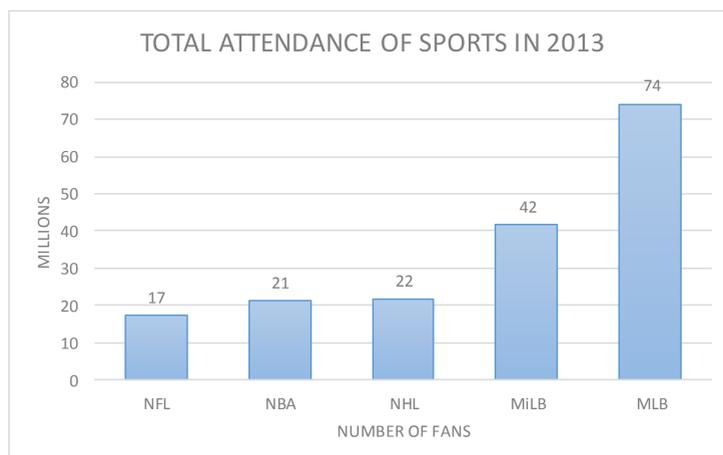


Decreasing Baseball's Environmental Footprint: The Best Implementations For Minor League Baseball Parks

Introduction

Sports are a big part of culture. Fans often associate themselves with being a part of a team. People enjoy the psychological benefit of sports that satisfy their need for power, craving of status, the tendency for group relationship, and feeling of group devotion. Sports industries have been able to use the strong bond they have with fans to be the leader in change for the United States. Unsustainable technologies and operations have been the cause of excessive energy usage in baseball stadiums. Minor League Baseball (MiLB) is an overlooked component of the sustainability movement in sports, yet its 192 teams hosted 42 million fans in 2013. MiLB fan base for games is larger than that of the National Hockey League (NHL) and National Football League (NFL) combined. MiLB needs to be a leader in sustainable efforts and can aid in the green sports initiative by reaching out to its large fan base. In order to do this the MiLB teams need to know how to make the changes. To find the solution to the problem I needed to ask: What are the most economic and feasible implementations to improve the sustainability and decrease the environmental impact of MiLB teams?



Method

The method was to critically analyze case studies from MiLB, Major League Baseball, and other professional sports teams that have successfully installed sustainable technologies in stadiums. From there, the benefits of the new technologies or practices were compared to the costs it takes to make the changes. The most feasible options with the highest environmental benefit for MiLB teams were determined based on lower revenue than the professional teams. Case studies show small alterations could make a big environmental difference; several revamps or changes cost nearly nothing, or cost the same as the less environmentally friendly technology. The larger modifications cost more, but saved in energy cost for the teams in the long run. Several stadiums have already made a significant impact towards the green initiative in sports. Some of the main Major League Baseball Teams include the San Francisco Gants, Seattle Mariners, and the Minnesota Twins.

Installation of Solar Panels at Busch Stadium

Home of the St. Louis Cardinals



<http://www.nrdc.org/greenbusiness/guides/sports/files/Game-Changer-report.pdf>

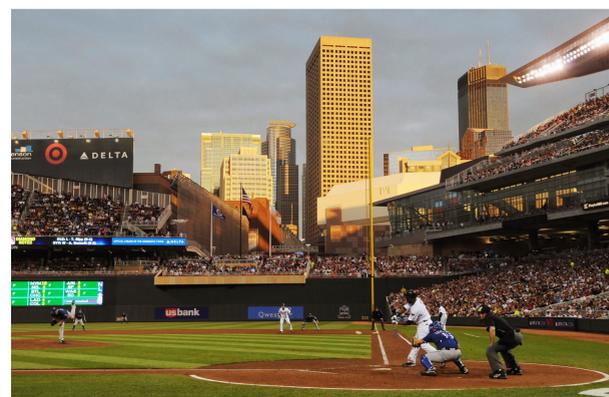
Recycling Crew at 2011 World Series Game



<http://www.nrdc.org/greenbusiness/guides/sports/files/Game-Changer-report.pdf>

Target Field

Home of the Minnesota Twins



<http://northsports.areavoices.com/2010/09/23/the-denard-span-sports-illustrated-cover-and-why-i-love-shooting-at-target-field/>

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Best Implementations

There are many different implementations that can be put into an MiLB park. The best options based on price, effectiveness, and feasibility are below.

- Lights:**
- Fluorescent (CFL) lights or LED lights cost more upfront, but save money due to lower energy costs
 - Inform employees to turn lights off
 - Install automatic lights that turn off on a timer
- Scoreboard:**
- LED lights save on energy usage and produce a good picture.
 - They also last longer.
- Recycling:**
- Silverware and utensils should be recyclable.
 - Include compost and recycling bins with pictures.
 - Have a crew go through after the game to separate recycling
- Transportation:**
- Have bike racks available on site.
 - Emplace mass transportation system
 - Offer discounts to those who car pool.
- Water:**
- Install waterless urinals.
 - Include a water catchment to be used for cleaning stands and watering field



http://upload.wikimedia.org/wikipedia/en/8/89/_%28Armitage_Shanks%2C_UK%29.jpg

Conclusion

To make necessary changes to be more sustainable, MiLB teams will have to manage their capital and make renovations slowly as the money becomes available. Even though minor league teams have less money available, planning ahead makes sustainable changes possible. Calculating how much money is going to be saved in energy cost allows for the team to decide how fast and how many changes they can make within the ballpark. Jorge Costa, senior vice president of ballpark operations for the San Francisco Giants, used baseball terms to describe their tactics to moving to a more sustainable stadium, stating "We take a dogmatic, methodical approach to greening. You've got to just make a base hit and work your way around while keeping the larger picture in mind." Changes should be made at a smaller scale. If changes are being continuously done at a smaller scale, over time the end state will have many sustainable approaches added to the stadium. MiLB has a large fan base, and if they can make these changes the sustainability efforts will be imposed on the fans and they will hopefully be sustainable in their individual lives.