, wanted to exhibit his power over the league in 2004-05 and locked out the entire NHL season. This was done because he wanted to make a point to the players that the league was not generating enough revenue and instead of working with the players and organizations to fix it, he chose to not have a season at all, a perfect

example of power, corruption, and greed. Another example of a league exhibiting its power in the hunt for more money recently transpired. During the past two months, Sky Sports, who owns the broadcasting rights for the English Premier League in the United Kingdom, and the Premier League itself, ruthlessly and obnoxiously decided they would charge fans extra to watch certain soccer games. For them to do that during a pandemic was to come out and say, “all we care about is money.” Due to massive uproar from fans, the Premier League and Sky Sports cancelled the plan and are currently trying to save face. “If financial motives dominate then other important internal goods associated with sport will be evacuated from the sporting arena” (Walsh 2007). It is important for those in charge of leagues and organizations to remember their role in the global economy, local communities and in protecting the environment. It is equally important to not allow greed or the desire for financial gain to creep into planning and decision making. Those in charge of decision making must think ethically in terms of the whole and not the individual, especially when business ventures have the capability of producing negative impacts.

Those tasked with managing the business operations of these massive, revenue-generating entities have a responsibility of acting ethically and responsibly to ensure negative impacts are kept to a minimum. The focus now, in our current world, is minimizing the negative impact of sports business on the environment. Now that we understand the relationship between sports business activities, such as stadium construction or spectator travel methods, and environmental harm more emphasis is placed on acting ethically for the environment. It is also important to understand the unethical practices that organizations and those who run them, engage in. The desire for personal profit and not acting in the best interests of others, has resulted in environmentally damaging or unsafe practices. The unethical practices that sports business engages in for the sake of profit, may give off the impression that it is simply a money-hungry,

capitalist entity with no moral compass. That assessment would not be a fair one to make, although I see why one might be eager to do so. With that being said, the professional sports industry is responsible for a lot of good and, believe it or not, does operate with good intentions, especially in recent years. The venality that was so present in business dealings regarding contracts, sponsorship deals and the commodification of all things sports, has seemingly crept back into its shell for most of the past twenty years. As studies continue to show the impact of sports related operations on the environment, organizations and leagues have taken the initiative to invest in more environmentally sustainable practices and initiatives.

Furthermore, it is important to understand ethics involving the environment, sustainability, and sport in order to effectively integrate ethical methods of business. As previously mentioned, it is the responsibility of human beings to become more sustainable in the ways in which we live. Now, more than ever, the need for sustainable practices has become a necessity. “Sustainability is often understood in the contexts of the environment, society and economy” (Rosenberg, as cited by McCullough 2020, 54) and all three arenas are main components of the industry of sports. In order for those within the sports industry to shift to more sustainable practices it is necessary for them to understand their role in society, the economy and the environment. “Modern sport has an intimate and ultimate interest in the environment and makes a significant impact on issues related to the welfare of the economy and society. The notion of place or geography is a constitutive feature of what makes sport possible” (Rosenberg, as cited by McCullough 2020, 54). Because the relationship between sport and the environment is so significant, those in charge of operations must be aware of the impact they are having on the environment. This requires a shift to ethical, sustainable practices that account for operational impacts on the environment, economy, and society. In the name of ethics, Rosenberg says “the

development of sport, whether for public or private purposes, requires serious attention to the health and welfare of the environment and its influence to improve the economic and social lives of people today and into the future” (Rosenberg, as cited by McCullough 2020, 54). One of the main interactions between sport and the environment occurs when space is devoted to the construction of sports infrastructure and so sustainability issues like clean water, air, and land and waste disposal must be considered in plans and designs. This is just one example of how professional sports impact the environment and as the relationship between sport and the environment becomes more and more apparent, ethical standards of development must be established. As the relationship between sport and the environment becomes clearer, the move toward ethical environmental and sustainable practices has grown immensely. Rosenberg highlights this by saying “responding to environmental and other sustainable challenges will not only require practical and technical changes, but an ethical response as well. Like all those who work in the private and public sectors, sport leaders and managers must comply with environmental and other sustainability laws, rules, and regulations that apply to their respective place of business and/or community” (Rosenberg, as cited by McCullough 2020, 54). Those in charge of making decisions for sports leagues and organizations have an ethical responsibility that includes the implementation of sustainable practices that are in line with the worldview of environmental wisdom. By implementing sustainable business practices in all aspects of operations, those within the professional sports industry can limit impacts on the environment. In doing so, organizations and leagues will be acting ethically in their relationship with the environment.

One final aspect of ethical sports business management is building and fostering the relationship it has with the community, specifically using it in social and educational

development. Furthermore, sports can be used as a tool to promote and educate people on sustainability and environmentally safe living and with its massive global following, it is in the perfect position to do so. By educating people on sustainability and the environment, they can become more aware of environmental issues and hopefully shift their worldviews towards ones that are not human centered. Through the creation of programs and initiatives, organizations and leagues can spread the word on the importance of healthy and sustainable living for both individuals and the environment.

In November of 2003, the United Nations made it a point to use sport as a tool to promote awareness on a whole host of issues. At the General Assembly meeting that month the UN “adopted a resolution affirming its commitment to sport as a means to promote education, health, development and peace” (UN Business Plan as cited by Westerbeek 2013). Sport was to be used to achieve their “Millenium Development Goals” which “include universal primary education, promoting gender equality and empowering women, combating HIV/AIDS and addressing issues of environmental sustainability” (UN Business Plan as cited by Westerbeek 2013). By creating sport-for-development programs, the UN was seeking to increase social capital such as education, reciprocity, trust, and relationship building. Westerbeek goes on to explain that the under-developed plans around this initiative and lack of tools and systems to track and measure progress ultimately created confusion on whether or not it was effective. The sport-for-development method relates to creating and promoting recreational sports leagues that kids can get involved in. These leagues forge relationships between kids and allow them to create new friendships which can promote community and group-based mindsets, perfect for fostering sustainable and environmentally conscious thinking. These programs also have the capability to involve both children and parents in order to educate themselves on environmental issues and

understand how a shift towards sustainable living might help to combat them. Although the effectiveness of the United Nations program was never fully understood, they were able to lay a foundation for setting up one type of program. Sport-for-development leagues are a good way to get kids involved in community and team building activities but there are many other strategies that have the capacity to reach an even greater audience. The ethical nature of creating programs and initiatives that promote healthy and sustainable living, allows organizations and leagues to build strong and positive relationships with communities.

The Green Sports Alliance, as previously stated, is an organization that has teamed up with over 195 teams across 15 leagues and 14 countries to create awareness of sustainability and the benefits it has on the environment. They realized that the platform of sports is so grand that it provides the perfect opportunity to engage and educate people about sustainable practices. Their message is clear, “we leverage the power of sports to drive meaningful impact, convene industry stakeholders, and engage fans, athletes, and communities. The Alliance is focused on seven key program initiatives: energy, food, procurement, transportation, venues, waste, and water” (Green Sport Alliance 2011). By forging partnerships with various organizations and leagues, The Alliance has been able to successfully bring about awareness of a variety of environmental issues. They have also been able to help individual organizations limit their impacts on the environment by educating them on sustainable practices. The 7 main initiatives they focus on are aspects of both sports business operations and regular daily life. Not only do they work with organizations to reduce their environmental impact, but they also help educate communities and individuals on how to reduce their impacts as well. The G.S.A. explains just how they do this, “The Alliance works to increase the implementation of greening initiatives and projects across sports and corporate members in order to create a positive impact. We provide resources and

expertise to members to develop and/or improve greening initiatives. The Alliance also raises awareness by providing educational resources, sharing stories, connecting potential partners, and amplifying members' commitments across seven key program areas" (Green Sports Alliance 2011). The Green Sports Alliance is a perfect model for how sports organizations can effectively invest in initiatives or programs that can educate individuals on sustainability and the environment. As organizations continue to evolve and management level executives are forced to find ways to combat the environmental impacts of sports business operations, they can also promote and educate others through investment in initiatives and programs. By using education programs and initiatives through sport, leagues and organizations fulfill an ethical responsibility by increasing awareness on the importance of sustainable living and limiting environmental impacts.

Chapter 5: A Tactical Shift

Now that the relationship between the professional sports industry and the environment has been laid out it is important to understand how to effectively create and integrate sustainable practices. The main goal of sustainable development is to ensure leagues and organizations operate in a way that is beneficial to society, the economy and most importantly the environment. The creation of effective environmental policy by both governments and leagues or organizations will be critical to ensuring that the professional sports industry operates in an environmentally sound manner. The focal point of new policy or development plans should be aimed at limiting the environmental impacts of professional sports business, promoting sustainability and ensuring continued economic success. In doing so, organizations and leagues will be able to limit their environmental impacts while simultaneously continuing to generate a

large amount of revenue. My goal is to suggest effective policies and plans that leagues and organizations can adopt in order to become more sustainable and limit their contributions to environmental issues.

As previously mentioned, the main focus for organizations and leagues should be to limit their contribution to environmental degradation through sustainable development. This can be achieved through effective government policy that focuses on limiting pollution, promoting sustainability and penalizing those who do not meet the set requirements. It can also be accomplished through policies and plans created by organizations or leagues that are specific to them and in line with set environmental standards. To create new sustainable business methods or policies, there must be communication and collaboration between a variety of people including fans, government officials, league and organization executives, stakeholders, environmental scientists, and community members. This level of collaboration is necessary to receive input from a variety of people so that effective and comprehensive plans can be developed. Without this valuable input, the likelihood of some groups of people benefiting more than others, increases. New policy and sustainable business plans must be comprehensive, coherent, and consistent with a clear-cut plan in order to be effective. In recent years, organizations and leagues have made it a top priority to move toward sustainable development with a clear focus on reducing their environmental impacts, engaging with the community, and creating education programs and initiatives. This will be essential to the success of professional sports and our planet in the future.

Sustainability. Throughout this paper it has become apparent that sports leagues and organizations must migrate towards more sustainable economic and environmental practices. Governments and their agencies play a major role in the development and implementation of

effective environmental policy. In doing so, they help guide decisions made by businesses that are aimed at improving environmental standards. To discourage people from engaging in or continuing environmentally damaging practices, governments and businesses must implement policy that deters them from doing so. The policy includes laws and regulations that must be upheld and adhered to by everyone involved in operations. If they are not, then the resulting penalty must be severe. In the case of business policy regarding the environment, the focus should be on sustainable development seeking to improve short- and long-term benefits to human and environmental health. It should also include education initiatives focused on increasing awareness of environmental issues, efficient use of resources and limiting pollution. As far as those within the professional sports industry are concerned, this type of policy must be implemented and committed to by setting standards and target points they expect to meet. The policy should incentivize a shift toward sustainable development with tax breaks, subsidies, and other monetary benefits.

An example of government policy involving the environment and professional sports is the United Kingdom's "*Securing the Future*" plan. Working in conjunction with Sport England, the main agency for promoting sports across the UK, the government created this plan to promote sustainable development in professional sports across the United Kingdom. This is what the plan includes, "all UK government departments now share responsibility for making environmentally sustainable development a reality. In turn, Sport England prepared a Sustainable Development Strategy which reviews the contribution of Sport England in meeting the government's national sustainable development goals. The strategy commits Sport England to actively promote environmental objectives and strengthen environmental advice in its published design guidance" (Crowe as cited by Casper & Pfahl 2015, 60). This portion of the policy

requires professional sports organizations and leagues in the United Kingdom to integrate and promote sustainable development. The collaboration between government officials, Sport England and individual organizations allowed for this policy to be enacted and enforced. By promoting sustainable development and setting attainable goals, the UK government made it a requirement for sports organizations to become more sustainable. However, sustainable development can also be achieved through collaboration between organizations and leagues themselves. Furthermore, in 2018 the British government instituted new requirements for companies that “have at least 250 employees, or an annual turnover of more than £36m, to publish their sustainability data in their annual reports” (Campelli 2018). Starting in April 2019, “all 20 Premier League football clubs and major sports governing bodies, including the Football Association (FA) and Rugby Football Union (RFU), will likely have to report their energy use, carbon emissions and energy efficiency measures” (Campelli 2018). By requiring large companies, including sports teams and associations, to report data on their sustainability initiatives, the British government compels them to integrate sustainable practices. This performance-based program outlines a series of targets that “aim to encourage businesses to improve their energy efficiency by at least 20% by 2030...however, if the organizations can show that they use less than 40,000 kWh of energy over a 12 month period, then they will become exempt from publishing the data” (Campelli 2018). In doing so, the program has jump-started a movement among clubs and fans to become more aware of environmental impacts and the importance of sustainability, highlighted by a recent BBC poll showing over 58 percent of Premier League fans care strongly about how their club impacts the environment. Similar programs have been created by leagues and individual organizations in the United States and Canada, but without government requirement. One example is the NHL Green Initiative started

in 2010 that aims to increase sustainability and green practices across all 31 teams throughout the league as well as raising awareness through educating fans and the public. With or without government intervention, professional sports leagues and organizations can take steps toward integrating sustainable practices into business operations through well thought out and effective policy changes.

Pollution. As we saw in chapter 1, gameday events are responsible for the pollution generated by the professional sports industry. The two major forms of pollution brought about by sporting events are solid waste comprised of food and beverage concessions and greenhouse gas emissions from motor vehicles and energy production. Limiting pollution from sporting events is a tall task, but with the right plan, policy, and adaptations, it can be achieved. Air pollution created by vehicle use and energy production make up the largest contribution to environmental degradation by professional sporting events. To tackle air pollution, new policy should be focused on encouraging the use of public transportation, sustainable facility design and system integration.

Organizations should, if they have not already, aim to develop clean air policies that address all sources of air pollution associated with operations. The use of public transportation is one way for people to minimize contributions to air pollution through greenhouse gas emissions. Policy focused on increasing the use of and access to public transportation should be created through collaboration between government officials, city planners and company executives. One potential incentive for organizations and leagues to use to increase public transportation use would be to sell multi-faceted game tickets that give fans access to the game and free access to any form of public transportation on the day of the game. This strategy was implemented by the German soccer club, FC Mainz, which became the first carbon-neutral club in Germany. FC

Mainz was able to do this by working “with their local authority to combine match tickets with public transport passes to encourage fans to leave the car at home” (Campelli 2020). However, this policy incentive is easier to include for teams in Europe than it is for teams in North America, since many North American venues are located in more suburban or rural areas, which forces people to use their own cars. Europe's advanced rail system means almost all sports venues are accessible by train or tram, limiting the necessity for personal vehicle use. This highlights a need for further development of public transportation systems by all levels of government in both Canada and the United States. Furthermore, those responsible for planning stadium sites in North America should prioritize sites that are accessible by public transportation. By promoting public transportation use by fans through multi-faceted tickets, organizations and leagues are able to contribute to policy goals of both the European Commission and the Federal Transit Administration of the United States. The European Commission’s aim is “by midcentury, greenhouse gas emissions from transport will need to be at least 60% lower than in 1990 and be firmly on the path towards zero. Emissions of air pollutants from transport that harm our health need to be drastically reduced without delay” (European Commission 2017). It would also be in line with the goals of the FTA’s program in conjunction with the American Recovery and Reinvestment Act of 2009. These goals include supporting “transit agencies in pursuing cutting-edge environmental technologies to help reduce global warming and create green jobs” (FTA, Hodges 2010). To significantly reduce vehicle emissions caused by travel to sporting events, there will need to be collaboration between leagues, organizations and government agencies. Government agencies will be responsible for creating and building efficient public transportation systems while leagues and organizations should incentivize and encourage spectators to use public transportation whenever possible. In North America the need for more

advanced, efficient, and expansive public transportation systems is necessary, this includes routes to and from stadiums and arenas. Through policy changes and incentives that encourage and expand public transportation use, leagues, organizations, and governments will hope to significantly reduce greenhouse gas emissions associated with spectator travel.

Sustainable Design. Sustainable facility design and system integration for stadiums and other facilities can limit air pollution as well as energy and solid waste. The environmental impacts of stadiums were laid out in chapter 1 and, although they have a smaller impact on environmental issues than transportation, they still play a significant part in generating waste and pollution. Throughout the United States and Europe there has been a movement towards making all sports venues more sustainable. Some tools used to do this include sustainable design, waste management and a commitment to recycling and using recycled products. Sustainable design of new and existing stadiums aims to “use less energy, water, and natural resources; integrate environmental design for new building components; and correct operating inefficiencies” (Heinze, Soderstrom as cited by McCullough 2020, 269). Stadiums should be fitted with efficient energy systems that use renewable sources of energy like wind, solar, hydro and geothermal power. Waste management and shifting toward recycling and using recycled products will minimize the amount of solid waste generated by sporting events. Changes in waste management should be aimed at efficiently, safely, and sustainably removing waste and ensuring it does not become pollution. Two methods of doing this are known as “zero waste” and “circular systems.” Zero waste is “eliminating waste through recycling and reuse and restructuring production and distribution systems to reduce waste” (Young, Ni & Fan as cited by Heinze, Soderstrom and McCullough 2020, 269). Circular systems are “designed to keep resources in use for as long as possible, extract the maximum value from them, and then recover and regenerate products and

materials” (WRAP as cited by Heinze, Soderstrom and McCullough 2020, 269). These changes to facility policies will help to reduce the environmental impacts of stadiums and the events within them. In doing so, stadiums in the United States will seek to secure LEED certification in line with EPA policy on building efficiency and sustainability.

LEED stands for “Leadership in Energy and Environmental Design” (EPA 2018) and it is a system of ratings aimed at “increasing the environmental and health performance of buildings, sites and structures and of neighborhoods and covers the design, construction, and operation of all types of buildings” (EPA 2018). For soccer stadiums in Europe, changes in stadium efficiency and pollution reduction policies will allow them to meet the requirements of UEFA and FIFA’s Green Goal program. The program “strives to encourage and support sustainable and environmentally responsible stadium design and construction. The main specific objectives of the Green Goal programme are to reduce water consumption and waste generation, to create more efficient energy systems and to encourage increased use of public transport systems. To satisfy Green Goal benchmarks, “green” strategies and initiatives such as environmentally responsible water and waste disposal management systems should be adopted wherever possible” (UEFA 2014, 31). By implementing these changes to policy and practice, organizations and leagues can work towards becoming more sustainable and in turn, decreasing the environmental impacts of stadiums and arenas. Evidence of this can be seen in a number of stadiums including MetLife Stadium in East Rutherford, New Jersey home of the Giants and Jets of the NFL which is double the size of the stadium it replaced in 2010. However, it produces 30 percent less energy than the old stadium through a series of infrastructure and system improvements. This was achieved by using “LED lighting and lighting controls that are powered by a “solar ring” of 1,350 solar panels. The stadium also boasts energy-efficient windows,

ENERGYSTAR office equipment, kitchen appliances, and concession equipment, and HVAC technologies that reduce energy demand and maintain performance for its refrigerators and chilled water air conditioning” (Energy.gov 2017). As for a stadium in Europe, Liverpool Football Club has made a series of changes to infrastructure and policy that has helped them in their commitment to sustainability. At Anfield, their stadium, they have instituted a number of changes that include “installing solar panels on the roof of the Stand, manage water usage through water drainage and waterless urinals and reduce CO2 emissions by installing low energy lighting” (Liverpool FC 2017). Several other stadiums have instituted similar changes to stadium design and system integration aimed at improving sustainability. By improving efficiency and sustainability through stadium design and system integration policy changes, organizations and leagues aim to lower the environmental impacts of structures and the events that occur within them.

Ethics. The business practices of all industries remain a top focus for policy makers as to ensure all involved prioritize ethical behavior and decision making. In chapter 4 we saw how the business practices of those within the professional sports world are not always in line with the ethical values or principles that much of society upholds. Problems of venality, greed and corruption have brought about several consequences and negative outcomes within the professional sports world. Now this is not to say everyone in the sports industry is guilty of unethical practices, but a significant number of individuals and organizations have been perpetrators of such behavior. Many of the ethical problems are rooted in the desire for personal gain especially financial growth. When there is a lack of consideration for ethics it more often than not leads to negative impacts on business, society, and the environment. These consequences include lawsuits, environmental damage, potential loss of permits or shutting

down of operations, heavy fines and others, all of which could potentially impact the success of business. To limit these consequences, the focus of new policies or plans should be to improve ethical standards and requirements and to educate personnel on the importance of ethics as they relate to the environment and the economy. Furthermore, executives and front office employees are responsible for creating ethical guidelines that compel all members of an organization or league to act more ethically. This should be done to maintain a positive relationship between organizations, leagues, community members and the environment.

The previous policy recommendations made above that address aspects of sustainability, design and pollution all require some level of ethical behavior. For those policies to be effective they must follow ethical guidance aimed at promoting safe and honest practices. This is all part of the corporate responsibility of organizations and leagues as profit generating entities. Corporate responsibility is defined as the “economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time” (Carroll and Buchholtz as cited by Casper & Pfahl 2015, 76). New ethical policy should be focused on upholding the economic, environmental, and social expectations of governments, stakeholders, communities and other corporations. Ethical policies should be the base for corporate responsibility models because these models are the guiding principles for leagues and organizations. Changes to corporate responsibility models should focus on ethical practices regarding business practices as they relate to the economy, society and the environment. Regarding economic dealings, these changes should be focused on eliminating corruption and greed when engaging in any form of business. This should include severe punishment and a zero-tolerance policy for anyone who engages in corrupt or greedy behavior. This will be key to deterring individuals from engaging in such behavior and give organizations and leagues the ability to remove any and all bad actors

upon findings of greed and corruption. Other aspects should focus on ensuring fair and honest financial success through internal reviews, accurate record keeping and the appointment of qualified individuals to authority positions that oversee all business operations.

Aspects of corporate responsibility models that deal with the environmental and social relationships of sports organizations and leagues should aim to enhance these relationships through ethical practices. These practices include engaging with community members, integrating sustainable practices such as efficient energy systems and facility design and increasing awareness of environmental issues through education. Ethical principles should act as the driving forces behind all new policies and corporate responsibility models because without them the focus of such policies and models may not be effective and lead to negative consequences. To accurately understand the changes that must be made to enhance social and environmental relationships, there should be extensive collaboration and communication between stakeholders, community members, government officials and the organizations and leagues themselves. This will allow for the most comprehensive and effective policy or model to be established and implemented. “The current trend is for organization personnel to increasingly implement more and expand current environmental initiatives into their CSR efforts as a strategic necessity to preserve organizational legitimacy in the face of changing social values. This focus on the environment and greening programs will continue to be on the agenda of many sport organizations not only because of the ongoing shift in social values related to environmental issues, but also because of new expectations (e.g., financial performance, adherence to governmental regulations) from a variety of stakeholders” (Trendafilova & Nguyen as cited by Casper & Pfahl 2015, 163). By completing thorough reviews and working in collaboration with a number of different groups to create effective policies and corporate

responsibility models, leagues and organizations will hope to improve ethical behavior of everyone involved. It is important that organization and league employees are aware of environmental worldviews as mentioned in chapter 4. If employees are made aware of the aspects of the environmental wisdom worldview, such as working with the Earth as opposed to the Earth working for us, then it will be easier to implement sustainable practices. In doing so, leagues and organizations should aim to increase the awareness of every employee on the importance of ethical behavior in all facets of business. This includes how their actions might impact the organization or league financially and the environmental or social repercussions of their actions. If leagues and organizations can effectively implement new ethical policies and adjust or create corporate responsibility models to clearly identify fair, honest and safe practices then they will be able to limit negative environmental and social impacts of their operations.

Through implementation of new business practices and internal policies, sports organizations and leagues will be able to become a more sustainable industry. As we have learned, the world of professional sports is immensely influential and important in the global economy. Professional sports brings people together and gives them a platform from which they can communicate and connect regardless of race, gender, nationality, economic standing, language or age. The role they play in local and global communities and their importance to so many people, cannot be understated. Often sports can be a reference point by which people from various cultures and backgrounds can connect on and build relationships through. However, it is now up to those in positions of power within the professional sports industry to address the environmentally damaging aspects of their operations. The continued success of the industry relies on the implementation of environmentally safe practices that allow for the sustainability of our planet and all it has to offer. With such a massive influence on society, professional sports

are in a prime position to be a leader in sustainable business. Sustainability and sports must work in conjunction with one another to ensure the continued economic success of the industry without damaging the environment. In doing so, the professional sports industry can cement its legacy as an environmentally sustainable dynasty.

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