Major League Baseball and the Green Revolution: A Market-Based Approach to Maintaining Competitive Balance in the Face of Environmental Regulations

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Both sides must understand that any blows at the thing called baseball would be regarded by [T]his [C]ourt as a blow to a national institution.¹

These were the words of Judge Kenesaw Mountain Landis, before whose bench was brought a dispute in 1915 between the established “major” baseball leagues—at that time the National and American Leagues, known collectively as Organized Baseball—and the upstart Federal League, to the parties of that suit.² The Federal League, much like the American League before it, was seeking to shed the shackles of its title as a “minor,” or inferior, league, and brought suit under the Sherman Act, contesting the contractual hiring practices of the “major” leagues.³

Judge Landis’s comments,⁴ which now occupy a hallowed spot in the American pastime’s history, also have some symbolic value. They represent a great willingness—not only among the general public but among the legal system—to distinguish treatment of professional sports organizations, and especially baseball, from that of other businesses.⁵

¹ J. G. Taylor Spink, Judge Landis and Twenty-Five Years of Baseball 35 (1947).
² Id.
³ See Peter Bendix, The History of Baseball’s Antitrust Exemption. Beyond the Box Score (Dec. 3, 2008, 5:00 AM), http://www.beyondtheboxscore.com/2008/12/3/678134/the-history-of-baseballs; see also Spink, supra note 1, at 32–33. Among the disputed contractual provisions were “10-day clauses,” which gave franchises the right to abrogate contracts within 10 days of their signing, but denied this right to players.
⁴ Judge Landis also noted, when future Pennsylvania Senator George Wharton Pepper referred to baseball players’ activities as “labor,” that “[a]s a result of thirty years of observation, [he was] shocked” to hear that term applied to playing baseball. Spink, supra note 1, at 35.
⁵ The best example of this is the antitrust exception that courts have repeatedly affirmed over the years. See, e.g., NCAA v. Bd. of Regents, 468 U.S. 85 (1984) (addressing the antitrust exception in the context of college football); Flood v. Kuhn, 407 U.S. 258 (1972);
One judge went so far as to say that “baseball cannot be analogized to any other business or even to any other sport or entertainment.” Indeed, while the Federal League’s grievances would eventually be aired in court, it was against Judge Landis’s efforts; the Ohioan, named for the famous Civil War battle, would reserve judgment for over a year, essentially forcing the parties to settle. The message was clear even then, without the benefit of hindsight: Landis had “proclaim[ed] from the bench that [baseball] is a public institution that no one shall think of harming . . . . [T]he game is safe in his hands.” The modern era of baseball’s antitrust exception, then, began with the personal vendetta of a well-positioned Cubs fan against whatever might hurt his team. Judge Landis went on to become the first commissioner of baseball, further cementing his historical notoriety.

But the Green Revolution has arrived, and professional sports represent a great coup for the cause. The prospect of this high-profile, well-moneyed, and influential industry adopting eco-friendly policies is of increasing interest to insiders and outsiders alike. Baseball’s increasingly environmentally conscious presence—including more and more LEED-certified venues, the use of alternative energy sources, and carbon offset purchases—has earned it the public approbation of environmental groups. Long-term plans for carbon emission reduction in the United States, however, will not ignore the professional sports industry and

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6 Finley v. Kuhn, 569 F.2d 527, 537 (7th Cir. 1978); see also Mitchell Nathanson, Truly Sovereign at Last: C.B.C. Distribution v. MLB AM and the Redefinition of the Concept of Baseball, 89 OR. L. REV. 581, 582 (2010).


8 SPINK, supra note 1, at 1.

9 Id. at 37–38.

10 Id. at 36.

11 Id. at 36–38.

12 See id. at 74.

13 See id. at 20. Judge Landis also heard arguments in the famous antitrust dispute between John D. Rockefeller’s Standard Oil Company and the United States, fining Standard Oil $29,240,000—unprecedented in 1907. His judgment, however, was reversed, and the case went on to become a seminal bit of antitrust law: Standard Oil Co. v. United States, 221 U.S. 1 (1911).


15 Id.
Major League Baseball—unless, perhaps, Judge Kenesaw Mountain Landis has judicial acolytes waiting in the wings.

Major League Baseball ("MLB"), however, is a business, and each of its primary parts—the franchise owners, the League itself, and the players—pledge allegiance to their bottom lines before the environment. Embracing the national trend toward eco-consciousness will mean reconciling the accompanying financial burdens with the benefits of meaningful policy change; this is especially true given MLB’s structural dependence on a collective bargaining agreement ("CBA") that contemplates first and foremost mechanical considerations like competitive balance, revenue sharing, and labor negotiations.

Judicial precedent recognizes, at least to some extent, the value of protecting competitive balance in the context of organized sports, and MLB’s interest in doing so seems self-preservation and reasonable. Deserving closer consideration are the questions of how environmentally conscious policies might disturb competitive balance, how those costs might be defrayed with benefits to the owners, players, and the League itself, and why MLB is an appropriate venue to test green policies.

The following proposes a cap-and-trade carbon emissions and offsets market internal to Major League Baseball, which would allow teams to aggregate the burden of conformity to an eco-friendly directive within the existing CBA structure and facilitate the transition into a greener organization without sacrificing the League’s competitive integrity.

I. BASEBALL, PROGRESSIVISM, AND COMPETITIVE BALANCE

Baseball, whose first major professional league was born in 1876, has observed, and even encouraged, the growth of American society during

17 Porteshawver, supra note 16, at 1–2.
three different centuries. During this time, it has earned a reputation for progressivism. In the environmental cadre, MLB commissioner Allan (“Bud”) Selig is among the most influential and active environmental advocates in sports history, having overseen an era of expansion for environmentally minded policies in organized athletics. Individual baseball franchises also participate in green initiatives, with some dabbling in carbon offset markets and paying increased attention to the environmental burdens associated with large events.

Professional baseball’s stance on social issues—where it is possible for a sports league to take one—has generally proven more progressive than that of the general public; perhaps the most vivid example was celebrated in 1947, when Jackie Robinson broke the color barrier with his debut for the Brooklyn Dodgers. The Supreme Court of the United States would not declare that “separate . . . [is] inherently unequal” until 1954, and the effectiveness of judicial mandate in achieving real desegregation in schools has been called into question. Meanwhile, MLB stands as a

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22 Lyle Spencer, Selig Honored for Environmental Sustainability Efforts, MAJOR LEAGUE BASEBALL (Sept. 7, 2012, 2:40 AM), http://mlb.mlb.com/news/article.jsp?ymd=20120906&content_id=37993594&vkey=news_mlb&c_id=mlb (“Bud Selig . . . accepted the Green Sports Alliance’s first Environmental Leadership Award. . . . ‘It is no exaggeration to say that [Selig] is the single most influential advocate in the history of sports’”).


24 CHRIS LAMB, CONSPIRACY OF SILENCE: SPORTSWRITERS AND THE LONG CAMPAIGN TO DESEGREGATE BASEBALL 16 (2012) (“When the Brooklyn Dodgers announced on October 23, 1945, that [Jackie Robinson had signed with the organization], black newspapers and their readers responded with rapture. . . . To black America the signing of Robinson transcended the white lines of baseball to the white lines of American society.”).


shining example of racial integration and merit-based hiring. 27 While demogra-
phics change annually, 28 racial integration in the MLB community
is remarkably consistent, and baseball has demonstrated a commitment to
embracing international players as well. 29 Further, there is evidence that
even long before Branch Rickey signed Jackie Robinson in 1946, the move-
ment from within baseball to break down walls built on race was raging. 30
Embracing new levels of racial equality during the 1930s (even if they re-
main horrifyingly inadequate by modern standards) proved baseball’s role
not only as a gauge, but as a driver of American cultural sentiment.

Environmentally progressive policy preferences are reflected in
recent trends around the League. Ball parks, especially those of recent
construction, are increasingly LEED 31 certified. 32 Solar panels are in-
creasingly ubiquitous, and some franchises have developed initiatives for
environmental awareness. 33 The Seattle Mariners, for example, celebrate
Earth Day in part by purchasing carbon offsets to negate the emissions
associated with that day’s game. 34 The Mariners compensate for emis-
sions associated with Safeco Field’s natural gas, water, and electricity
usage, as well as the visiting team and umpires’ air travel and hotel-
related emissions. 35 They also offset the fans’ travel emissions and sup-
port large recycling and waste disposal programs. 36 The recycled waste
is redistributed to fans as “Safeco Field Soil.” 37 Recycling and composting
are on the rise around the league. 38 Especially in this era of increased

27 See Richard Lapchick et al., The 2011 Racial and Gender Report Card: Major
League Baseball, The Institute for Diversity and Ethics in Sport, Apr. 21, 2011,
MLB a B+ overall for its minority penetration, including an A+ for players).
28 Id. at 3, 20–34.
29 Id. at 3.
30 Lamb, supra note 24, at 4–5 (presenting evidence that high-profile baseball players,
managers, and writers favored racial integration as early as the 1930s).
31 See Porteshawver, supra note 16 (noting that LEED directives are the leading method
for green building); see also LEED Is Driving the Green Building Industry, U.S. Green
certification).
32 See Hershkowitz, supra note 14.
33 Id.
34 Mariners Press Release, supra note 23.
35 Id.
36 Id.
37 Id.
38 See Hershkowitz, supra note 14.
eco-awareness, MLB and individual franchises alike seem to recognize a moral imperative\textsuperscript{39} and market boon\textsuperscript{40} in publicized sustainability efforts.

These avenues for success are dual motivators. Major League Baseball, and private industry in general, will naturally embrace new eco-friendly policies more readily if they come wrapped up in increased profitability. Recent market trends suggest that these two goals are far from mutually exclusive.\textsuperscript{41}

As environmentally oriented publicity campaigns and products continue to see success,\textsuperscript{42} the case for eco-friendly policies as sound business practice—despite the associated costs—is increasingly convincing.\textsuperscript{43} What is more, some have proposed that climate change has had deleterious effects on the national pastime’s actual gameplay,\textsuperscript{44} suggesting that new environmentally friendly policies might be a step toward protecting the value of MLB’s product.

Now that the public increasingly manifests a demand for sustainable options\textsuperscript{45} for their food, transportation, and lodgings, among other things, it follows that the sports and entertainment industries should be subject to—and thus positioned to benefit from—those demands.\textsuperscript{46} MLB

\textsuperscript{39} See, e.g., UNION OF CONCERNED SCIENTISTS: CITIZENS AND SCIENTISTS FOR ENVIRONMENTAL SOLUTIONS, General Electric Company (GE), available at http://www.ucsusa.org/assets/documents/scientific_integrity/corporate-profiles/general-electric.pdf (citing General Electric’s support of efforts to decrease and eventually reverse greenhouse gas growth—this from another large commercial entity).

\textsuperscript{40} LEED Is Driving the Green Building Industry, supra note 31 (detailing commercial advantages to LEED certification).

\textsuperscript{41} Id.; see also M. Todd Henderson & Anup Malani, Corporate Philanthropy and the Market for Altruism, 109 COLUM. L. REV. 571, 577 (2009) (“Asking why firms produce altruism is like asking why Toyota produces the Camry or Apple produces the iPod Nano. . . . [T]hey do so because there is consumer demand for it and the company is able to produce it at competitive cost.”).

\textsuperscript{42} See Hershkowitz, supra note 14.

\textsuperscript{43} Henderson & Malani, supra note 41, at 582 (suggesting a shareholder and market demand for social good as a corporate product).


\textsuperscript{45} Miller, supra note 16, at 142; see also NEIL Z. STERN & WILLARD N. ANDER, GREENTAILING AND OTHER REVOLUTIONS IN RETAILING 58 (2008) (outlining financial incentives of “going green”).

\textsuperscript{46} Miller, supra note 16, at 141–42.
has the opportunity to convert a potential public relations liability into a positive campaign.

Positive motivators aside, MLB also faces potentially undesirable consequences from future government regulation. The CBA that governs MLB is a carefully negotiated agreement broaching virtually every issue associated with the game.\(^{47}\) One of the CBA’s primary motives is to create competitive balance among the thirty MLB franchises, guaranteeing that every game is a valuable product of the League’s organization.\(^{48}\)

The current CBA is designed to shift money from large markets to small markets using a multilayered process that gathers and redistributes funds using both flat and variable rates.\(^{49}\) All clubs pay thirty-four percent of their Net Local Revenue (essentially clubs’ gross revenue, minus their annual MLB allowance and some expenses)\(^{50}\) to a central fund, which is then divided equally among the franchises.\(^{51}\) The revenue sharing program also establishes another central fund, into which only certain clubs pay (based on rates that vary for each club and between years), and from which certain clubs draw (again, at variable rates).\(^{52}\) Naturally, the regime includes plenty of additional stipulations and rules, but it suffices for current intents and purposes to agree that this delicately balanced, if imperfect, system does not contemplate externally imposed environmental controls.\(^{53}\) Any regulation imposing liability on individual franchises would have a naturally disparate effect,\(^{54}\) and franchise revenue disparity under


\(^{48}\) 2012–2016 Basic Agreement, supra note 18, at 110–52 (detailing, under Articles XXIII and XXIV, the Competitive Balance Tax and the Revenue Sharing Plan, both of which are designed to compensate for the increased revenue enjoyed by franchises based in large markets); see also Wendy Thurm, The Marlins and the MLB Revenue Sharing System, FANGRAPHS (Nov. 14, 2012), http://www.fangraphs.com/blogs/index.php/mlb-revenue-sharing-system/ (explaining the revenue sharing program in a straightforward and accurate manner).

\(^{49}\) 2012–2016 Basic Agreement, supra note 18, at 110–52.

\(^{50}\) Id. at 119–20.

\(^{51}\) Thurm, supra note 48; see also 2012–2016 Basic Agreement, supra note 18, at 121.

\(^{52}\) Thurm, supra note 48; see also 2012–2016 Basic Agreement, supra note 18, at 121–23.

\(^{53}\) See generally 2012–2016 Basic Agreement, supra note 18 (containing no references to externally imposed environmental controls).

\(^{54}\) Because each franchise is a unique brand and occupies a unique market, each franchise’s impact on the environment is unique. The Yankees—quintessentially successful in the realms of attendance and merchandising and located in New York City—have a larger carbon footprint than the Tampa Bay Rays, a comparatively small-market team.
the new CBA is already the subject of debate.\textsuperscript{55} It has been suggested that the current revenue sharing system is susceptible to abuse, and perhaps has already been mined.\textsuperscript{56} In fact, the tension between larger-market, high-revenue franchises and small-market franchises has been the subject of legal, political, and fiscal debate in the baseball community for some time.\textsuperscript{57}

The Los Angeles Dodgers’ recent television contract with Time Warner Cable (valued at over $7 billion over two decades)\textsuperscript{58} has also highlighted trouble with the current revenue sharing paradigm.\textsuperscript{59} Thanks to a favorable bankruptcy court ruling,\textsuperscript{60} the Dodgers television deal has been assigned a value at $84 million (note that the deal’s actual value of $7 billion greatly exceeds this), leaving the Dodgers with an unrivaled revenue stream that sharing rules currently in place can only dent.\textsuperscript{61}


\textsuperscript{60} Dayn Perry, Don’t Forget: Dodgers TV Windfall Bigger Than You Think, EYE ON BASEBALL (Nov. 26, 2012, 12:45 AM), http://www.chssports.com/mlb/blog/eye-on-baseball /21137250/don’t-forget-dodgers-tv-windfall-bigger-than-you-think.

\textsuperscript{61} Thurm, supra note 58 (acknowledging this problem, but also noting that the Supplemental Plan might somewhat mitigate the negative effects).
This is all to say that the current CBA, in force through 2016,\(^\text{62}\) may well prove inadequate to handle the implications of new television deals and the unprecedented amounts of money they might bring to MLB.\(^\text{63}\) In 2012, approximately $400 million in revenue was shared.\(^\text{64}\) Revenue projections for the 2013 season\(^\text{65}\) suggest that the Dodgers individually would share almost close to that amount alone if not for the bankruptcy court ruling.\(^\text{66}\) Any new environmental regulations would of course have to be negotiated into the next CBA, and if the market for television contracts continues as the 2012–2013 offseason has forecasted it might, serious changes in the revenue sharing structure might accompany that renegotiation. Despite this element of uncertainty, an influx of Net Local Revenue would give franchises more flexibility to share revenue, perhaps increasing their capacity to accommodate new (and expensive) green policies.

Bound up in franchises' brands and markets are their relationships with local governments.\(^\text{67}\) The construction of large venues like baseball stadiums carries tremendous resource costs, and the product expends terrific amounts of energy, generates mountains of waste, and exacerbates pre-existing transportation problems.\(^\text{68}\) It should come as no surprise, then, that sports facilities are often constructed under cooperative deals between franchises and governments.\(^\text{69}\) Both stand to reap benefits from a well-planned, well-connected, and environmentally friendly venue.\(^\text{70}\) Local governments, though, will inevitably legislate building codes differently and on different timelines;\(^\text{71}\) this suggests that normalizing regulation

\(^\text{62}\) 2012–2016 Basic Agreement, supra note 18, at 1.

\(^\text{63}\) Thurm, supra note 58.


\(^\text{65}\) Neyer, supra note 58.

\(^\text{66}\) Thirty-four percent of the projected TV revenue of $350 million, plus additional Net Local Revenue, would be shared. Then, an additional percentage (determined by the Dodgers franchise's Performance Factor) would be shared. Only time will provide precise figures, but the total sharing amount might even have exceeded $400 million.

\(^\text{67}\) See generally Porteshawver, supra note 16 (discussing federal, state, and local governments' roles in the construction of sports venues and in green building in general).

\(^\text{68}\) See generally id. at 248–49 (noting, inter alia, that 79 million attendees consume live baseball each year, and that Safeco Field alone generates 2.8 million pounds of trash each year in the relatively small market of Seattle).

\(^\text{69}\) Id. at 249–51.

\(^\text{70}\) Id. at 249–51.

\(^\text{71}\) Id. at 244–47 (describing the steps various cities have taken to go green, including, for example, requiring LEED certification for all newly constructed buildings).
is best done through the common denominator in all of these deals, which is the Major League franchise.

While the relationship between franchises and local government does indeed make a lot of sense, very recent events have called the future of these deals into question. The Miami Marlins recently agreed with the City of Miami and Miami-Dade County to build a new stadium, only to unload many of the team’s assets—specifically, player contracts—that were expected to generate revenue. Wendy Thurm eloquently summarized how this scandal reminded public investors of the dangers of cooperation with private profit-minded actors: “Even if the economics [of a publicly subsidized stadium] make sense . . . it’s still an extraordinary expenditure of public funds for the benefit of a privately held sports team.” To make matters worse for Miami-area taxpayers, their government financed its subsidy of about $500 million in part with a $91 million loan that will amount to an obligation of $1.2 billion, not to be paid in full until 2048. Speculation about the future of franchise-government cooperation abounds, but projected chill should reinforce the preference of League-side environmental regulation.

To summarize: the bad news for advocates of green policies is that environmental controls are another complication to an already-complex revenue sharing program that will keep changing. The good news is that a system for offsetting disparately imposed costs already exists in MLB, and there is reason to believe that another beneficiary of revenue sharing—namely, the environment—could be added to the mix. Major League Baseball itself, and not the government, is best positioned to institute broad reforms that take advantage of the revenue sharing system already in place to improve sustainability.

72 Id. at 243–65 (discussing the benefits of collaboration between franchises and local governments to construct venues, albeit citing risks).
74 Thurm, supra note 73.
75 Id.
76 Hanks, supra note 73.
II. MAJOR LEAGUE BASEBALL AND CAP-AND-TRADE

Perhaps the simplest conception of environmental regulation is a command structure. Under such a regime, the regulator (usually the government) stipulates what rules the governed must follow: perhaps guidelines for the application of carbon scrubbers to smokestacks or limits on carbon emissions. Command regulations have been criticized for their rigidity, but praised for their effectiveness at setting certain minimum standards. Another approach, structurally more complex but cheaper to implement, is the market-based regulatory system. Market-based regulatory schemes rely on the free trade of a limited number of carbon emission allowances and/or carbon offsets. That is, rather than stipulating that a regulated entity must take certain steps to reduce its emissions, the regulator allocates allowances for market participants to trade among themselves according to their need. Emissions credits and offsets are useful units to trade because they are homogenous, quantifiable, and do not vary widely in quality (when correctly moderated)—valuable qualities in a trade chip. The market mechanism, used as a means of enforcing a more comprehensive regulatory program that includes certain command elements—specifically, a cap on allowable emissions—results in the cap-and-trade market, regarded as a tremendously effective means of enforcing environmental regulations.

Cap-and-trade markets are popular because they have proven the most cost-effective approach to meeting emissions goals, creating hard

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78 Id.
80 Id.
81 Id.
82 Precisely what sort of emissions or offsets are being traded, while by no means immaterial, is important during the planning phase only insomuch as those chips are available for trade. Candidates include sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon dioxide. Richard F. Kosobud et al., Emissions Trading: Environmental Policy’s New Approach 4 (2000).
85 Id.
limits on actual emissions. Already in effect in Europe, cap-and-trade is increasingly favored among American academics and politicians. In fact, such markets have been proposed for large-scale implementation. Major League Baseball’s configuration as a small consortium of well-capitalized actors makes it an interesting cap-and-trade subject. Some essential elements of maintaining an effective regulatory program, such as accurate monitoring, would be very easily accomplished. While expenses associated with monitoring are often an obstacle to less sophisticated actors, MLB franchises are both wealthy and limited, creating an ideal administrative environment. On the other hand, there is evidence to suggest that the size of the MLB market is small enough that efficiencies associated with market operations might not be meted out. A sufficient number of trade sources is important. Another consideration is the availability of the trade unit—for instance, carbon dioxide credits. There exist more than a few international organizations dedicated to marketing these trade chips, including South Pole Carbon, Sustainable Carbon, Climate Friendly, Native Energy, and Emergent Ventures International. Finally, Swift notes the importance of enforceability.

86 Stavins, supra note 79, at 298; Swift, supra note 84, at 3.
88 See generally Stavins, supra note 79; Keohane, supra note 87, at 7–8.
89 Swift, supra note 84, at 1.
90 Id.
91 See, e.g., Dorhauer, supra note 55, at 240 (comparing the value of dollars spent on free agents, acquired on the free market for talent, to the value of dollars spent on arbitrated contracts, which are set by a neutral panel. Arbitrated deals create far more value per dollar than free agent contracts, suggesting competitive interests drive prices up on the open market).
92 Swift, supra note 84, at 1.
93 Id.
99 Swift, supra note 84, at 1.
The nature of MLB’s governance makes this final consideration a non-issue. Because any cap-and-trade market would necessarily be the product of negotiations between all involved parties, the regulated entities would be contractually obligated to perform. Provided sufficient monitoring measures, the League’s executive discretion, and if necessary the United States court system, would be well-positioned to enforce any regulatory scheme.

Despite possible weaknesses, exploration of a small-scale cap-and-trade market for MLB seems like a useful exercise. Similar approaches have been implemented in the United States with some success, although never with a population quite like MLB. Typically, cap-and-trade markets feature larger populations and pursue a very broad impact.

It makes sense that a heavily self-regulated organization like MLB should implement cap-and-trade, if it is assumed that reducing emissions is a valid goal. Major League Baseball combines a very diverse membership—thirty franchises, located across the United States, each with varied resource pools, access to infrastructure, venues, pollution productions, and relationships with local government—with a powerful control structure that prioritizes financial success and the League’s integrity. This broad geographical base and diverse population makes MLB an apt testing ground for the broad market approach. In this way, MLB is positioned to “open the door” to private cap-and-trade markets, just as it did to racial desegregation in the 1940s.

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100 Kosobud et al., supra note 82, at 19–22 (detailing four cap-and-trade markets, including one nation-wide market, one market covering multiple states, and two covering only metropolitan areas, with each targeting different industries).

101 See, e.g., Stavins, supra note 79, at 300 (discussing the U.S. Clean Air Act Amendments of 1990, which represent the most significant implementation of domestic cap-and-trade. It is estimated this program generates over $1 billion in savings annually, and cut emissions from the power sector by over 5 million tons between 1990 and 2005).


104 See Lamb, supra note 24.
III. BUILDING A MARKET

An analysis of emissions trading and its fit for a private association like MLB should begin with a review of the cap-and-trade market’s components and the potential approaches MLB might consider for its implementation of such a market. Emissions trading is largely misunderstood and, like an iceberg, the vastness of its potential has yet to see the light of day.105

Carbon offsets,106 also known as greenhouse gas offsets, are units of carbon dioxide equivalents.107 They are measured in tons, and represent carbon dioxide emissions that have been negated in some fashion, either by avoiding or reducing the emission or by compensating for it elsewhere.108 There is no standard offset; these are not products to be bought.109 Rather, they are units that measure the effectiveness of behavior with a net impact of reducing carbon emissions.110

To be considered effective, several criteria must be met.111 Permanence is an important consideration.112 This concern usually comes into play in scenarios where offsets sequester carbon emissions that could reenter the atmosphere at a later time.113 Investing in forestation, for example, might be an ineffective attempt at offsetting emissions, because forest fires or decay could reverse the emissions reduction.114

Offsets must also be additional to whatever emissions-generating project they are intended to balance.115 Behavior that is not responsive to cap-and-trade market incentives, but rather constitutes typical operation, cannot constitute an offset.116 Market players must first establish, in addition to the above-mentioned baseline emissions measurements, a

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105 Swift, supra note 84.
106 It is convenient to refer to the offsets and credits discussed herein as carbon, as this is a popularly traded offset. See Carbon Offsetting Explained, THE CARBONNEUTRAL CO., http://www.carbonneutral.com/knowledge-centre/carbon-offsetting-explained (last visited Mar. 16, 2014). However, trade chips could take the form of other pollutant units. Swift, supra note 84, at 3.
107 WORLD RESOURCES INSTITUTE, supra note 83, at 1.
108 Id.
109 Id.
110 Id.
111 Id.
112 Id.
113 But see KOSOBUD ET AL., supra note 82, at 26 (noting that the bankability of a traded right can have value under certain circumstances).
114 WORLD RESOURCES INSTITUTE, supra note 83, at 1.
115 Id. at 1–2.
116 Id. at 1.
baseline operations model (for instance, a cost-benefit analysis for a given project) that does not contemplate an emissions purchase. The carbon offsets are necessarily external to this equation.

Additionally, the practical qualifications of enforceability and verifiability, though not academically significant, are essential to an effective market. An offset is verifiable if its purchase can be confirmed; it is enforceable if it can be traced back to its purchaser and distinguished from others’ offsets, the goal being to avoid double-counting.

Carbon credits are even less tangible, because they are fictional constructs of the regulating body. The regulator sets a cap-and-trade reduction on allowable pollutants calculated based on some baseline. Any regulated entity exceeding this level is sanctioned in some way. Of course, picking a baseline and determining an appropriate reduction from that level (including how long is necessary to reach that reduction) is regularly a subject of debate between regulators and regulatees.

Major League Baseball would be no different. An effective baseline uses reliable measurements to set a realistic starting point for gradual emissions reductions. Unfortunately, comprehensive information on baseball-related emissions is not available. An effective baseline would take that data into account, and then set reductions at amounts and intervals that reflect the franchises’ collective ability to reduce aggregate emissions. Included among those considerations would be each franchise’s local environmental regulations, the potential for a new or improved venue, and opportunities to reduce emissions through programs undertaken independently.

Major League Baseball would also need to determine whether to adopt a cap-and-allowance program or a credit trading program. The former imposes a permanent emissions cap inside of which market participants may trade allowances; the latter is a market element that attaches

117 Id. at 1–2.
118 Id.
119 Id. at 2.
120 WORLD RESOURCES INSTITUTE, supra note 83, at 2.
121 Stavins, supra note 79, at 297.
122 KOSOBUD ET AL., supra note 82, at 27.
123 Stavins, supra note 79, at 298.
124 KOSOBUD ET AL., supra note 82, at 27.
125 Id. at 23, 27.
126 Id. at 27 (advocating the principle of measured reduction intervals outside the specific context of MLB).
127 Swift, supra note 84, at 2–3.
to an existing regulatory structure, allowing actors to trade any emissions credits left over after clearing cap space. A cap-and-allowance program seems like the obvious choice—especially given that MLB is not currently subject to any regulatory regime—but the alternative has its merits. For example, if after some testing, MLB decided the most effective approach to emissions reduction was to impose caps on individual franchises rather than to set an aggregate cap, a credit trading program might be the best option.

An effective emissions trading market can be defined through a series of dichotomies. Both for the sake of simplicity and because it faithfully reflects the sort of approach that the founders of an emissions market would take to structuring the community, these dichotomies will serve as the basis for this hypothetical MLB market. If an effective market is like a tree, it is best to start at the roots and grow the model upwards to get the whole picture. This is the most intellectually honest approach, because it is true to reality and precludes the supposition of any circumstances other than the essential hypothetical that constitutes this experiment: that MLB wishes to institute an emissions trading market.

The first dichotomy is between public and private market negotiation. That is, will the government or private actors devise the resolution to the negative externality of pollution? Under most circumstances, the public option alone is viable. A regulatory scheme designed to protect the general public welfare encompasses countless parties (individuals, corporations, etc.), and to bring each affected party together to negotiate effectively would be impossible. Those same individuals, independently, probably lack the wherewithal to make a difference. For a more conventional analysis, it would be clear that government regulation is necessary. However, MLB is self-governed and enjoys a strong central executive authority. Further, the public at large is not the primary player in this case. Thirty franchises can negotiate among themselves much more

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128 Id. at 4, 8–9.
129 See generally Kosobud et al., supra note 82, at 3–40.
130 Id. at 3–5.
131 Id. at 5.
132 Id. at 6.
133 Id.
134 Id.
135 Kosobud et al., supra note 82, at 6.
136 See generally 2012–2016 Basic Agreement, supra note 18.
137 But see Kosobud et al., supra note 82, at 25 (suggesting that secondary, non-covered players might contribute to the market. Independent brokers, for example, might increase market efficiency).
easily than can an innumerable public. A private resolution thus seems like a feasible option.

In fact, a hybrid of the two seems ideal. By utilizing the pseudo-governmental authority of Major League Baseball (the executive entity), a MLB market could access the benefits of a strong facilitator without sacrificing its private sovereignty.138

The degree of MLB intervention into franchise operations is the next consideration.139 A market-based resolution typically requires the government to assign emissions rights (or allowances), the distribution of which is based on cost-benefit analyses that weigh the burden placed on players in the market against the public benefit of such limitations.140

For MLB, this cost-benefit analysis seeks a balance between the financial benefits and product protection that a degree of environmental consciousness offers. At the collective bargaining table, the Players’ Union will ensure that player salaries do not adversely bear the cost of regulation; the same goes for the owners and their franchises, and the League itself for its own interests.141

In theory, markets seek out efficiency.142 That is, given an efficient market where transaction costs do not prohibit trade, players in a market will redistribute amongst themselves whatever emissions allowances the government issues, regardless of the appropriateness of the original distribution. This is precisely the value of a market.143 In the MLB context, regulatory efforts would benefit from this effect, although its smaller market would undoubtedly carry higher transactional costs.144 Internalizing these costs without undue negative effect will be one of the challenges of an emissions market. Of course, nothing would stop MLB from admitting outside brokers into the private market.145 Even if those brokers were restricted from marketing (or buying) allowances, offsets trading could drive the price of allowances to the margin and negate market inefficiencies inherent in the MLB structure.

138 There is good evidence to suggest MLB is highly motivated to do just this. See Nathanson, supra note 6, at 582–83.
139 Kosobud et al., supra note 82, at 6–8.
140 Id.
141 See generally 2012–2016 Basic Agreement, supra note 18.
143 Id. (quoting Sir Arthur Salter: “The normal economic system works itself. For its current operation it is under no central control, it needs no central survey. Over the whole range of human activity and human need, supply is adjusted to demand and production to consumption, by a process that is automatic, elastic and responsive.”).
144 Id. at 390–91.
145 Kosobud et al., supra note 82, at 25.
The next dichotomy refers to whether the basic market approach uses centralized or decentralized control. Under a centralized model, the government is responsible for establishing exact performance standards and regulating specific technologies. This approach has seen widespread institution, and the results are evident in our daily lives; carbon scrubbers on smokestacks and catalytic converters on cars, for example, are the products of centralized emissions control legislation. The centralized model offers the benefit of guaranteeing (if compliance is assumed, at least) that certain measures are taken to reduce emissions, and also leaves the government with a fairly clear idea of the costs associated with making those reductions. It is a highly effective way of enforcing minimal standards.

Despite this, the centralized approach becomes increasingly ineffective as the scope of market regulation expands. Imposing baseline regulations and demanding certain technologies be employed to cut emissions is a small task compared to comprehensive market management. As regulatory efforts become more ambitious, the costs associated with them increase. The government is often ill-suited to regulate comprehensively, and usually would prefer not to bear those costs, anyway. In addition to this problem, such a system inevitably puts the regulator and the regulated into a confrontational position.

The decentralized approach relies on an incentive-based market that uses, for example, pollutant taxes to encourage market players to reduce their carbon output, and provides them with an anonymous emissions offsets market in which they can operate with autonomy. Under this model, market players would presumably seek an efficient balance between the penalties of non-compliance, the costs of compliance, and the overall viability of their business model. In the specific context of MLB, the market’s anonymity is very important. Players in this marketplace are inherently opposed to each other’s success, so disempowering them to use the emissions market as a method of compromising other teams (or at least forcing them to incur some costs) is essential.

146 Id. at 8.
147 Id. at 9.
148 Id.
149 Id. at 9–11.
150 Id. at 10.
151 Kosobud et al., supra note 82.
152 Id.
153 Id. at 10–11.
In reality, the ideal solution probably lies somewhere in between these two approaches. The ease and simplicity of a centralized approach makes it well-suited for enforcing certain standards across the board, while the flexibility and efficiency of the decentralized approach makes it the better backbone for any large-scale market plan. This is a fairly uncontroversial position, despite legislative history suggesting otherwise.154

The next dichotomy is between two possible approaches to decentralized market control: taxes and trading.155 In theory, assuming a world full of certainty, good information, and no transaction costs, this is a superficial distinction to make.156 Under a tax regime, the regulated would seek to minimize the taxes they incur and the control expenditures on remaining emissions. Under a market regime, the equation is very similar: players minimize the costs incurred buying allowances on the market and the control expenditures on remaining emissions. If emissions on the market are purchasable at the same rate at which they are taxed, the two systems differ only procedurally, and yield the same ultimate result.157

Reality has shown this theory to be incorrect, however; this is mostly because the assumptions upon which it is predicated are not reliably present in the real world.158 This breeds error, which can have a different impact on either system.

The potential for error depends on the regulator’s information on how control costs and harms vary with emissions.159 If uncertain costs vary little, but public harm varies significantly, a tax-based approach can lead to serious error, because it allows less control than the issuance of a given number of allowances.160 A regulator in a tax system is forced to adjust rates to a happy equilibrium with marginal control costs, which emitters will equate in their cost-benefit analyses but which might be unbalanced.161 This constant changing of rates has potential to unsettle the market, and would almost certainly be unpopular among the emitters.162 By contrast, in a system under which allowances are distributed commensurate to the system’s net emissions, only the distribution of those

154 Id. at 11–12.
155 Id. at 12–13.
156 Id.
157 Kosobud et al., supra note 82, at 13.
158 Id.
159 Id.
160 Id.
161 Id.
162 Id.
allowances is of concern.\textsuperscript{163} This distinction is trivial when distribution is arbitrary—for under this model distribution would be as capricious and subject to change as a tax rate—but this is easily solved.\textsuperscript{164} The regulator can auction the initial allowances into the market, allowing players to purchase a package scaled to their demand (a demand which they measure based on their own cost-benefit analyses, which they are better placed to perform than the regulator). This naturally would diminish the regulator's revenue, and whether the system's increased efficiency and legitimacy justifies this sacrifice is a legitimate question.\textsuperscript{165}

The ensemble of expenses associated with a tax regime, as well as tax rates' somewhat fickle nature, have nevertheless driven the community at large toward the emissions trading system.\textsuperscript{166}

In the specific context of MLB, however, many of the disadvantages associated with a tax policy are mitigated or eliminated. Logistical costs on the regulator's side could be significantly reduced to the size of the regulated community, and rates might be easier to moderate. Further, the political pitfalls associated with public sector regulation would be reduced, or even absent. MLB administration is not subject to the same democratic accountability as, for example, a legislature passing regulatory laws or an executive enforcing them. Beyond this, any sort of regulation would necessarily be instituted through the CBA—a document which is bargained out between the emitters and regulator in direct terms. The logical step between electing a representative and supporting that representative's legislation is not present here, which would help legitimacy.

The MLB market size also has potential negative implications on an emissions market system. The emissions trade approach to regulation is favored based on the presupposition of an efficient market. Markets derive their efficiency from size, which makes generally available any demanded product at a competitive price. MLB offers perhaps too small a market for real efficiency. What is more, the market players are within the same industry that operates largely as a zero-sum game, with each franchise competing for competitive success and revenue. Even in a context where the players are totally cooperative, thirty players might not generate the ideal market in which supply for a given demand is ubiquitous. The increase in transaction costs associated with this inefficiency might outweigh the supposed benefits of the market system.

\textsuperscript{163} Kosobud et al., supra note 82.
\textsuperscript{164} Id.
\textsuperscript{165} Id.
\textsuperscript{166} Id. at 14–15.
This question obliges the analyst to consider what type of emissions market best supports a given situation. The dichotomy here is between cap-and-trade (closed-system) trading and rate-based (open-system) trading. The cap-and-trade system, which has been most commonly embraced, is a traditional model. The regulator allocates (either manually or by auction) allowances to the emitters, respecting individual caps and an aggregate limitation. The emitters then calculate the most cost-effective combination of emitting and trading for new allowances. An alternative to this system is the cap-and-credit model, which establishes a baseline performance standard based on the regulator's choice environmental calculus (usually the aggregate emissions budget or cap divided by total heat input or capital stock utilization). Players below this baseline are awarded credit; players above are charged. The ease of adjusting this baseline lends this system flexibility, but also creates an added element of uncertainty.

Defining a cap-and-trade market is a more sophisticated exercise, however, than simply structuring allowance distribution. Other essential considerations are defining pollutants, market coverage, the trading population, the emissions cap (in a mathematical fashion), and the characteristics of the offset as a tradable commodity. Beyond this, an effective cap-and-trade market must contemplate commodity pricing and the costs associated with trading, program enforcement and monitoring, and the program's own place in an evolving culture of environmental regulation. The answers to some of these questions require the sort of calculus that only the well-positioned and well-informed can reliably make, but we can speculate as to how MLB would address these problems and incorporate realistic answers into our analysis.

Rate-based trading offers emitters the option to exclude themselves from emissions trading, instead submitting to traditional control regulation. For market players, this frees them of the costs associated with creating, selling, or buying tradable credit—including the price of calculating marginal control expenditures, finding and negotiating with other traders, and receiving government verification of emissions transactions. In turn, this system imposes on the government the practical obligation of verifying that each proposed emissions reduction credit is permanent, quantifiable, and genuinely surplus. These processes, naturally, create their own costs. This approach is perhaps most effective as a concession to the frequent political reality of compromise: while cap-and-trade markets are in theory almost always preferable, those markets depend on thorough and productive negotiation and both cooperation and compliance from many parties. Offering parties an opt-out is an effective means of achieving agreement, if nothing else. Self-interested parties
will often prefer the greater flexibility this model affords. In other words, it is better to have some emissions trading than no emissions trading. As a corollary to this idea, the rate-based approach can serve as an effective stepping stone to a more effective cap-and-trade market. It has been argued, for example, that the complexity of a cap-and-trade market is such that the most responsible approach is to ease into it gradually with a rate-based approach, thus reducing the costs of the inevitably inaccurate startup calculations of control emissions caps.

Within the rate-based trading model are two types of credits: emission reduction credits and discreet emission reduction credits, both of which offer different approaches to rate-based trading.

Fortunately for our analysis of cap-and-trade and rate-based markets, examples of these approaches are available for review. In the United States, four prominent cap-and-trade markets—all with distinct defining characteristics—have been extensively studied and can provide good insight into what features suit different scenarios best. They range in scale from metropolitan areas (Chicago and Los Angeles) to seminational and national size. Rate-based trading markets are also available for review. One of the unique challenges that MLB presents is its dissociation from a geographically defined market; the organization is at once national and isolated. While emissions, obviously, do not observe political boundaries, markets certainly do—this is the very basis for MLB’s revenue sharing system. It is, then, to be expected that a market structure designed to respond even to pollutants that are not geographically specific should consider the impact of geography on the market.

IV. Proposal

Major League Baseball could adopt a cap-and-trade market to mitigate carbon emissions without disturbing competitive balance. The following is this Note’s proposal.

First, MLB should set a baseline emissions standard matching the best estimations of emissions associated with professional baseball in 2016, the final year of the current CBA. From this baseline, MLB should set diminishing reductions in 2025, 2035, and 2045, reflecting a cost-benefit analysis of MLB’s financial interests and the costs associated with decreasing emissions. Recommendations suggest, for example, a reduction of about fifteen percent by 2025, fifty percent by 2035, and seventy-five percent by 2045.167

167 Keohane, supra note 87, at 6.
Second, MLB should address the revenue sharing issue. Redefining “Net Local Revenue” as excluding a flat percentage costs associated with emissions reductions would incentivize larger market teams, who naturally create more emissions, to invest more in reductions. Alternatively, adjusting Performance Factors to consider emissions credits could accomplish this goal (although the discrepancy between shared revenue refunds to paying teams versus large market teams might create a gap in incentives for teams like the Nationals in such a case). With these provisions in place, environmental control will be subsumed in the revenue sharing program. It will be essential that MLB establish close monitoring to ensure that emissions credits’ written-off revenue sharing obligations are accurately claimed. Also, MLB should refrain from allowing teams to defray all of their emissions mitigation costs through revenue sharing, as this would disincentivize them from pursuing maximum reductions.

Third, MLB should set up a cap-and-trade market designed to function in tandem with the integrated revenue sharing program. The first step in establishing that market is to devise a system for allocating emissions allowances. The Coase Theorem stipulates that auctioning off the allowances or distributing them freely both yield the same result. Under the former method, the auction funds should be channeled into the revenue sharing fund defraying reductions costs (that is, either the Net Local Revenue fund or the Supplemental fund, depending on which approach MLB opts to take). Under a free distribution, the revenue sharing will happen automatically.

Finally, MLB should also open up the market to external brokers. This will minimize any deleterious effects on market efficiency due to the small market size and the franchises’ competitive nature. Emissions offsets groups, while they would have no reason to participate in the MLB carbon allowances market, could compete against the professional clubs to keep those allowances available at marginal cost.

This system offers several key benefits. First, it maintains equity among franchises of all sizes. Franchises will inevitably trade from large markets to small markets, contributing to the revenue sharing process rather than compromising it (as in a system where centralized control left overburdened teams on their own to meet guidelines).

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168 2012–2016 Basic Agreement, supra note 18, at 120.
169 Id. at 122.
170 See Thurm, supra note 48.
171 See generally Coase, supra note 142.
172 KOSOBUD ET AL., supra note 82, at 25.
Second, it is easy. This system is as minimally resource-intensive as is likely feasible. The Coase Theorem guarantees efficiency in market transactions of this kind.\textsuperscript{173} Even if this is only a theorem—and not a practical guarantee—this relatively sophisticated market benefitting from strong executive oversight and exposure to external brokers seems capable of maintaining efficient dealing.

Third, such a program offers continued legal independence from government regulation. MLB has been the beneficiary of independence from government oversight, especially in the anti-trust realm, for years.\textsuperscript{174} This is perhaps largely because it has proven more progressive than the government itself, and American society at large.\textsuperscript{175} Recent rumblings of the value emissions trading markets could have in the United States suggest that regulation may come sooner rather than later, and the increasing role of local government in influencing franchises’ motivations has shown that an efficient mode of normalizing environmental obligations may soon be in order.

CONCLUSION

Major League Baseball has long been a guiding force, ushering Americans into new eras of social consensus. As it approaches the precipice of dramatic new trends in environmental policy, the League’s primary directive of competitive parity must remain its chief goal. Over the past century, baseball has come from a loose association of disorganized leagues to a tightly run business governed under a carefully negotiated CBA. A cap-and-trade emissions market can fit within the League’s revenue sharing structure, allow teams to aggregate the burden of conformity to environmental regulations within that agreement, and not only ease the League’s transition into a new period of eco-awareness, but do so without relinquishing the balance over a century of law and tradition have developed.

\textsuperscript{173} See generally Coase, supra note 142.
\textsuperscript{174} See Nathanson, supra note 6, at 581–82.
\textsuperscript{175} See LAMB, supra note 24.